



Bogaard Shopping Centre Renovation

Multi-Sensory Experience Social Centre



Tutors:

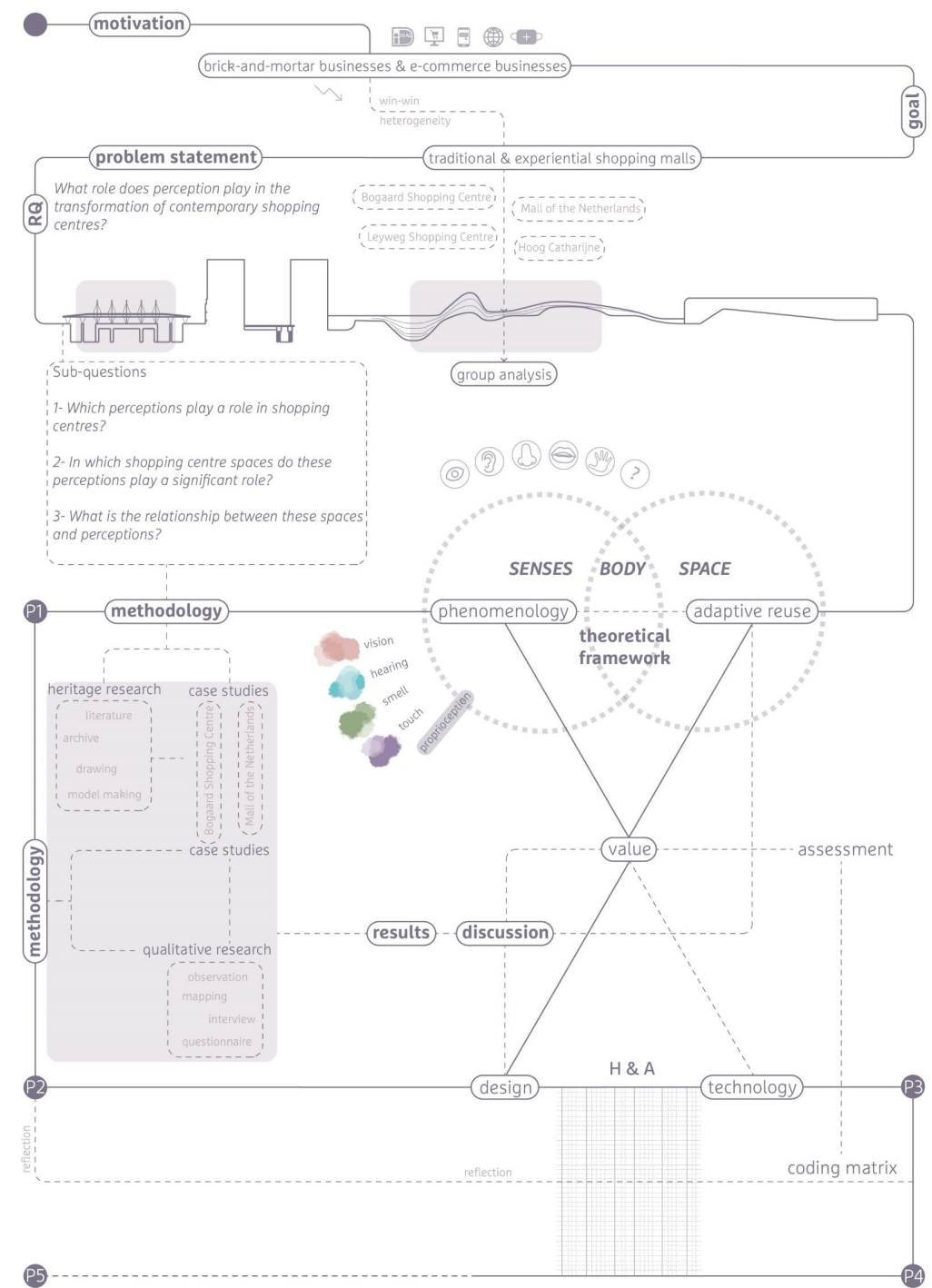
Lidy Meijers

Anet Meijer

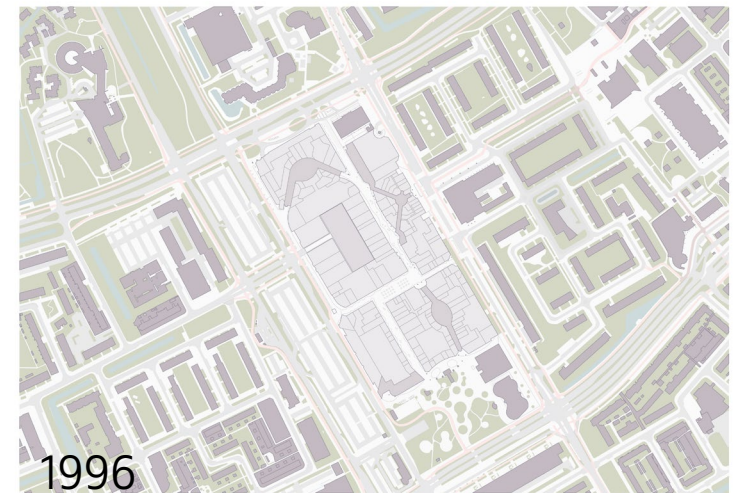
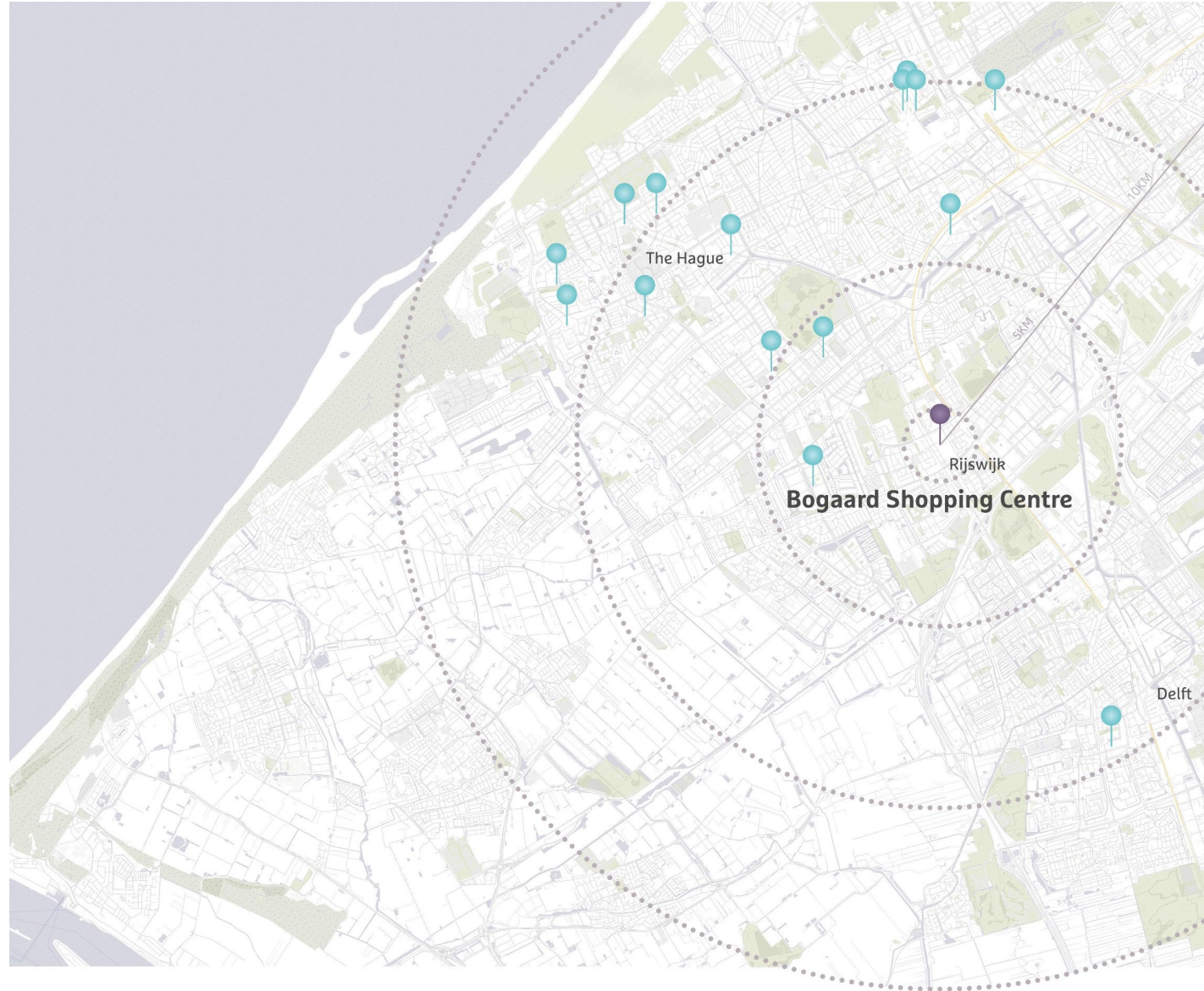
Federica Marulo / Wido Quist

Chuanlin Gao 5541026

Research



| Introduction



| Introduction



| Introduction

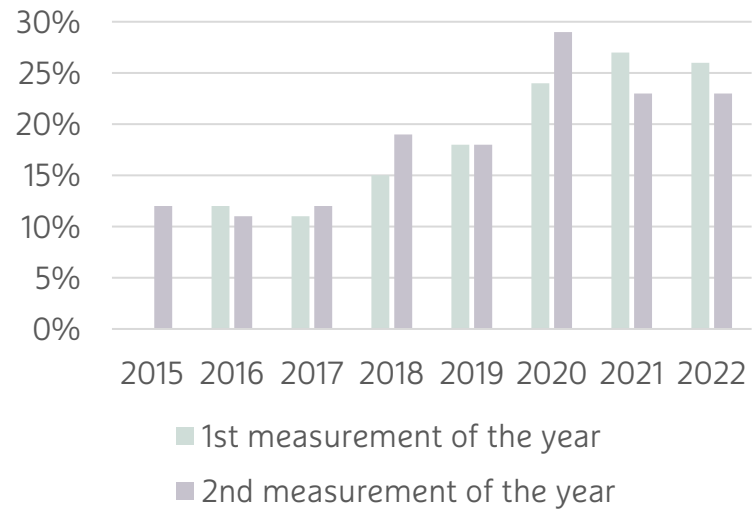


| Problem Statement

- E-commerce business



Penetration rate consumers online shopping



- Brick-and-mortar business



| Problem Statement



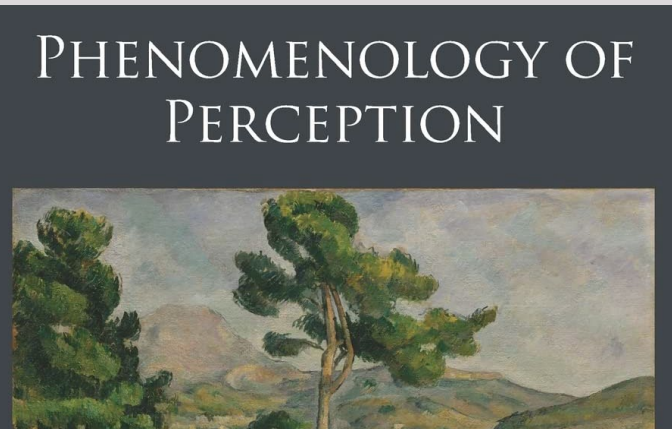
| Problem Statement

What role does perception play in the transformation of contemporary shopping malls?

| Theoretical Framework

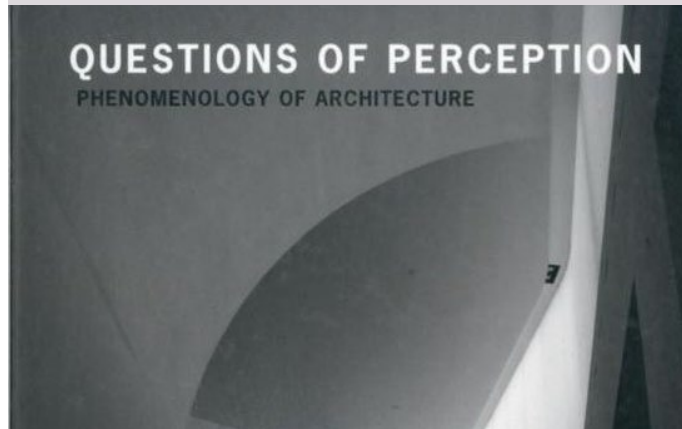
- Maurice Merleau-Ponty

The acquisition of perception and experience takes place through the movement of the body through space and the environment.



- Juhani Pallasmaa

- Eye
- Ear
- Nose
- Skin
- Tongue
- Skeleton
- Muscle



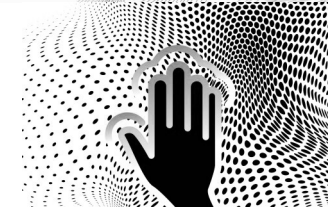
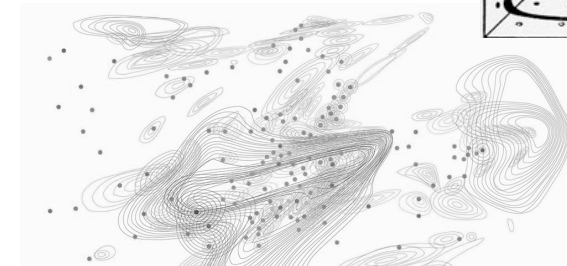
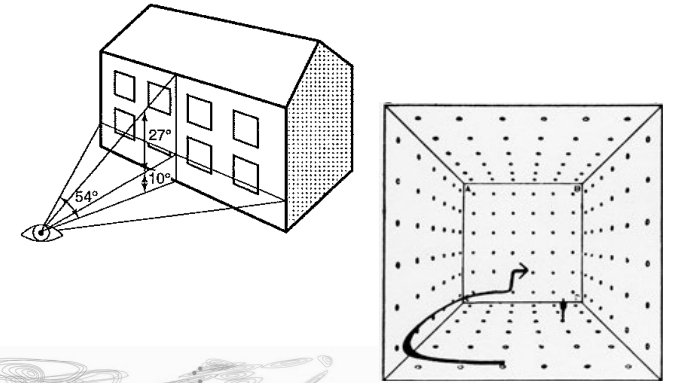
- Jan Gehl

- Senses
- Communication
- Dimensions



| Theoretical Framework

- **Vision:** is the sense that humans rely on most. Sometimes it can cloud other perceptions.
- **Hearing:** can pick up sound in space after reflection, absorption, etc.
- **Smell:** can influence people's moods.
- **Touch:** can help us to identify materials.
- **Proprioception:** is your body's ability to sense movement, action, and location.



