

# Communis

\_a hybrid of self-build housing and flexible workspaces for young professionals and entrepreneurs

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## Contents/ structure

### I. Starting Points

- The site
- Problem(s) statement
- Design Objective
- Design Question

### II. Research

- Research Paper
- From research to design

### III. Design

- Design Intentions and decisions
- The final design
- Conclusion(s)

## Site Analysis

The Marineterrein within the Amsterdam context



## Site Analysis

A well connected island within the urban tissue



## Site Analysis

More than 50% of the site is inaccessible



## Site Analysis

Public vacancy - Buildings with no public use



# Site Analysis

Movement



## A desolate environment

A feeling of remoteness and emptiness during the day – there is not immediate connection between the built environment and the people



## Starting Point

Problem statement 1

### Detachment from the built environment

'The architectural creation has become unreasonable to human scale with no capacity to serve and strengthen the social relationships within the city environment. Human scale has become the weakest and man is losing his normal relationship to architecture within the city environment.'

Konstantinos Doxiadis

'There is no form, only proliferation,, and when spaces search for function like hermit crabs looking for a vacant shell.'

Rem Koolhaas



## Starting Points

Problem statement 2

### **Social Isolation and Social loneliness.**

The phenomenon of being unable to socialize within the living environment.

AMS 2017 survey states that the highest level of people that feel under social loneliness are from the age group of 20-40 which is also 37% of the whole population of Amsterdam.



## Vision for the site

Gradual transition from private to public



## Vision for the site

Gradual transition from private to public [+5]



## Vision for the site

Gradual transition from private to public [+10]



## Vision for the site

Gradual transition from private to public [+15]



## Design objective

How can we keep our city living environment and society liveable in a contemporary urban environment that is constantly changing?

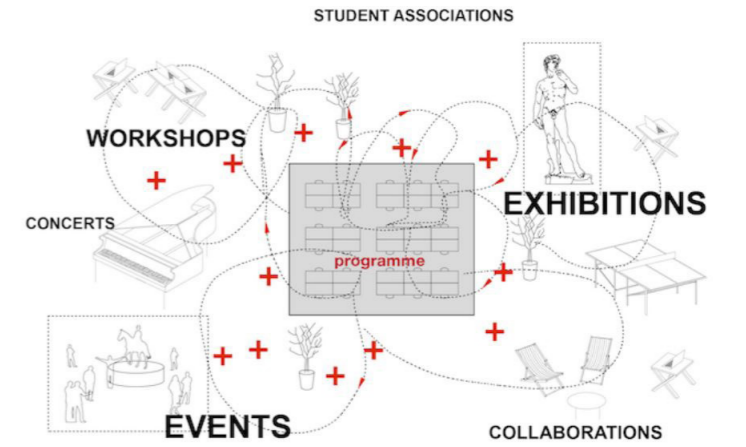
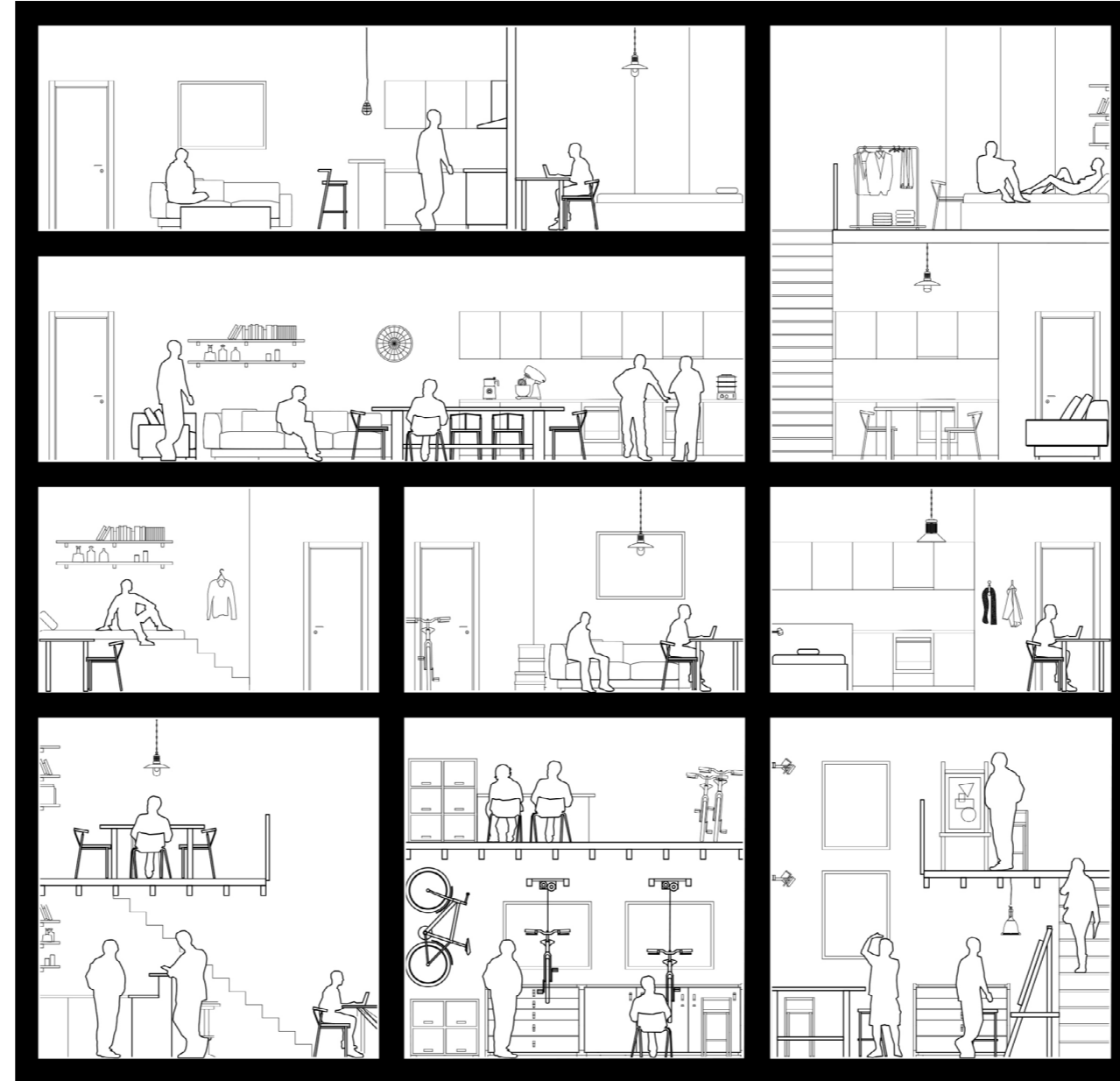
Liesbeth Jansen, project leader at Bureau Marineterrein Amsterdam

# Proposal

## Program

### co-Living / co-Working

A multi-functional spatial experiment where young professionals, entrepreneurs and students could live and work together consisting a shared living environment.

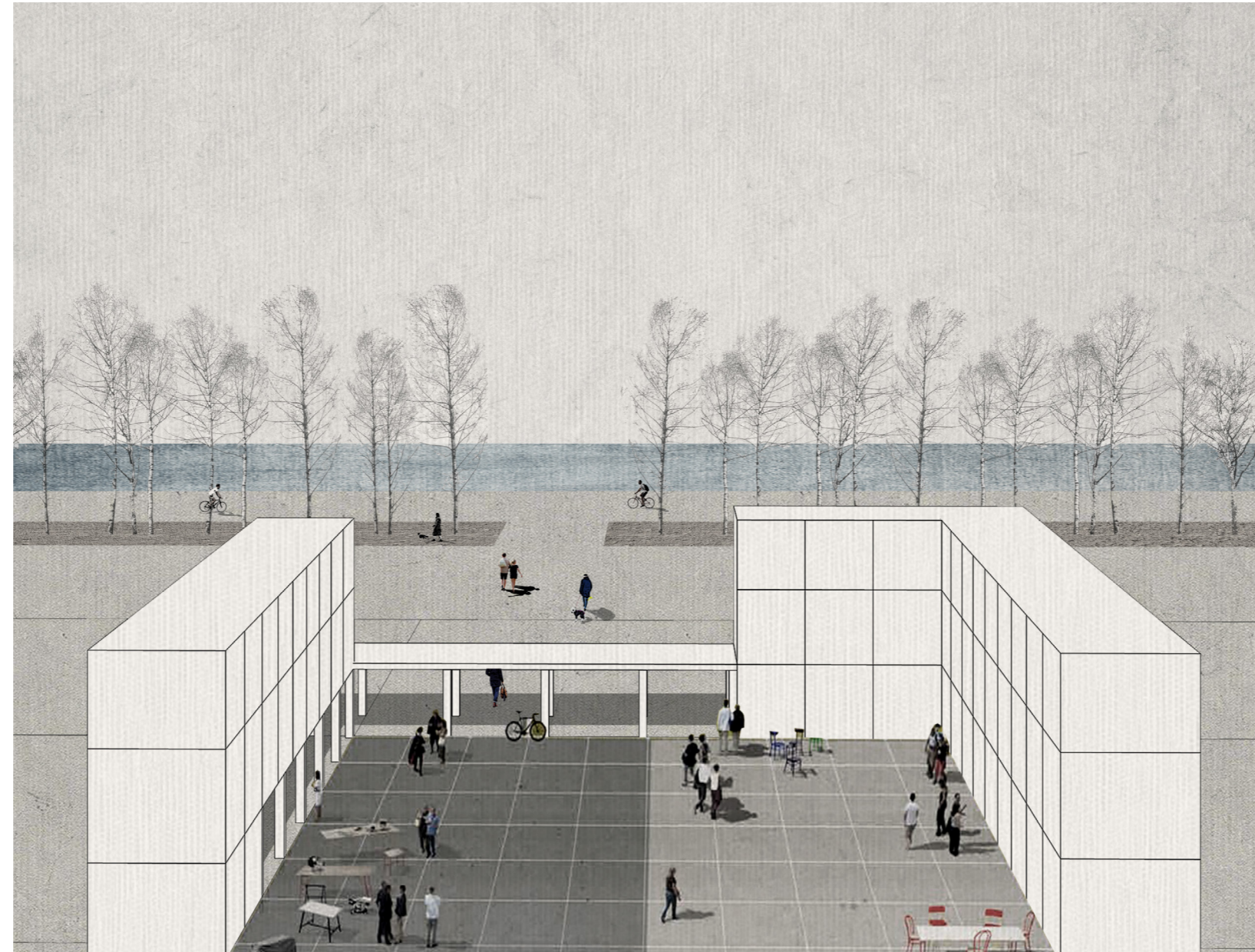


## Proposal

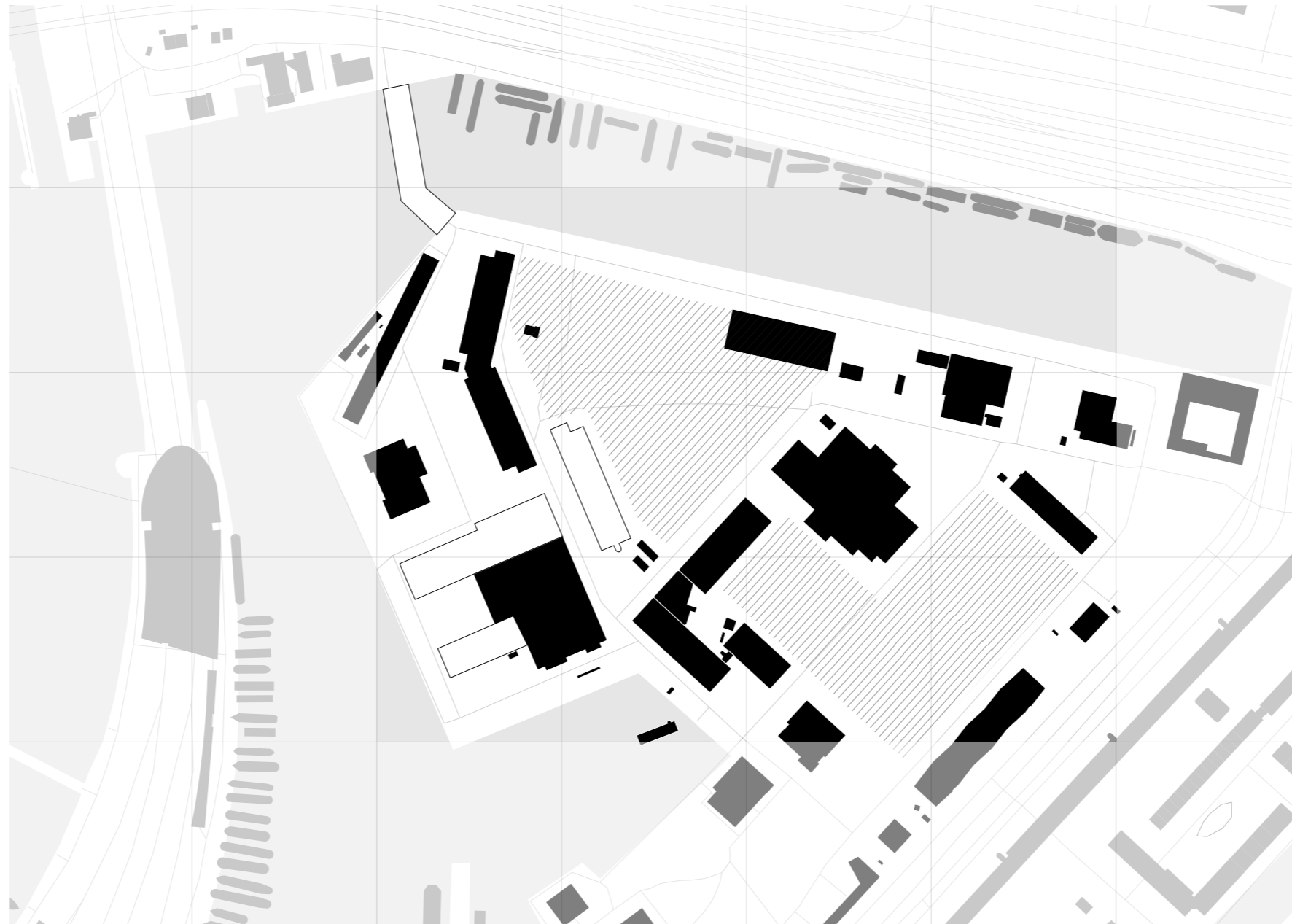
Ambition

### Communis

The formation of a public environment where social presence is essential, social interaction is key and its ultimate goal will be the establishment of a community within the site



## Potential Position



### The site as a cluster

A site appropriate for the establishment of community due to its clusterised character.

1. Access
2. Substantial buildings
3. In between spaces suitable for recreational activities

'You first plant the seed, then you see how it will evolve and you repeat if it is successful.'

The site



## Design Question

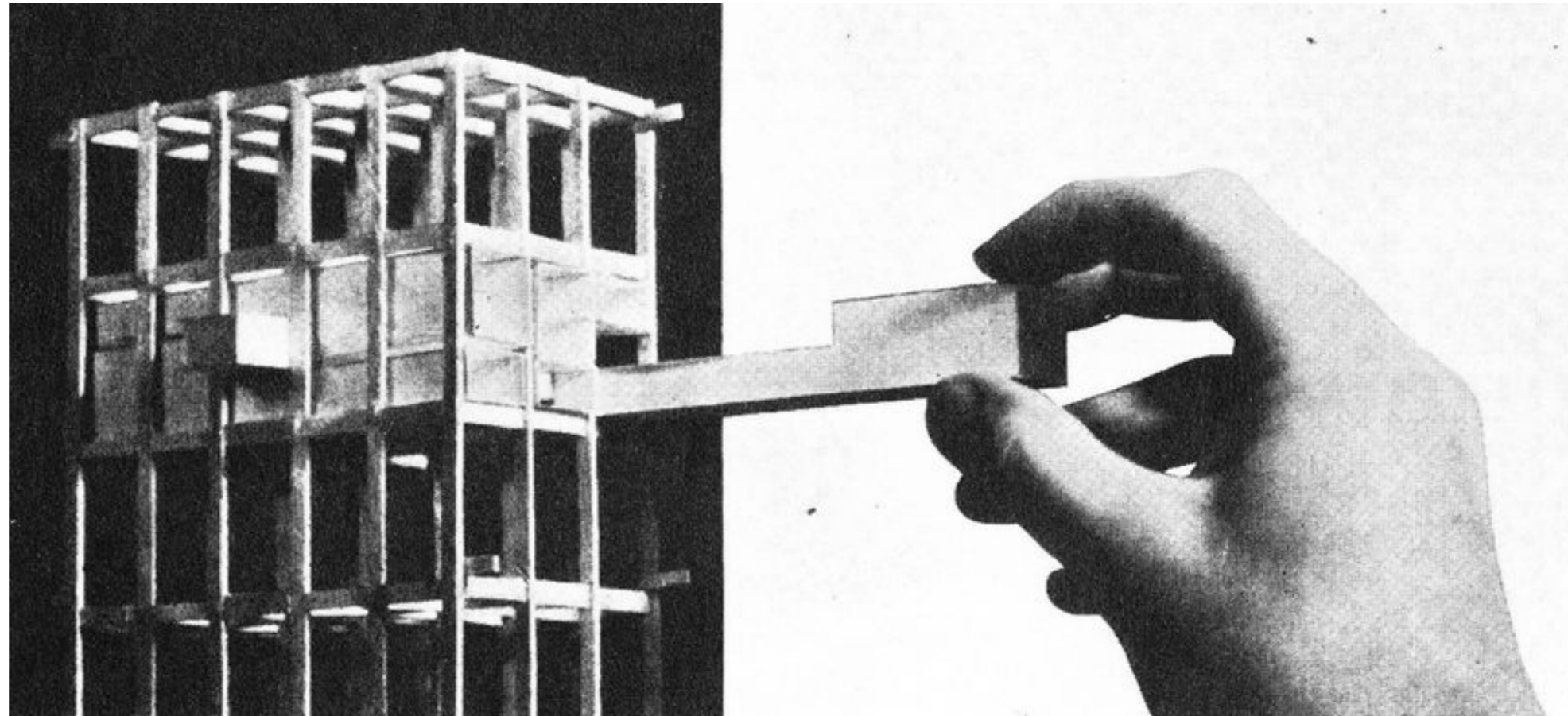
How can we approach architecture in such a way that will tackle the above problems of social and spatial detachment?

## Participatory Architecture

**The production of space becomes a collective act.**

People engaging with the production of space based on their needs in order to be satisfied with their living environments

Within this collective process of the production of space people will re-socialise, re-politicise and interact with each other.



Unité d'Habitation, 1946 - Le Corbusier - Apartamento

## Research

### **Towards a more human orientated, socially driven architecture**

A research in the field of participation in architecture.

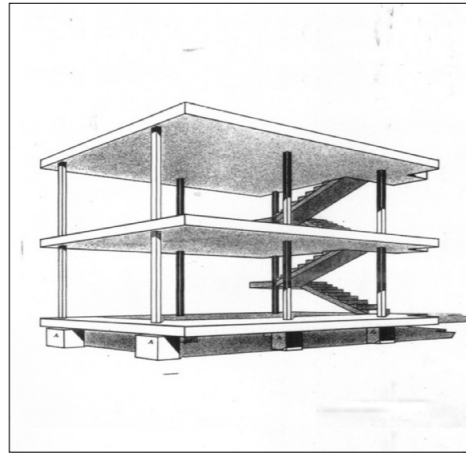
Why is participation necessary?

What is the level of participation and what is the role of the architect?

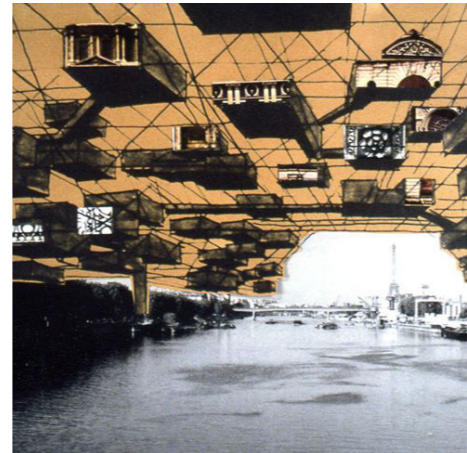
What is the most efficient model of participatory architecture?

## Research

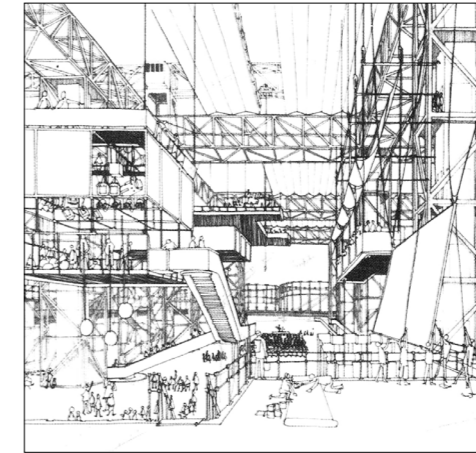
Pionner participatory Case Studies



Le Corbusier  
Maison Dom-ino, 1914



Yona Friedman  
Villa Spatielle, 1958



Cedric Price  
Fun Palace, 1964



Self-generating  
Lucien Kroll  
MeMe, Brussels, 1970-76



Self built  
Peter Sulzer and Peter Hübner  
Bauhausle, Stuttgart, 1981  
Segal Method



Flexible Infill  
Yositika Utida  
Next 21, Osaka, 1994  
Open Building Strategy

## Research

Conclusion

### What is the most efficient model and level of participation?

A **hybrid model** formulated upon the **strengths** of each model of participatory architecture.

A model that contains the high levels of use flexibility, adaptability of Next21; the high level of participation, construction flexibility and level of socialisation of Bauhäusle as well as the high levels of design flexibility, self-generating and organic evolvement of MeMe.

## Research

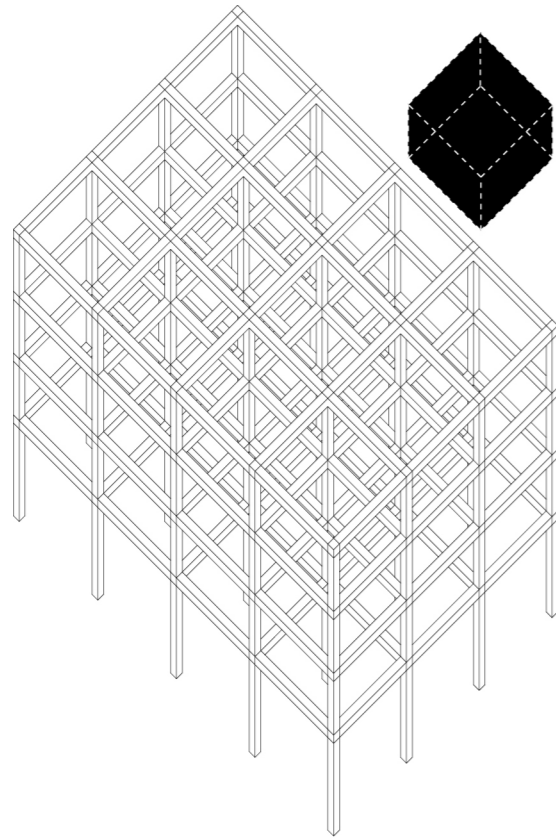
Conclusion

### A Compromised Participation

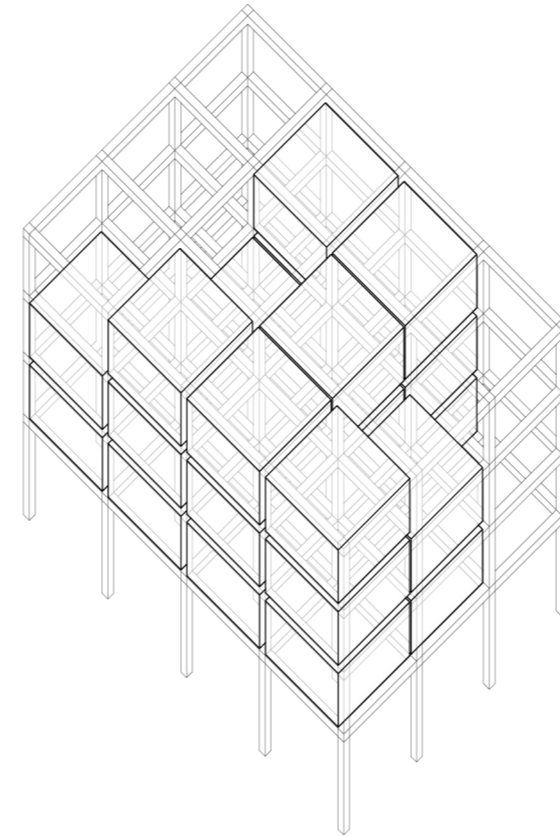
An ordering structure that will be provided by the architect that will enable participation to evolve within.



