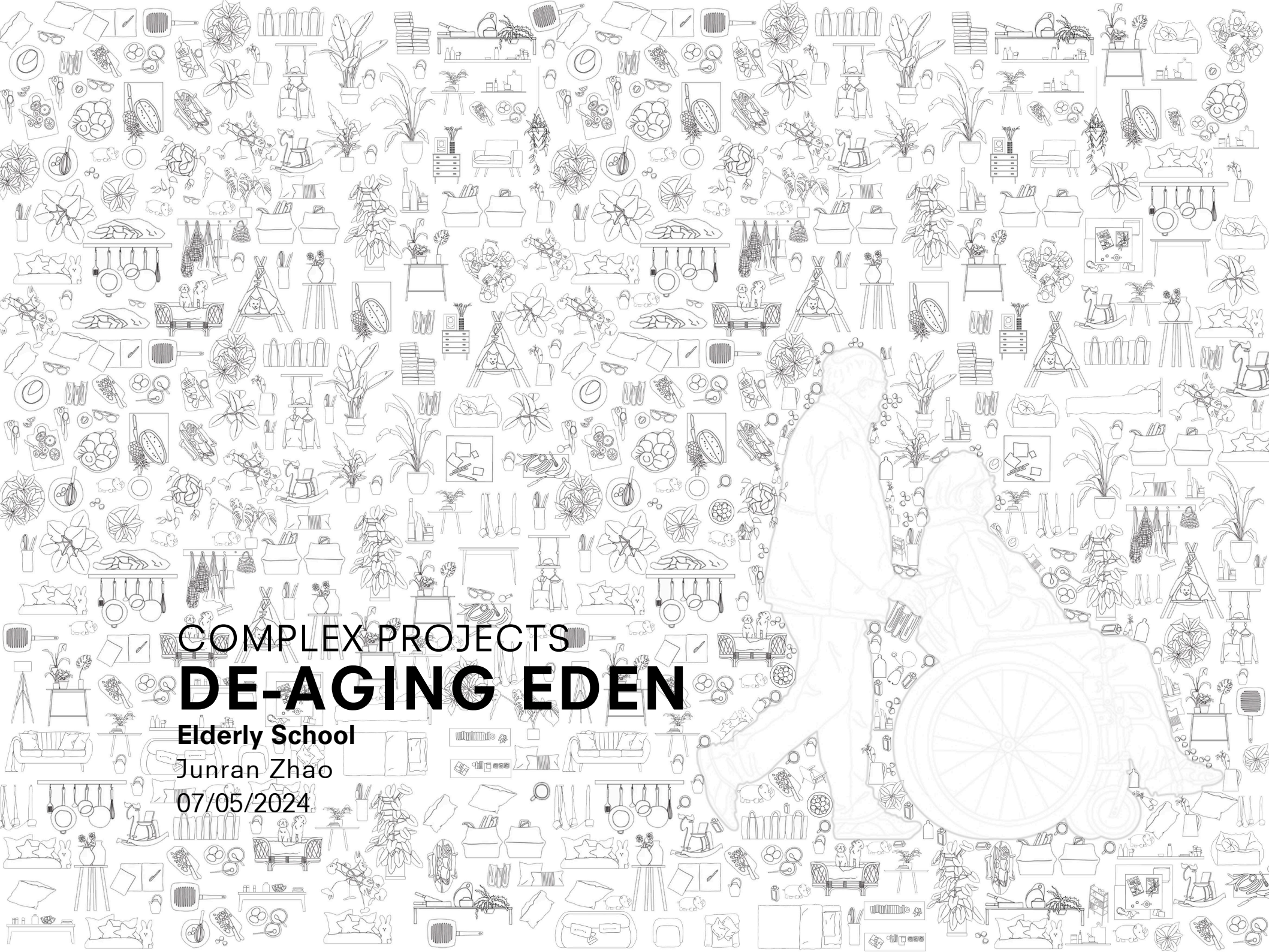


COMPLEX PROJECTS

DE-AGING EDEN

Elderly School

Junran Zhao

07/05/2024



DEFINITION OF SCHOOL



What do we talk about when we talk about

GOING TO SCHOOL?

A forgotten age of open air classrooms in the Netherlands, 1957.
https://twitter.com/historyinmemes/status/1653083950619803664/photo/1

DEFINITION OF SCHOOL



Mental calculation at primary school. Nikolay Bogdanov-Belsky, 1895.
https://nl.wikipedia.org/wiki/Hoofdrekenen#/media/Bestand:BogdanovBelsky_UstnySchet.jpg

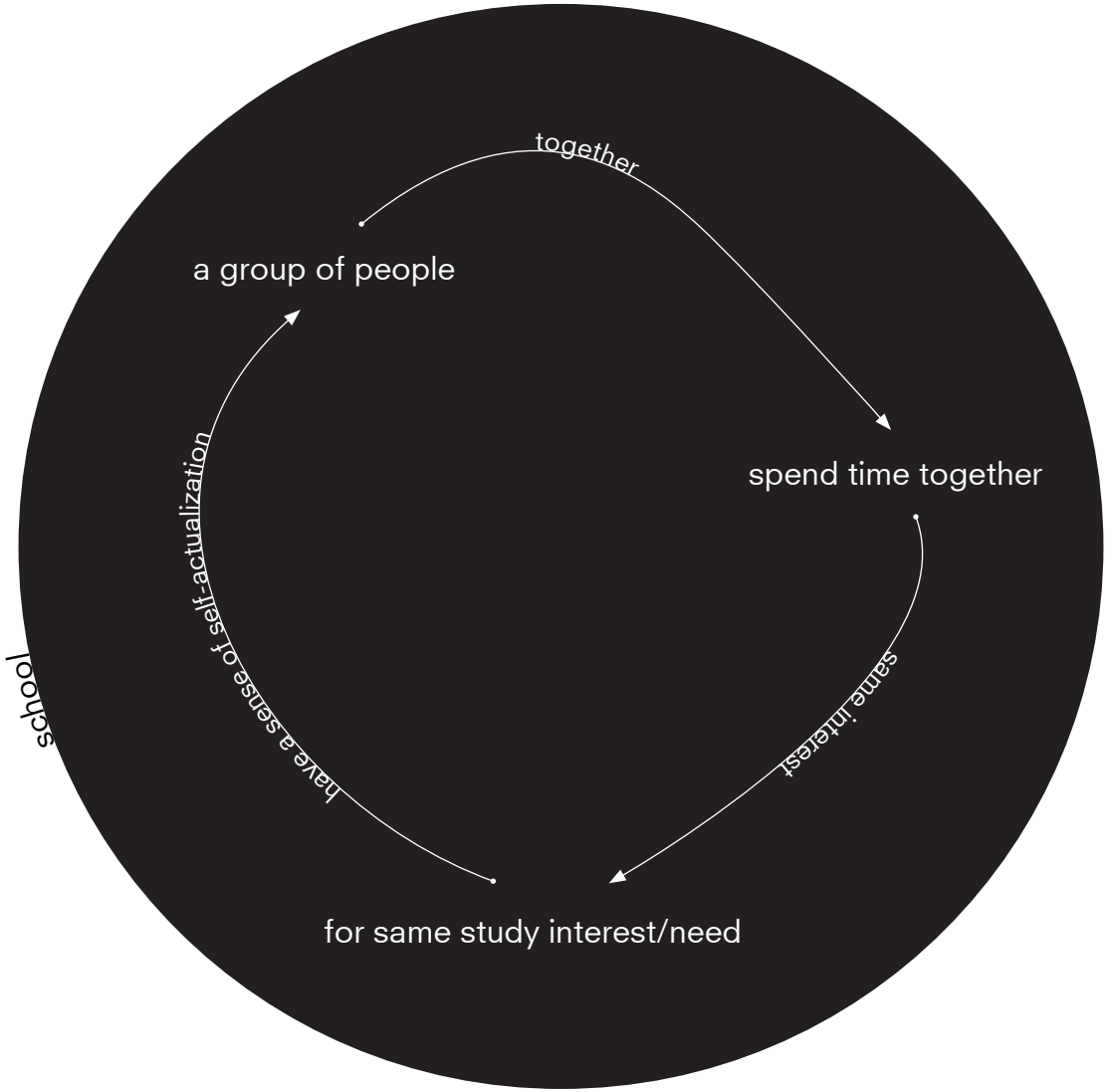
DEFINITION OF SCHOOL



The Anatomy Lesson of Dr Nicolaes Tulp. Rembrandt van Rijn, 1632.
https://www.mauritshuis.nl/en/our-collection/artworks/146-the-anatomy-lesson-of-dr-nicolaes-tulp/

DEFINITION OF SCHOOL

School is not only for children and young people...



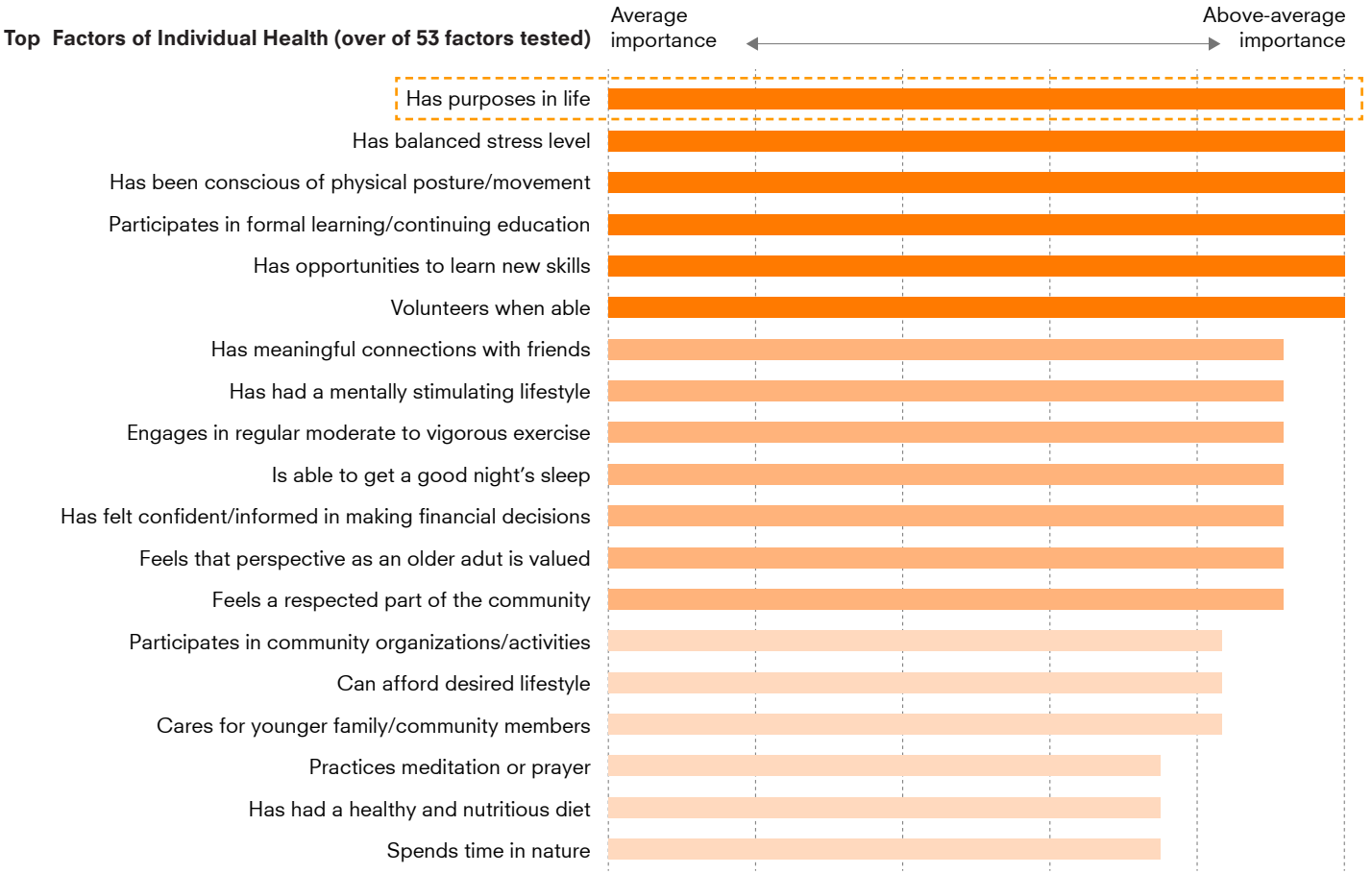
DEFINITION OF SCHOOL



School of Athens. Raffaello Sanzio da Urbino, 1509-1511.
https://www.museivaticani.va/content/museivaticani/en/collezioni/musei/stanze-di-raffaello/stanza-della-segnatura/scuola-di-atene.html

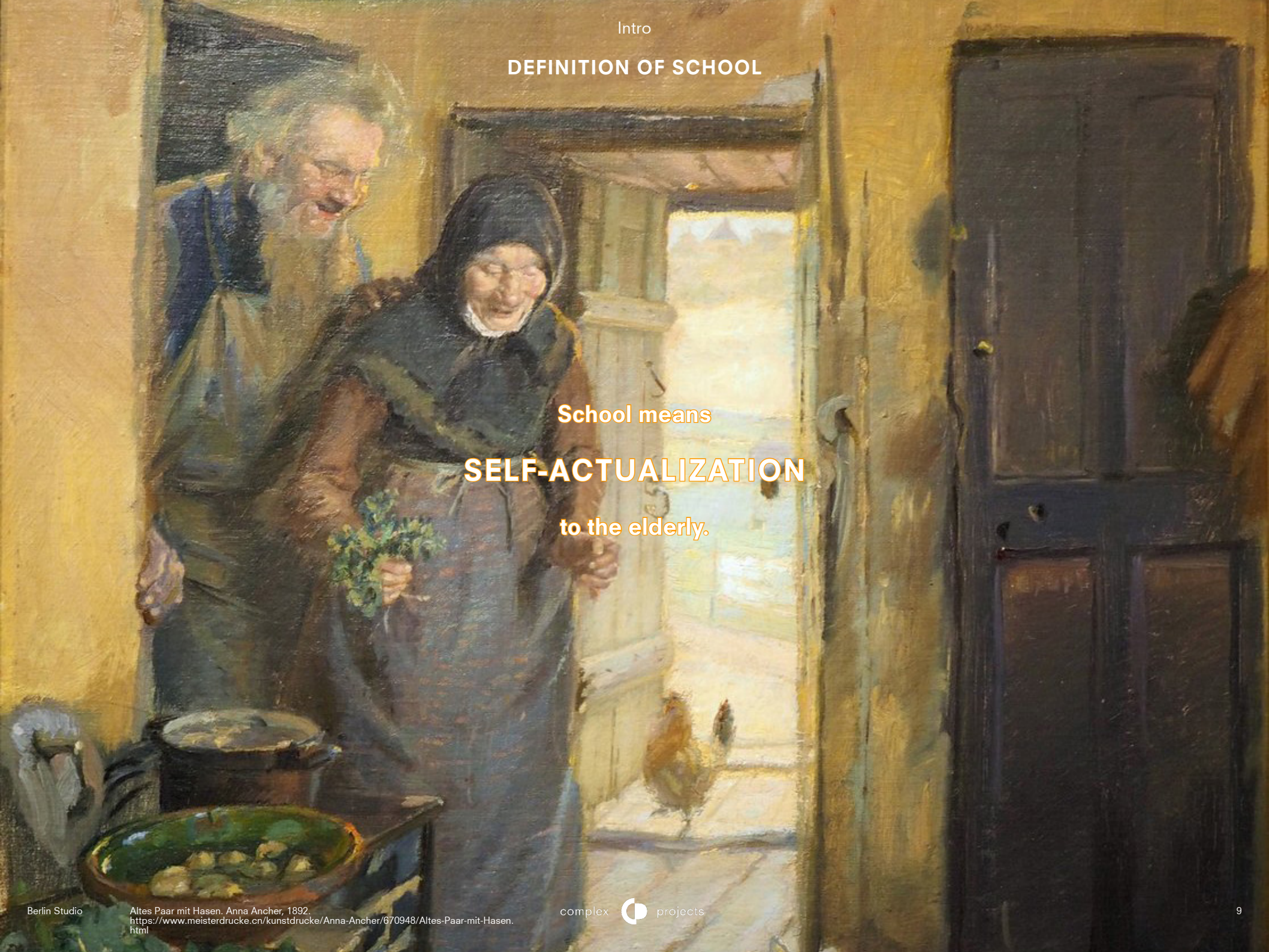
SELF-ACTUALIZATION

Teaching and learning in schools can help the elderly have a sense of self-actualization, which matters most to elderly's health.



Data Source: https://www.mckinsey.com/mhi/our-insights/age-is-just-a-number-how-older-adults-view-healthy-aging

DEFINITION OF SCHOOL



School means

SELF-ACTUALIZATION

to the elderly.

Altes Paar mit Hasen. Anna Ancher, 1892.
https://www.meisterdrucke.cn/kunstdrucke/Anna-Ancher/670948/Altes-Paar-mit-Hasen.html



What is the situation of

THE ELDERLY IN BERLIN?

AGING POPULATION

There will be more elderly in the future.

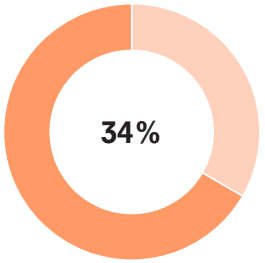


German population development

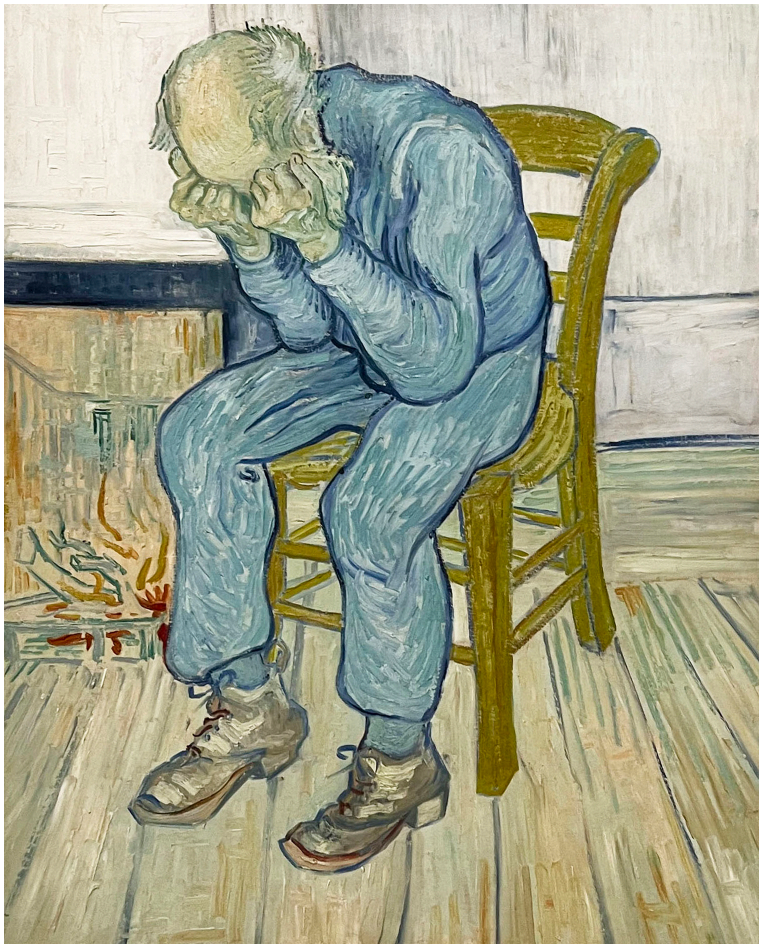
Data Source: https://www.businessinsider.de/wirtschaft/forscher-zeigen-an-7-beispielen-wie-radikal-sich-deutschland-in-den-naechsten-10-jahren-veraendern-wird/, https://www.researchgate.net/figure/Population-structure-of-Germany-2050-constructed-using-Bayesian-population-projection_fig5_330592416

Picture Source: https://aphconnectcenter.org/aging/social-isolation-and-loneliness-major-risks-factors-for-older-people/

ELDERLY LIVING ALONE



In Germany, approximately 5.9 million people aged 65 or older live alone, accounting for one-third (34%) of the population in this age group.





Elderly people living alone are more likely to suffer from anxiety and depression.
They may feel abandoned by society.

Sorrowing Old Man, At Eternity's Gate. Vincent Van Gogh, 1890
Photographed in Kröller-Müller Museum
Data Source: https://www.destatis.de/EN/Press/2021/09/PE21_N057_12411.html



SOCIETY | GERMANY

The Germans curing loneliness with homes for young and old

Volker Witting
05/23/2023

Multigenerational housing projects — with young and old living under one roof — are becoming increasingly popular in Germany. Having a diversity of ages in one home can improve lives, especially as the population ages.

News Title: https://www.dw.com/en/the-germans-curing-loneliness-with-homes-for-young-and-old/a-65703756
Picture Source: https://hopva.org/benefits-of-seniors-and-young-children-spending-time-together/

MIXED-AGE CO-LIVING

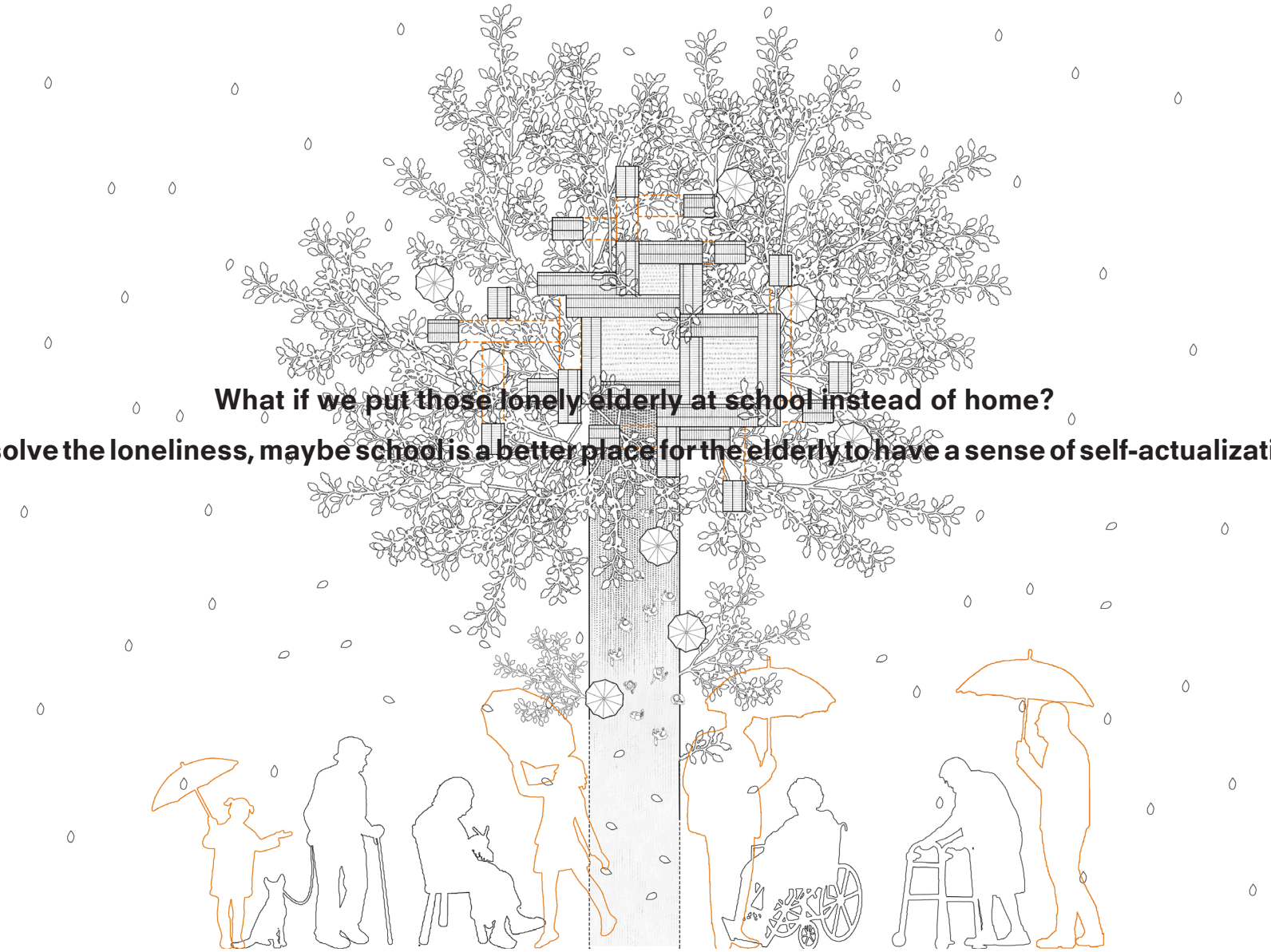


INTERGENERATIONAL COMMUNICATION

would boost all aspects of health for the elderly in Berlin.

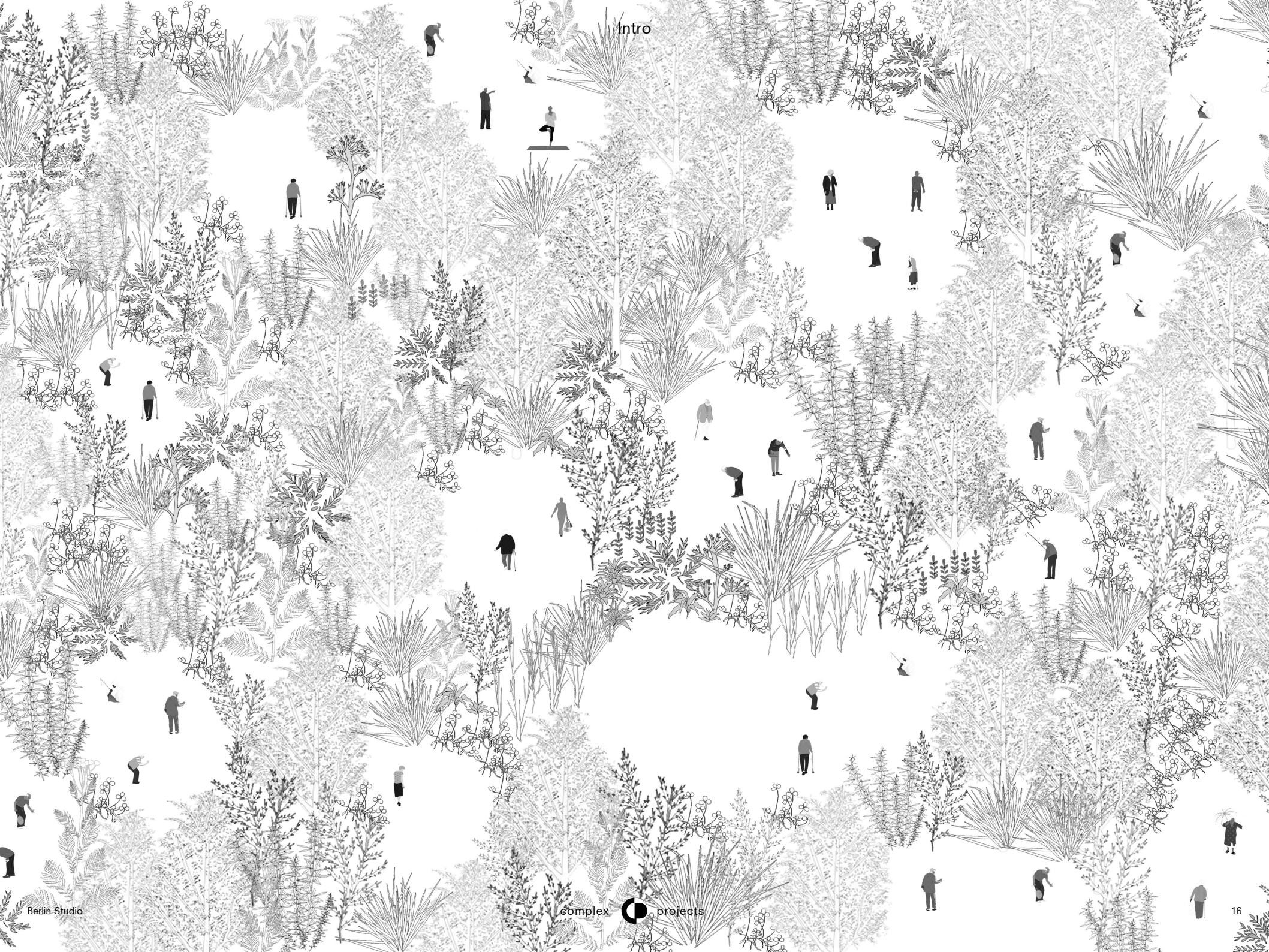
La Grenouillere. Pierre-Auguste Renoir, 1869.
https://www.kunstkopie.nl/a/pierre_auguste_renoir/la-grenouillere.html

ELDERLY SCHOOL



What if we put those lonely elderly at school instead of home?

To solve the loneliness, maybe school is a better place for the elderly to have a sense of self-actualization.





RESEARCH QUESTION

Can intergenerational-knowledge-sharing space help the elderly achieve self-actualization?

SELF-CARED ELDERLY IN BERLIN



Two German women chat in the gardens of a senior care home in Berlin.
Sean Gallup/Getty Images.
https://www.ijpr.org/2013-10-17/grandma-exodus-german-seniors-look-to-poland-for-care

Client

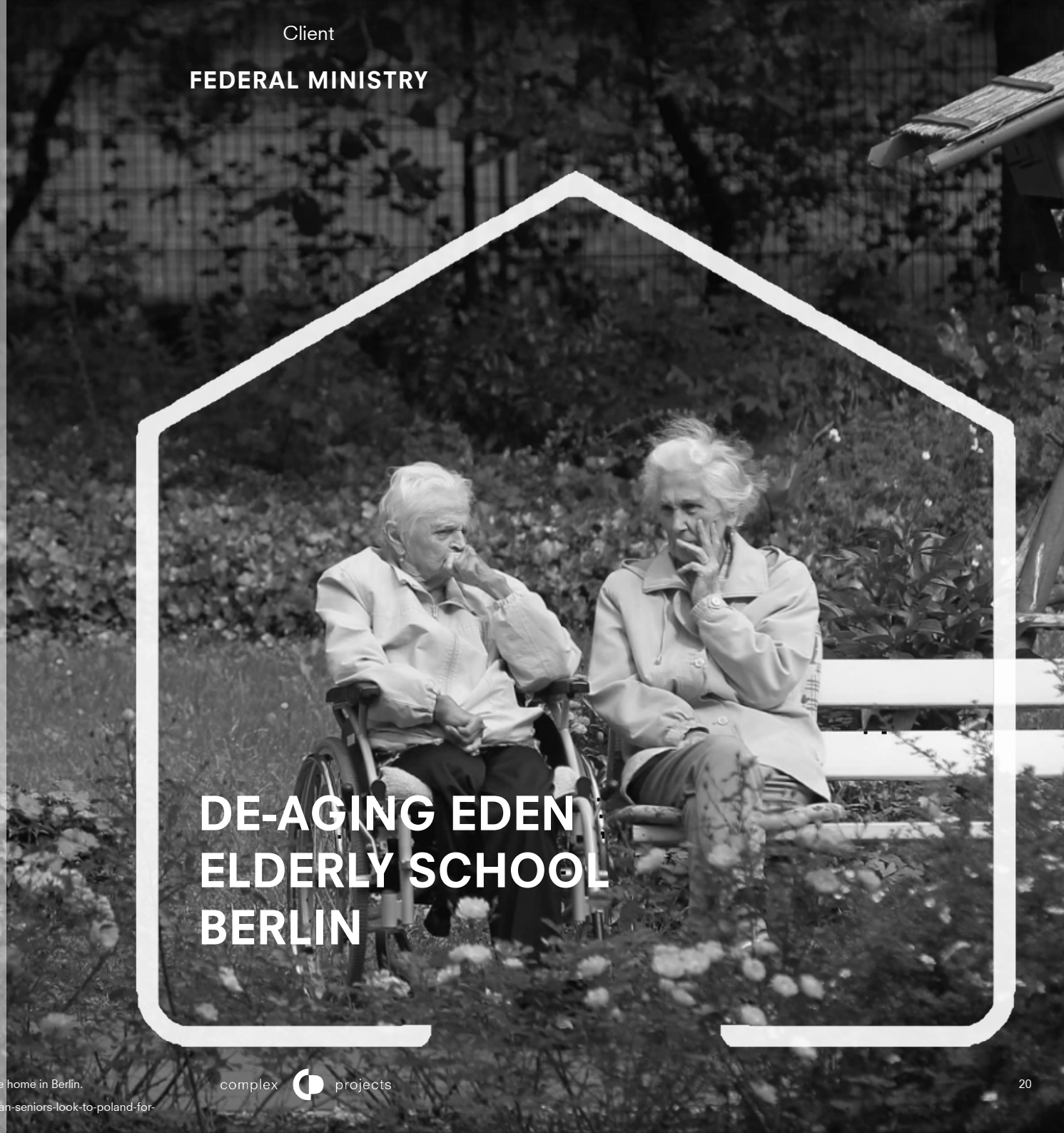
FEDERAL MINISTRY

Federal Ministry of Health

Federal Ministry for Family Affairs, Senior Citizens, Women and Youth

Federal Ministry of Education and Research

DE-AGING EDEN : ELDERLY SCHOOL BERLIN



Two German women chat in the gardens of a senior care home in Berlin. Sean Gallup/Getty Images. https://www.ijpr.org/2013-10-17/grandma-exodus-german-seniors-look-to-poland-for-care

INTERGENERATIONAL CLASS





Teach

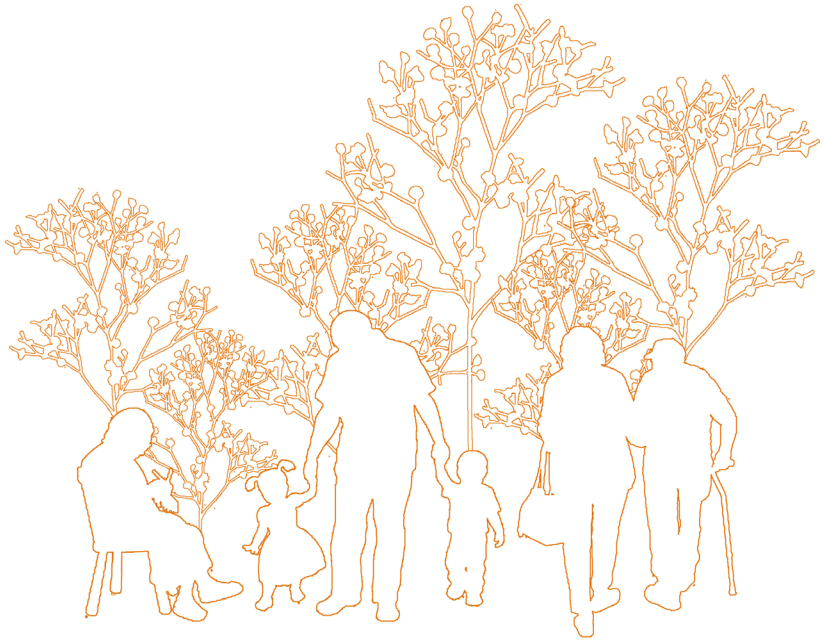
Teach

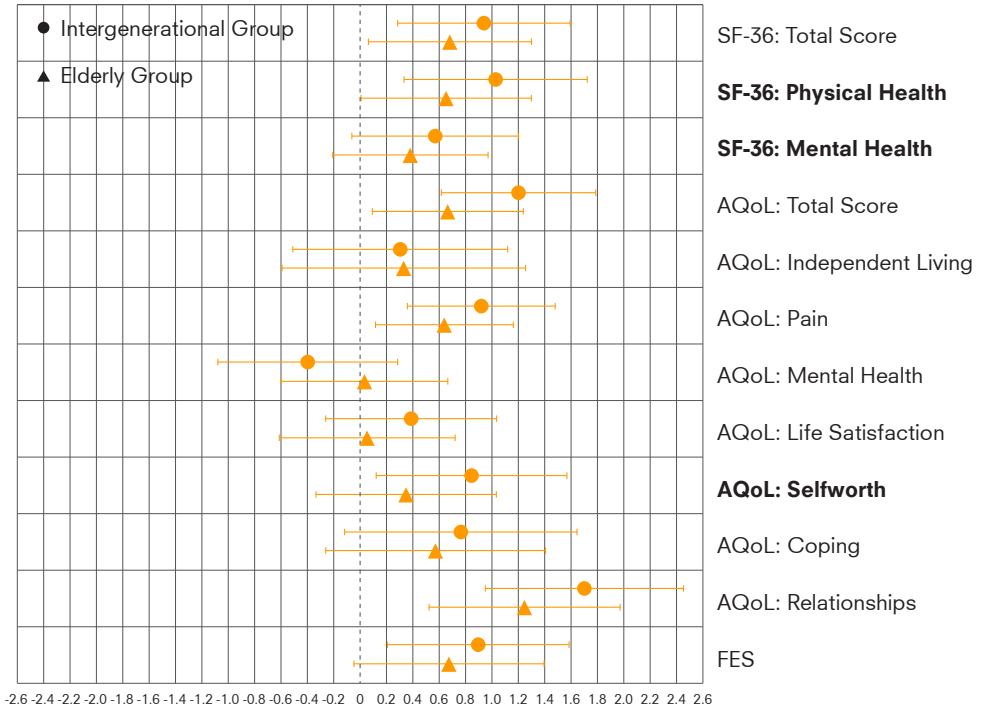
Old People

Intergenerational Communication

Young People

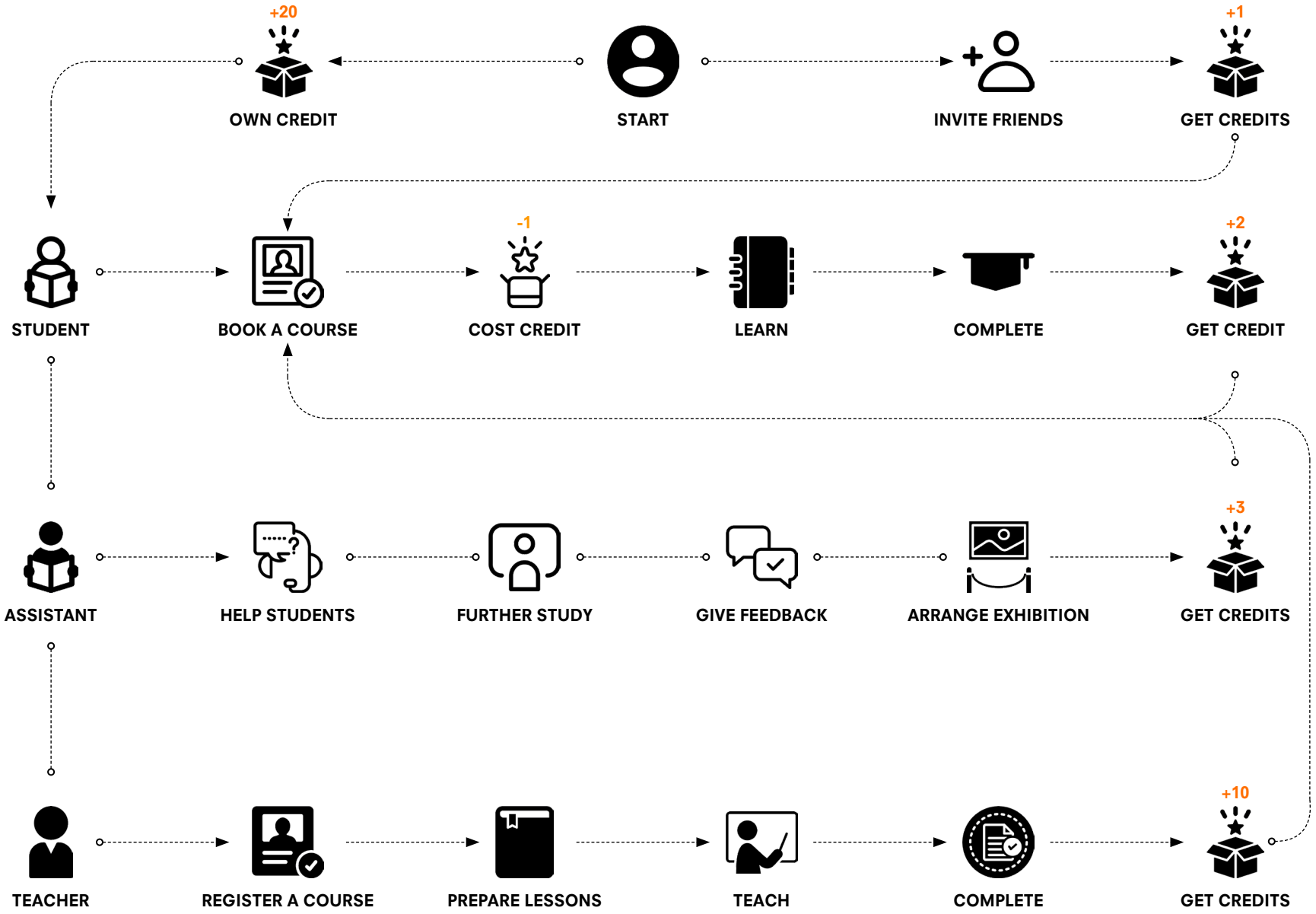
INTERGENERATIONAL CLASS





Data Source: https://peerj.com/articles/11292/

CREDIT SYSTEM

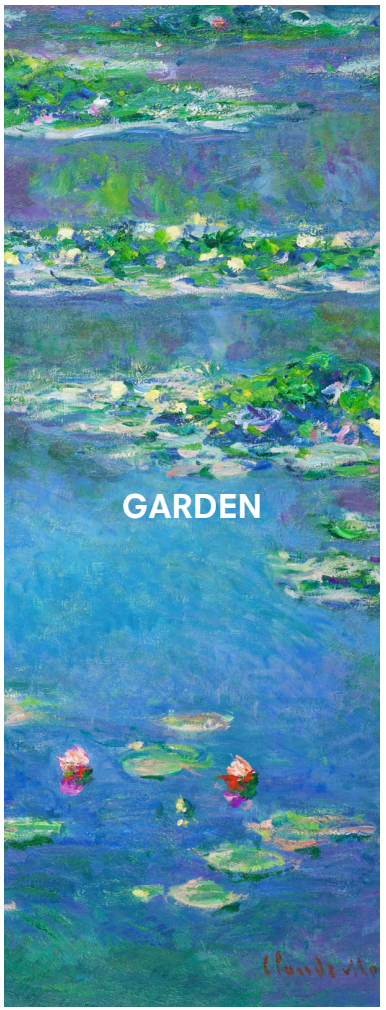


ELDERLY SCHOOL



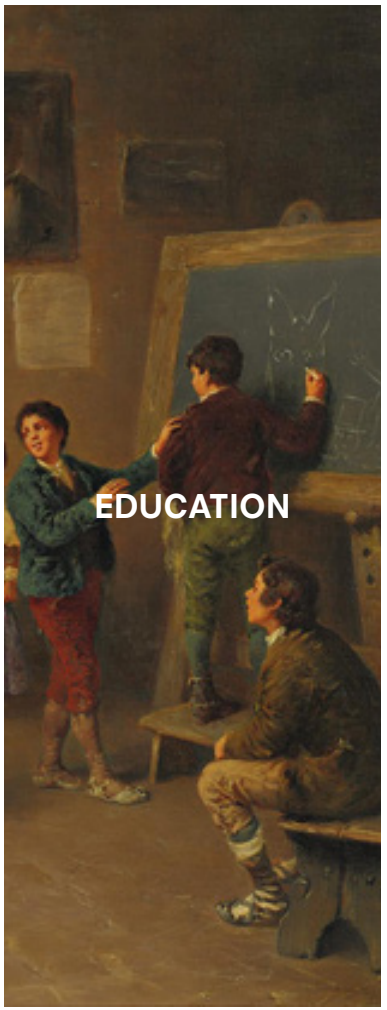
Terrace of a Café at Night.
Vincent van Gogh, 1888

https://krollermuller.nl/en/vincent-van-gogh-terrace-of-a-cafe-at-night-place-du-forum-1



Water Lilies.
Claude Monet, 1906

https://www.artic.edu/artworks/16568/water-lilies



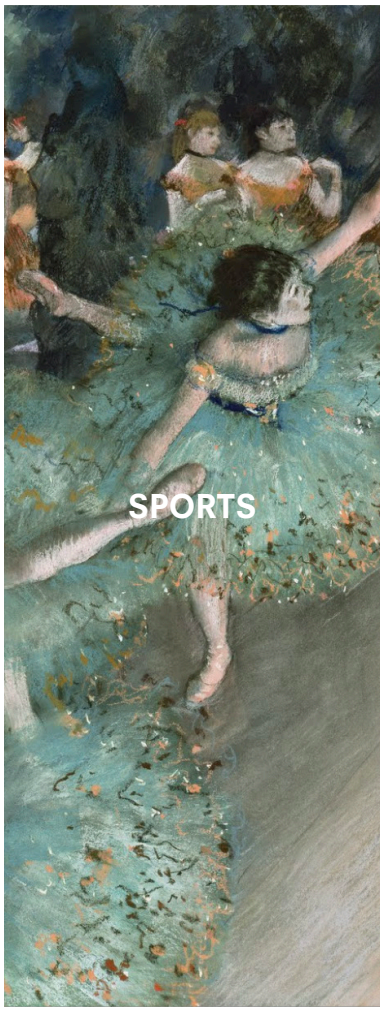
The Unruly Classroom.
Francesco Bergamini, date unknown

https://commons.wikimedia.org/wiki/File:THE_UNRULY_CLASSROOM.PNG



Dance at Le Moulin de la Galette.
Pierre-Auguste Renoir, 1876

https://artsandculture.google.com/asset/dance-at-le-moulin-de-la-galette/rQEx7CtGiKE3yg?hl=en-GB

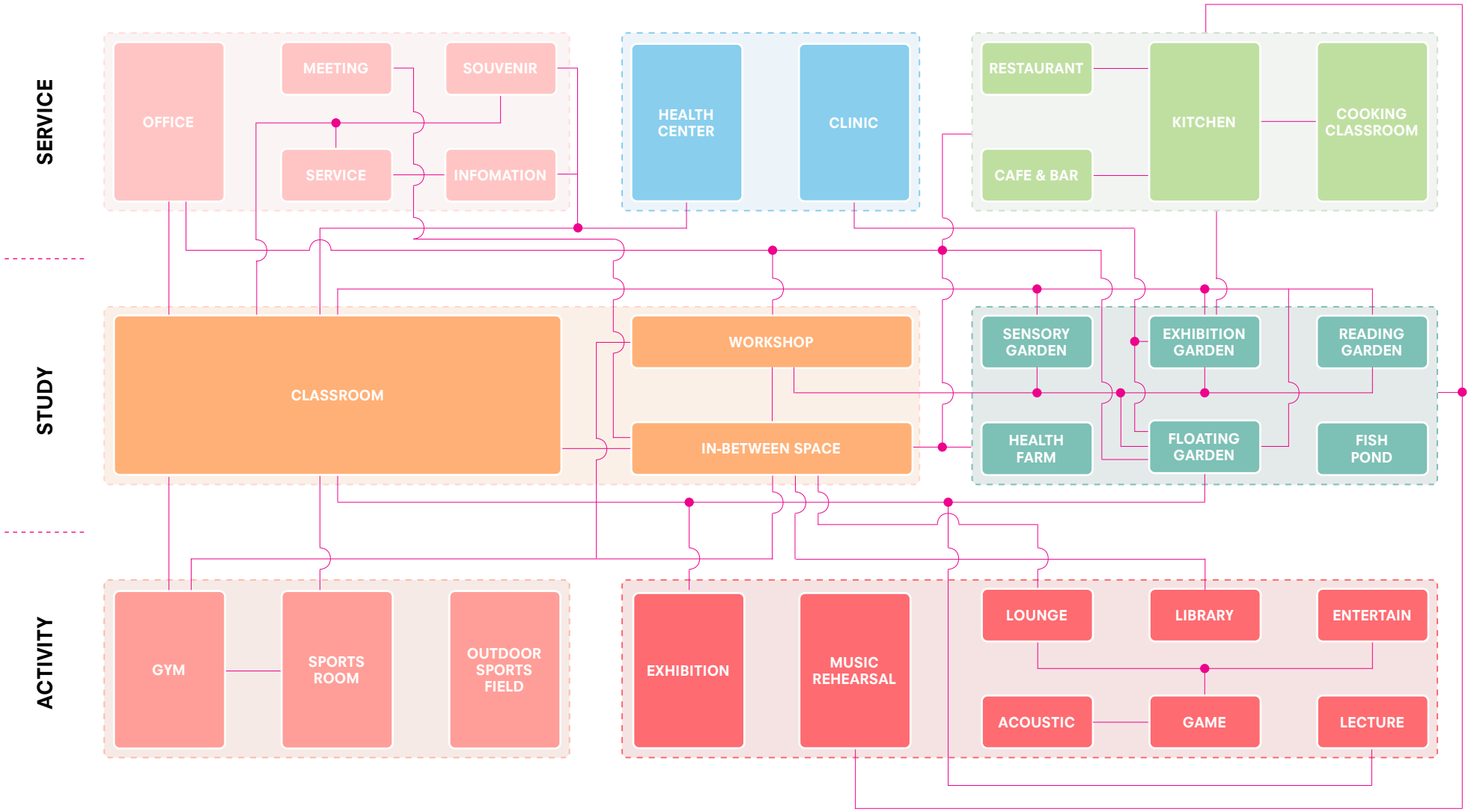


Swaying Dancer.
Edgar Degas, 1877-1879

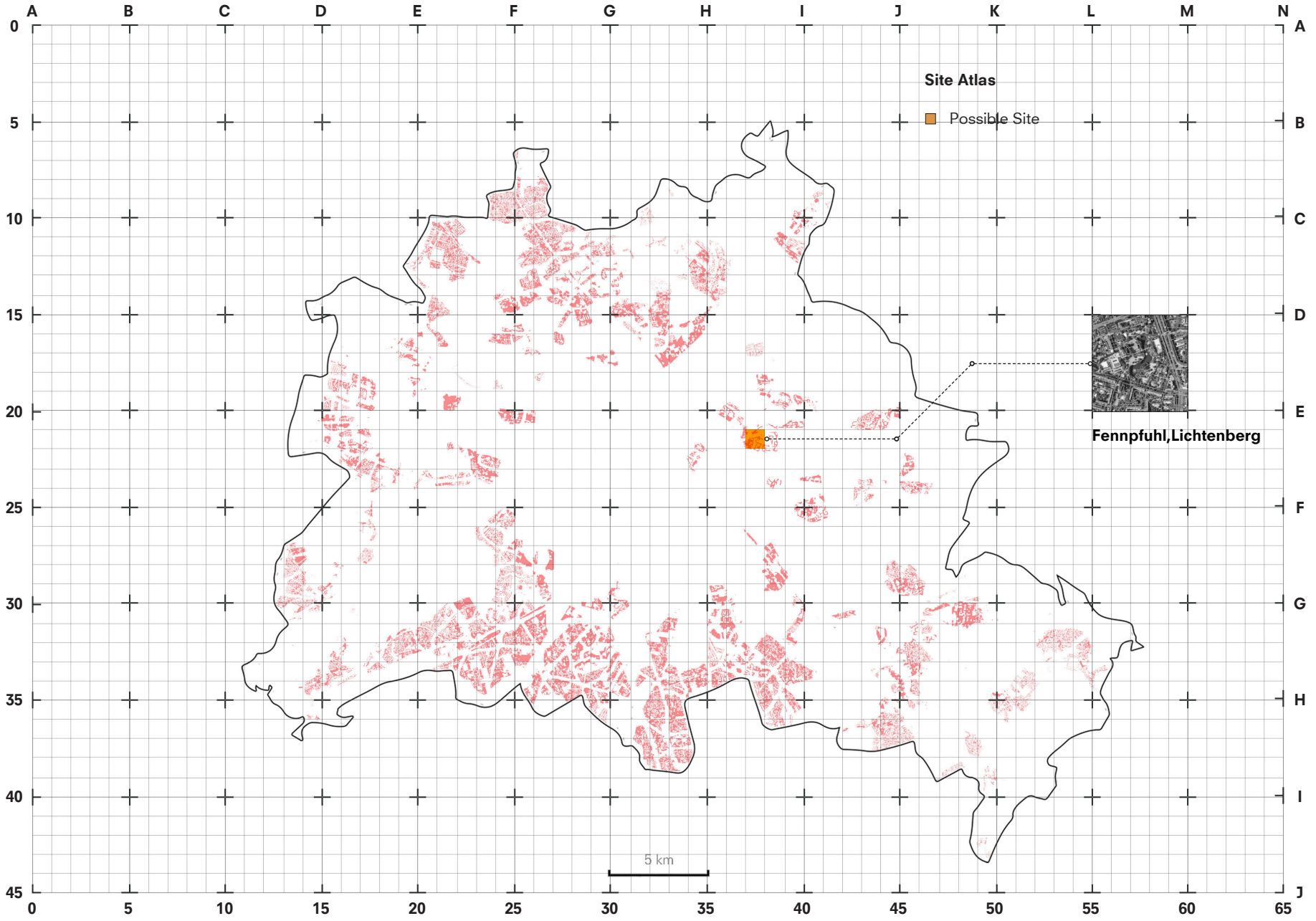
https://artsandculture.google.com/asset/swaying-dancer-dancer-in-green/PAG7nnYIK8XTTA?hl=en-GB

