

## **Manutencao Militar Lisbon**

---

Disclosing the military city

P5 presentation #4091019

# Contents

---

## **PART I: CONTEXT**

meeting MMC  
meeting Beato

## **PART II: DESIGN ASSIGNMENT**

defining the assignment

## **PART III: TRANSFORMATION STRATEGY**

story of the place  
story of the people  
story of the function  
story of the fabric  
creating a framework

## **PART IV: ARCHITECTURAL DESIGN**

opening the MMC  
the spiritual centre  
house of the body  
the new infill  
the meditation route

## **PART V: CONSIDERATIONS**

reflection



**PART I**

---

Context

## I. Context

---

meeting MMC



*Lisbon, Portugal*



*Beato, Lisbon*



*MMC, Beato*



project location

## I. Context

---

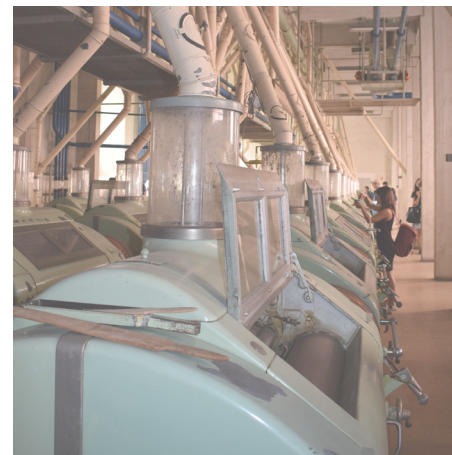
meeting MMC



focus on southern part of the MMC

## I. Context

meeting MMC





## I. Context

meeting Beato



*borders of the MMC*



*impermeable urban fabric*



*lack of functional public space*



## I. Context

---

meeting Beato



*borders of the MMC*



MMC as barrier in the neighbourhood of Beato

## **PART II**

---

Design assignment

## II. Design assignment

---

defining the assignment

**“How can the design of public interiors empower the transformation of industrial sites within an existing urban structure?”**

research question



## II. Design assignment

defining the assignment

### RESEARCH QUESTION

“How can the design of public interiors empower the transformation of industrial sites within an existing urban structure?”

### ARCHITECTURAL ANALYSIS

‘What to do?’

CONTEXT ANALYSIS  
SITE ANALYSIS  
FUNCTION ANALYSIS

Defining the design assignment based on the analysis on public space and mapping the transformation potentials.

DESIGN PROBLEMS AND POTENTIALS

### CULTURAL VALUE ASSESSMENT

‘Why to do it?’

VALUE ASSESSMENT

Define the essential qualities of the complex and its surroundings.

ESSENTIAL QUALITIES

### TRANSFORMATION STRATEGY

### GENERAL DESIGN RESEARCH

‘How to do it?’

LITERATURE RESEARCH  
COMPARATIVE CASE STUDIES  
RESEARCH BY DESIGN

Constructing a theoretical framework on the design of public interiors as driving force, expanding the frame of reference and conducting practical design experiments.

SUSTAINING KNOWLEDGE

## II. Design assignment

---

defining the assignment

### PHYSICAL & VISUAL

- impermeability of the urban fabric
- lack of public space
- lack of physical and visual connections
- lack of functional green

### SOCIAL & ECONOMICAL

- small scale economical activity
- lower education and high unemployment rates
- relatively high rate of poverty
- lack of social cohesion

architectural analysis

## II. Design assignment

---

defining the assignment


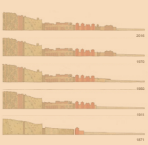




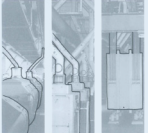





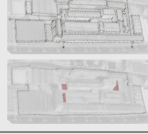
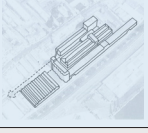
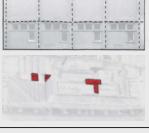
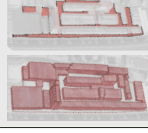
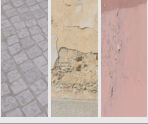








### DESIGN PROBLEMS

The design problem can be defined as the need for the **RECONNECTION** and **DIFFERENTIATION** of the MMC and its surroundings on a variety of levels, being a physical, visual, social and economical level.

conclusion of the architectural analysis

II. Design assignment

defining the assignment

	AGE VALUE	HISTORICAL VALUE	ARTISTIC VALUE	COMMEMORATIVE VALUE	USE VALUE	NEWNESS VALUE	CONFLICT VALUE	NOSTALGIC VALUE
SURROUNDINGS	 old convent walls	 connection river connection convents	 architecture of the convents and palace		 hillside hillside provides sightlines towards the MMC.			 naming of Beato "the blessed" refers to the better days of the neighborhood.
STORY		 development MMC presence of different time layers due to the development of MMC in relation with historical military events.						
STUFF		 machinery machinery from different time periods shows the development of MMC.	 industrial charac- ter machinery	 plaques				
SERVICES		 production vs service division in a production and facilitating part. production and transportation systems show former use of the site.						
SPACE PLAN		 pragmatism pragmatism in design and use of both interior and exterior spaces.	 difference in character of the public interior		 sightlines squares shading			
STRUCTURE		 interconnection interconnection buildings in favour of the production process. entrance use of entrances as part of the "production process".	 industrial charac- ter structure repetition of construction. compromizing elements "in between structures" compromise the value of the exterior of the buildings.		 public interior high density high density building might compromise use value			
SKIN	 historic building materials	 enclosure military function visible in the perimeter enclosure of the MMC.	 difference in character facades division in pragmatist industrial facades and aesthetic monumental facades.					
SITE		 connection N-M-S interconnection different parts of the MMC	 building pattern difference of the pattern in scale and grid between MMC and its surroundings.		 landmarks larger objects currently serve as architectural landmarks			
SOCIAL		 social role MMC social role of MMC in the neighborhood in terms of the employment of beatos inhabitants and the support of families of army employees.					 convent vs MMC military occupation of religious heritage welfare vs sup- pression welfare of MMC is tied to the dictatorial period in Portuguese history productivity MMC complex is a reminder of the former prosperity of Beato due to the functioning of MMC	

cultural value assessment

## II. Design assignment

---

defining the assignment

### ESSENTIAL QUALITIES

The essential qualities of the design can be defined as, the **AESTHETIC** character of the current physical state, the **SOCIAL** character the complex has had in the past and the **FUNCTIONAL** character of its development.

conclusion of the cultural value assessment

## II. Design assignment

---

defining the assignment

### DESIGN ASSIGNMENT

The design assignment can be defined as the **RECONNECTION** and **DIFFERENTIATION** of the MMC and its surroundings on a variety of levels, while restoring, enhancing or adding value to the **AESTHETIC**, **SOCIAL** and **FUNCTIONAL** character of the site.