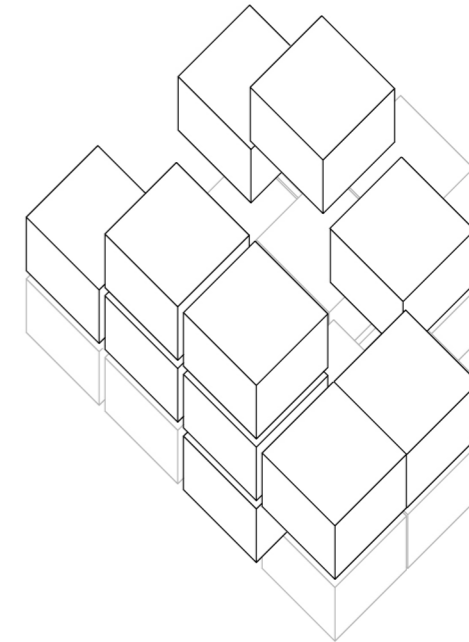
# Ownership



Framework owned by municipality or private sector while plots will be rent under certain period of time



Individualised designed and self built infill

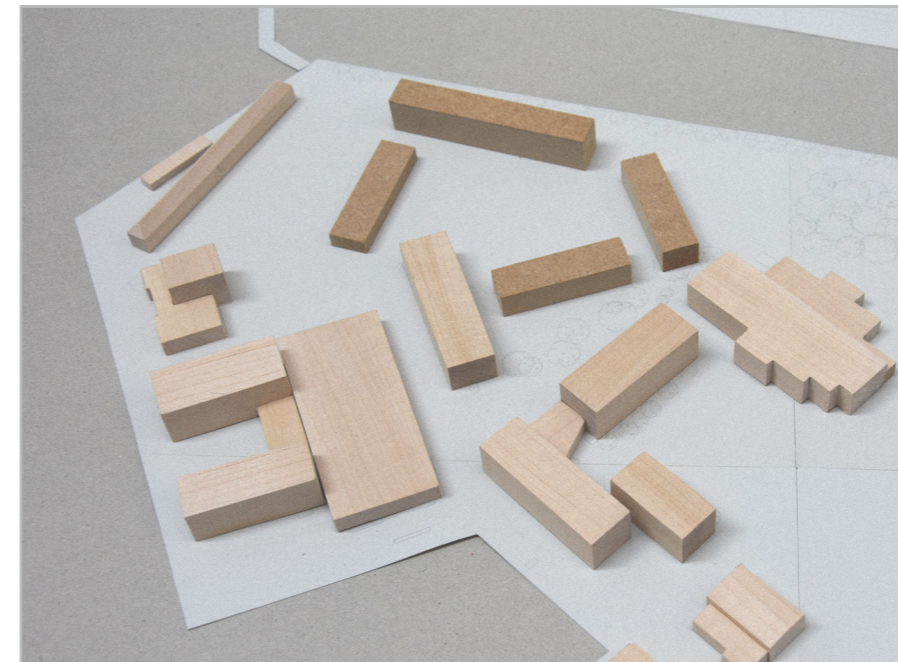
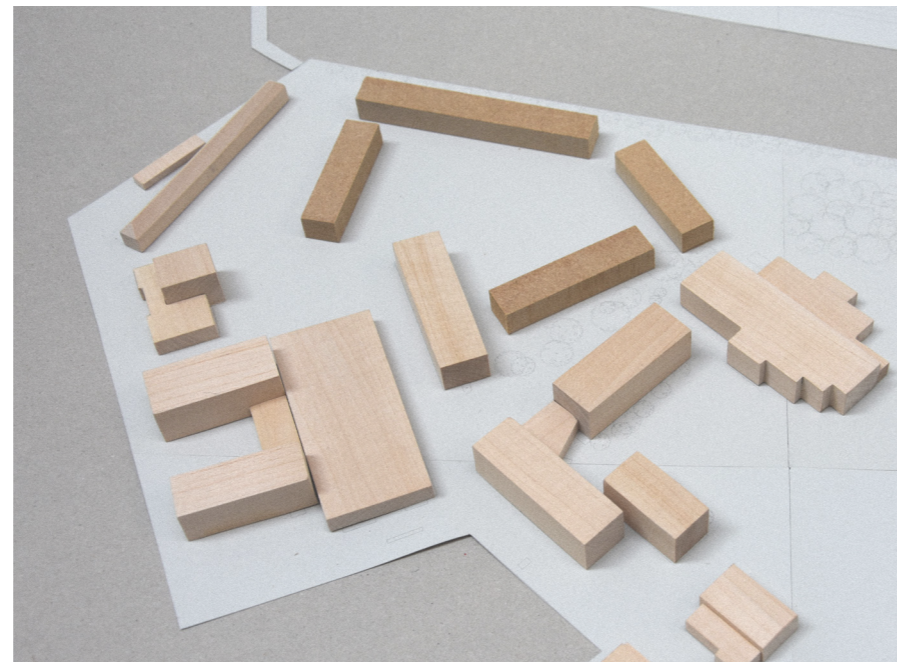
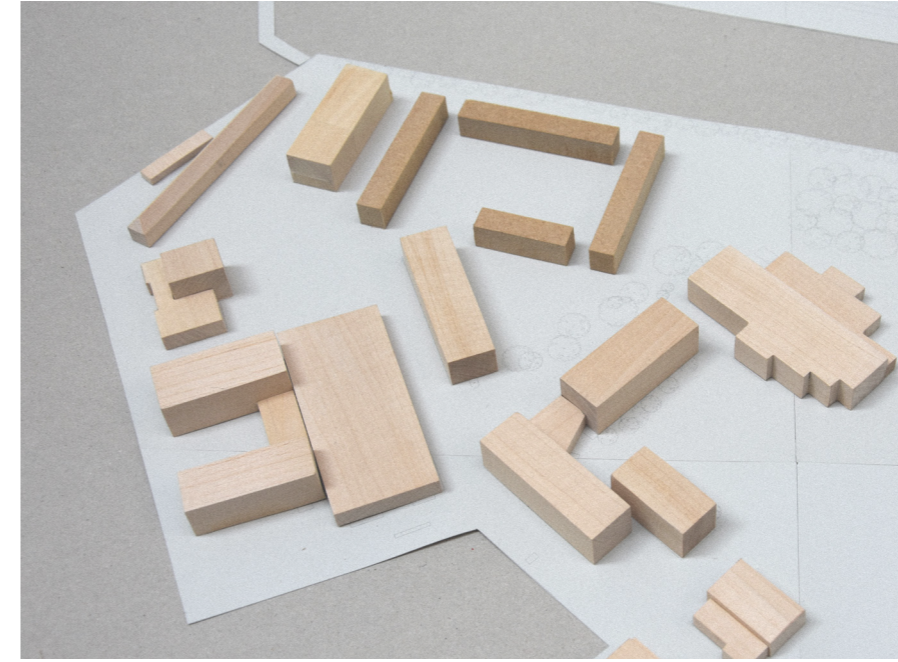
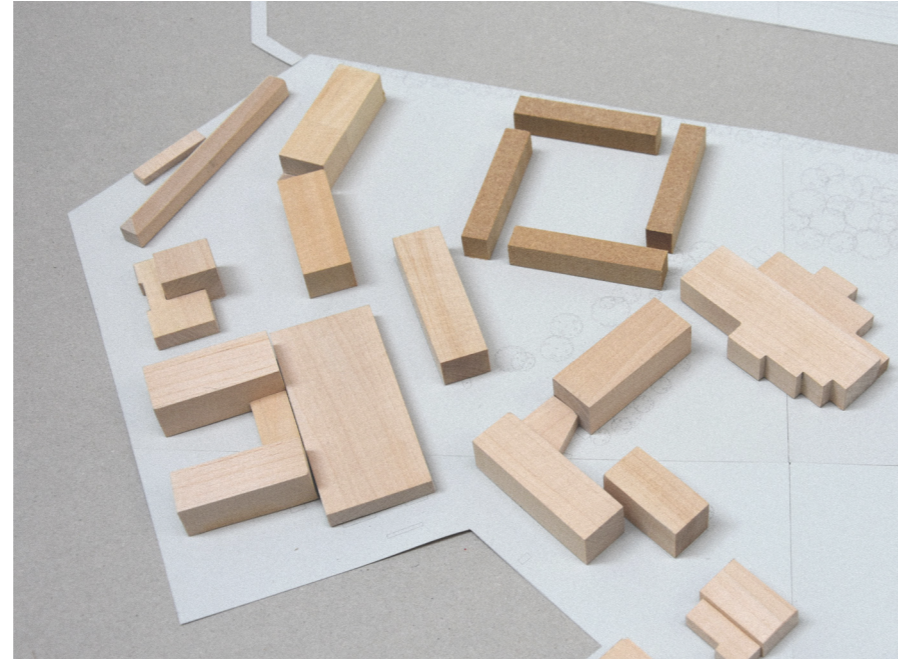


Partly re-use of the infill after the end of the contract.



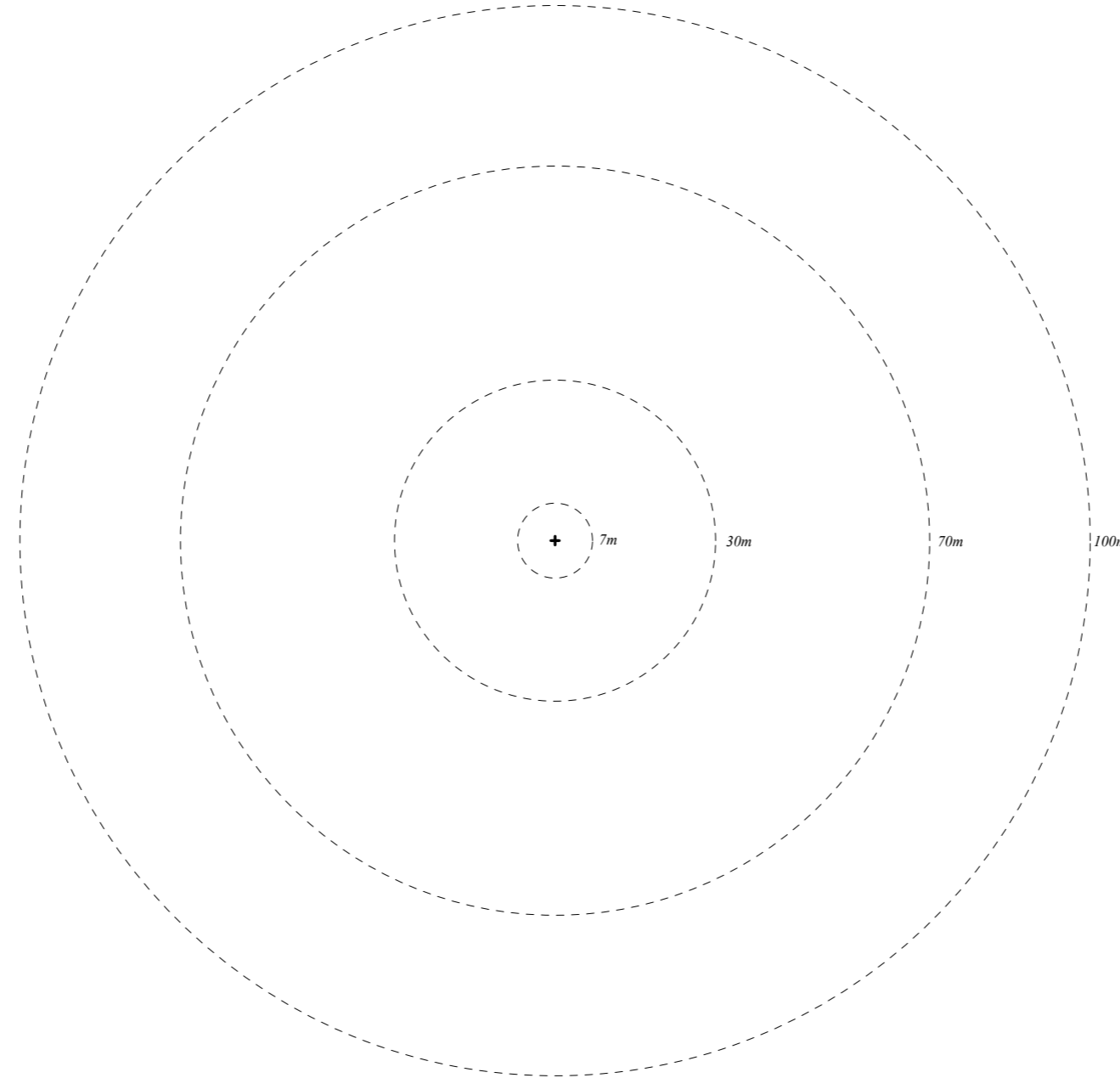
## Design Principles

How to design such an ordering structure?



# Design Principles

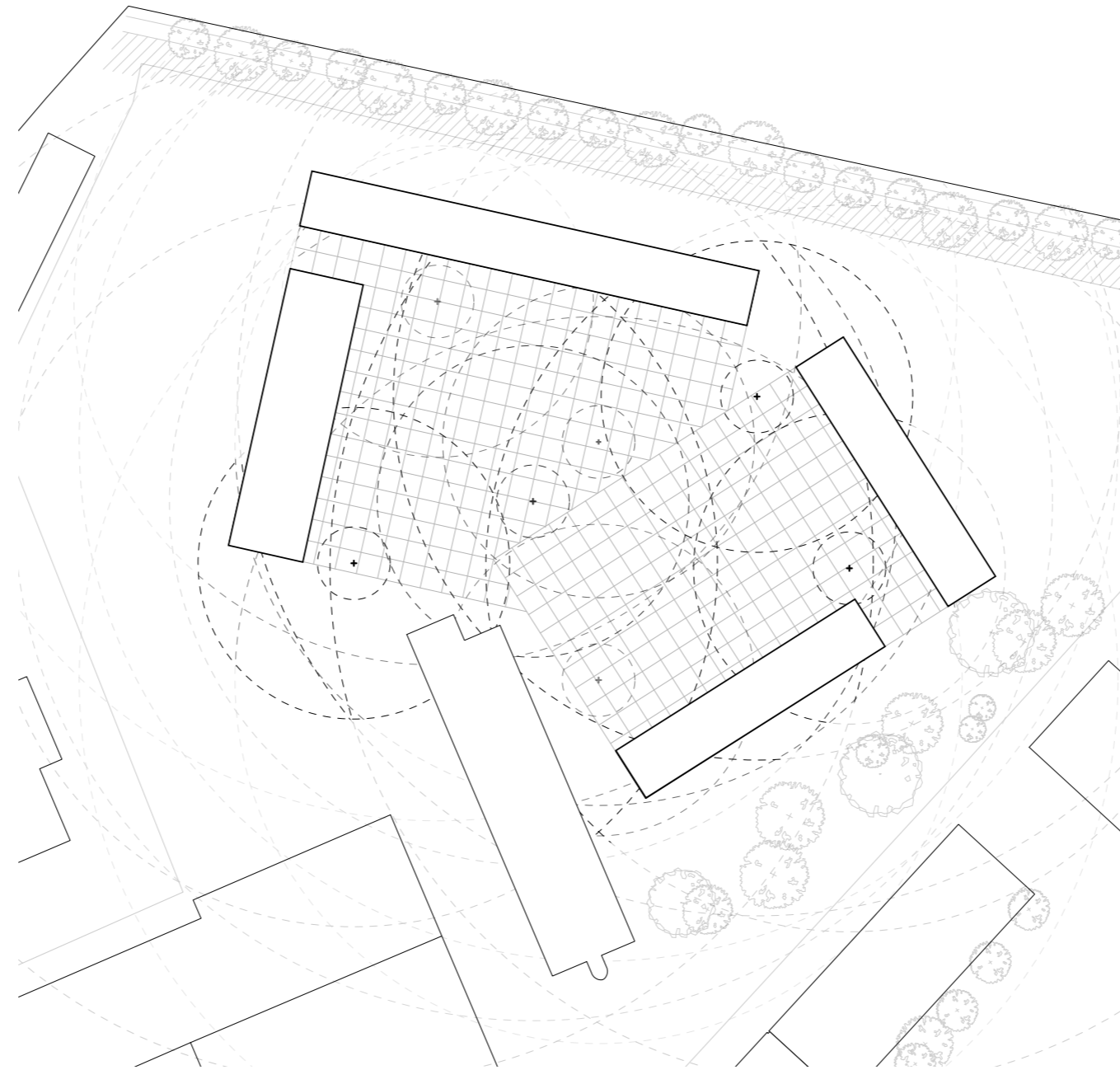
Planning the spatial experience



hear  
30m visual recognition of individuals  
70m recognition of physical characteristics  
100m beginning of visual interaction

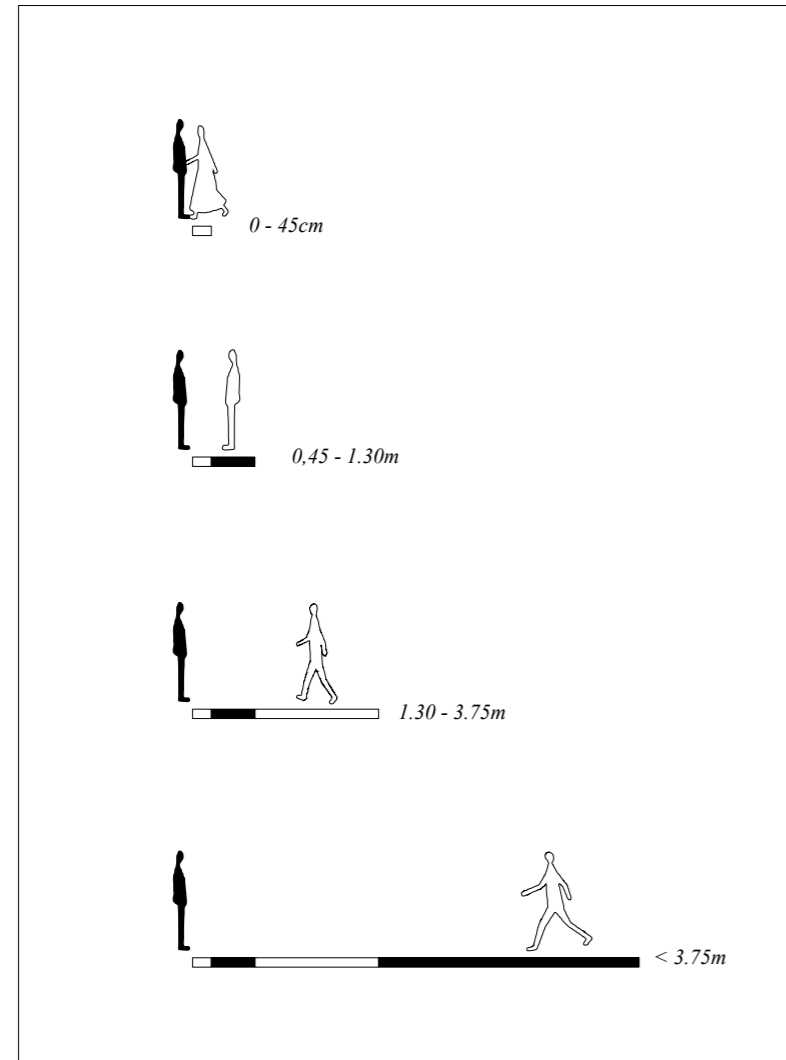
# Design Principles

Planning the spatial experience



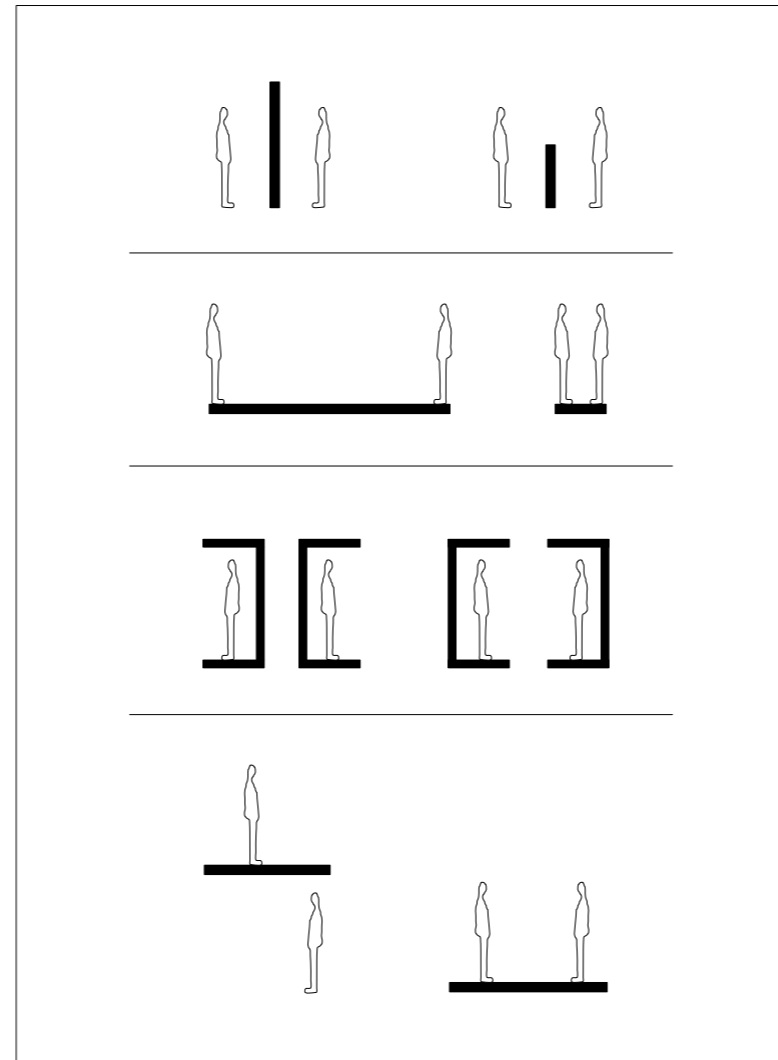
## Design Principles

Social distances as a planning guide



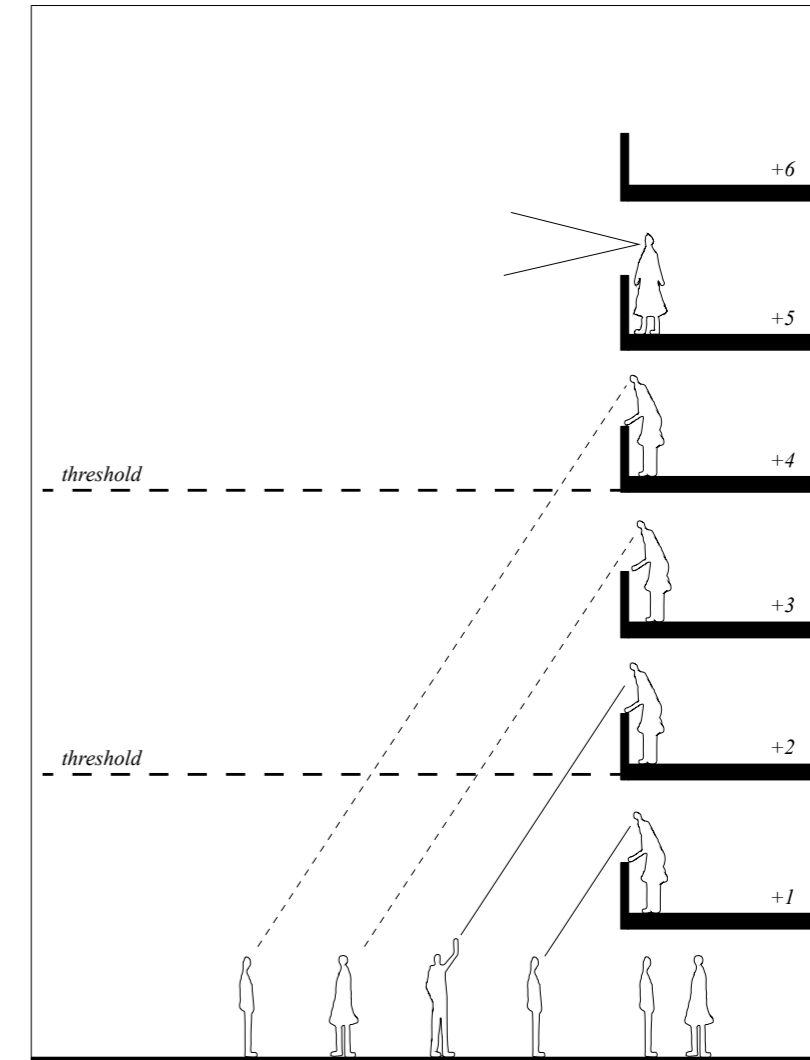
### Social Distances

1. Intimate distance
2. Personal distance
3. Social distance
4. Public distance



### Promoting + Inhabiting visual and auditory contact

1. Walls - No walls
2. Long distances - Short distances
3. Multiple Levels - One level
4. Back to back - Face to face orientation



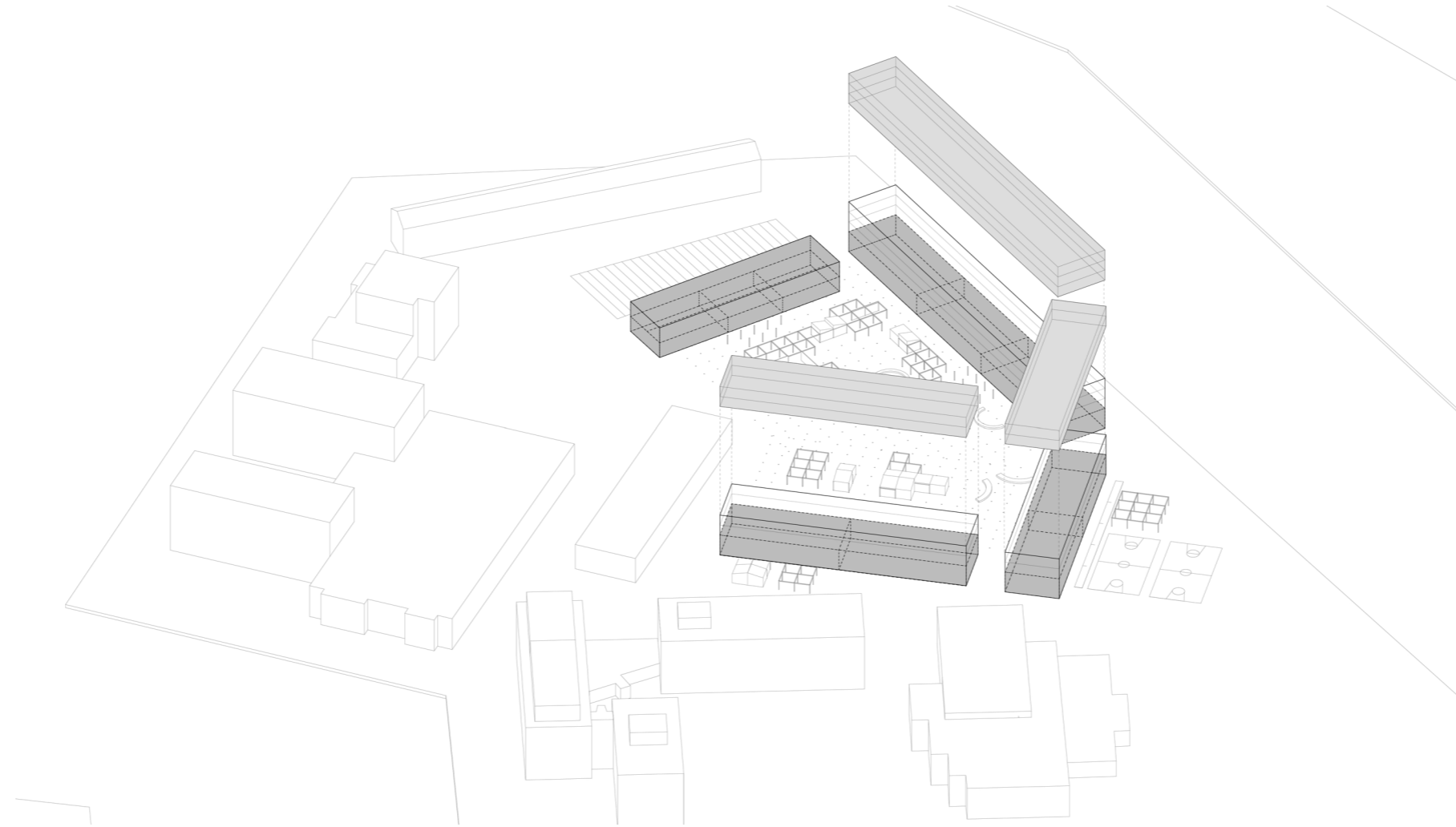
### Meaningful contact

- [+ 2] Meaningful contact with ground level events is possible.
- [+ 4] A marked decrease in the ability to have contact with the ground
- [+5] Anything and anyone above the fifth floor is definitely out of touch with the level events.