RELATION SCHEME

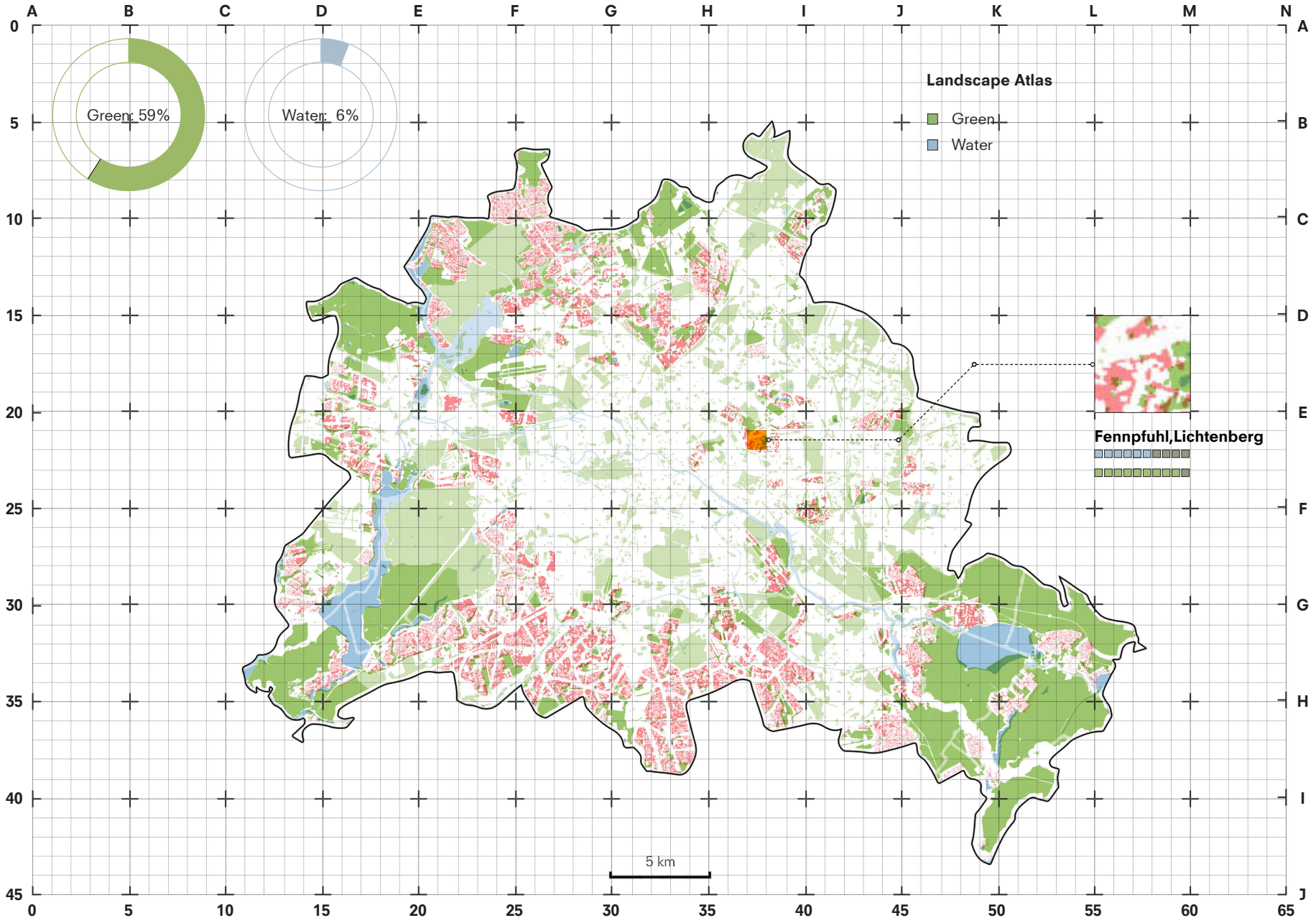
GFA: 31,104 m²



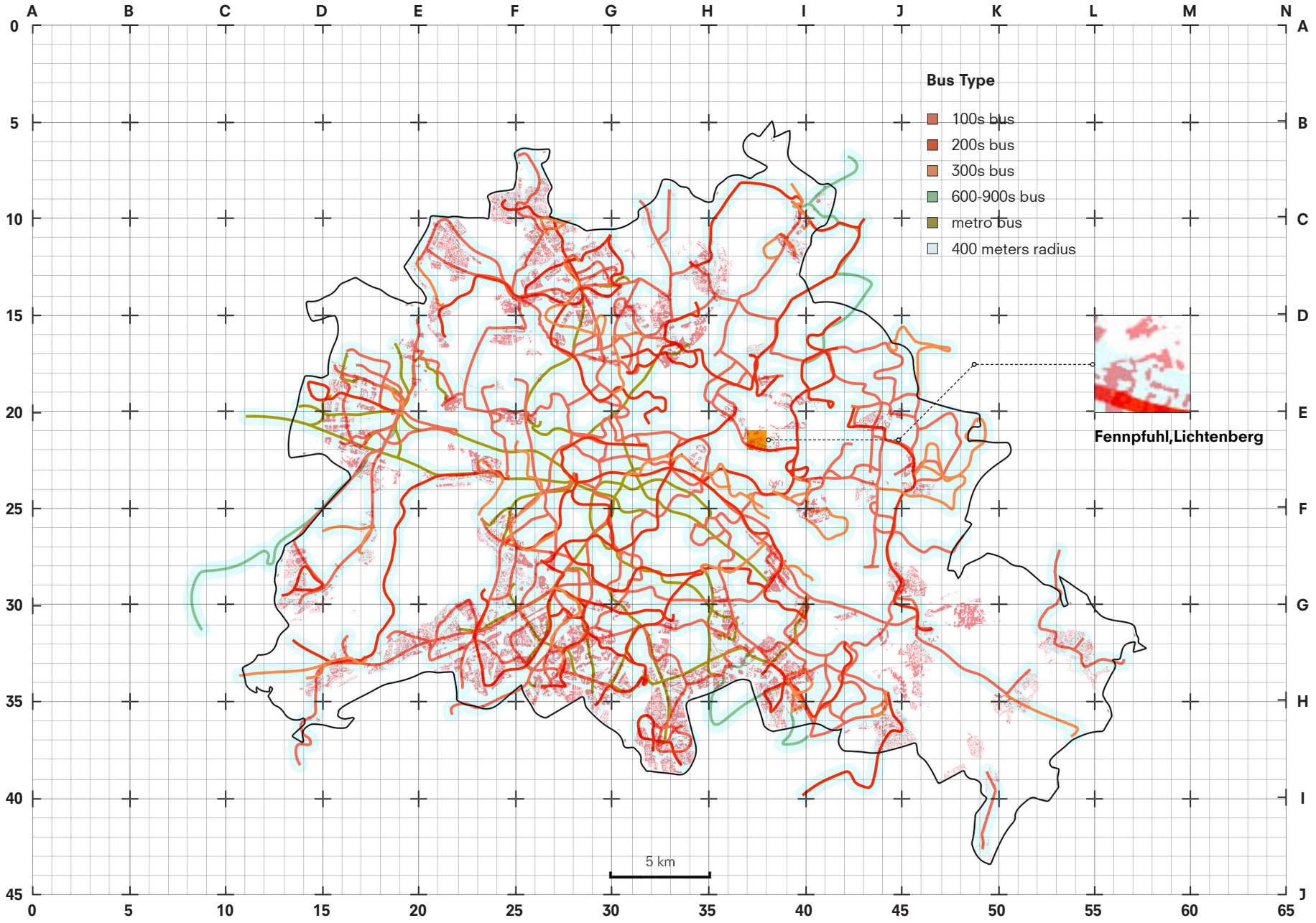
MIXED-AGE COMMUNITY



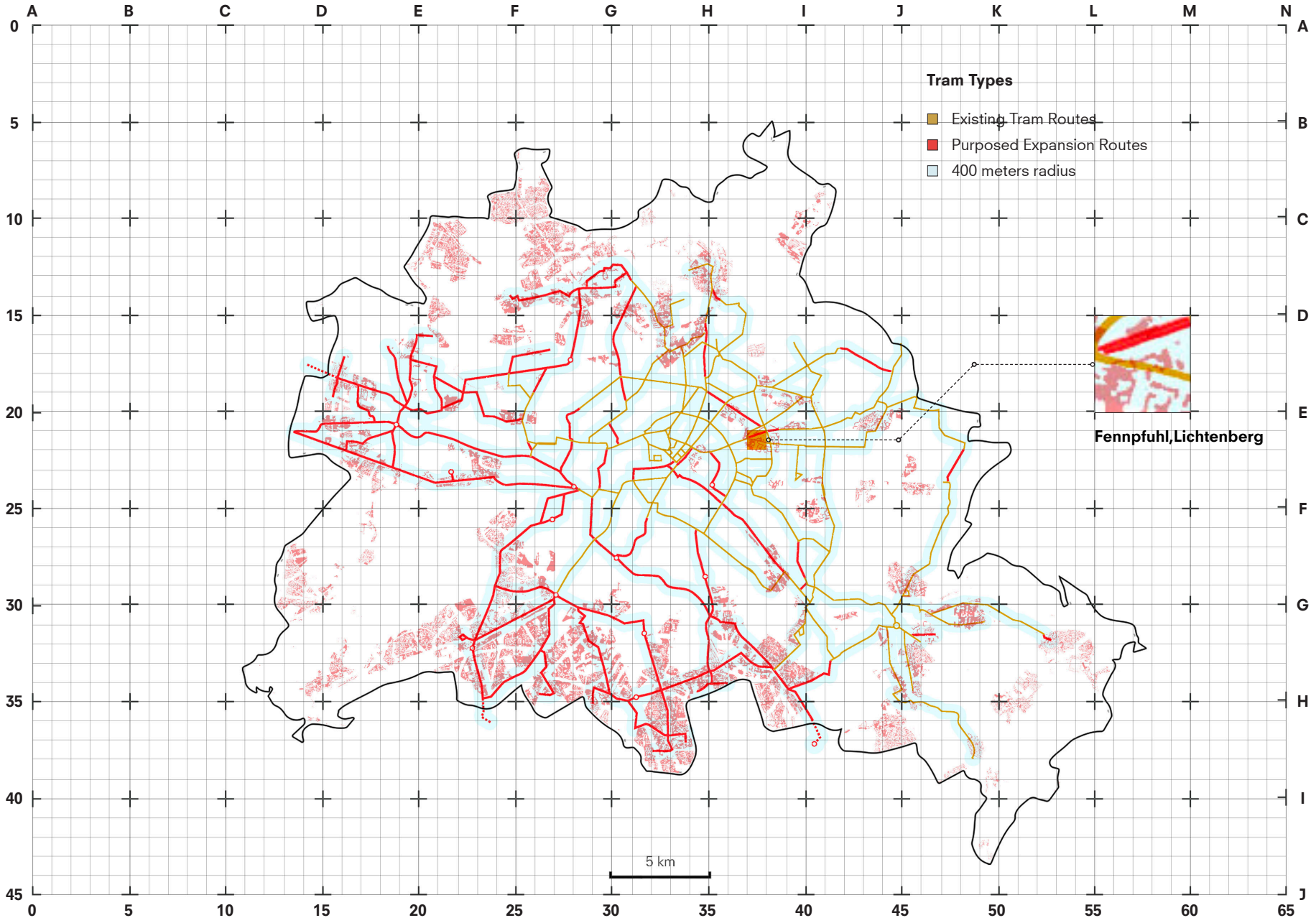
LANDSCAPE


Green: 59%
Water: 6%
Landscape Atlas
Green
Water
Fennpfuhl,Lichtenberg
5 km

BUS

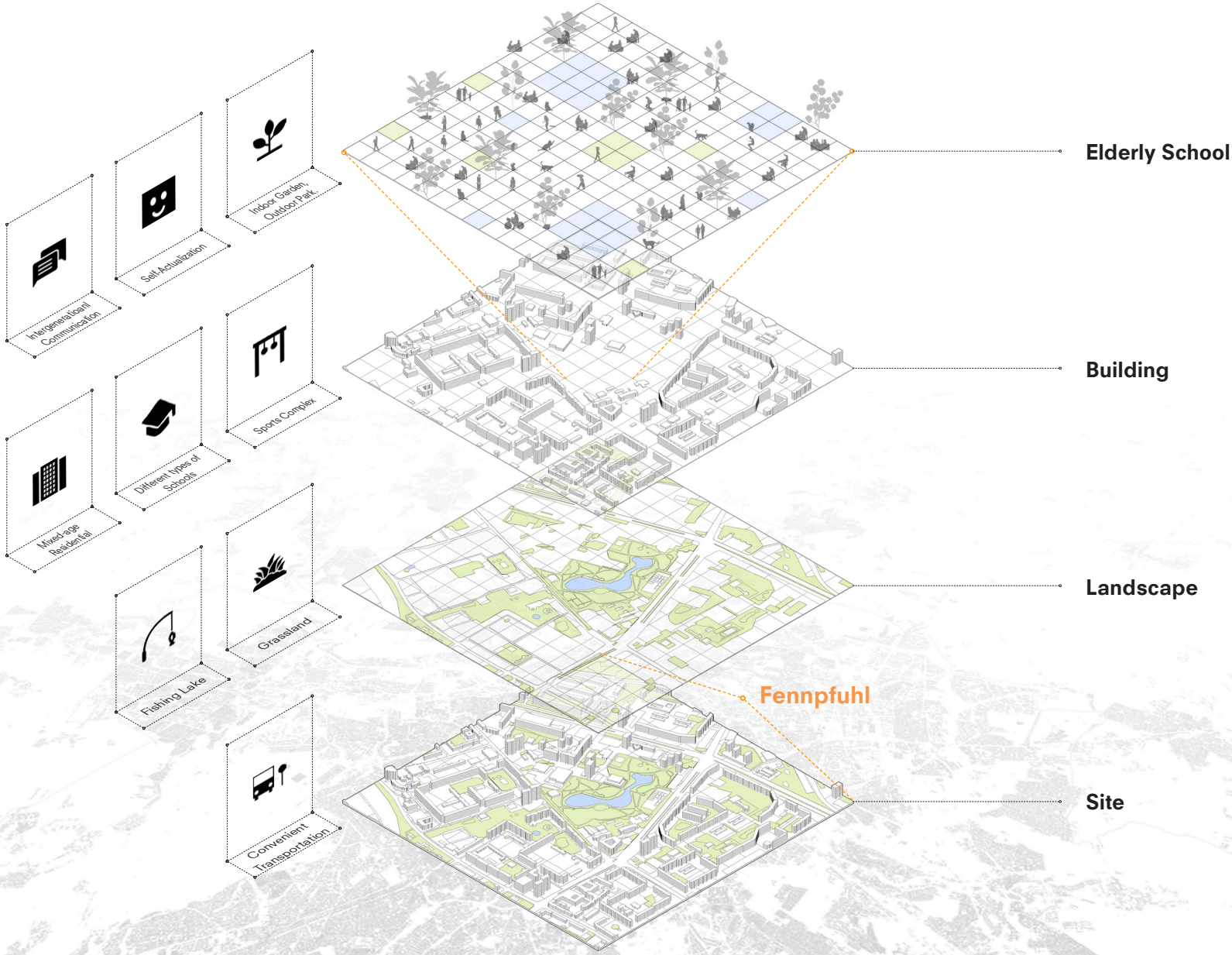

Bus Type
100s bus
200s bus
300s bus
600-900s bus
metro bus
400 meters radius
Fennpfuhl,Lichtenberg
5 km
A B C D E F G H I J K L M N
0 5 10 15 20 25 30 35 40 45
0 5 10 15 20 25 30 35 40 45 50 55 60 65

TRAM

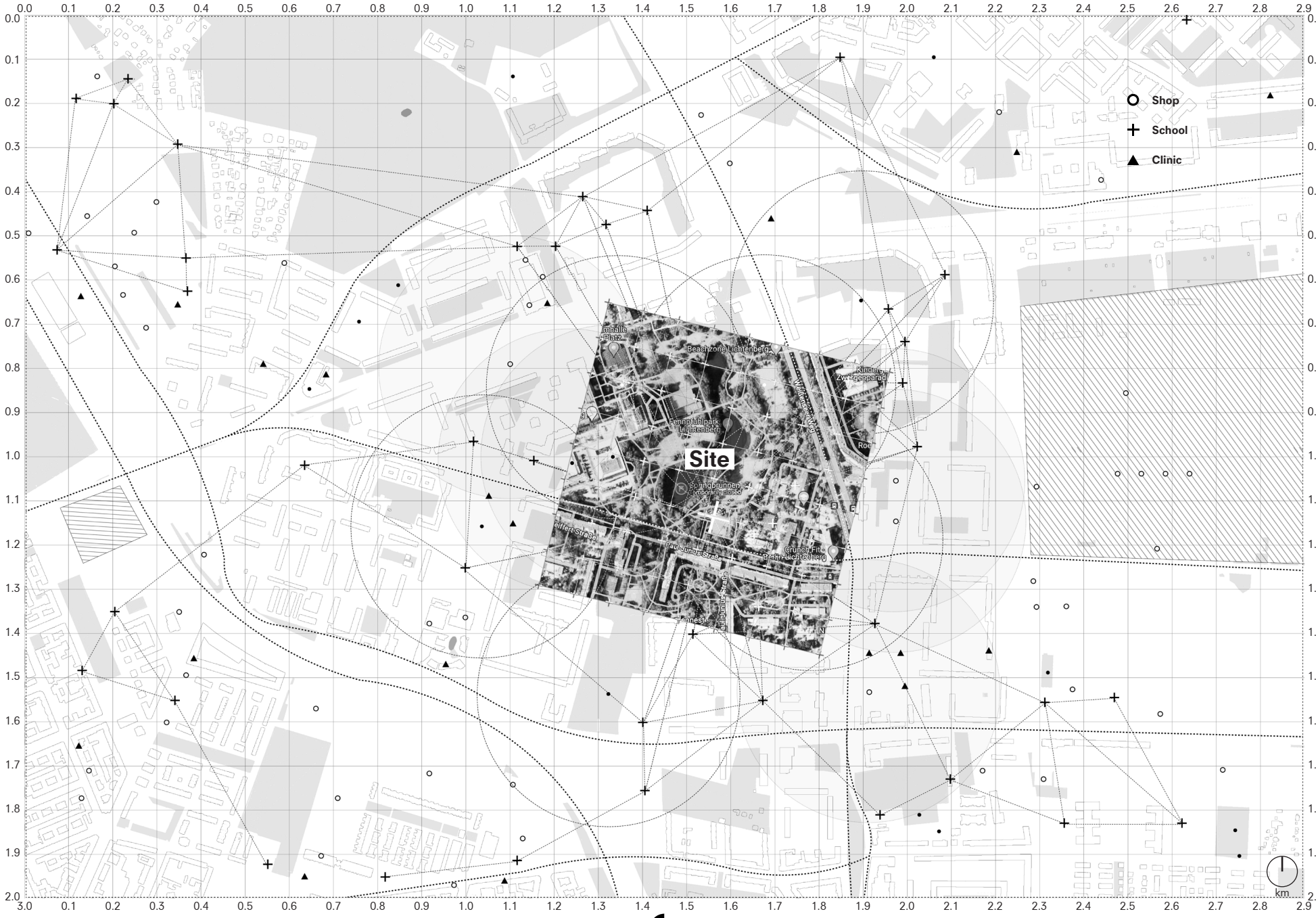


https://www.reddit.com/r/transit/comments/y21u81/map_of_the_planned_extensions_of_the_berlin_tram/

FENNPFUHL, LICHTENBERG

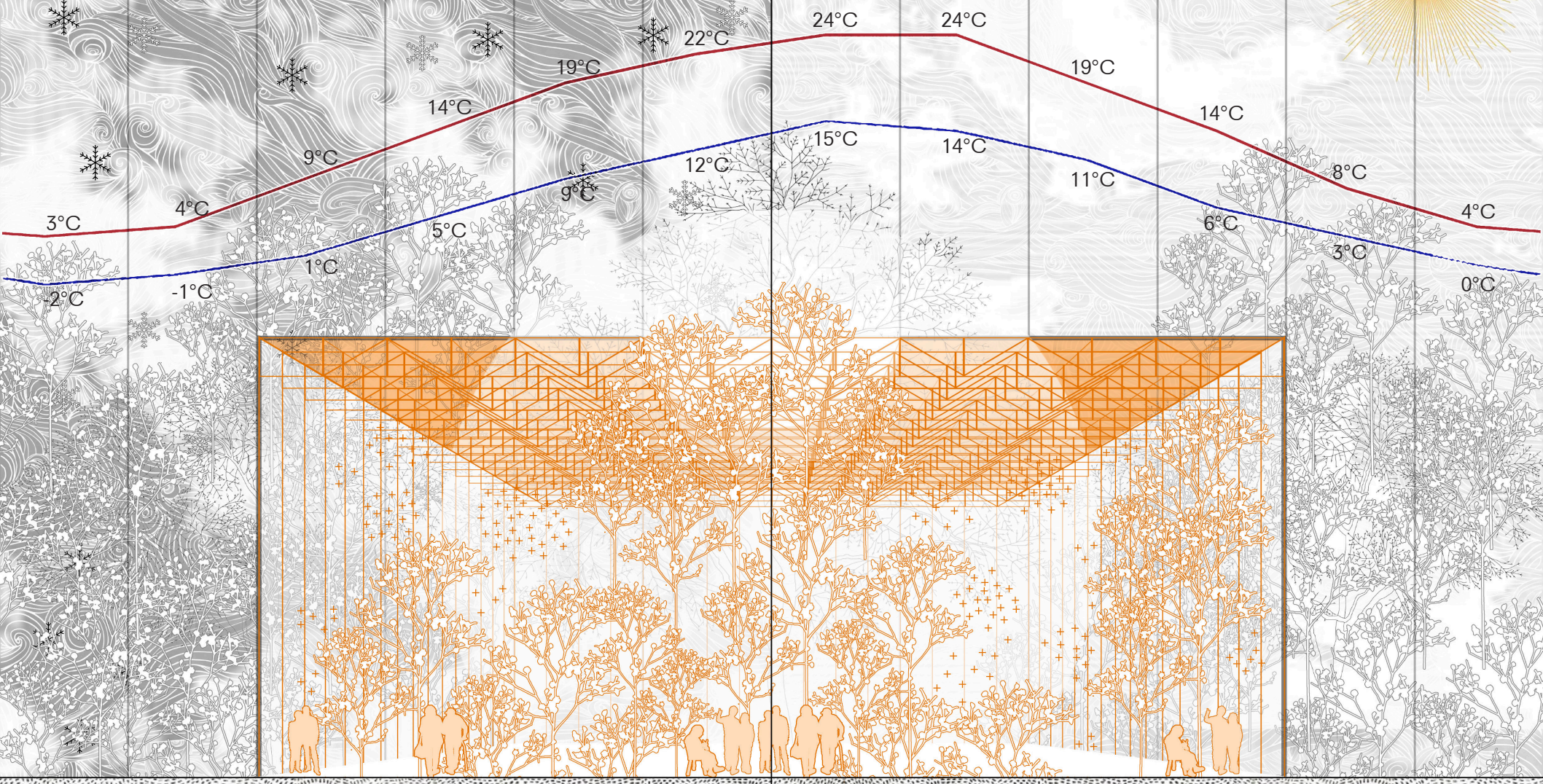


FENNPFUHL, LICHTENBERG



OUTDOOR PARK, INDOOR GARDEN

A four-season place for elderly's daliy walking routine and communication.




Space Imagination
DE-AGING EDEN
WOODEN
GLASS
EXHIBITION
1717
Berlin Studio
complex
projects

SITE MASSING COMPARISON



COURTYARD RING



WATERFRONT CUBOID



FLOATING BRIDGE

+ +



GARDEN PAVILION



WATERFRONT RING



GARDEN CUBOID

+ +



STREETFRONT CUBE

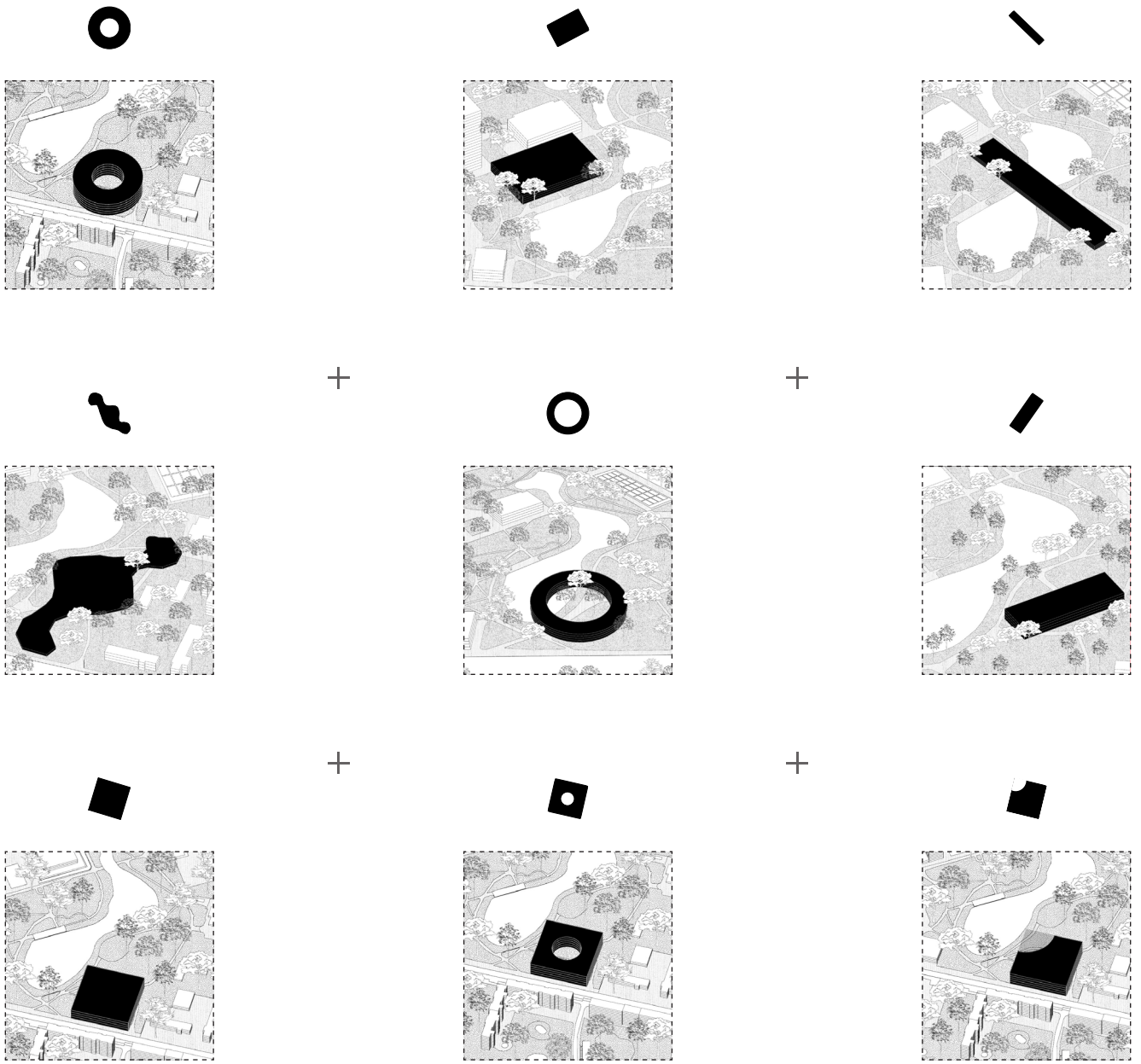


GROUND FLOOR

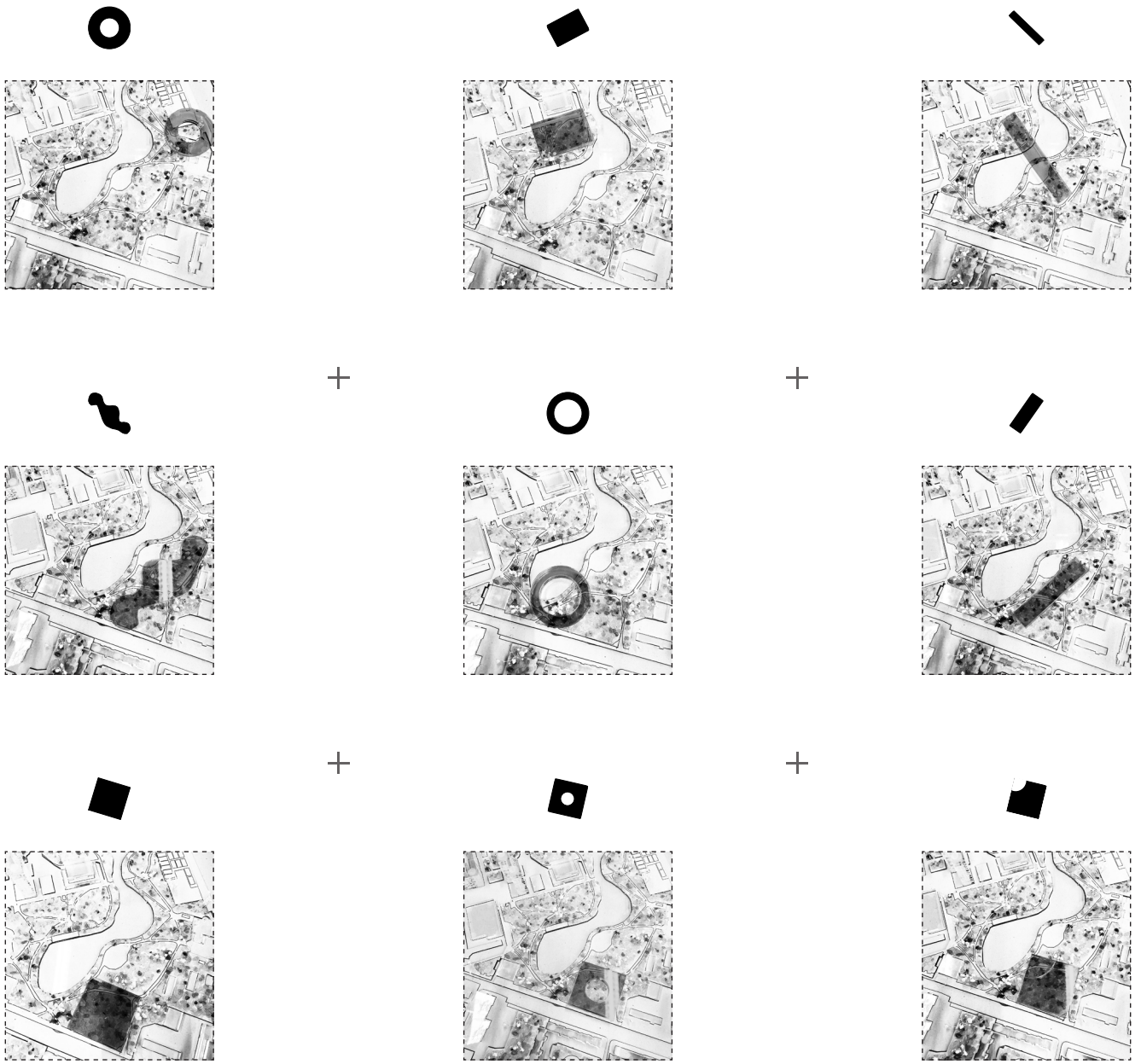


INTROVERTED CUBE

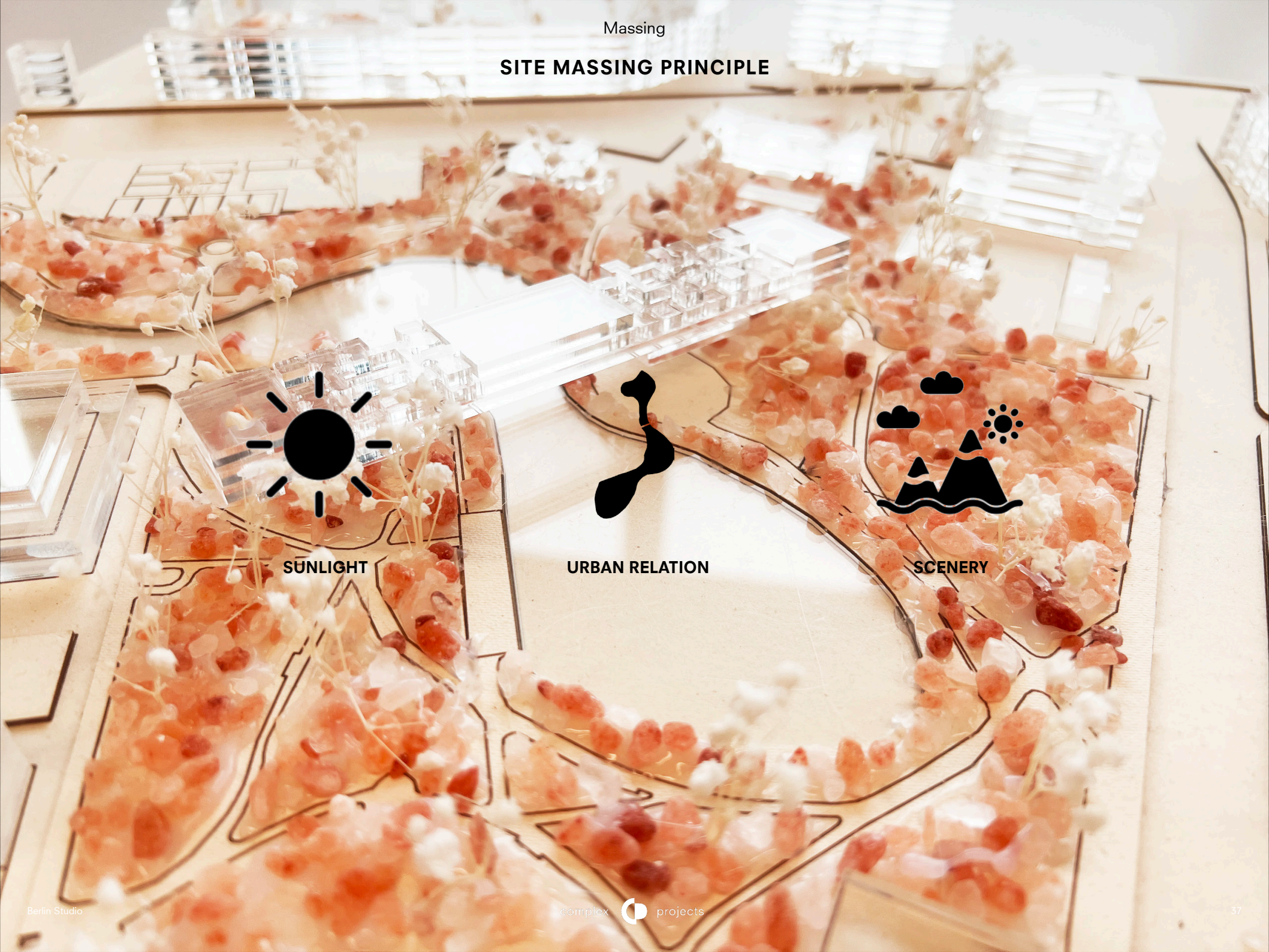
SITE MASSING COMPARISON



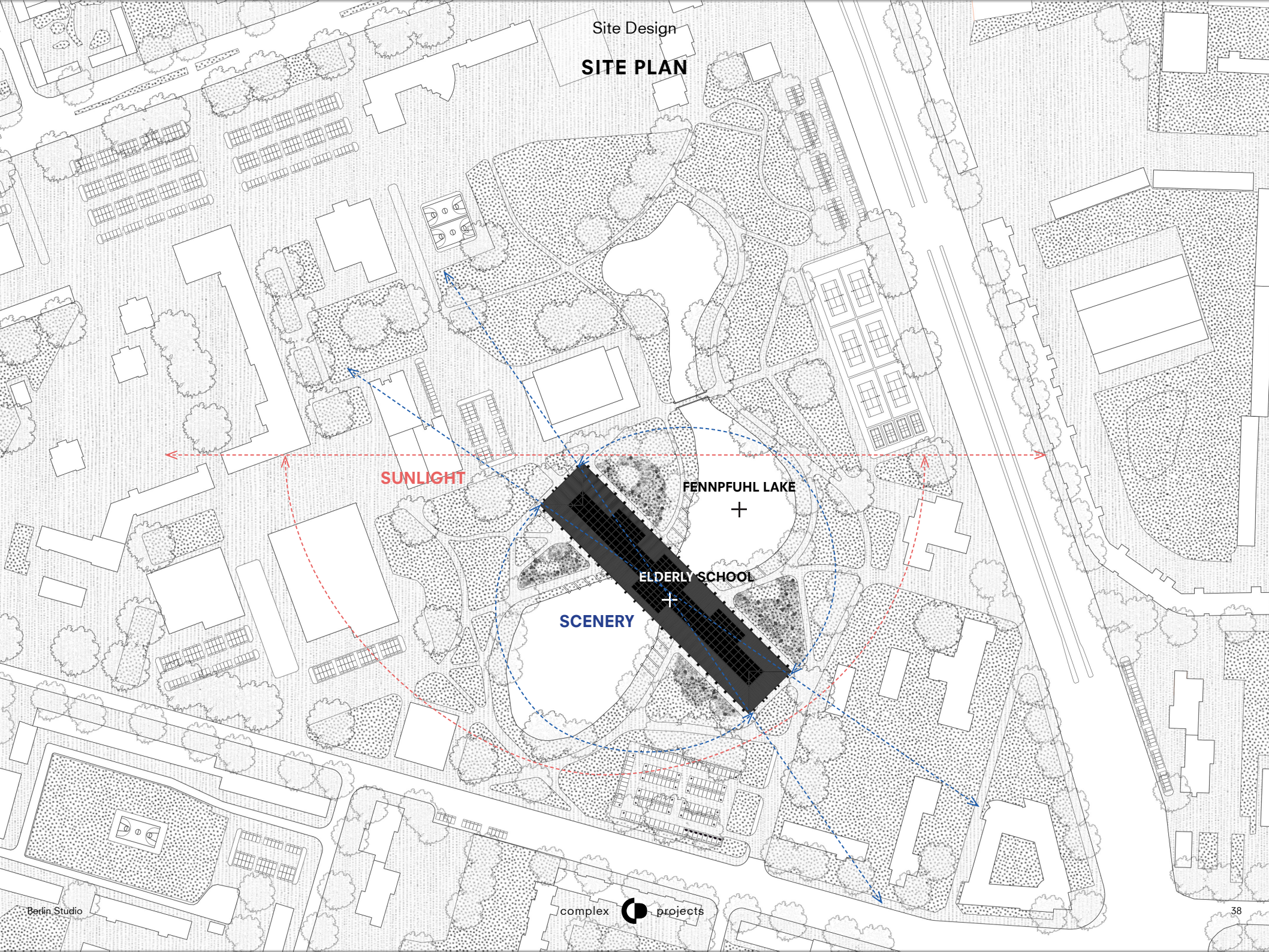
SITE MASSING COMPARISON



SITE MASSING PRINCIPLE



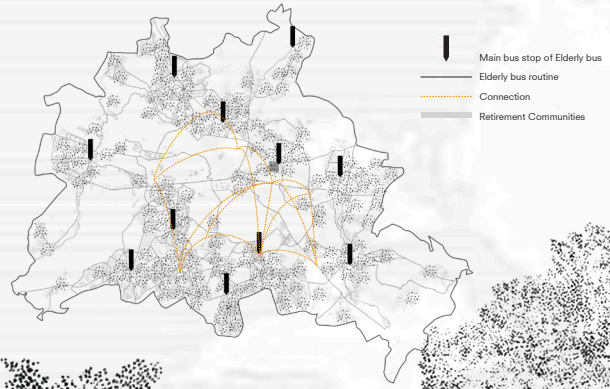
SITE PLAN



MELT IN NATURE, FLOAT ON LAKE.

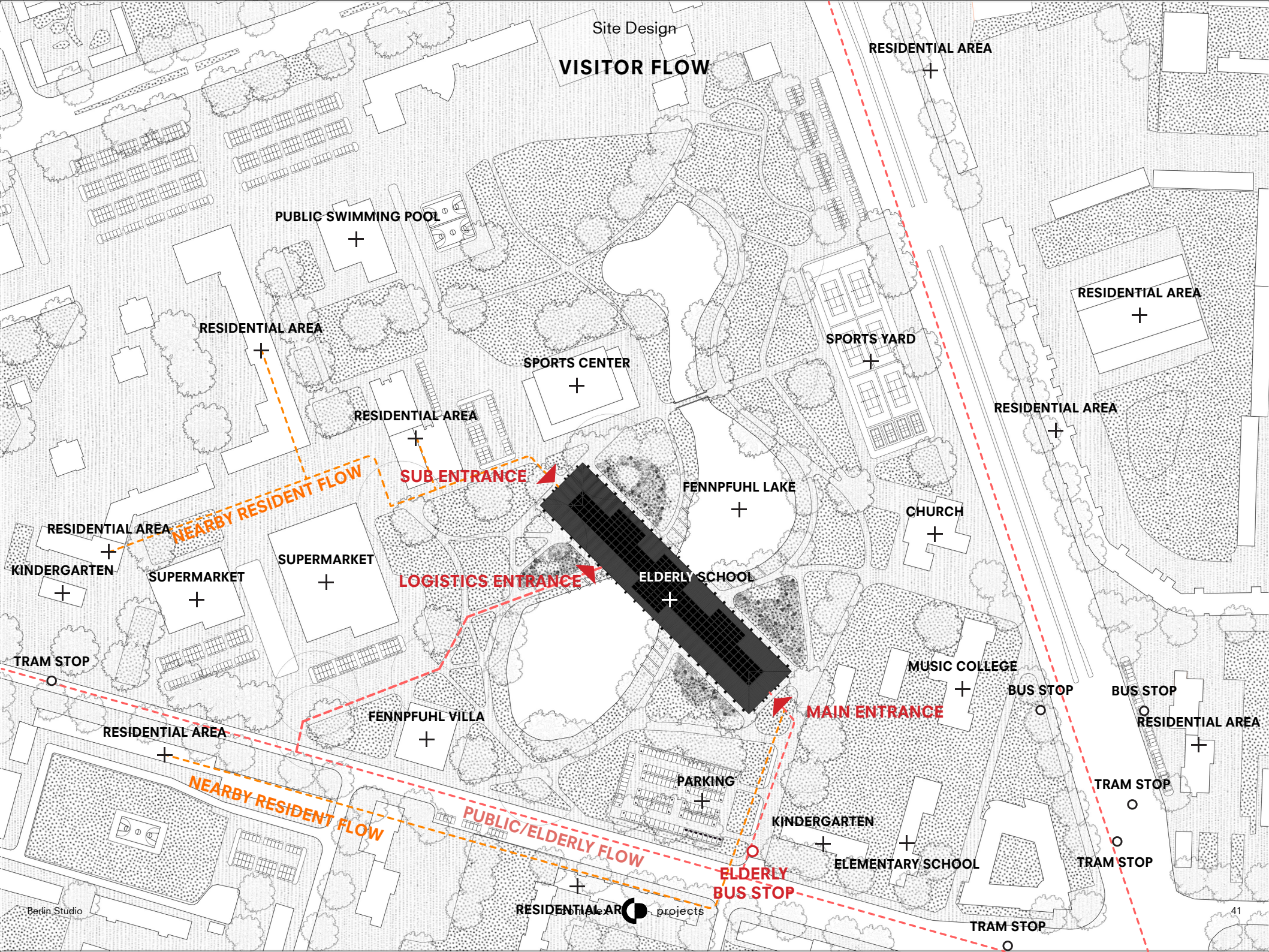


ELDERLY BUS


Main bus stop of Elderly bus
Elderly bus routine
Connection
Retirement Communities

Site Design

VISITOR FLOW



EXISTING SCULPTURES + LANDSCAPE


Paar


Zwiesprache


Junges Paars


Felicia


Dem Leben gewidmet


David und Goliath


Poesie der Großstadt


Poetische Stimmung

Große Liegende

Refrain

Windrad

Rosenpavillon

Zwiesprache

Der Entfesselte

Junges Paars

Begegnung

Zwei

Felicia

Dem Leben Gewidmet

David und Goliath

Poetische Stimmung

ELDERLY SCHOOL


Begegnung


Impressionen


Sitzmauer


Wasserwand


Kugelbrunnen


Refrain

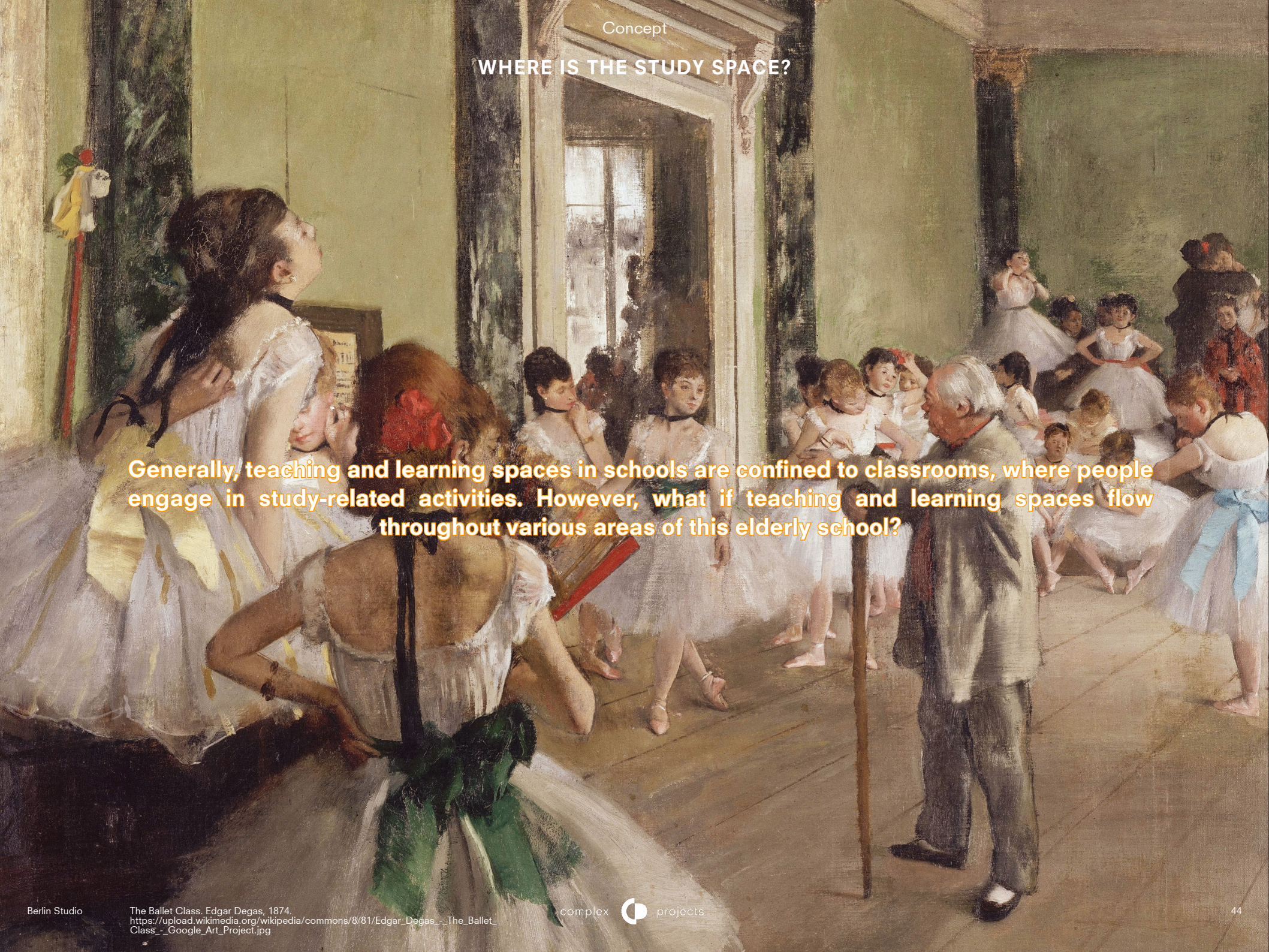

Löwe


Holztiere

OUTDOOR PARK EXPERIENCE



WHERE IS THE STUDY SPACE?



Generally, teaching and learning spaces in schools are confined to classrooms, where people engage in study-related activities. However, what if teaching and learning spaces flow throughout various areas of this elderly school?

The Ballet Class. Edgar Degas, 1874.
https://upload.wikimedia.org/wikipedia/commons/8/81/Edgar_Degas_-_The_Ballet_Class_-_Google_Art_Project.jpg

CHANCE TO ENCOUNTER



CREATE CHANCE TO ENCOUNTER, TO TALK, TO STUDY AND LEARN.

FLUID-STUDY SPACE

INDOOR GARDEN

Landscapes for exhibition, Concert, gardening things and activities.

IN-BETWEEN SPACE

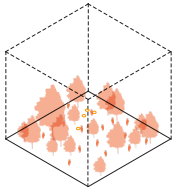
Random learning and communication spaces outside the classroom.

STUDY ROOM

Places for the elderly and young people to teach and study.