| Case Studies



Bogaard Shopping Centre



Mall of the Netherlands

| Case Studies

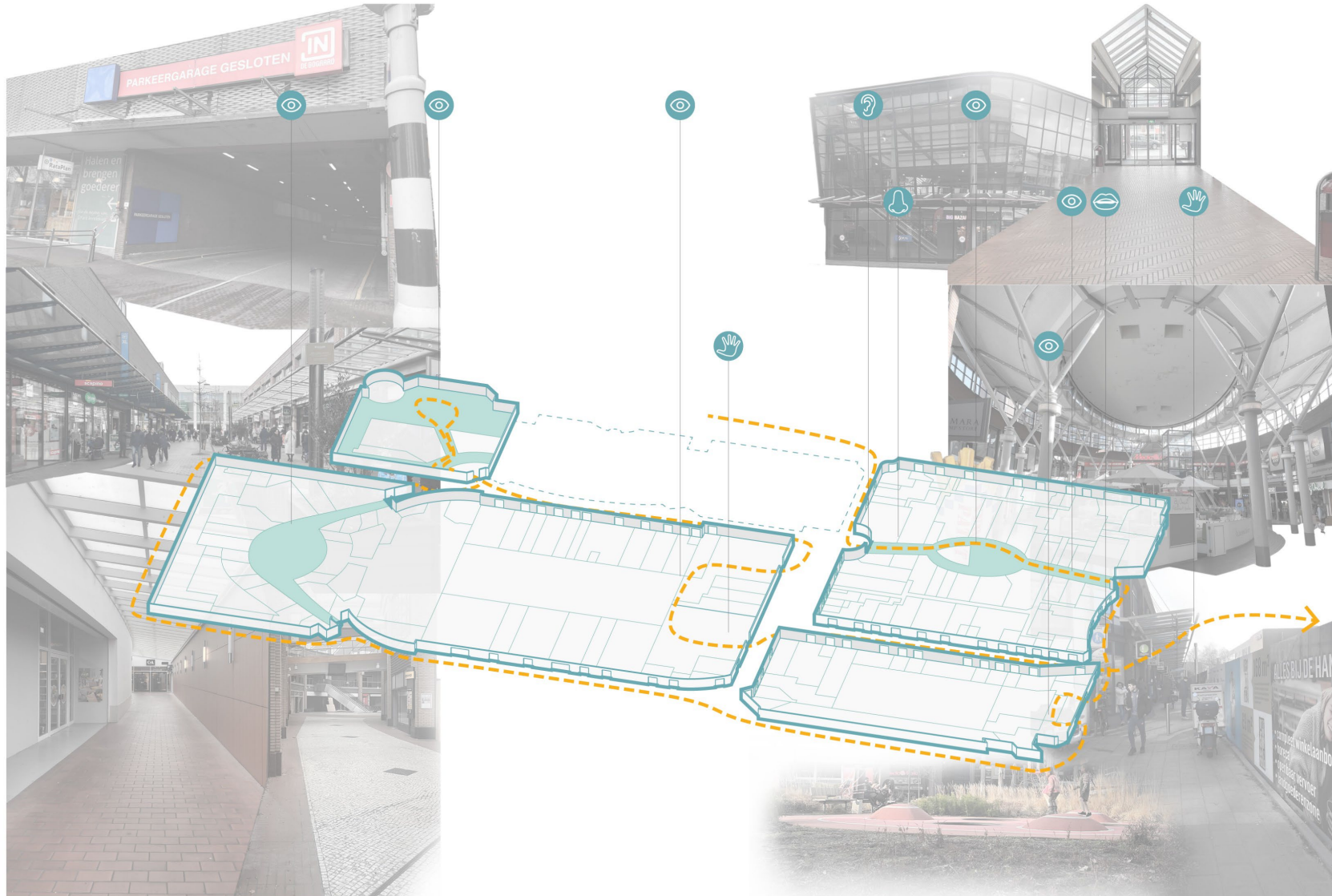


MoN Before
2016
Leidsenhage
Shopping mall

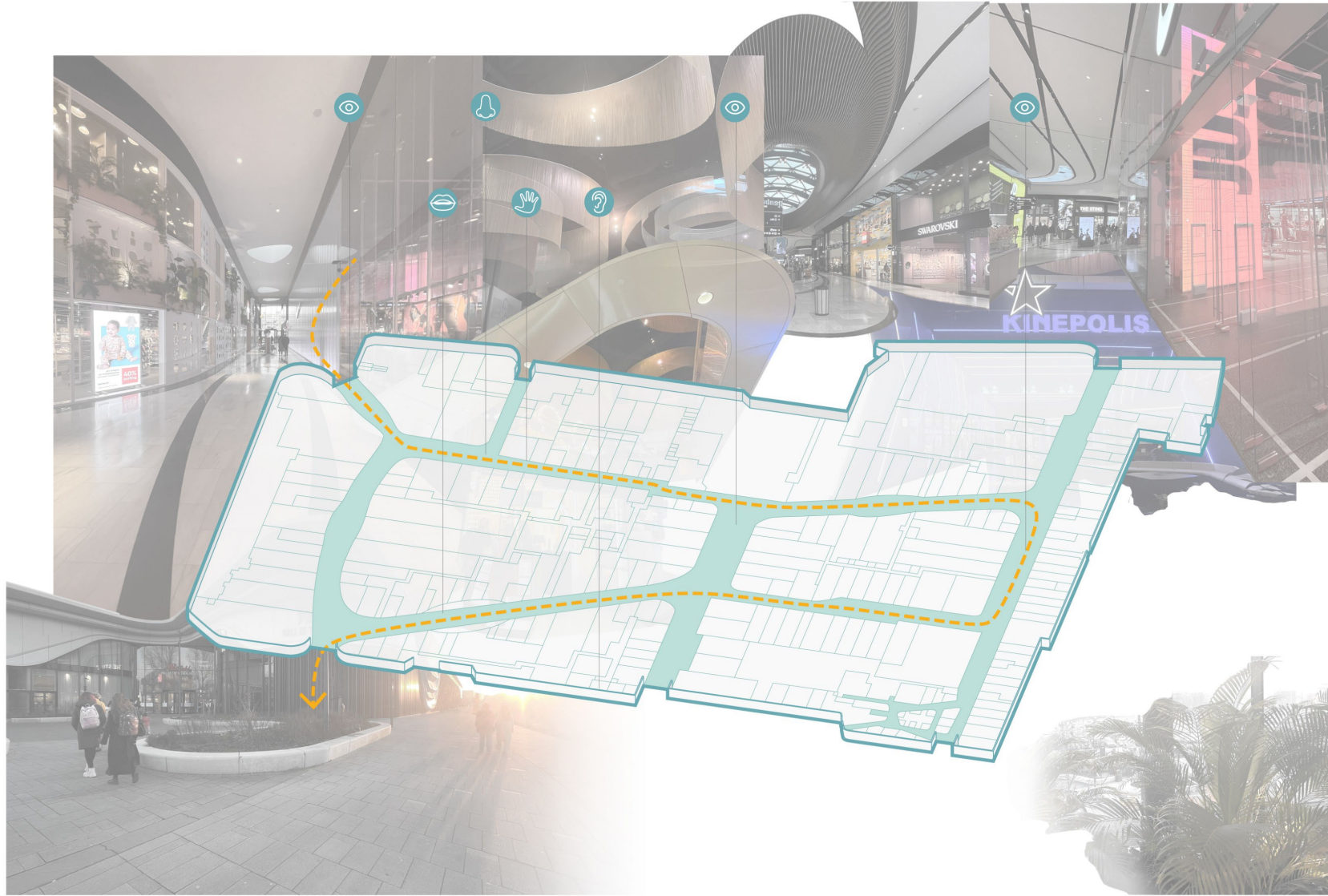
Bogaard Now



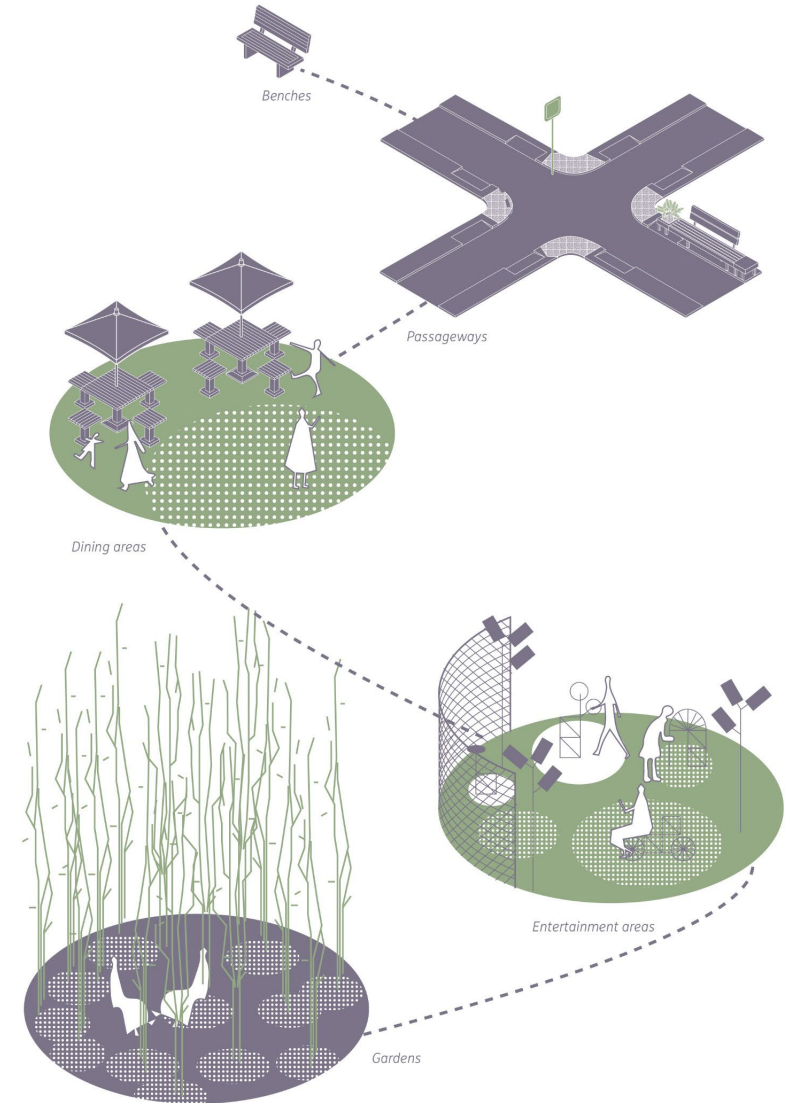
| Case Studies



| Case Studies

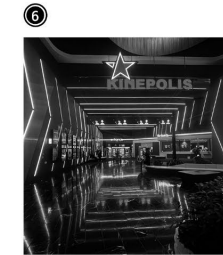
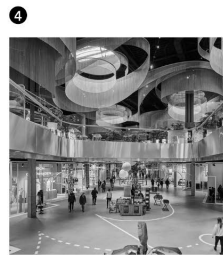
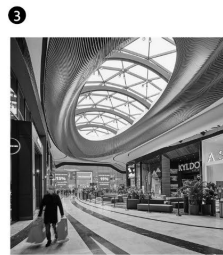
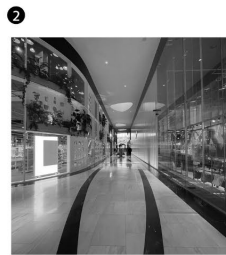
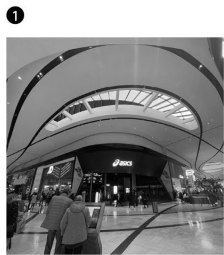
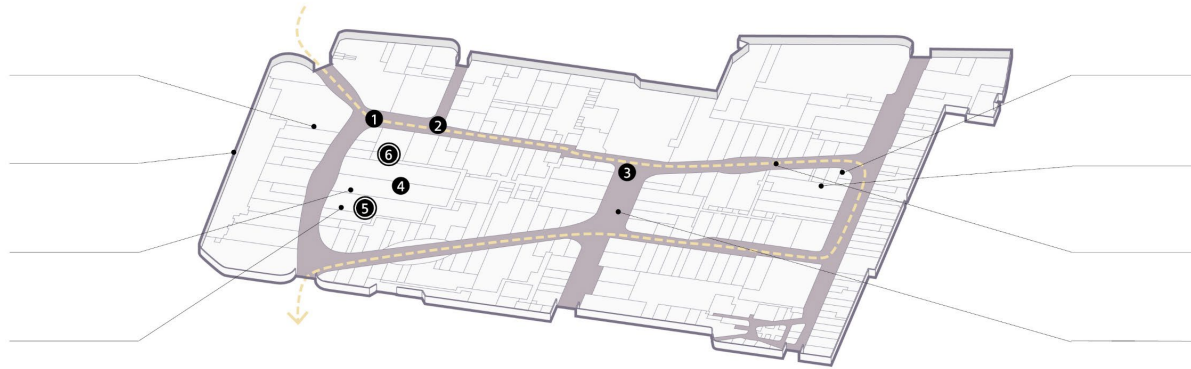
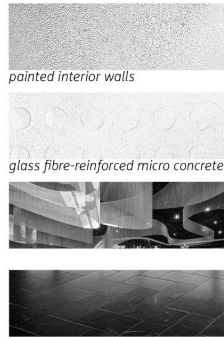


Case Studies



| Case Studies – Questionnaire

Mall of the Netherlands



On-site

Vision + + + + +
 Hearing + + + + +
 Smell +
 Touch
 Proprioception +

Vision + +
 Hearing + +
 Smell
 Touch + +
 Proprioception + + +

Vision + + + + +
 Hearing + +
 Smell
 Touch + + +
 Proprioception +

Vision + + + + +
 Hearing + +
 Smell + +
 Touch +
 Proprioception +

Vision + +
 Hearing
 Smell + + + + +
 Touch + + +
 Proprioception

Vision + + + + +
 Hearing + + + + +
 Smell
 Touch +
 Proprioception +

Off-site

Vision + + + + + + +
 Hearing
 Smell
 Touch
 Proprioception + + +

Vision + + + + + + +
 Hearing
 Smell
 Touch
 Proprioception + + + + +

Vision + + + + + + +
 Hearing
 Smell
 Touch
 Proprioception + + + + +

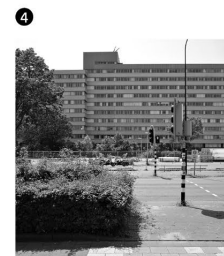
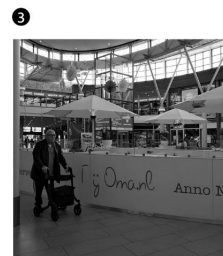
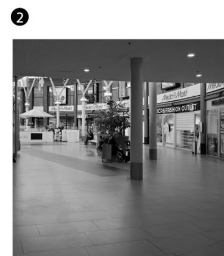
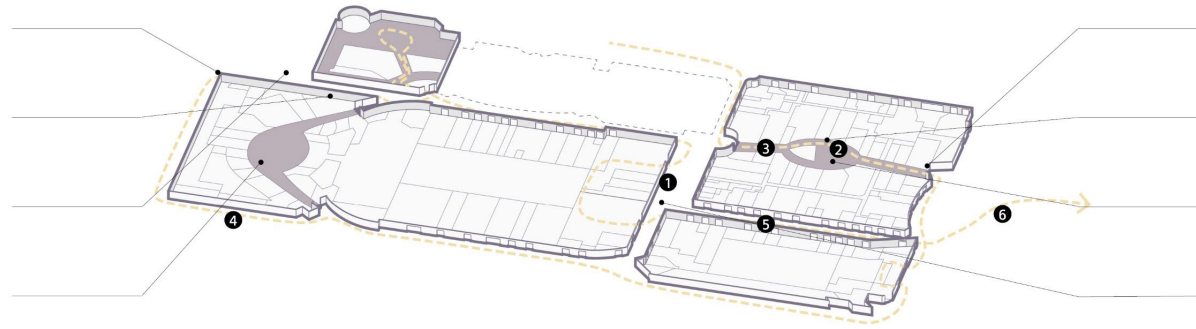
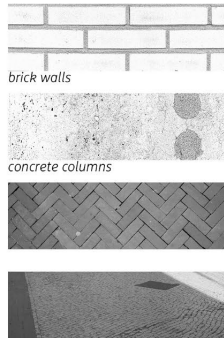
Vision + + + + + + +
 Hearing +
 Smell
 Touch
 Proprioception + +

Vision + + + + + + +
 Hearing
 Smell +
 Touch
 Proprioception + +

Vision + + + + + + +
 Hearing +
 Smell
 Touch
 Proprioception + + +

| Case Studies – Questionnaire

Bogaard Shopping Centre



On-site

Vision + + + + + . .
 Hearing + +
 Smell +
 Touch + +
 Proprioception +

Vision + + + + + . .
 Hearing + +
 Smell
 Touch +
 Proprioception + +

Vision + + + + + . .
 Hearing +
 Smell + +
 Touch
 Proprioception + +

Vision + + + + + . .
 Hearing + +
 Smell +
 Touch
 Proprioception + +

Vision + + + + + . .
 Hearing +
 Smell +
 Touch + + +
 Proprioception +

Vision + + + + + . .
 Hearing +
 Smell + +
 Touch + +
 Proprioception +

Off-site

Vision + + + + + + +
 Hearing +
 Smell
 Touch
 Proprioception + +

Vision + + + + + . .
 Hearing
 Smell
 Touch +
 Proprioception + + +

Vision + + + + + + +
 Hearing
 Smell +
 Touch
 Proprioception + +

Vision + + + + + + +
 Hearing
 Smell
 Touch
 Proprioception + + +

Vision + + + + + + +
 Hearing
 Smell
 Touch +
 Proprioception + +

Vision + + + + + . .
 Hearing
 Smell +
 Touch
 Proprioception + + + + + . .

| Discussion– Senses & Spaces

- Socializing?
- Senses – Scales
- Intangible – Tangible

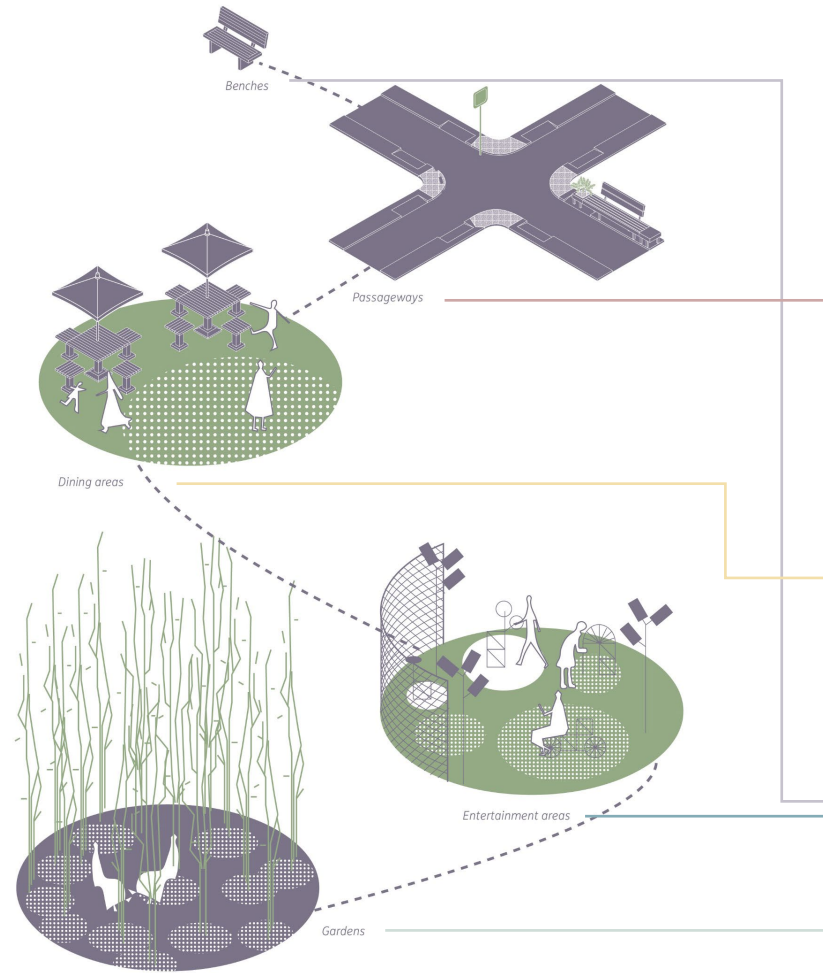


| Discussion– Senses & Spaces

- The effective social distance is about 7 meters.
- The senses of touch and smell are more impressive within 7 meters.
- The senses of vision and hearing have a wider range of action.
- The larger the space, the more information people perceive.



| Discussion– Senses & Spaces



| Discussion– Senses & Spaces

- Most of the respondents preferred the atmosphere of Bogaard. Because the worn, warm-coloured brick walls and wooden benches make them feel relaxed.
- People linger over the open green spaces. On sunny days you can see many people gathering on the grass and children playing with water in the fountains.
- In the questionnaire about Bogaard, many locals said that they used to come to Bogaard when they were children, that it was part of their memories and that they had witnessed the transformation of the Rijswijk.