conclusion: design assignment

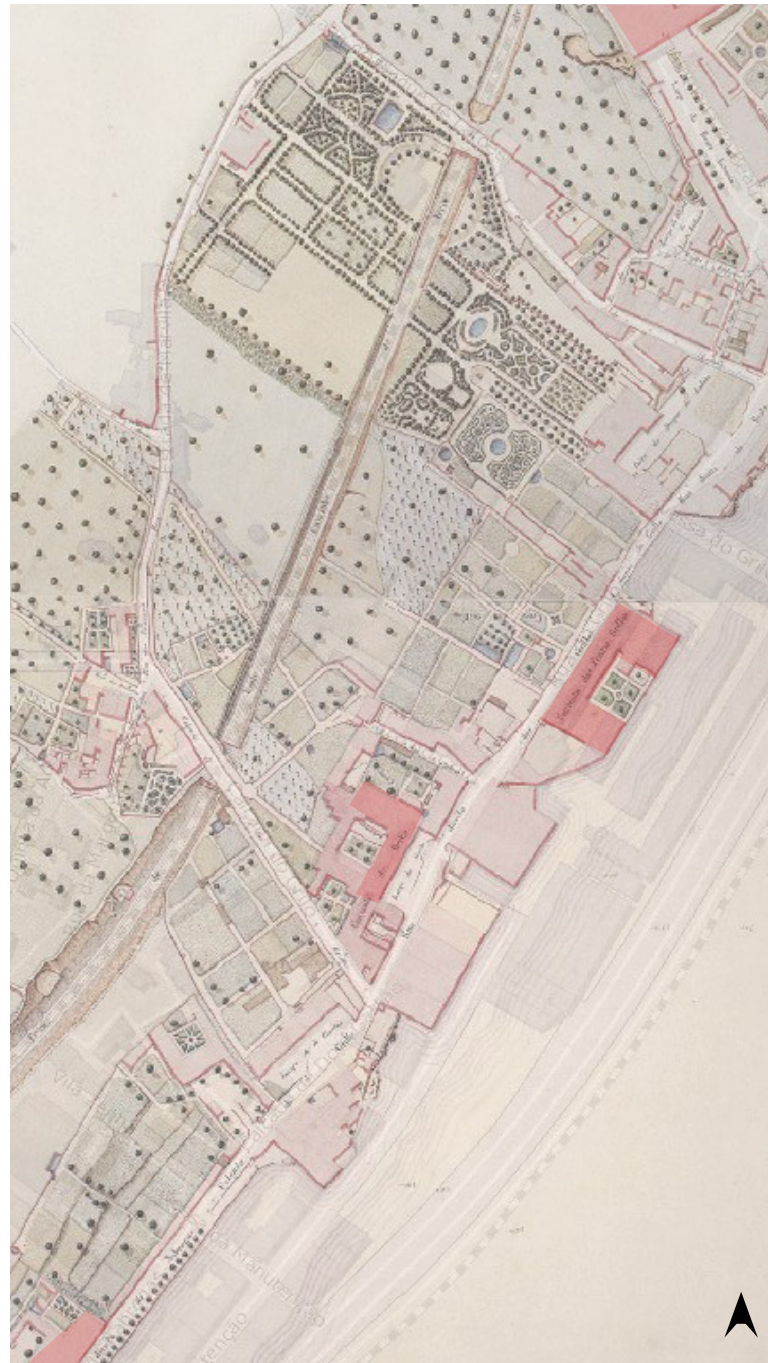
## PART III

---

Transformation strategy

### III. Transformation strategy

story of the place



historical map  
of Beato, 1858

era of the convents



### III. Transformation strategy

---

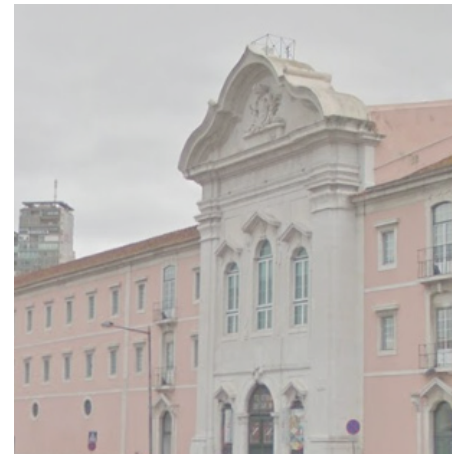
story of the place



convento do  
Beato, 1570



convento do  
Grilo, 1663

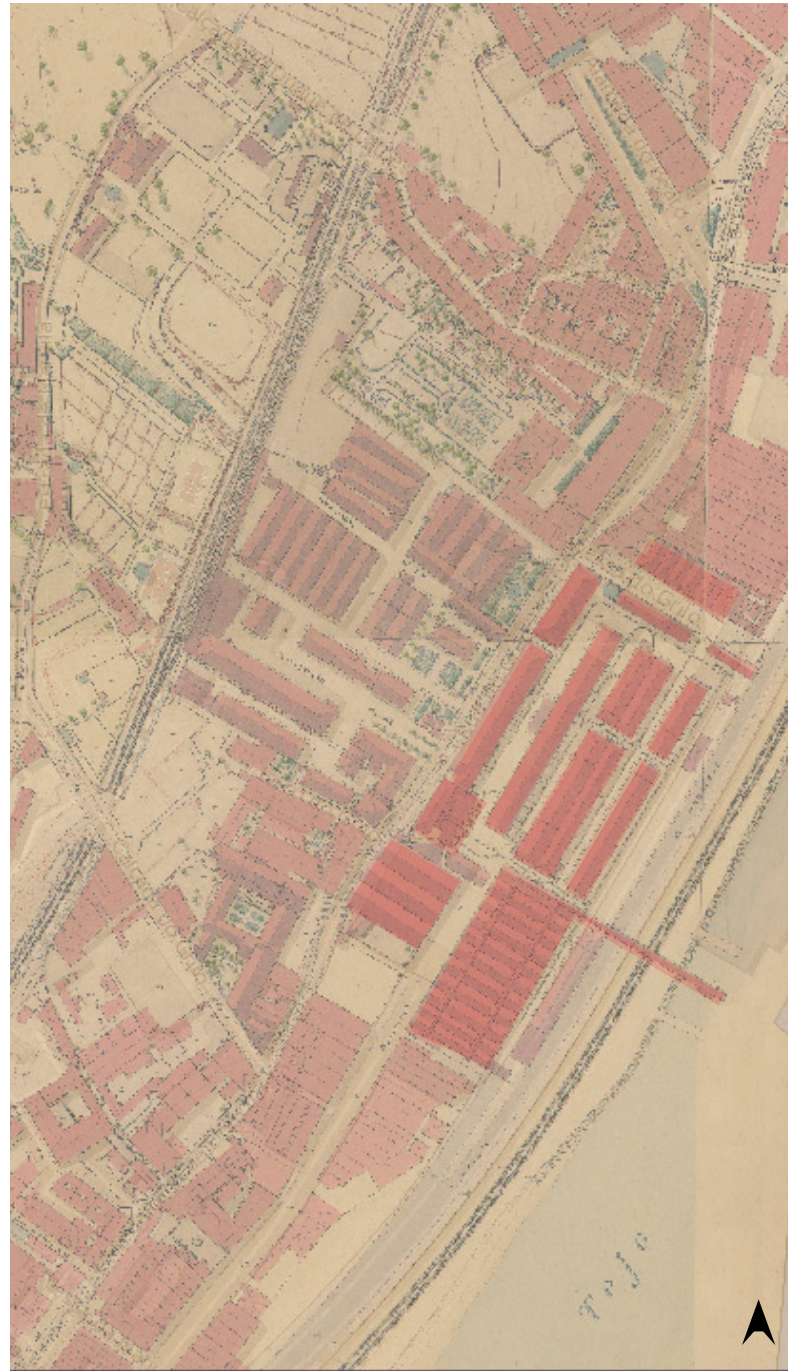


convento do Sao  
Francisco, 1456

### III. Transformation strategy

---

story of the place



*historical map  
of Beato, 1950*

era of the MMC

### III. Transformation strategy

---

story of the place





### III. Transformation strategy

---

story of the place



map of Beato,  
2016

era of decay

### III. Transformation strategy

---

story of the place

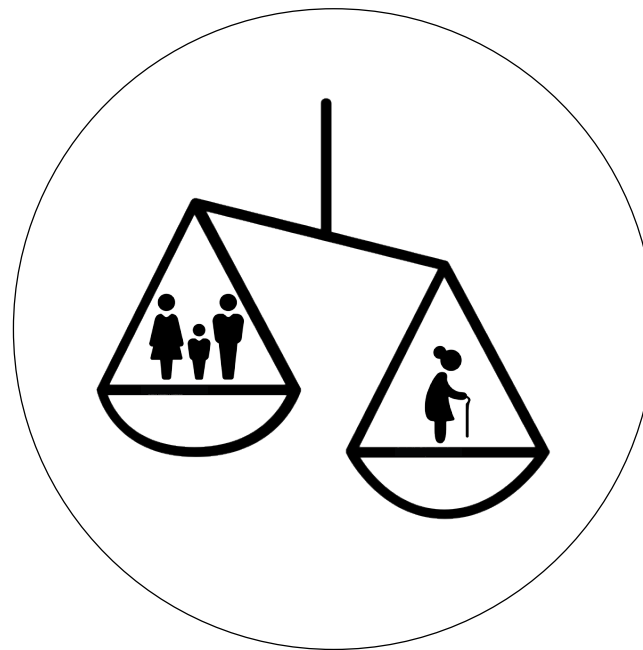


social centre of the neighbourhood has become a social barrier

### III. Transformation strategy

---

story of the people



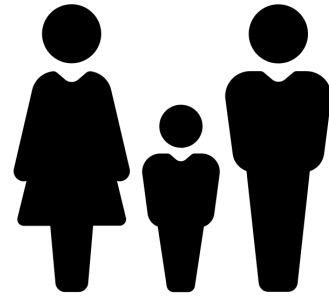
unbalance in the local demography

### III. Transformation strategy

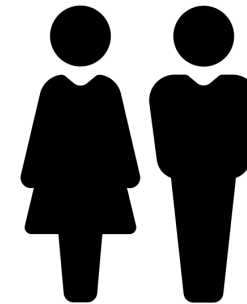
story of the people



ELDERLY



FAMILIES



STARTERS



VISITORS

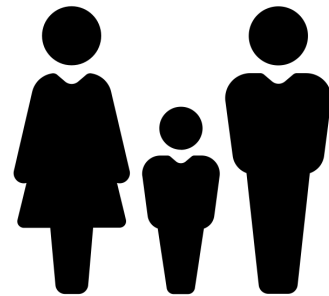