PUBLIC

PUBLIC

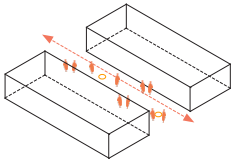


MAIN GARDEN

Concert/Exhibition/Gardening

People Amount | + + + +

Partition | Rooms, Shelves

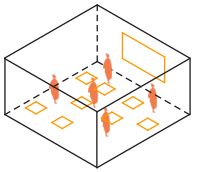


CORRIDOR

Circulation/Enhance

People Amount | + + +

Partition | Rooms



CLASSROOM

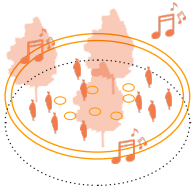
Intergenerational Class

People Amount | + + + +

Partition | Walls

OPEN

CLOSE

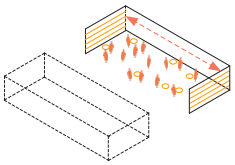


FLOATING GARDEN

Talks/Exhibition/Gardening

People Amount | + + +

Partition | Rooms, Shelves

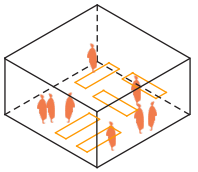


THRESHOLD

Band/Lounge

People Amount | + + + +

Partition | Rooms, Facade



WORKSHOP

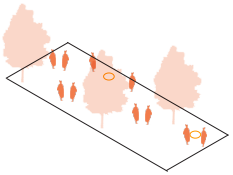
Intergenerational Workshop

People Amount | + + + +

Partition | Walls

OPEN

CLOSE

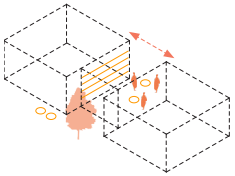


MINERAL GARDEN

Relax/Gardening

People Amount | +

Partition | Paving

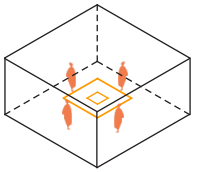


LIMINAL SPACE

Meditation/Consult/Fun

People Amount | + +

Partition | Rooms, Facade



GAME ROOM

Mahjong/Card Game/Movie

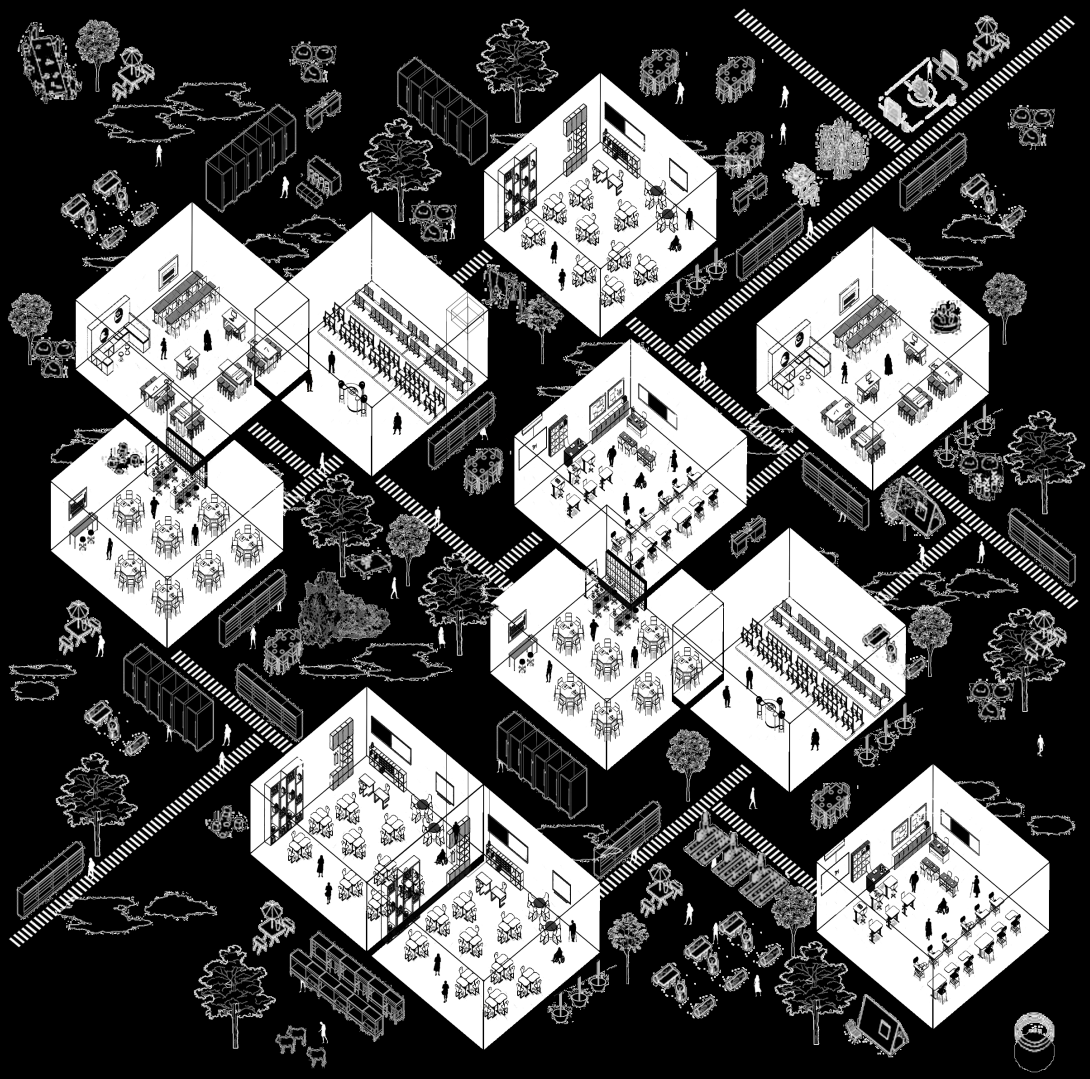
People Amount | + + +

Partition | Walls

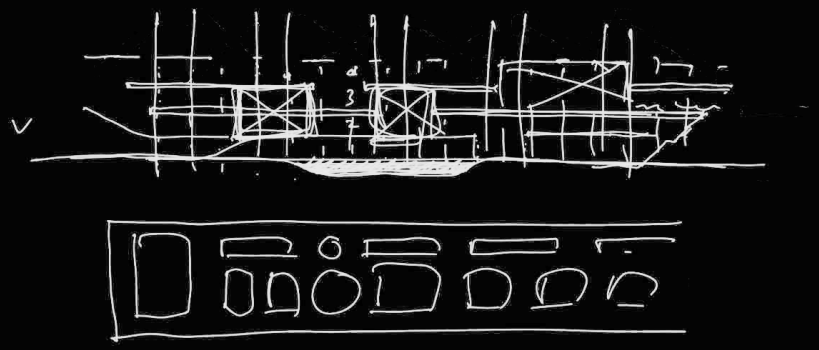
PRIVATE

PRIVATE

SPACE CONCEPT



SPACE PHILOSOPHY



“三十辐，同一毂，当其无，有车之用也。
埏埴以为器，当其无，有器之用也。
凿户牖以为室，当其无，有室之用也。
故有之以为利，无之以为用。”

--《道德经》第十一章（老子，公元前509年）

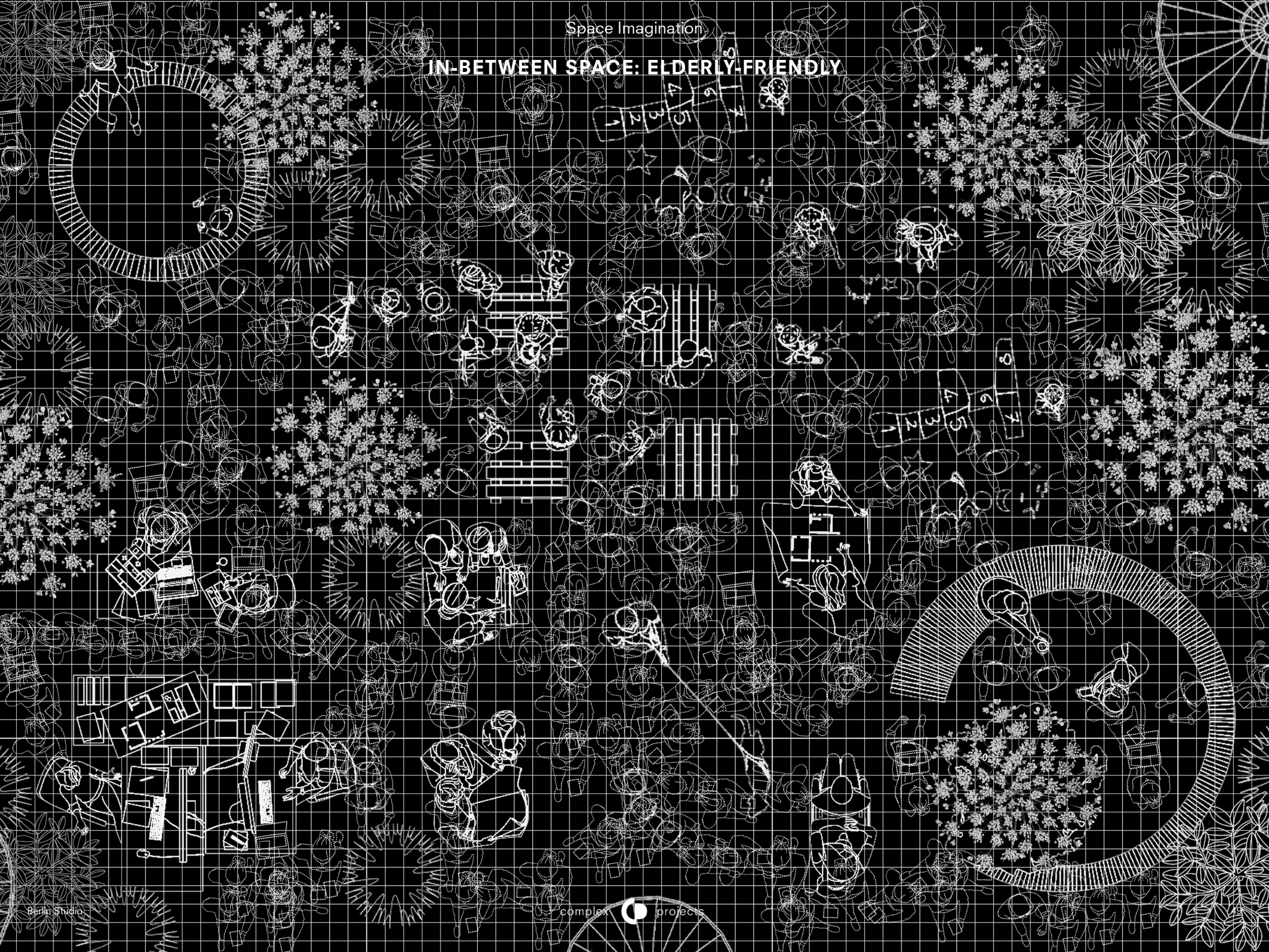
“Thirty spokes are joined in the wheel’s hub.
The hole in the middle makes it useful.
Mold clay into a bowl.
The empty space makes it useful.
Cut out doors and windows for the house.
The holes make it useful.

Therefore, the value comes from what is there,
But the use comes from what is not there.”

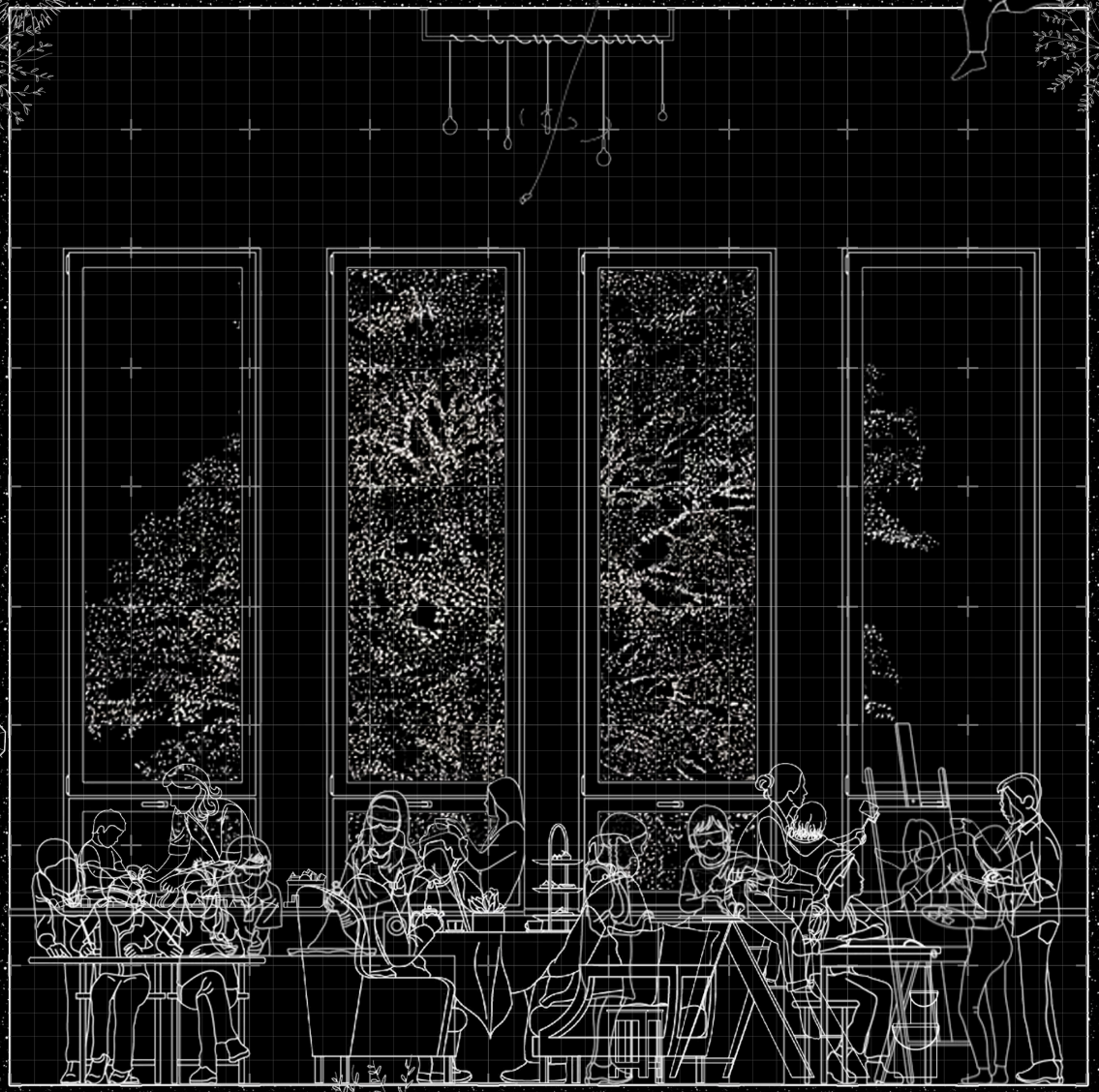
-- *Tao Te Ching, Chapter XI* (Lao Tzu, 509 B.C.)

Translate Source: https://www.taoistic.com/taoteching-laotzu/taoteching-11.htm

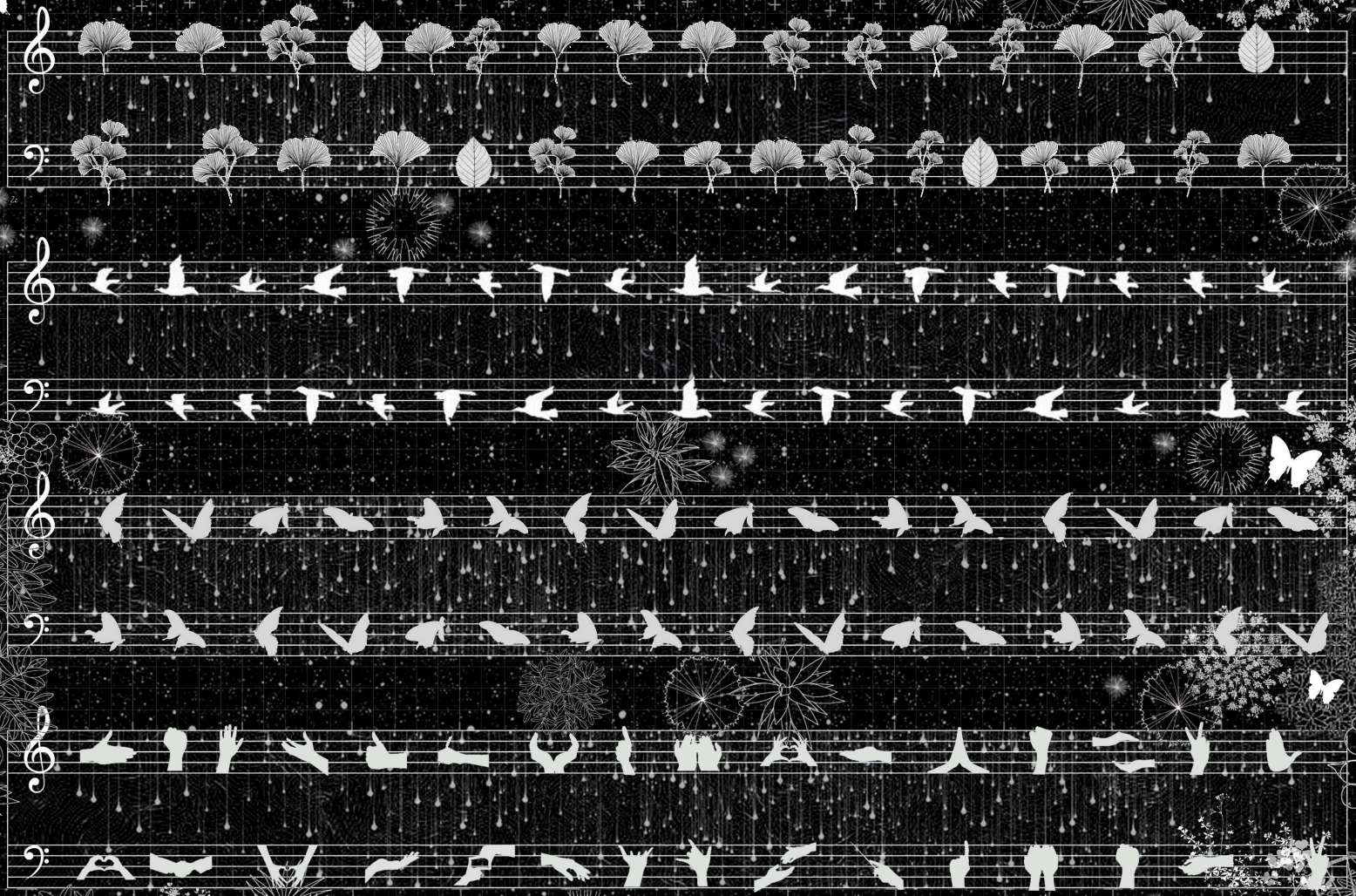
IN-BETWEEN SPACE: ELDERLY-FRIENDLY



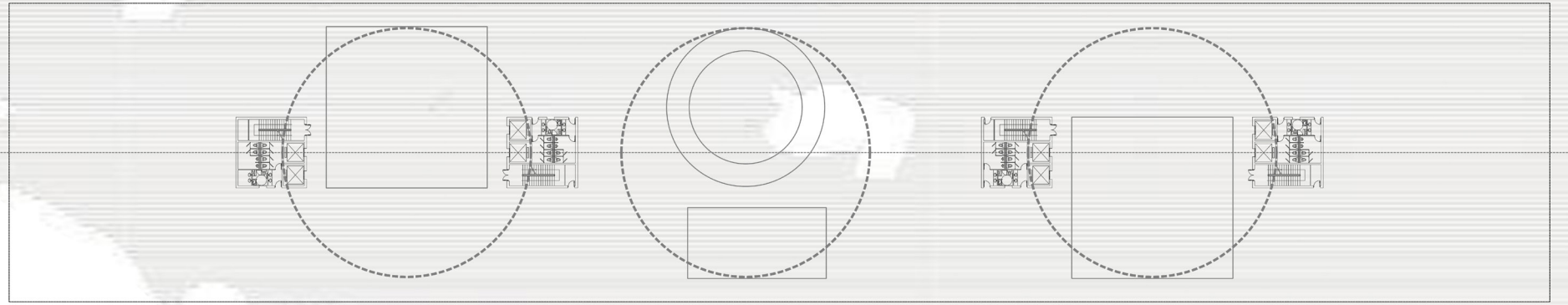
STUDY ROOM: PARTICIPATORY

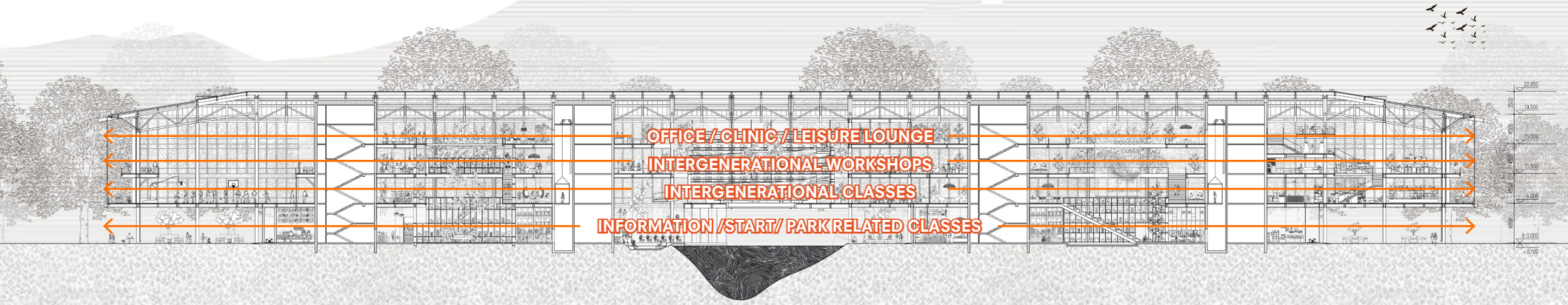


INDOOR GARDEN: MULTI-SENSORY

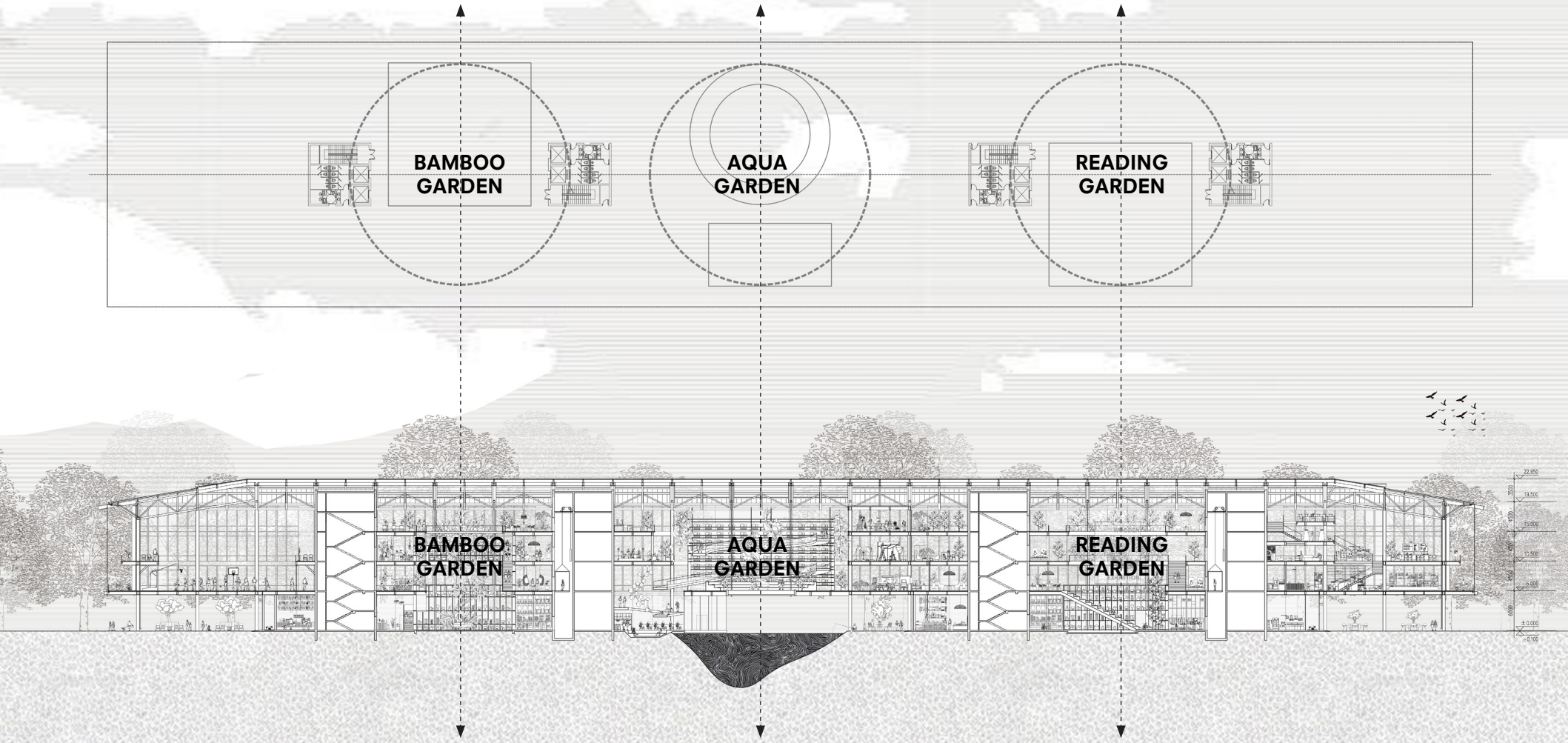


SECTION 1-1

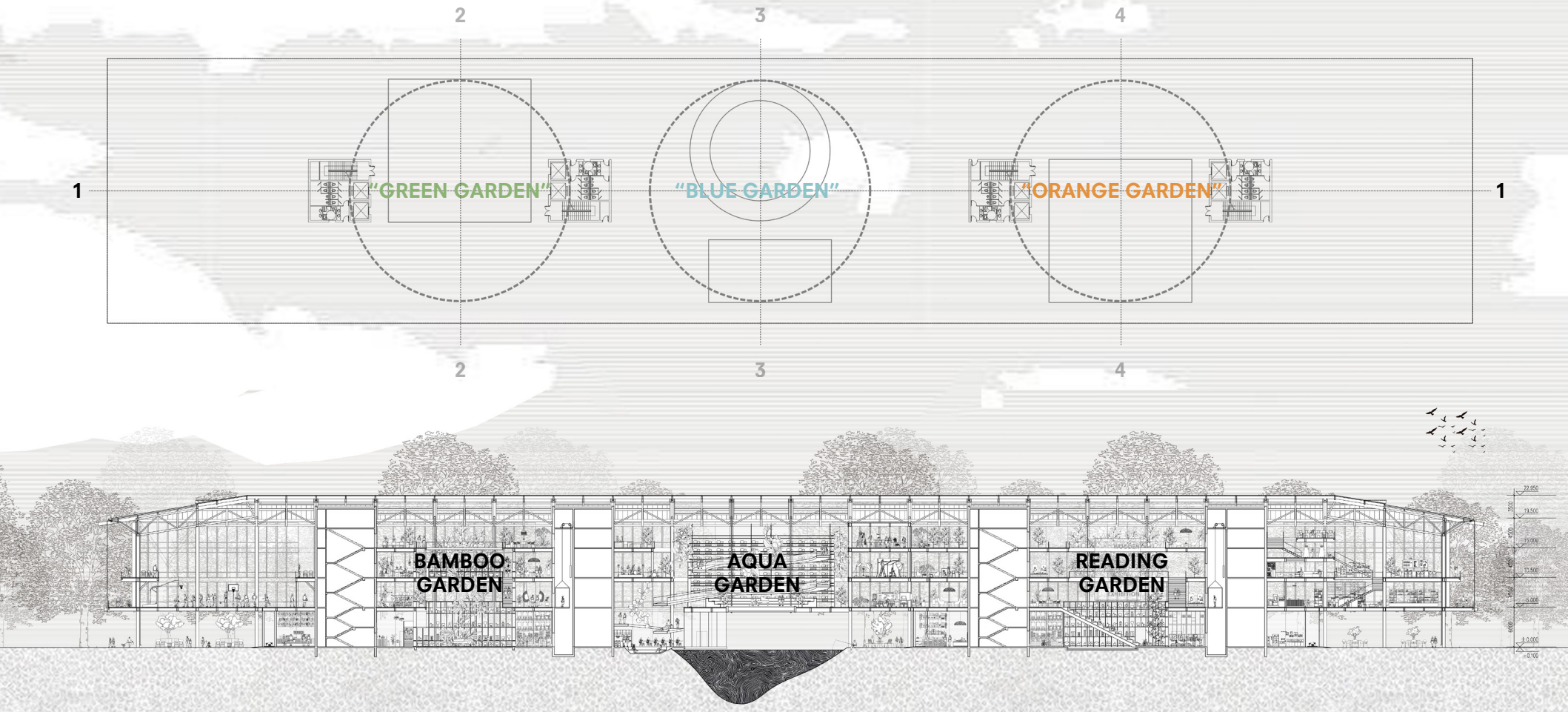


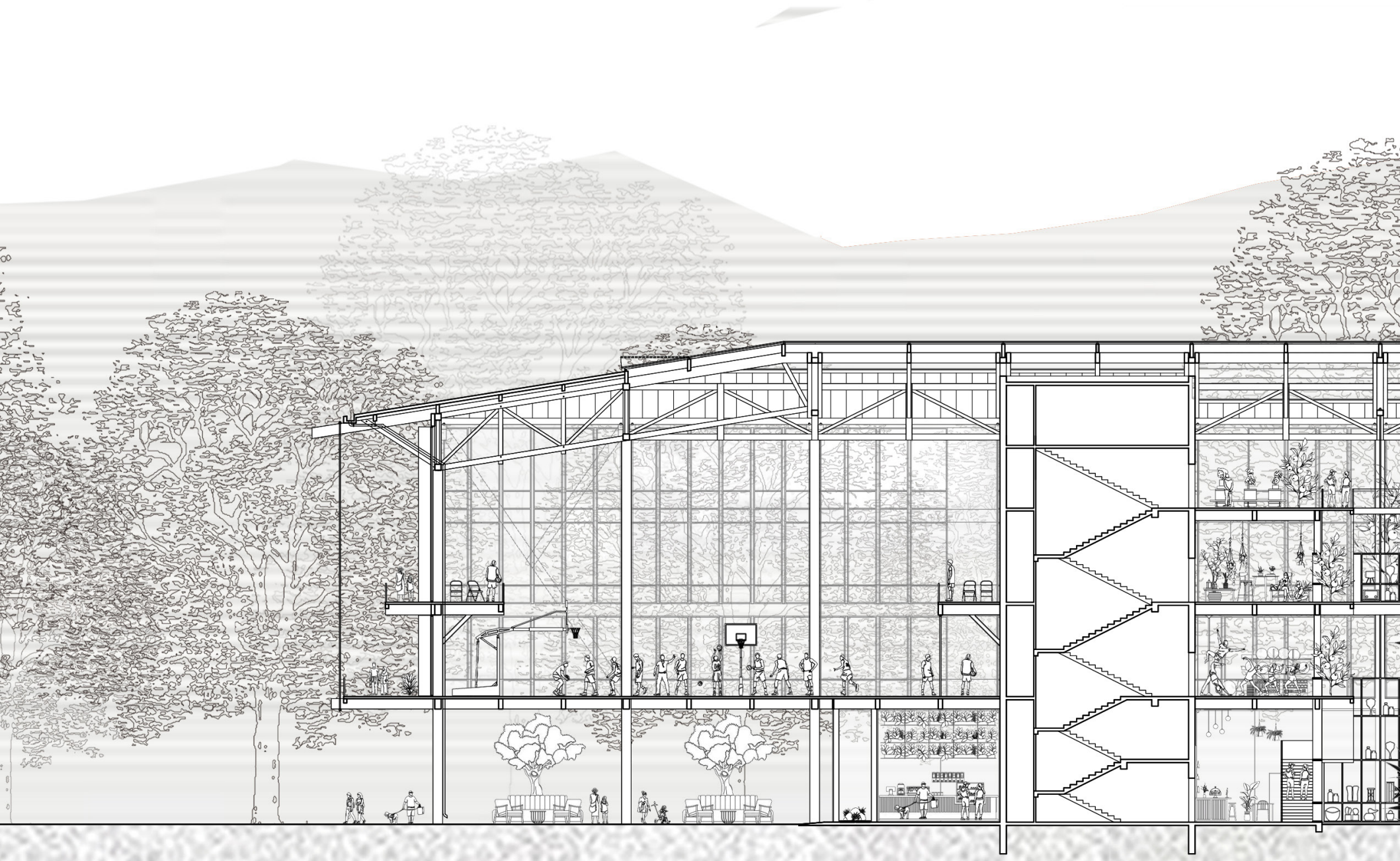

OFFICE / CLINIC / LEISURE LOUNGE
INTERGENERATIONAL WORKSHOPS
INTERGENERATIONAL CLASSES
INFORMATION /START/ PARK RELATED CLASSES