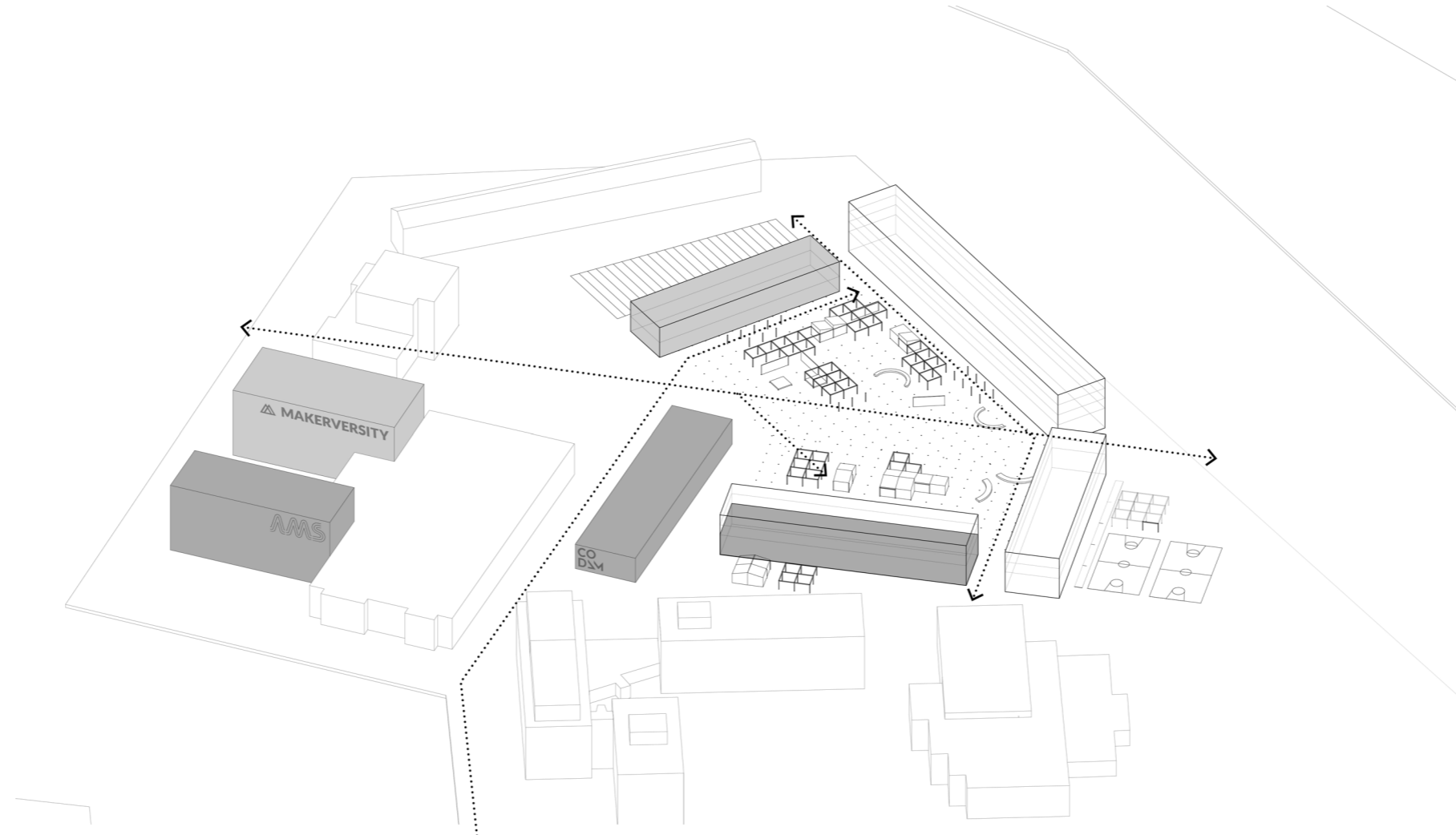
# Volumetric studies

Public / Private  
Live / Work



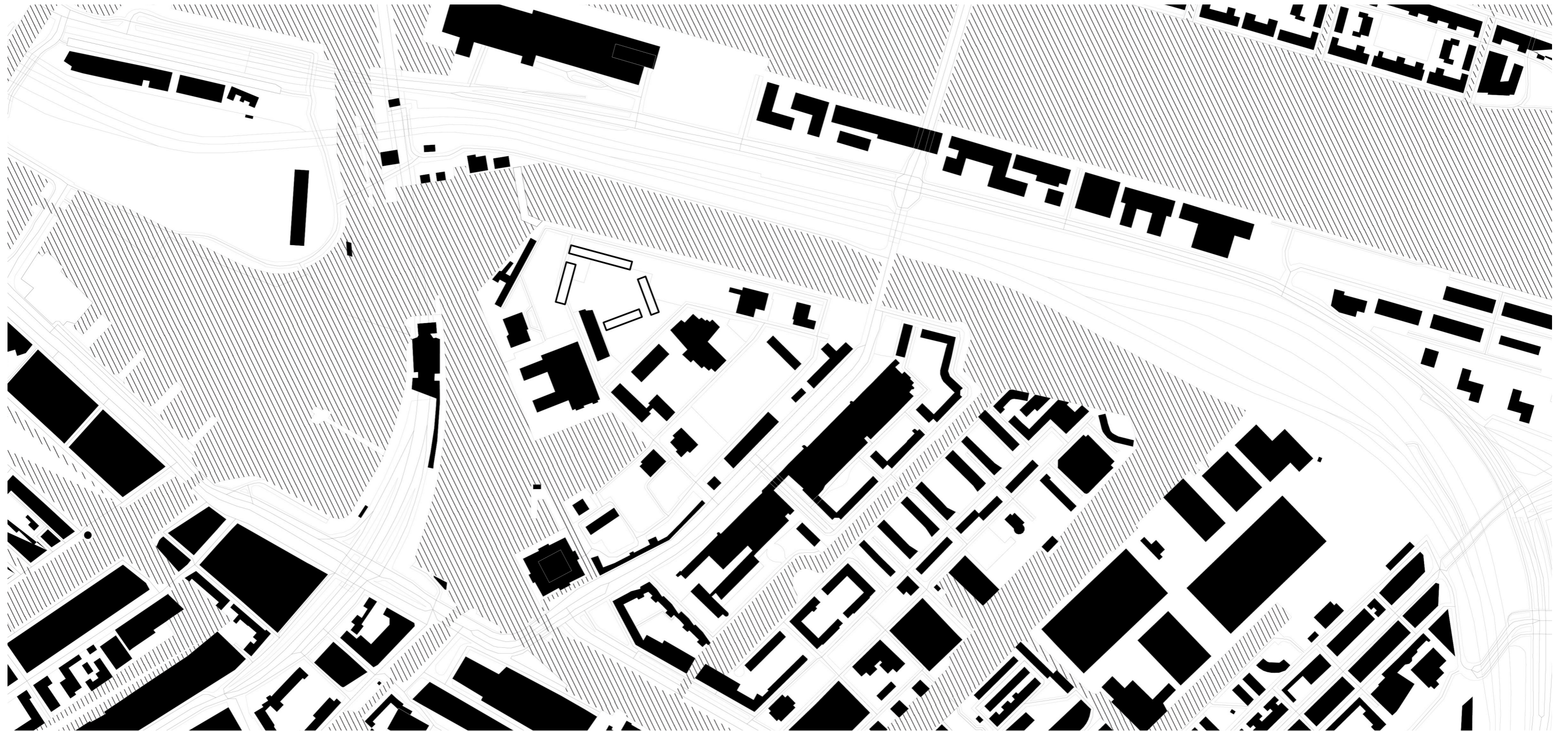
# Volumetric studies

Programme distribution and Interrelations



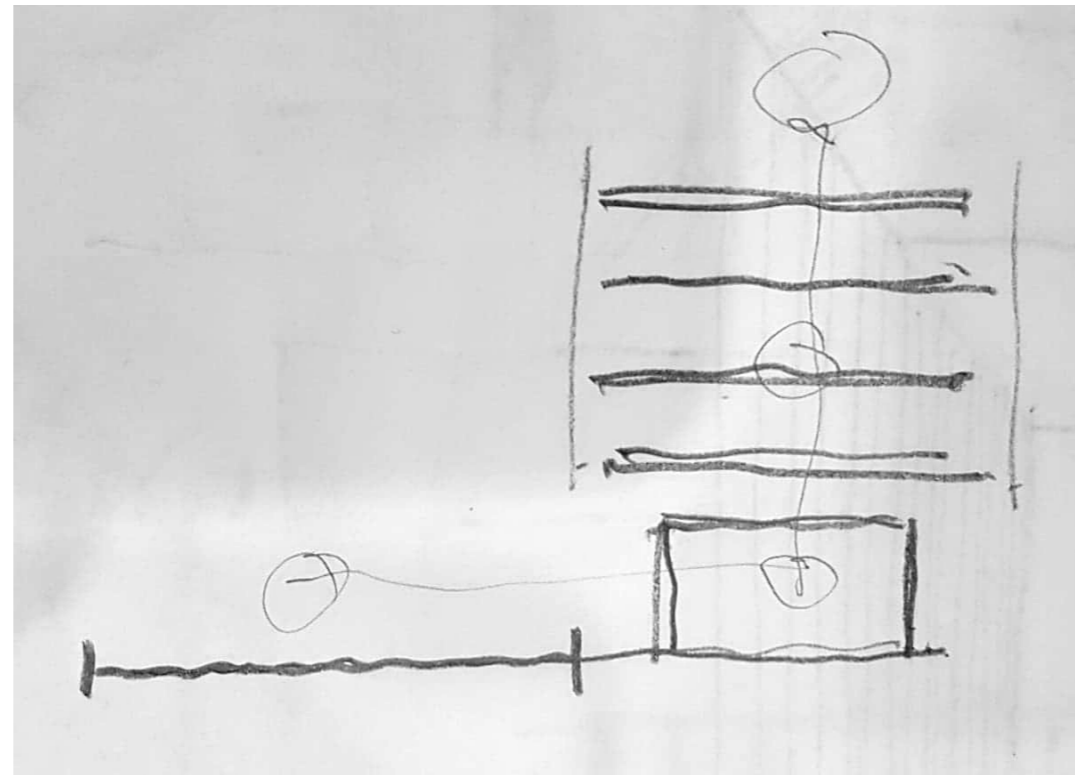
## Final Spatial Setting

The continuation of the idea of a cluster in which the community will evolve.



## Design Intentions

A framework in which the levels of participation vary.



## The Public Square

“Activity as attraction – whenever there are people it is generally true that people and human activities attract other people! .”

Vittorio Aurelli, DOGMA

## Design Intentions

The square



Walk




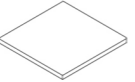

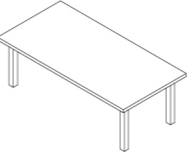
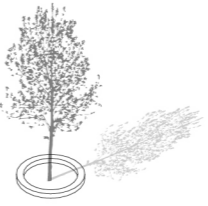
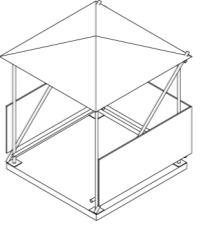
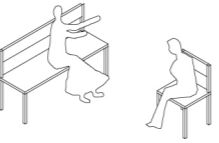
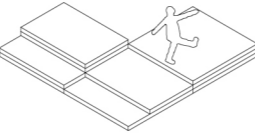
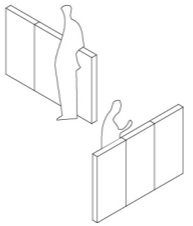
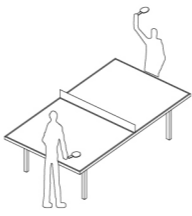
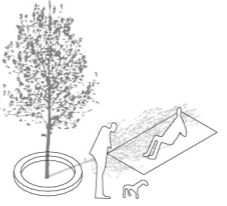
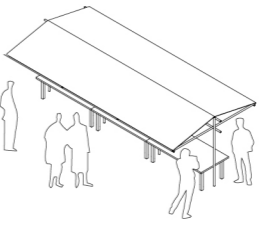
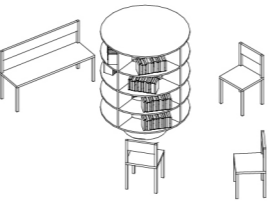
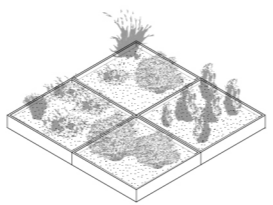
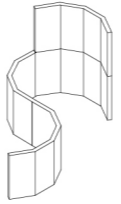
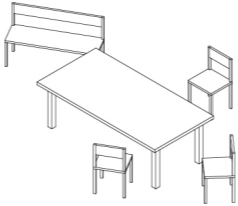
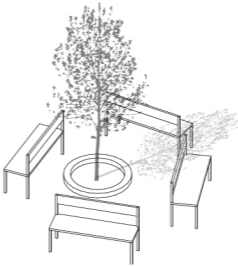
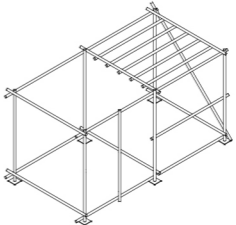
Sit



Talk

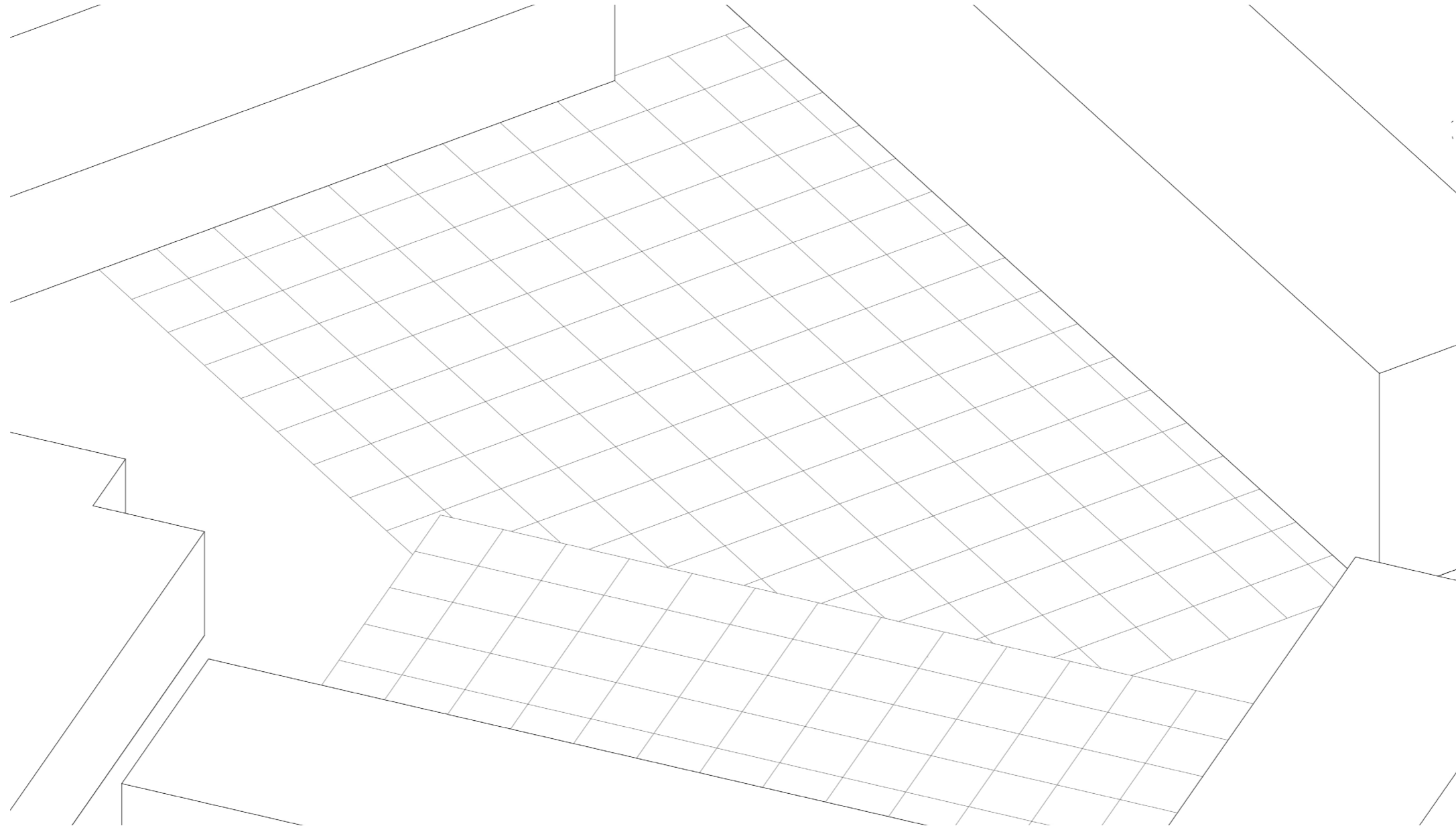
# Design Intentions

Social Participatory Devices

Fundamental Devices / Provided						
Interaction of devices with life						
'Interaction between life and form' Interaction of devices with space.						