definition of future user groups: balancing the demographic situation

### III. Transformation strategy

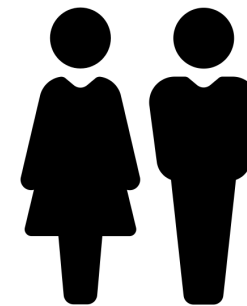
story of the people



family  
social recreation  
community centre  
healthcare  
amenities  
religion  
green



housing  
education  
social activities  
daycare  
playground  
green



housing  
co-offices  
start-ups  
library  
leisure  
retail  
horeca  
green



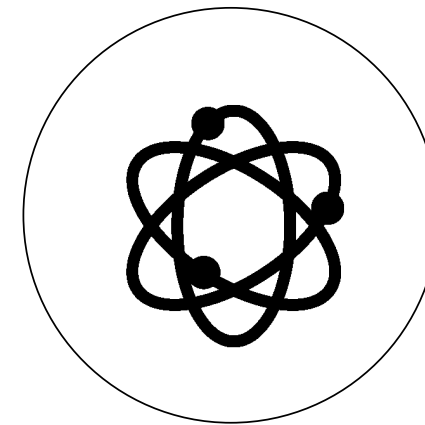
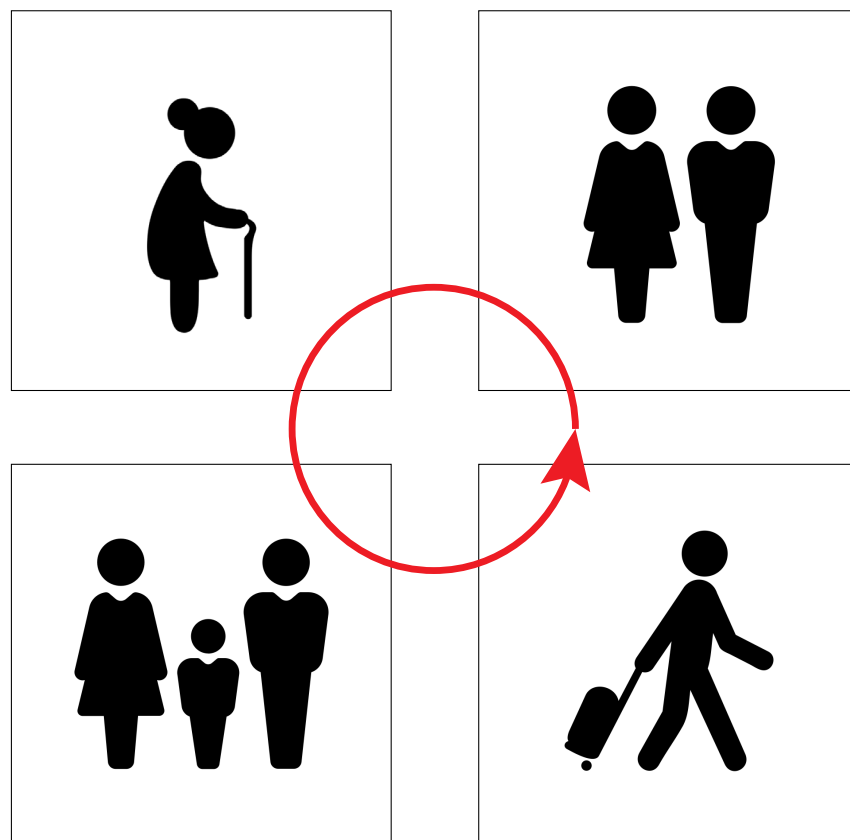
horeca  
musea  
green  
shopping  
leisure  
events  
exhibitions

functions to be integrated in the masterplan per usergroup

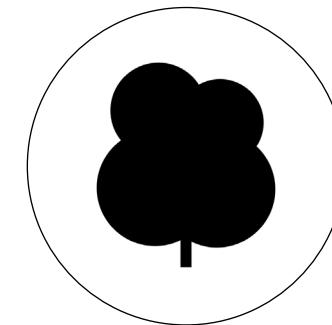


### III. Transformation strategy

story of the people



SOCIAL ACTIVITY



GREEN

establish a social structure: merging of interests

### III. Transformation strategy

---

story of the function



SPIRITUAL CENTRE

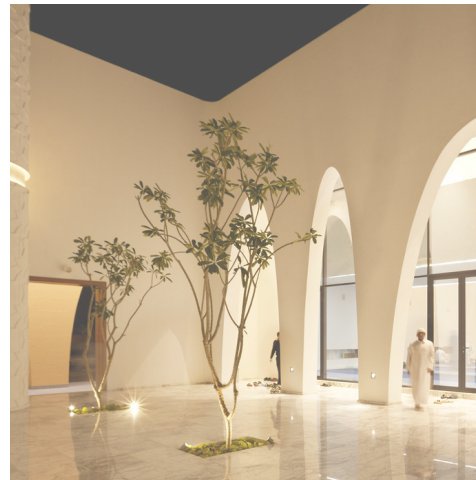
function: spiritual centre

### III. Transformation strategy

story of the function



CHARITY



COMMUNITY



EDUCATION



GREEN

from left to right: image 1,  
Sophie Lok, 2016; image  
2, Sadao Hotta, 2016;  
image 3, John Hall, 2011;  
image 4, Nacasa & Part-  
ners, 2017.