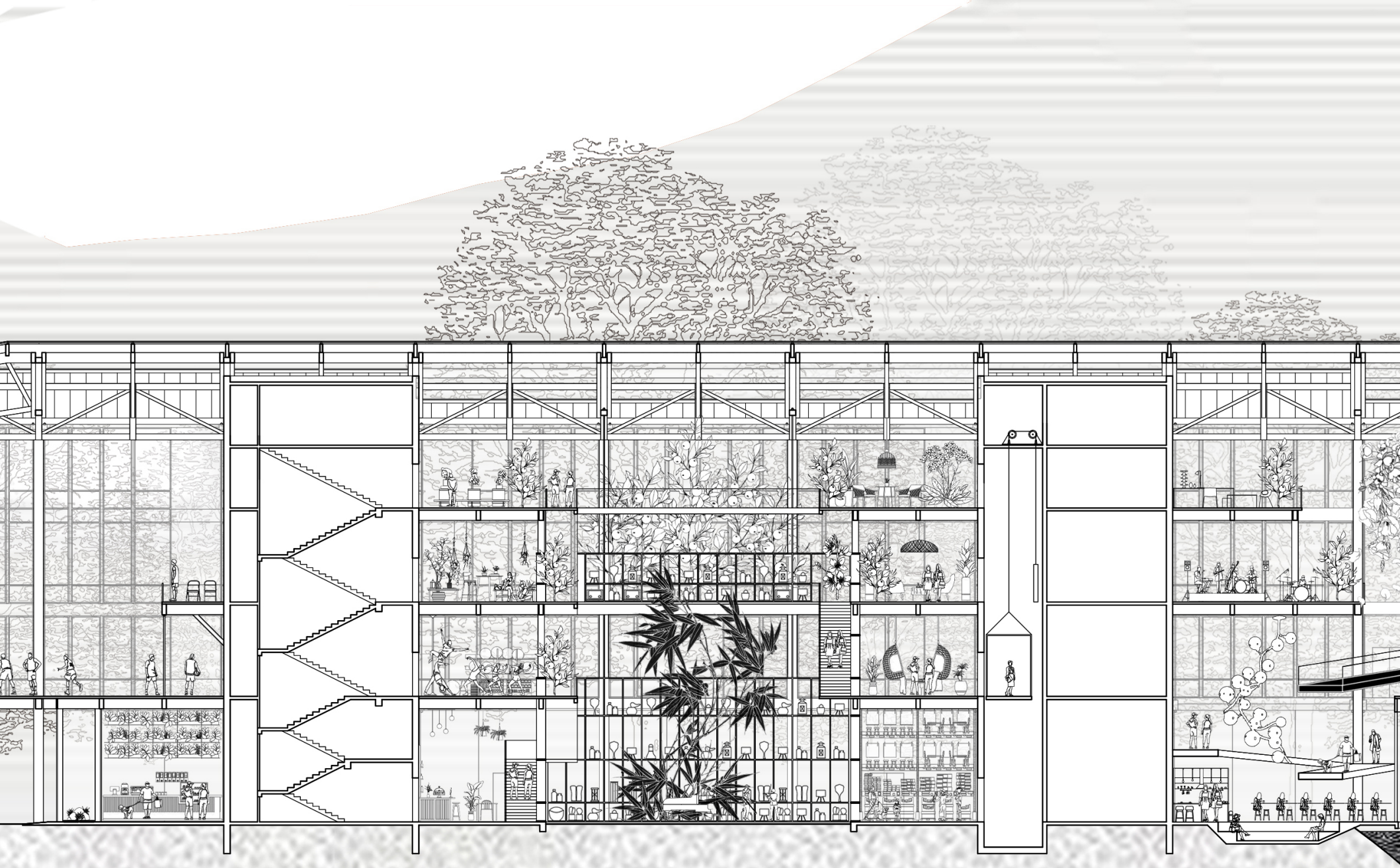
SECTION 1-1

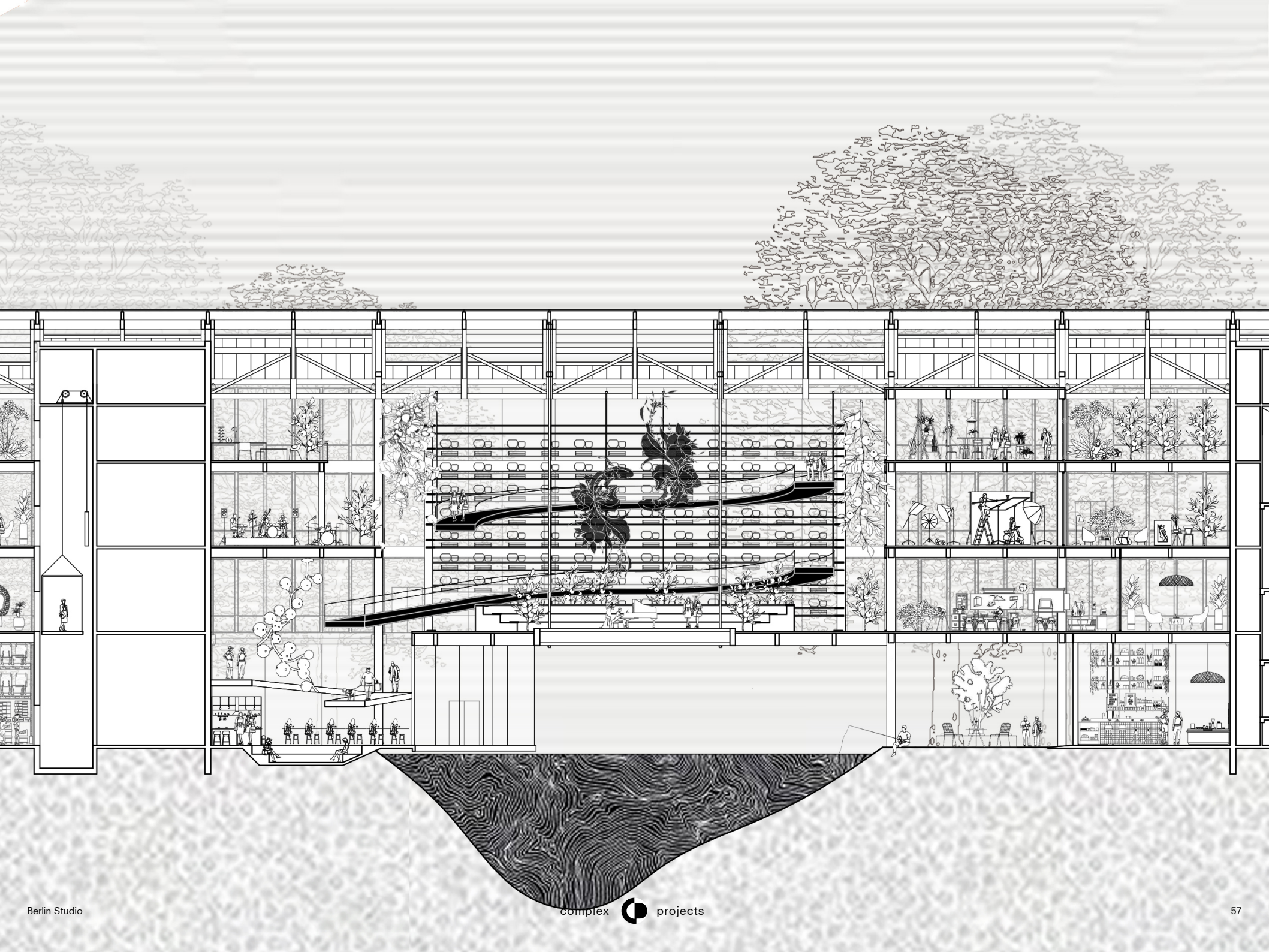

BAMBOO GARDEN
AQUA GARDEN
READING GARDEN
BAMBOO GARDEN
AQUA GARDEN
READING GARDEN

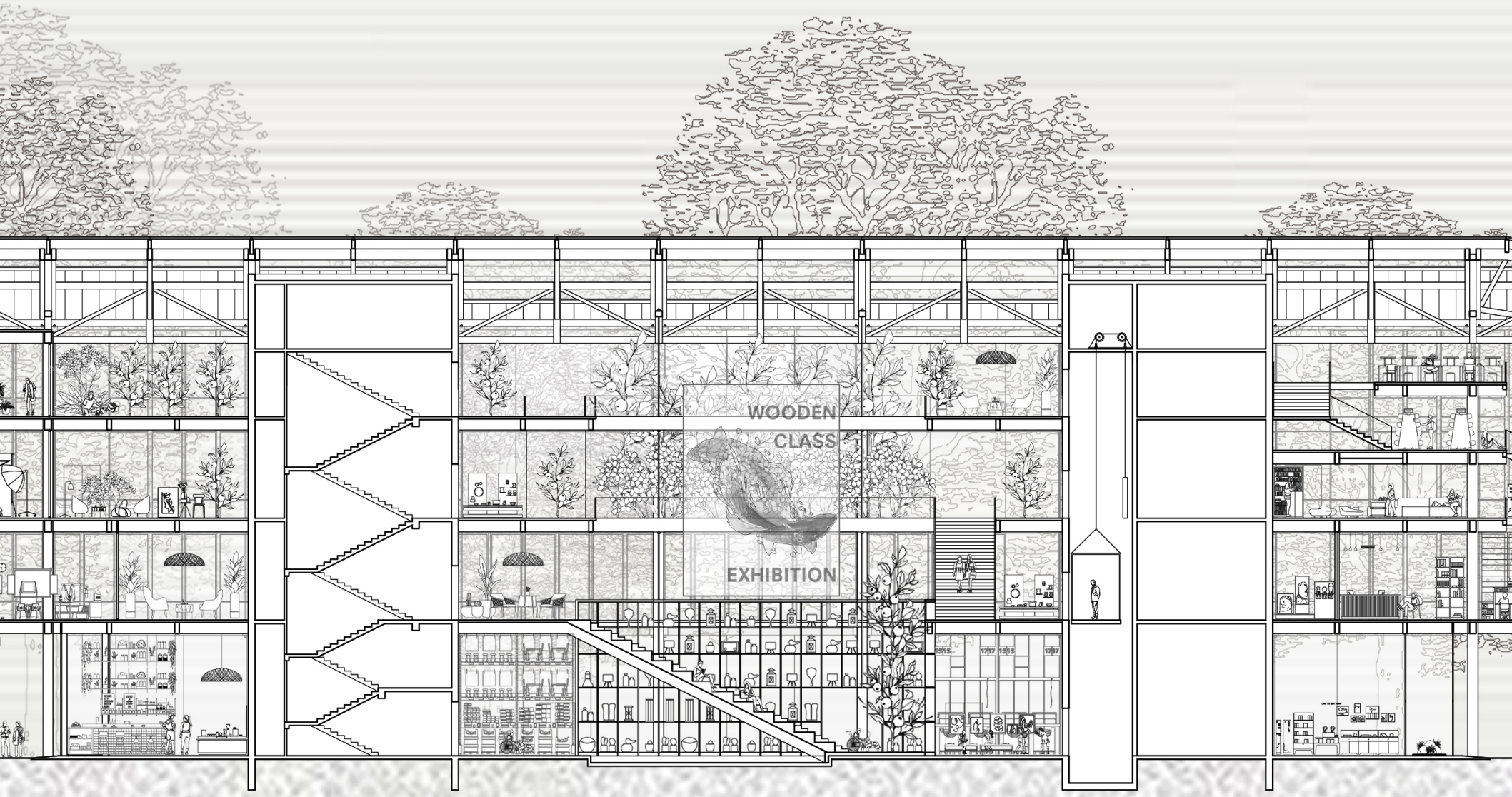
SECTION 1-1

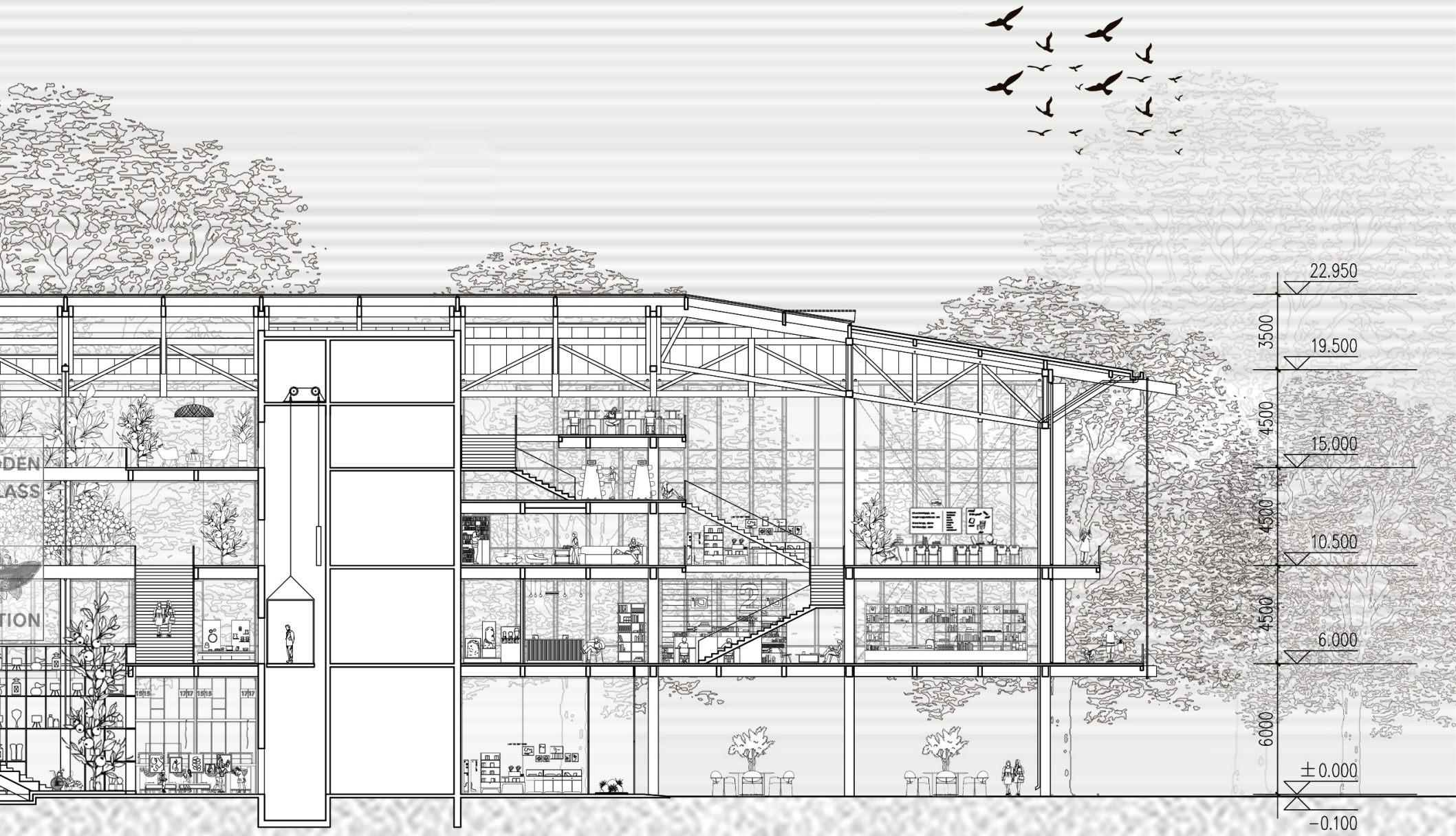

2
3
4
1
"GREEN GARDEN"
"BLUE GARDEN"
"ORANGE GARDEN"
1
2
3
4
BAMBOO GARDEN
AQUA GARDEN
READING GARDEN



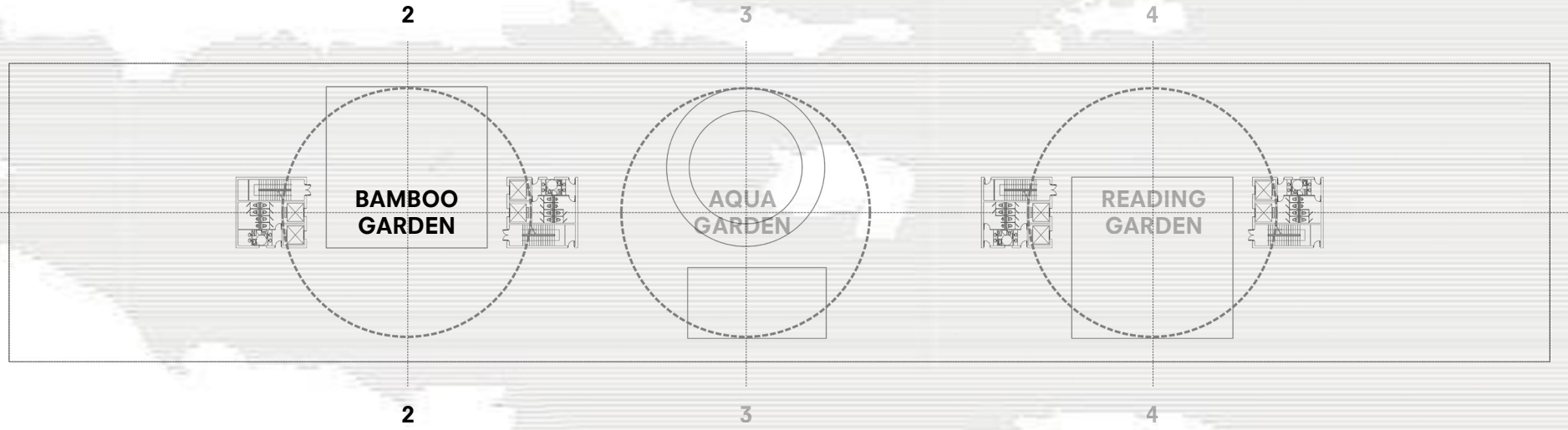


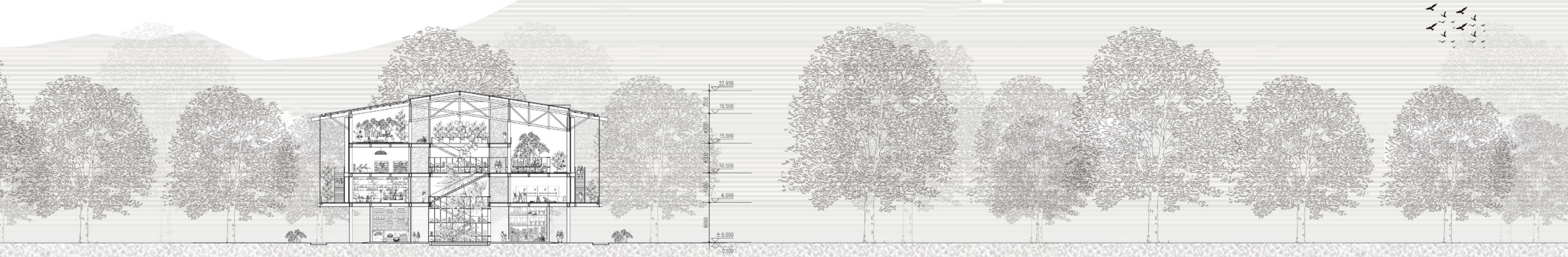



WOODEN
CLASS
EXHIBITION

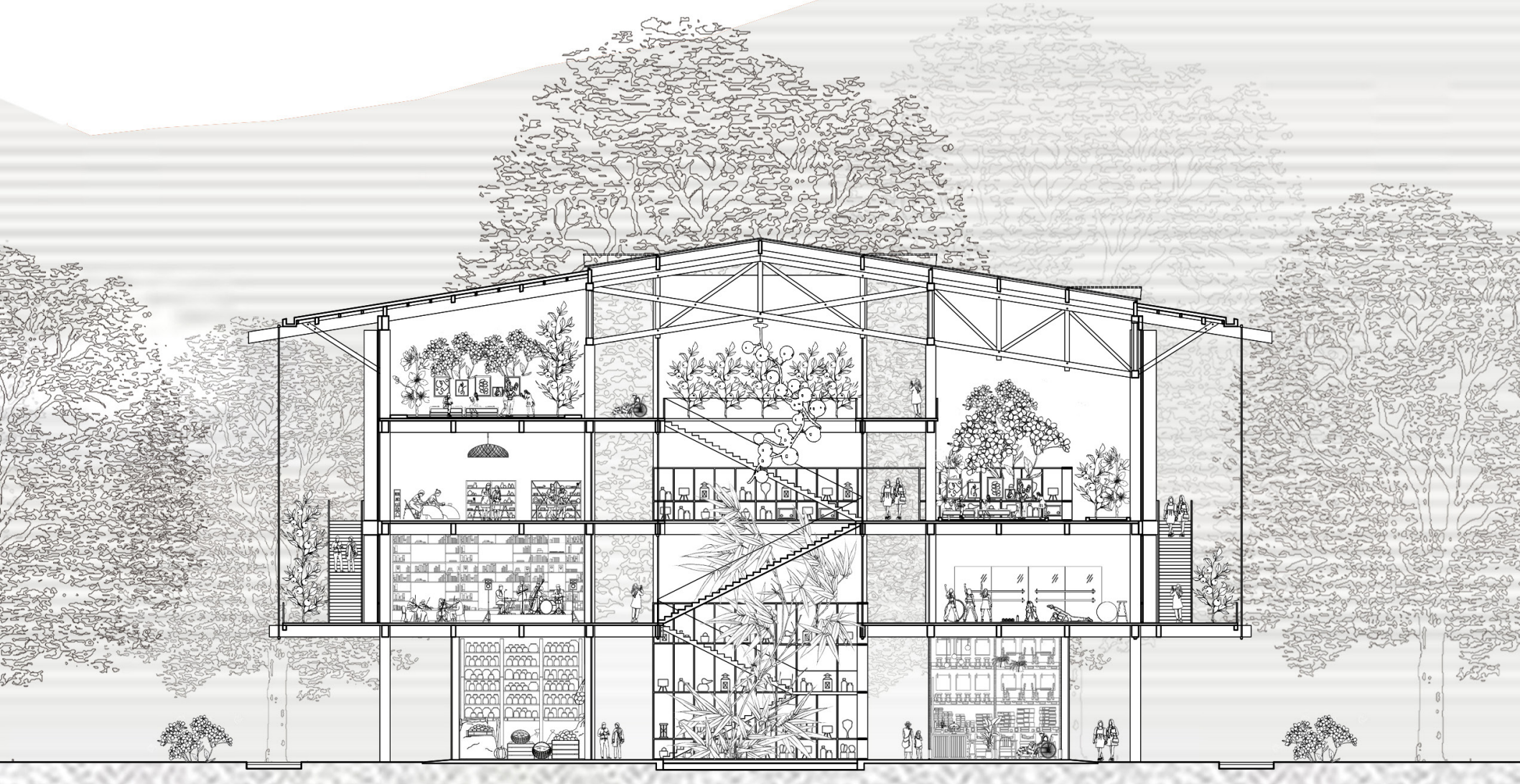

22.950
19.500
15.000
10.500
6.000
±0.000
−0.100
3500
4500
4500
4500
6000

SECTION 2-2

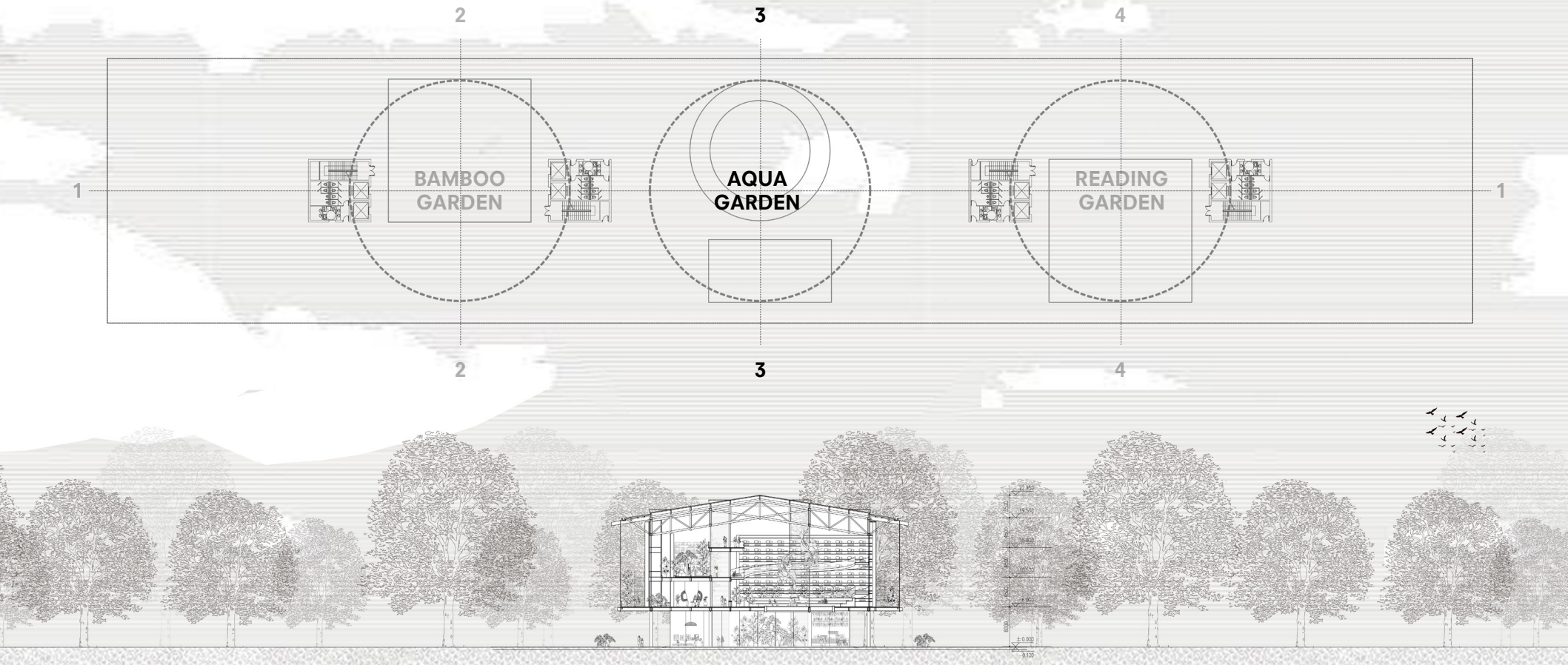




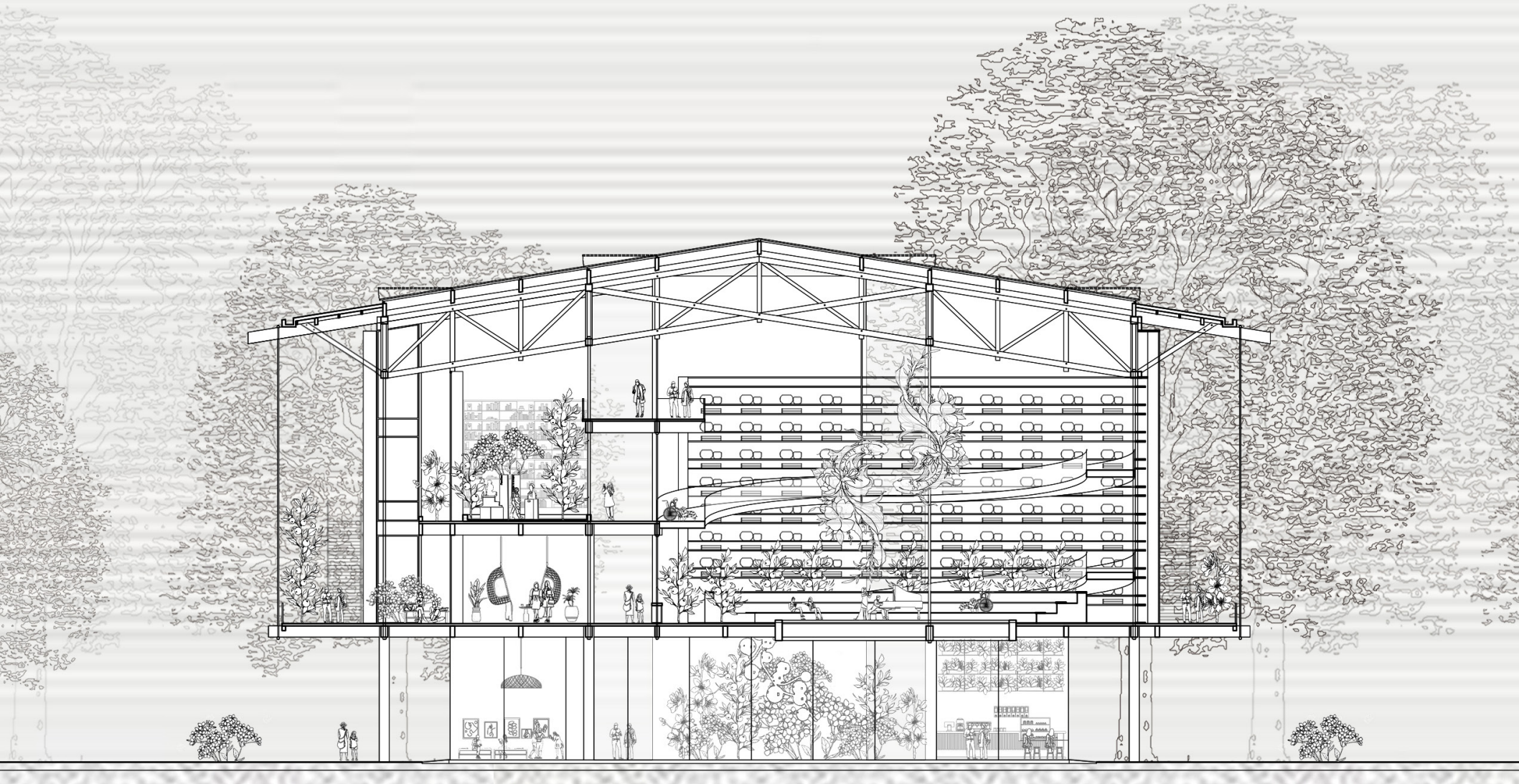
BAMBOO GARDEN



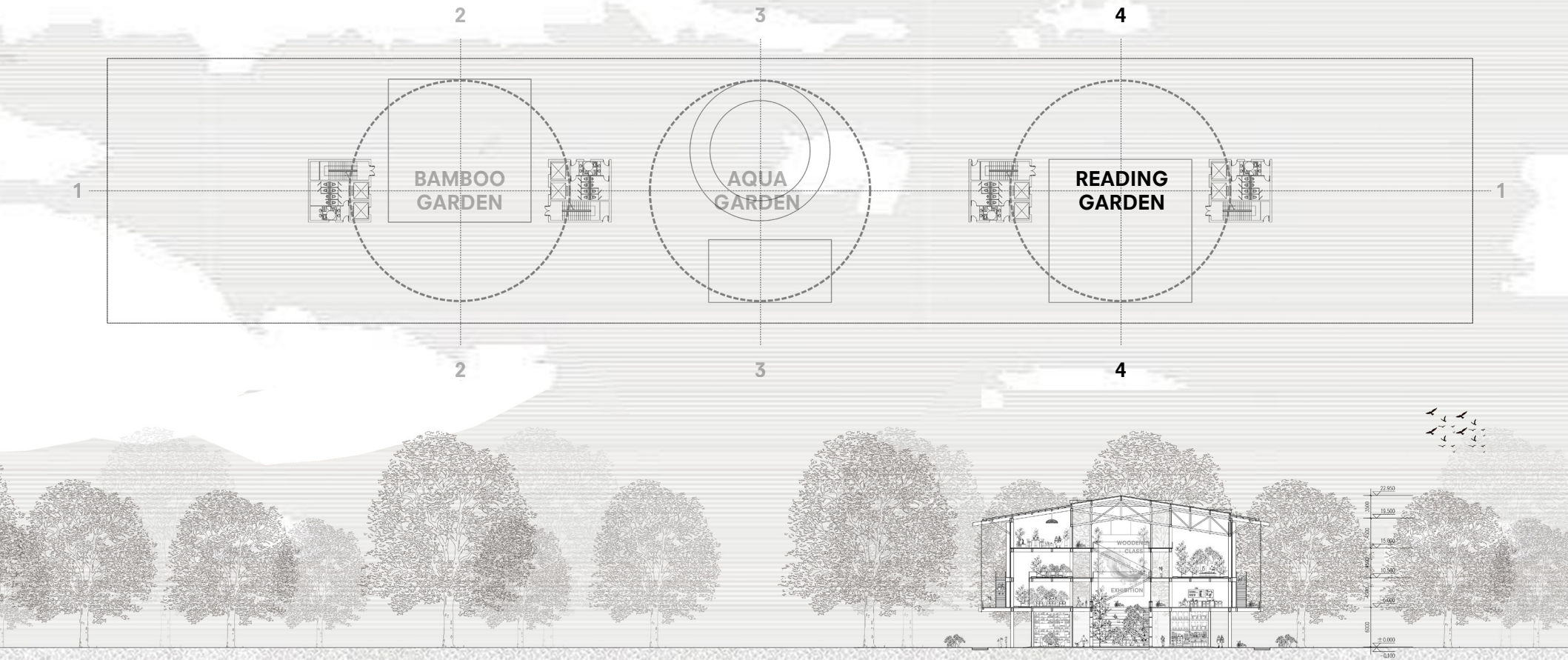
SECTION 3-3



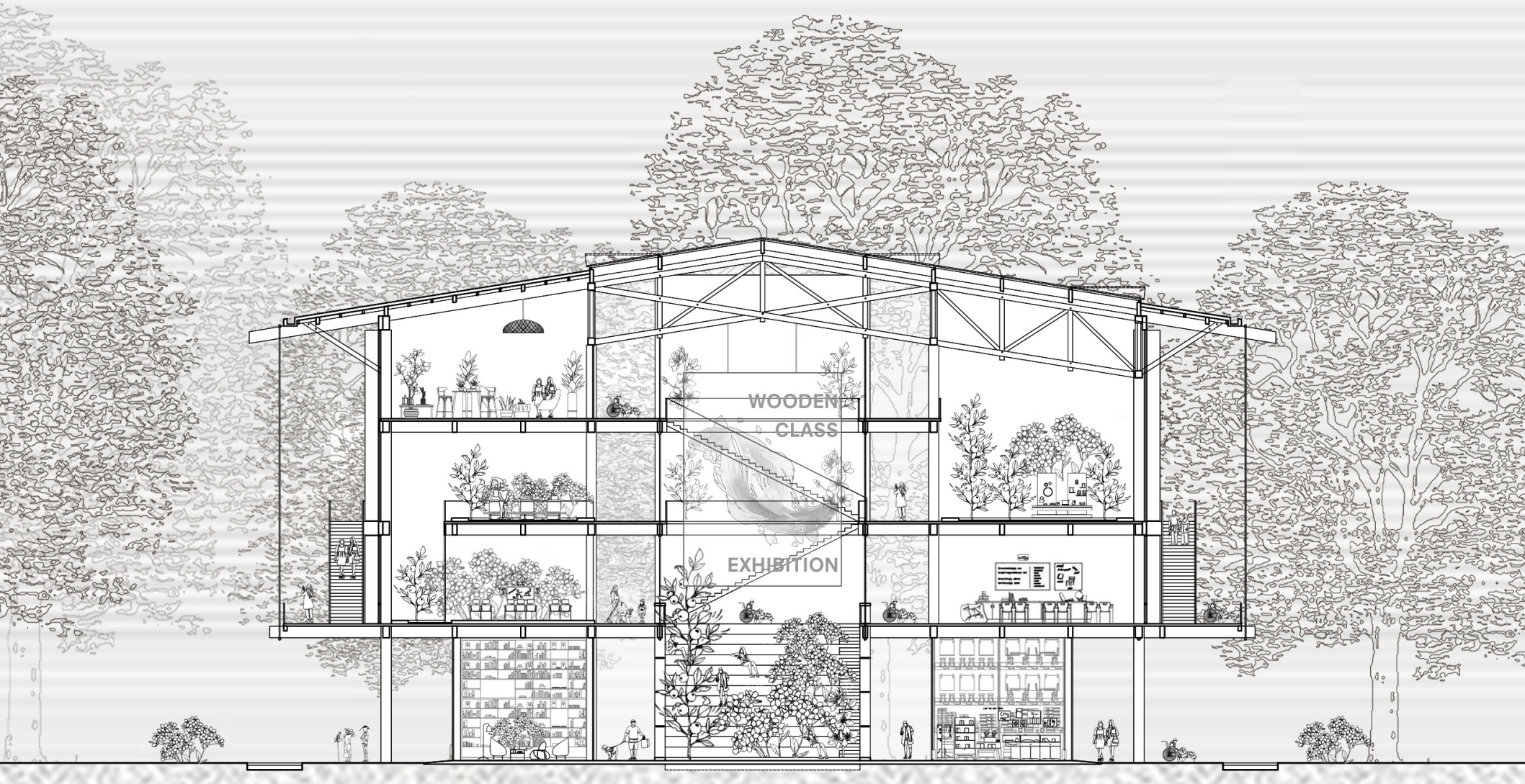
AQUA GARDEN



SECTION 4-4



READING GARDEN



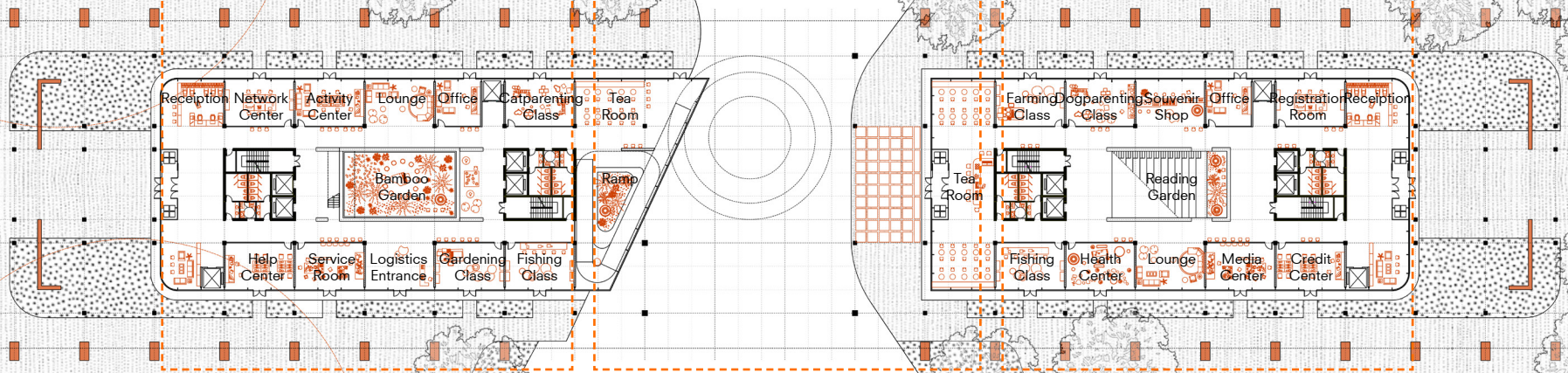
GROUND FLOOR PLAN

INFORMATION / HELP / PARK RELATED CLASSES

PARK-RELATED CLASSES
INFORMATION + HELP

TEA ROOM

PARK-RELATED CLASSES
INFORMATION + HELP

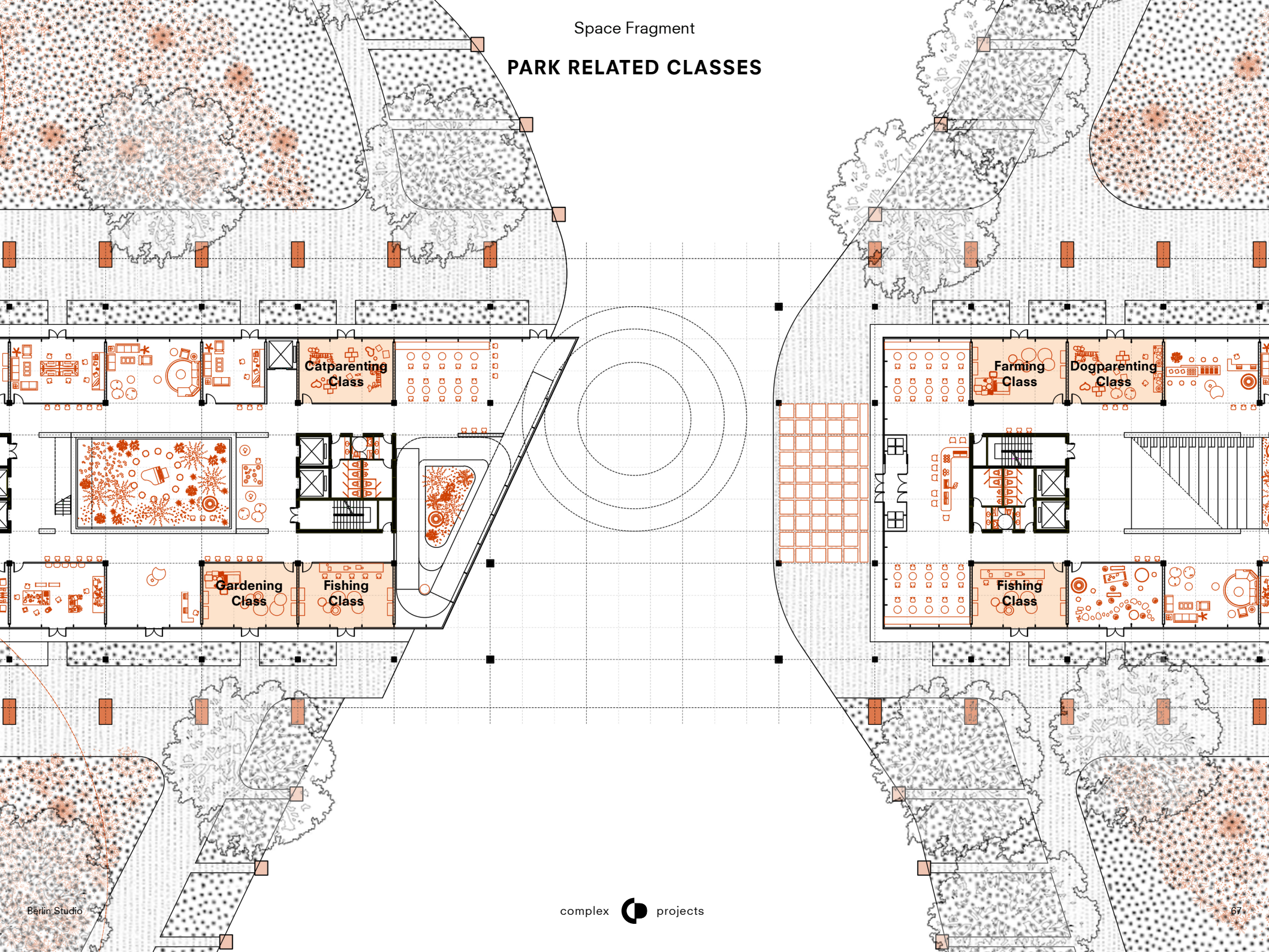


SPACE RHYTHMN: VISION + SMELL + HEARING



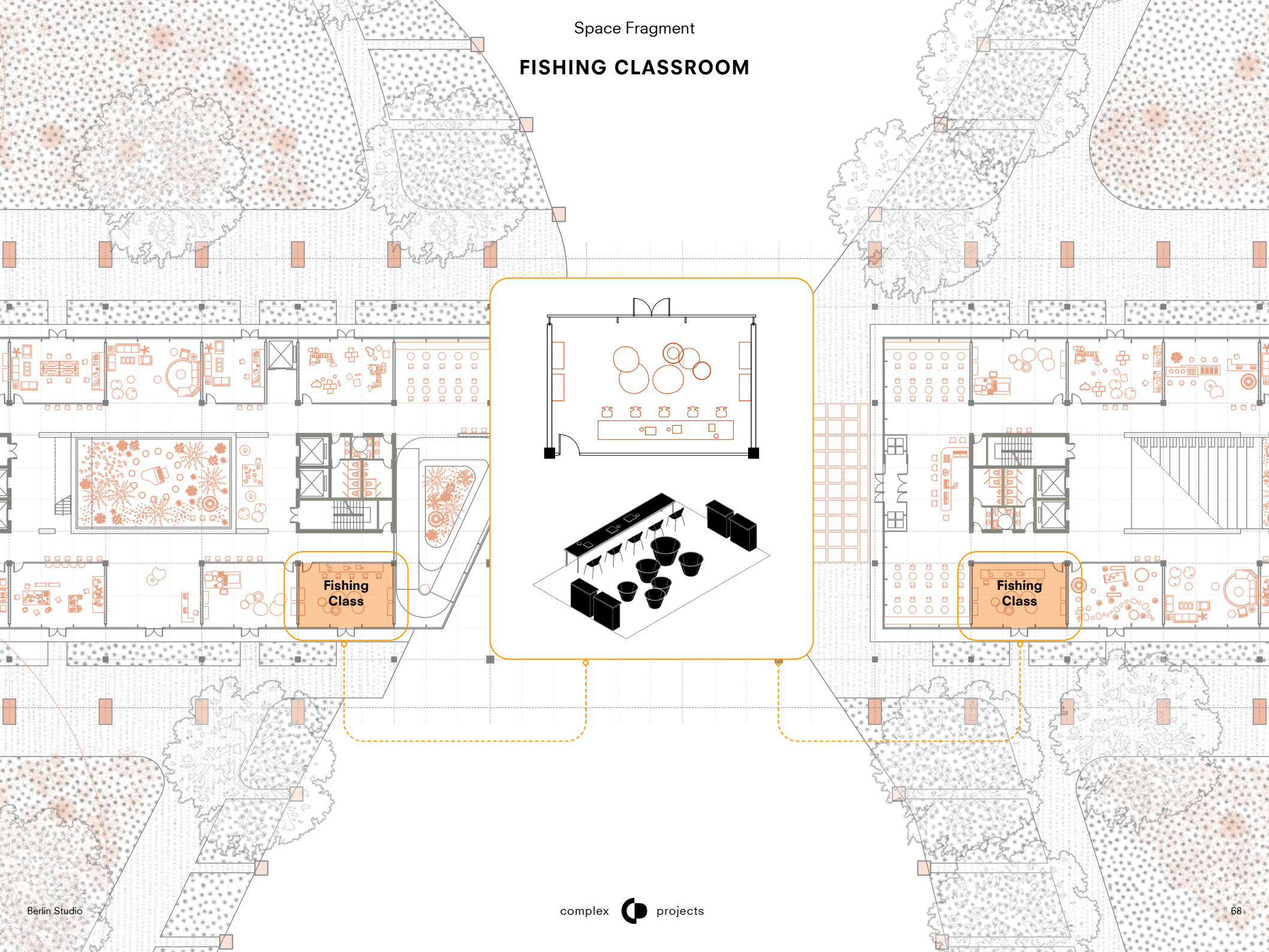
Space Fragment

PARK RELATED CLASSES

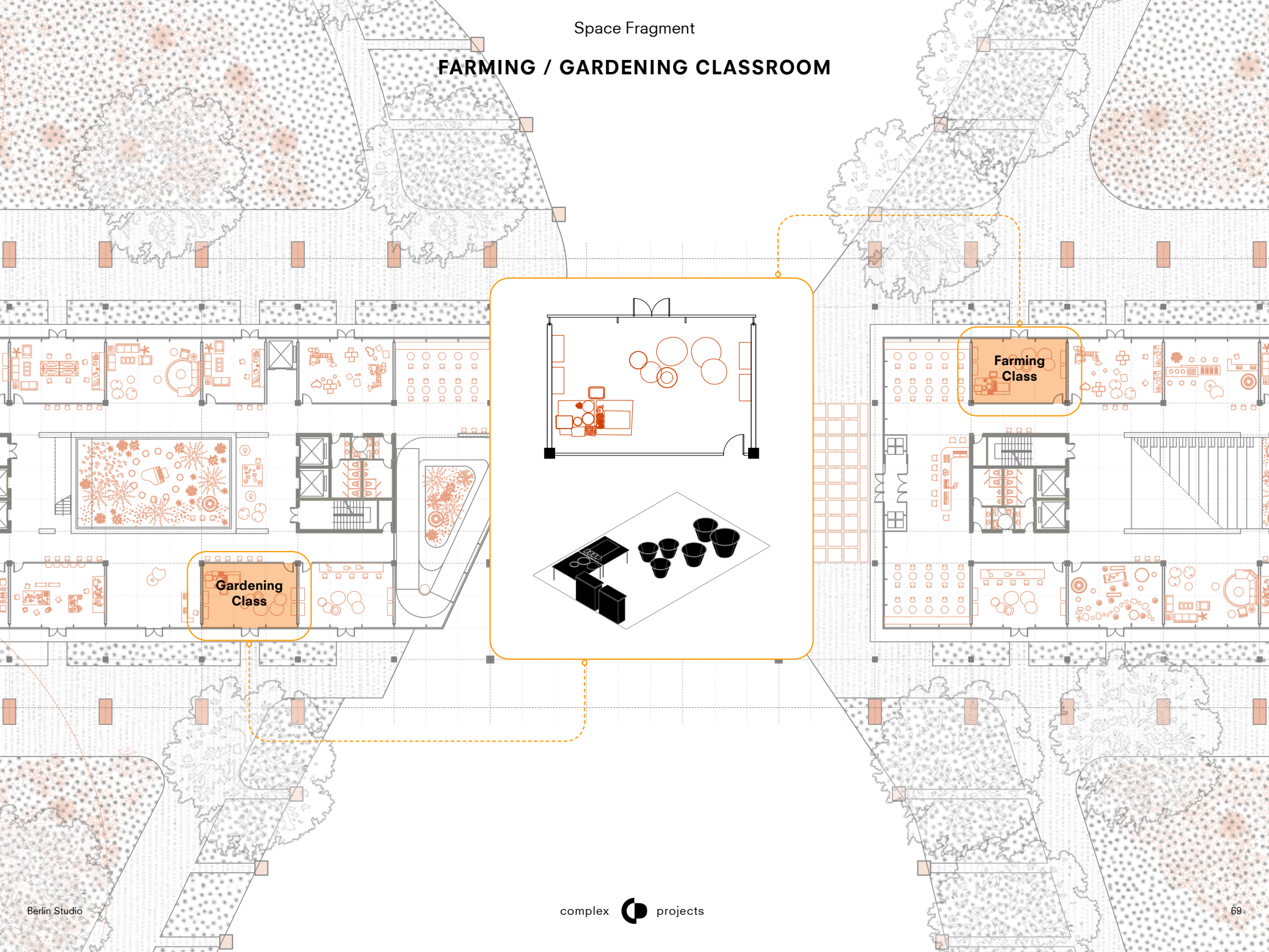


Space Fragment

FISHING CLASSROOM

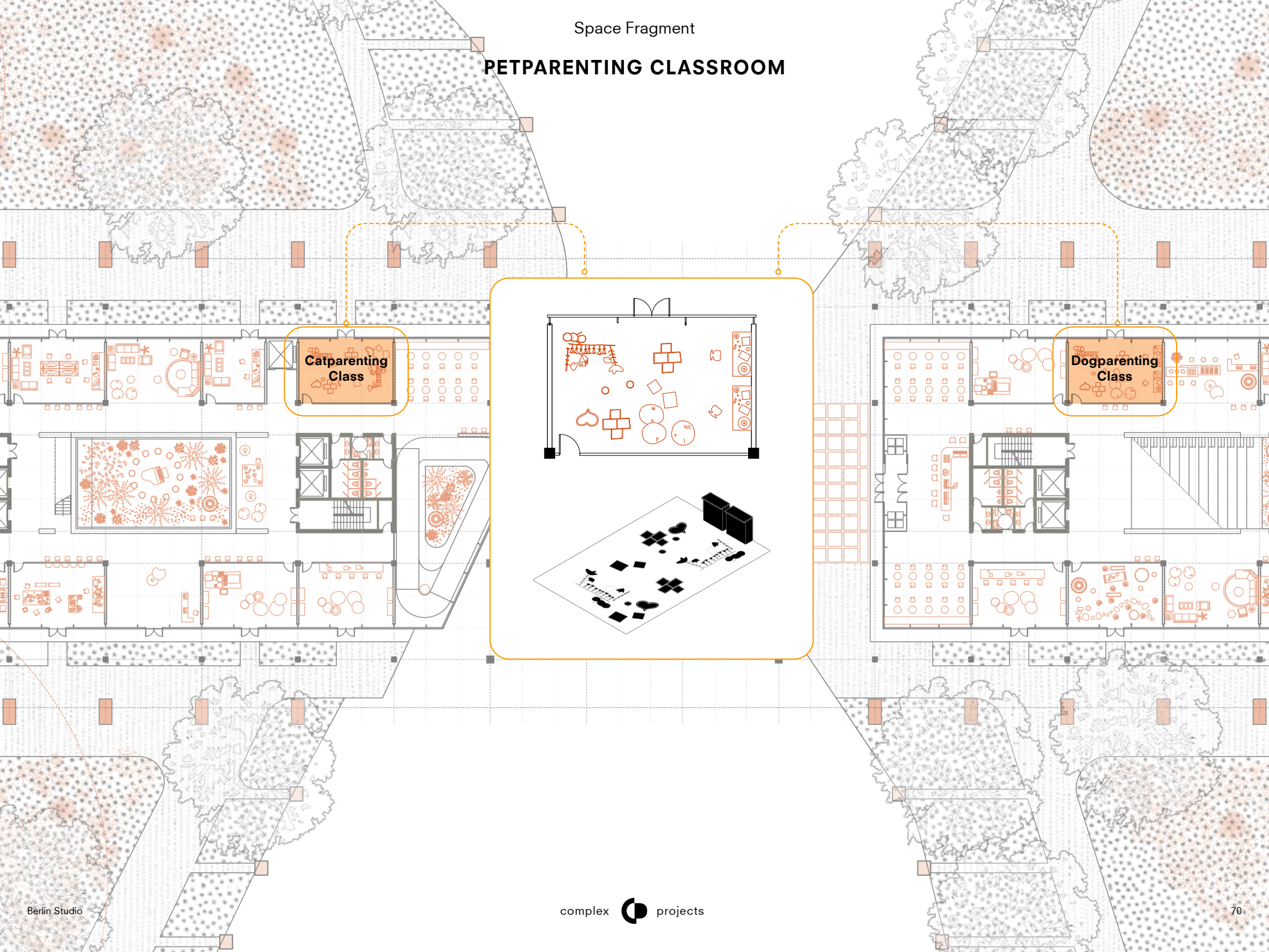


FARMING / GARDENING CLASSROOM



Space Fragment

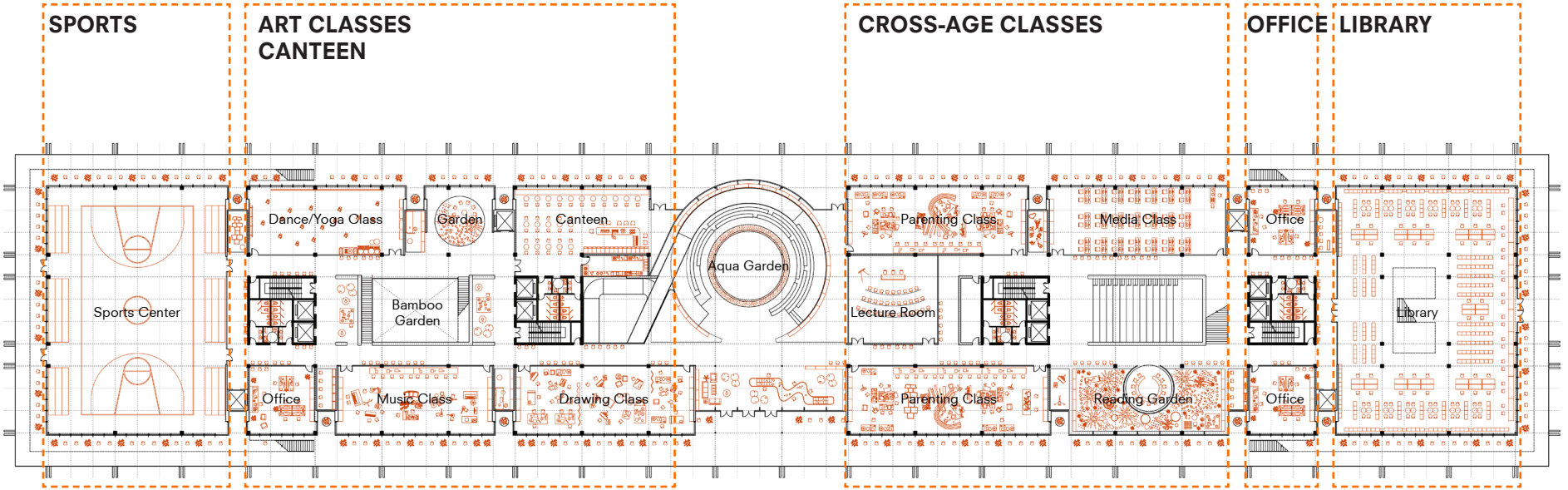
PETPARENTING CLASSROOM



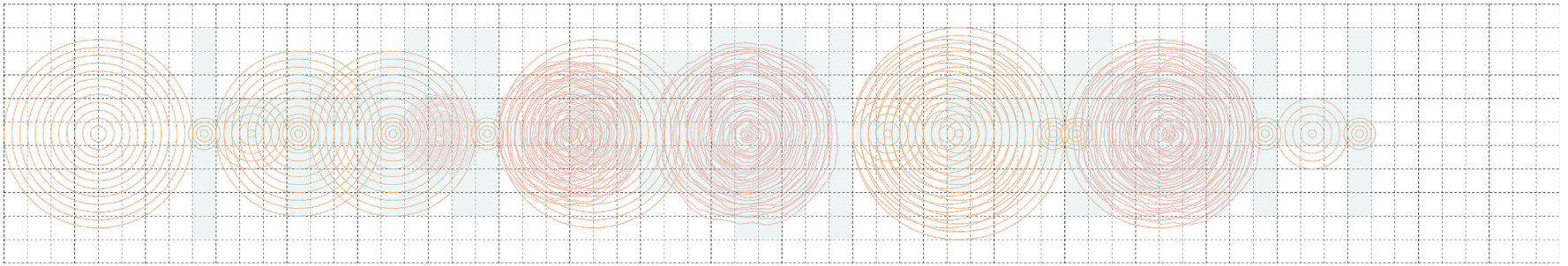
FIRST FLOOR PLAN

INTERGENERATIONAL CLASSES

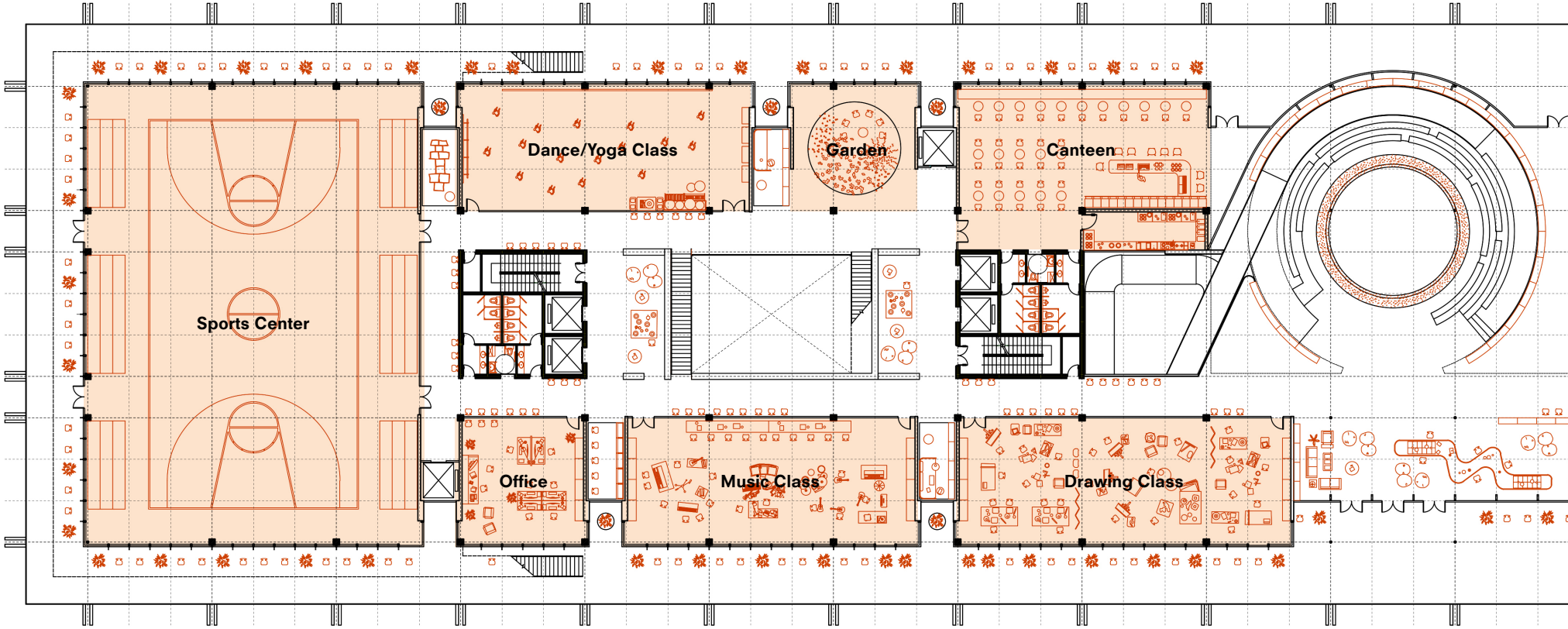




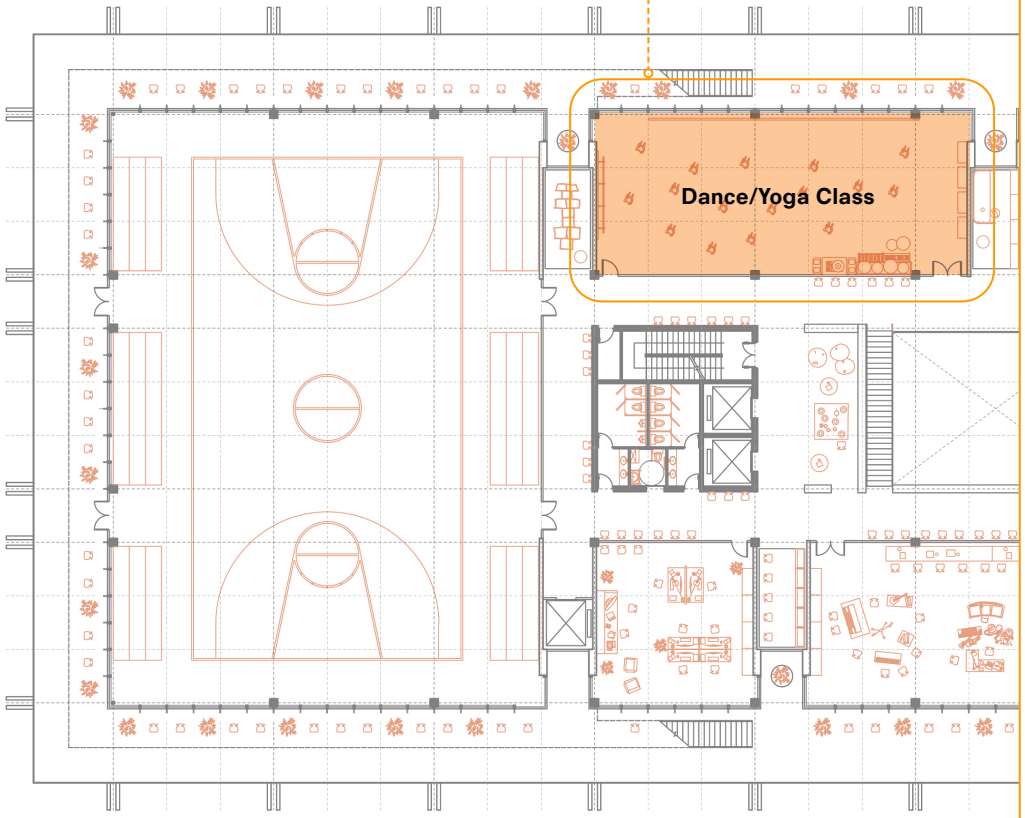