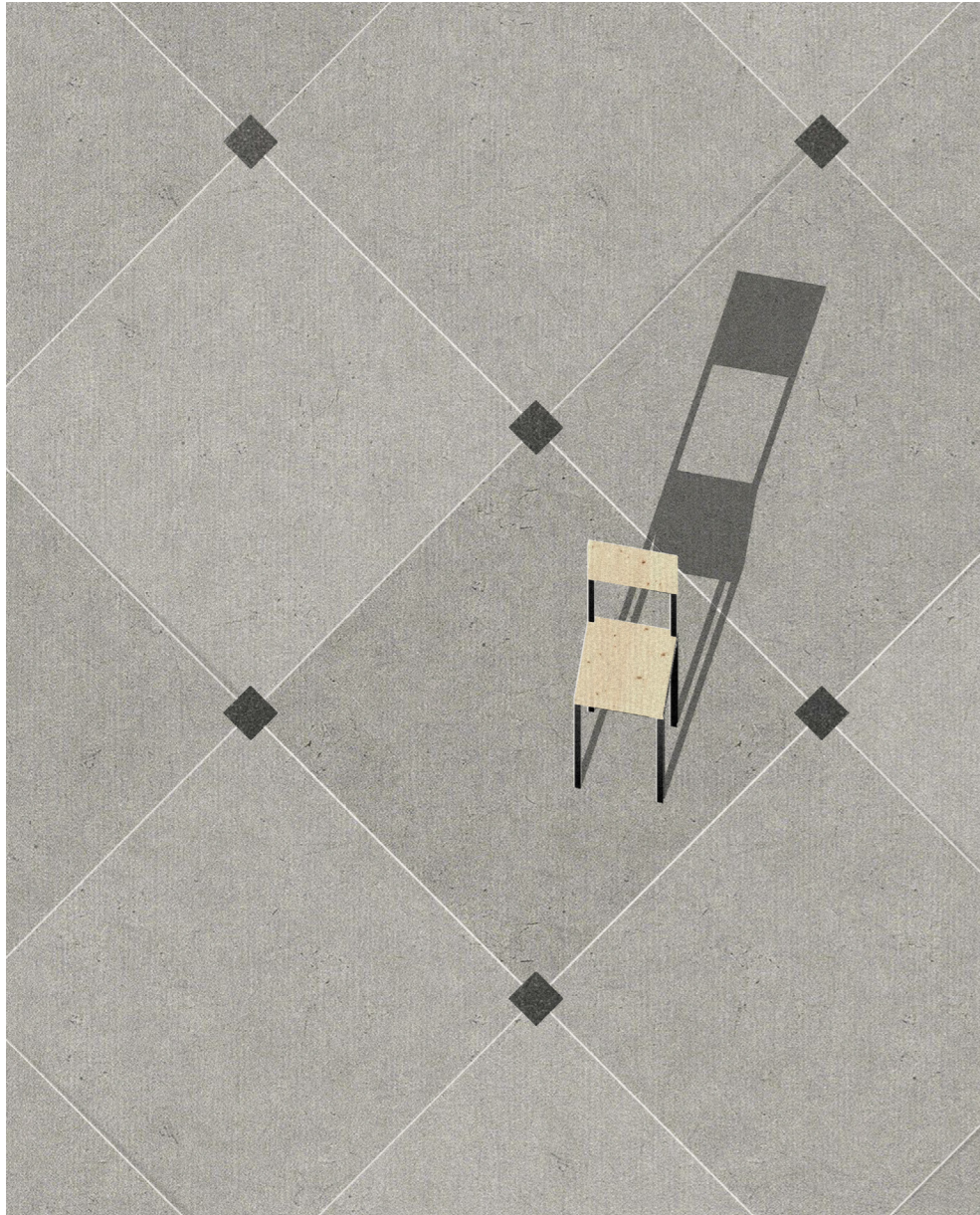
# Design Intentions

A grid capable of guiding participatory acts

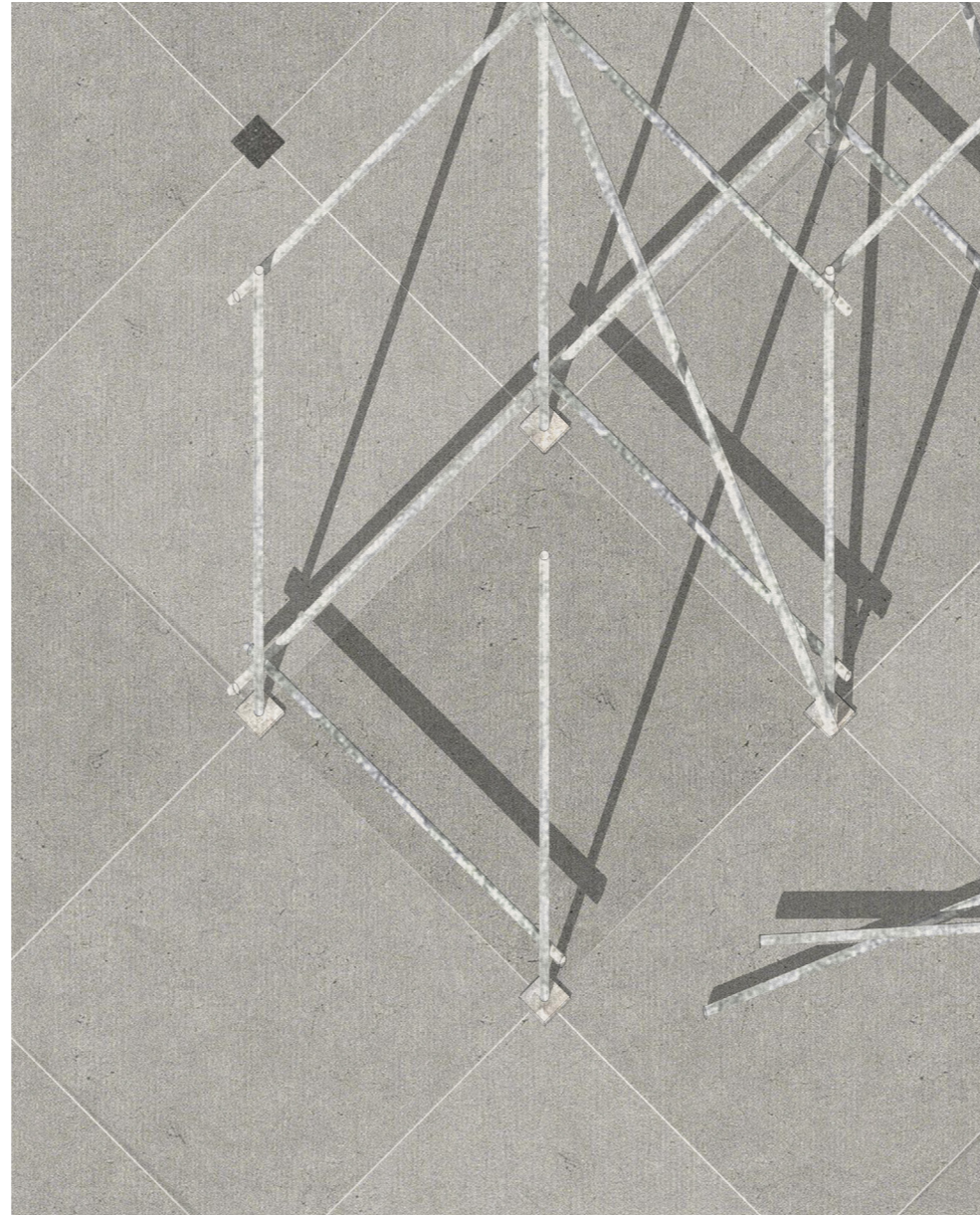


## Design Intentions

A grid capable of guiding participatory acts



Position



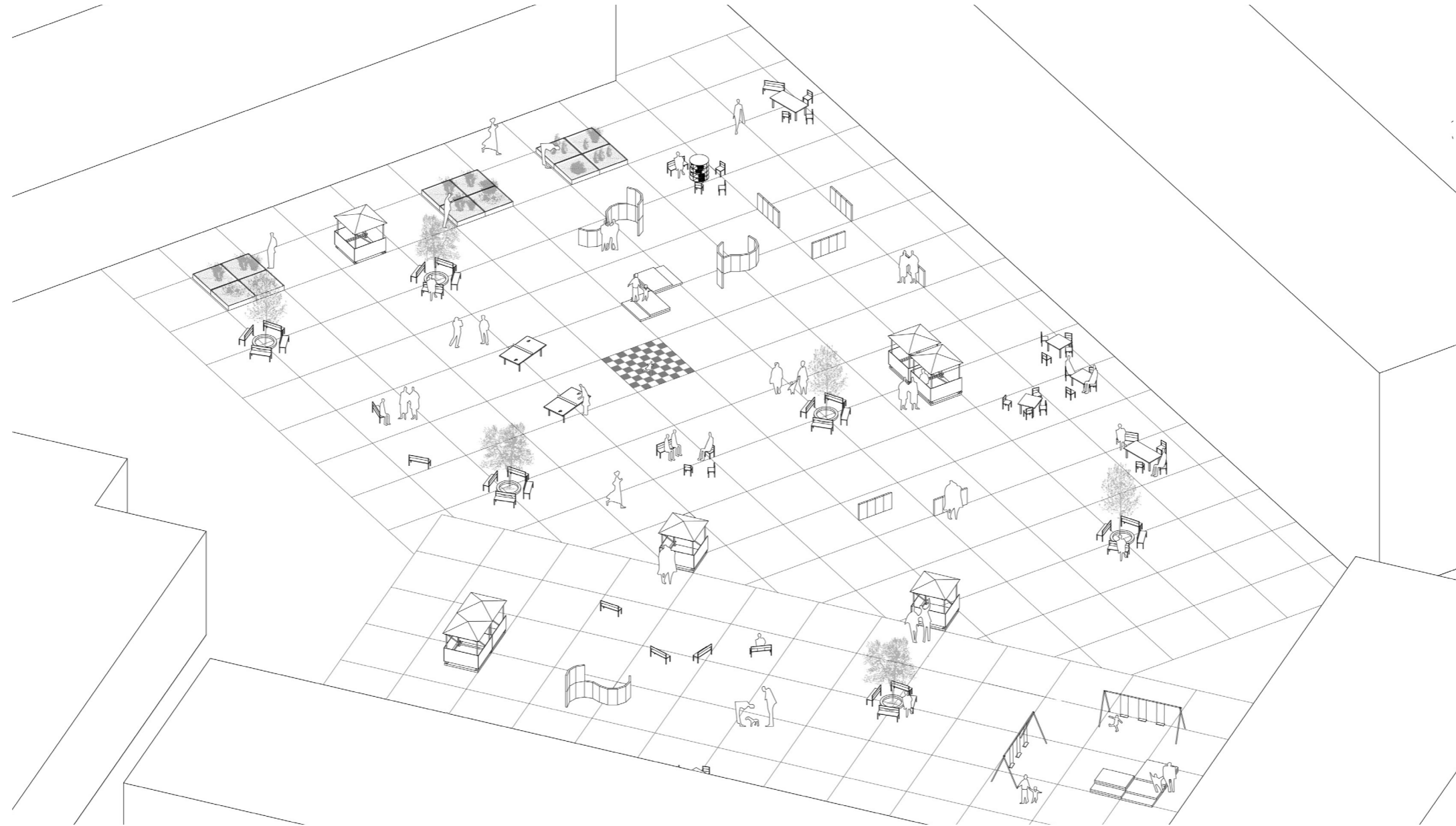
Build



Replace

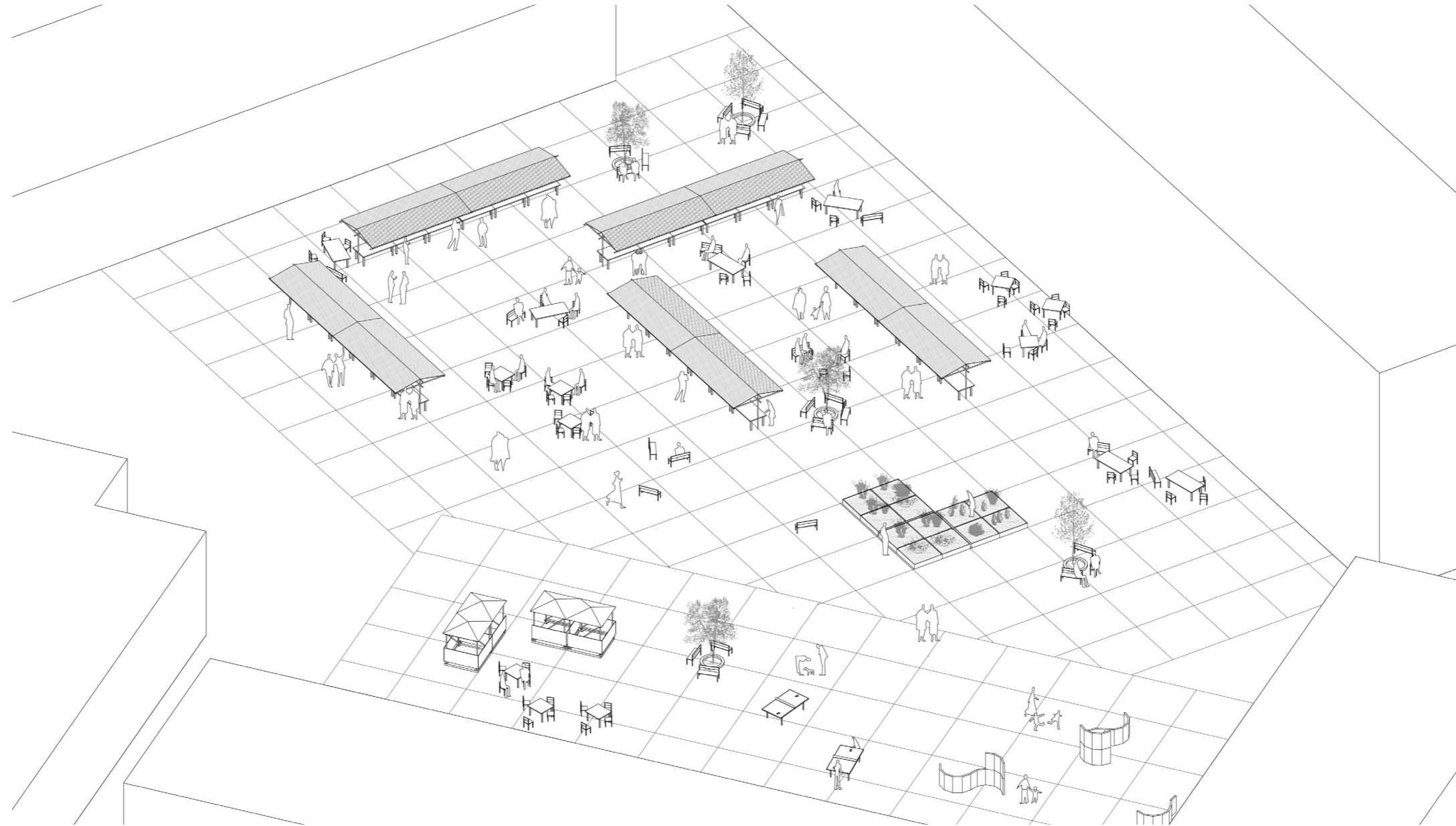
# Design Intentions

Dispersing the fundamental social devices



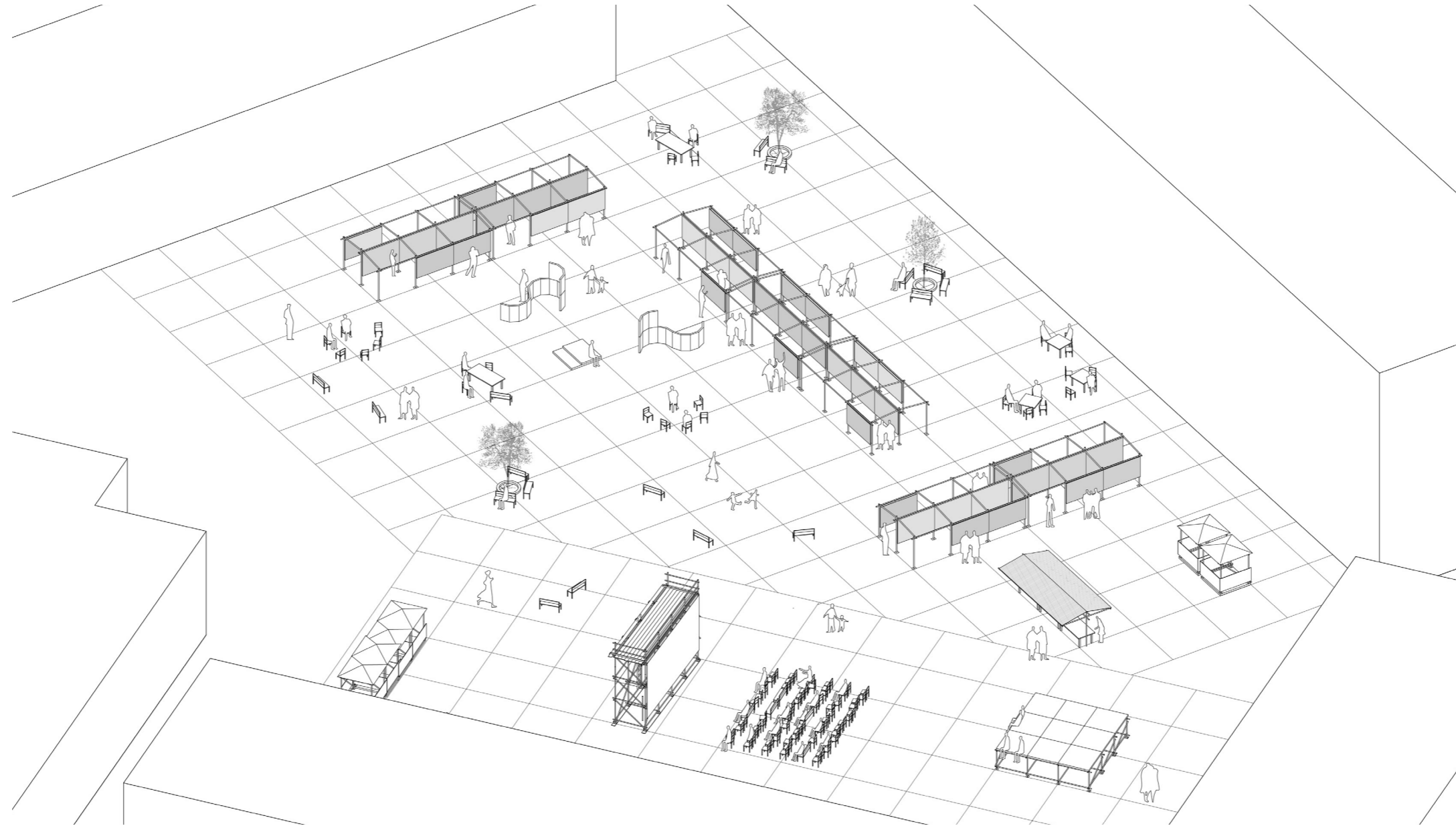
# Design Intentions

A more fixed programme - Market



# Design Intentions

Exhibition / Festivity



## The square

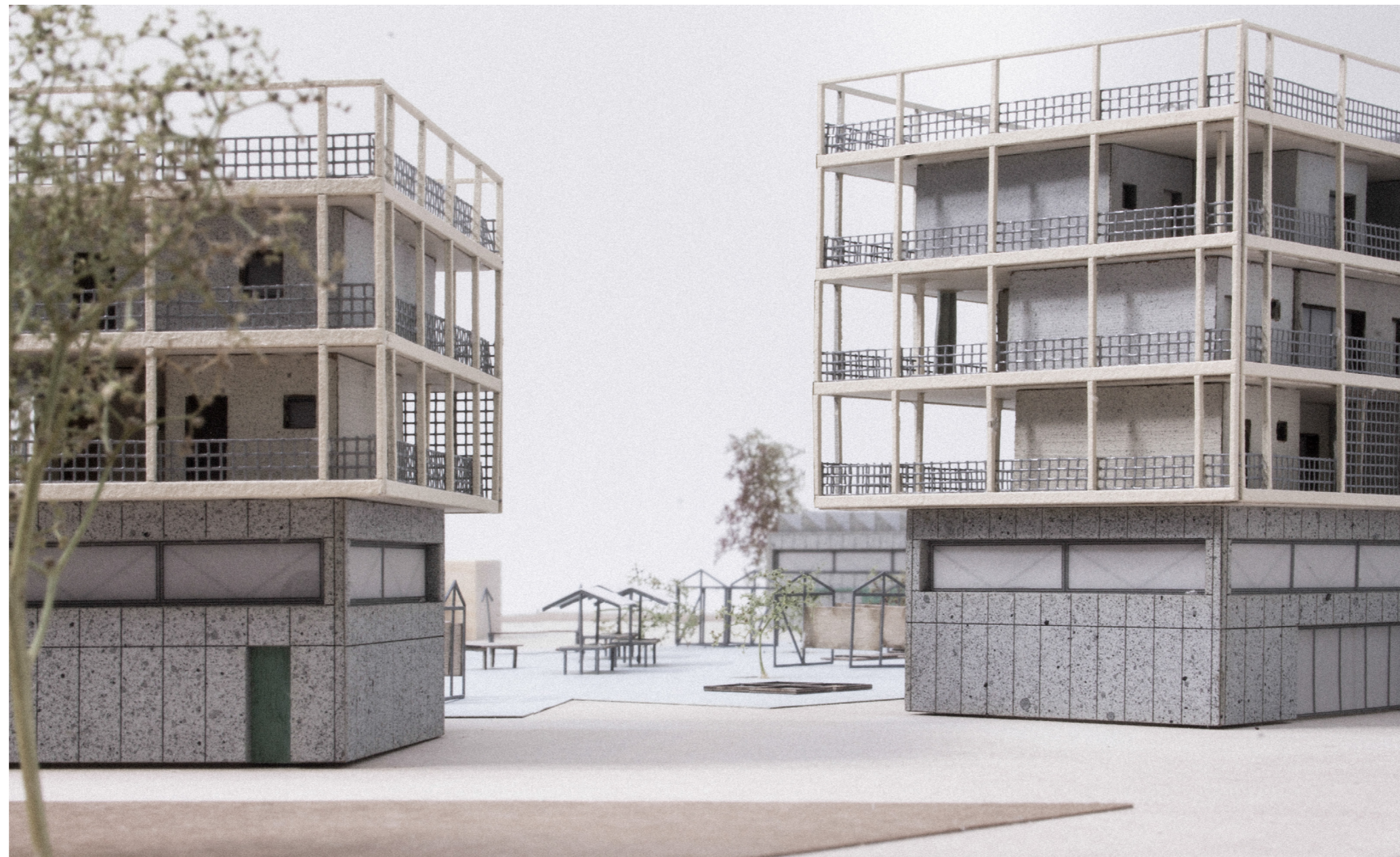
The projection of the square on the facade and vice versa



Entering the square



Connecting views



Enclosure/ encapsulating activities

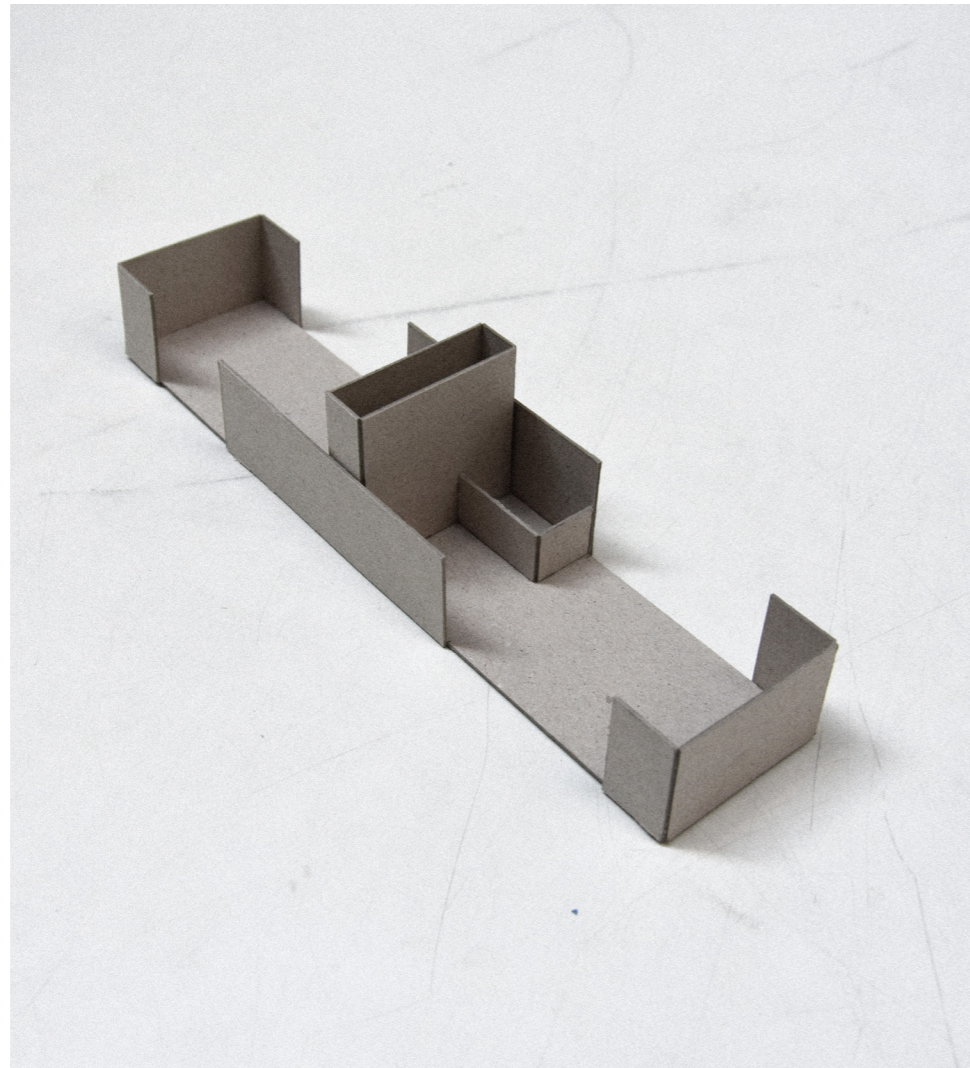


## Work

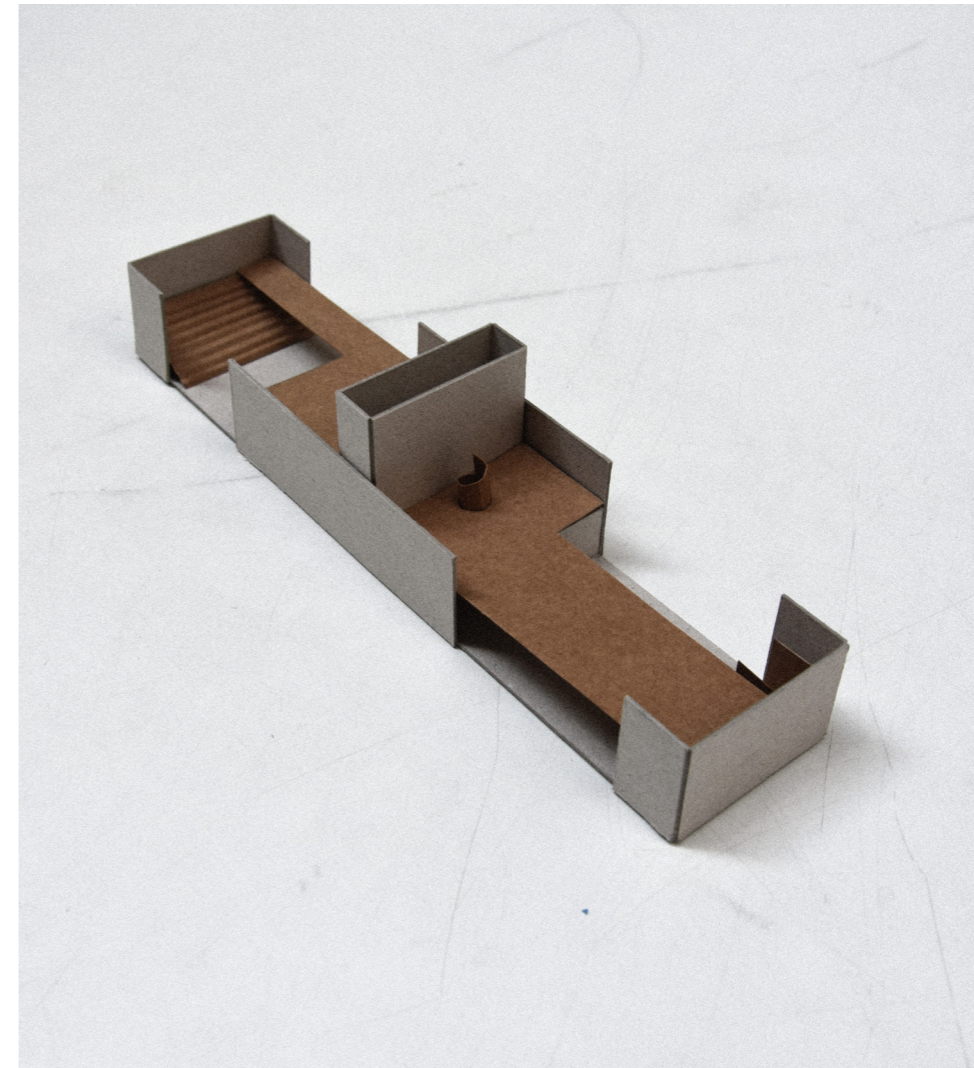
Designed by the architect using participatory principles.