programmatic aim: connection of the different user groups

### III. Transformation strategy

---

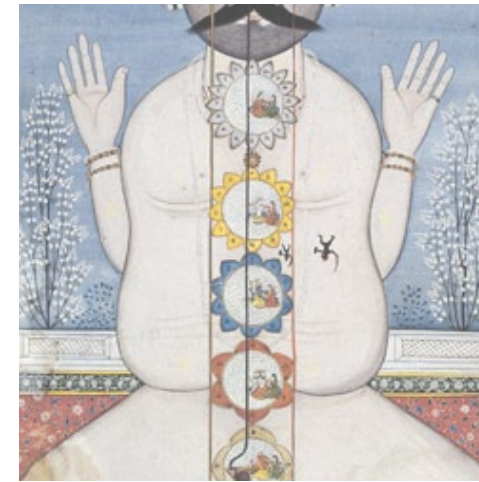
story of the function



PANTHEISM



INDIVIDUALITY



SOMATIC

from left to right: image 1,  
<http://lcblog.catholic.net>,  
retrieved: 16-03-2017; im-  
age 2, Thea Cesar, 2017;  
image 3, [www.wikipedia.org](http://www.wikipedia.org),  
retrieved: 16-03-2017

choice of programme: modern interpretation of spirituality

### III. Transformation strategy

---

story of the function

#### HOUSE OF THE BODY

##### **retreat**

guestrooms

##### **community centre**

restaurant

cafe

event space

##### **bath house**

exercise

wellness

treatment

ablution

#### HOUSE OF THE MIND

##### **religious centre**

meditation

prayer

confession

chapel hall

##### **educational centre**

library

lecture hall

programmatic division: separation of body and mind related functions

### III. Transformation strategy

---

story of the fabric



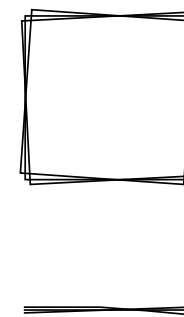
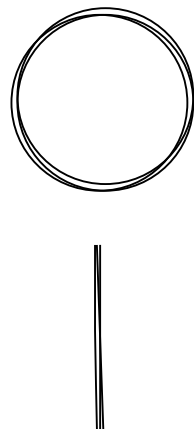
choice of buildings: the warehouses and the silos