SPACE RHYTHMN: VISION + SMELL + HEARING

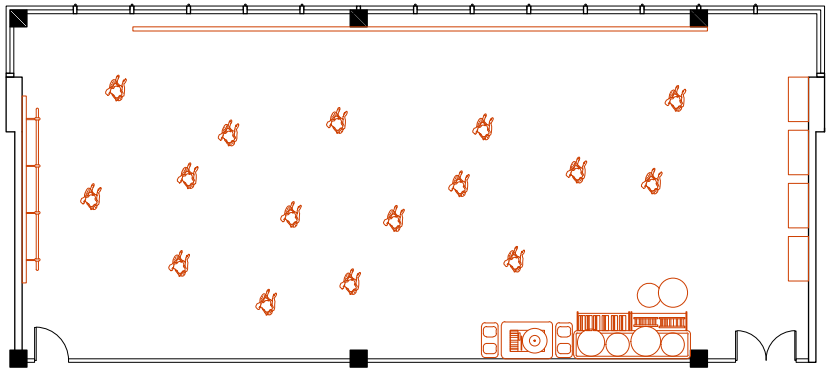


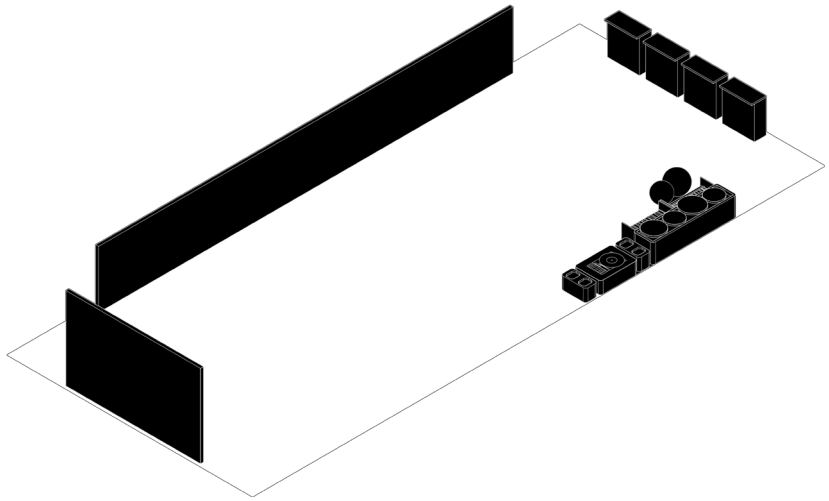
ART CLASSES


Sports Center
Dance/Yoga Class
Garden
Canteen
Office
Music Class
Drawing Class

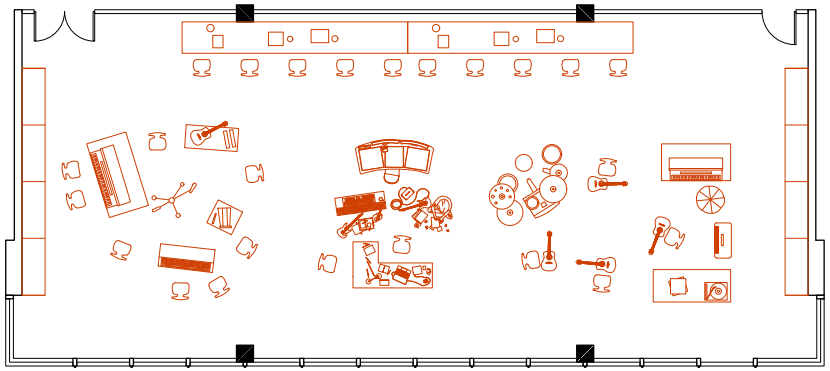
DANCE CLASSROOM

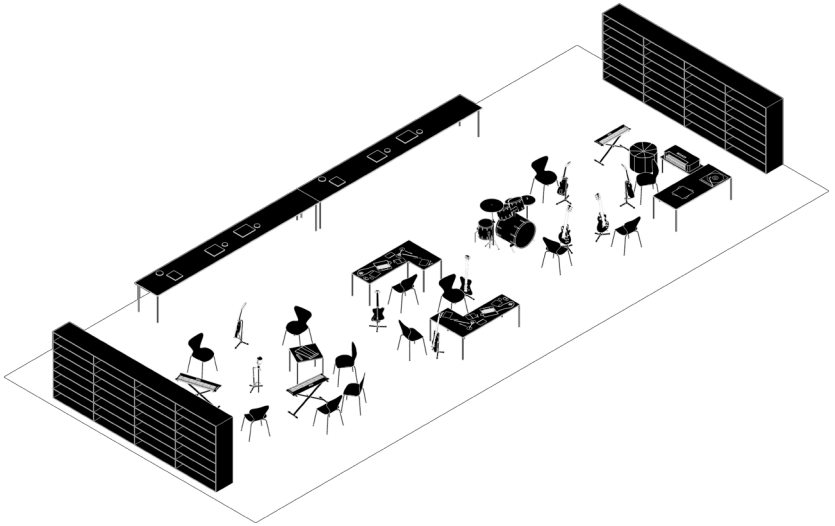


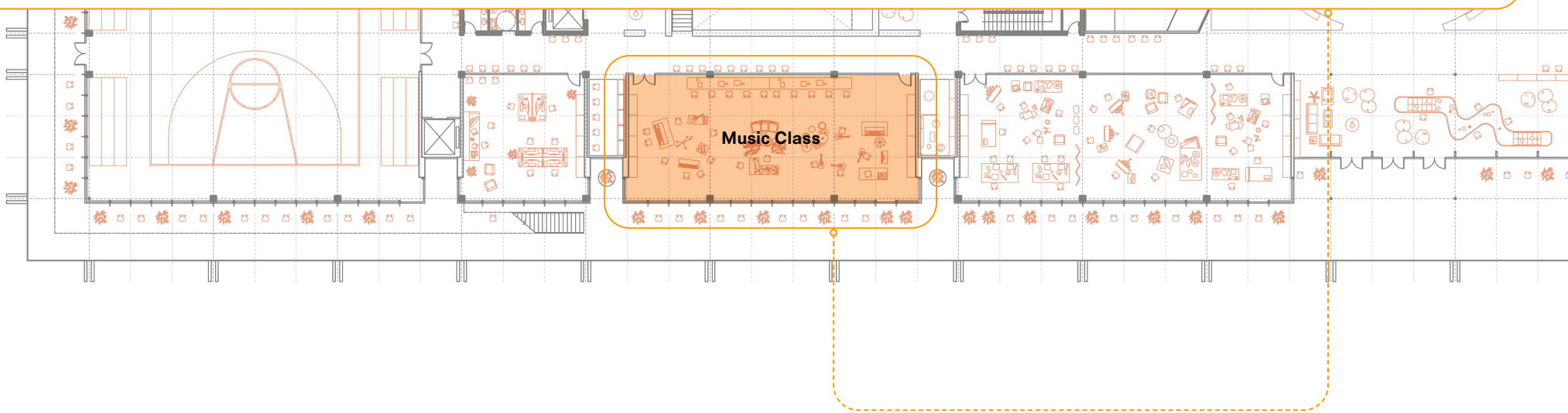




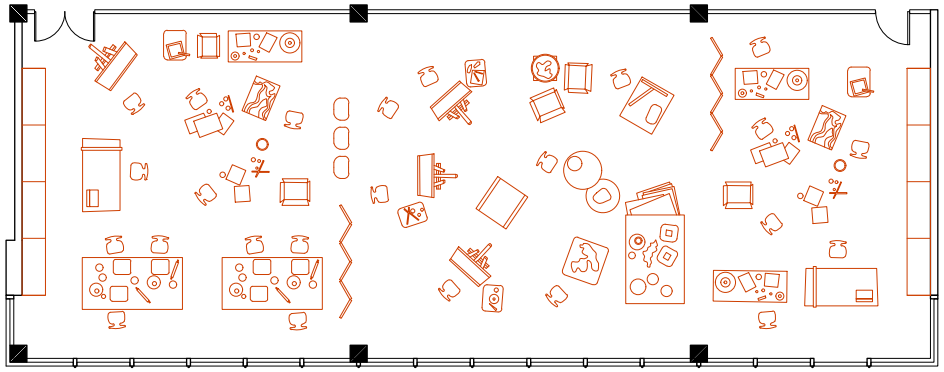
MUSIC CLASSROOM

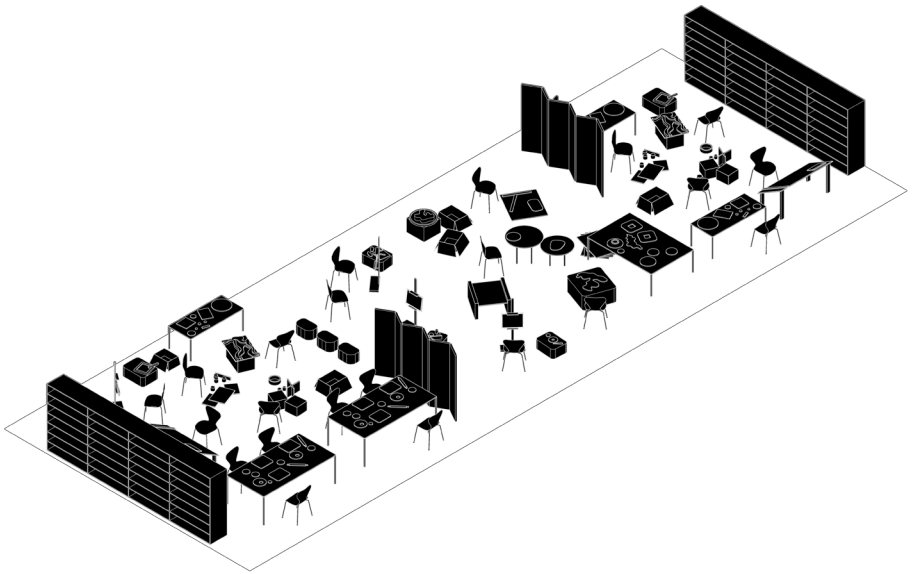


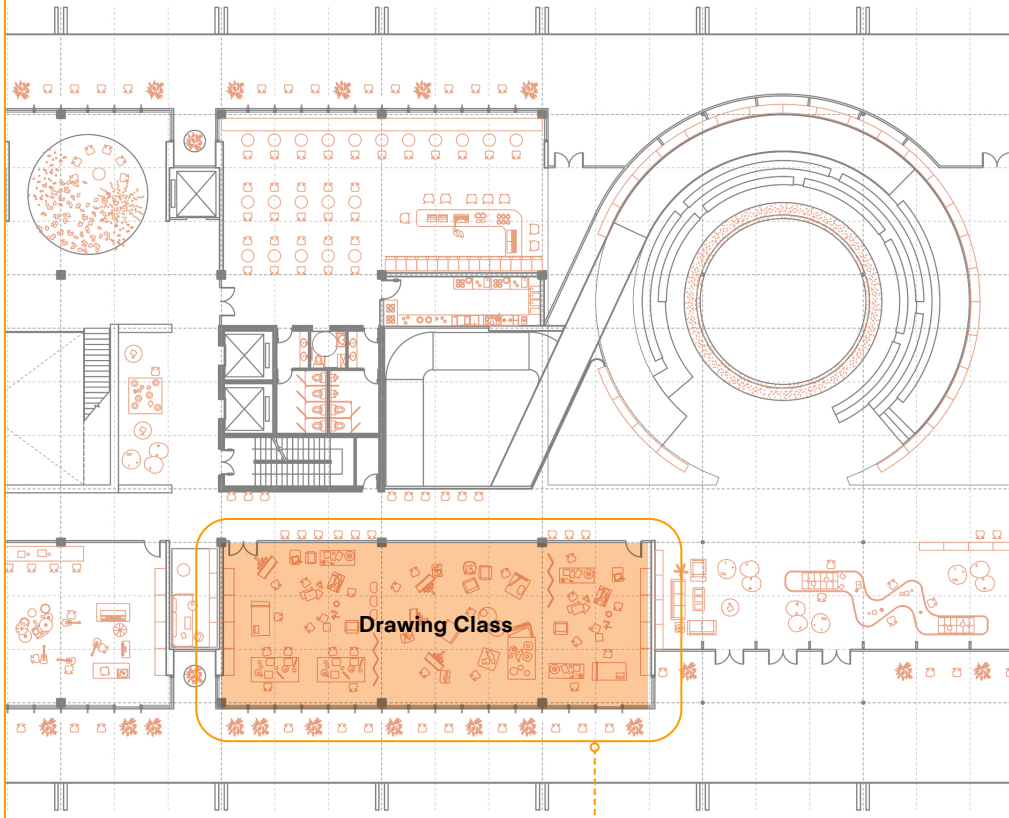




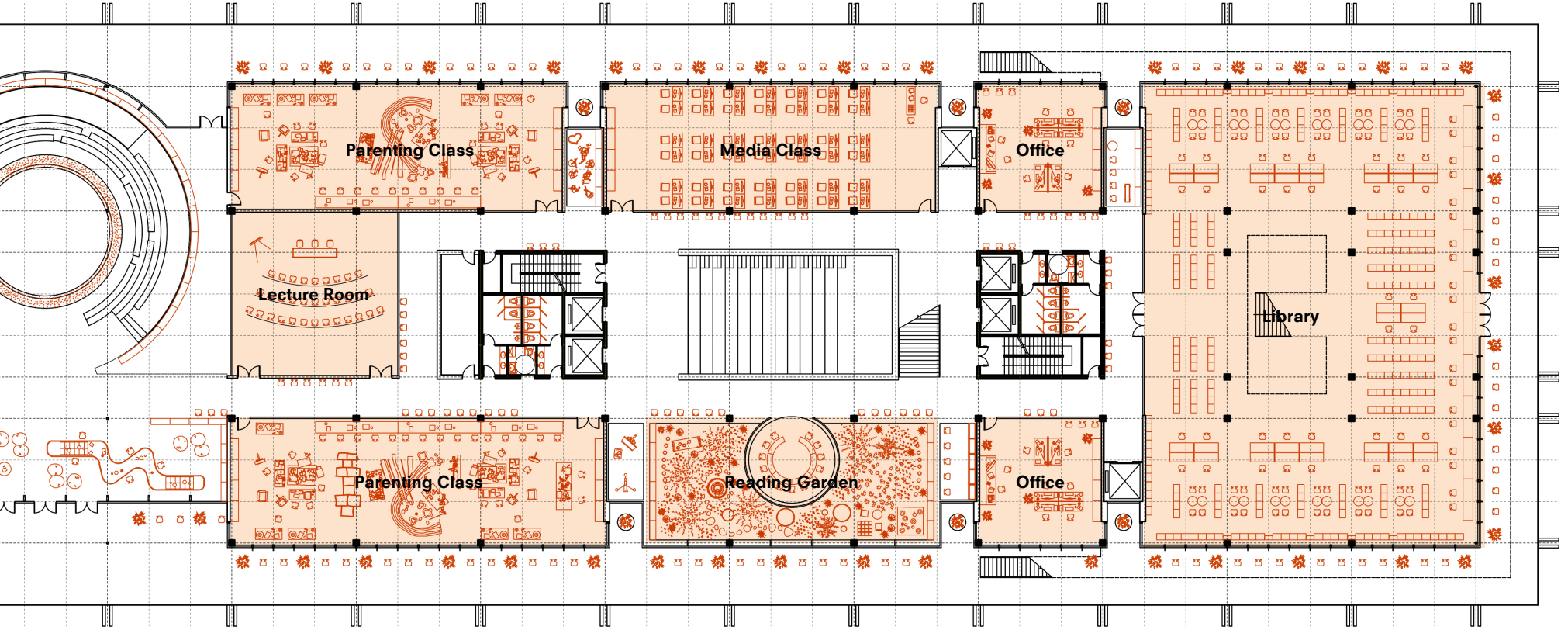
DRAWING CLASSROOM



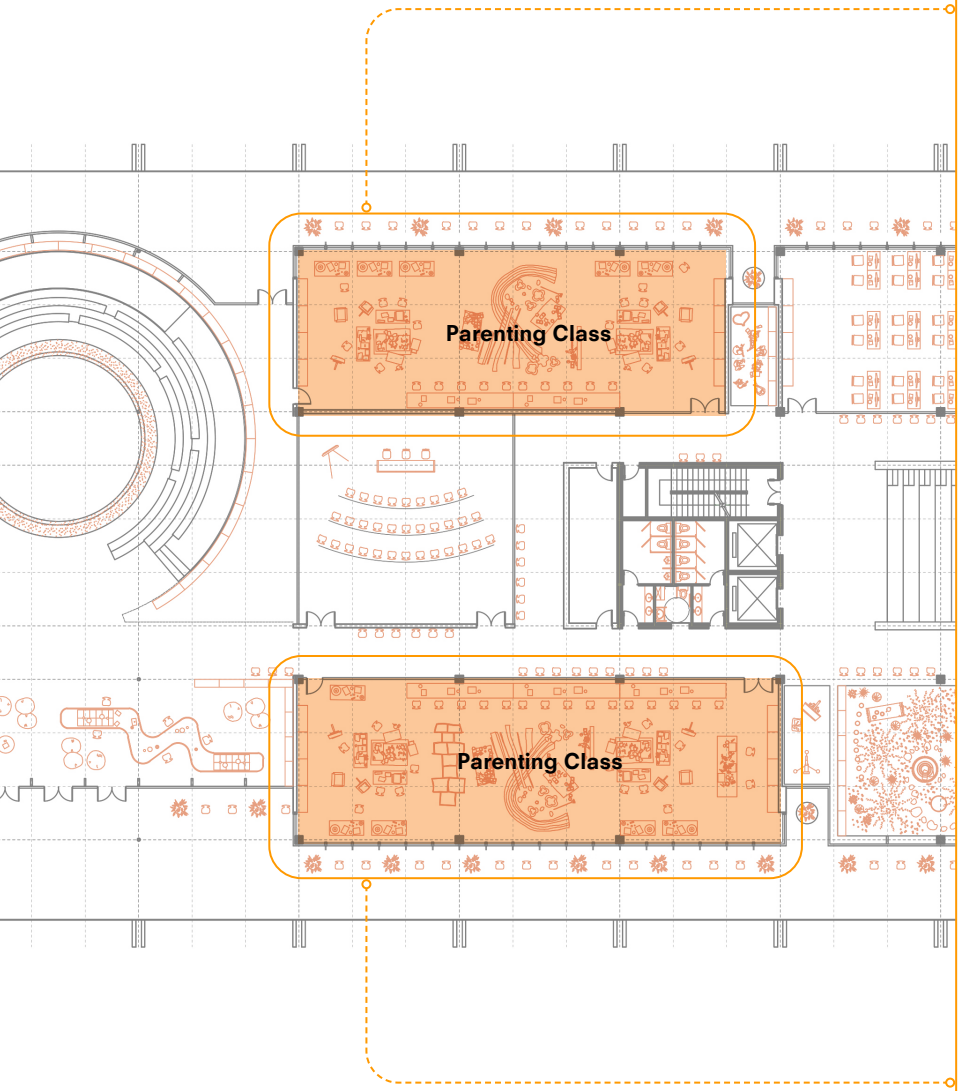


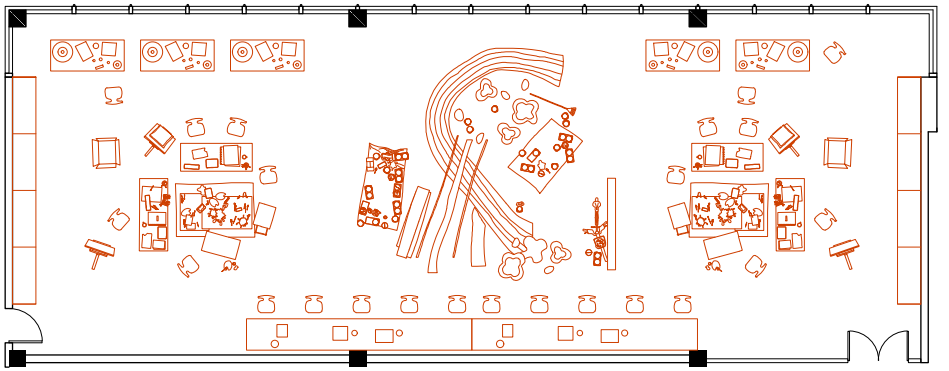


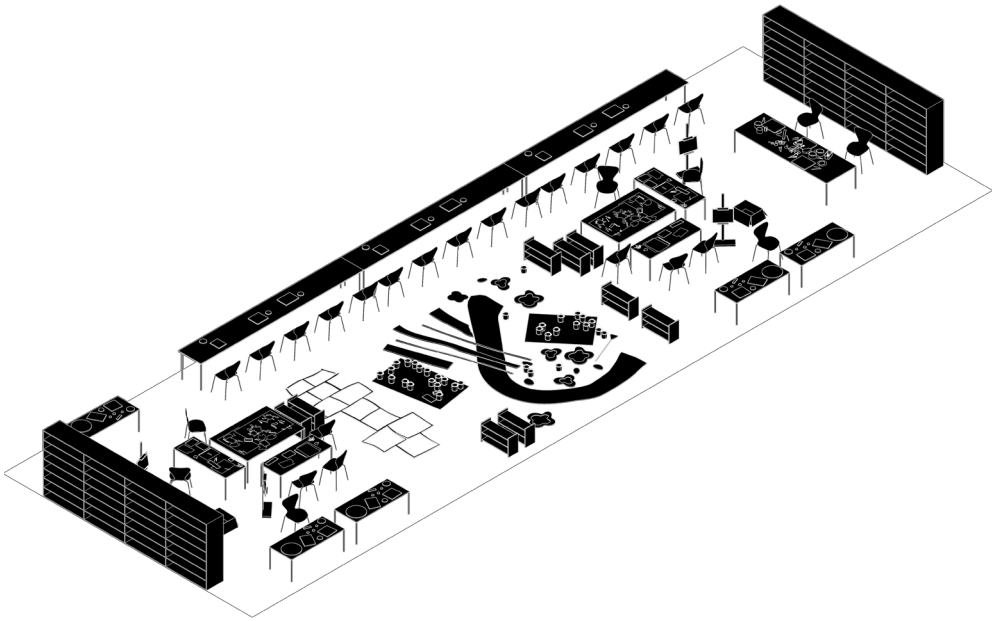
CROSS-AGE CLASSES



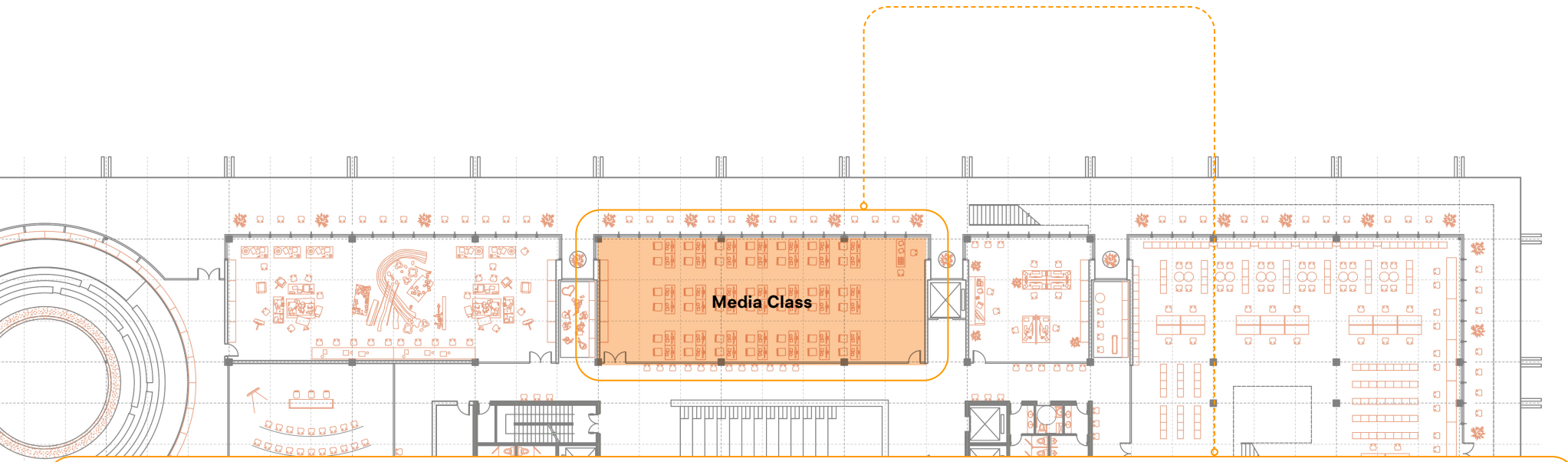
PARENTING CLASSROOM

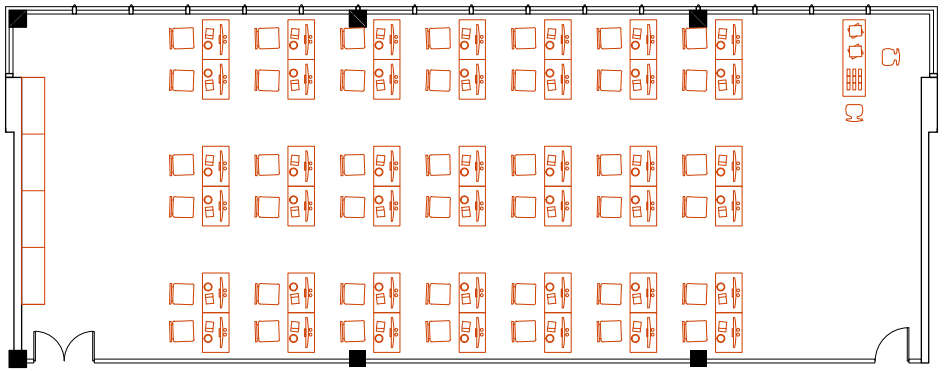


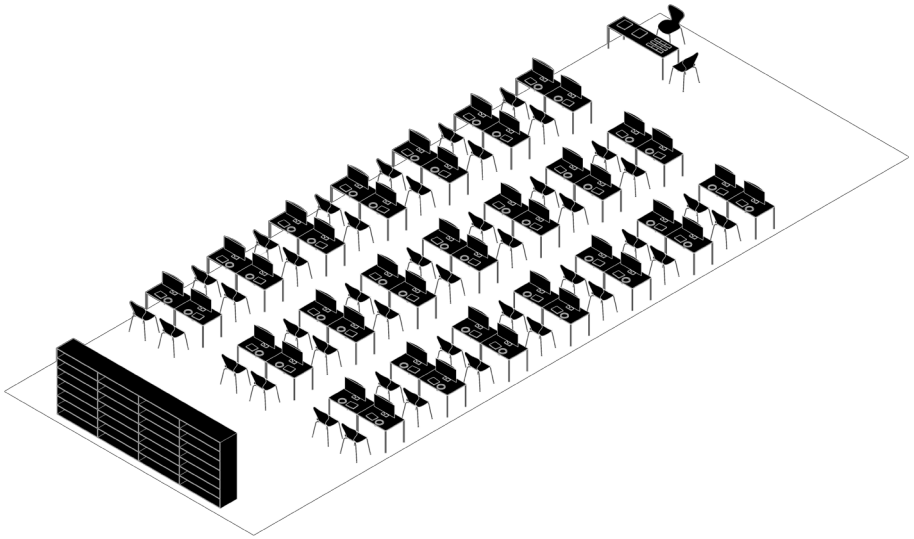




MEDIA CLASSROOM



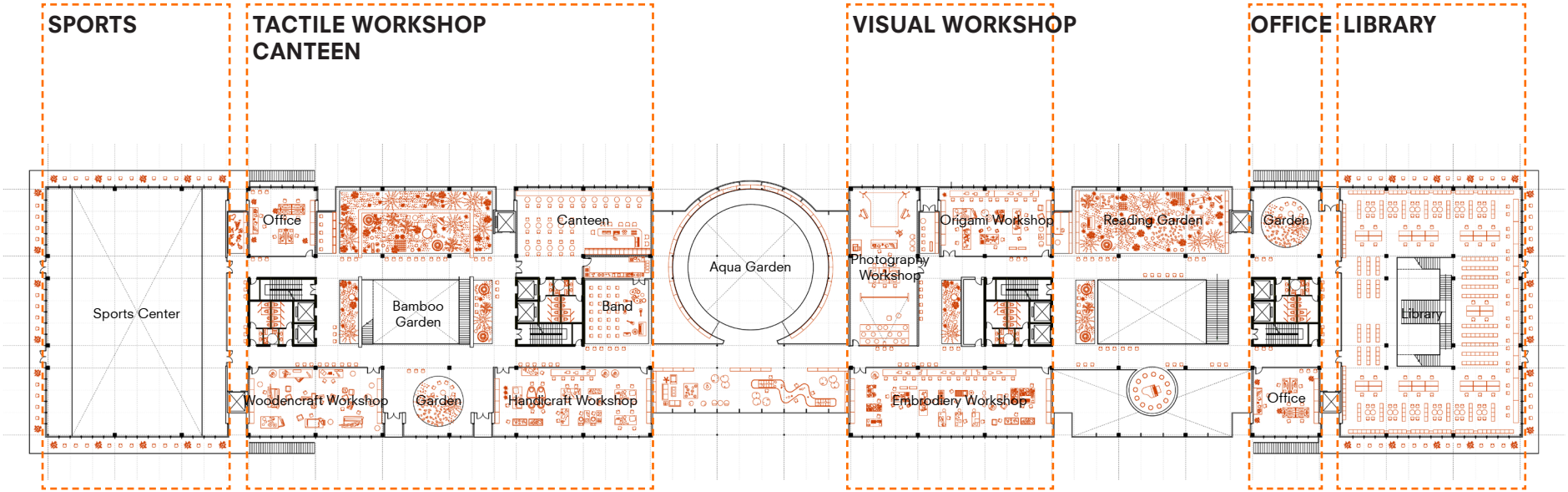




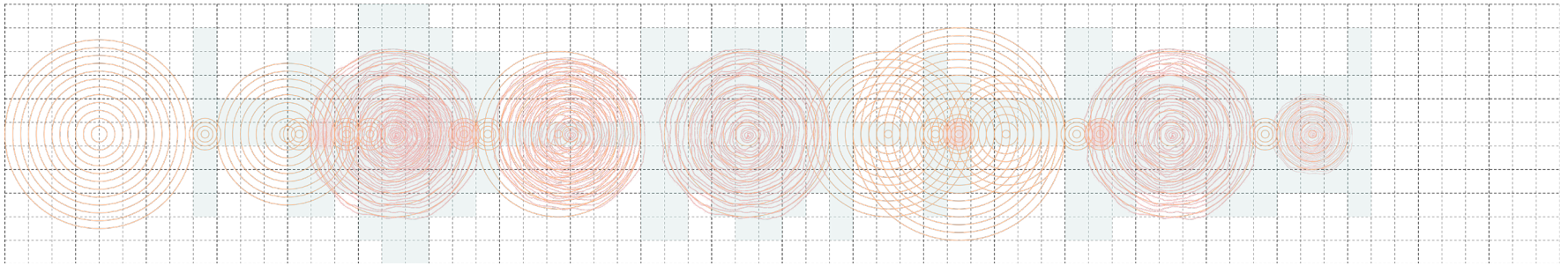
SECOND FLOOR PLAN

INTERGENERATIONAL WORKSHOPS

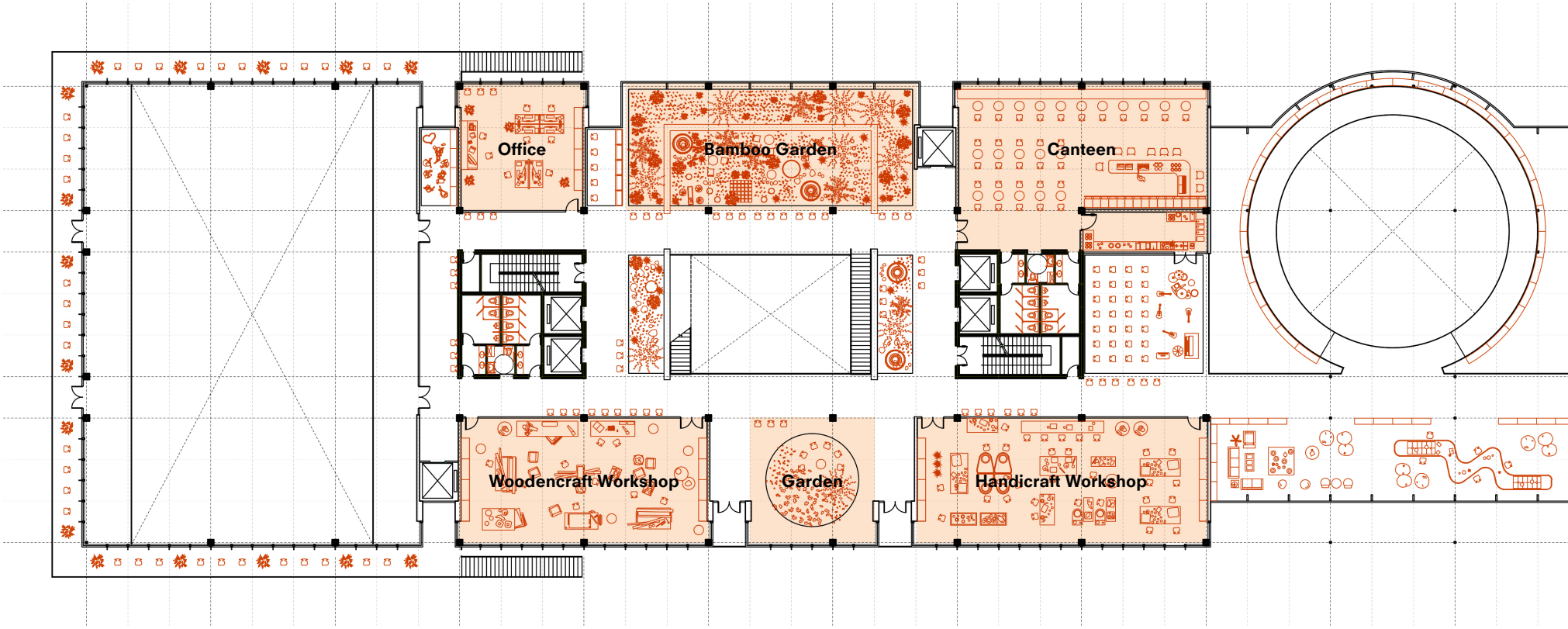




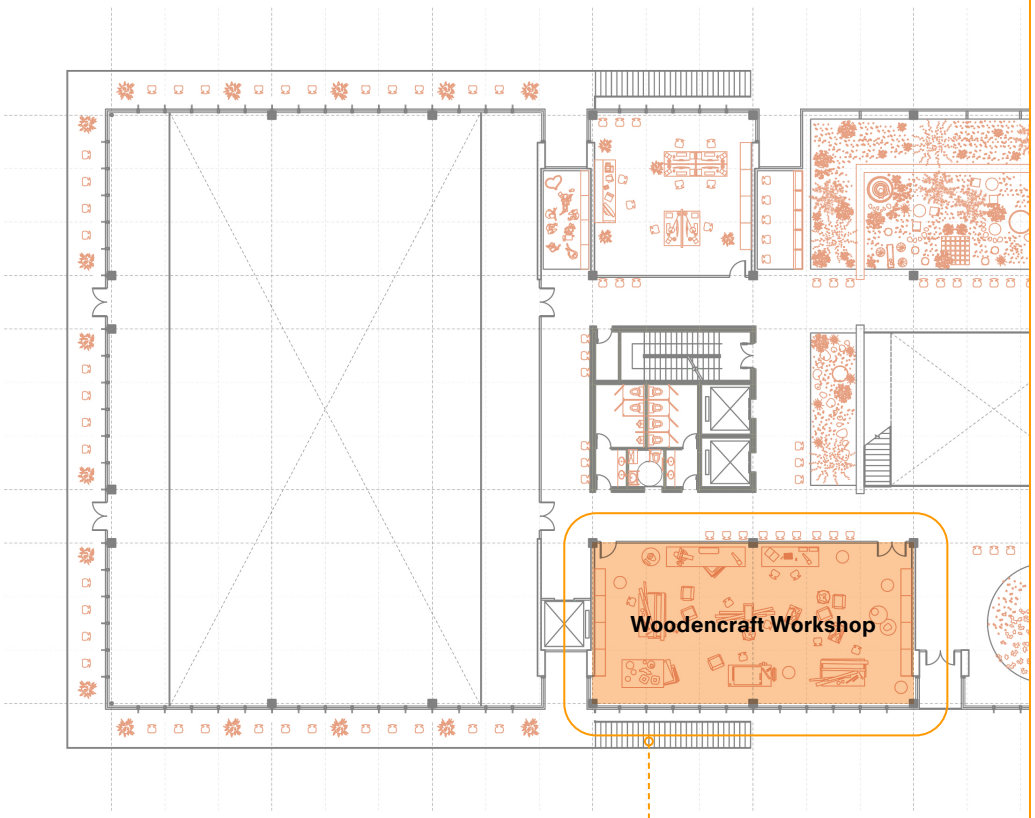
SPACE RHYTHMN: VISION + SMELL + HEARING

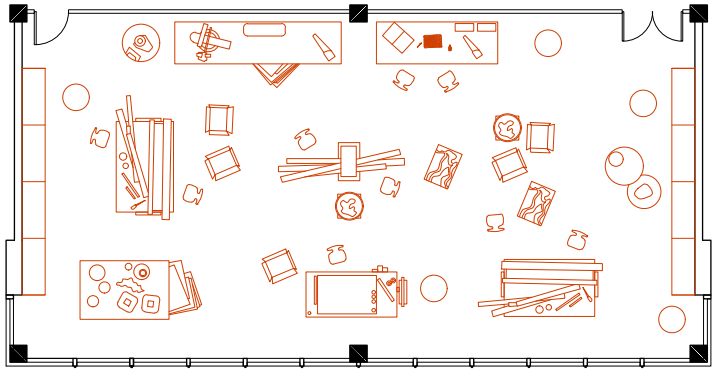


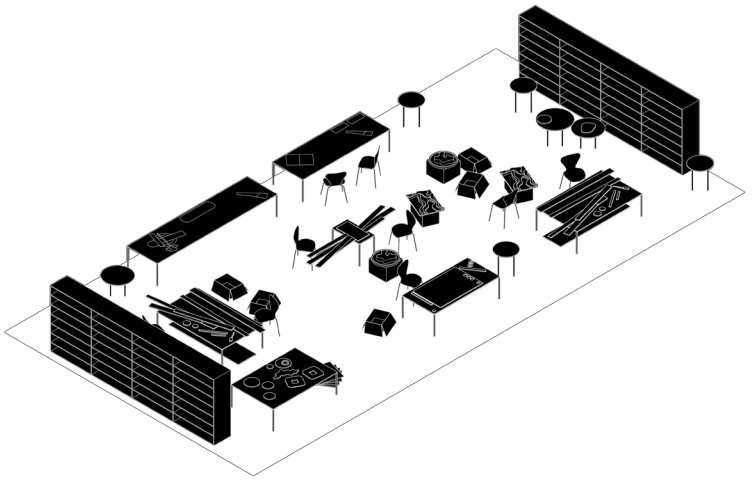
TACTILE WORKSHOP



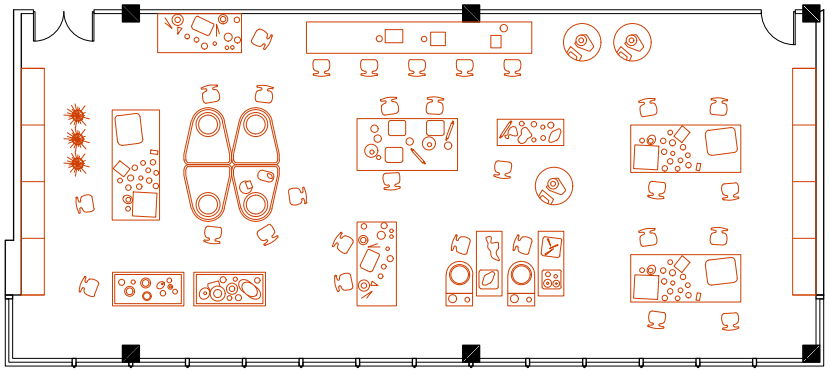
WOODENCRAFT WORKSHOP

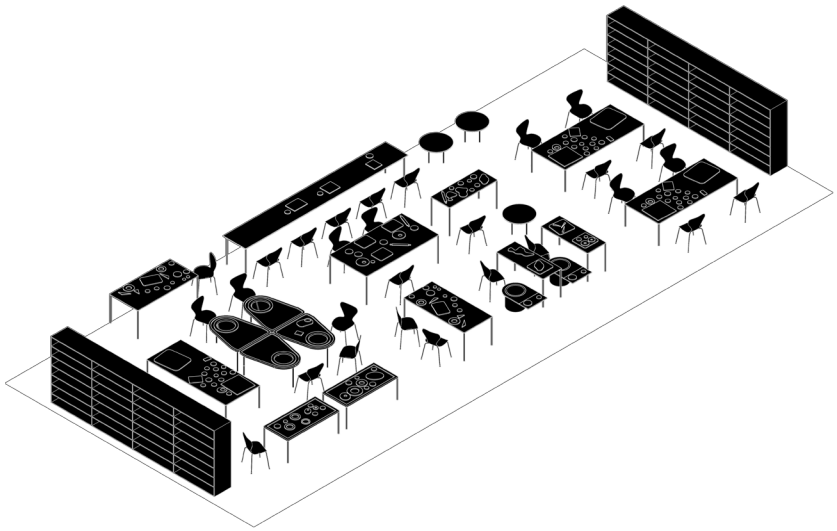


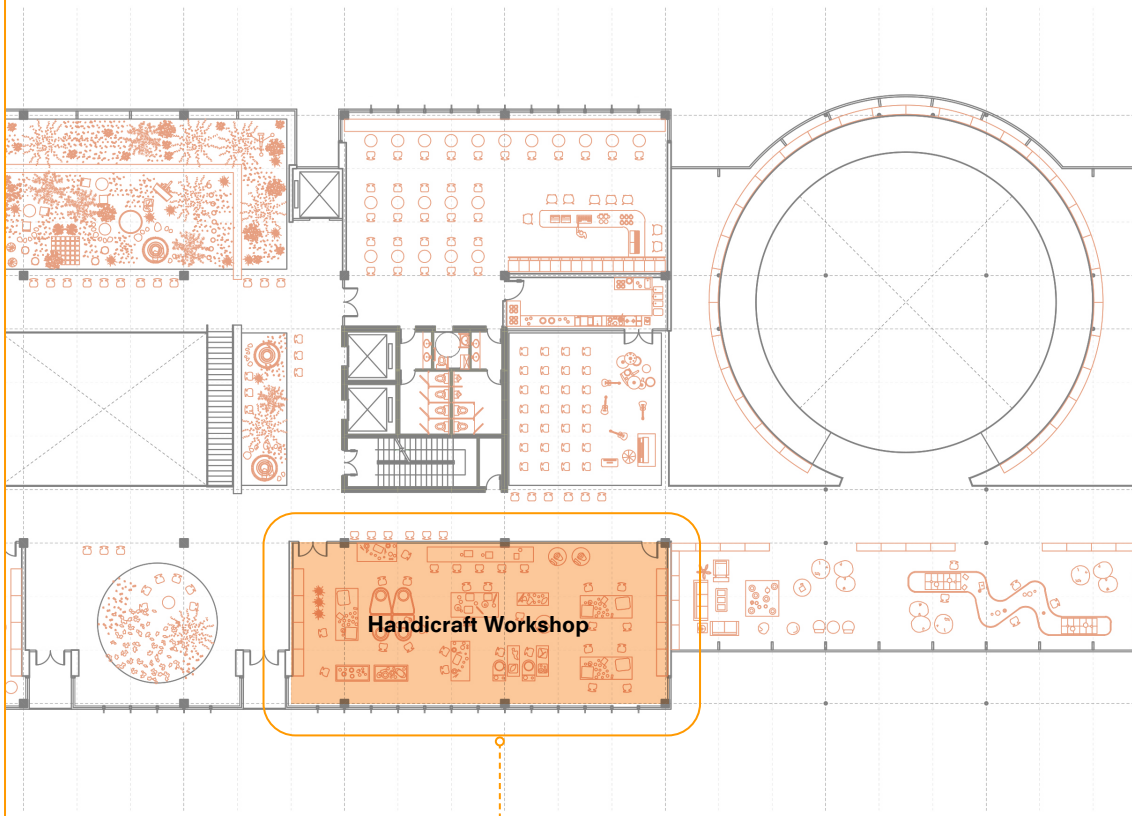




HANDICRAFT WORKSHOP







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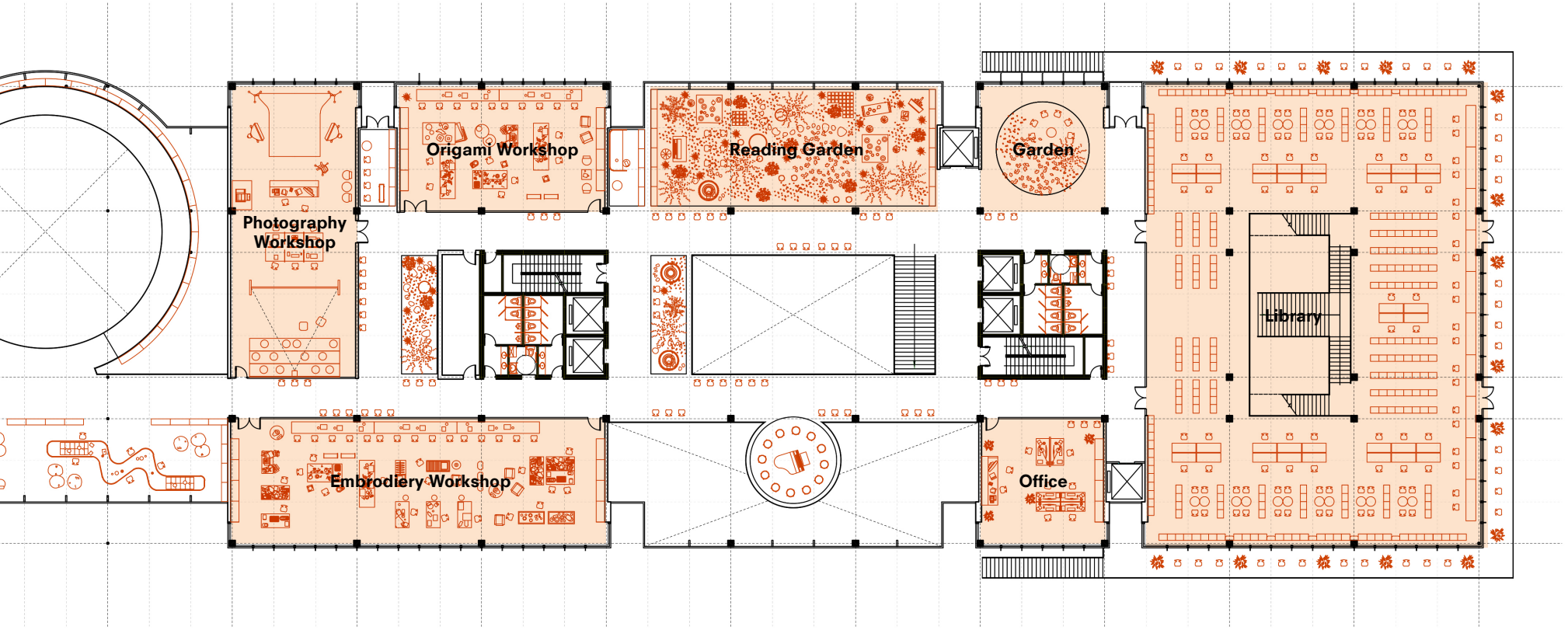
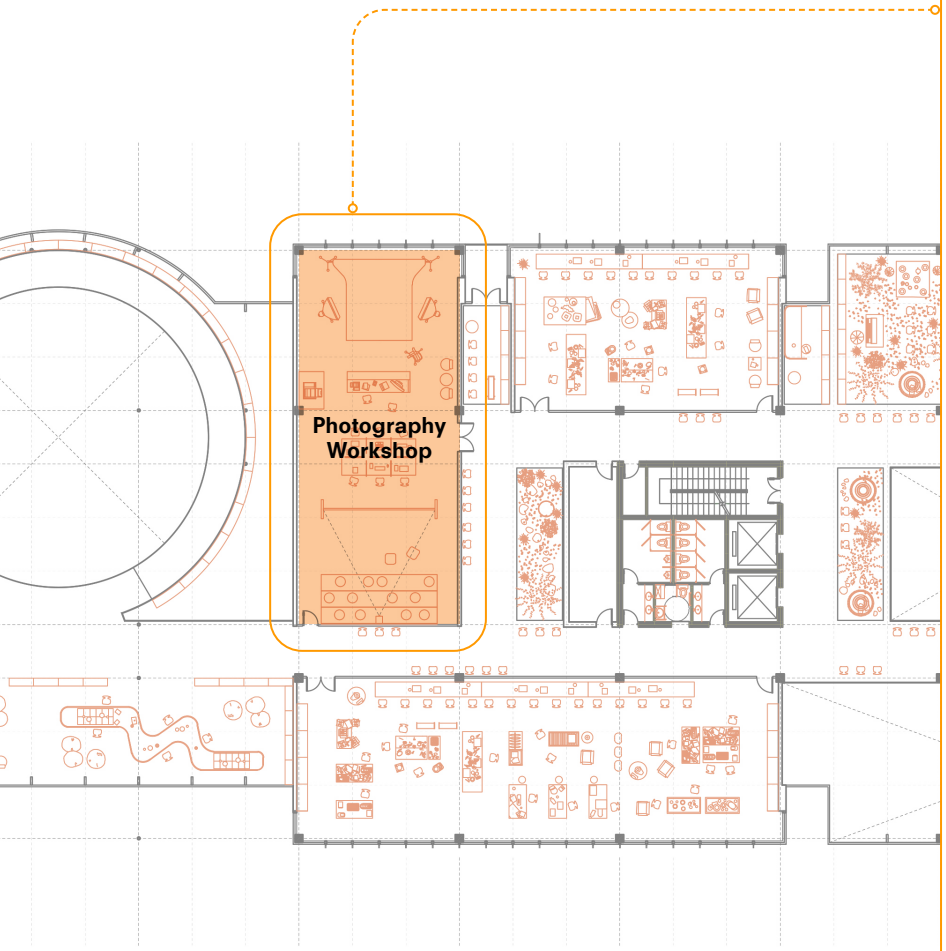
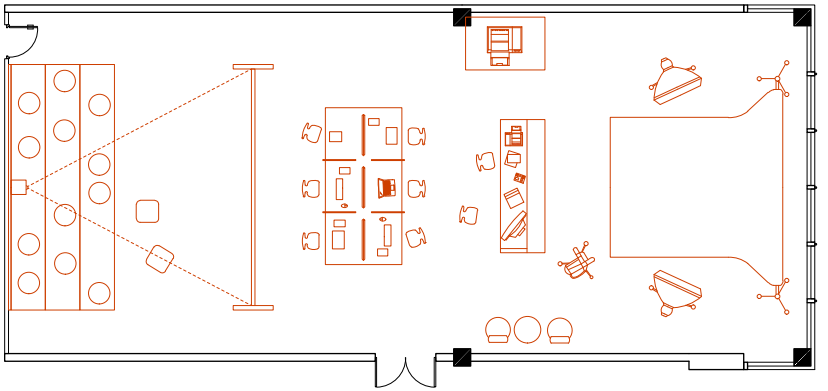
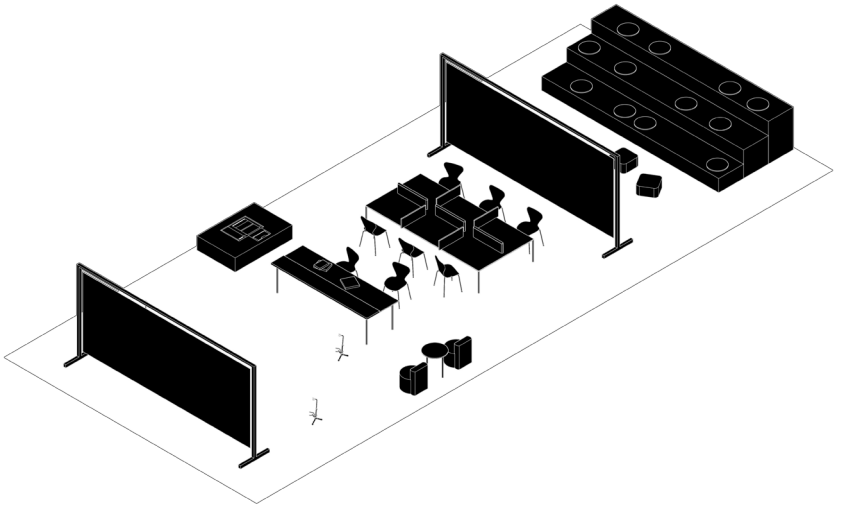