## Design Intentions

Minimum level of participation



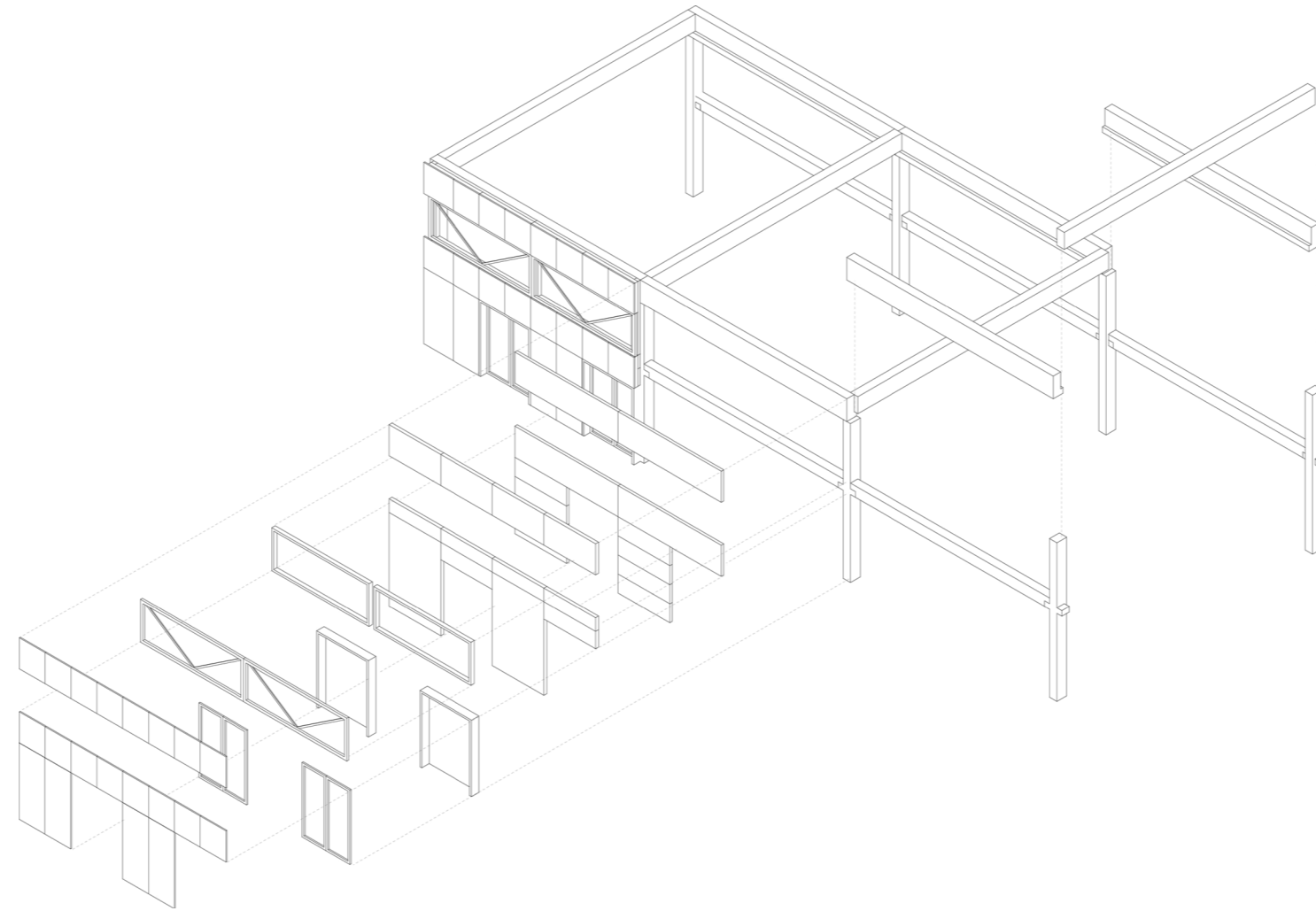
Provided Envelope



Lightweight flexible infill

## Design Intentions

Assemble to disassemble  
Concrete plinth as a substantial element for the formation of the community.

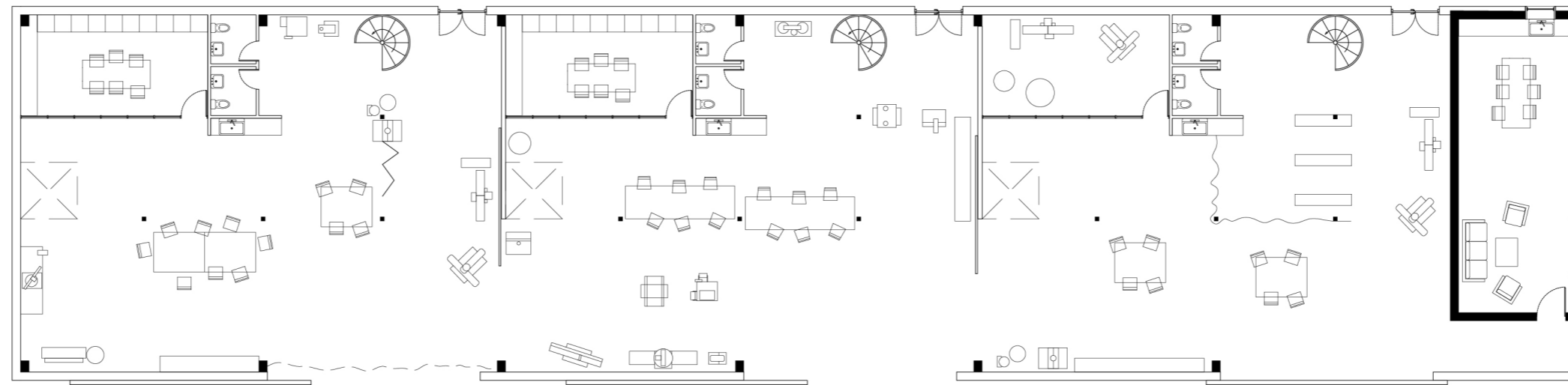
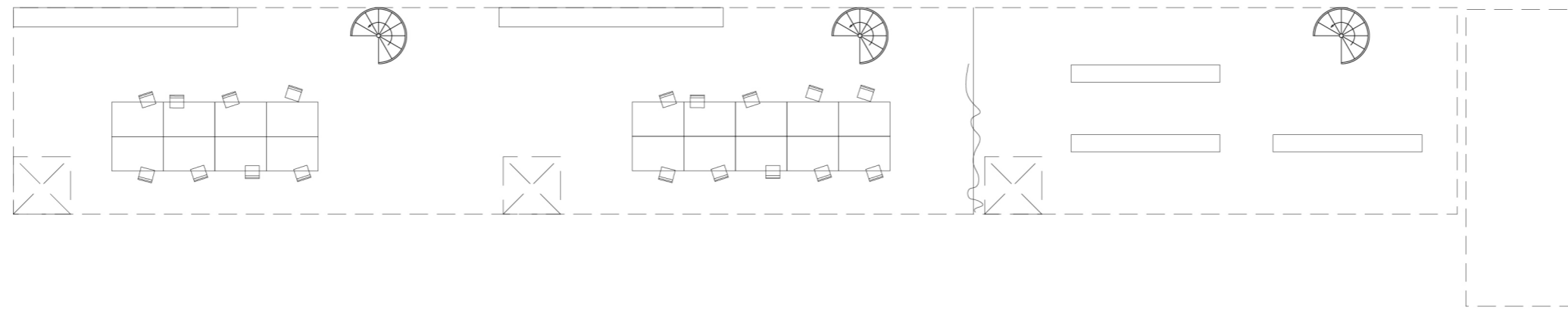


# Design Intentions

The projection of the inside to the outside

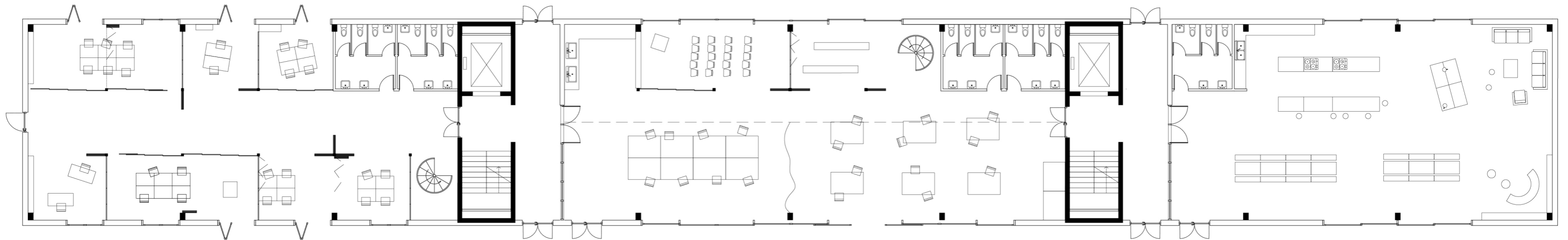
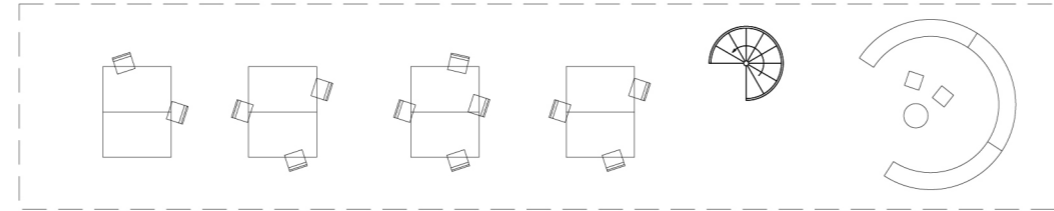
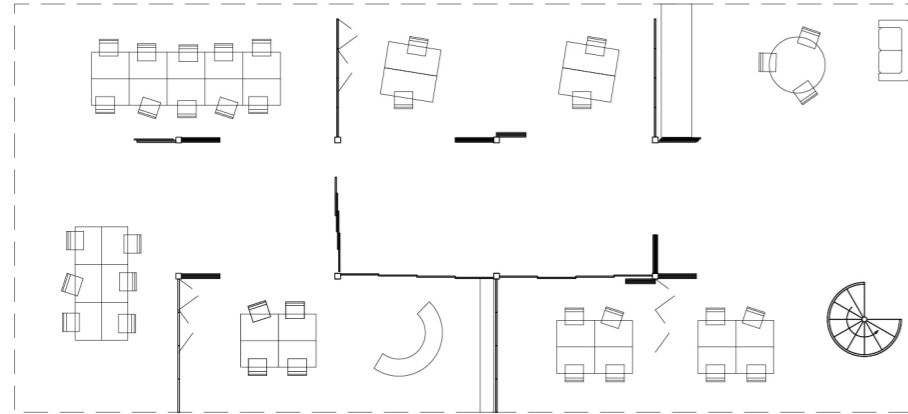


# Workshop



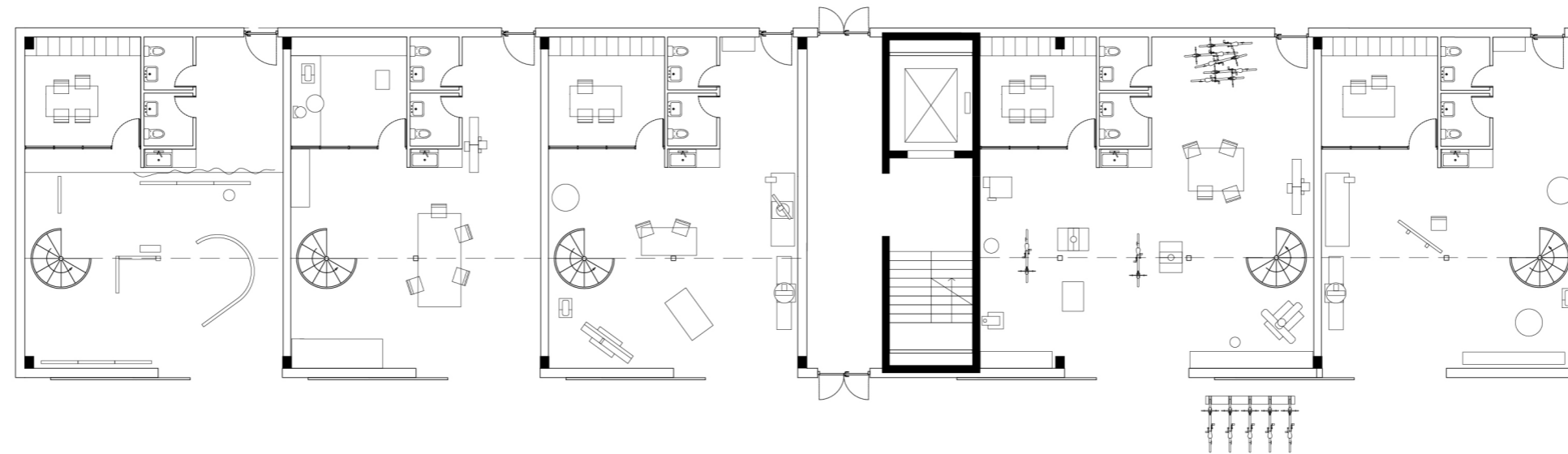
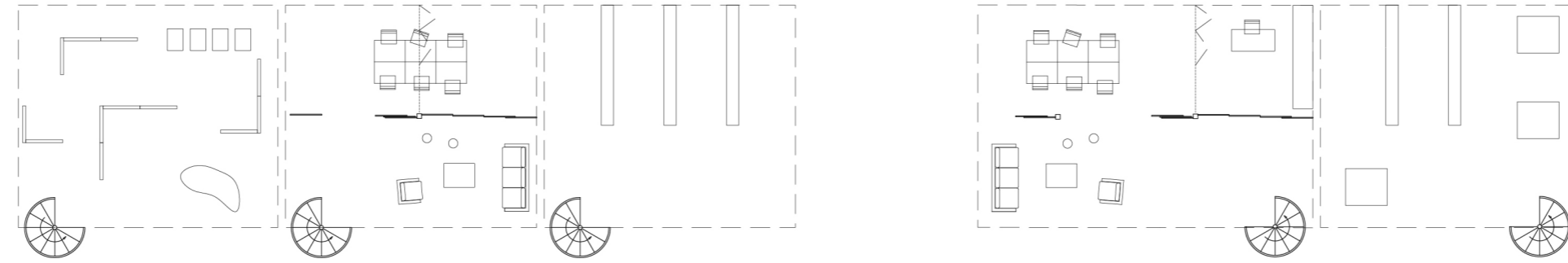
Metal, wood and communal workshop  
Providing the know how and the hardware

# Community Lab



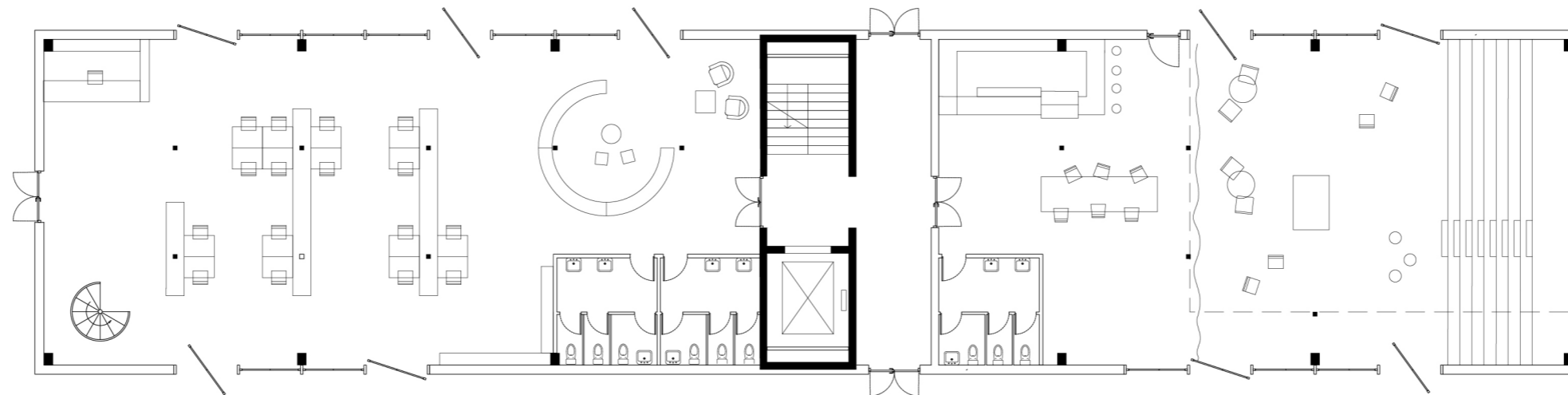
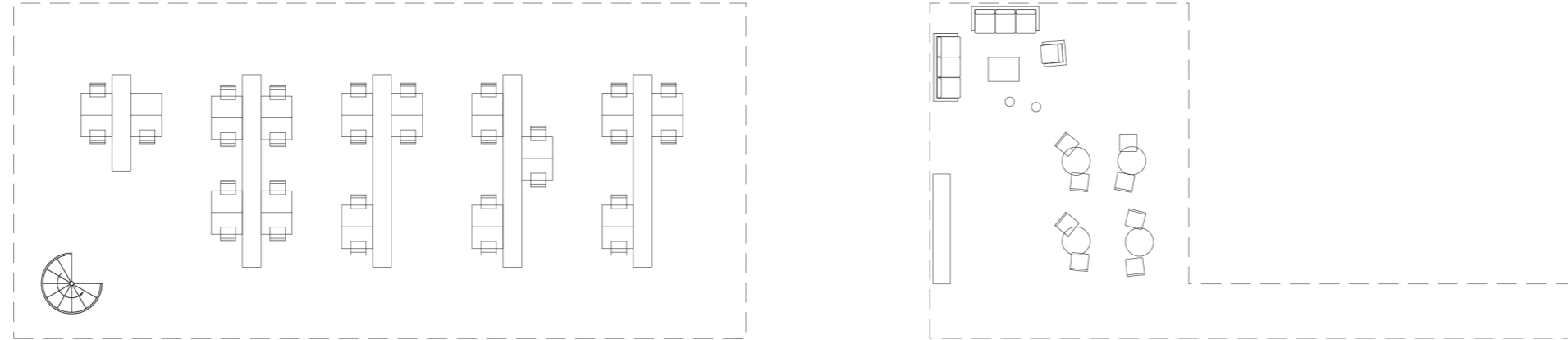
Offices zone for young professionals and entrepreneurs  
Lightweight handcraft community workshop/ atelier  
Communal kitchen / dining room

# Flexible Workspaces / Ateliers



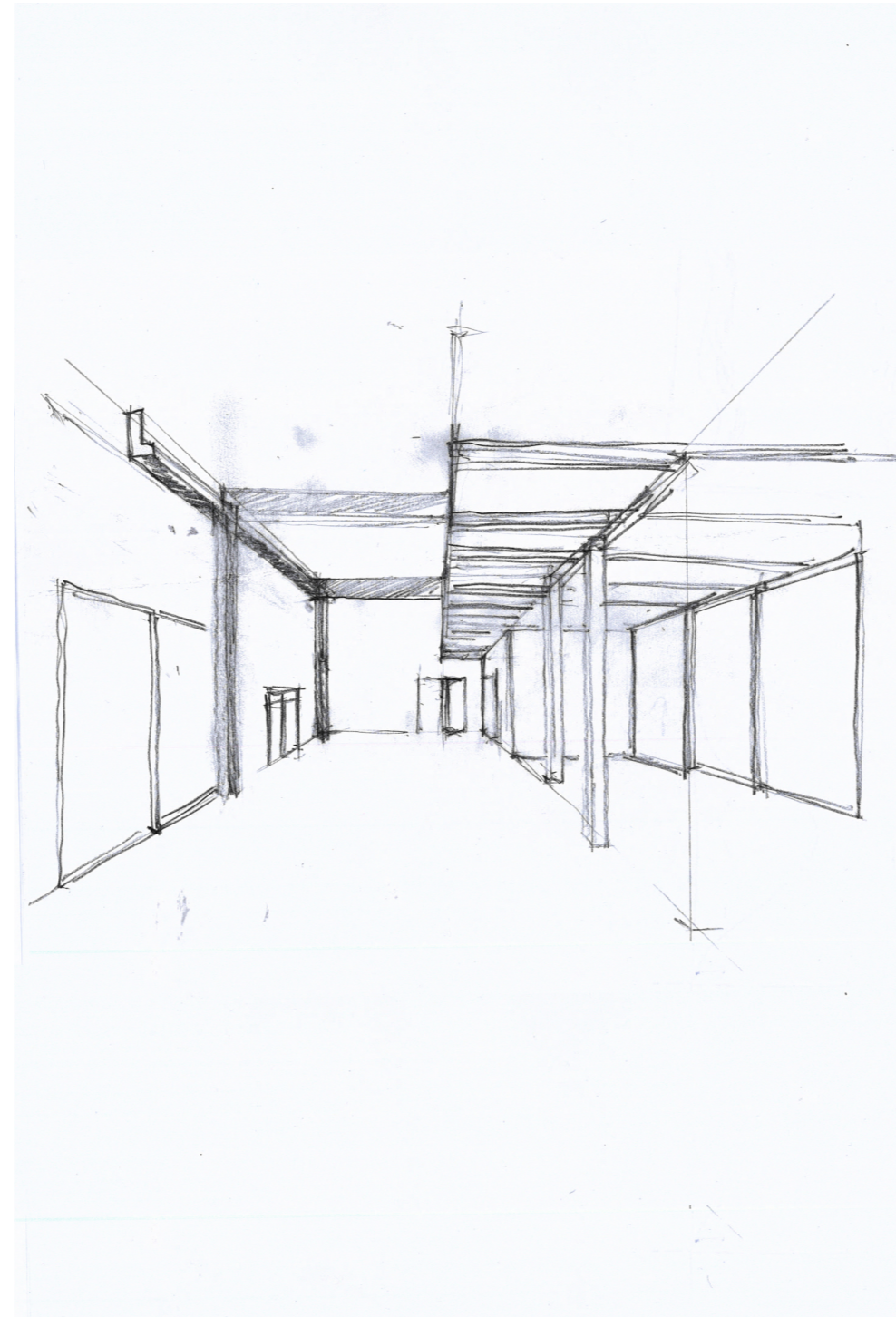
Individualized workspaces or ateliers for craftsmen and professionals

Education



Library / study space  
Cafe / auditorium

# Initial Perception



## Live

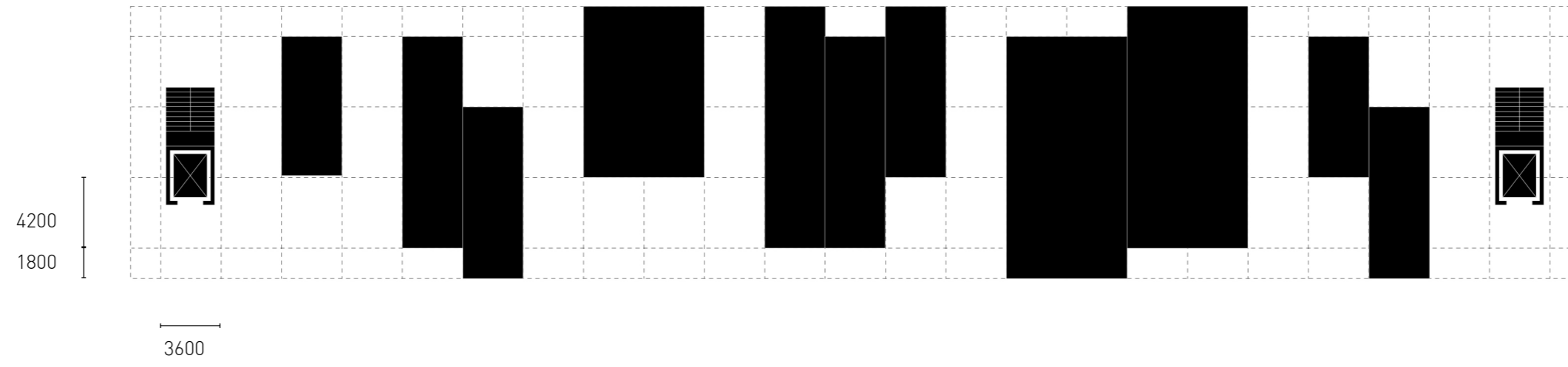
“Living together is only possible if there is always the possibility to be alone.”