### III. Transformation strategy

---

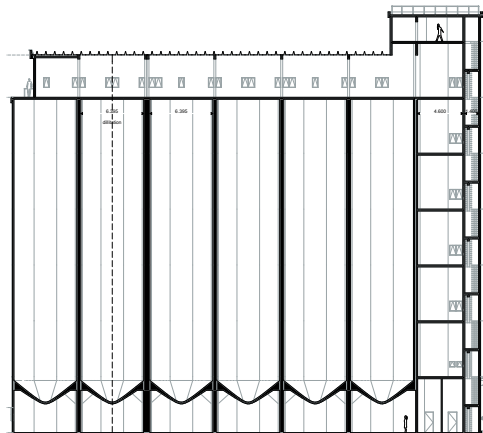
story of the fabric



choice of buildings: the symbolic reference of form

### III. Transformation strategy

story of the fabric

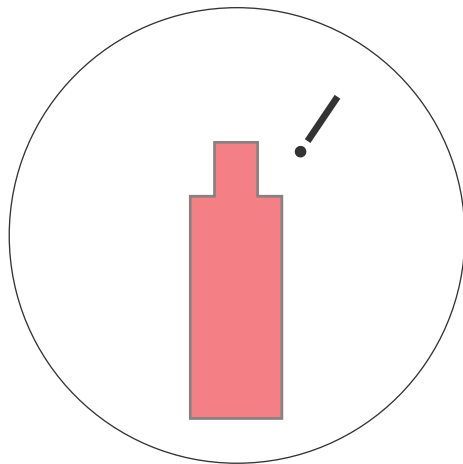


silo building: documentation existing state

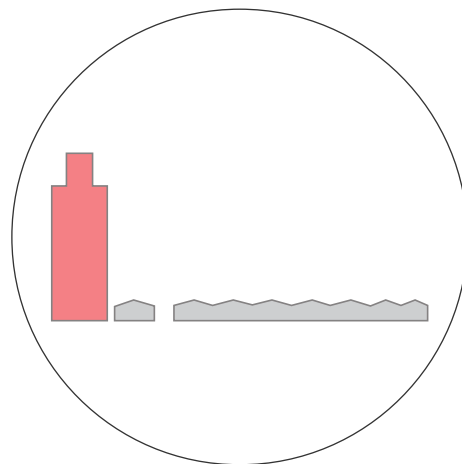


### III. Transformation strategy

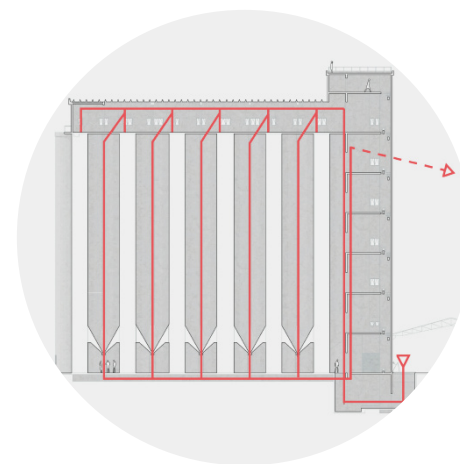
story of the fabric



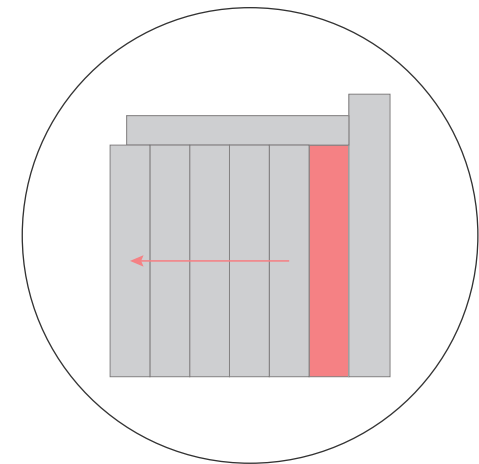
LANDMARK



CONTRAST



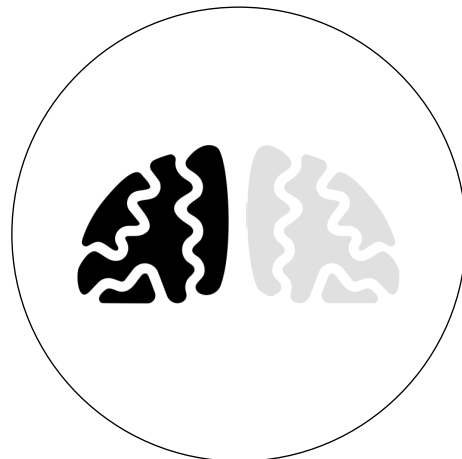
PRODUCTION PROCESS



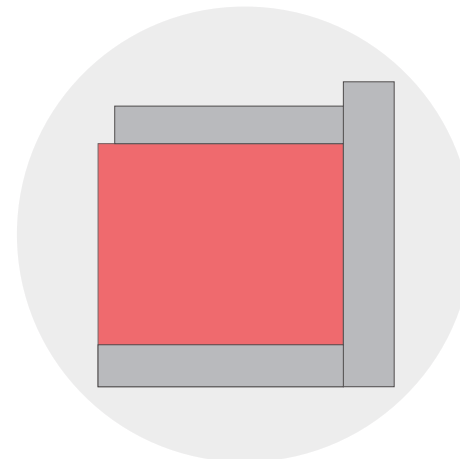
REPETITION



MONOLITHIC STRUCTURE



PRAGMATISM



STORAGE VS SERVICE



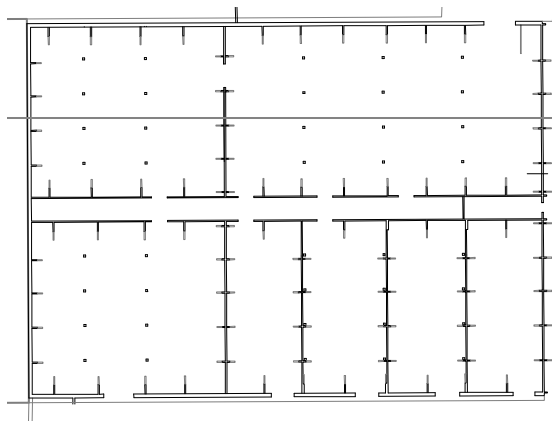
INDUSTRIAL CHARACTER

silo building: essential qualities of the existing

### III. Transformation strategy

---

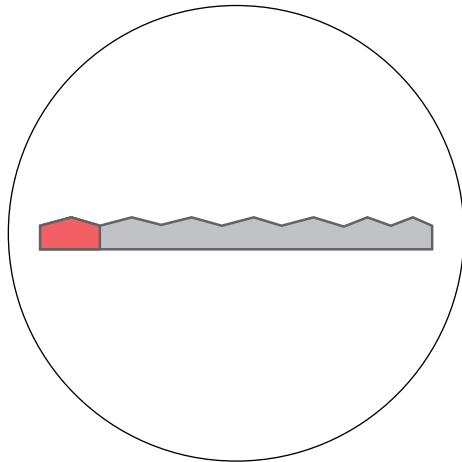
story of the fabric



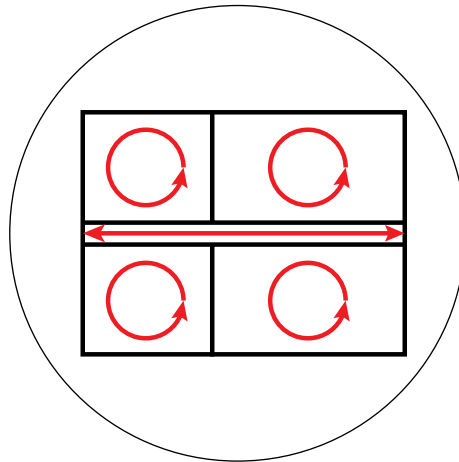
warehouses: documentation existing state

### III. Transformation strategy

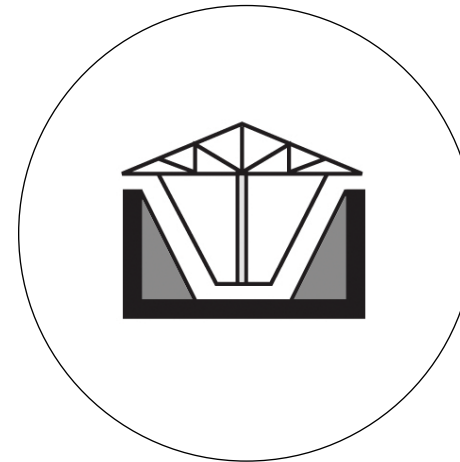
story of the fabric



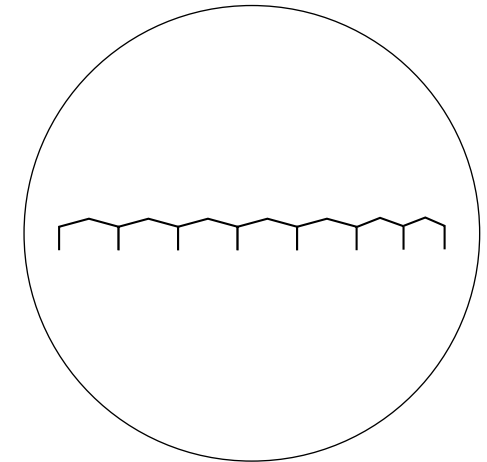
BAY STRUCTURE



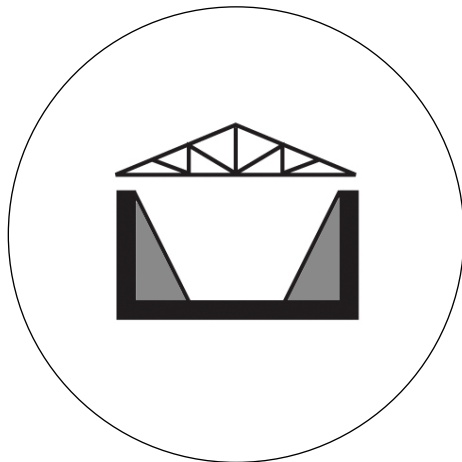
SPATIAL  
ORGANISATION



BASE VS INFILL



UNIFYING ROOF  
STRUCTURE



HEAVY BASE VS  
LIGHT TOP



PRODUCTION  
PROCESS



PRAGMATISM



LAYERING

warehouses: essential qualities of the existing

### III. Transformation strategy

---

creating a framework



PHYSICAL CONNECTION



FUNCTIONAL CONNECTION



CONNECTION OF PEOPLE

from left to right: image 1,  
Sophie Lok, 2016; image  
2, <http://astrodharma.org>,  
retrieved: 16-03-2017;  
image 3, [www.dailygrail.com](http://www.dailygrail.com),  
retrieved: 16-03-2017

conclusion: creation of a design in which all different stories coincide as one.