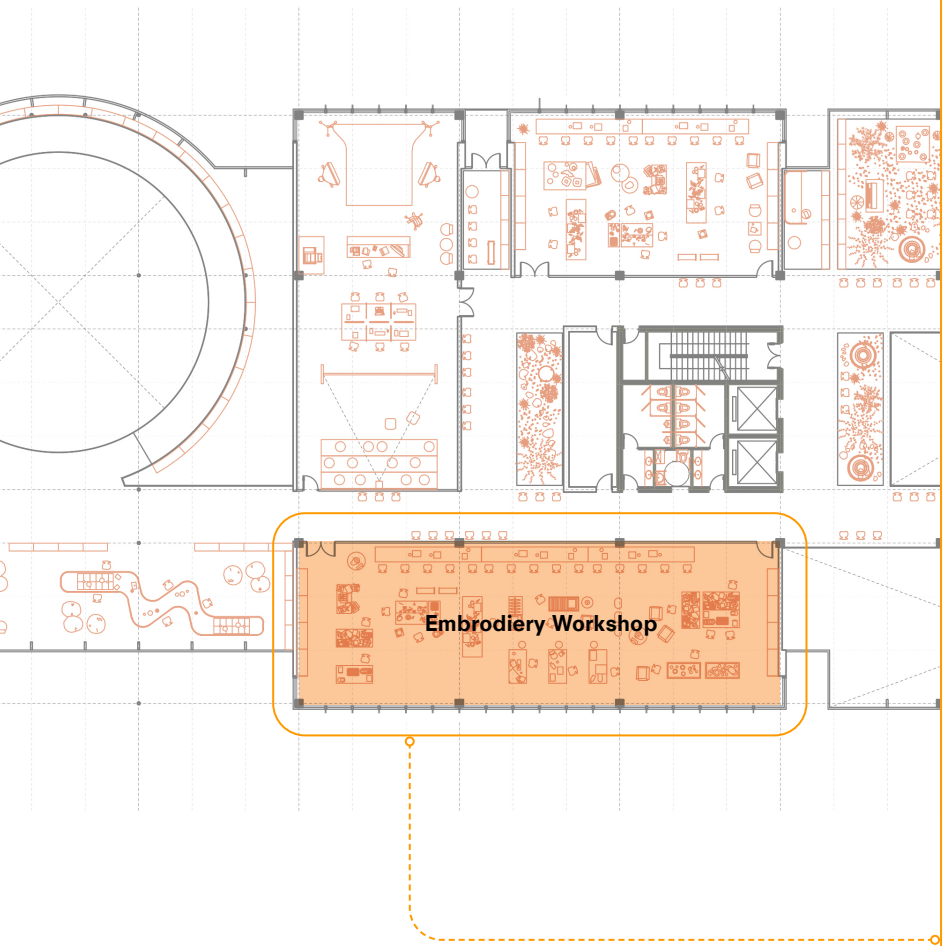
PHOTOGRAPHY WORKSHOP

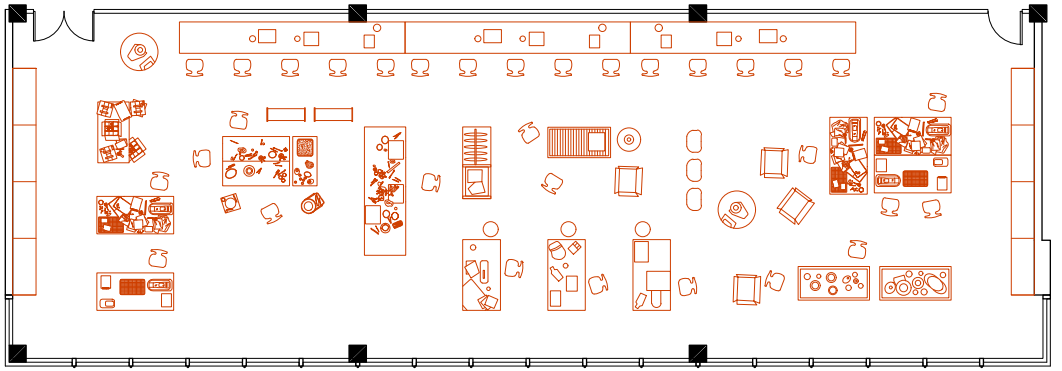


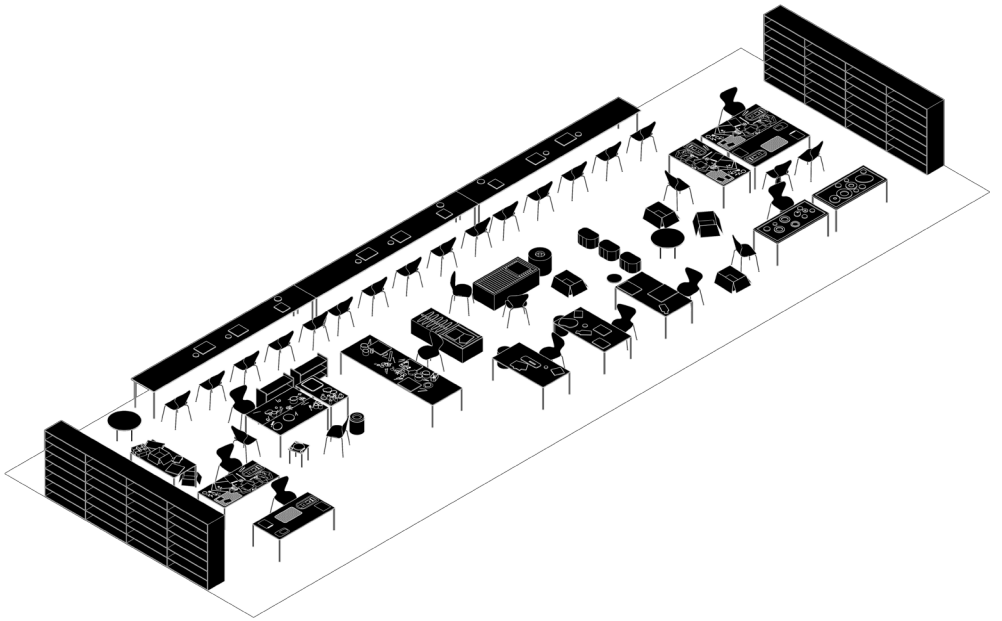




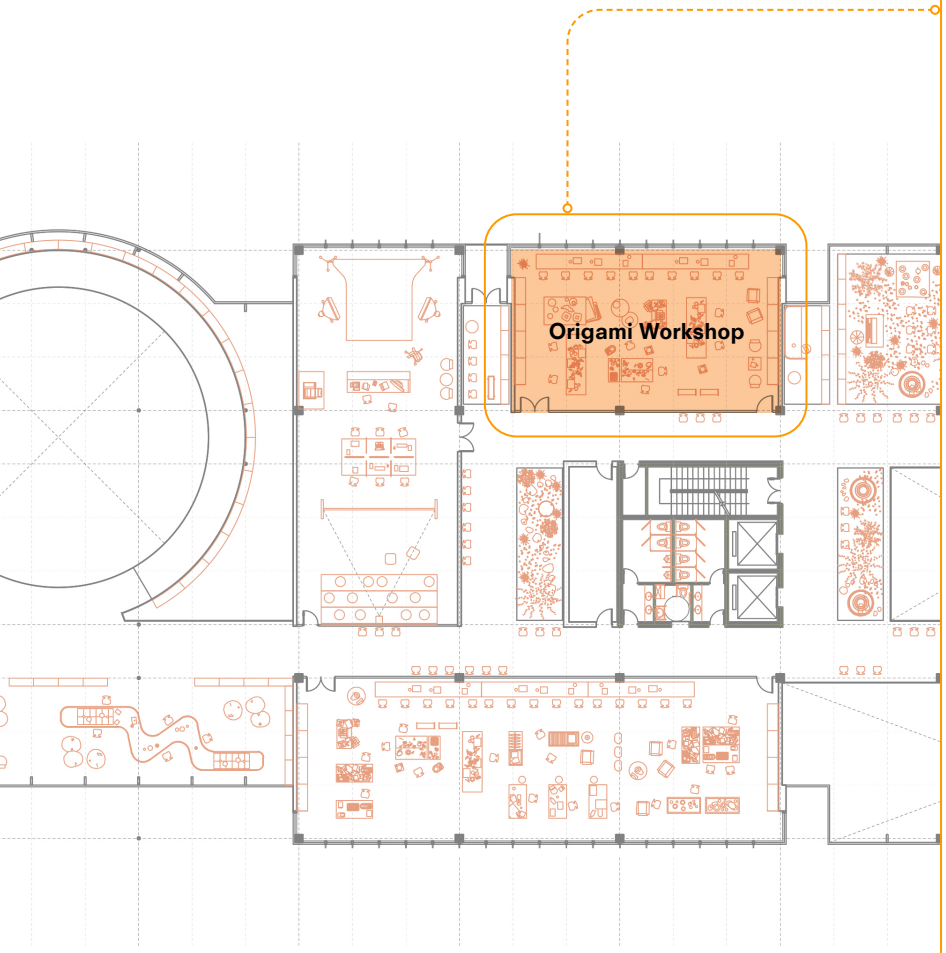
EMBRODIERY WORKSHOP

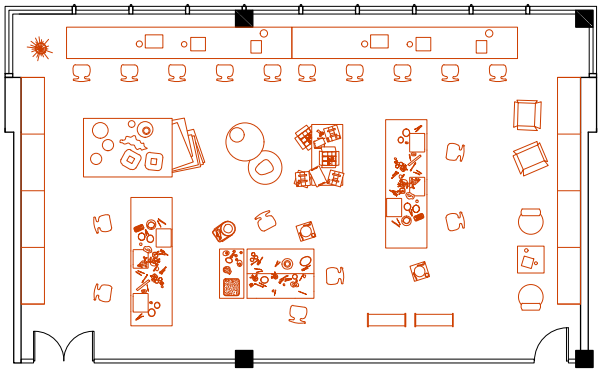


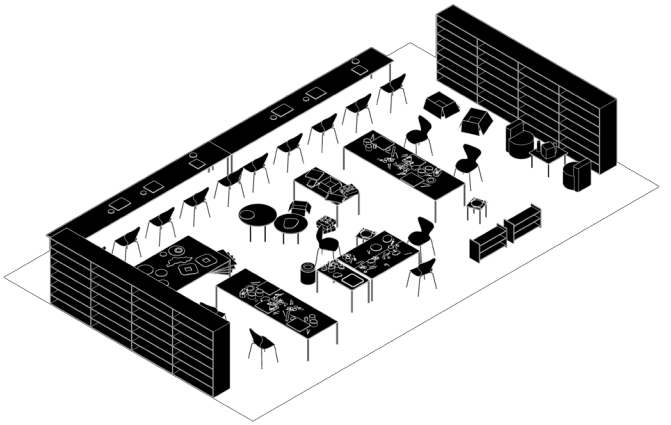




ORIGAMI WORKSHOP



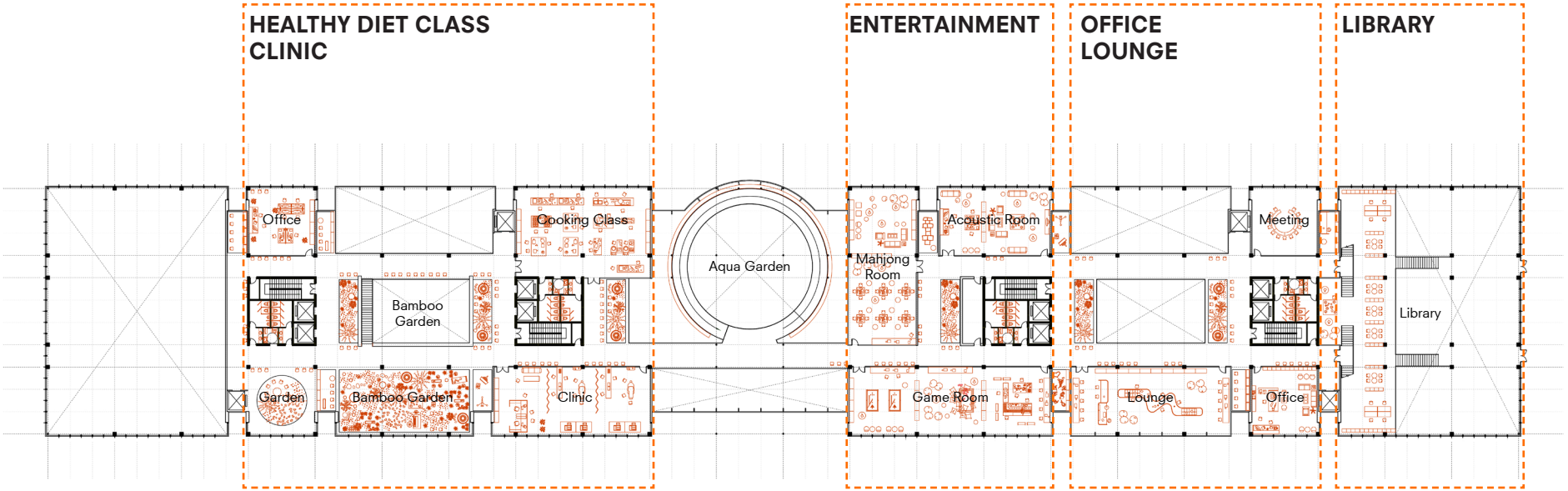




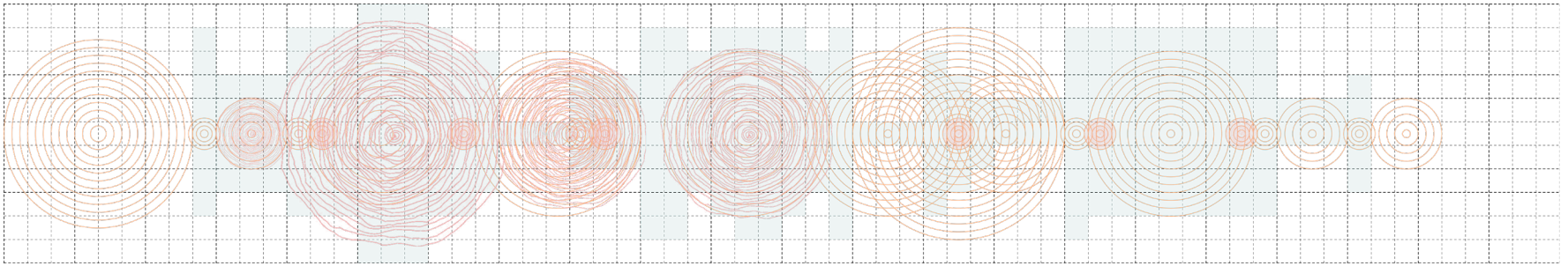
THIRD FLOOR PLAN

HEALTH-RELATED AREA / LEISURE LOUNGE

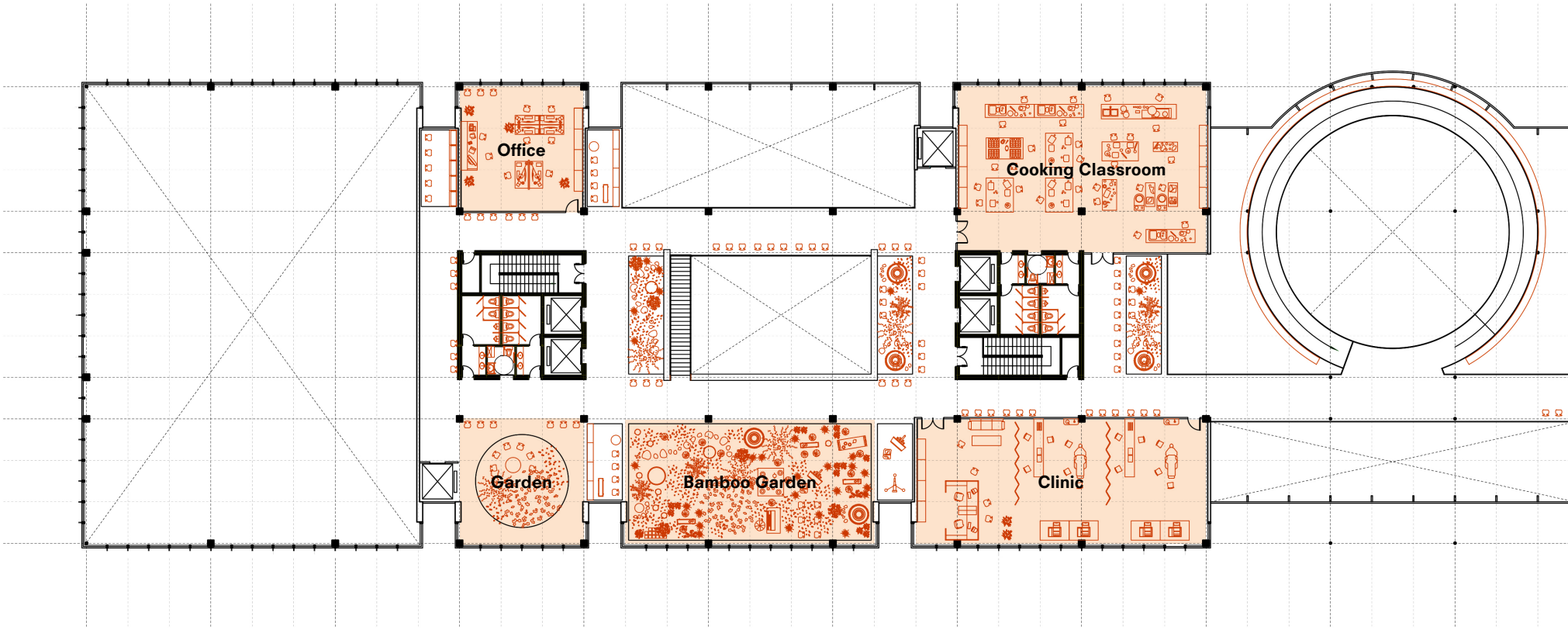




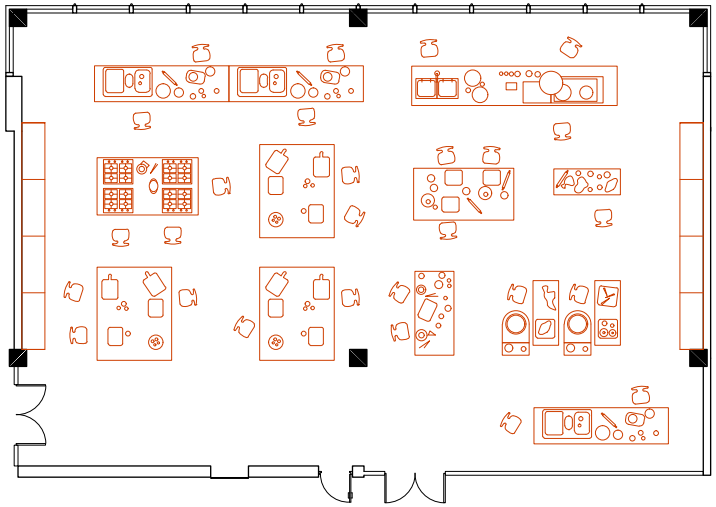
SPACE RHYTHMN: VISION + SMELL + HEARING

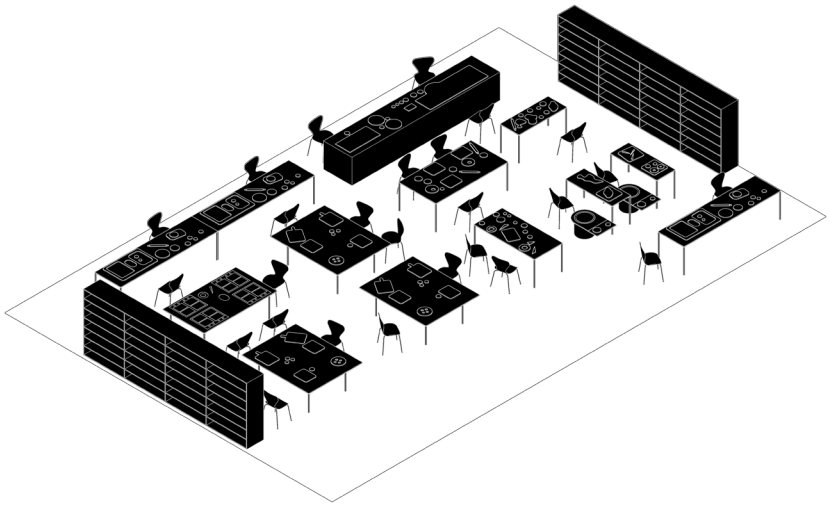


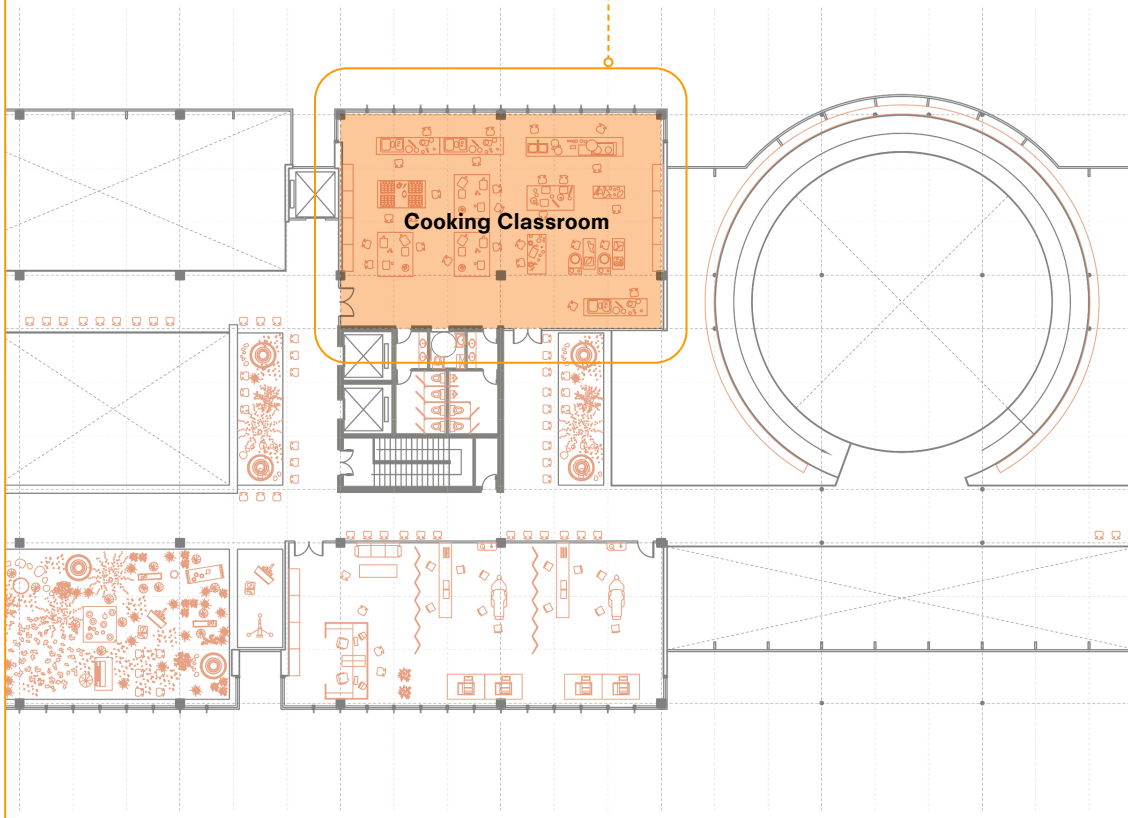
HEALTH-RELATED AREA



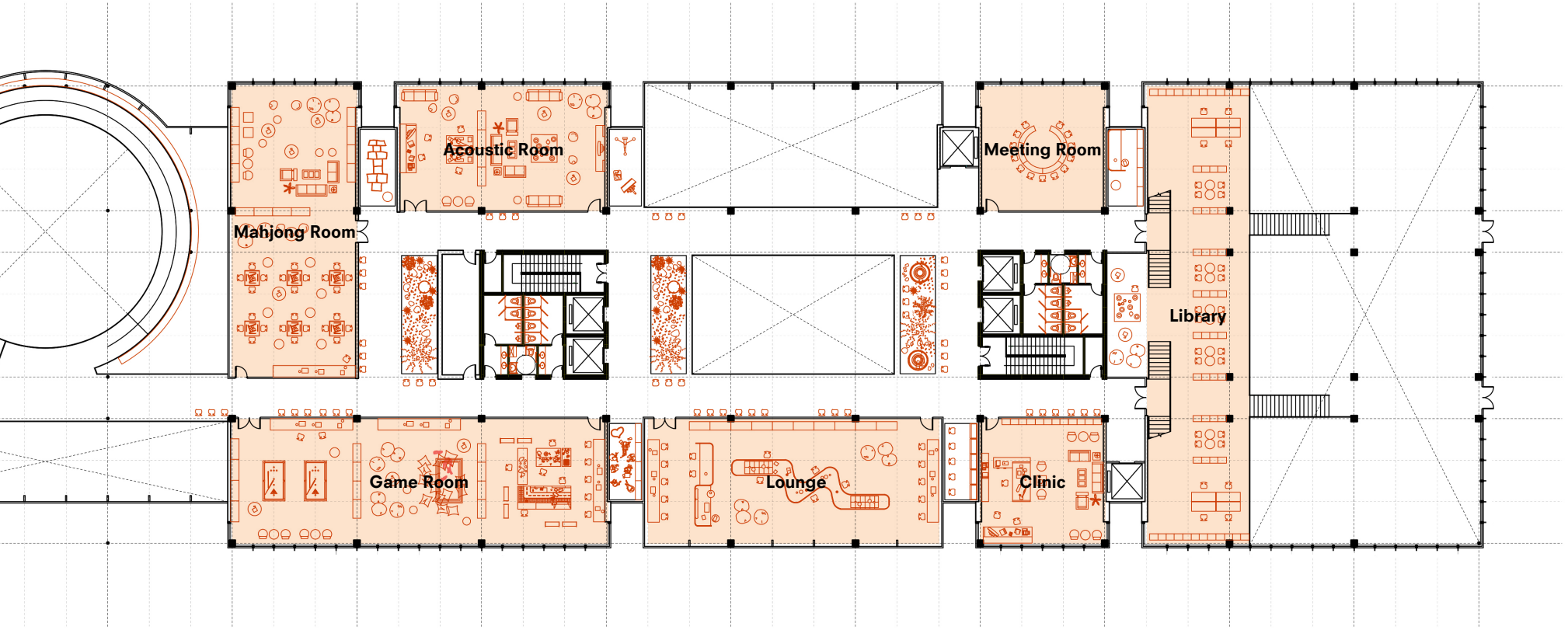
COOKING CLASSROOM



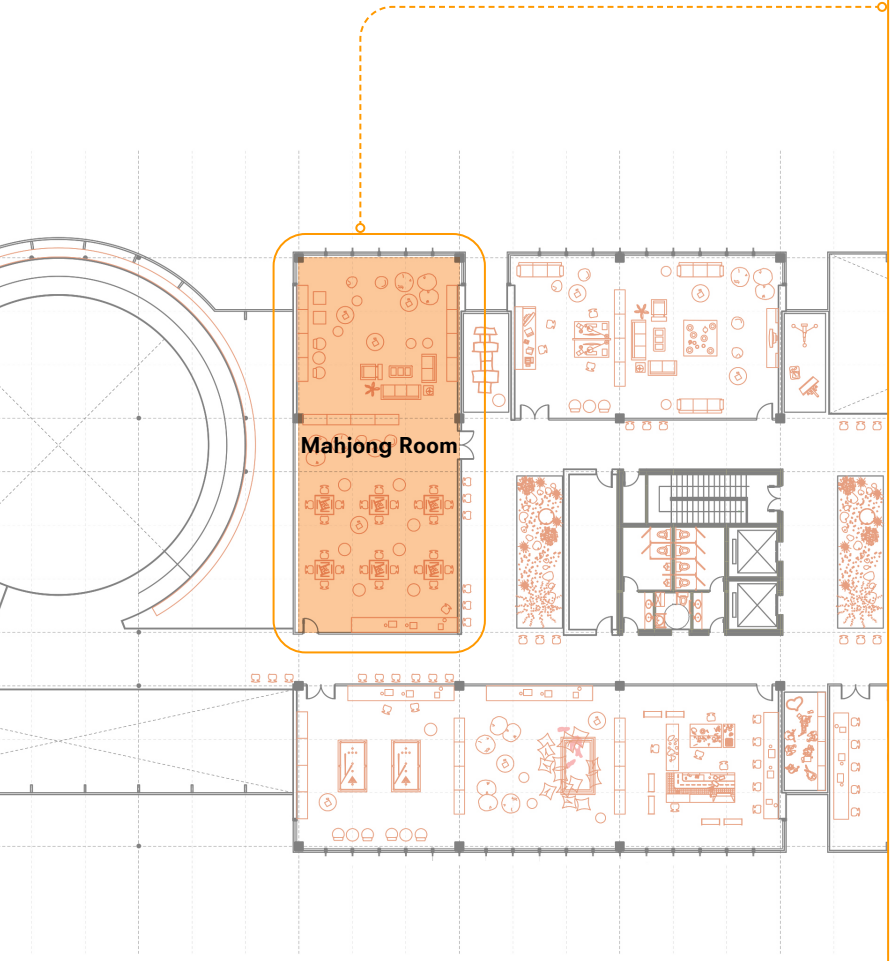


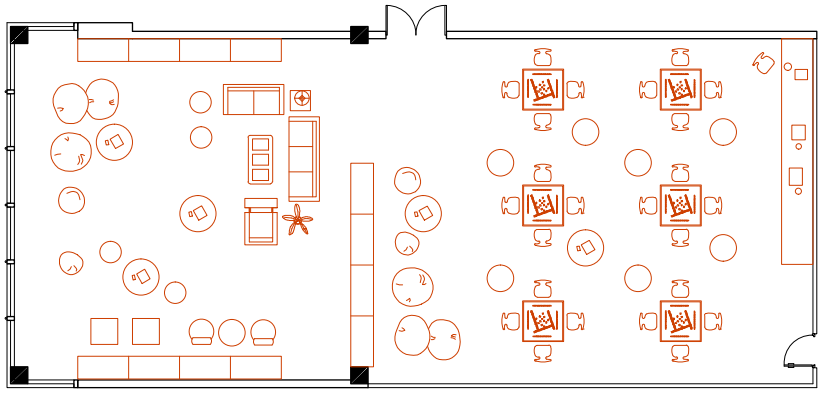


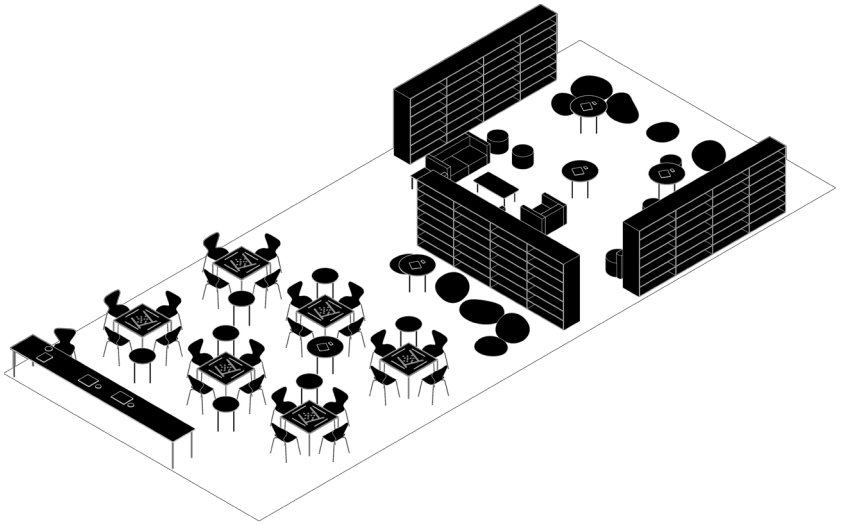
ENTERTAINMENT AREA



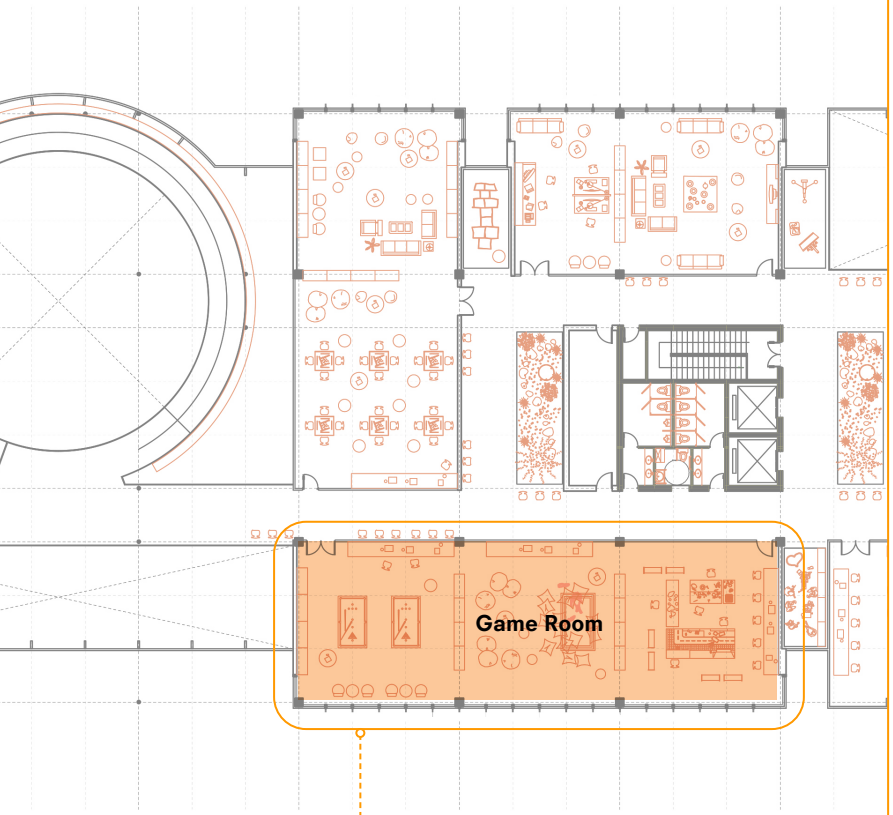
MAHJONG ROOM

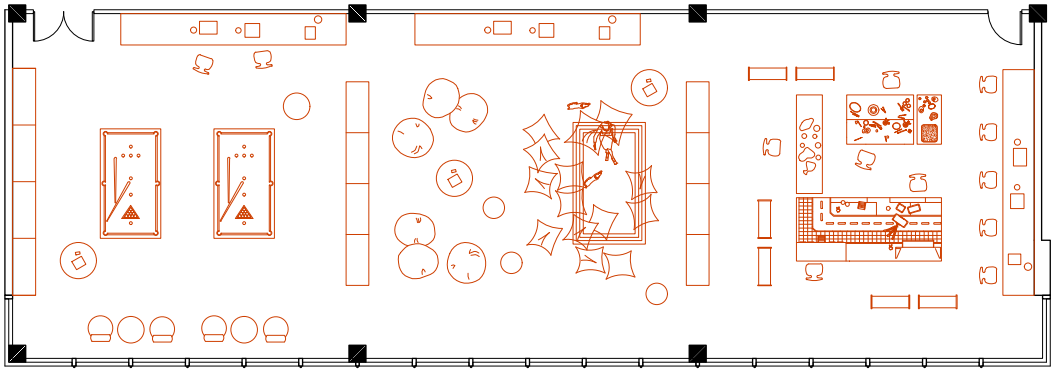


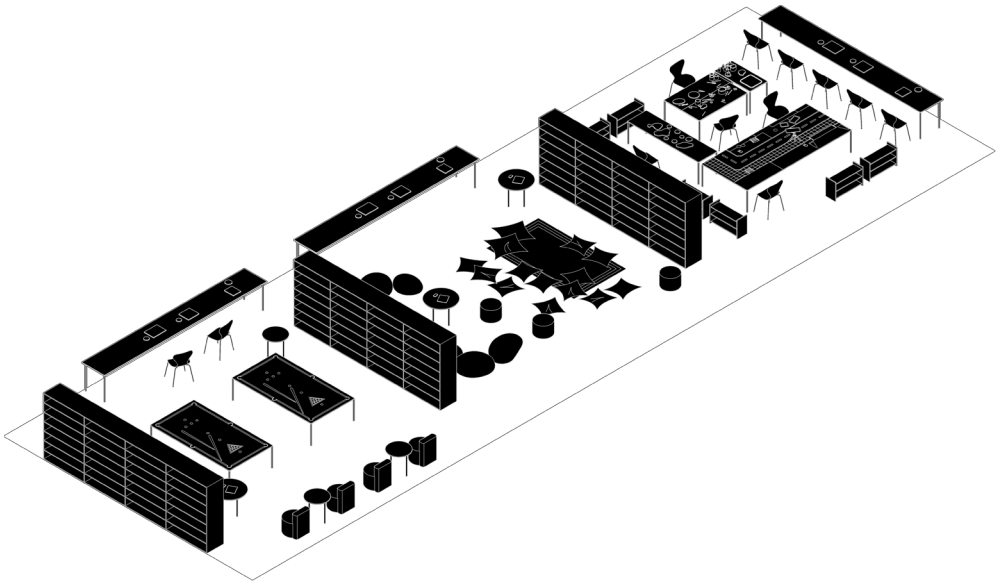




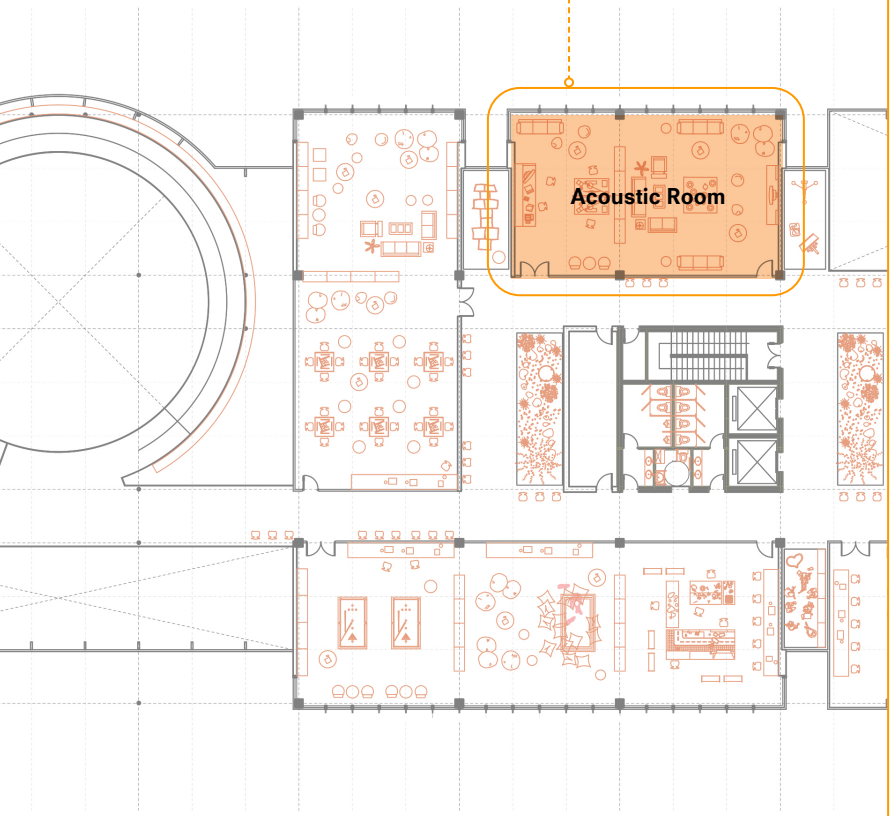
GAME ROOM

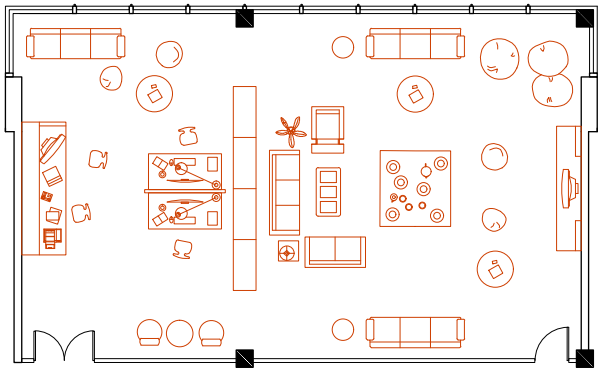


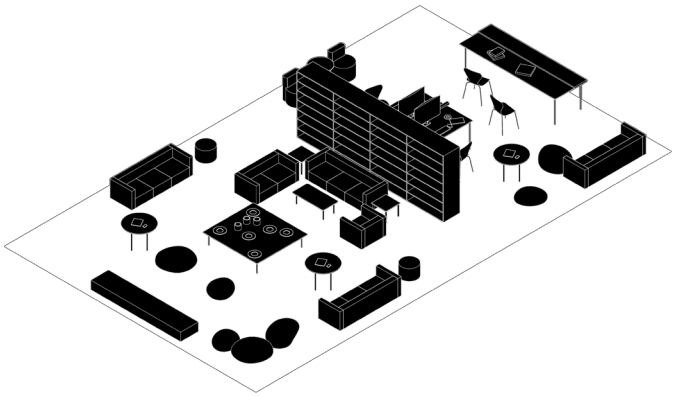




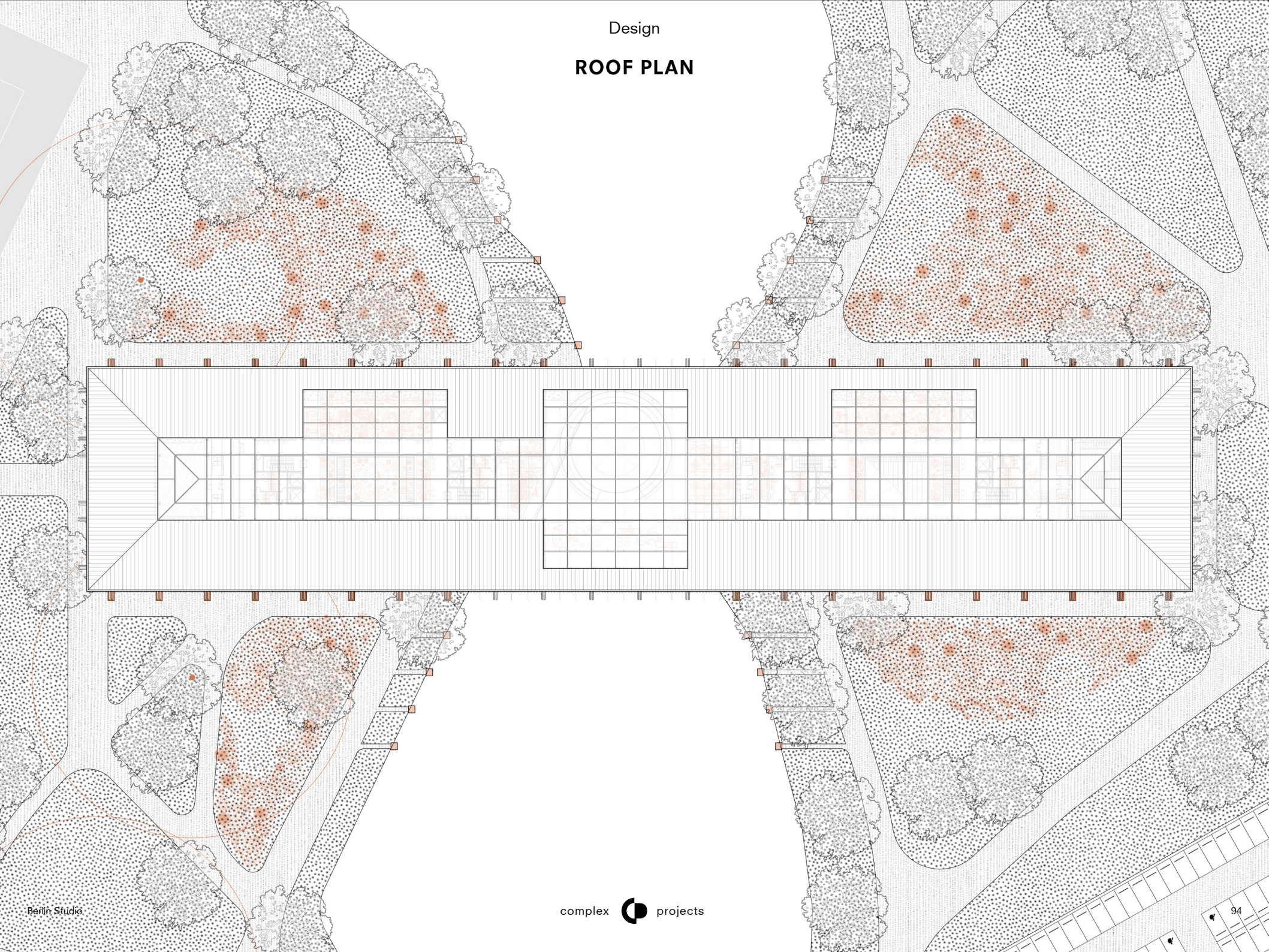
ACOUSTIC ROOM







ROOF PLAN

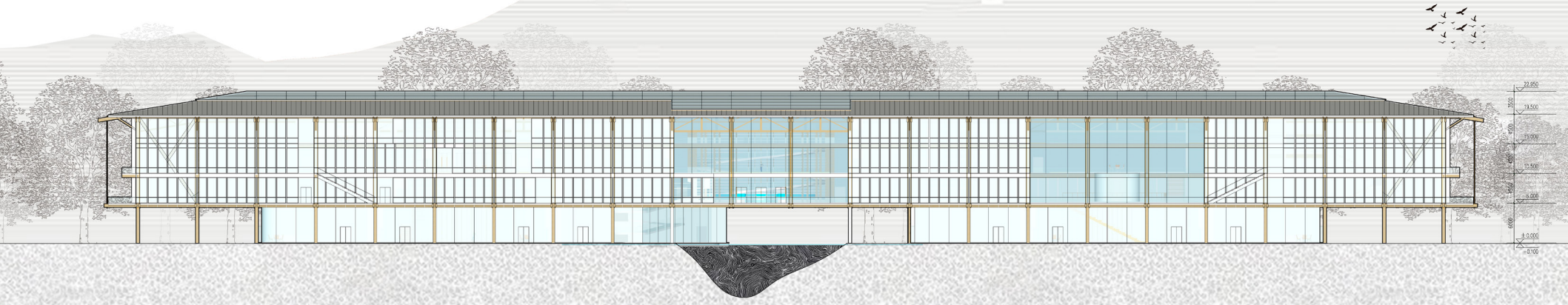


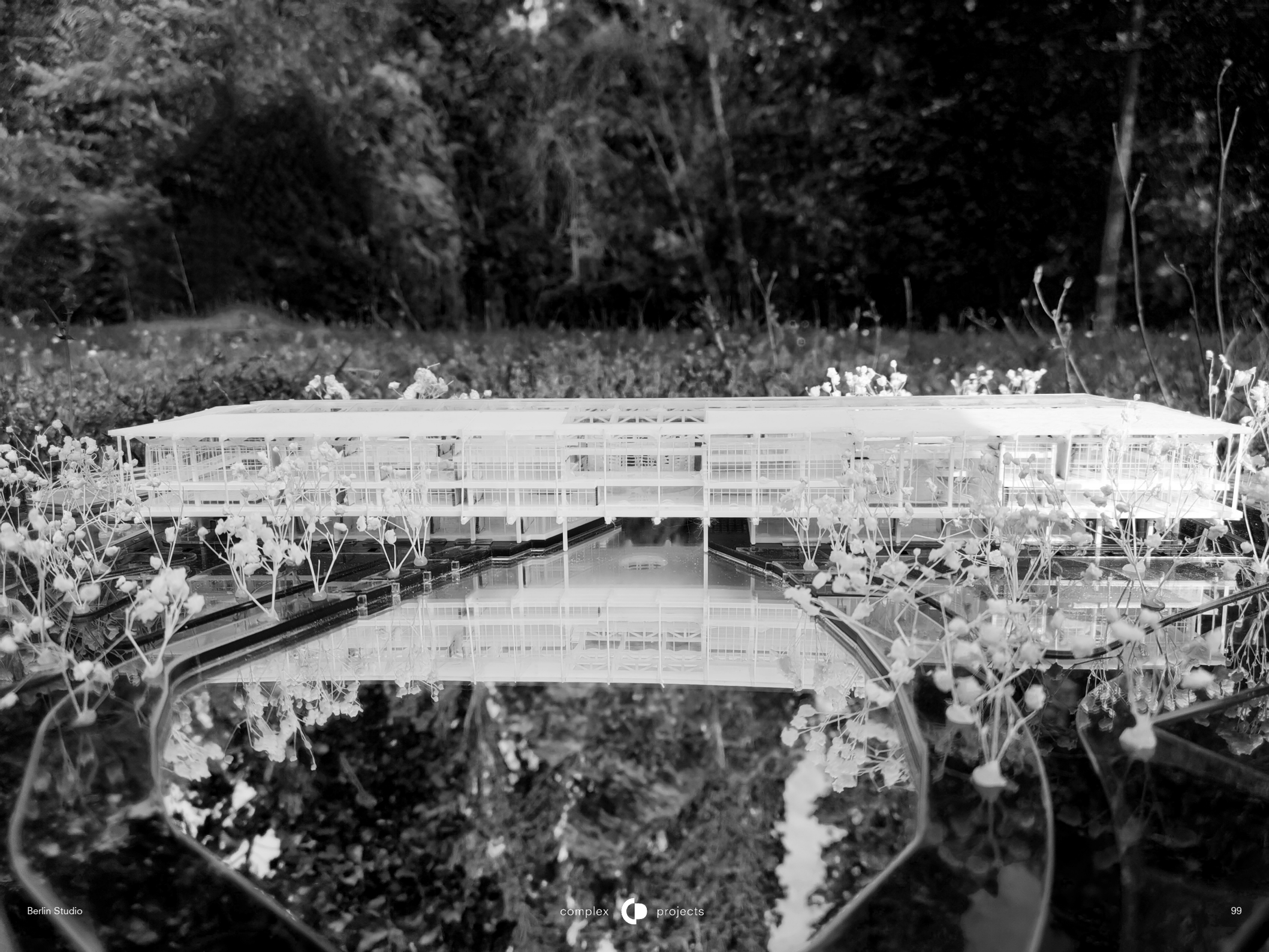






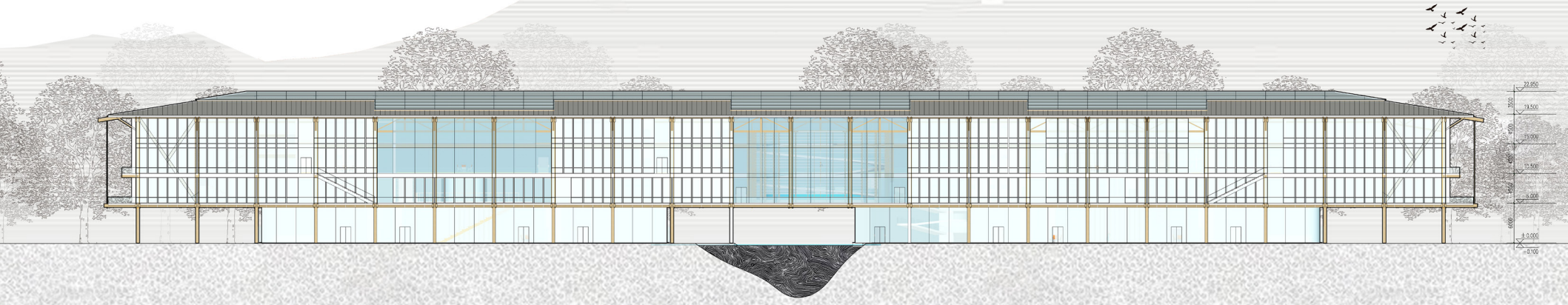
SOUTHWEST-SIDE ELEVATION







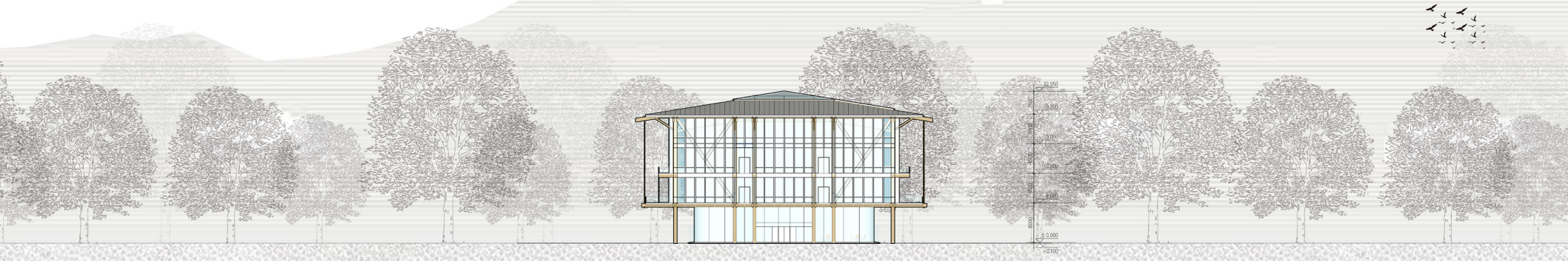
NORTHEAST-SIDE ELEVATION



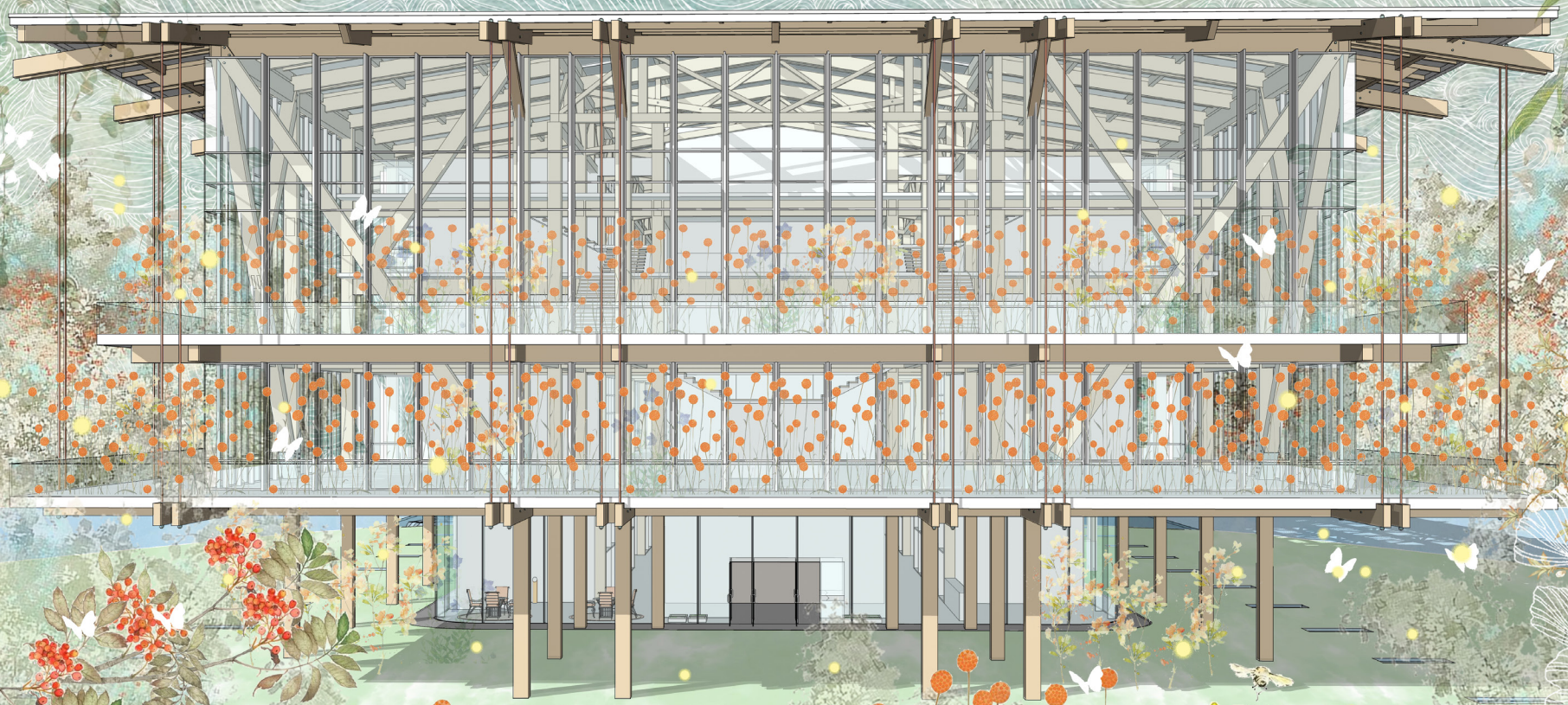




ELEVATION







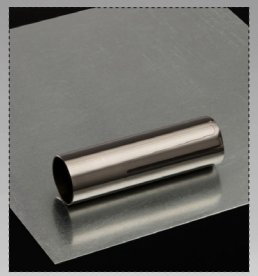
MATERIAL



TIMBER



GLASS



GALVANIZED STEEL



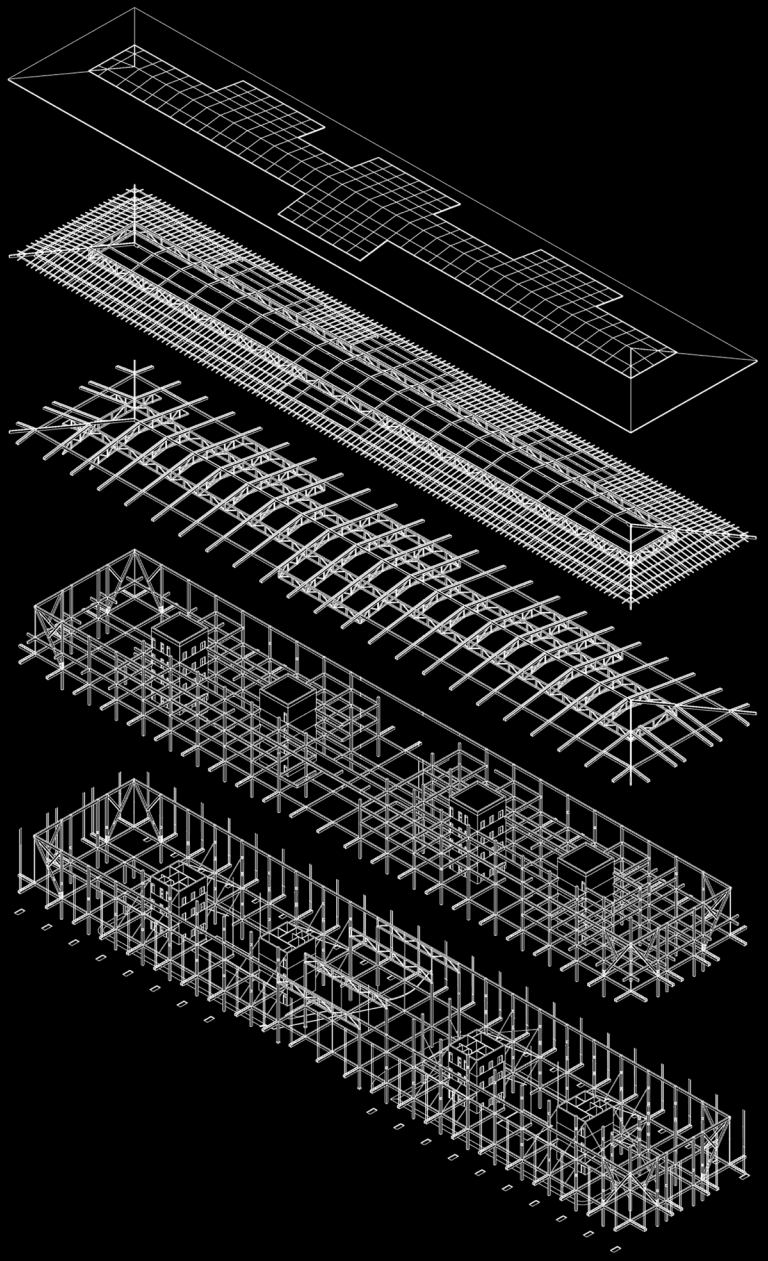
CONCRETE



STRUCTURE


Roof Skylight
Purlin and Rafter
Beam and Truss
Concrete Core, Beam and Column
Third Floor
Second Floor
Indoor Garden
First Floor
Ground Floor
Bracing and Hanger