Pereira Roders' value framework

- Age

Maturity: piece of memory, reflecting the passage/lives of past generations.

- Ecological

Essential: identification of ecological ideologies on its design and construction.

- Social

Emotional individual: memory and personal life experiences;
Emotional collectivenotions: related with cultural identity, motivation and pride, sense of “place attachment” and communal value.

| Heritage Values

Pereira Roders' value framework

- Age

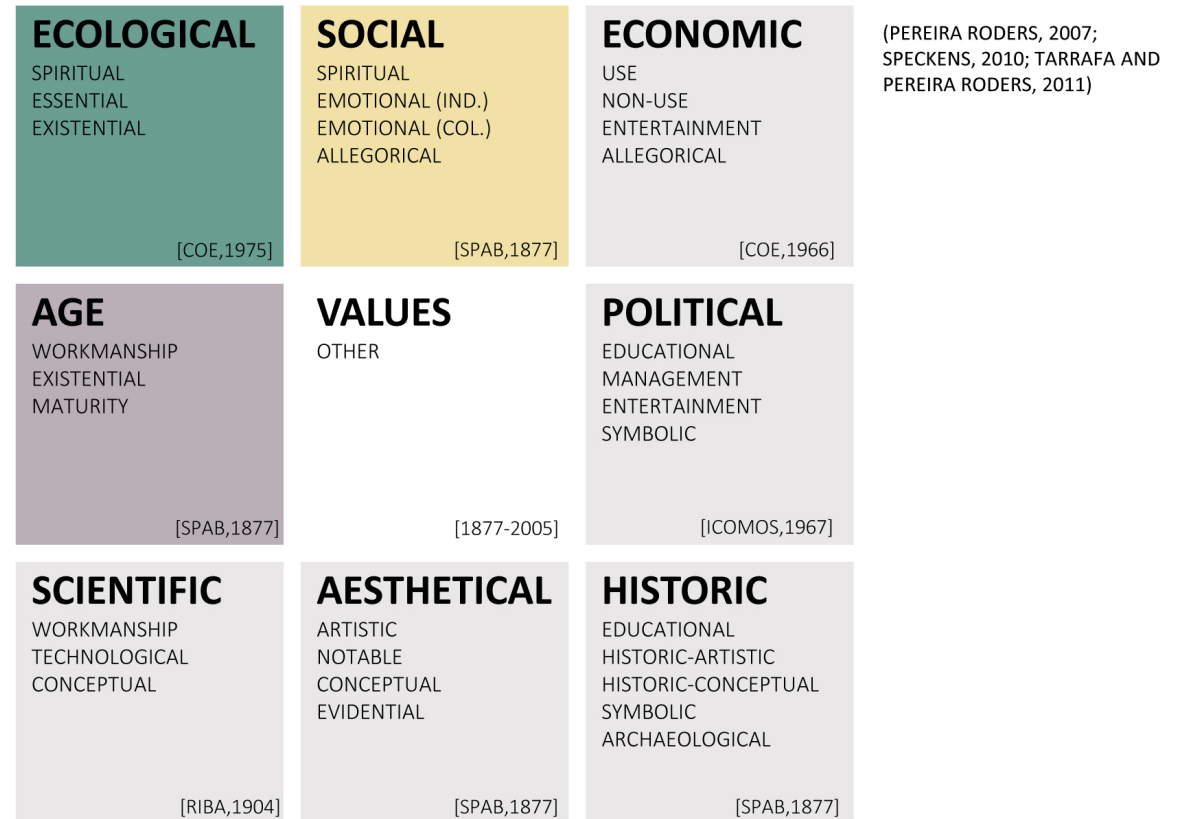
Maturity: piece of memory, reflecting the passage/lives of past generations.

- Ecological

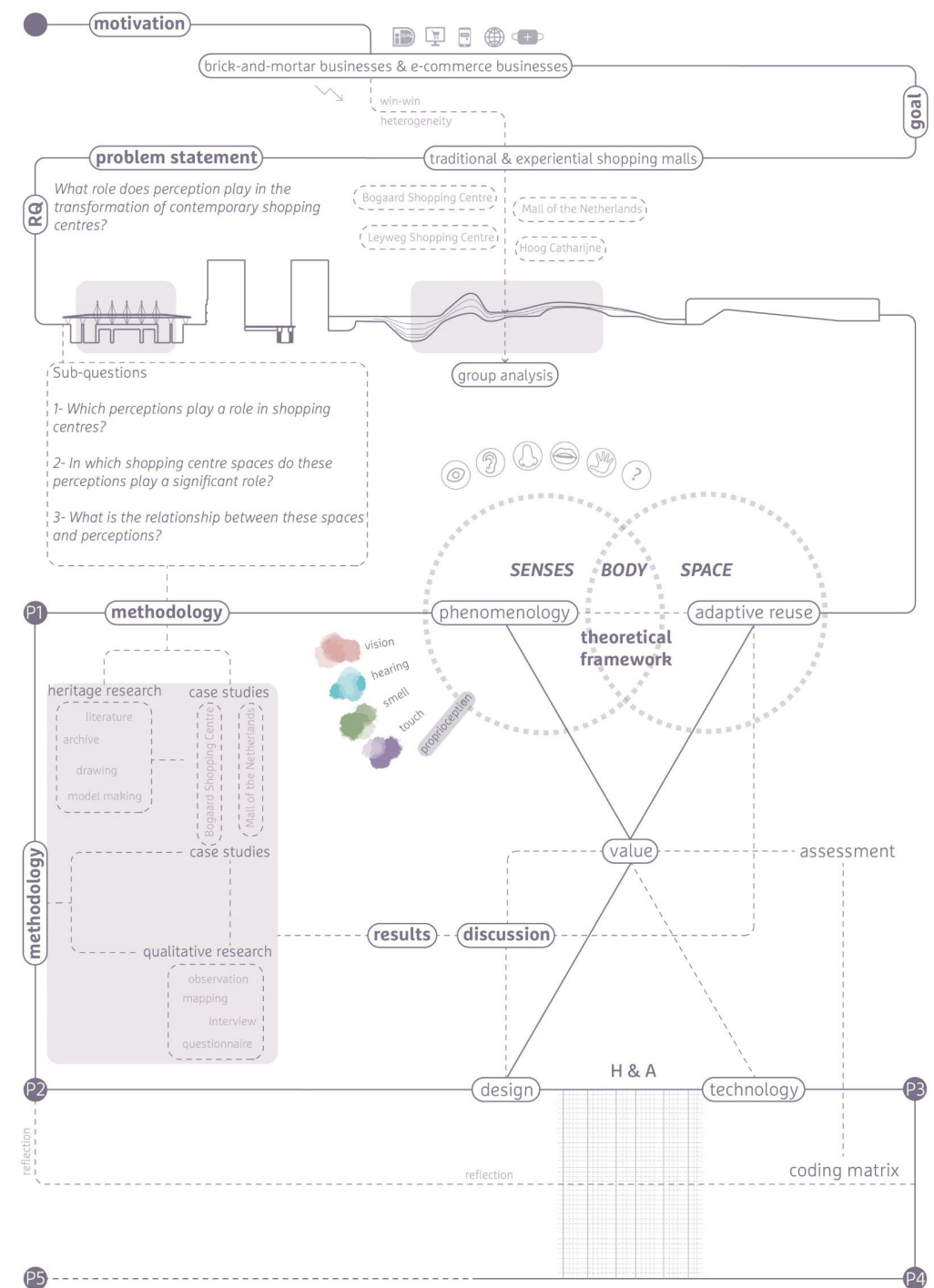
Essential: identification of ecological ideologies on its design and construction.

- Social

Emotional individual: memory and personal life experiences;
Emotional collectivenotions: related with cultural identity, motivation and pride, sense of "place attachment" and communal value.

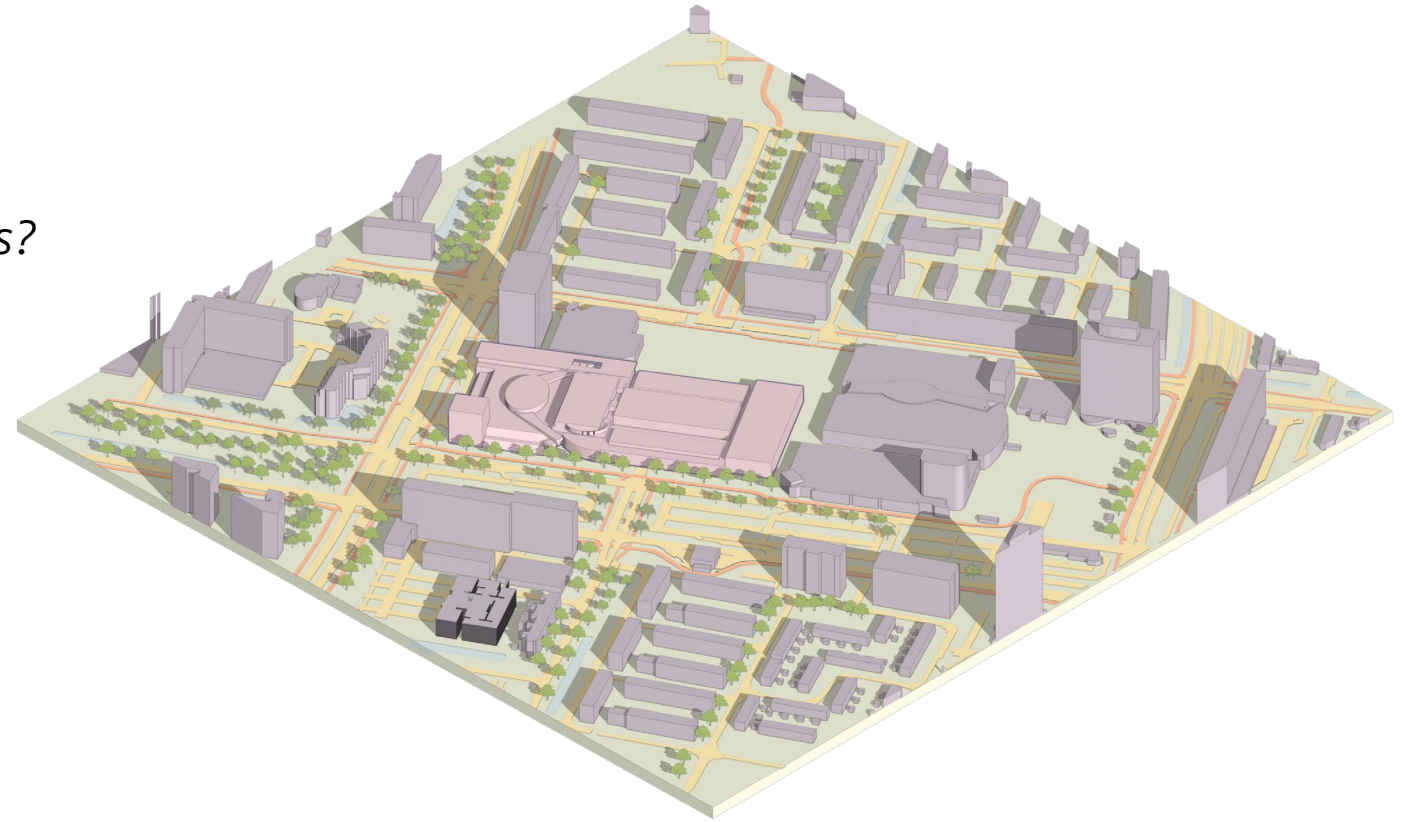


Design



| Concept

How can we return city centre to residents?



| Concept

City Living Room

- Reading
- Having a nap
- Watching TV/movies
- Working
- Having a party
- Chatting with friends
- Bonding with your family
- **It is always open to you.**



| Intervention Strategies

Pereira Roders' value framework

- Age

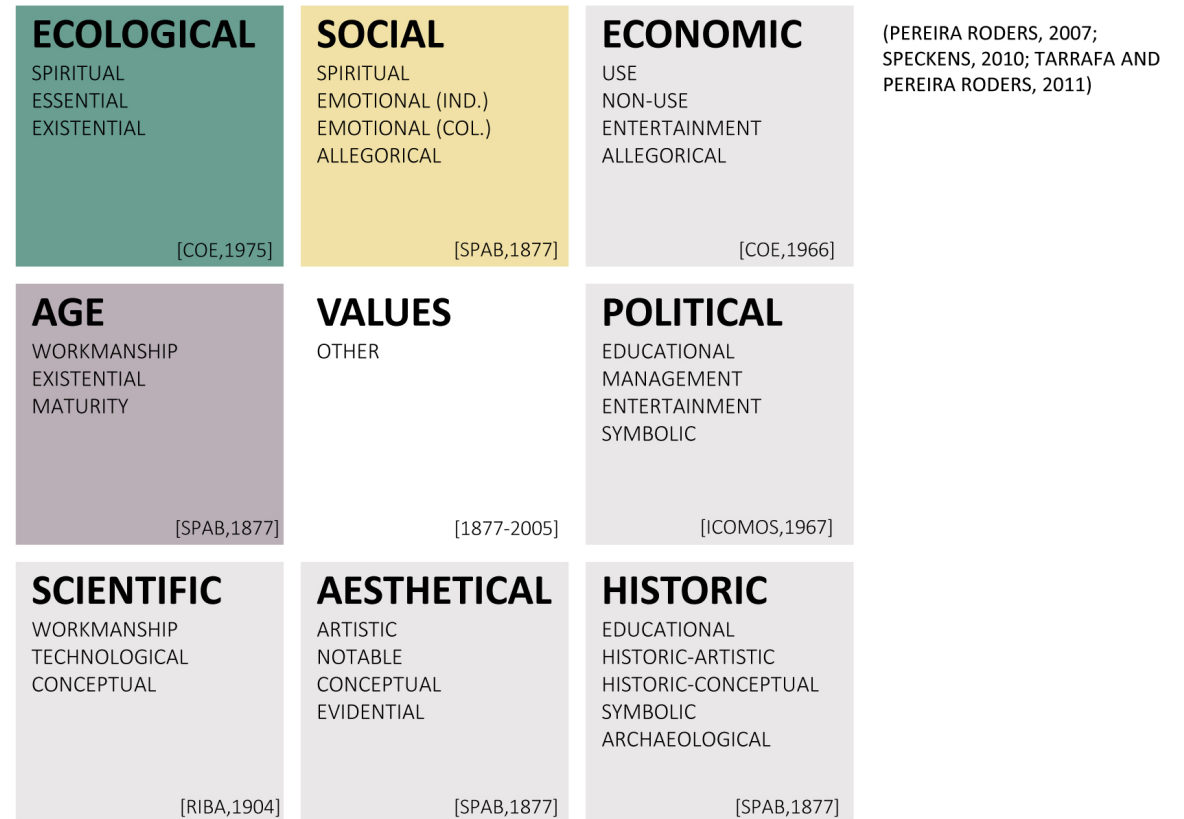
Maturity: piece of memory, reflecting the passage/lives of past generations.

- Ecological

Essential: identification of ecological ideologies on its design and construction.

- Social

Emotional individual: memory and personal life experiences;
Emotional collectivenotions: related with cultural identity, motivation and pride, sense of "place attachment" and communal value.