## **PART IV**

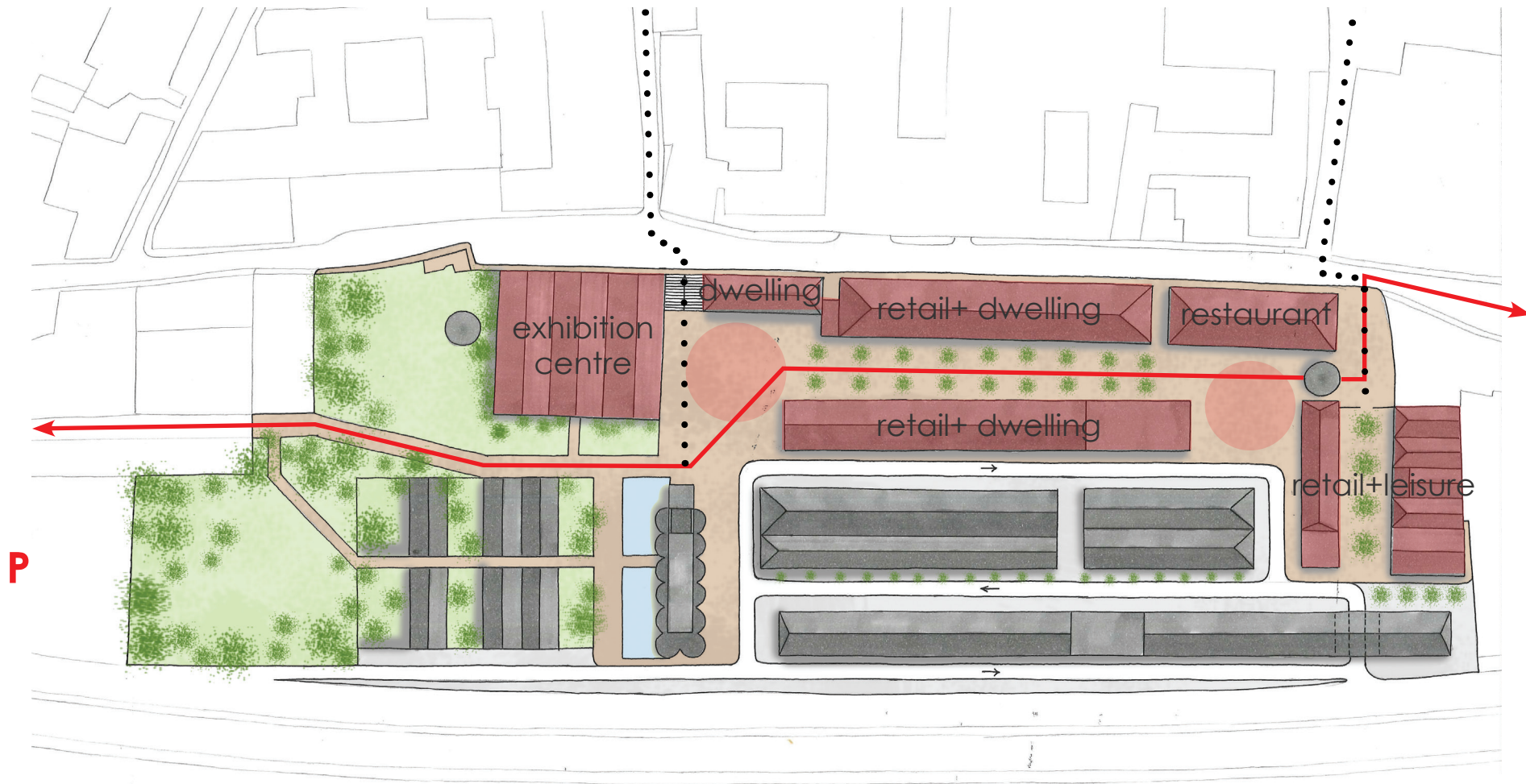
---

Architectural design



## IV. Architectural design

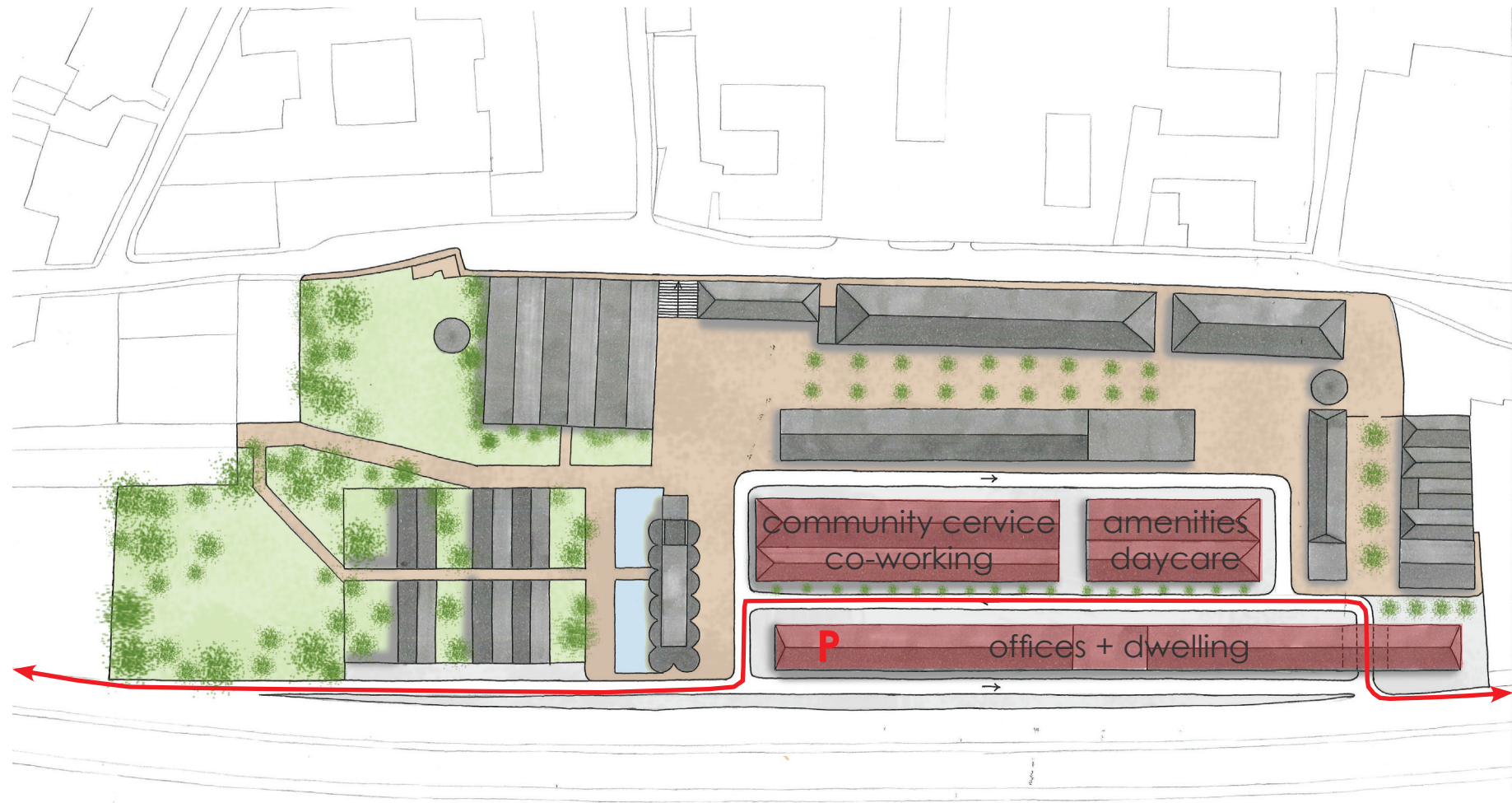
opening the MMC



the public route

## IV. Architectural design

opening the MMC

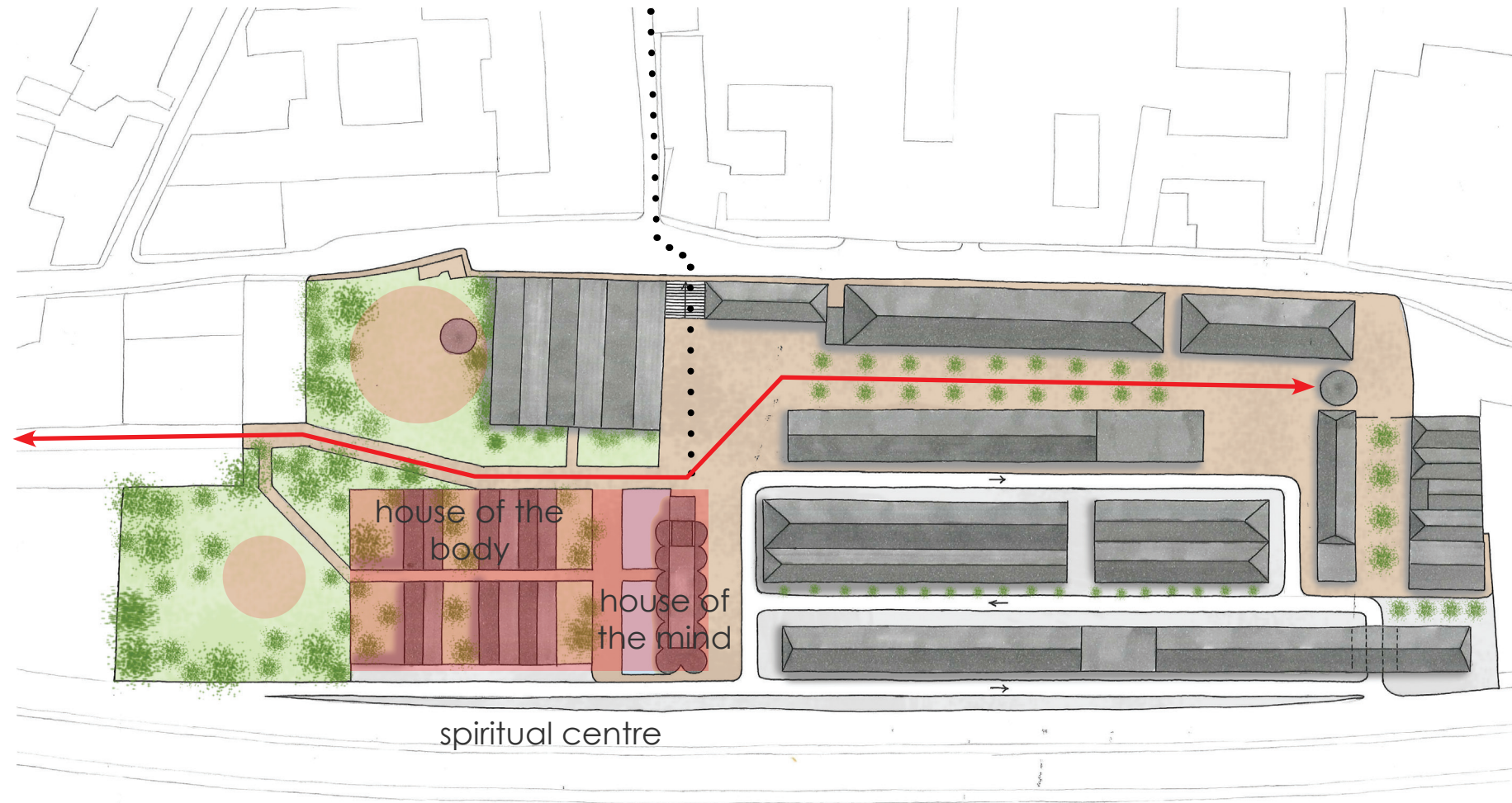


the sustaining centre



## IV. Architectural design

opening the MMC



the social heart



## IV. Architectural design

---

the spiritual centre