Vittorio Aurelli, DOGMA



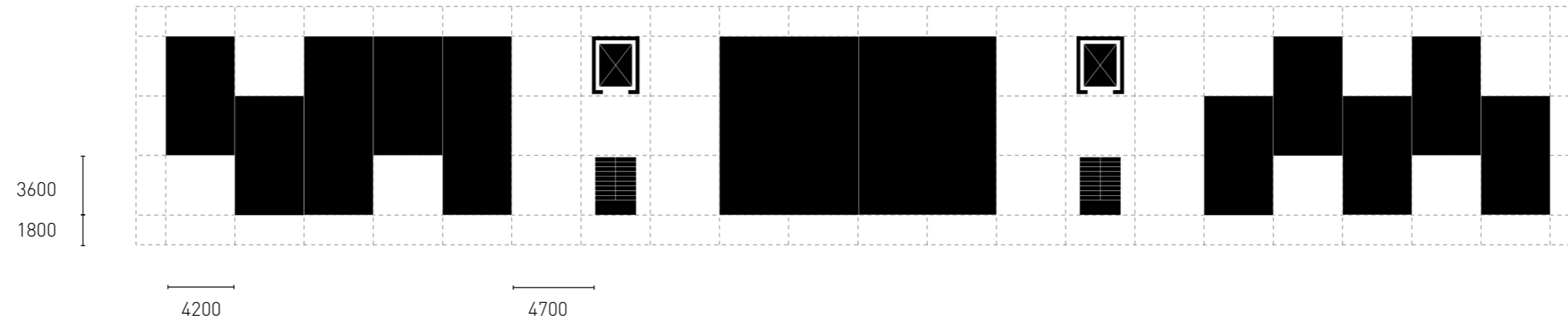
# Modular Investigation

A flexible grid



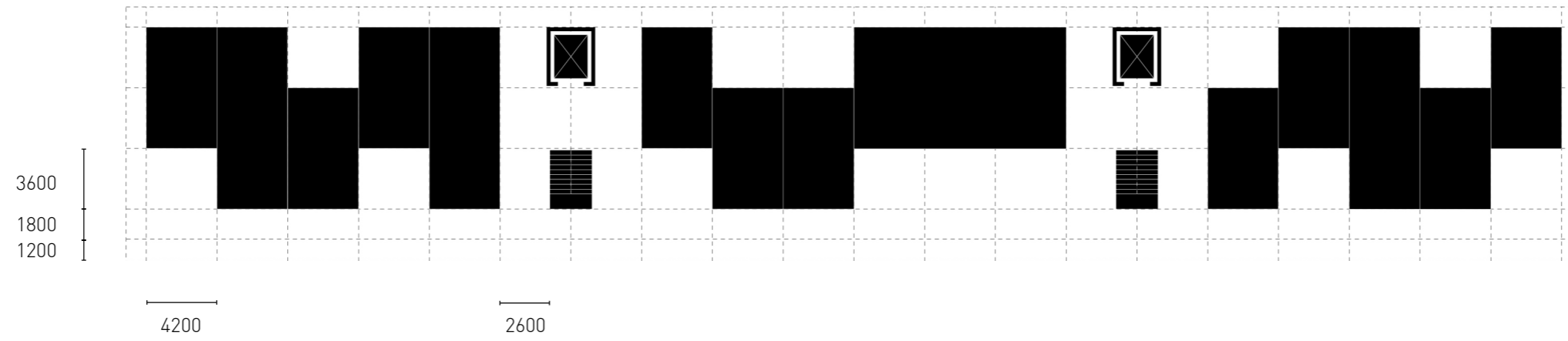
# Modular Investigation

A flexible grid



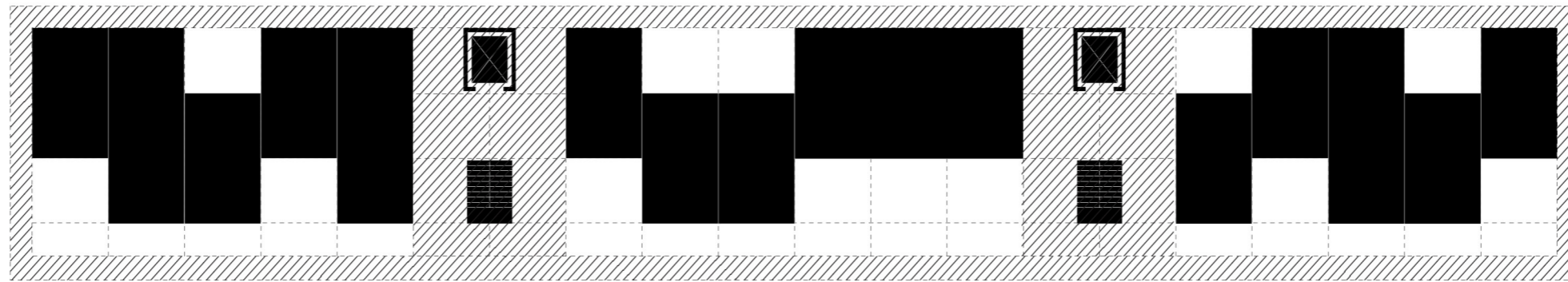
# Modular Investigation

A flexible grid



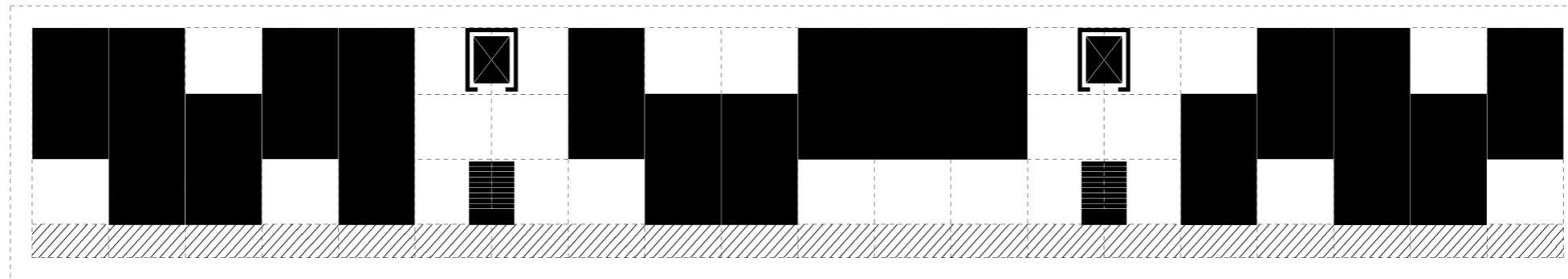
## Ordering the participation process 1

During the building process the circulation routes become substitutes for scaffolding therefore they always need to stay open



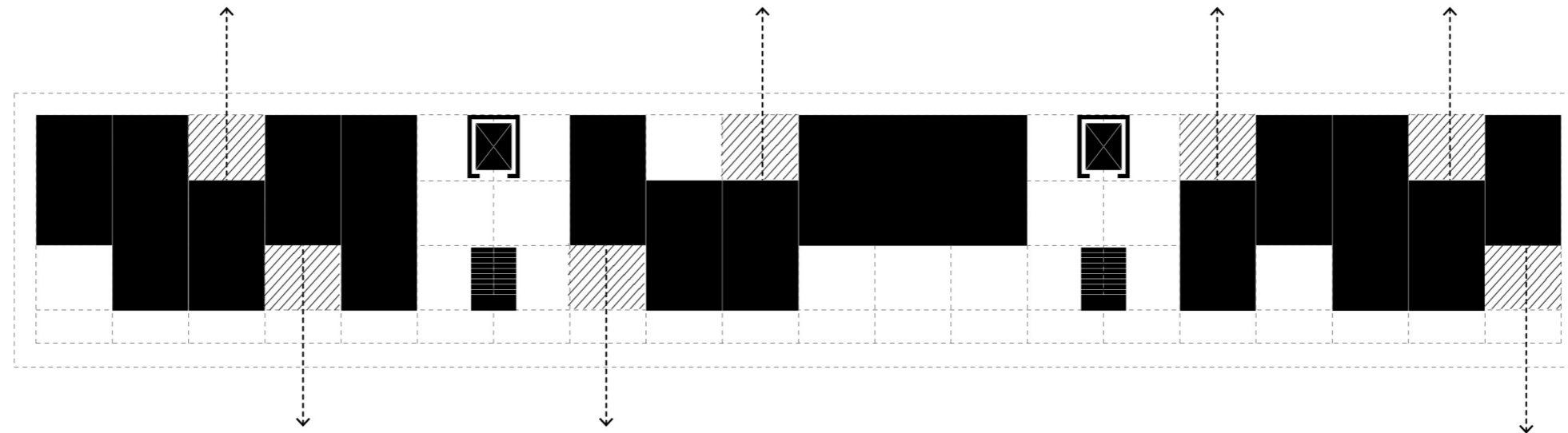
## Ordering the participation process 2

The buffer zone between the circulation and the live units  
facades as a semi-private exterior extension of the live.

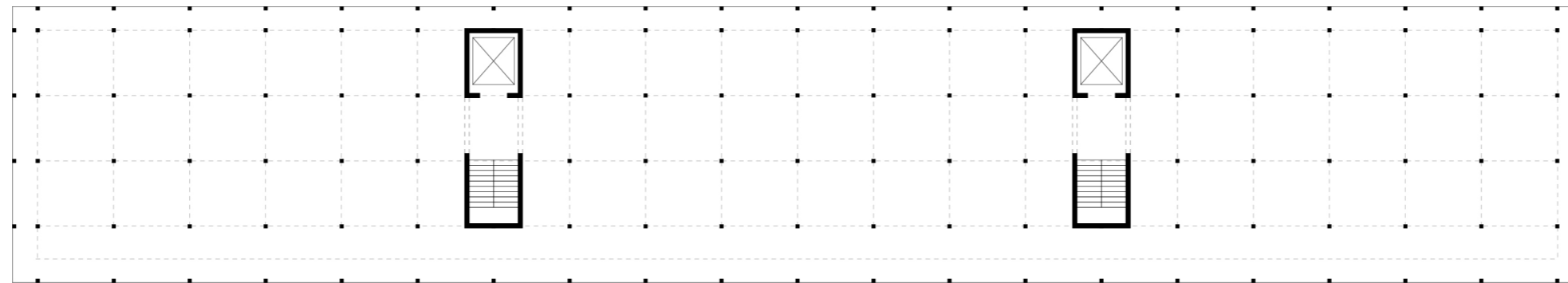


### Ordering the participation process 3

Potential growth only takes place outwards



# Modular Investigation

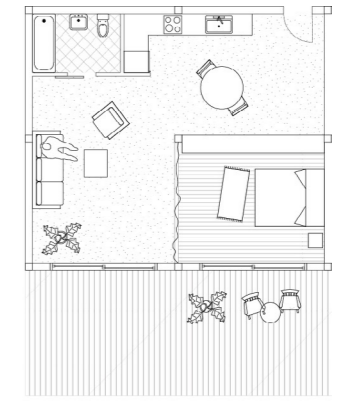
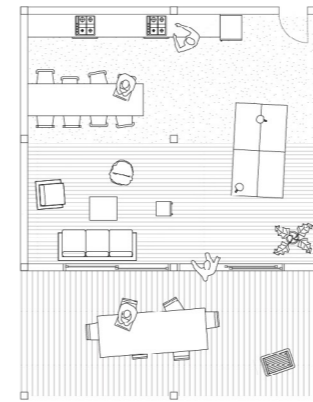
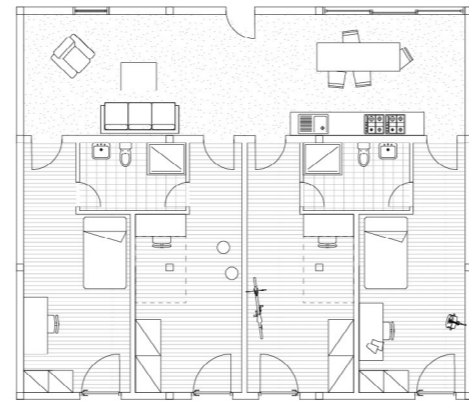
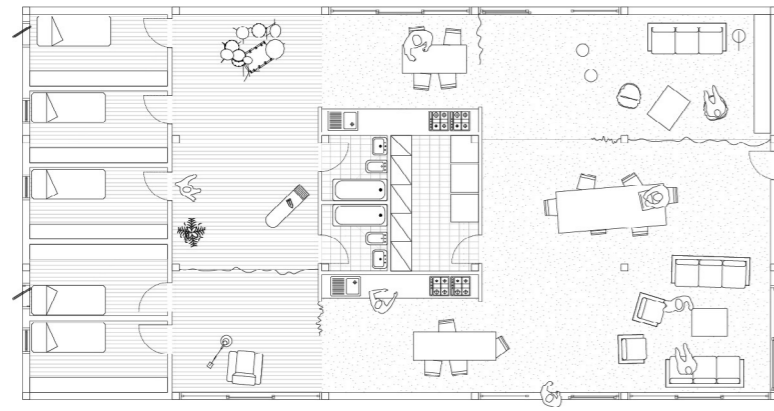


The fundamental 3

slab  
columns  
circulation

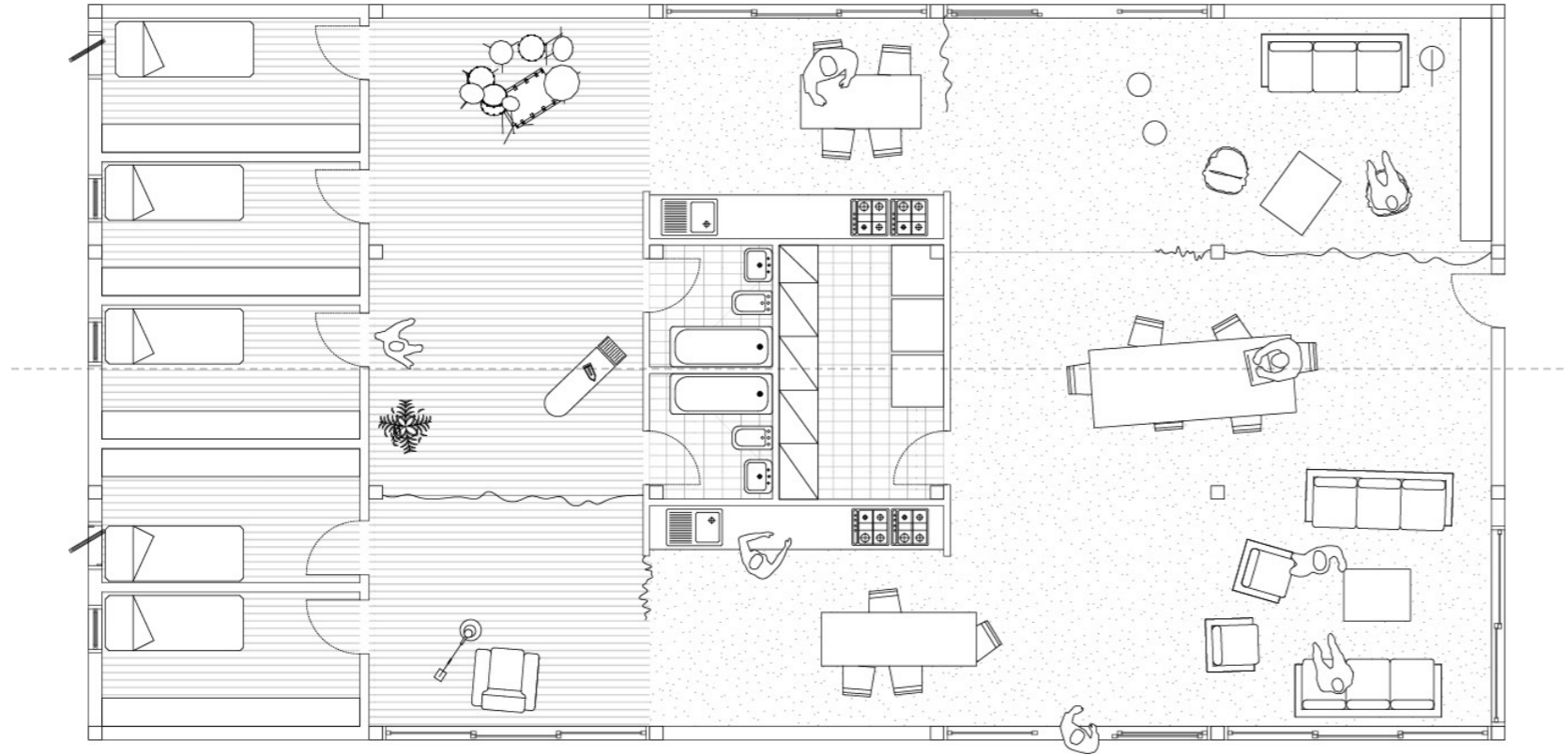
# Typological Investigation

Unpredictable layouts as products of participation



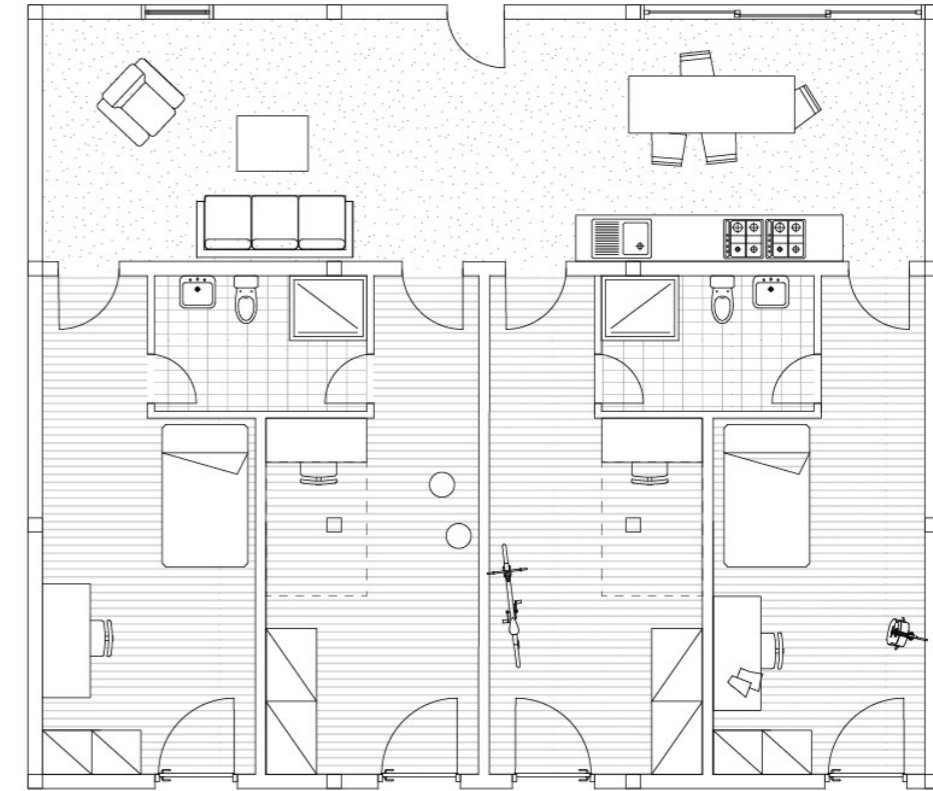
## Typological Investigation.

1. Short stay / Temporary housing  
Distributing minimal living / Common spaces



**Type A.**

Common > Individual  
220sqm



**Type B.**

Individual > Common  
130sqm

# Typological Investigation.

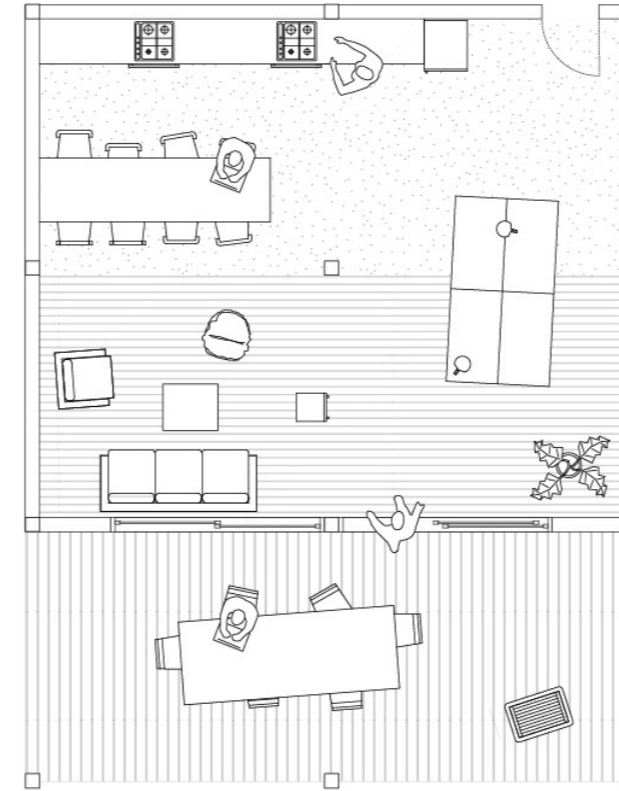
## 2. Room Ensuite

Minimal living / Necessity for a common spaces



**Room Ensuite**

28sqm + Outside

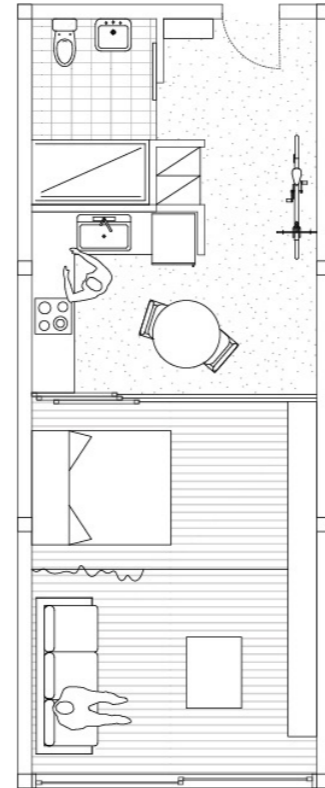


**Common Kitchen**

56 sqm

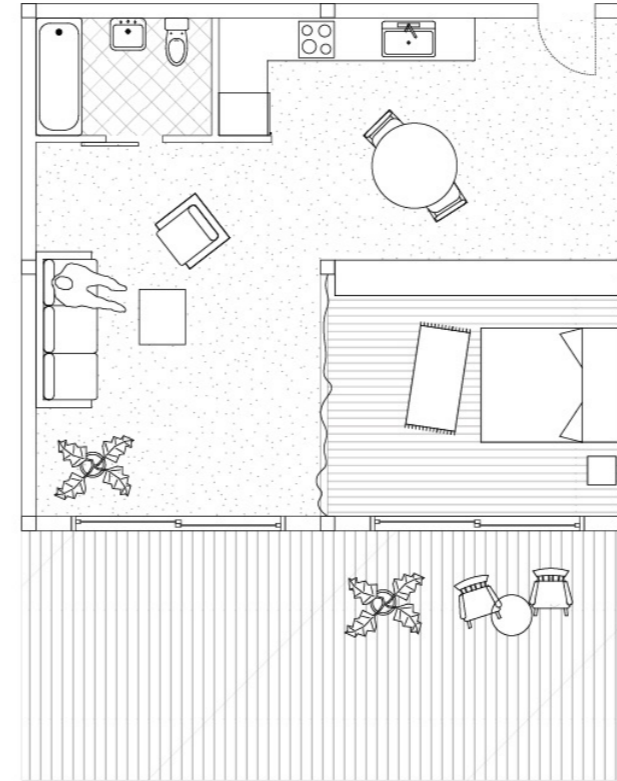
## Typological Investigation.