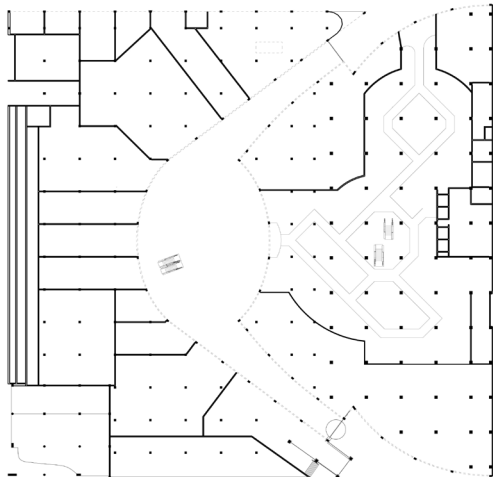
| Intervention Strategies

Pereira Roders' value framework

- Social

Emotional individual: memory and personal life experiences;
Emotional collective notions: related with cultural identity,
motivation and pride, sense of "place attachment" and
communal value.

Atmosphere & Structure



| Intervention Strategies

Pereira Roders' value framework

- Ecological

Essential: identification of ecological ideologies on its design and construction.

Green space



| Intervention Strategies

Pereira Roders' value framework

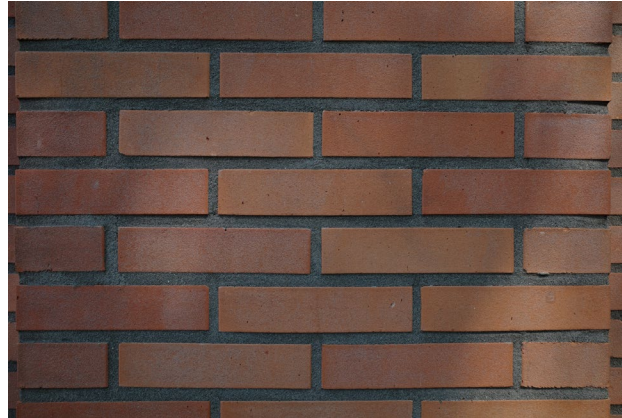
- Age

Maturity: piece of memory, reflecting the passage/lives of past generations.

Materials:

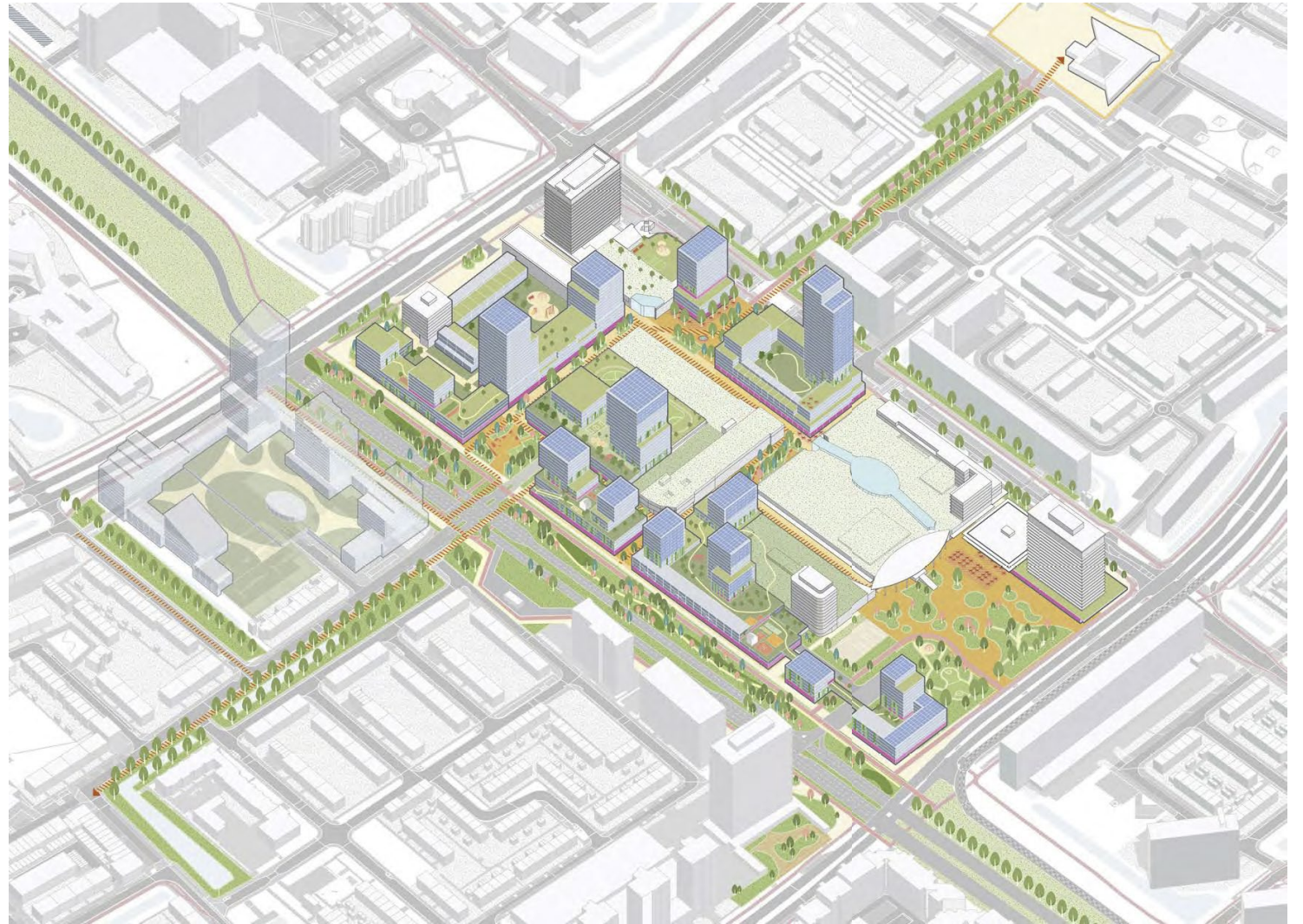
Brick

Wood

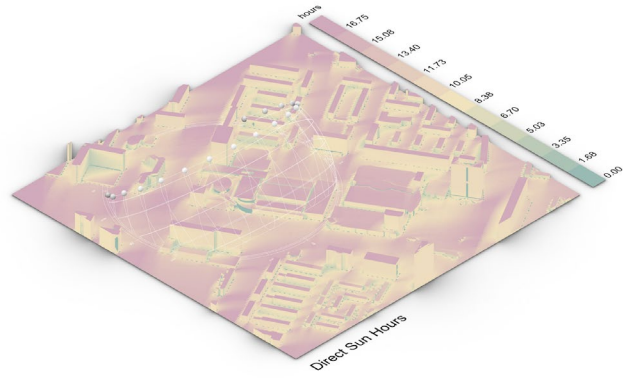


| Design Process

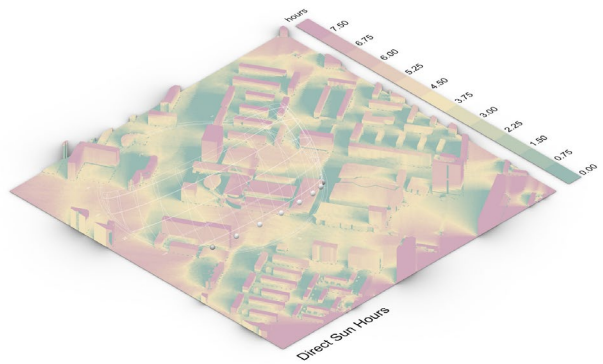
In de Bogaard masterplan



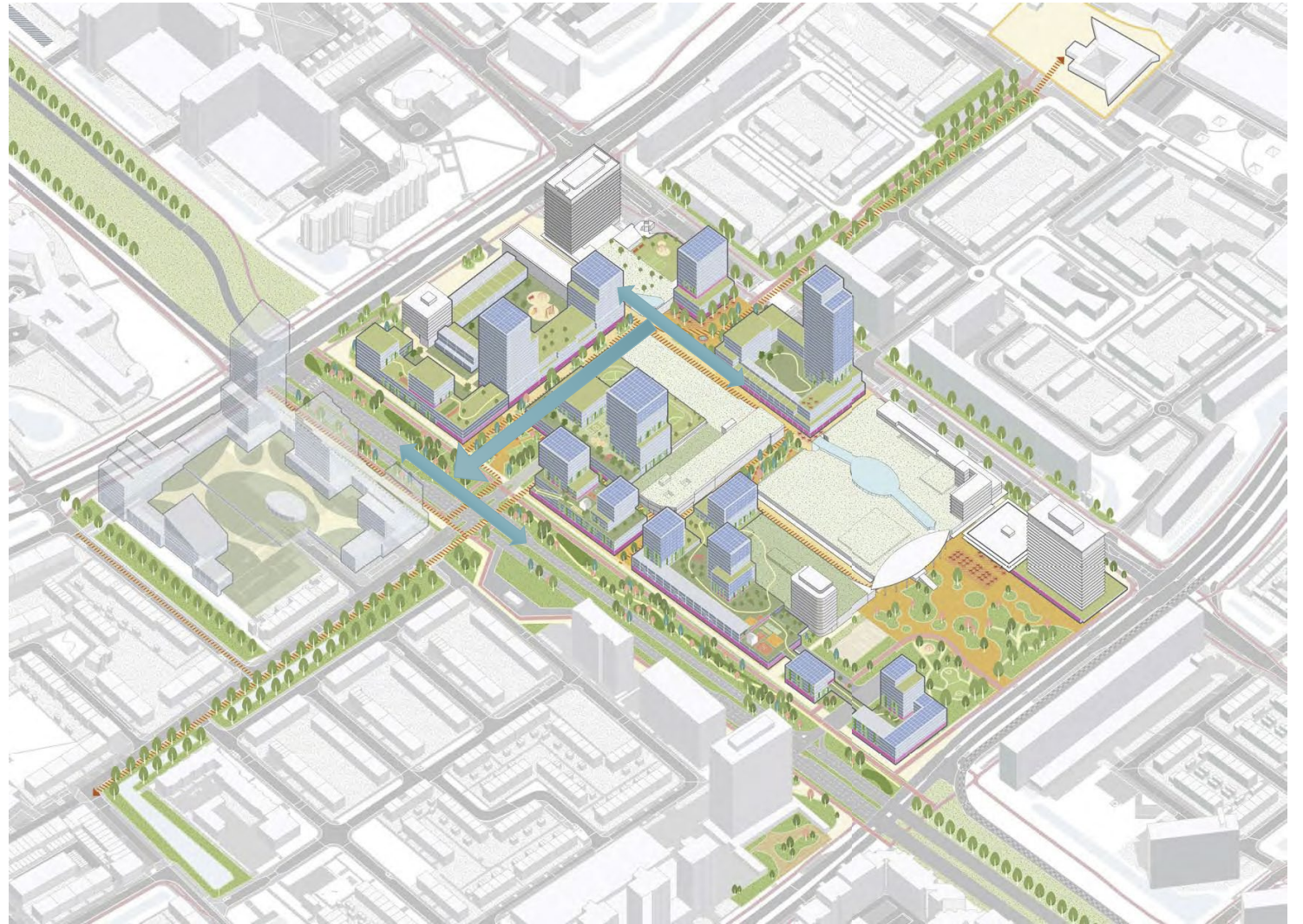
| Design Process



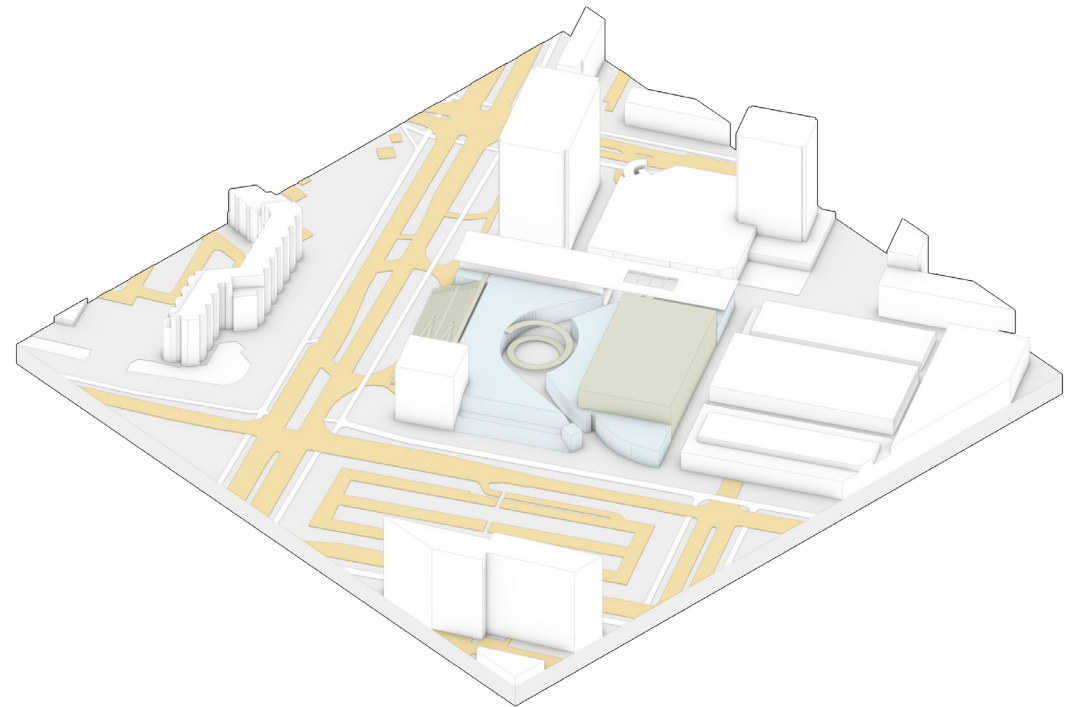
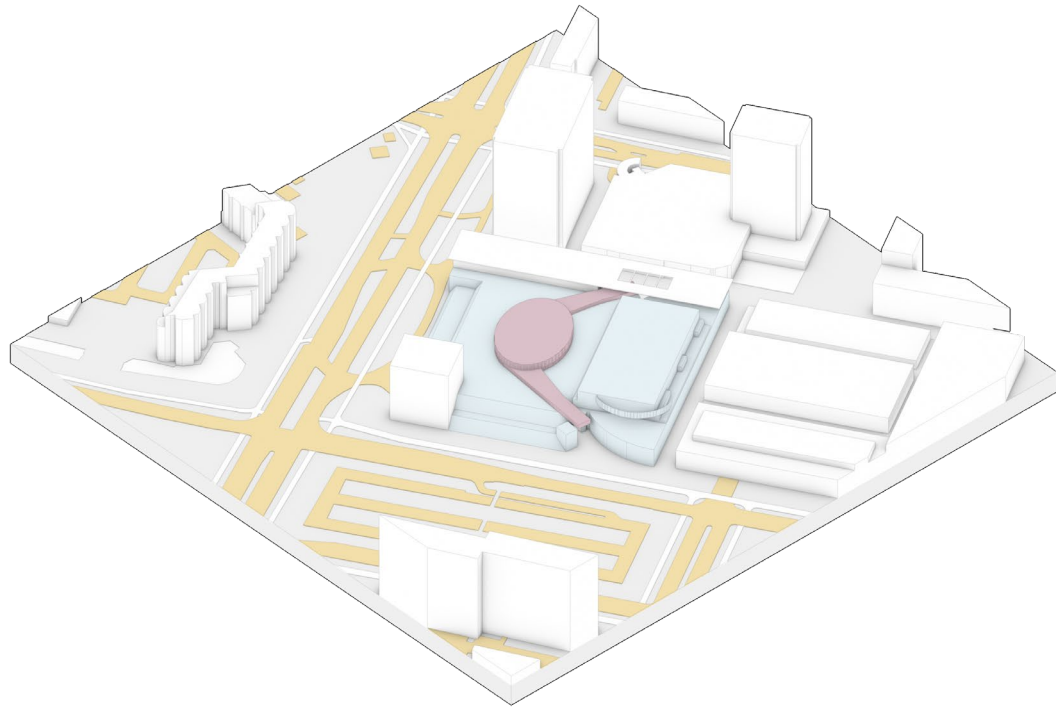
6.21