STRUCTURE



Roof Skylight

Glass, Aluminum-magnesium-manganese alloy

Purlin and Rafter

Laminated veneer lumber

Beam and Truss

Glued laminated timber

Concrete Core, Beam and Column

Fair-faced concrete, Glued laminated timber

Bracing and Hanger

Galvanized steel wire

STRUCTURE

Interior Flooring

Dowel laminated timber

Interior Wall

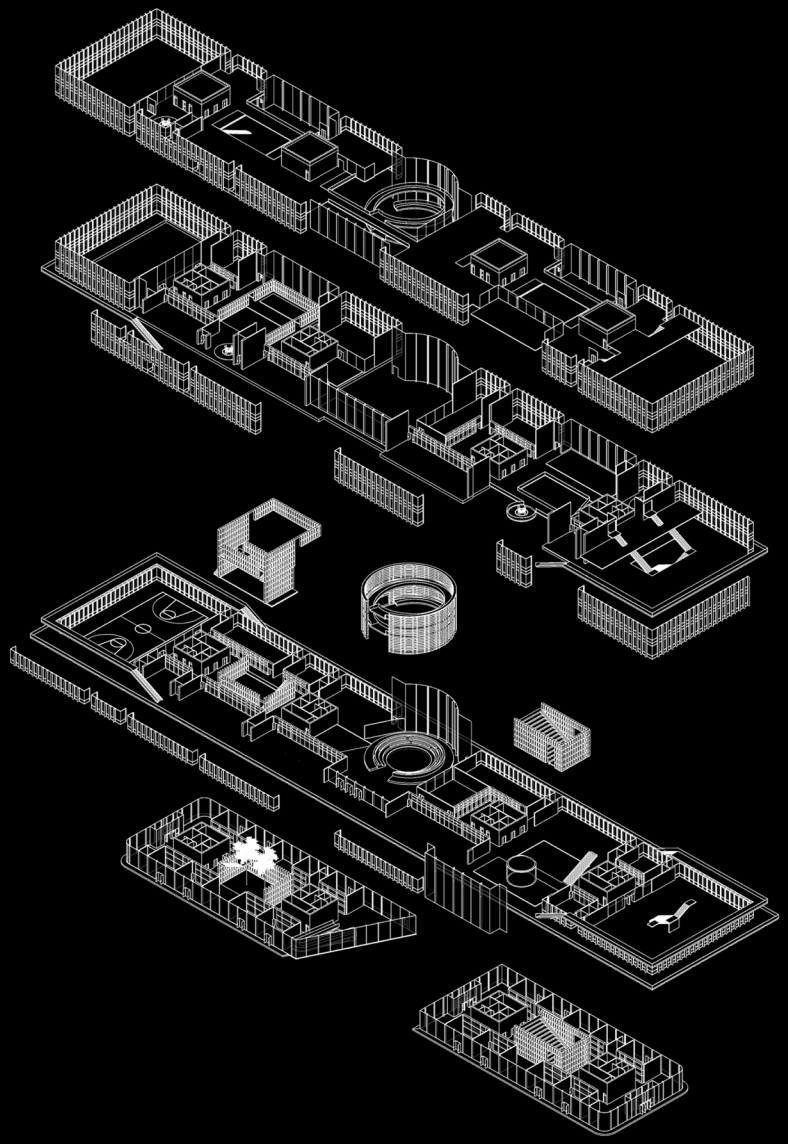
Dowel laminated timber

Facade

Glass

Veranda Flooring

Glued laminated timber





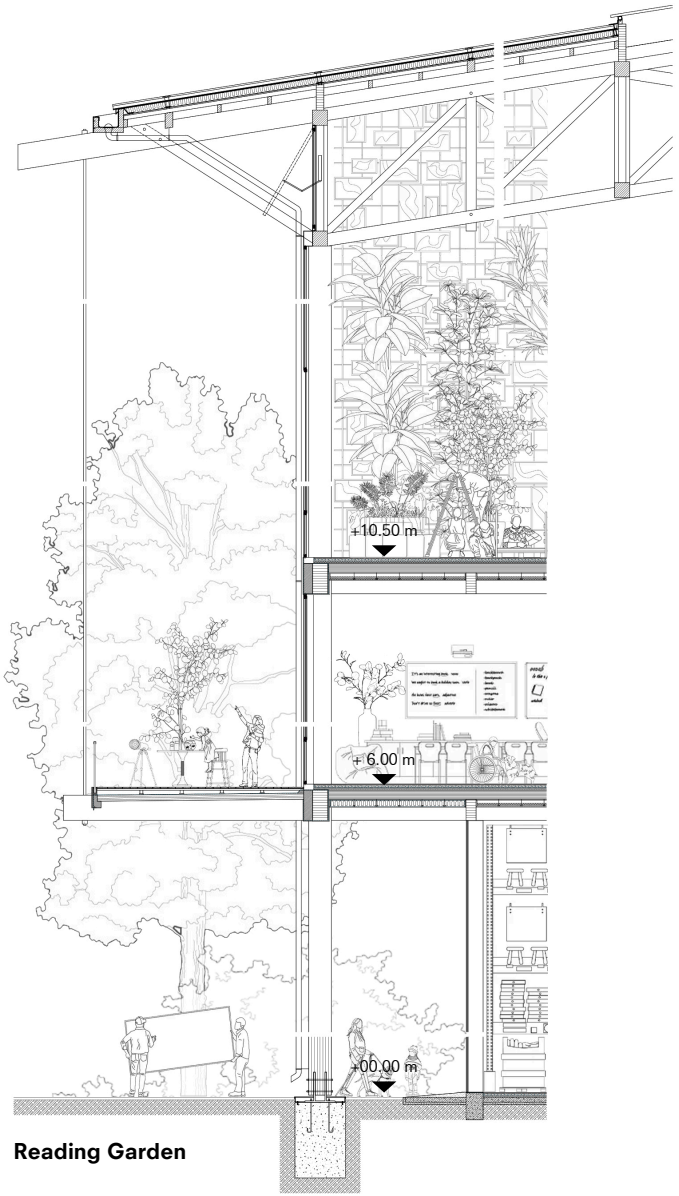






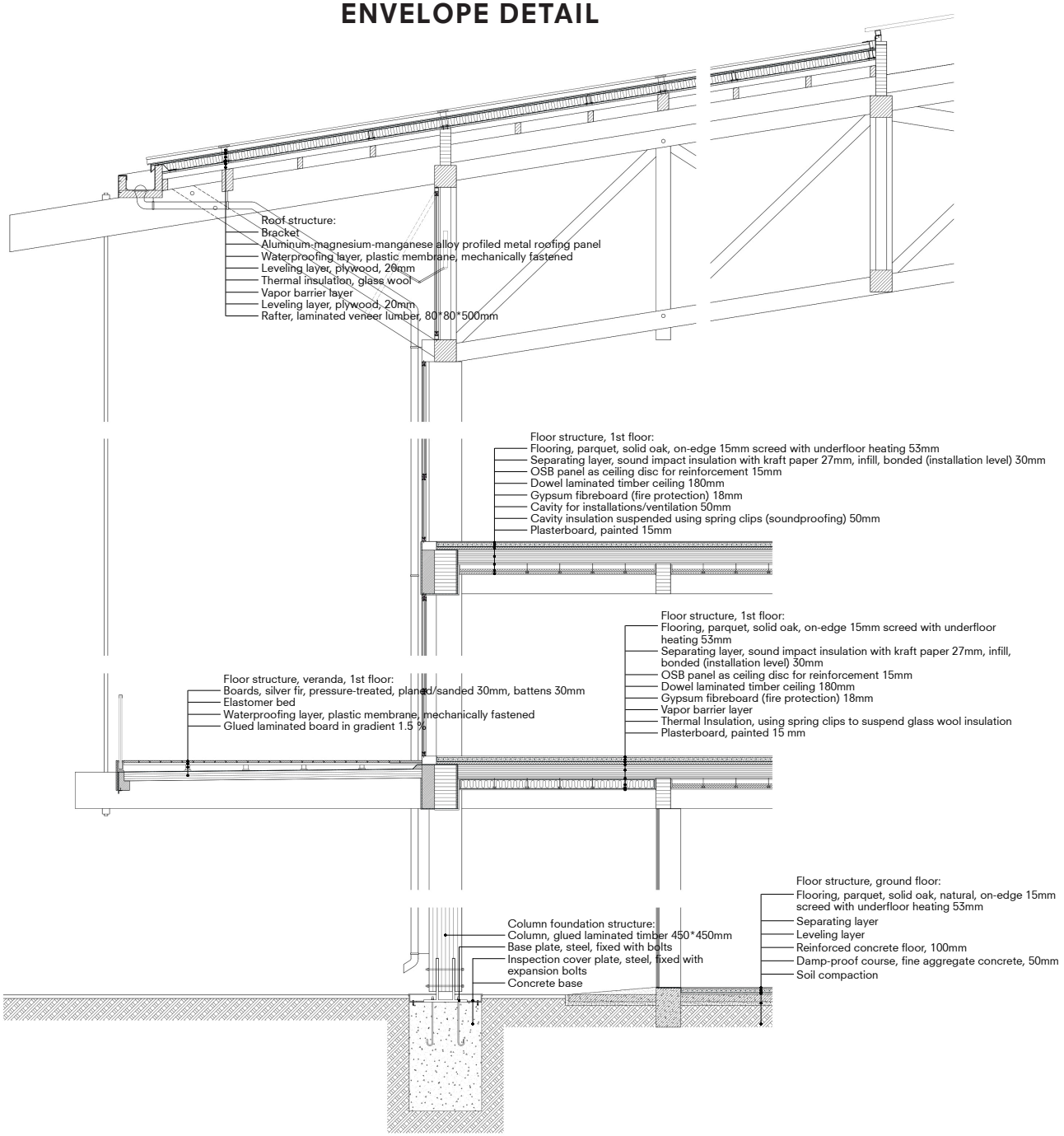
ENVELOPE DETAIL



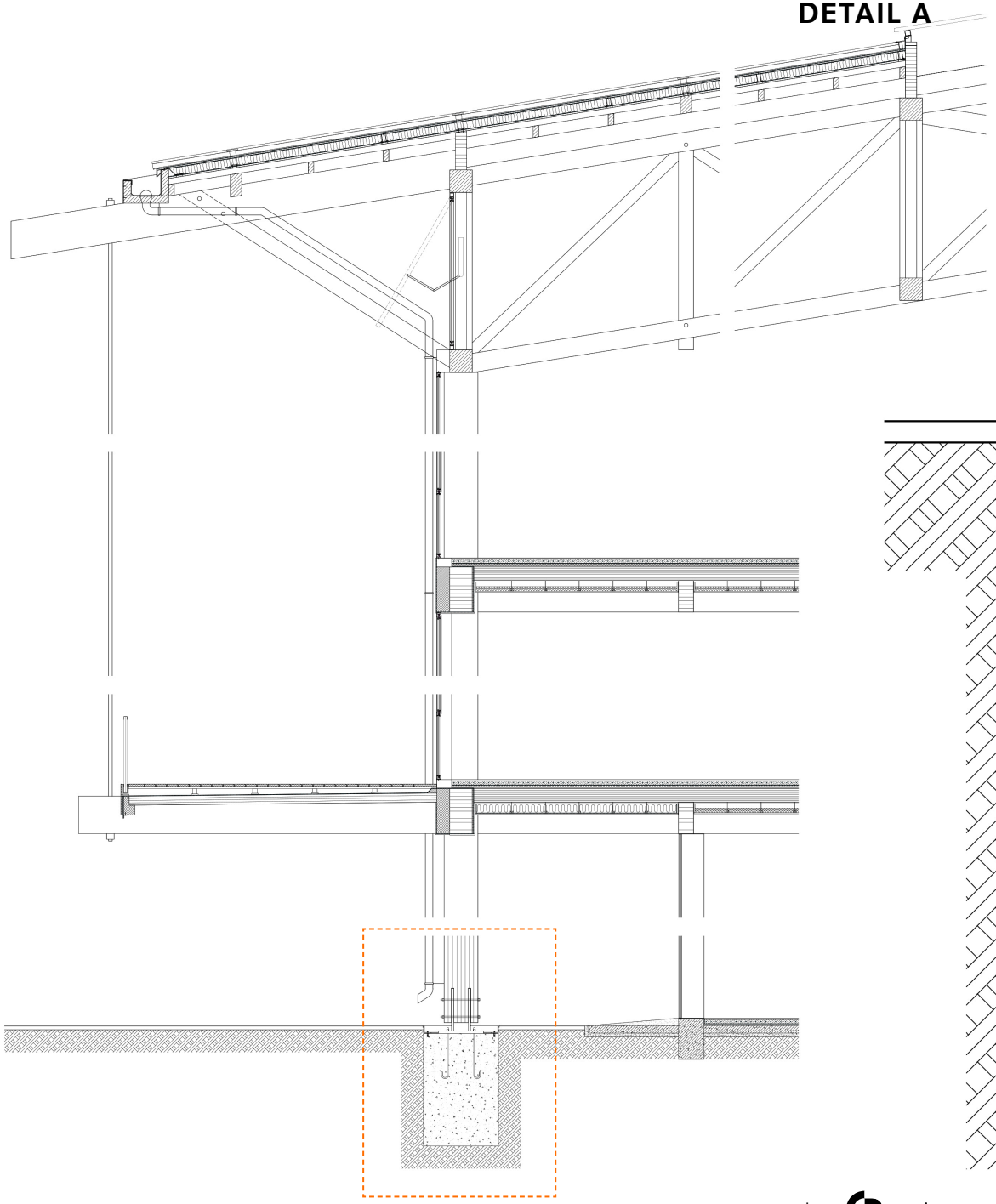


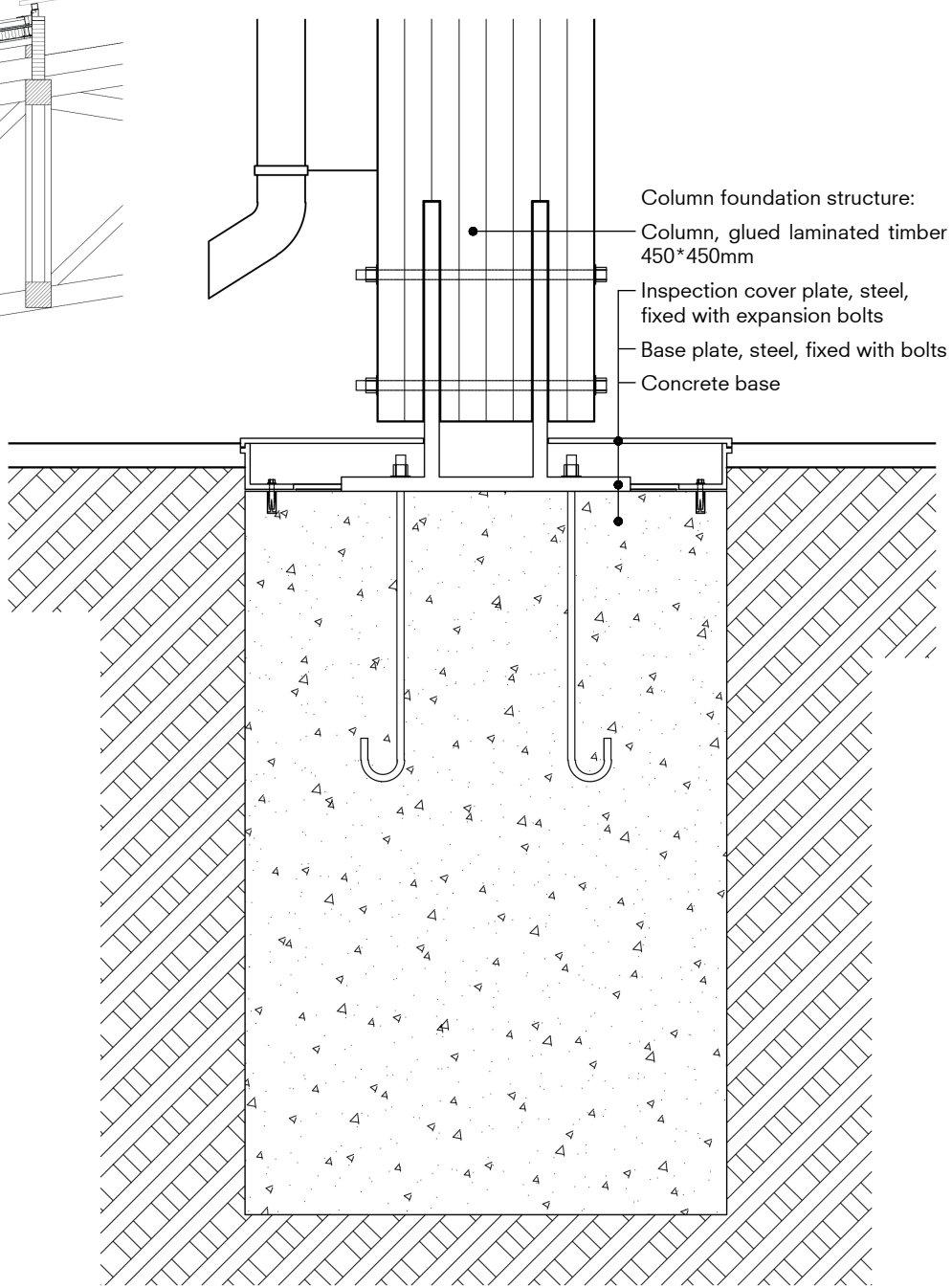
Reading Garden

ENVELOPE DETAIL

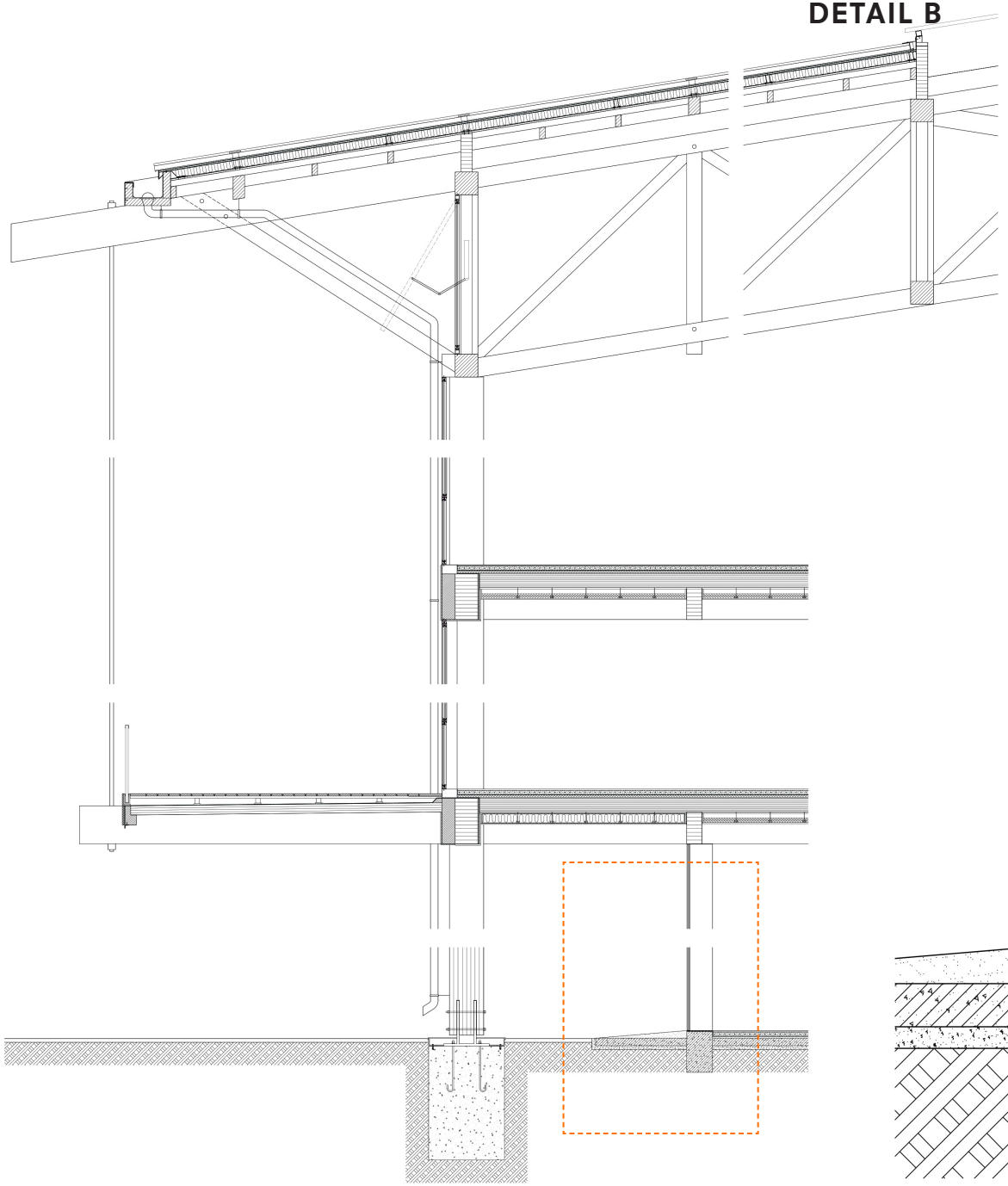


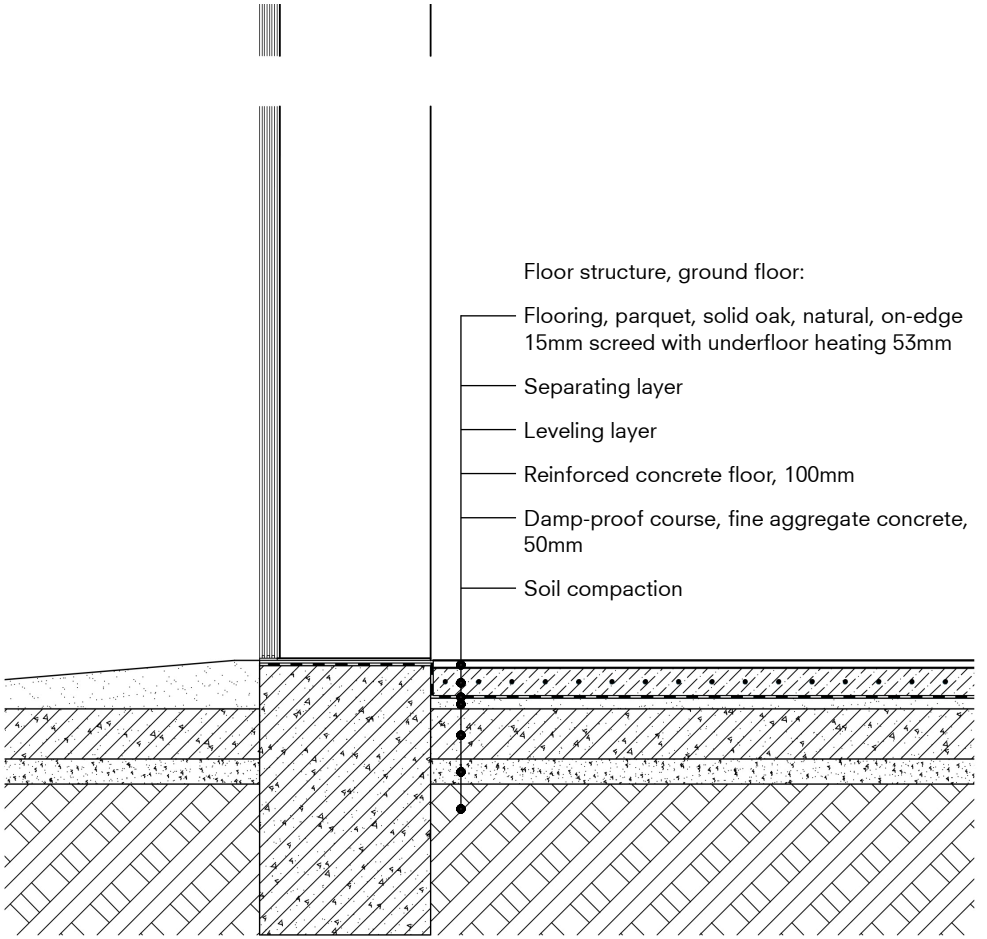
DETAIL A




Column foundation structure:
Column, glued laminated timber 450*450mm
Inspection cover plate, steel, fixed with expansion bolts
Base plate, steel, fixed with bolts
Concrete base

DETAIL B

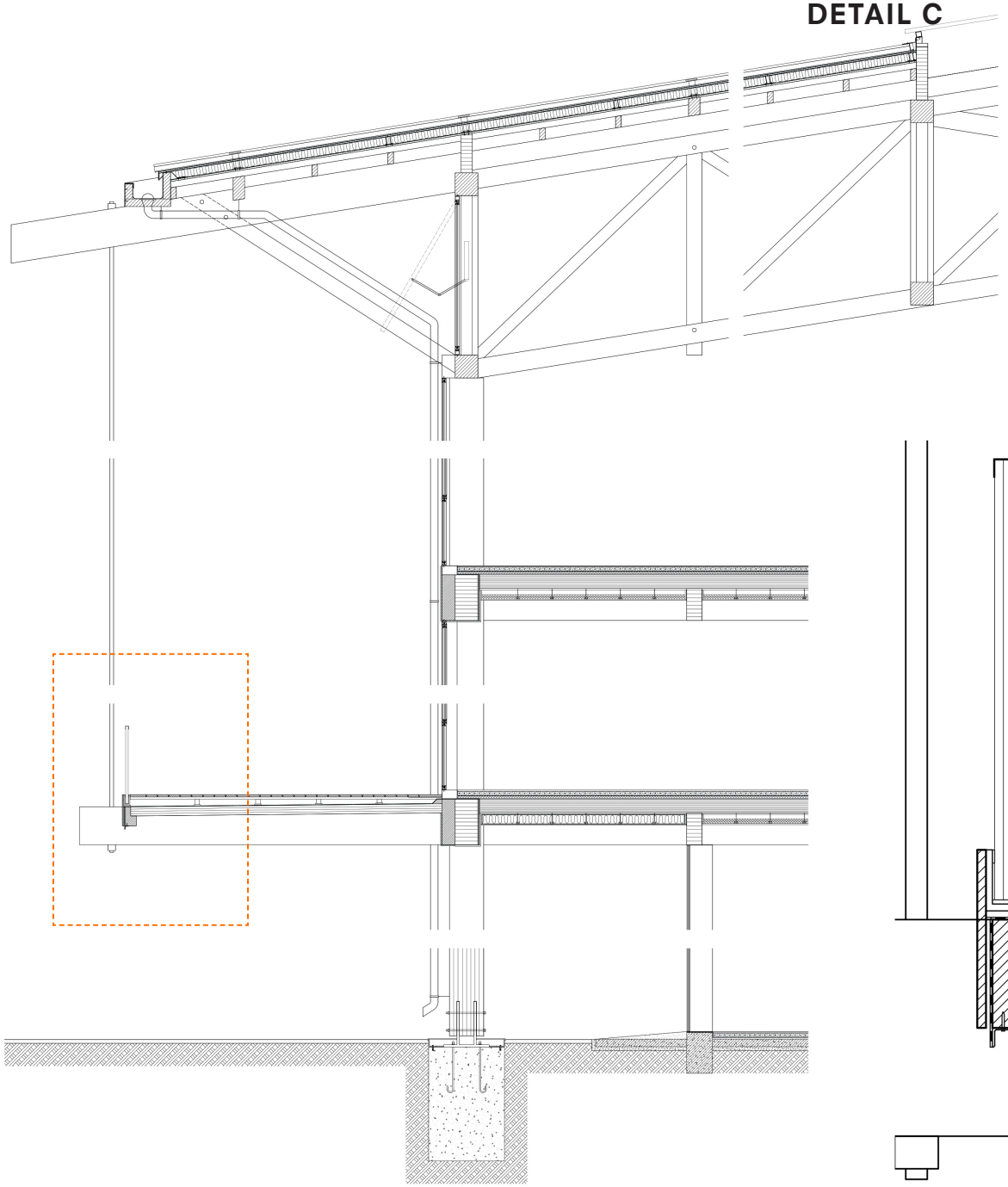


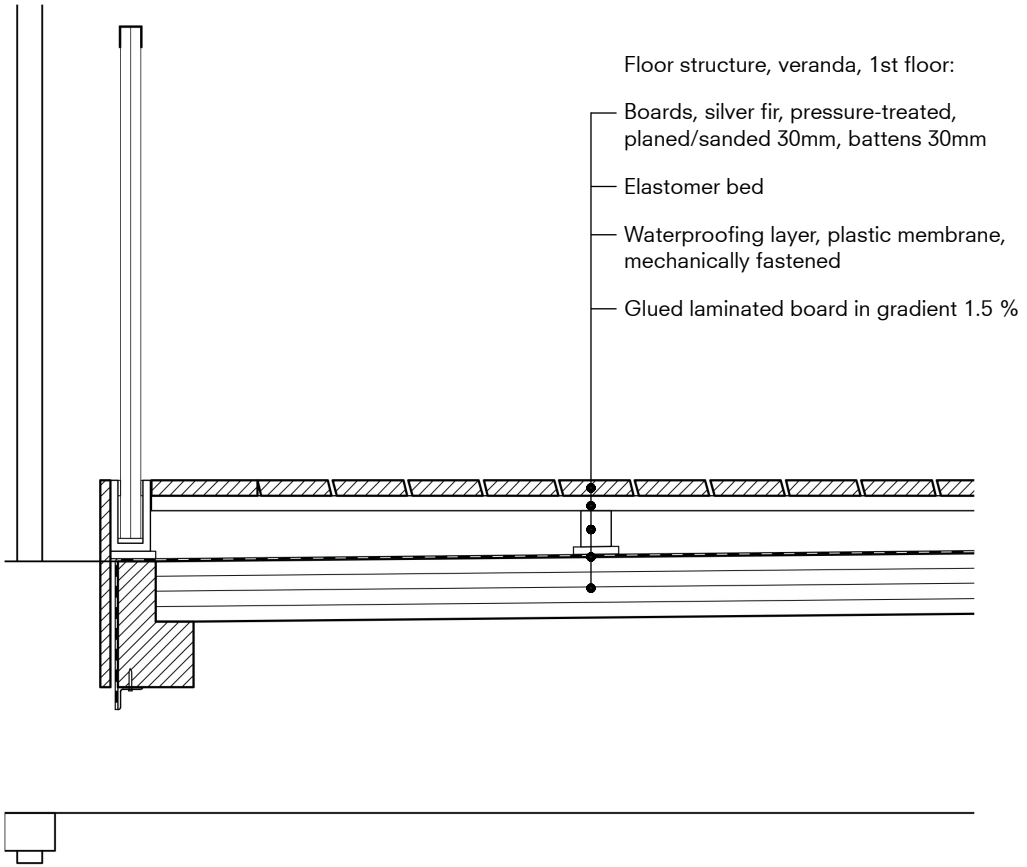


Floor structure, ground floor:

- Flooring, parquet, solid oak, natural, on-edge 15mm screed with underfloor heating 53mm
- Separating layer
- Leveling layer
- Reinforced concrete floor, 100mm
- Damp-proof course, fine aggregate concrete, 50mm
- Soil compaction

DETAIL C

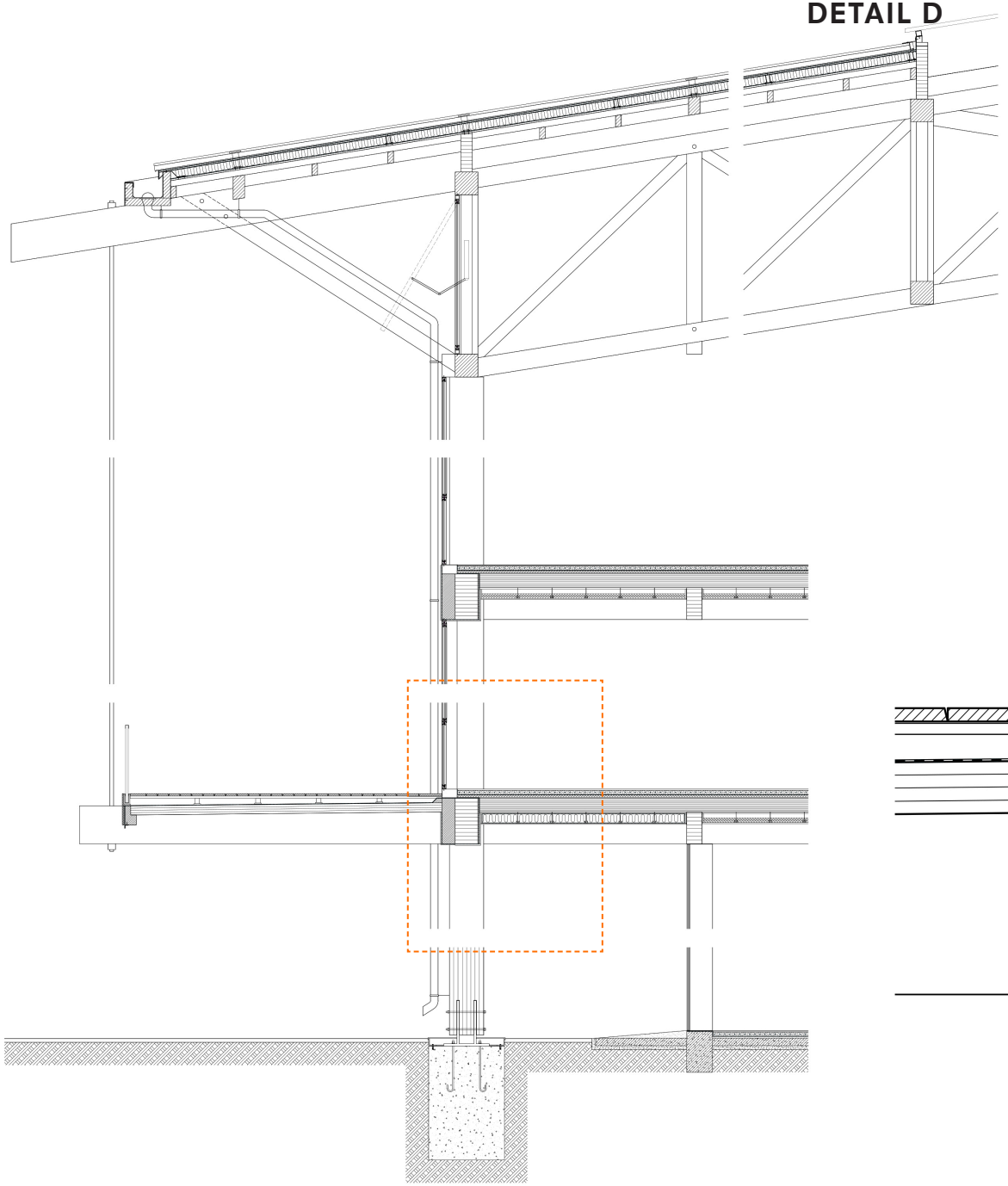


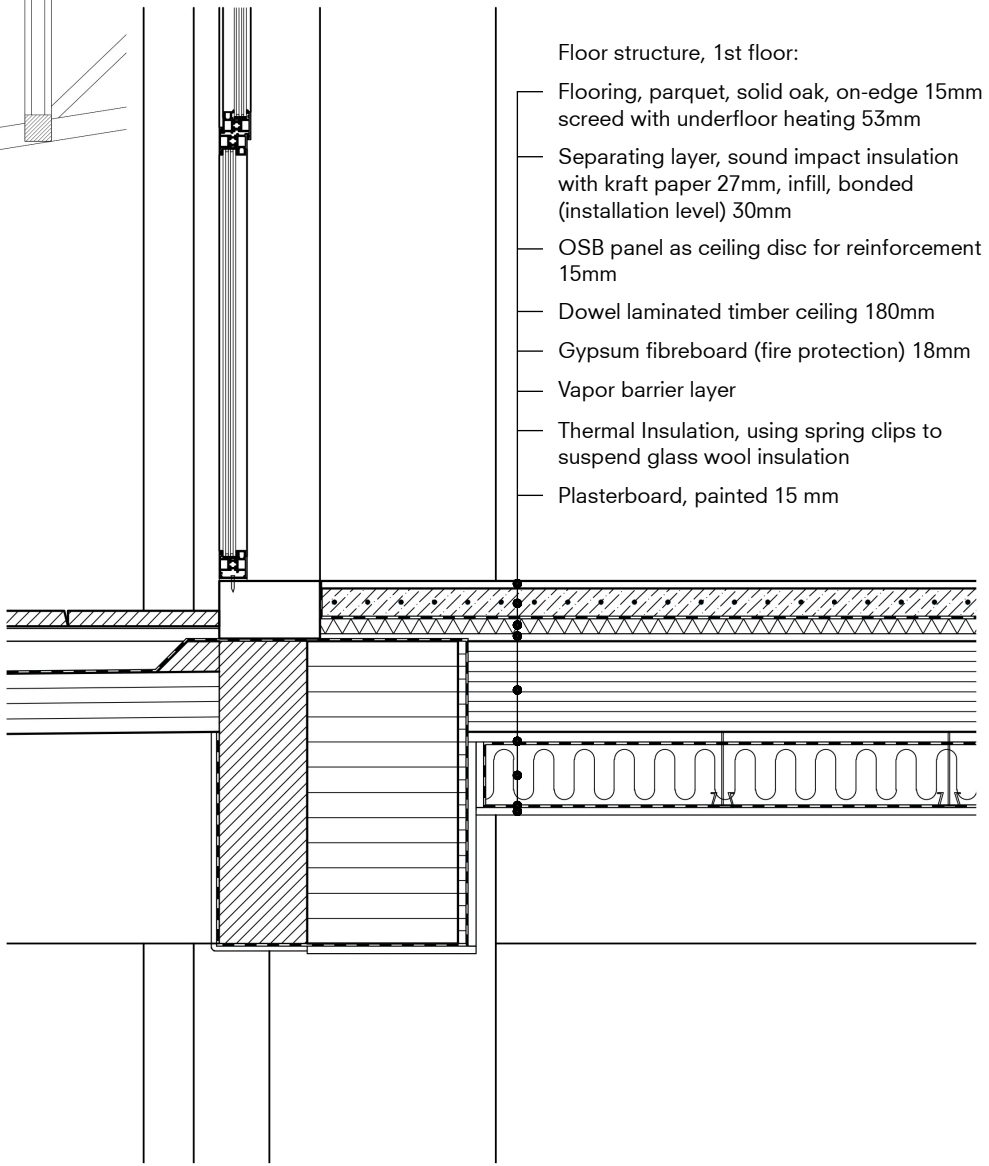


Floor structure, veranda, 1st floor:

- Boards, silver fir, pressure-treated, planed/sanded 30mm, battens 30mm
- Elastomer bed
- Waterproofing layer, plastic membrane, mechanically fastened
- Glued laminated board in gradient 1.5 %

DETAIL D

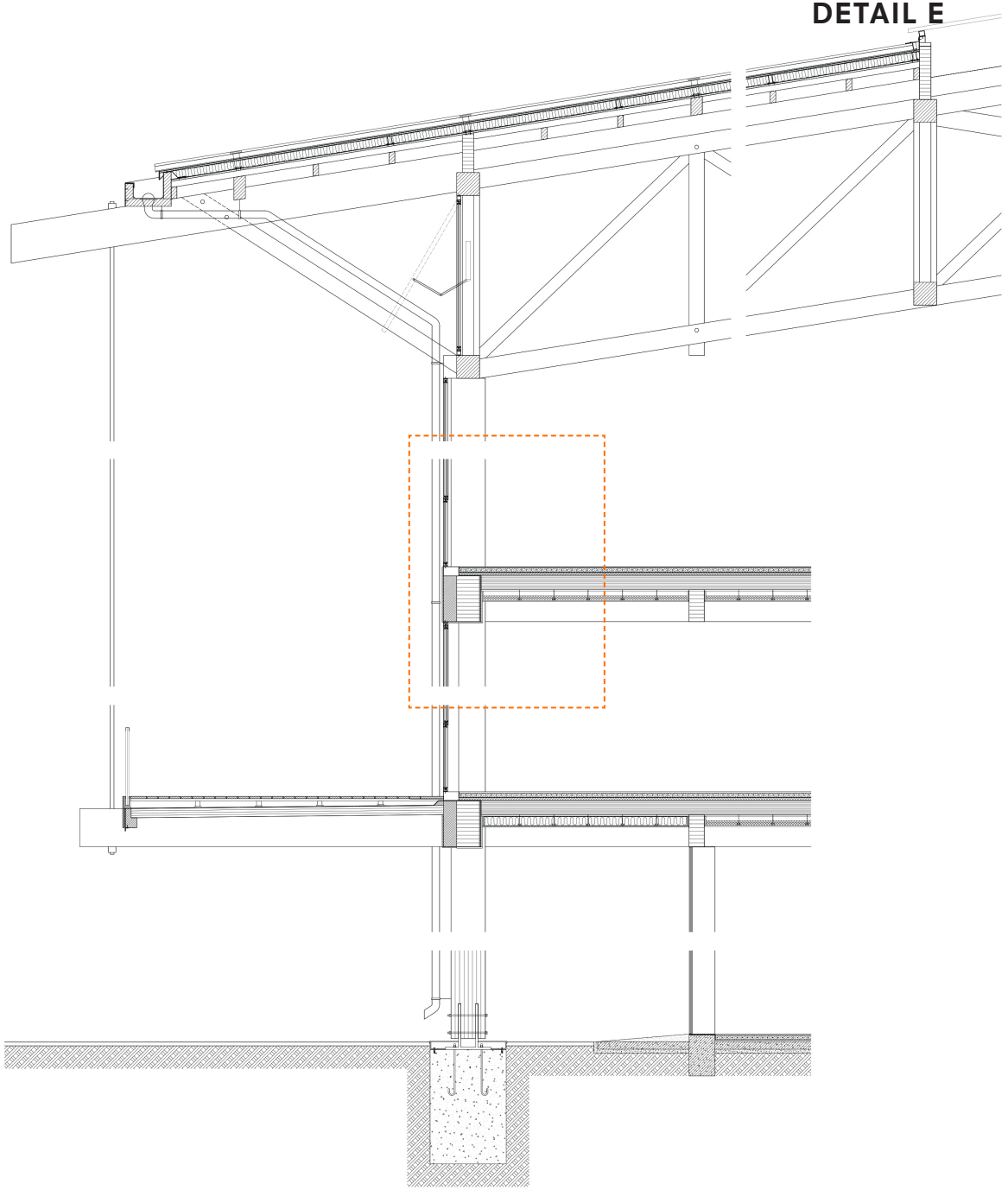


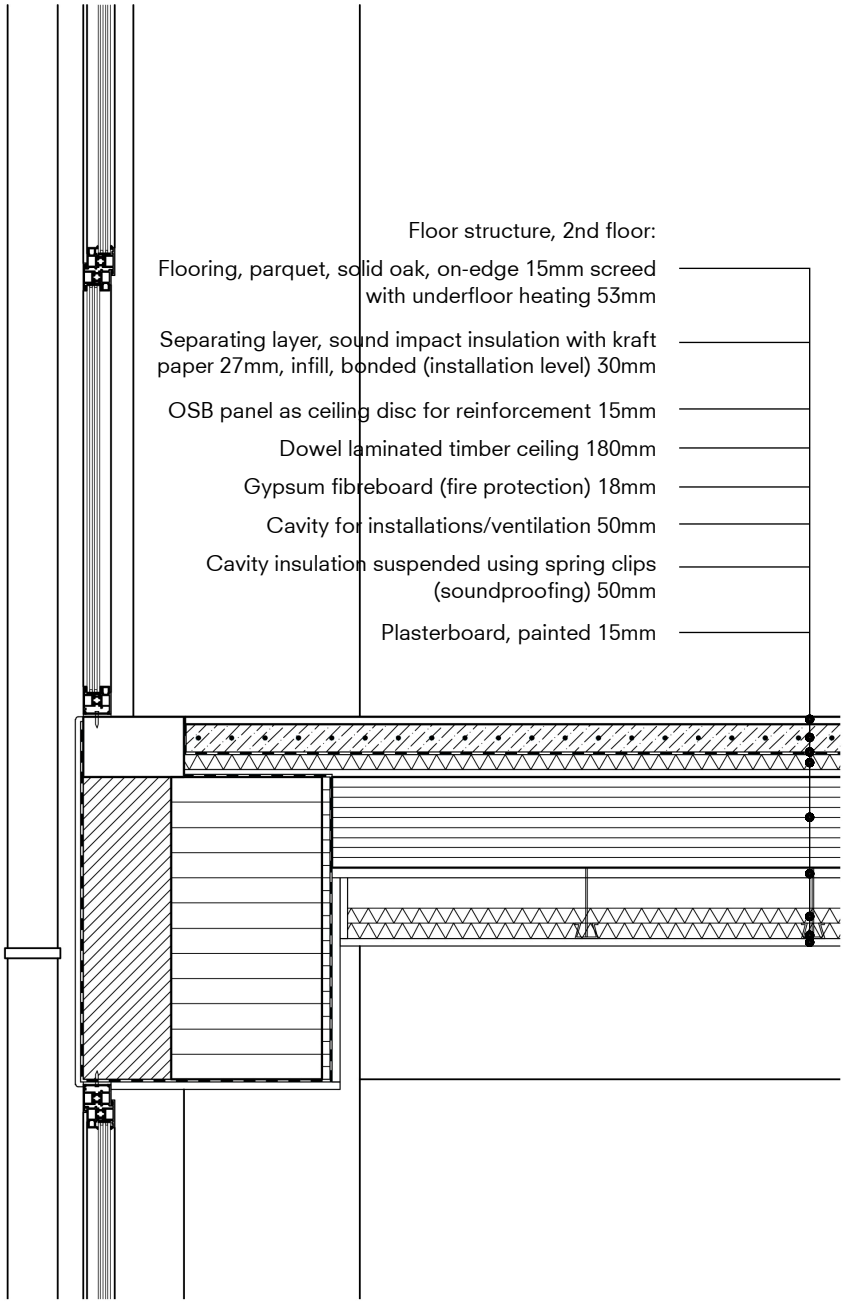


Floor structure, 1st floor:

- Flooring, parquet, solid oak, on-edge 15mm screed with underfloor heating 53mm
- Separating layer, sound impact insulation with kraft paper 27mm, infill, bonded (installation level) 30mm
- OSB panel as ceiling disc for reinforcement 15mm
- Dowel laminated timber ceiling 180mm
- Gypsum fibreboard (fire protection) 18mm
- Vapor barrier layer
- Thermal Insulation, using spring clips to suspend glass wool insulation
- Plasterboard, painted 15 mm