### 3. Autonomous studios



**Type A.**

42sqm

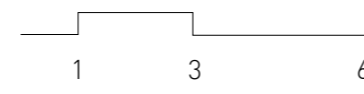
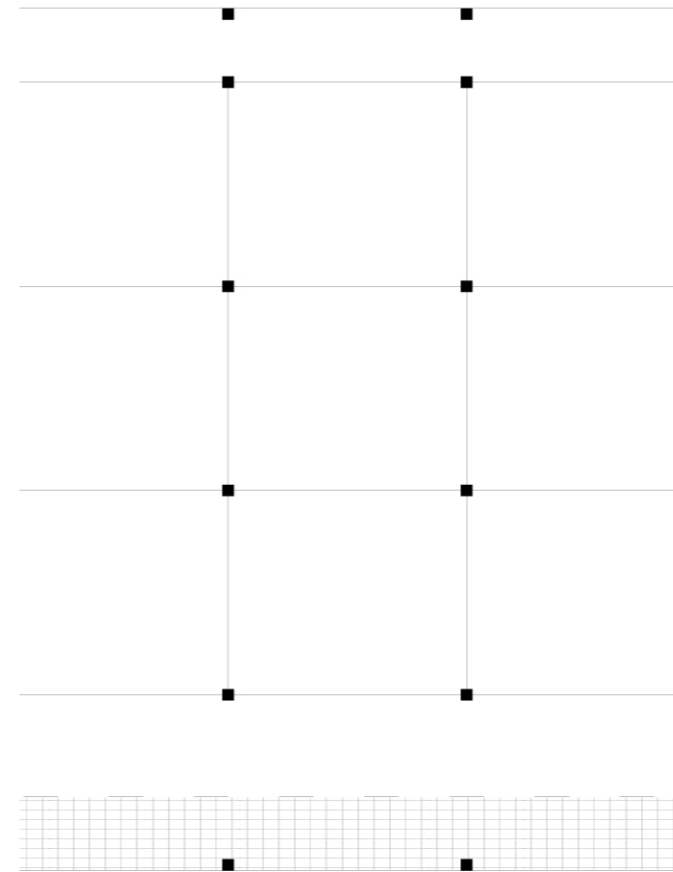


**Type B.**

57sqm + Outside

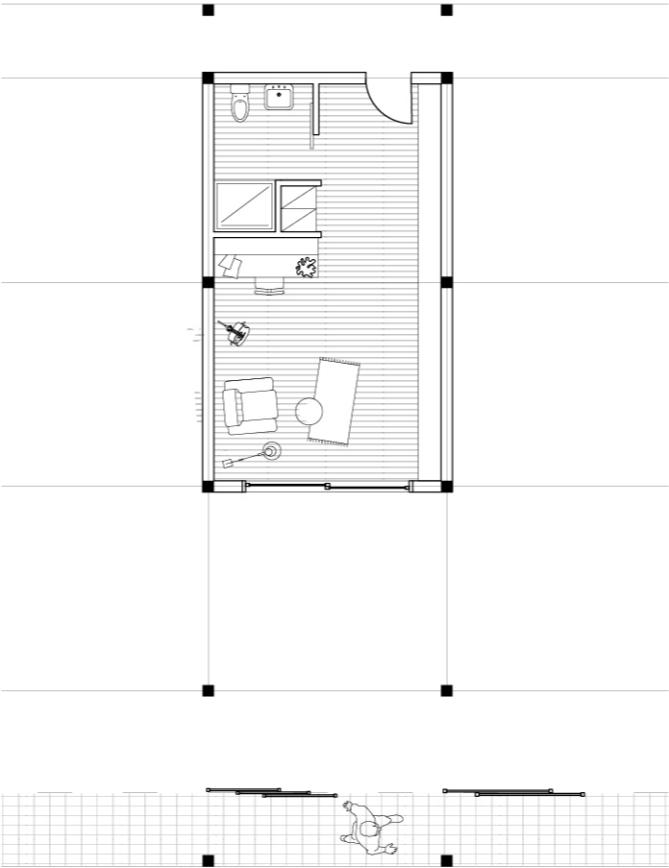
# Modular Growth

The grid



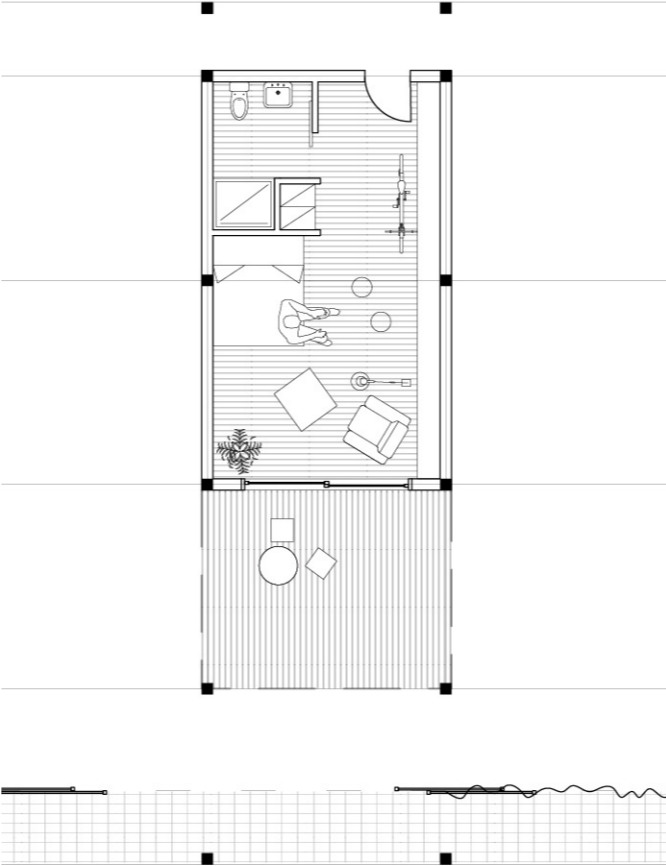
# Modular Growth

A flexible grid



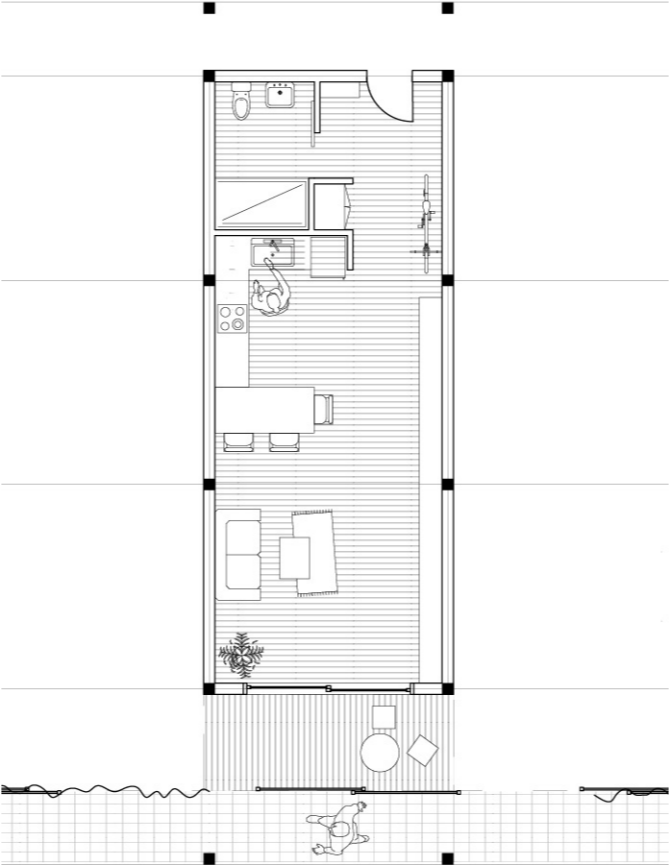
# Modular Growth

The grid



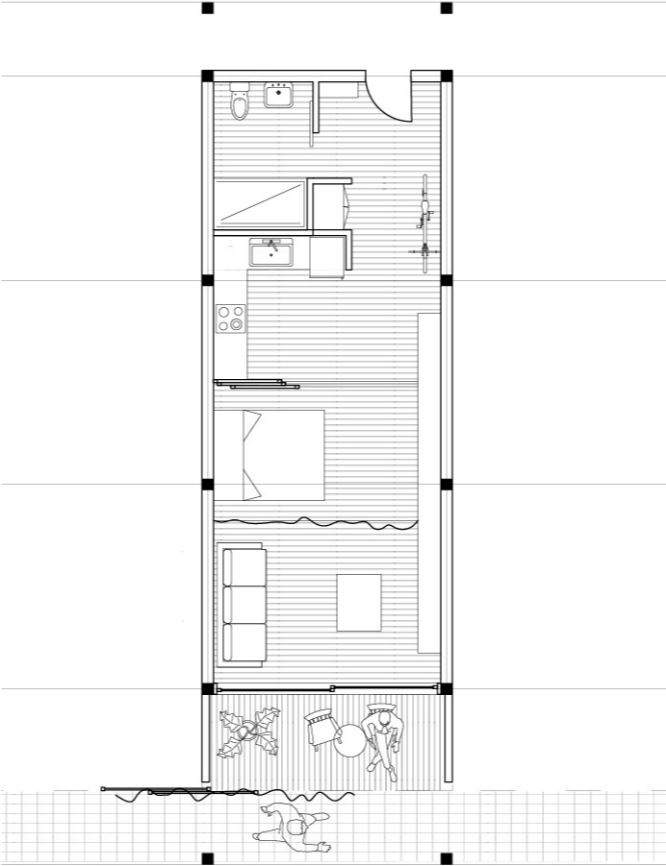
# Modular Growth

A flexible grid

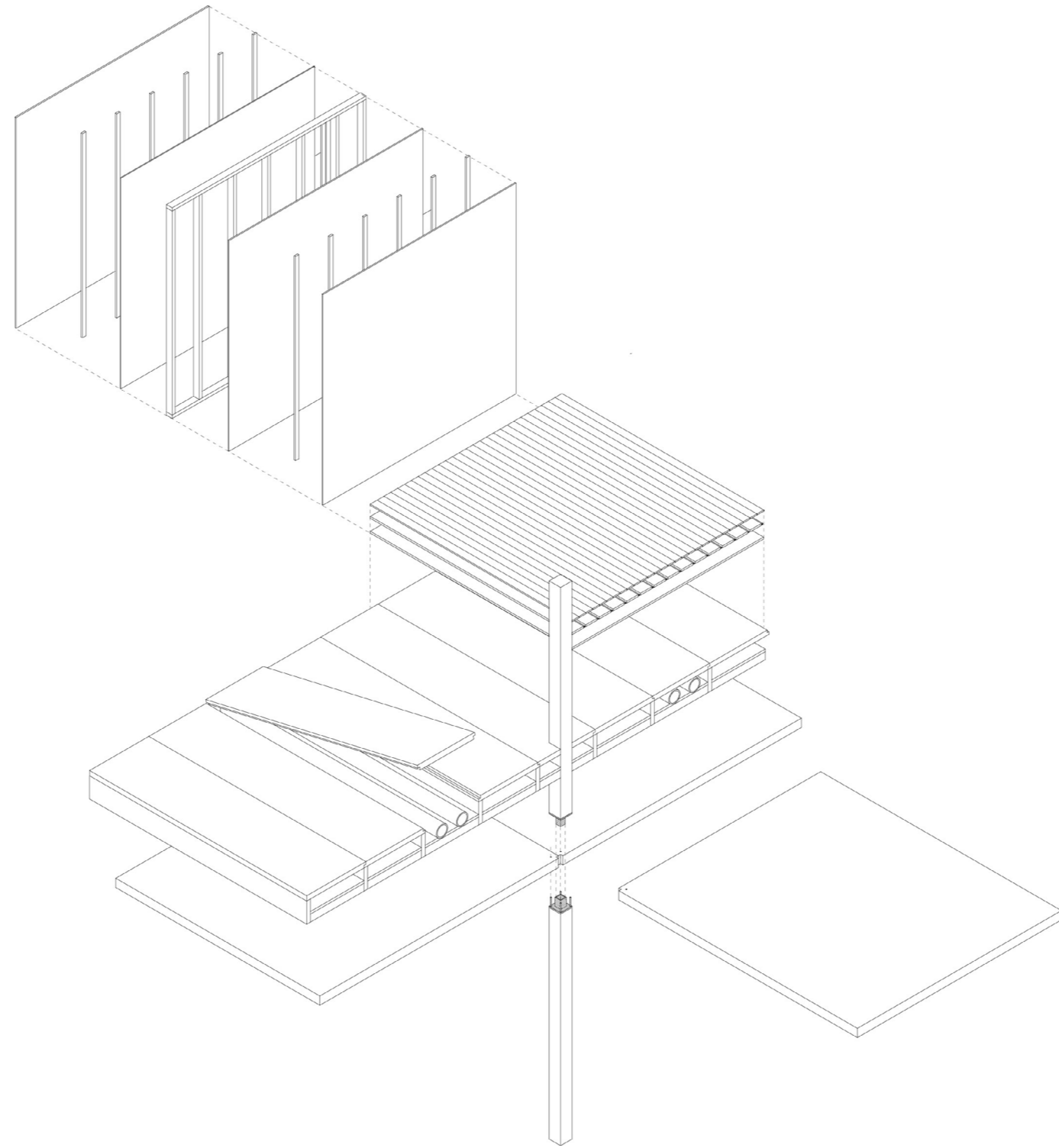


# Modular Growth

The grid



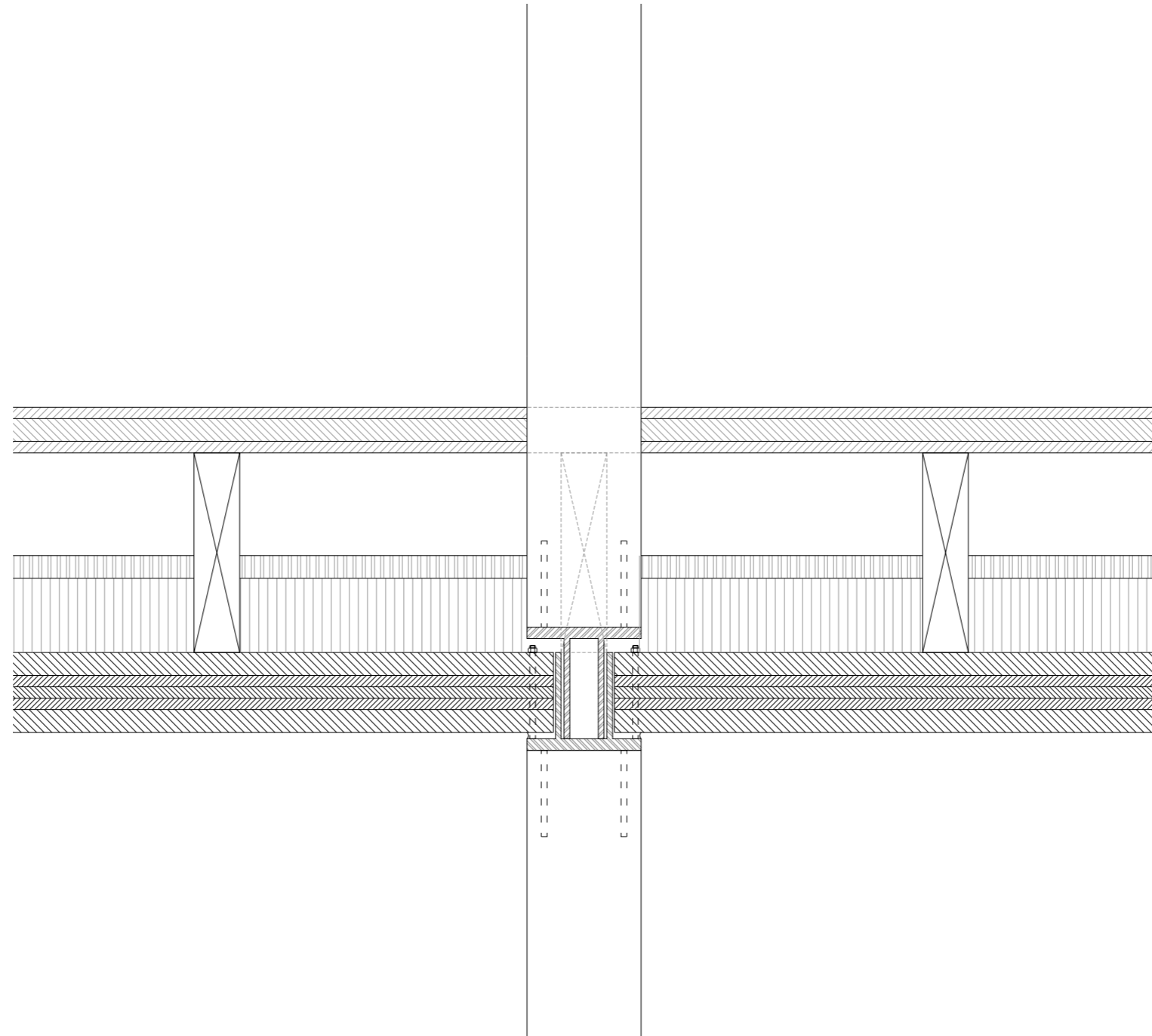
## The slab



Steel plug-in connectors ensure vertical load transmission from support to support and hold the ceiling slabs in place.

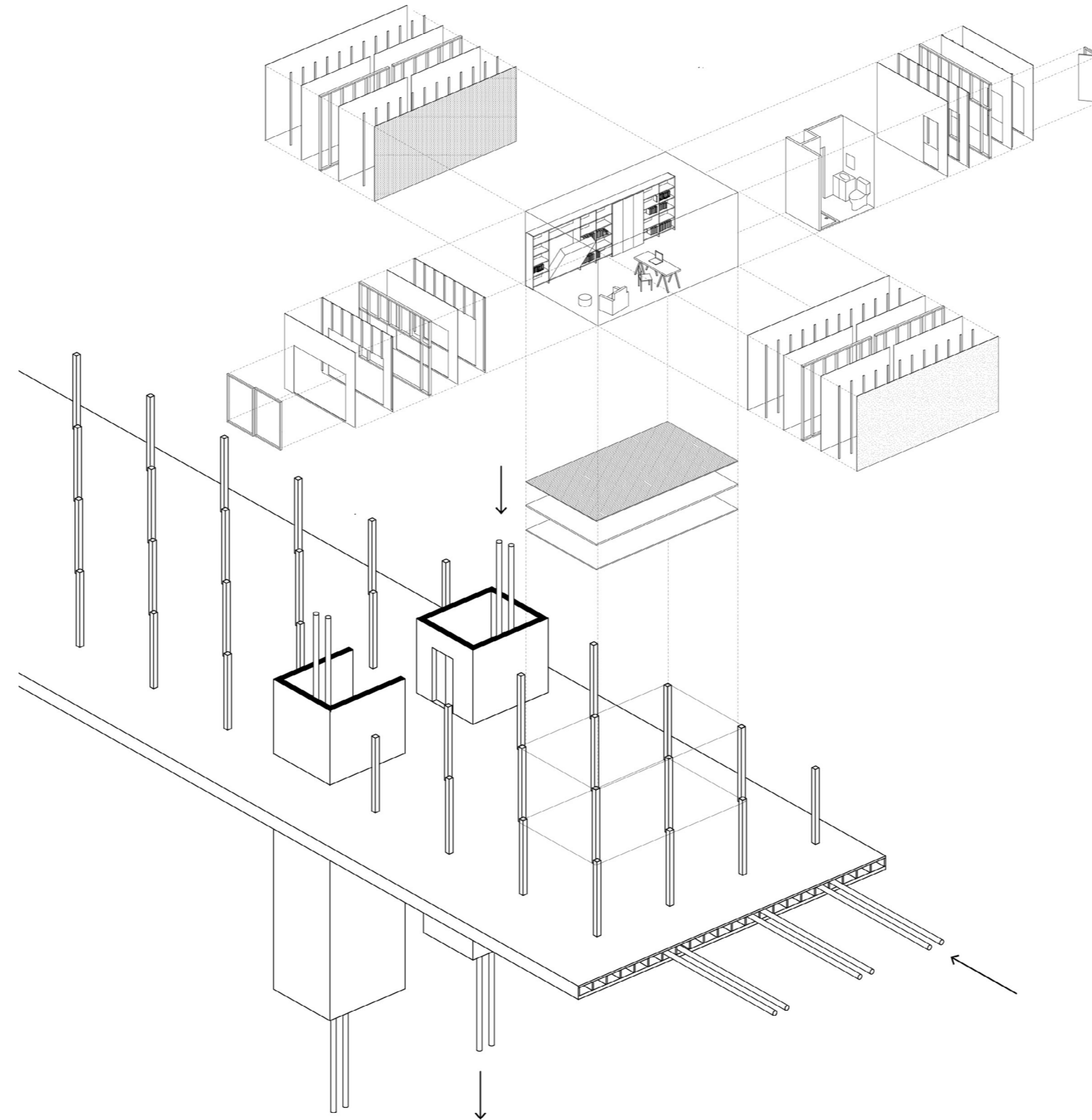
# Key timber joint detail

Column and floor intersection and encapsulation



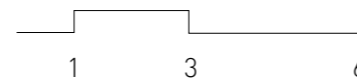
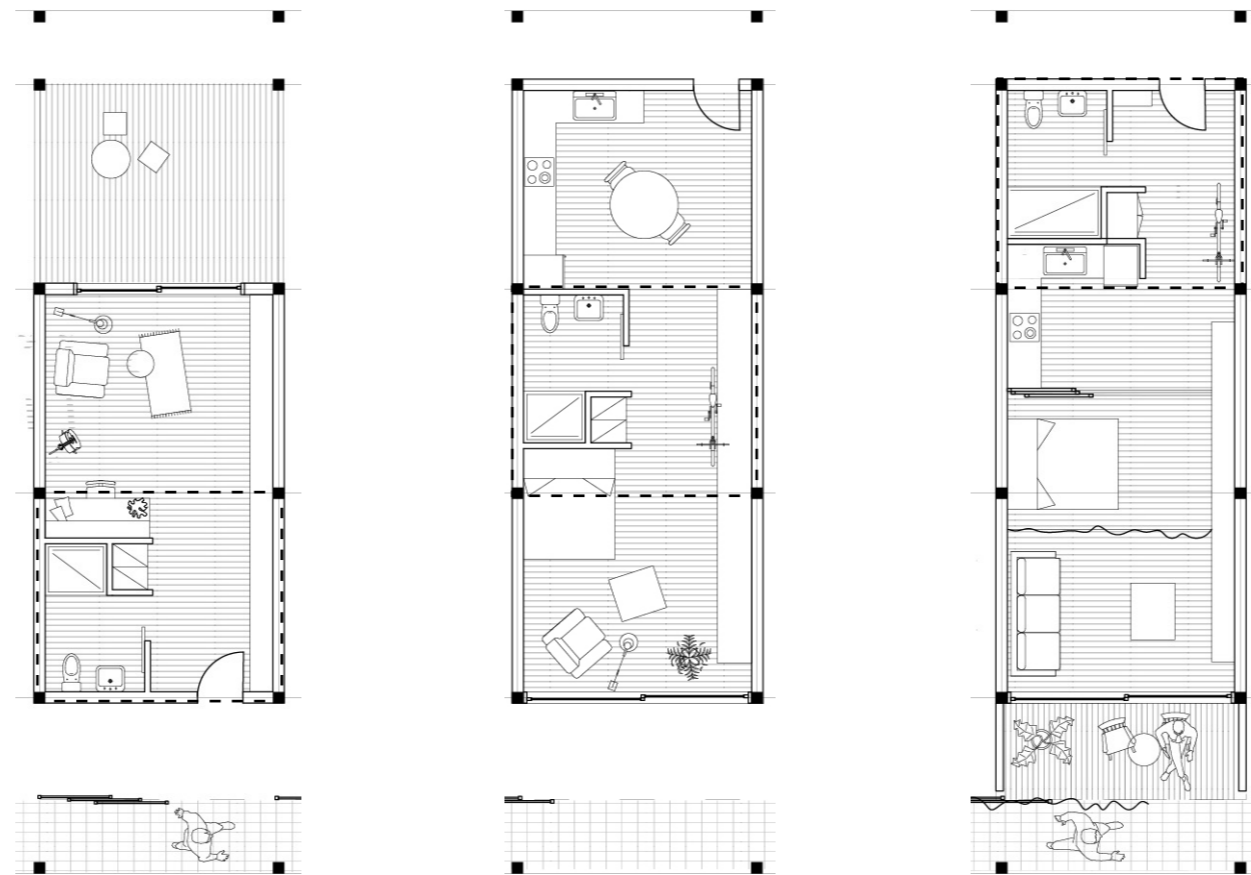
# Provided / Infill

Traditional timber frame construction as a flexible construction method.