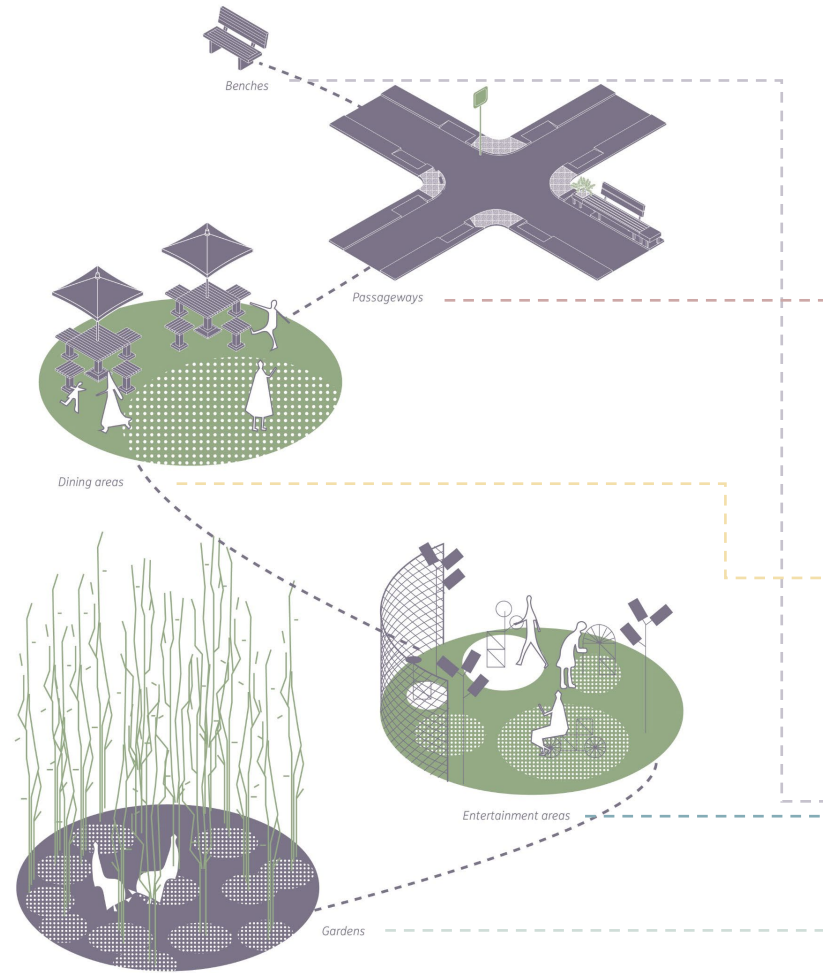
12.21



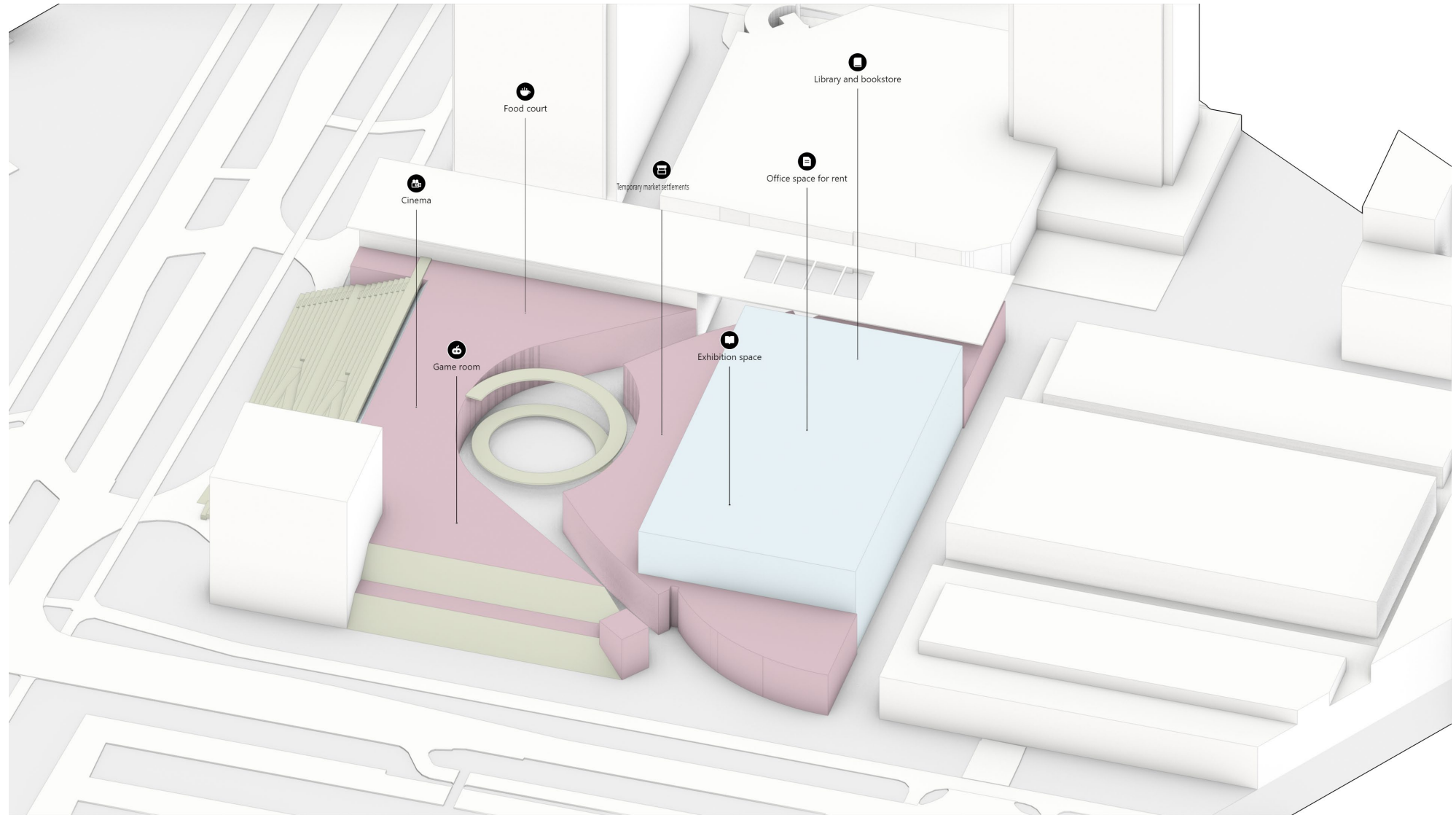
| Design Process



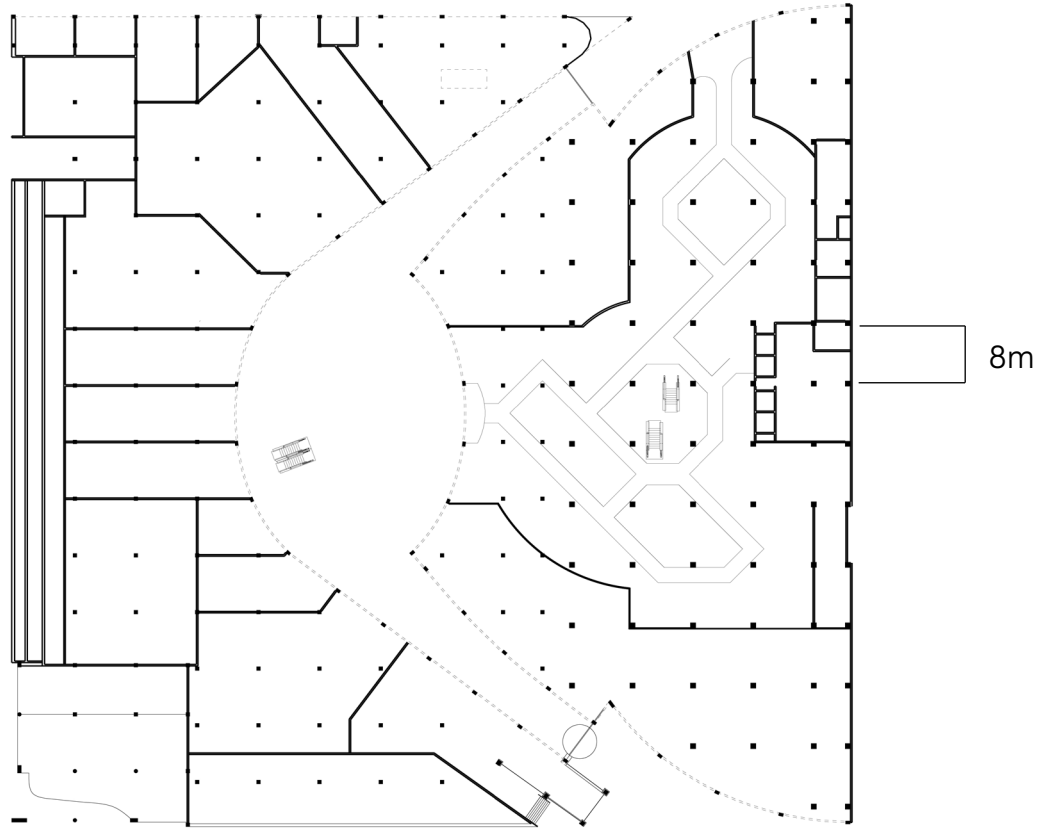
| Design Process



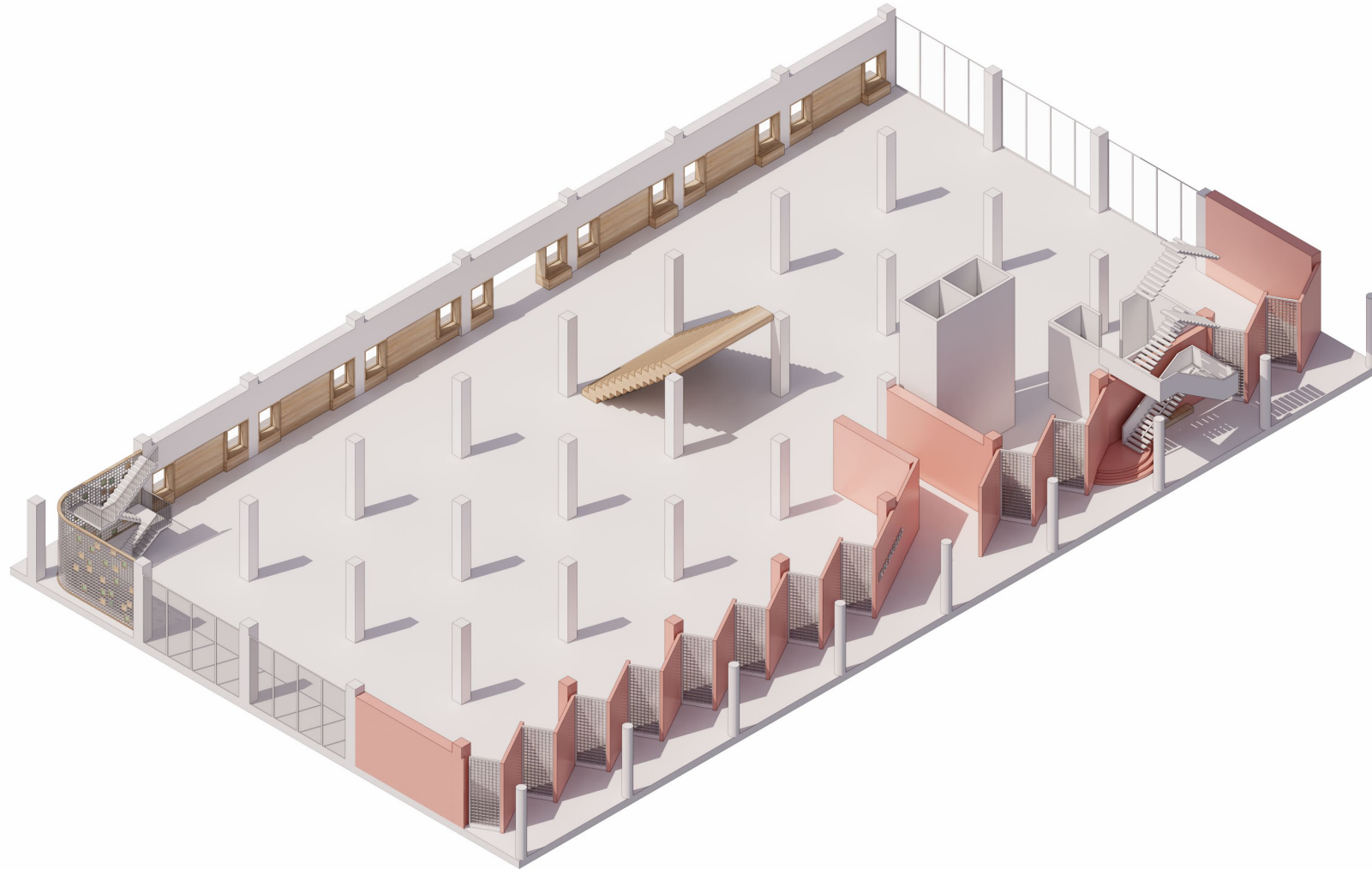
| Design Process



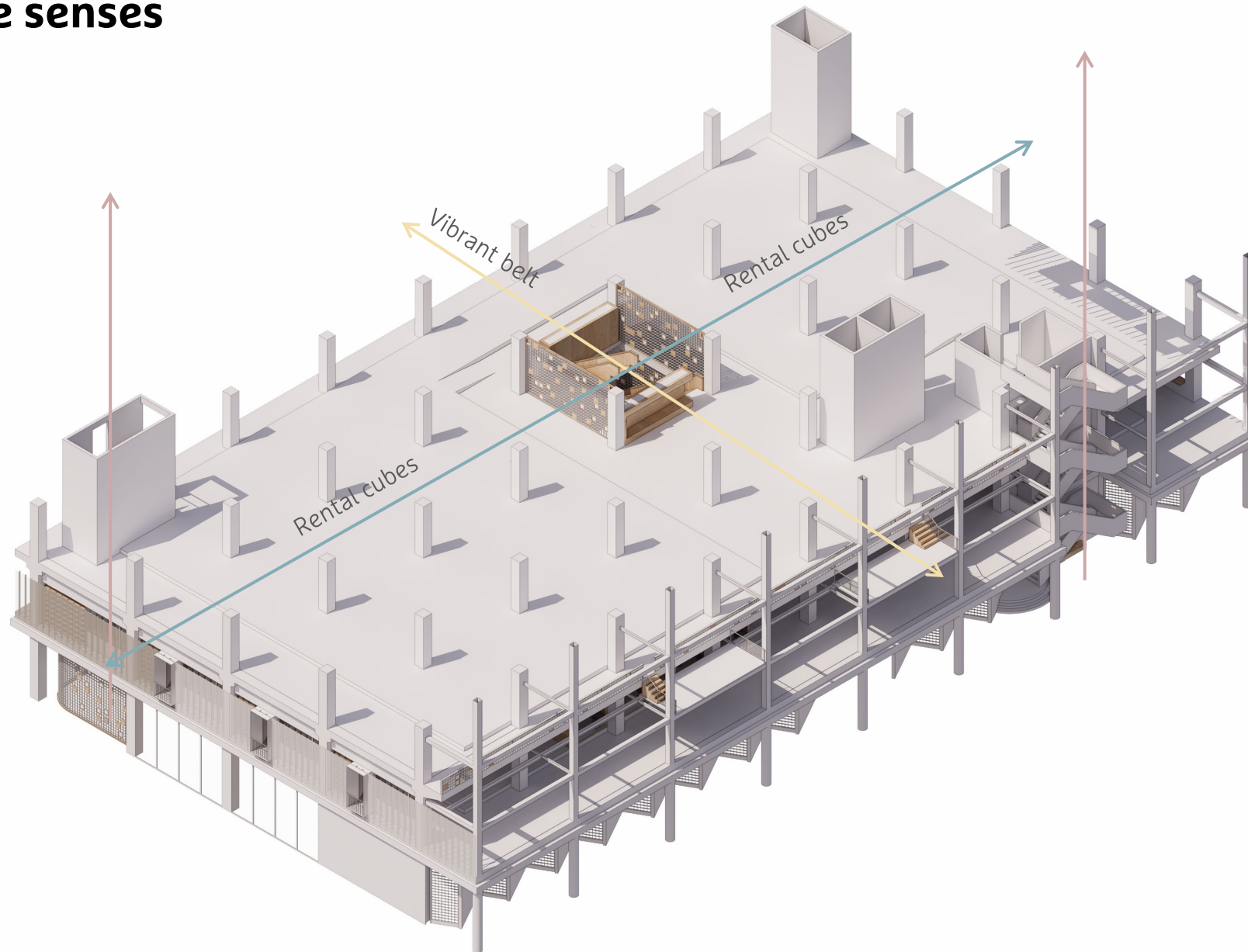
| Design Process – Smell & Touch



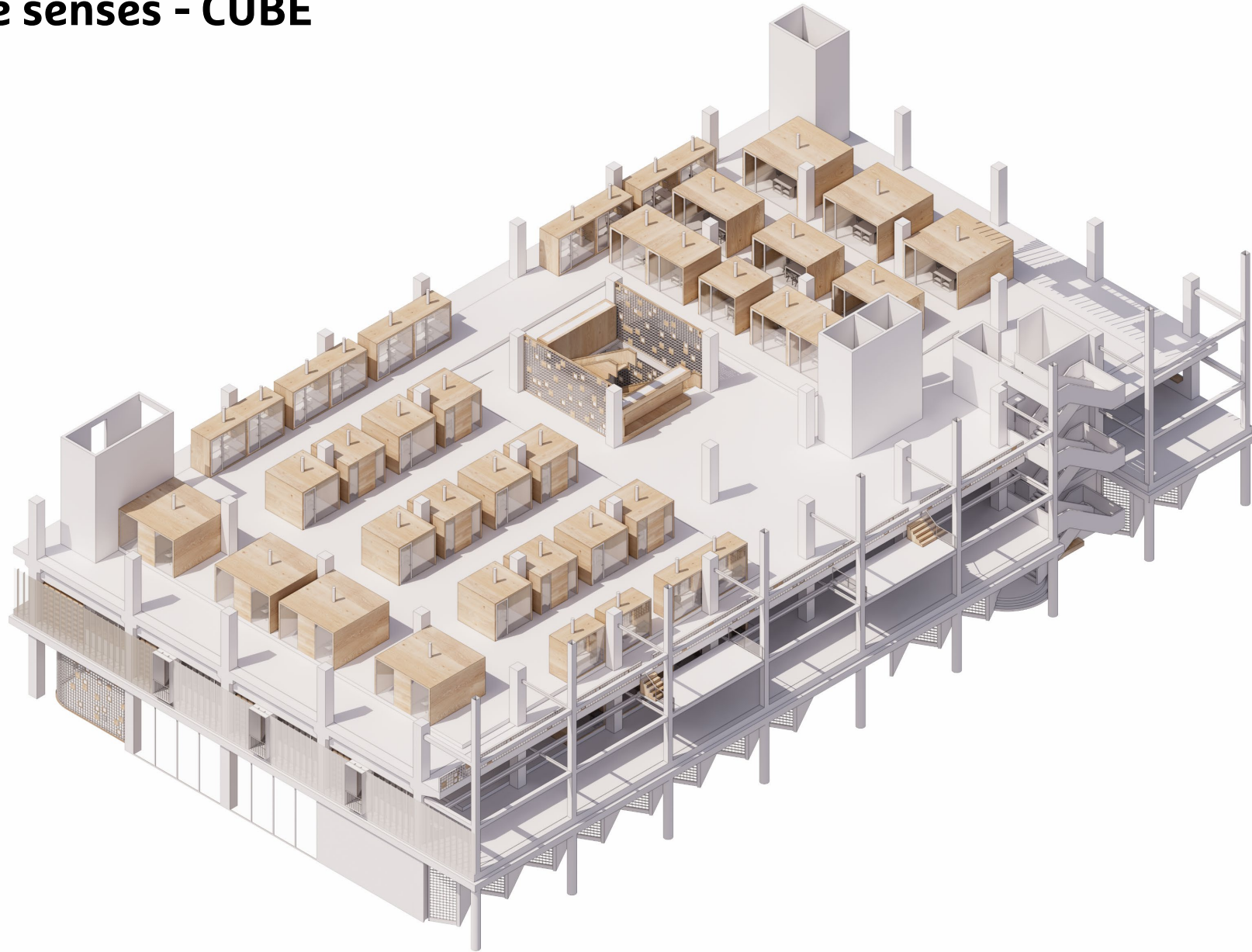
| Enhance senses - Materials



| Enhance senses



| Enhance senses - CUBE



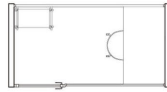
| Enhance senses - CUBE



Silent cube

working/studying/reading

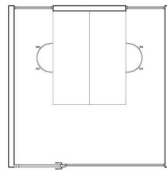
1



3100 x 1550

working/studying/reading

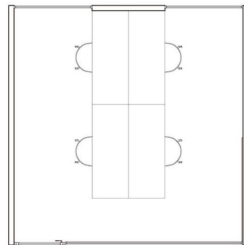
2-4



3100 x 3100

working/studying/reading

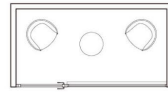
4-6



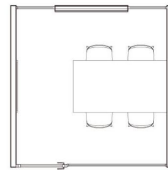
4600 x 4600