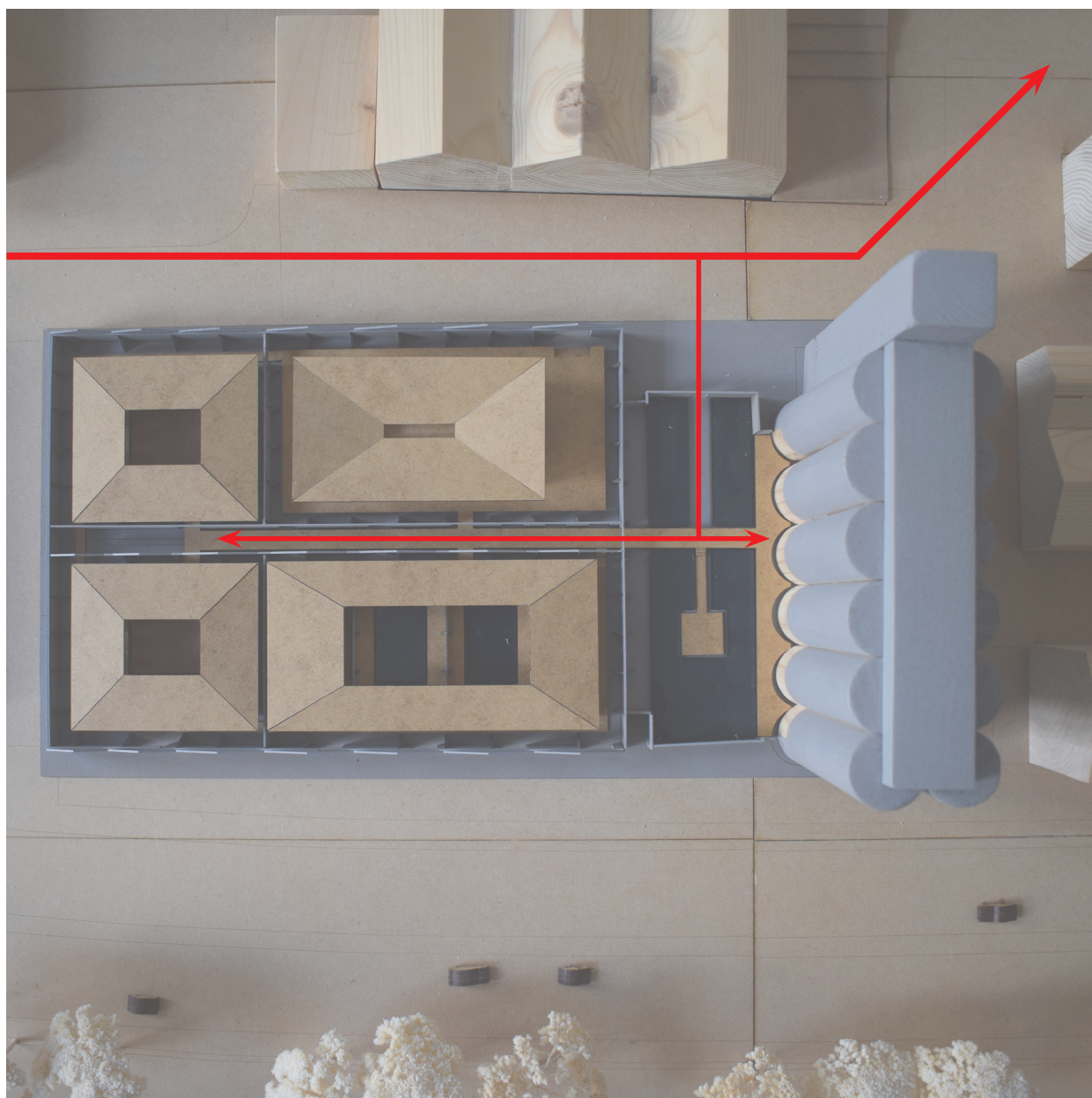


entering the complex



## IV. Architectural design

the spiritual centre



entering the complex

## IV. Architectural design

---

the spiritual centre



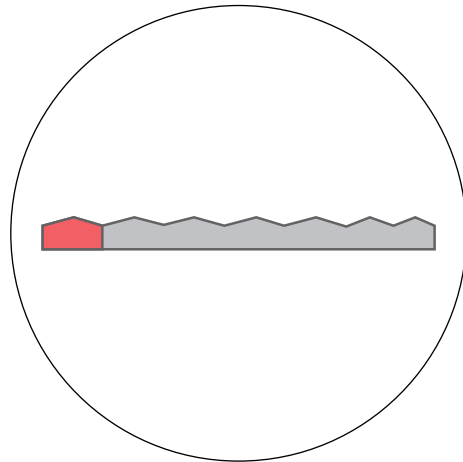
The Walled, Yangzhou - Neri&Hu Design

character of the entrance zone and visitors centre

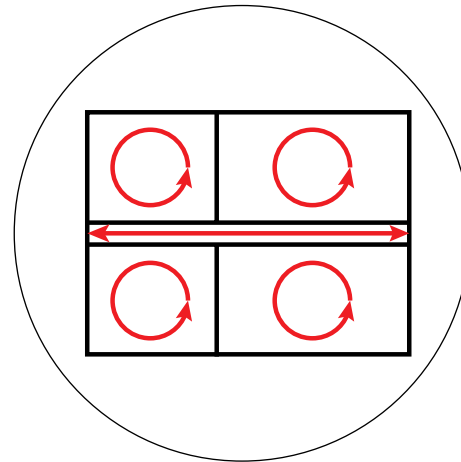


## IV. Architectural design

house of the body



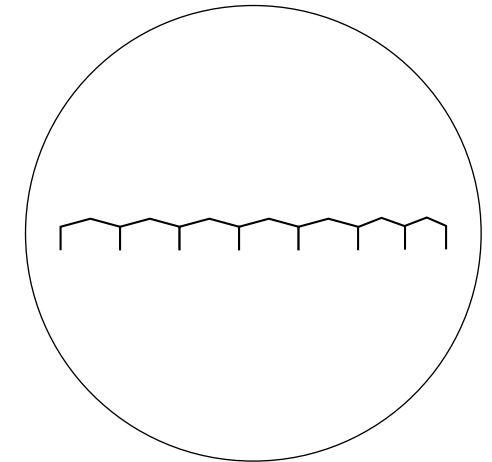