DETAIL E

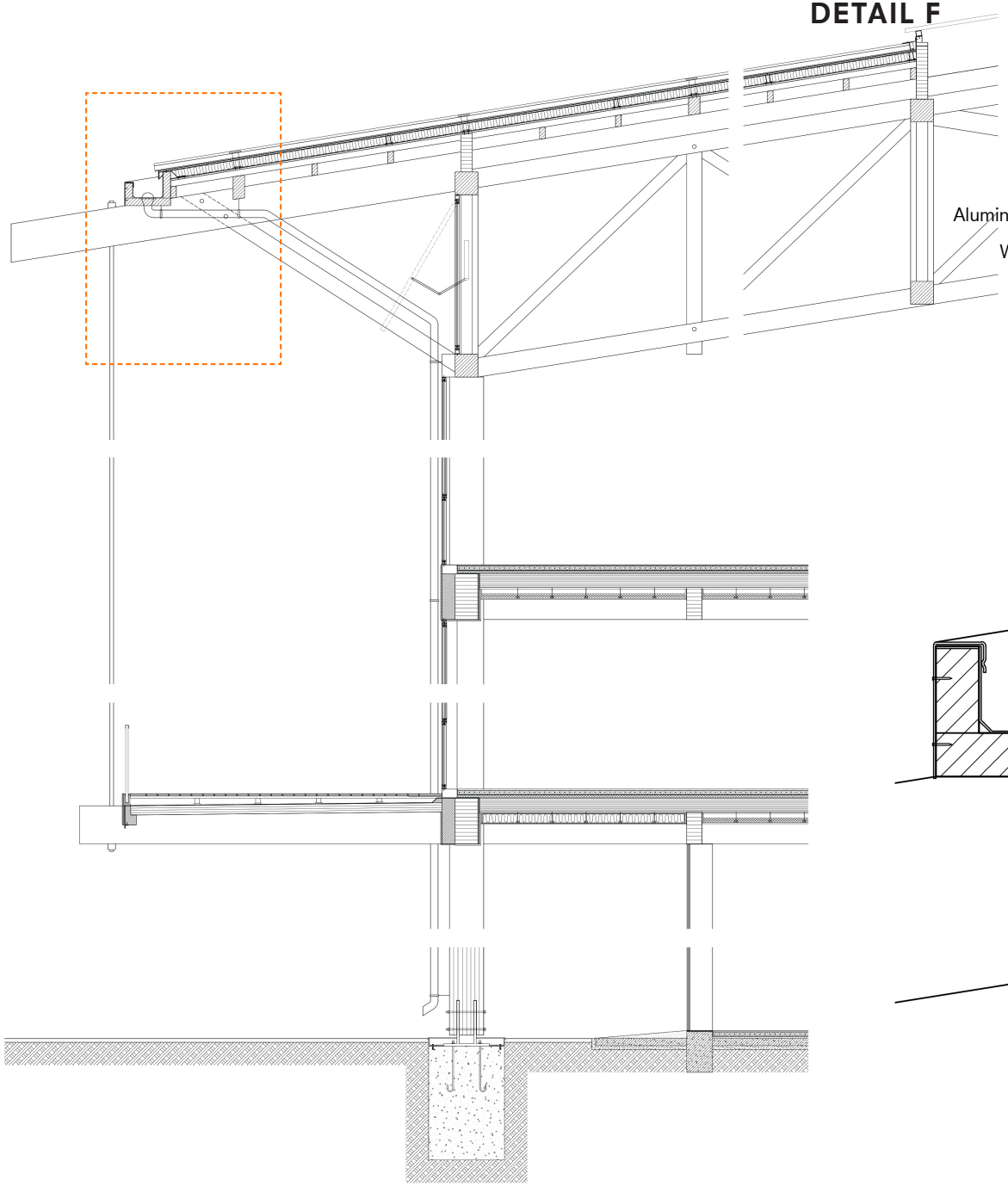




Floor structure, 2nd floor:

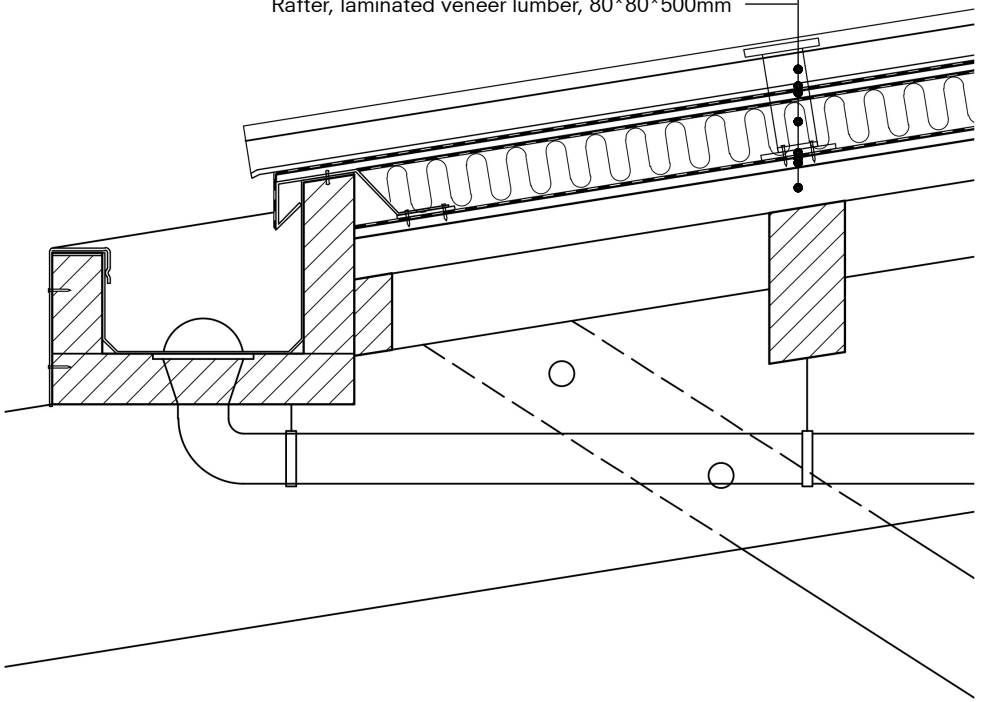
- Flooring, parquet, solid oak, on-edge 15mm screed with underfloor heating 53mm
- Separating layer, sound impact insulation with kraft paper 27mm, infill, bonded (installation level) 30mm
- OSB panel as ceiling disc for reinforcement 15mm
- Dowel laminated timber ceiling 180mm
- Gypsum fibreboard (fire protection) 18mm
- Cavity for installations/ventilation 50mm
- Cavity insulation suspended using spring clips (soundproofing) 50mm
- Plasterboard, painted 15mm

DETAIL F

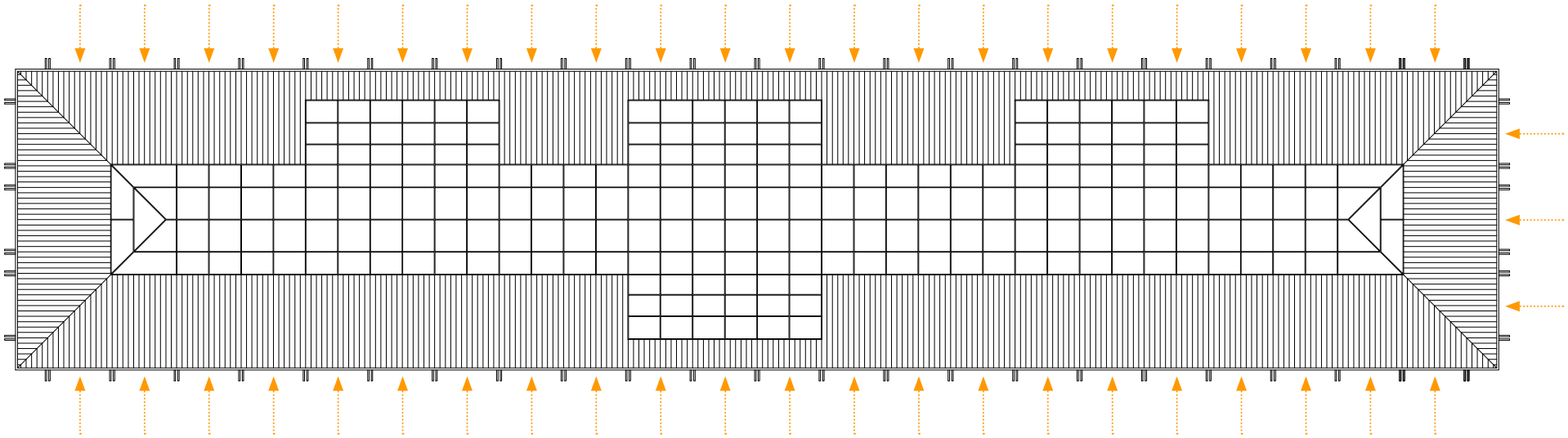


Roof structure:

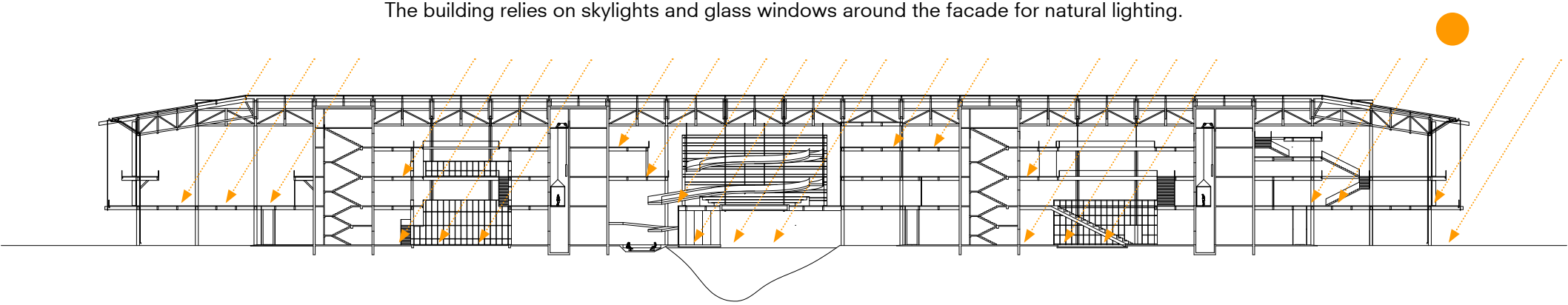
- Bracket
- Aluminum-magnesium-manganese alloy profiled metal roofing panel
- Waterproofing layer, plastic membrane, mechanically fastened
- Leveling layer, plywood, 20mm
- Thermal insulation, glass wool
- Vapor barrier layer
- Leveling layer, plywood, 20mm
- Rafter, laminated veneer lumber, 80*80*500mm



SKYLIGHT



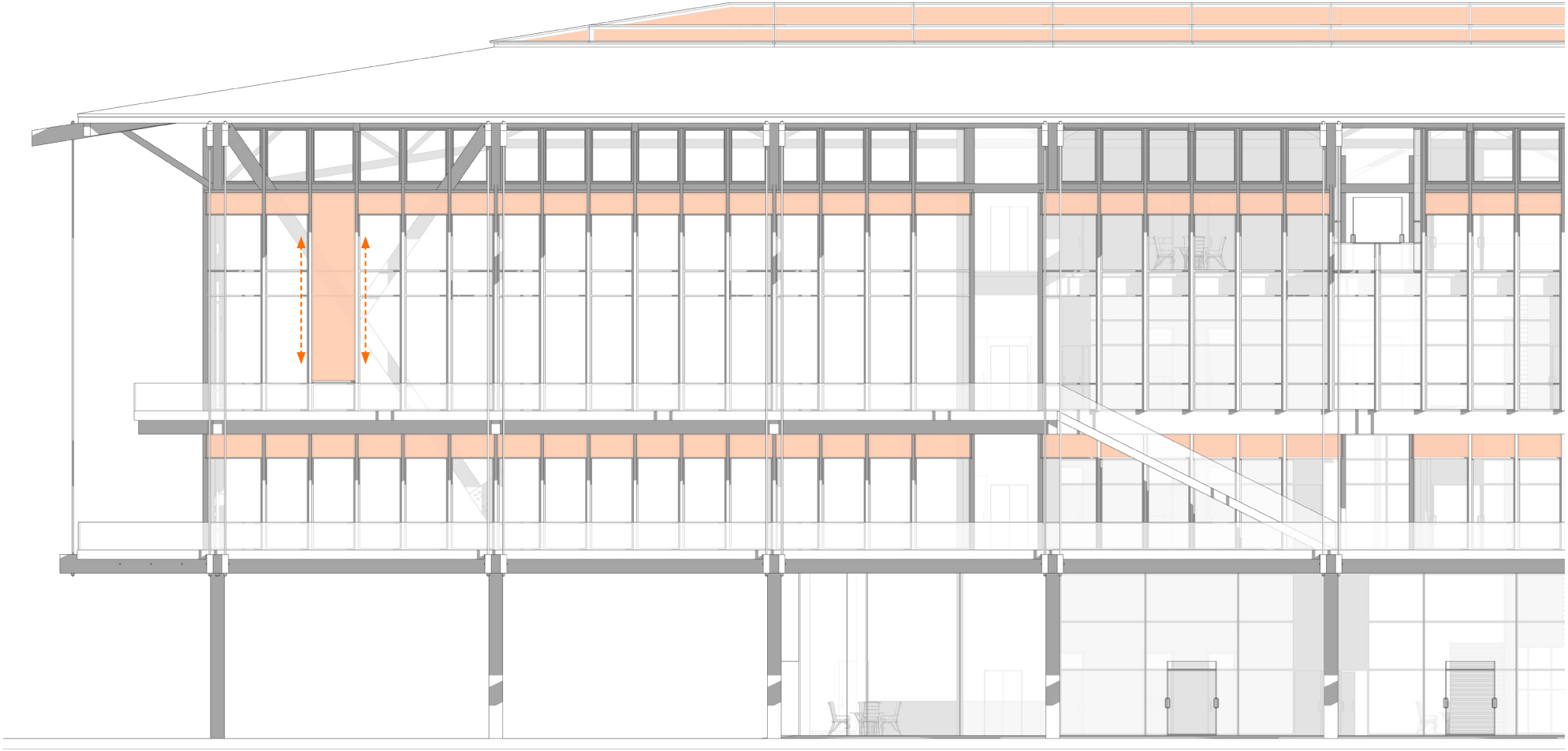
The building relies on skylights and glass windows around the facade for natural lighting.



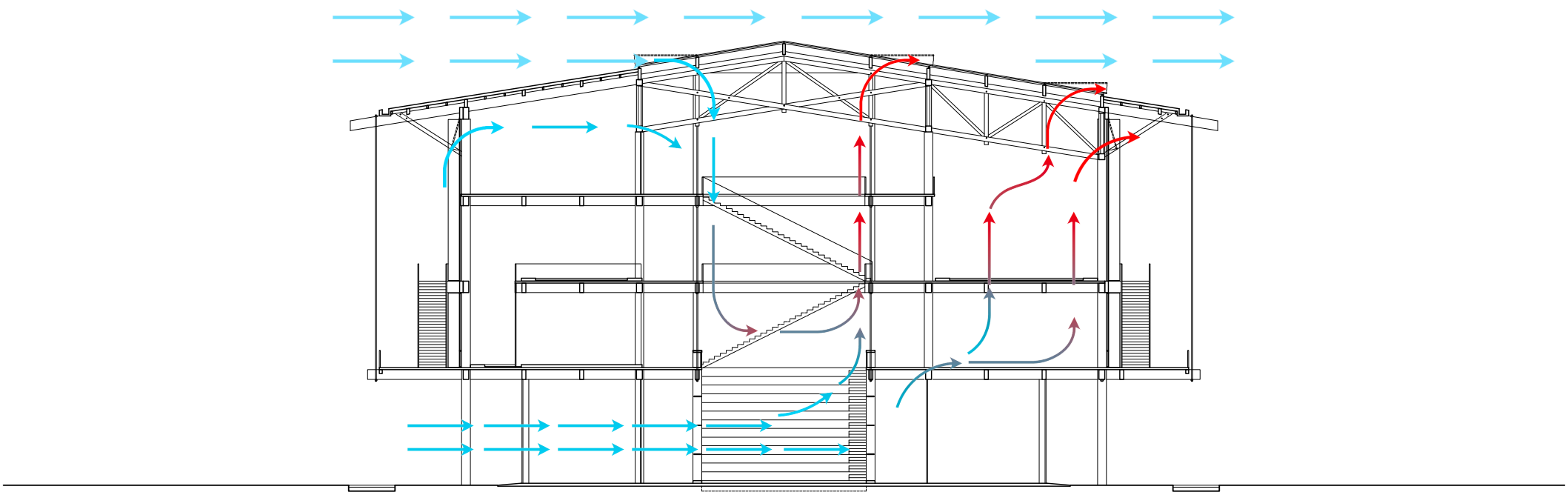
SUN SHADE



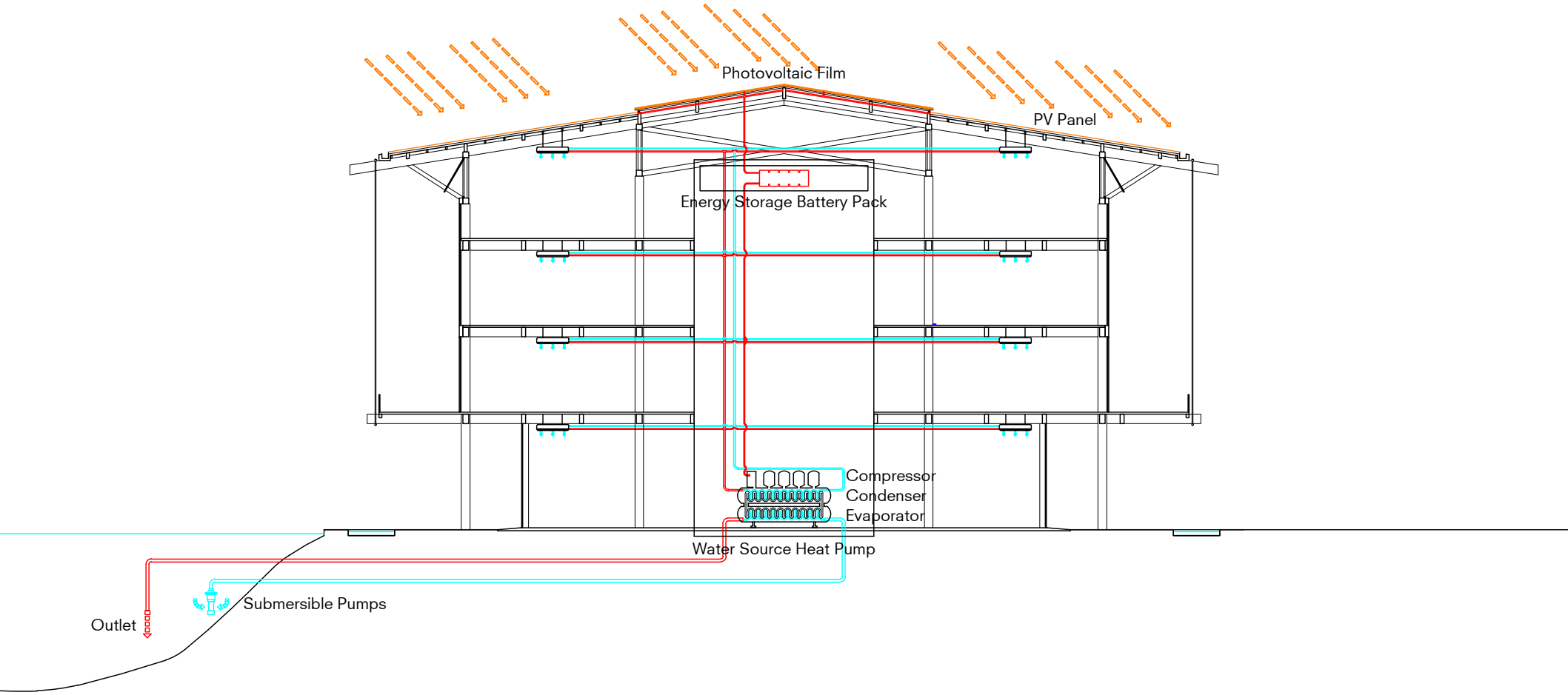
SUN SHADE



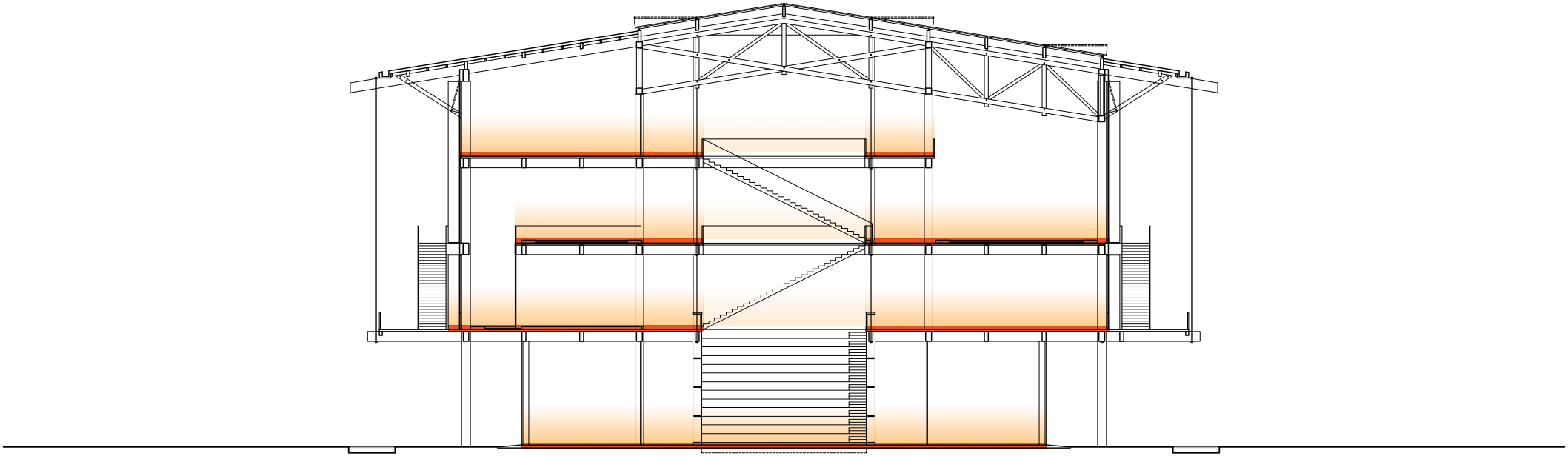
SUMMER - VENTILATION



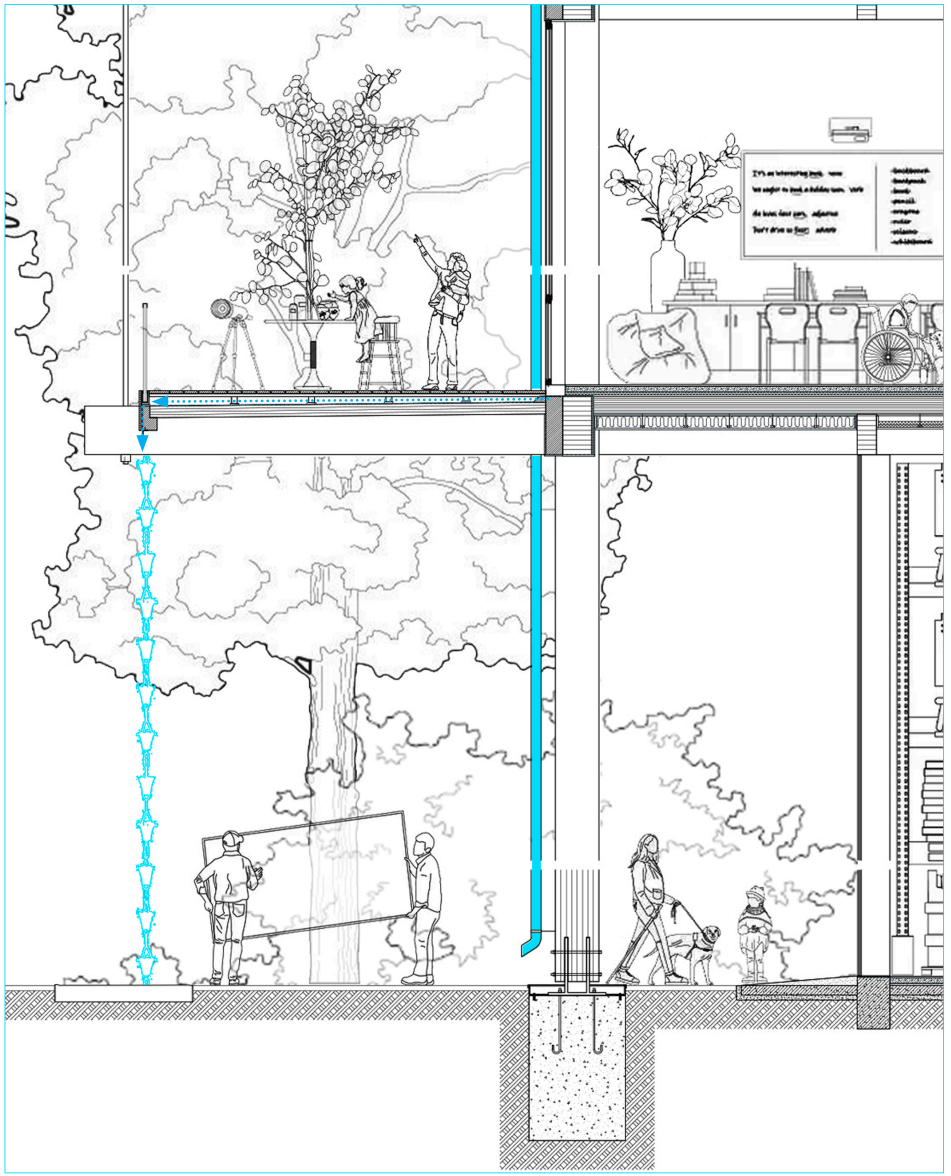
SUMMER - SOLAR ENERGY & WATER SOURCE HEAT PUMP

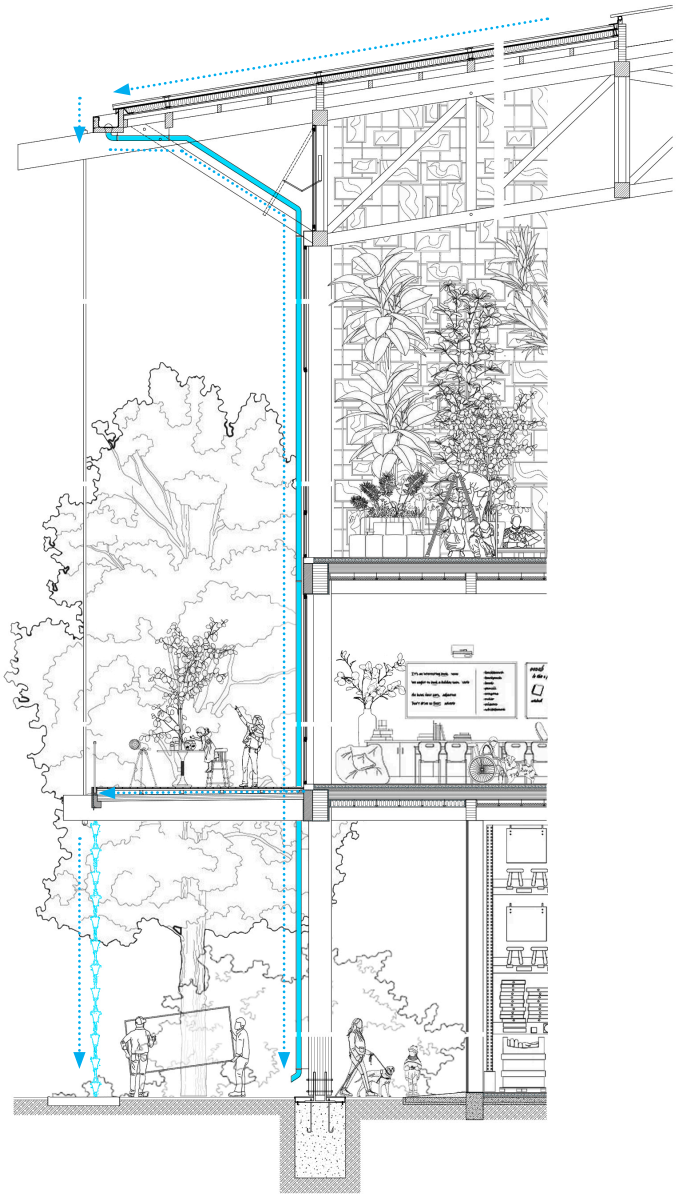


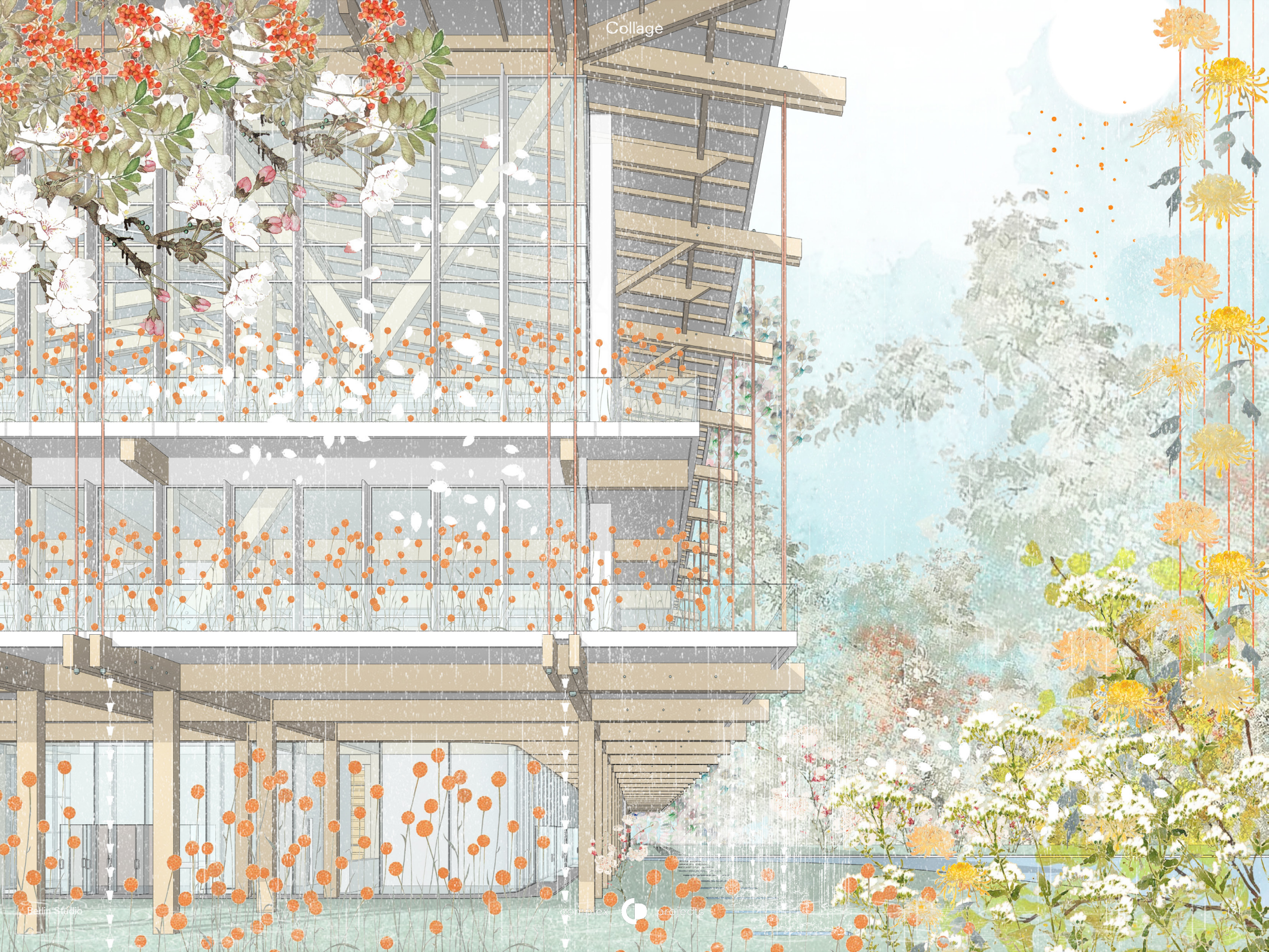
WINTER - FLOOR HEATING



BUILDING DRAINAGE

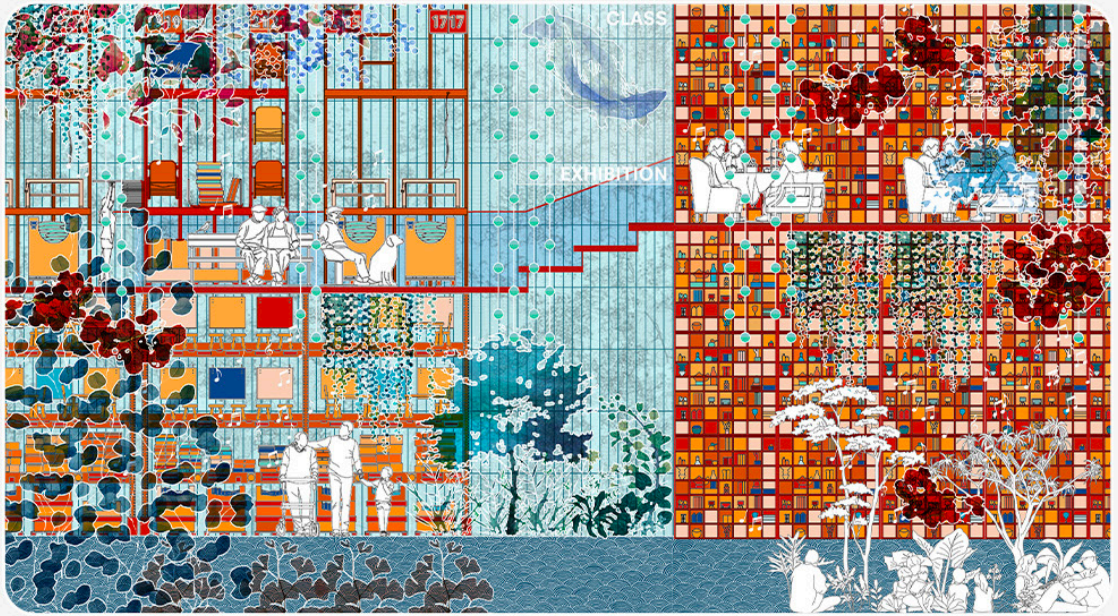





Collage

GUIDEBOOK

Klasse Aktivität Ausstellung Nachricht



WILLKOMMEN ZU ENTALTERUNG EDEN!

Deutsche Version

Fennpfuhlpark, Lichtenberg, 10369 Berlin, Deutschland
https://www.deagingeden.com

DE-AGING EDEN
ELDERLY SCHOOL
BERLIN

SCHOOL SIZE



Student

1200



Teacher

60



Staff

40



Administration

10



Volunteer

300+

1



Petparenting

2



Farming

3



Gardening

4



Fishing

5



Media

6



Dancing

7



Yoga

8



Music

9



Drawing

10



Parenting

11



Origami

12



Embrodiery

13



Woodencraft

14



Photography

15



Handicraft

16



Cooking

17



Mahjong

18



Game

19



Sports

20



Literature

VISTOR MAP

3rd Floor - LEISURE LOUNGE / CLINIC

- Mahjong Room
- Game Room
- Cooking Classroom
- Lounge
- Acoustic Room
- Library
- Meeting Room
- Dean's Office
- Clinic Room
- Doctor's Office

- Bamboo Garden
- Aqua Garden
- Reading Garden

2nd Floor - INTERGENERATIONAL WORKSHOPS

- Handicraft Workshop
- Woodencraft Workshop
- Embrodiery Workshop
- Origami Workshop
- Photography Workshop
- Cafe & Restaurant
- Library
- Office
- Sports Room's Stands

- Bamboo Garden
- Aqua Garden
- Reading Garden

1st Floor - INTERGENERATIONAL CLASSES

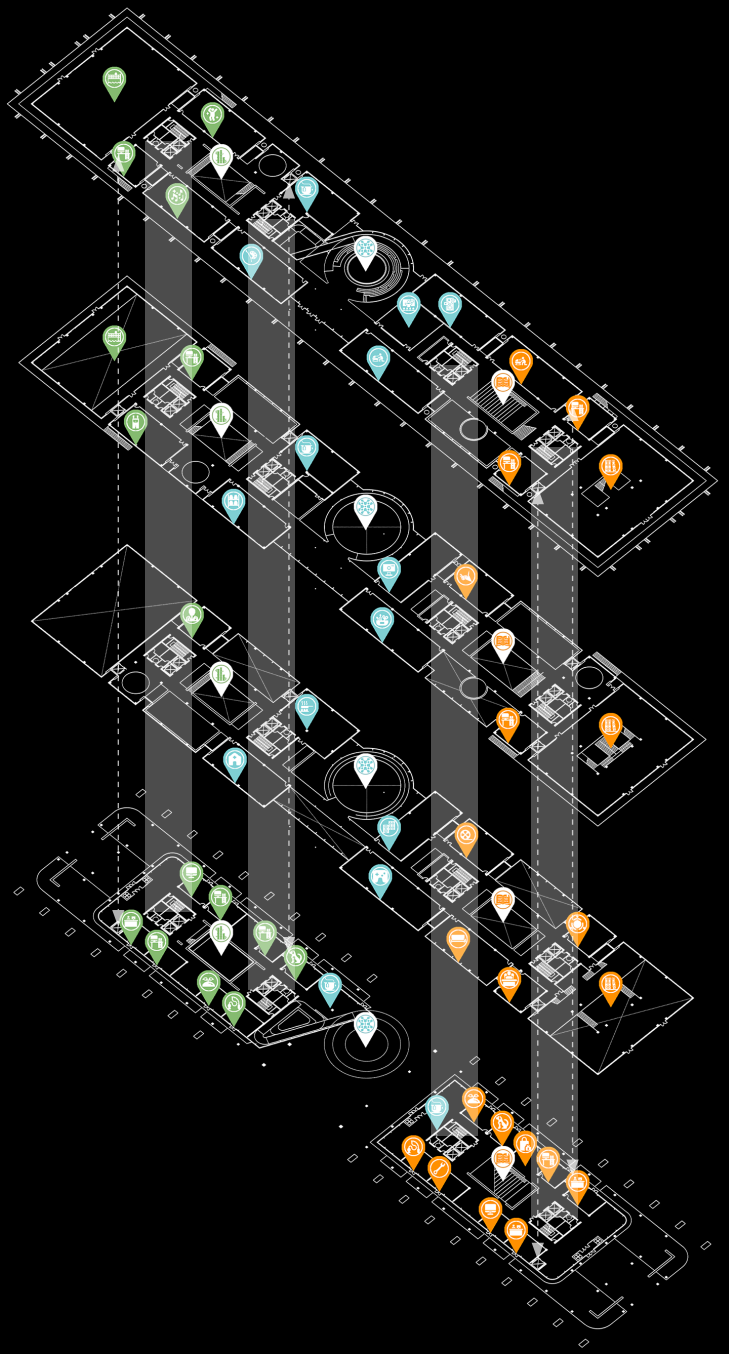
- Music Classroom
- Dancing Classroom
- Media Classroom
- Parenting Classroom 1&2
- Lecture Room
- Cafe & Restaurant
- Drawing Classroom
- Library
- Office
- Sports Room

- Bamboo Garden
- Aqua Garden
- Reading Garden

Ground Floor - INFORMATION / PARK RELATED CLASSES

- Tea Room
- Garden Classroom
- Fishing Classroom
- Petparenting Classroom
- Souvenir Shop
- Reception Room
- Repair Room
- Media Room
- Office

- Bamboo Garden
- Aqua Garden
- Reading Garden



THE ELDERLY'S ONE DAY

08:00-08:15
Register at office

08:15-08:45
Read in the orange garden

08:45-10:00
Learn in the media classroom

10:00-11:15
Learn in the music classroom

11:15-11:30
Mental consult with young people

11:30-12:00
Have lunch in the canteen

12:00-12:30
Watch basketball game

12:30-13:00
Take a rest in the garden

13:00-14:15
Teach young people woodencraft

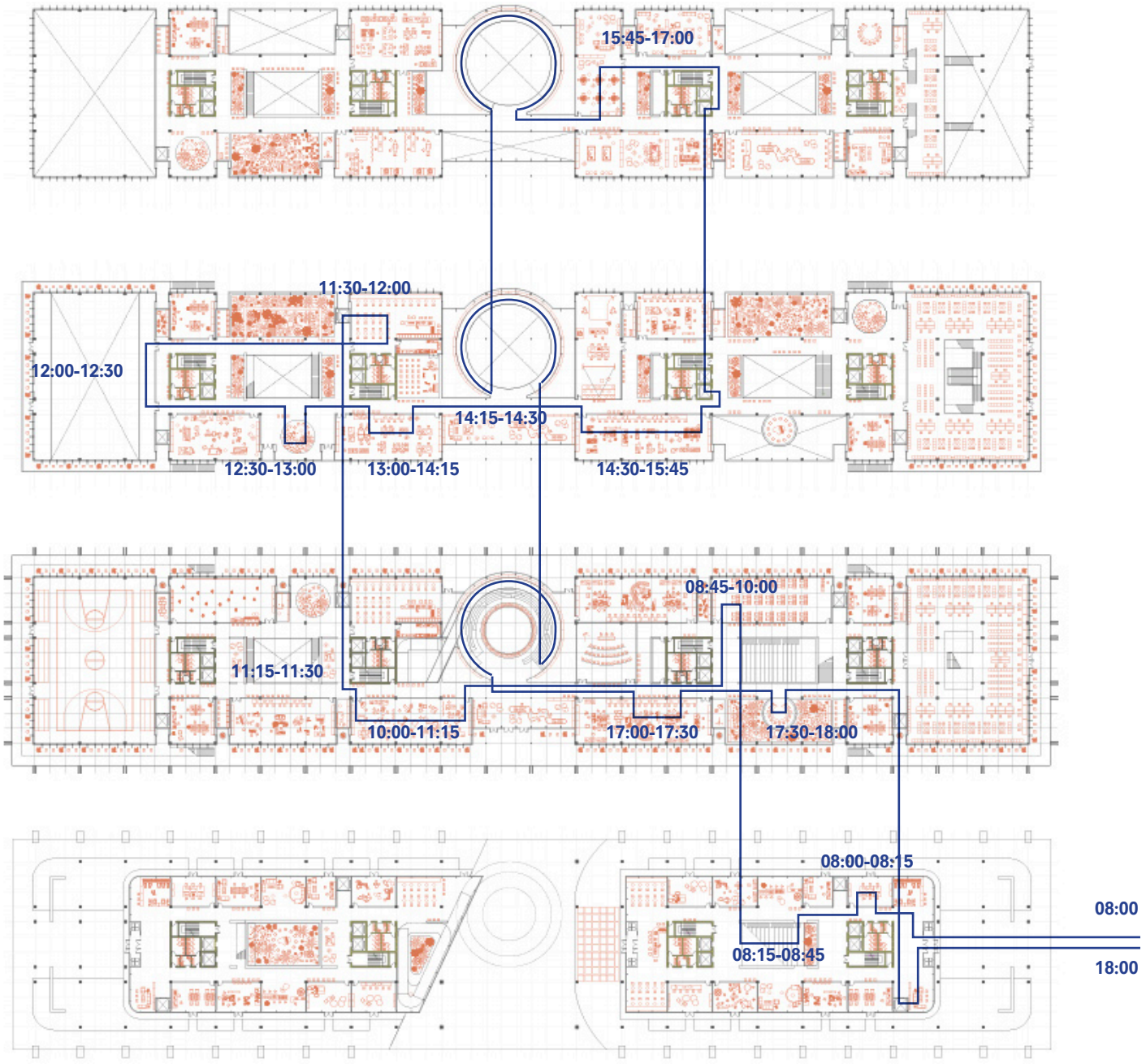
14:15-14:30
Take a rest in the lounge

14:30-15:45
Help young people with embroidery

15:45-17:00
Play mahjong with new friends

17:00-17:30
Have fun with after-school kids

17:30-18:00
Play piano in the garden











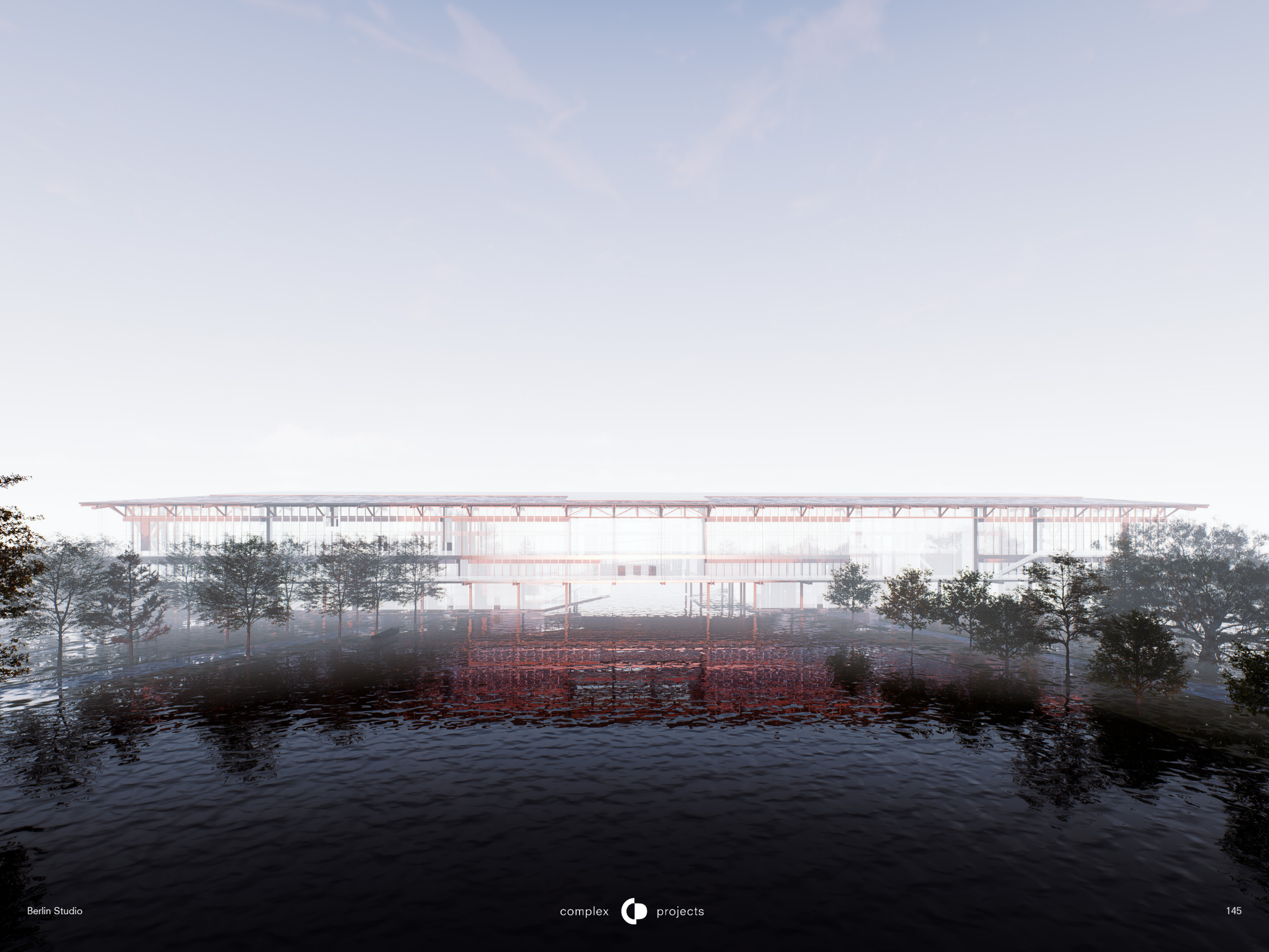




















VALUE

Everything for the elderly, elderly for everyone.



“老吾老以及人之老，幼吾幼以及人之幼。”

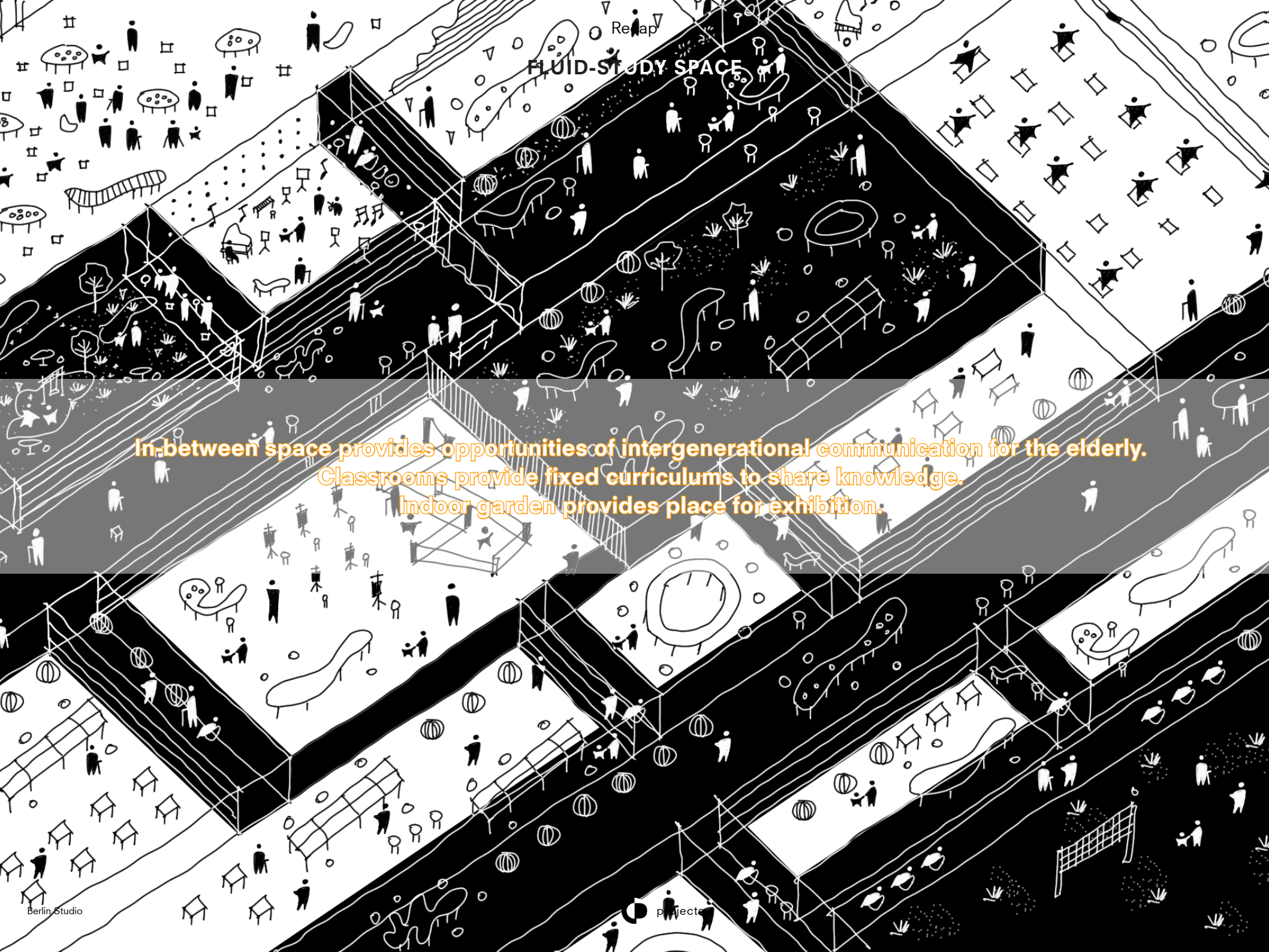
--《梁惠王上》（孟子，公元前320年）

“Honor old people as we do our own aged parents, and care for other’s children as our own.”

-- *Liang Hui Wang I* (Mencius, 320 B.C.)

Picture Source: https://www.culturalkeys.cn/2021/09/17/chinese-stories-mencius/

FLUID-STUDY SPACE




THANK YOU!