Communication cube

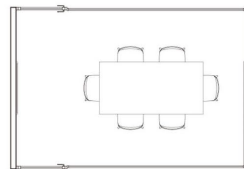
chatting



meeting/discussing



meeting/discussing



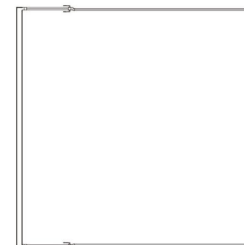
4600 x 3100

≥6

user-defined space

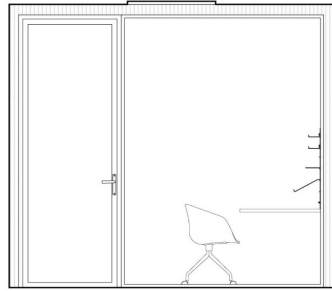


user-defined cube

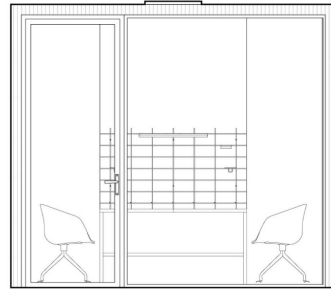


4600 x 4600

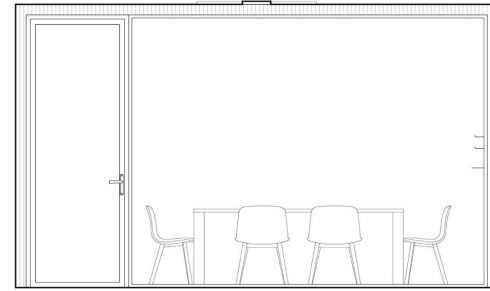
| Enhance senses - CUBE



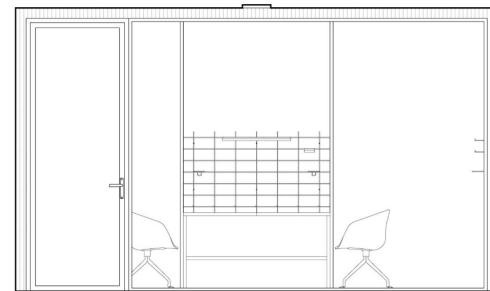
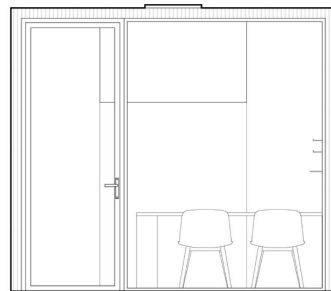
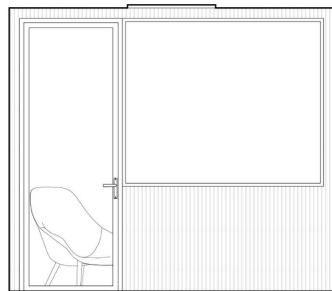
Personal comfort system
Positive pressure four fan ventilation system



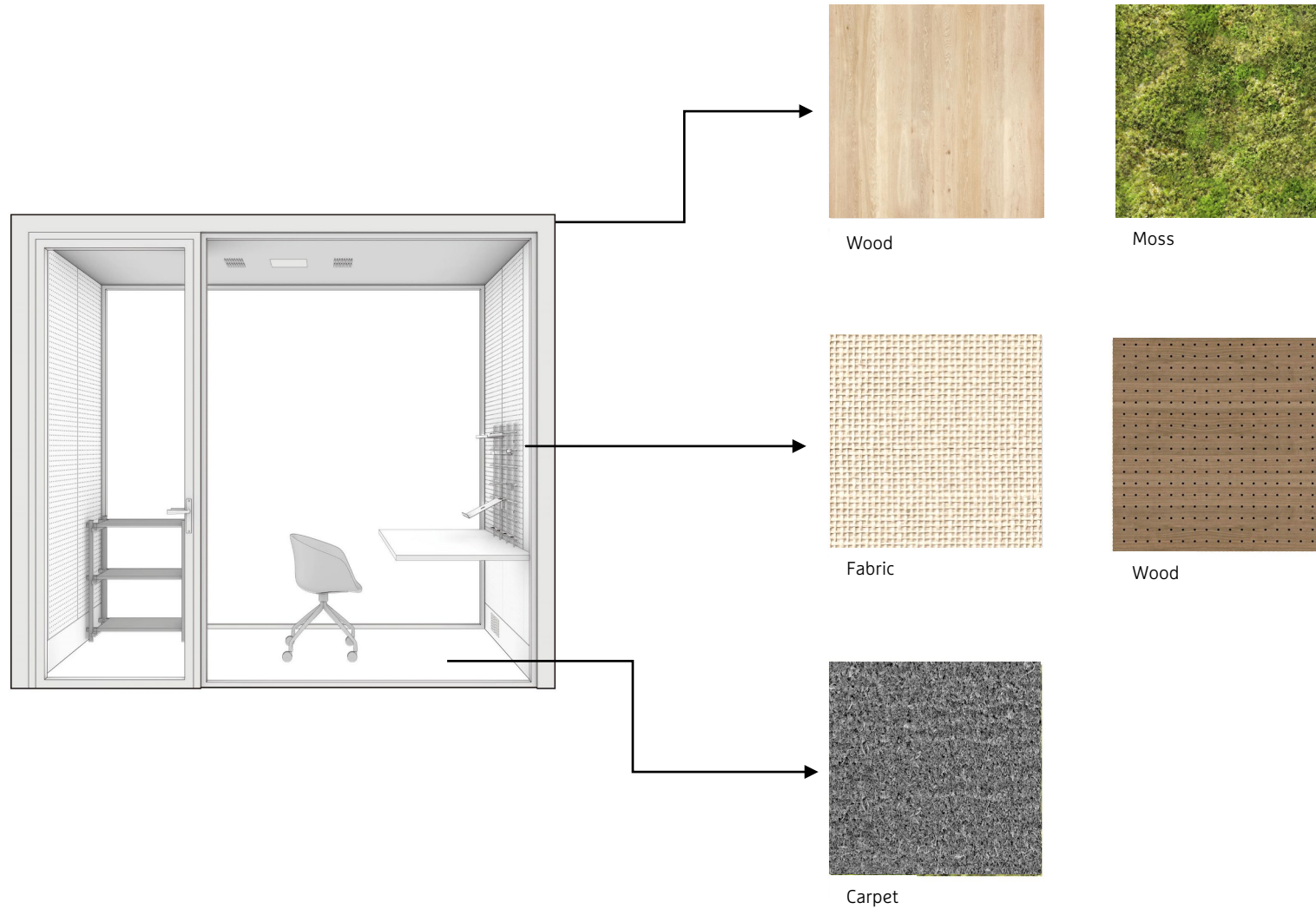
Occupancy Sensor
LED lighting



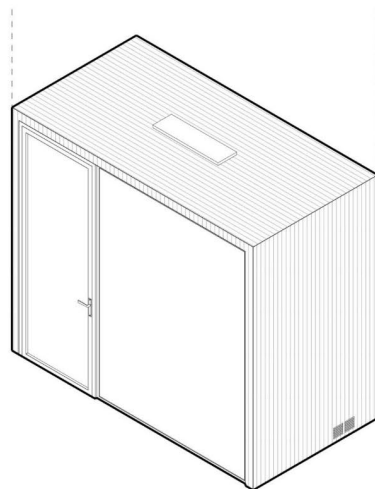
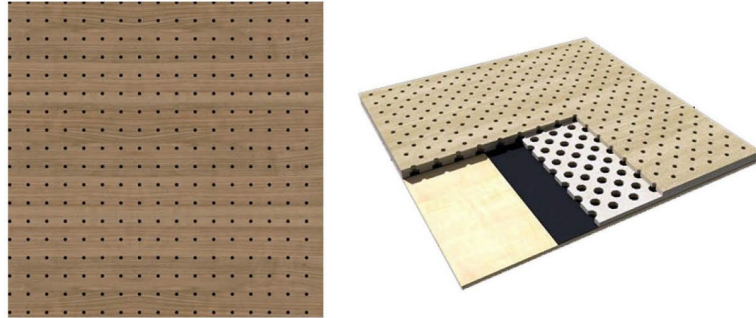
Standard power outlet (optional network and USB ports)
Concealed magnetic door closure