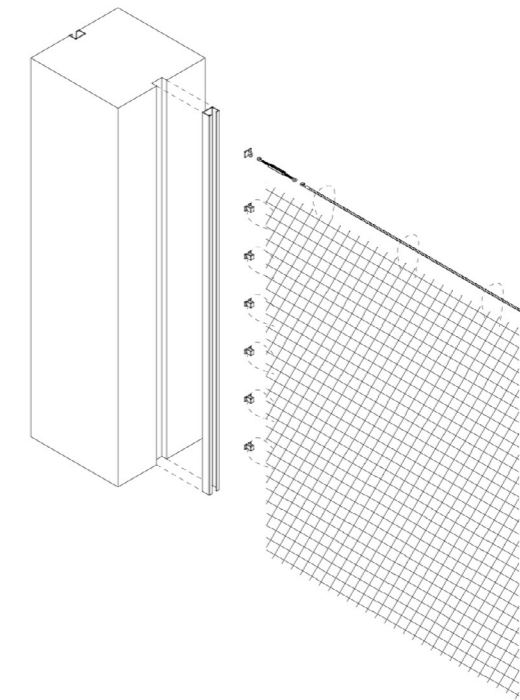
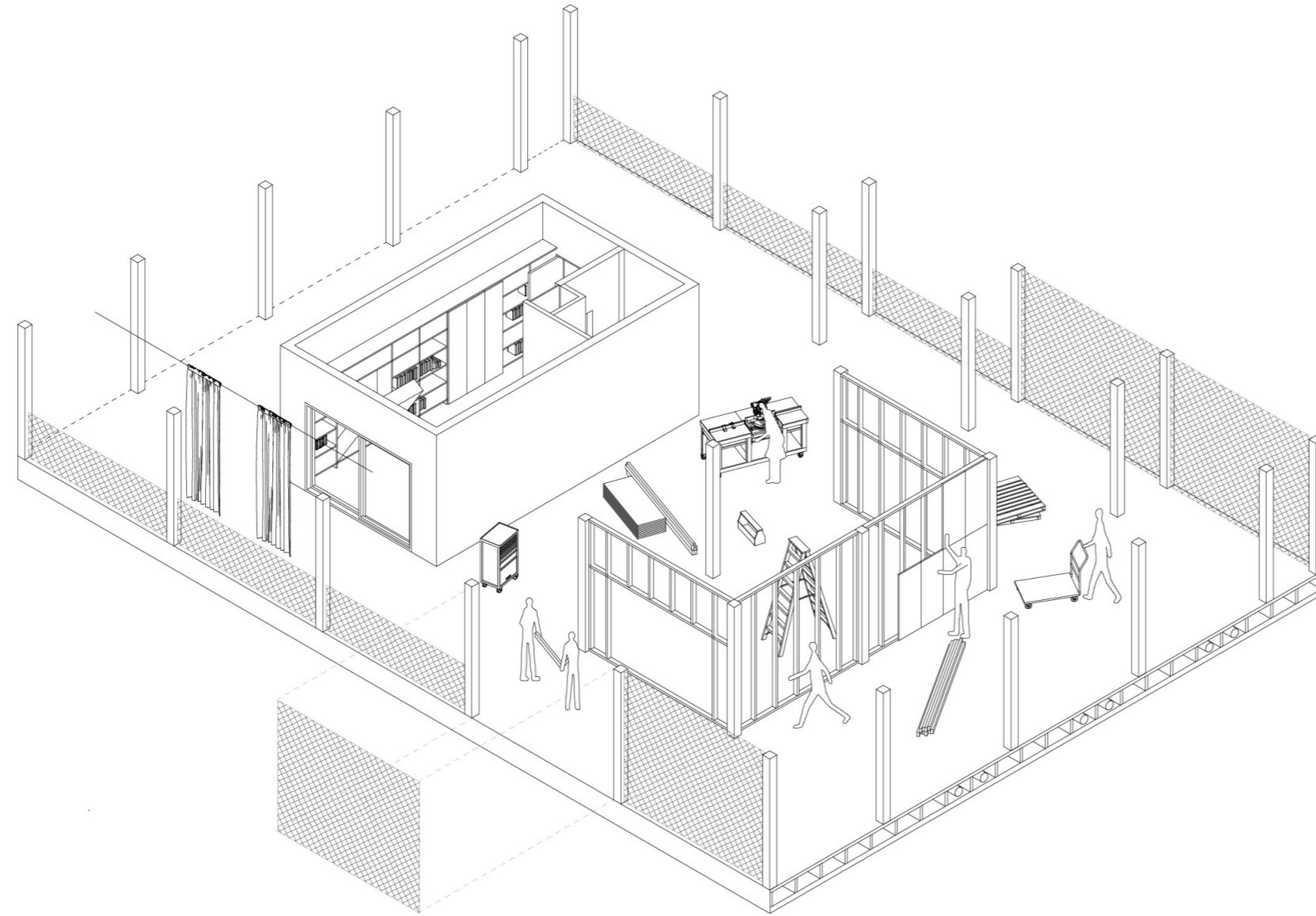
# Modular Flexibility

The position of the services anywhere within the grid



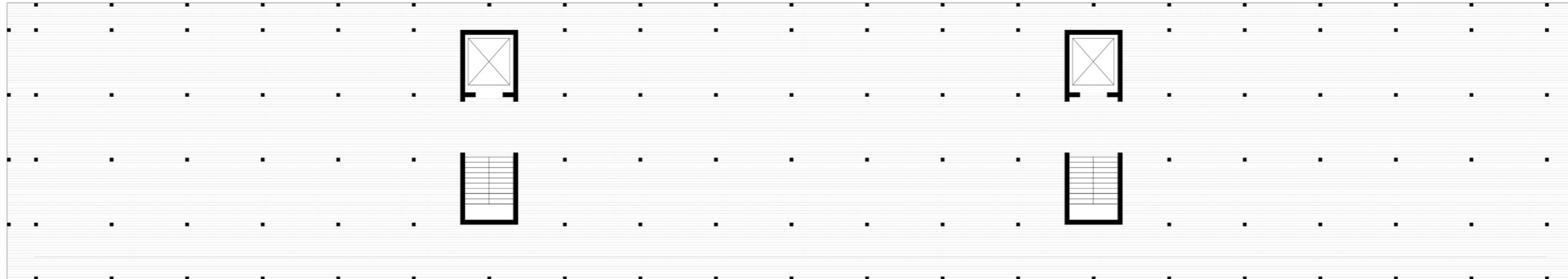
# The process of participation

The building process as a moment of negotiation, compromise and social interaction

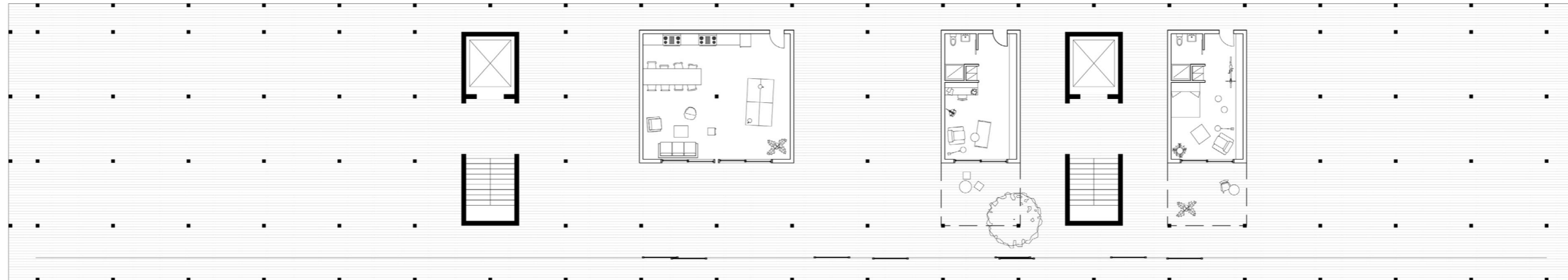


# Overall Growth

The beginning



# Overall Growth



# Overall Growth

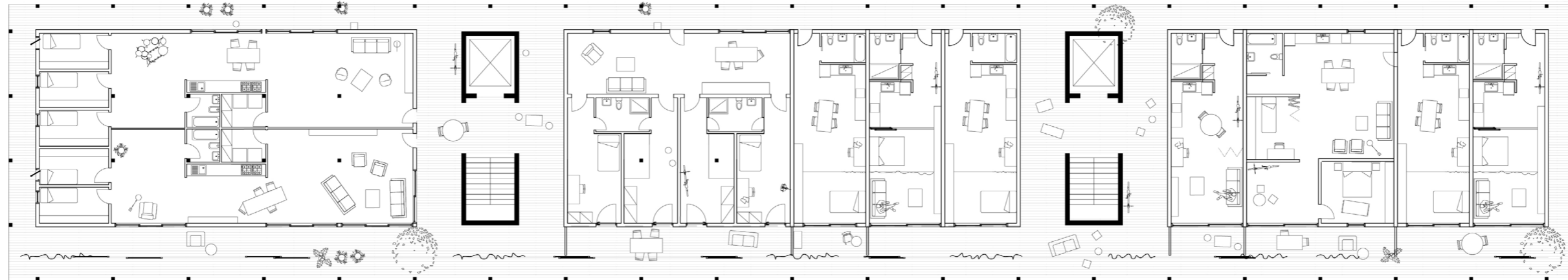


# Overall Growth



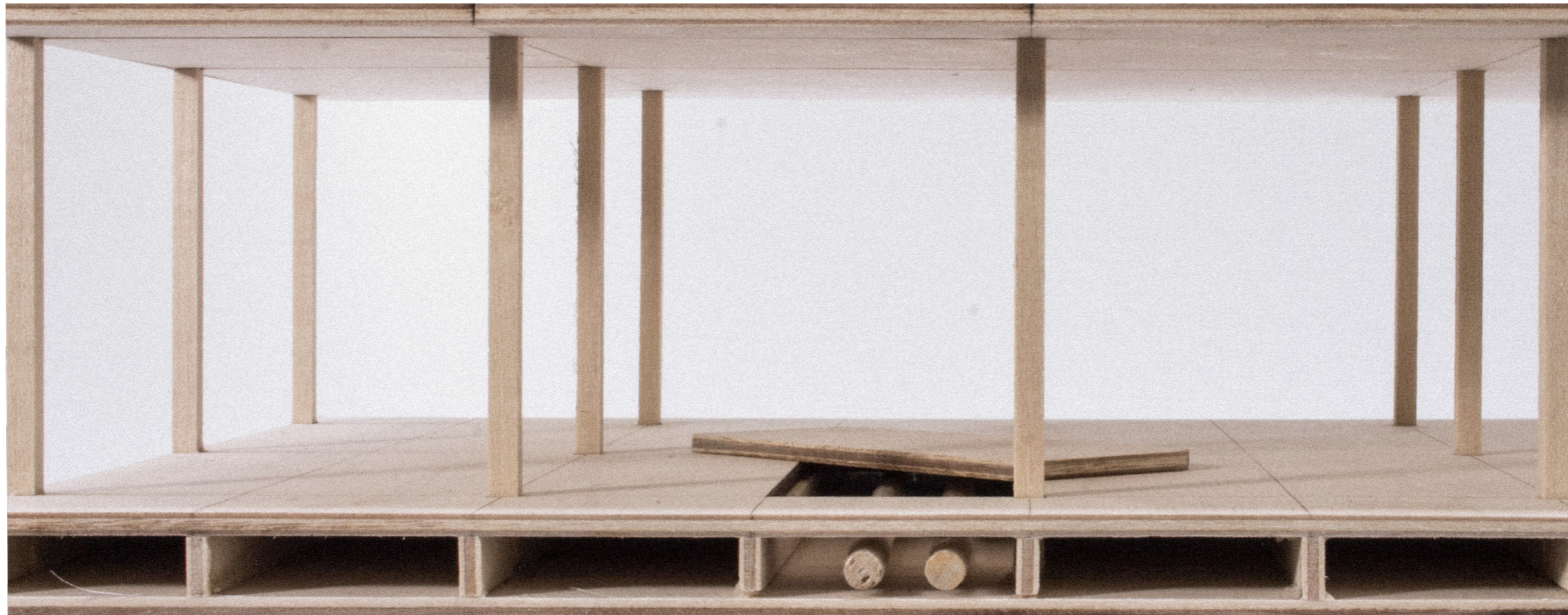
# Overall Growth

Maximum capacity



## Participation process

Stage 1 // The provided ordering structure



## Participation process

Stage 2 // The building process



## Participation process

Stage 3 // The live unit



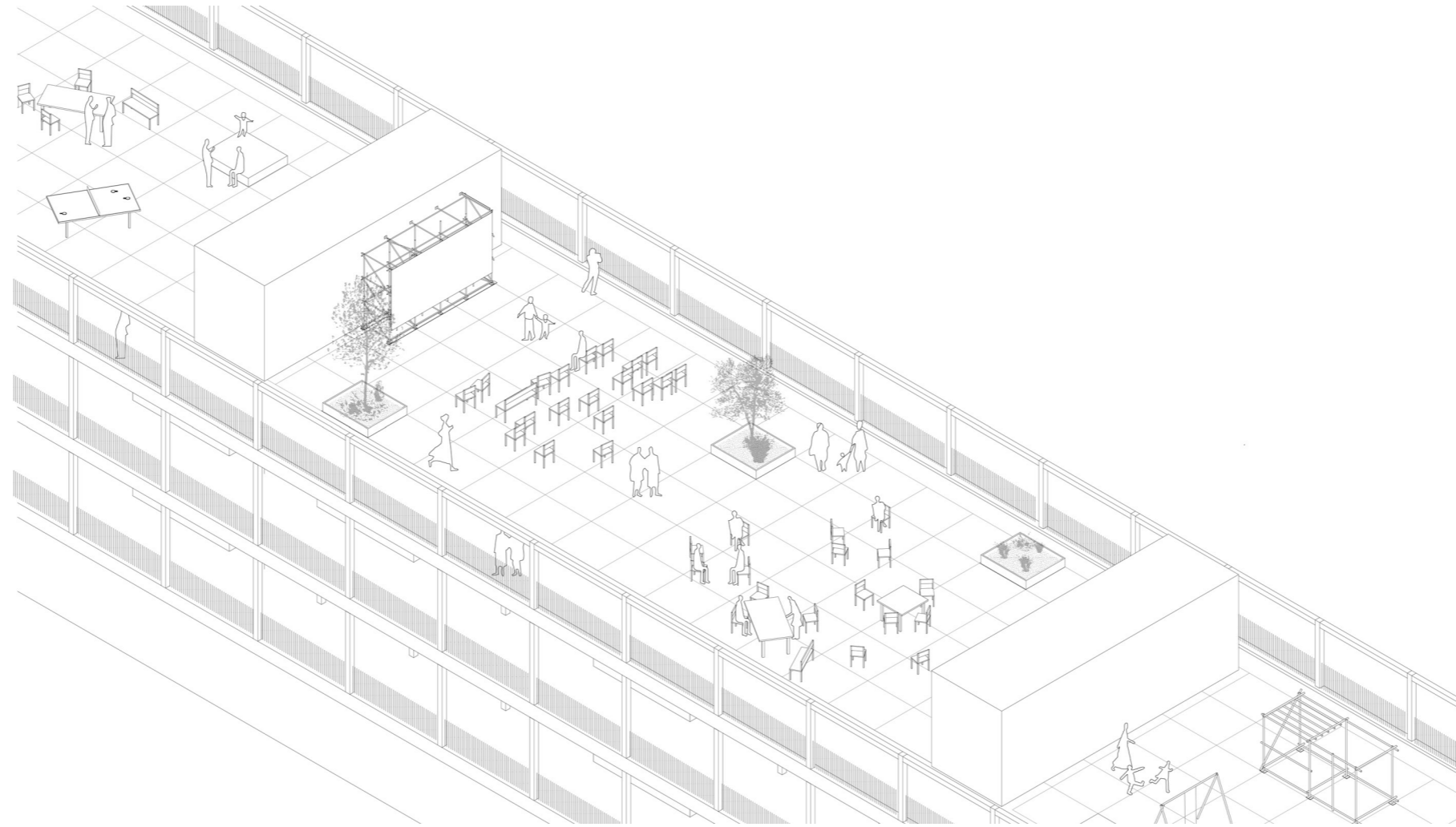
## **The roof**

A level of flexibility that is offered by its openness

A reflection of the public ground onto the roof

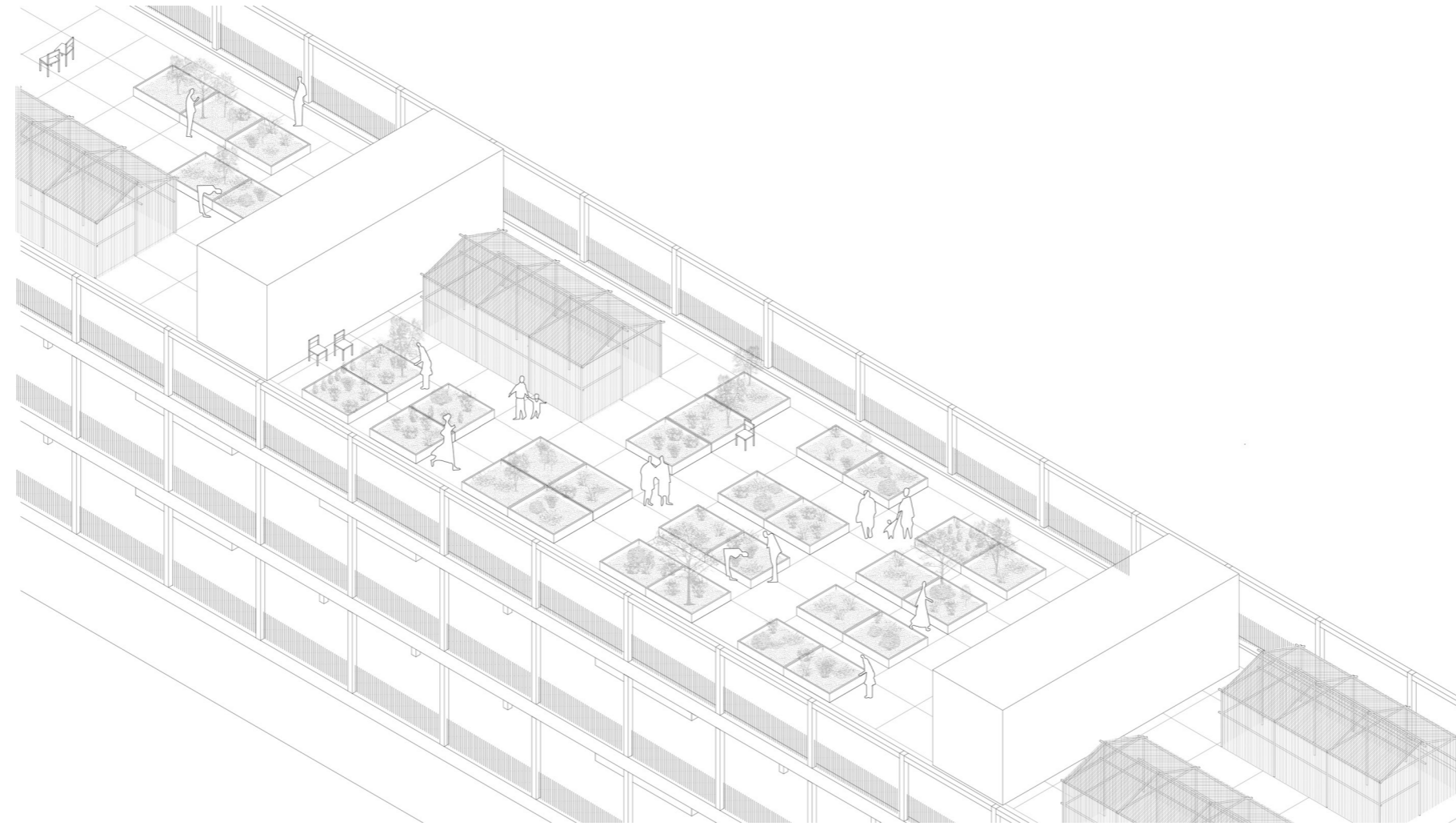
# Roof

Scenario 1



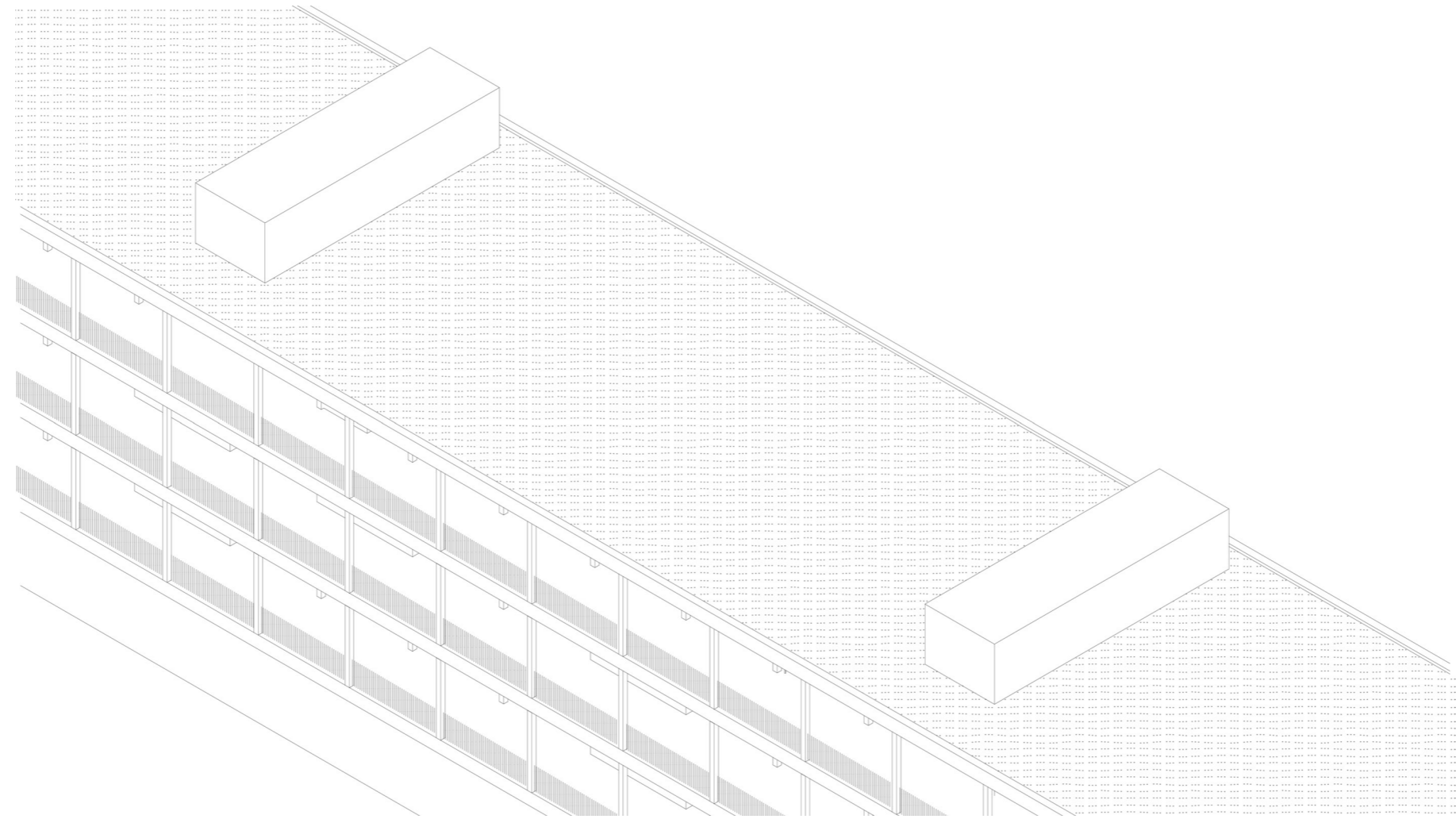
## Roof

A more ethical approach towards the environment  
and the neighborhood



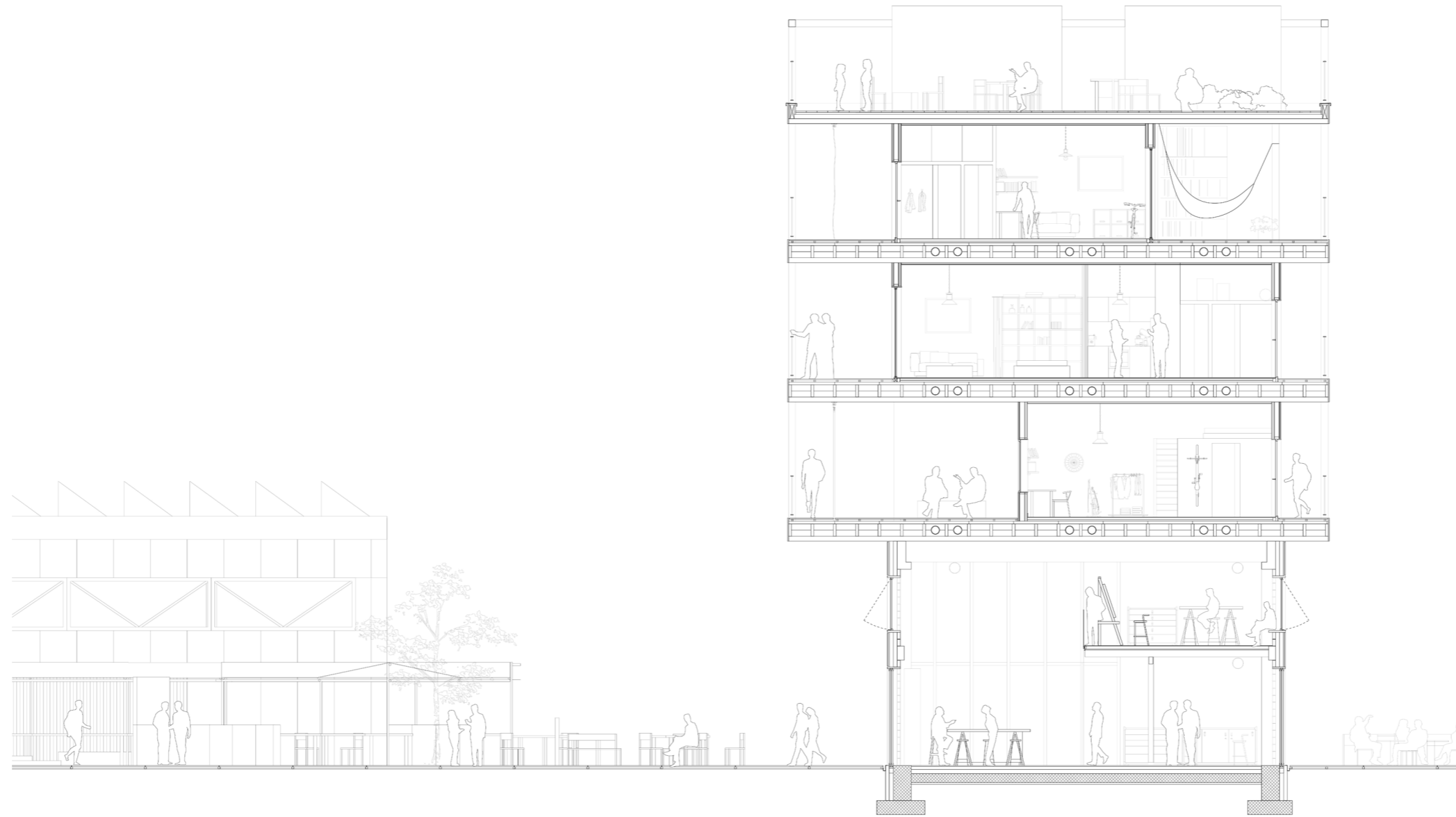
# Roof

Future expansion



# Communis

A vibrant diverse live work environment where socialization is present  
A circle of different levels of participation and collectivity.



1:50 SECTION A-A'

## The live unit

Transition in privacy



## The process of participation

A live process that could be experienced through the building



## The lift

Industrial size lift (2400x3000) for people and goods



## The workspace

Light construction community workshop



## Ideal application

The strategies and the methodologies that this project have been evolved upon to be able to be applied on different contexts.



## Ideal application

The strategies and the methodologies that this project have been evolved upon to be able to be applied on different contexts.





Thank you