| Enhance senses - CUBE



| Enhance senses - CUBE



Positive pressure ventilation system

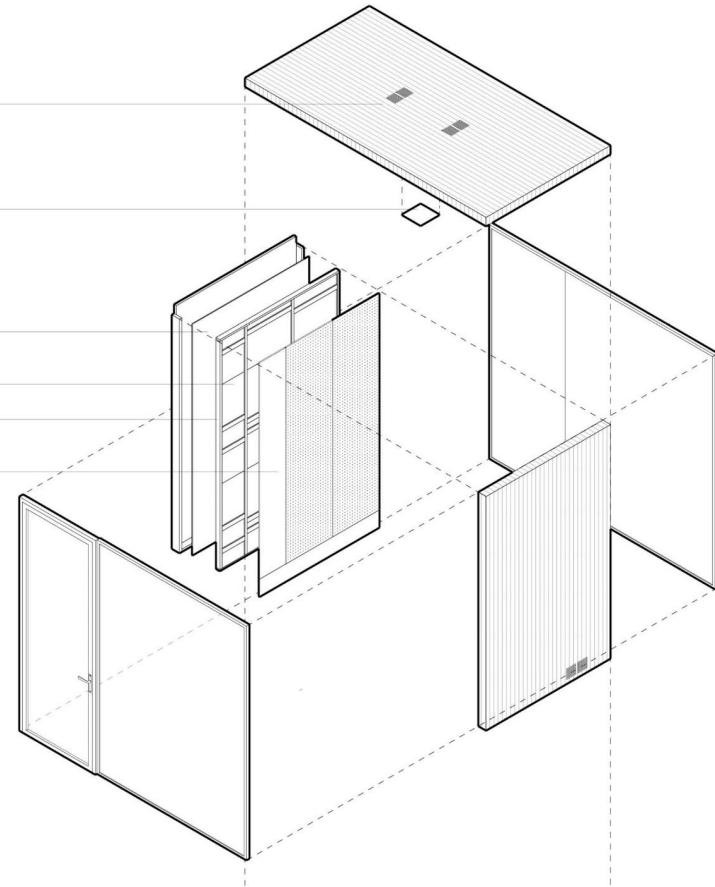
LED lighting

Acoustic felt insulation 8mm

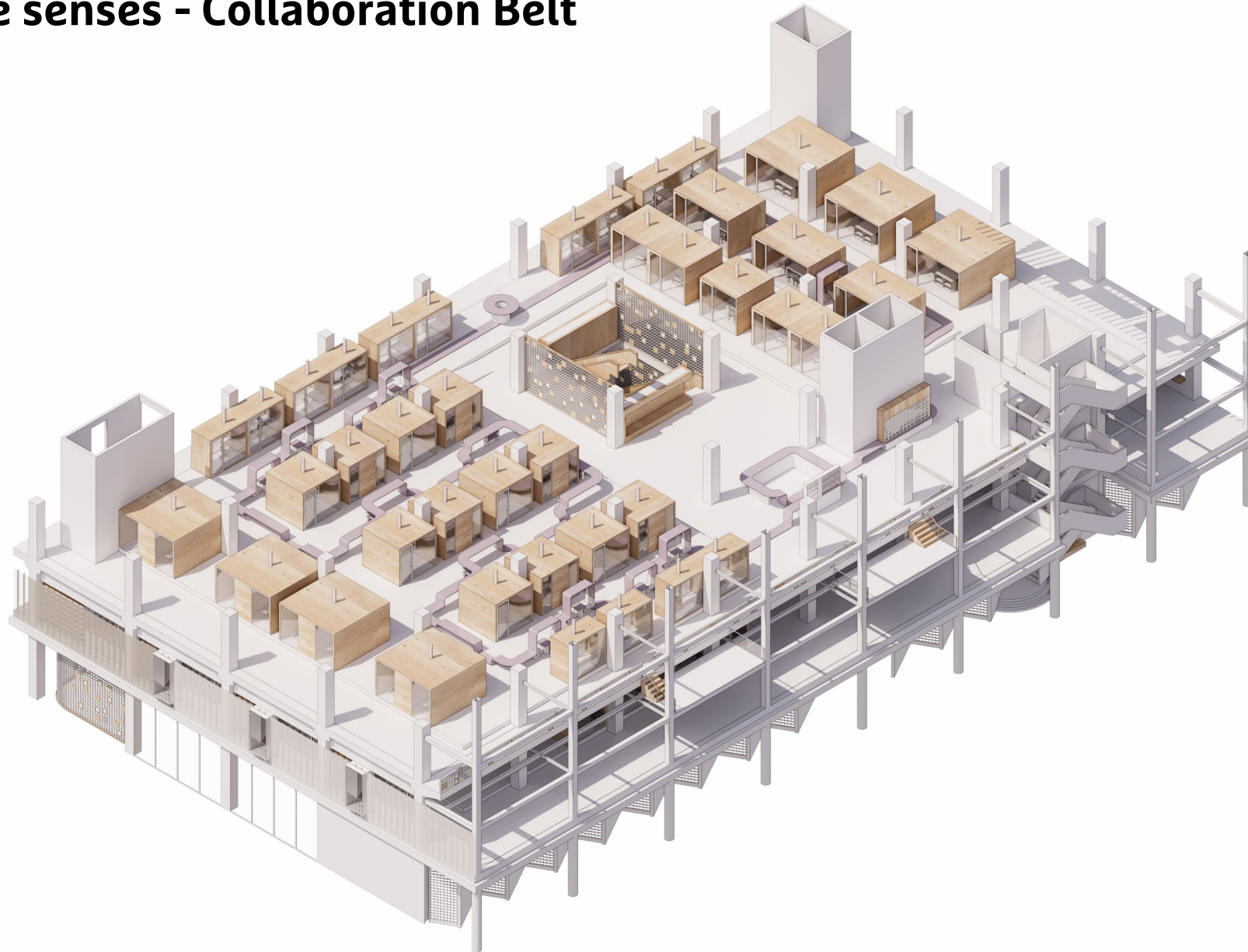
Mineral fibre 40mm

Battens 50mm

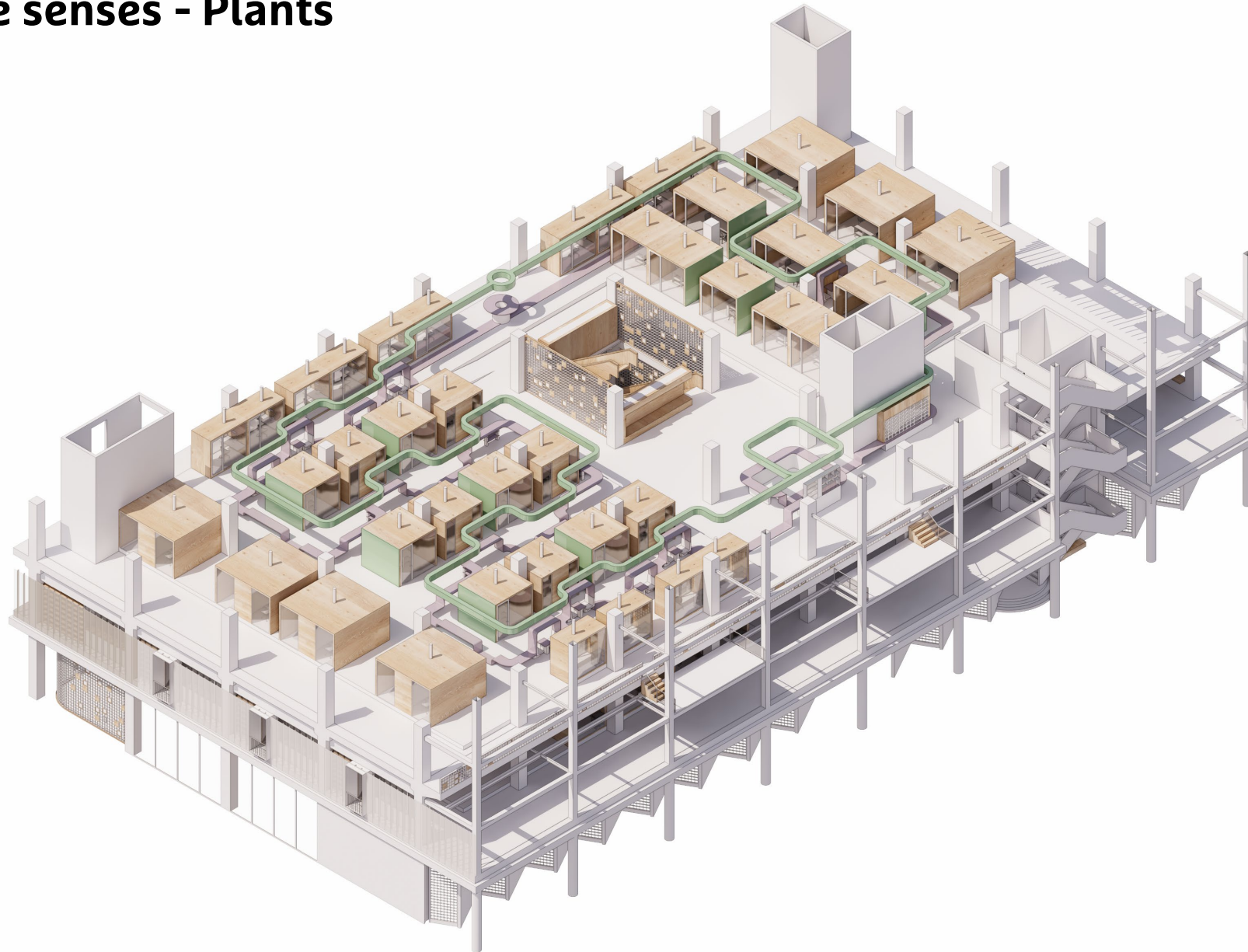
Perforated acoustic panels 12mm



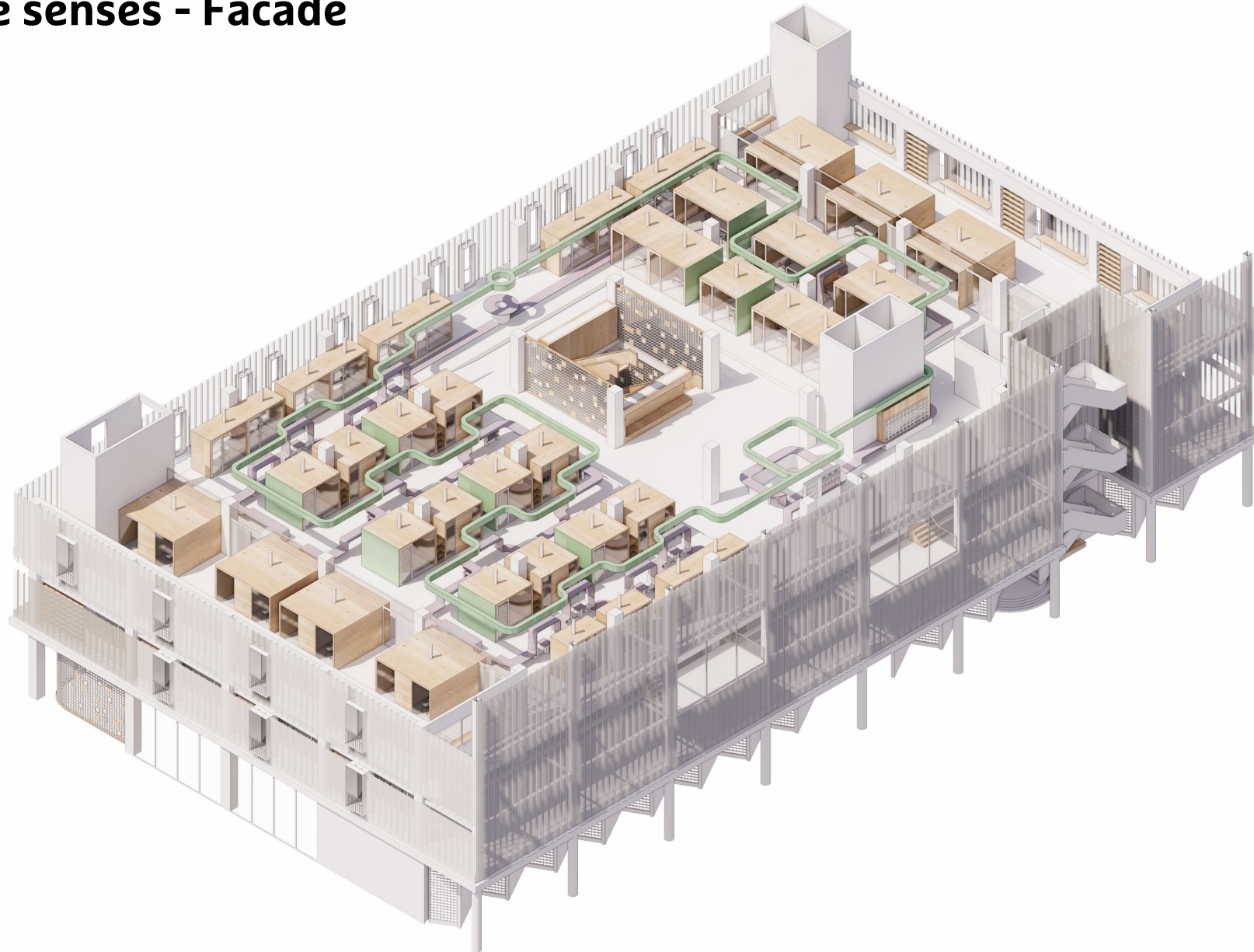
| Enhance senses - Collaboration Belt



| Enhance senses - Plants



| Enhance senses - Facade



Plan

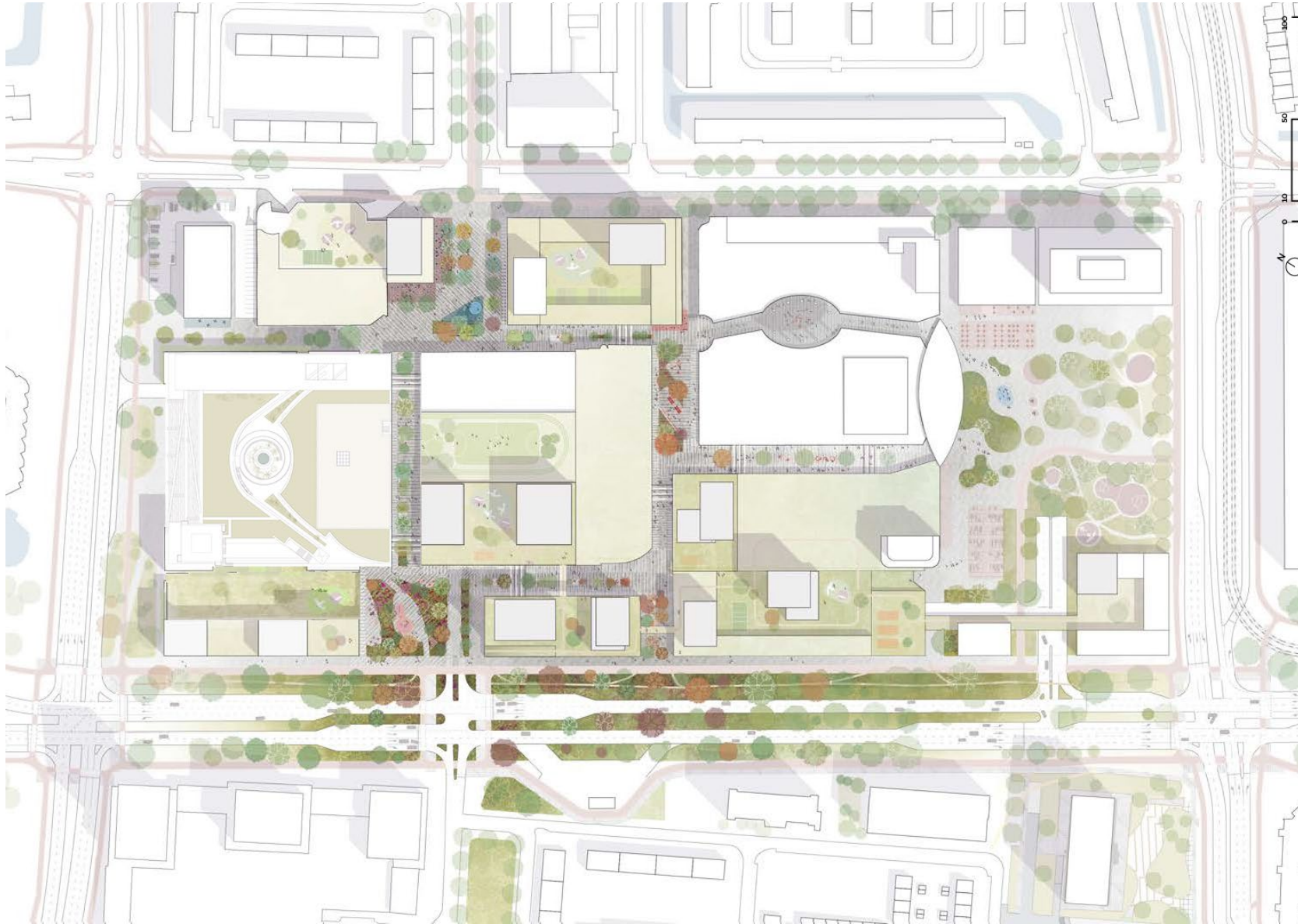
- 01 Food Court
- 02 Cinema
- 03 Game area
- 04 Garden
- 05 Temporary market settlements
- 06 Stage & event area
- 07 Exhibition
- 08 Toilet

Self-pickup cabinets & Vending machine



1:200 PLAN

| Plan



| Elevation existing



| Elevation S



| Elevation W



| Elevation N



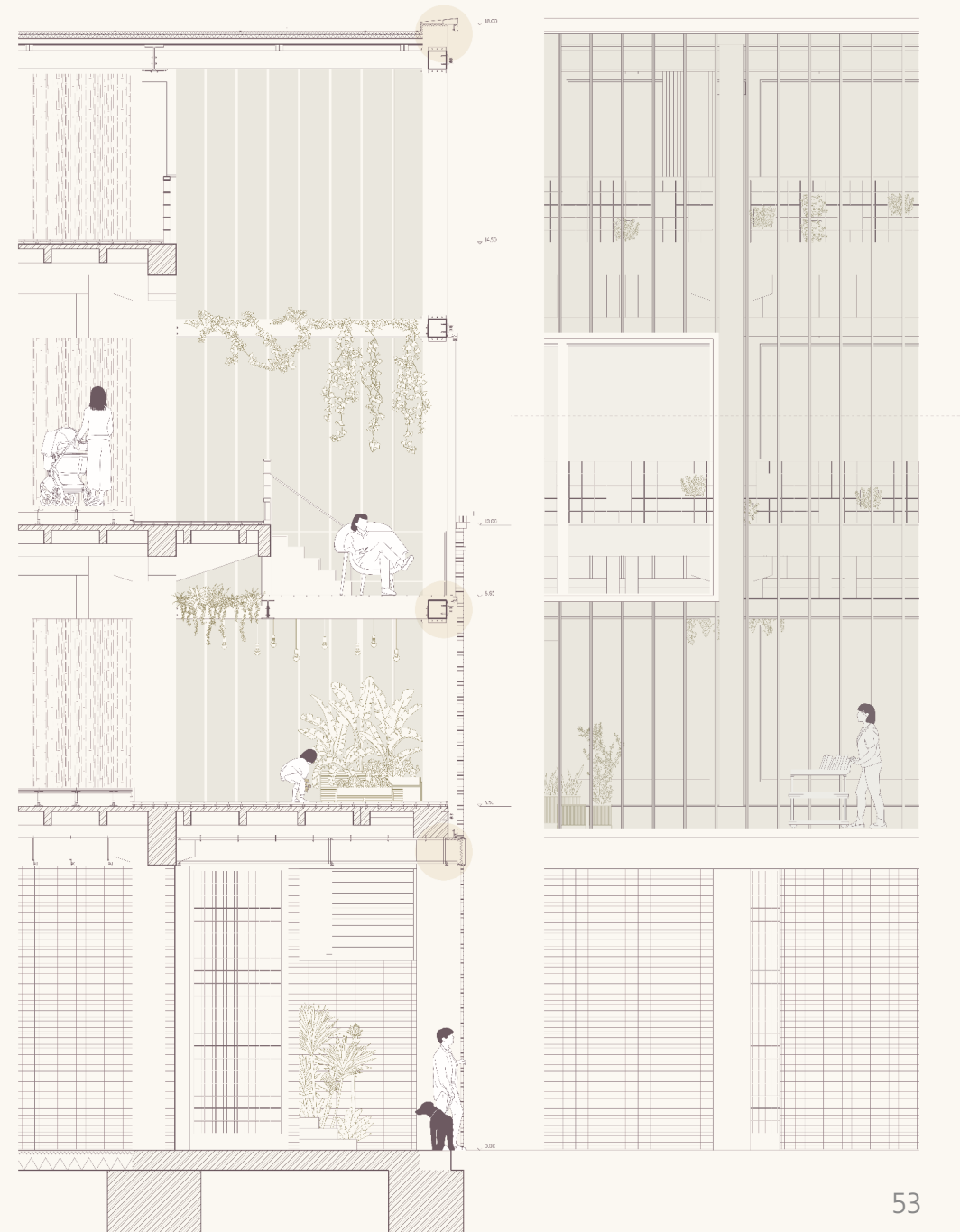
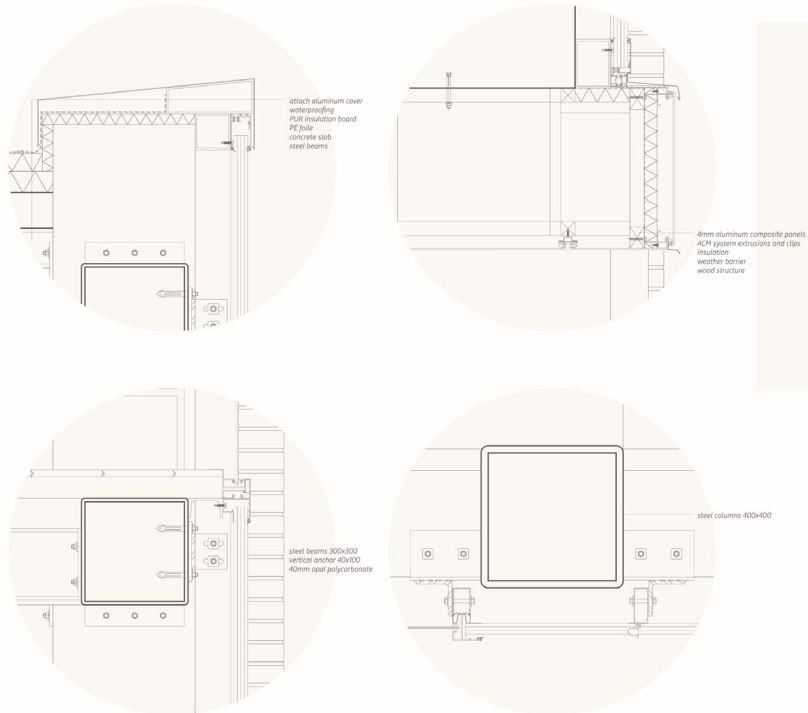
| Elevation E



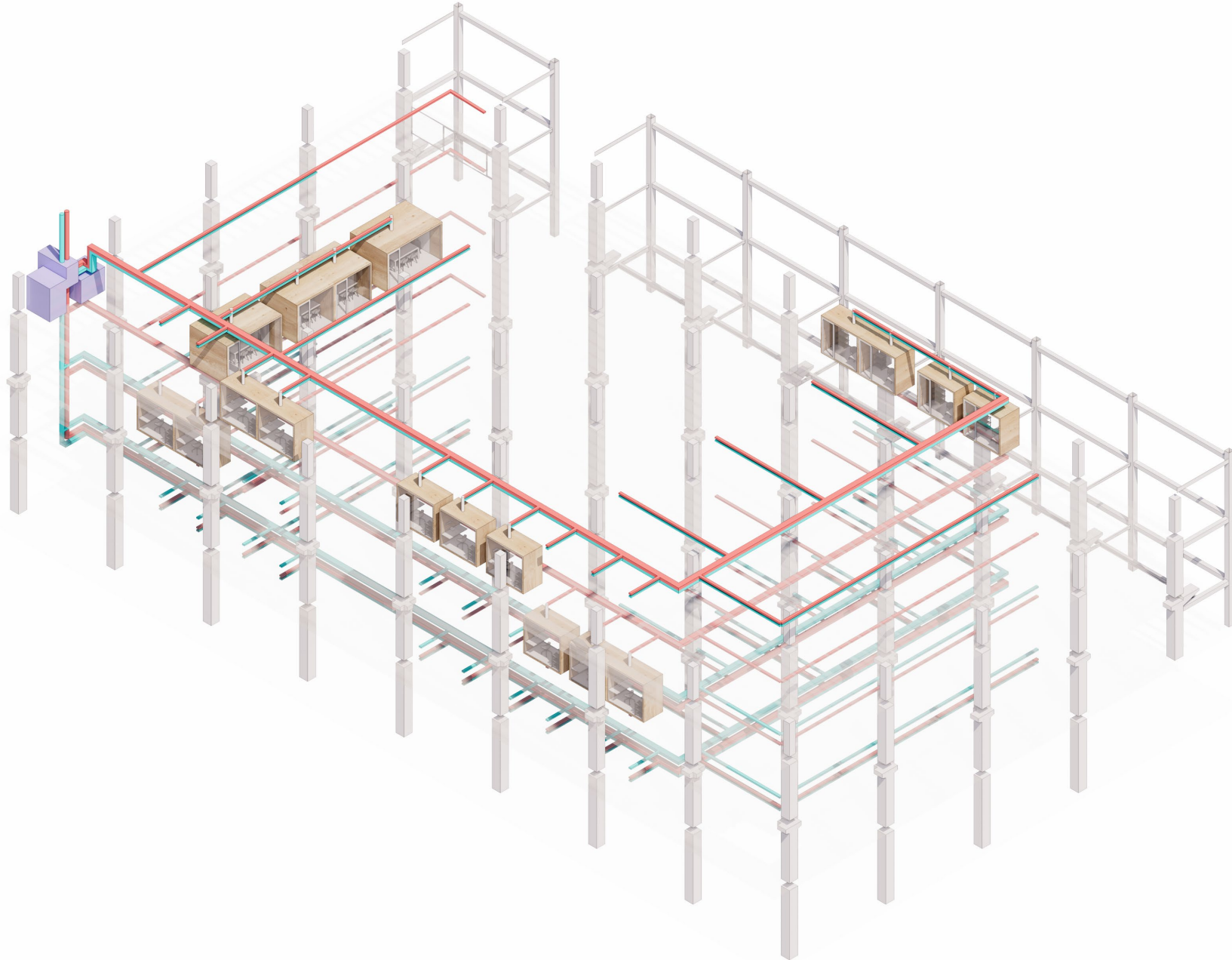
| BT

Polycarbonate panels

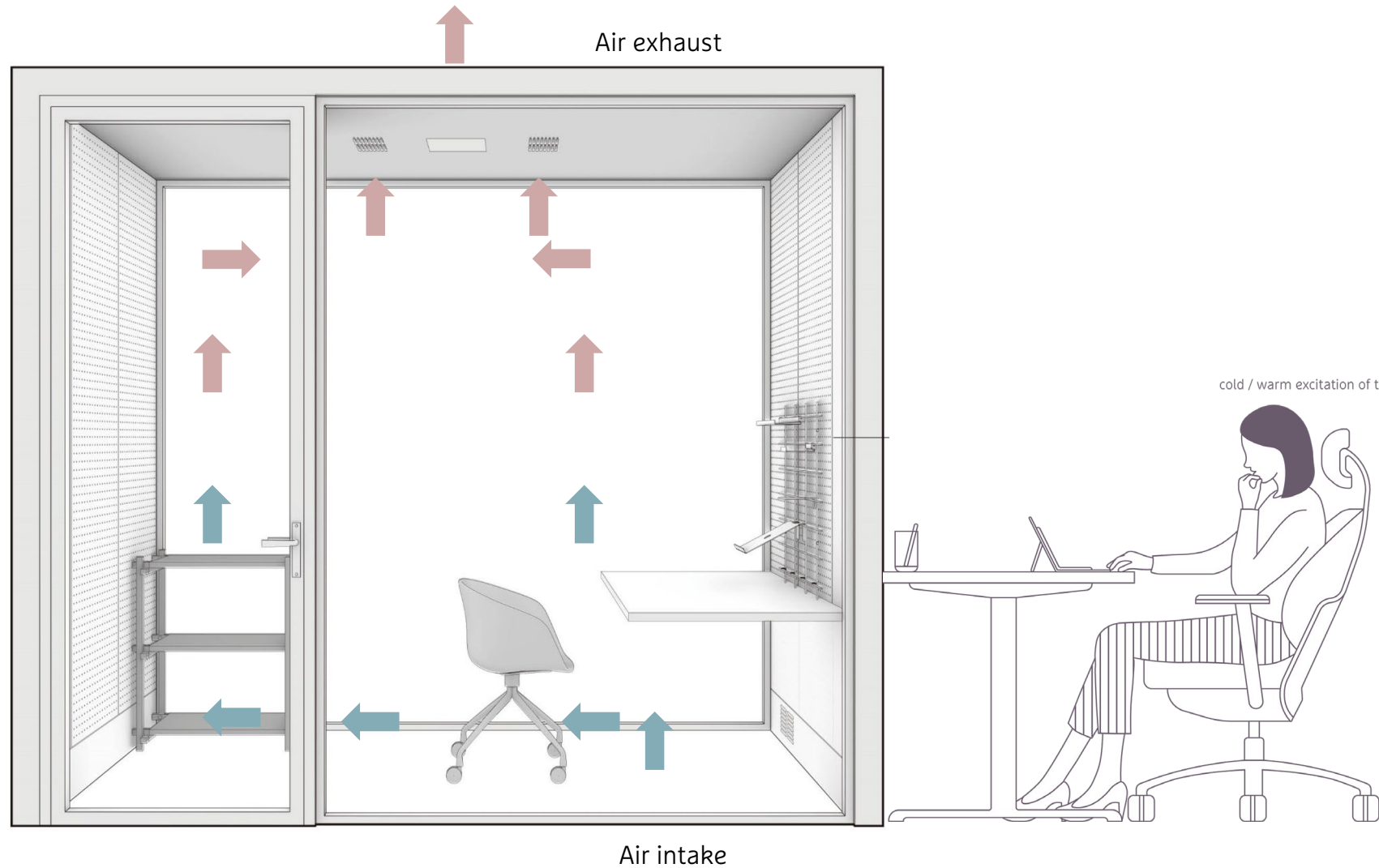
- Impact resistance
- Heat resistance
- Long service life
- Light Diffusion / UV Protection
- Easy to install



| Climate - Heat recovery ventilation



| Climate - Underfloor ventilation & Personal comfort system



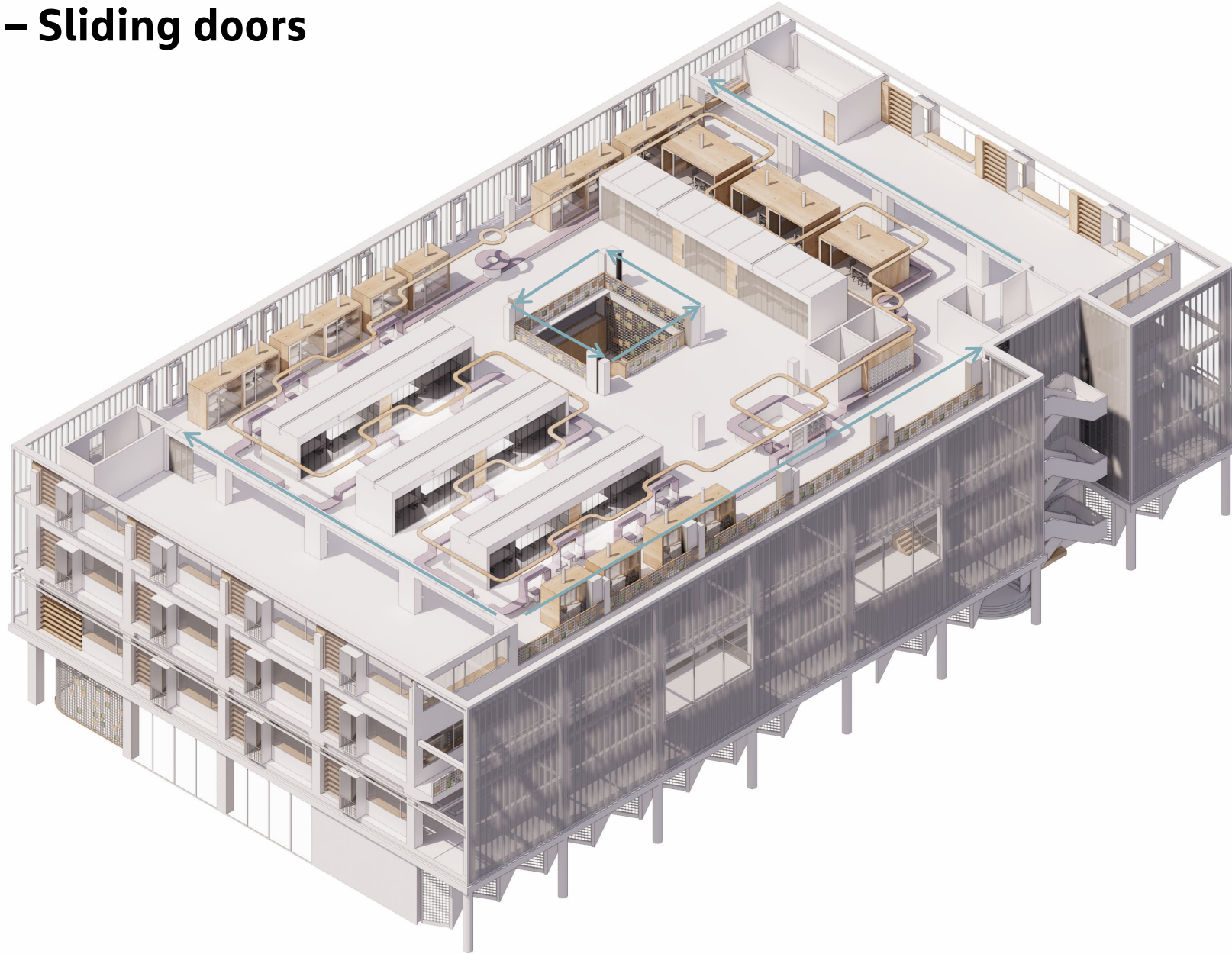
| Climate - summer



| Climate - winter



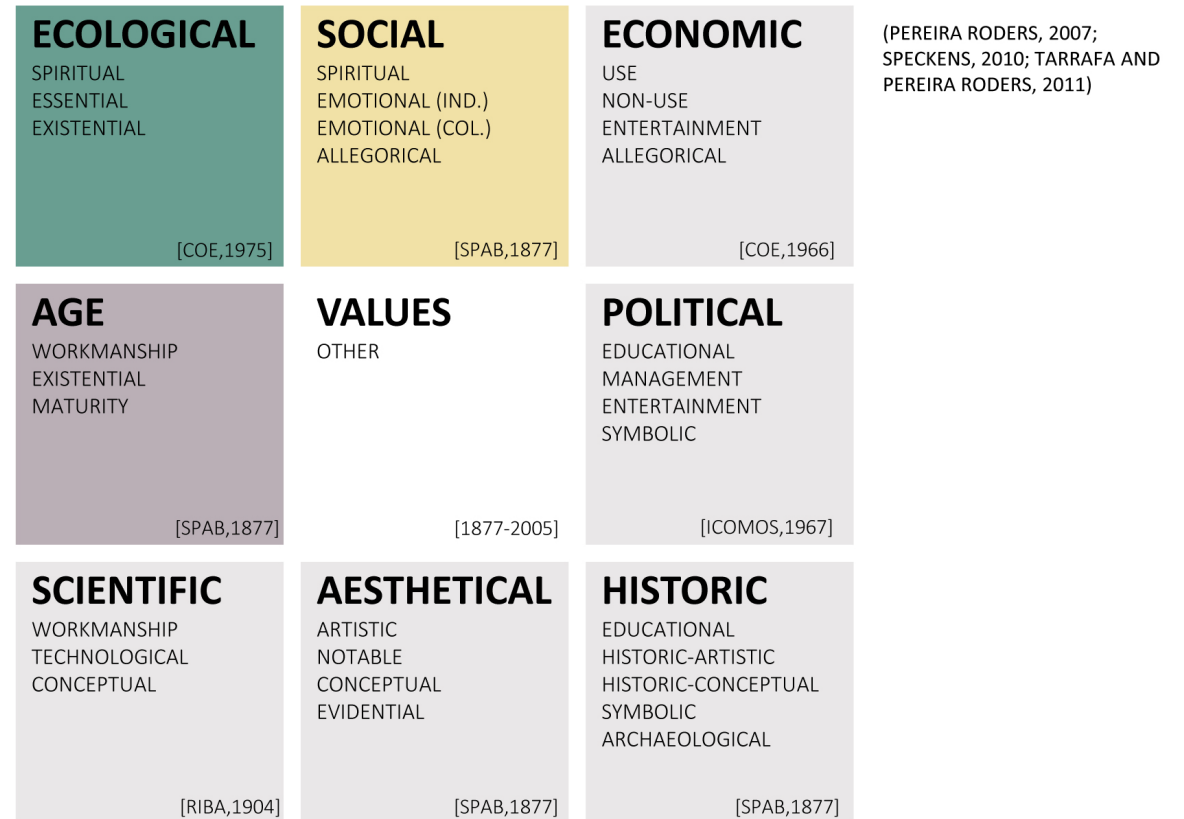
| Climate – Sliding doors



| Heritage values

Pereira Roders' value framework

- Age
Materials
- Ecological
Green space
- Social
Atmosphere & Structure



| Existing & New



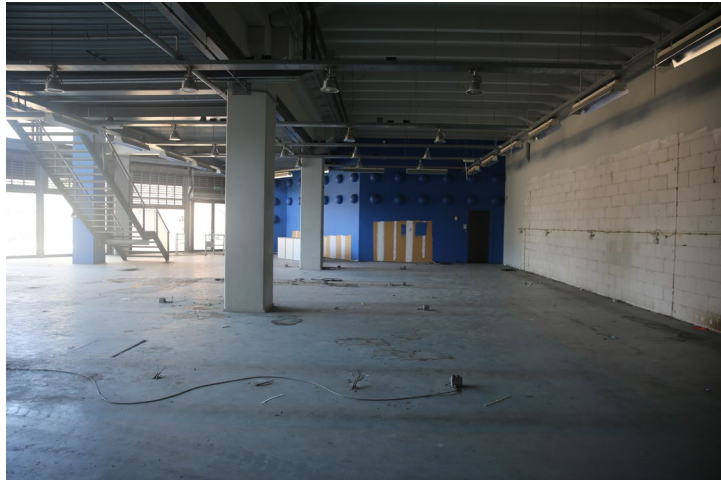
| Existing & New



| Existing & New



| Existing & New



| Existing & New



| Existing & New



| Existing & New



| Existing & New



| Existing & New



| Existing & New



Problem Statement

What role does perception play in the transformation of contemporary shopping malls?

Thanks