BAY STRUCTURE



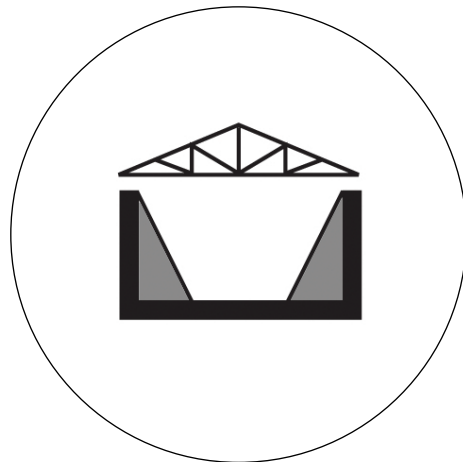
SPATIAL  
ORGANISATION



BASE VS INFILL



UNIFYING ROOF  
STRUCTURE



HEAVY BASE VS  
LIGHT TOP



PRODUCTION  
PROCESS



PRAGMATISM

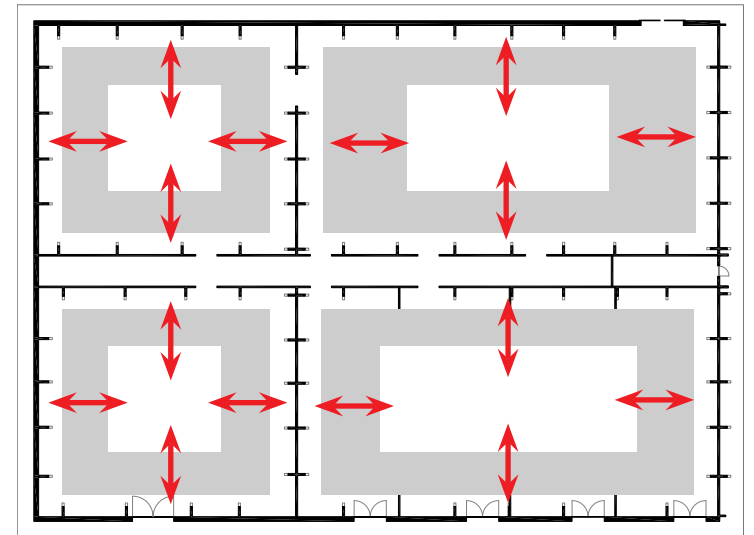
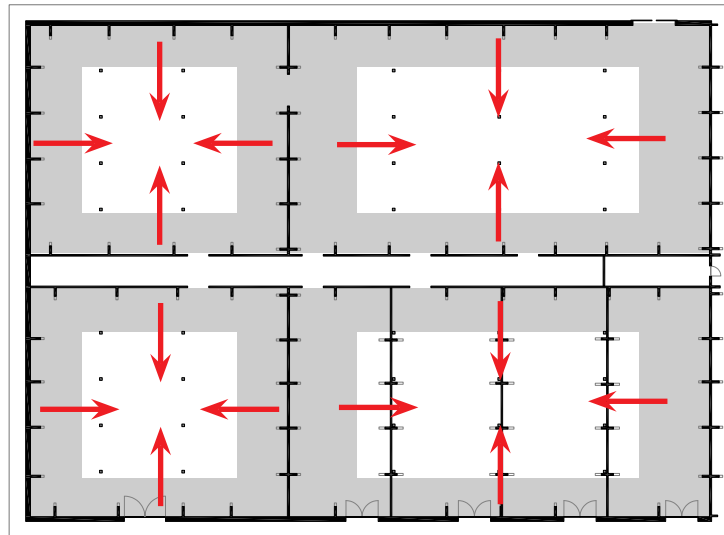
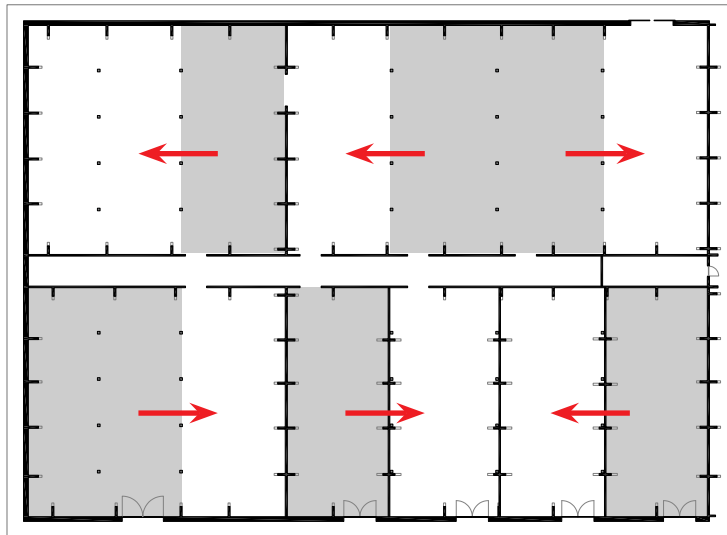


LAYERING

design concept: essential qualities as startingpoints for the design

## IV. Architectural design

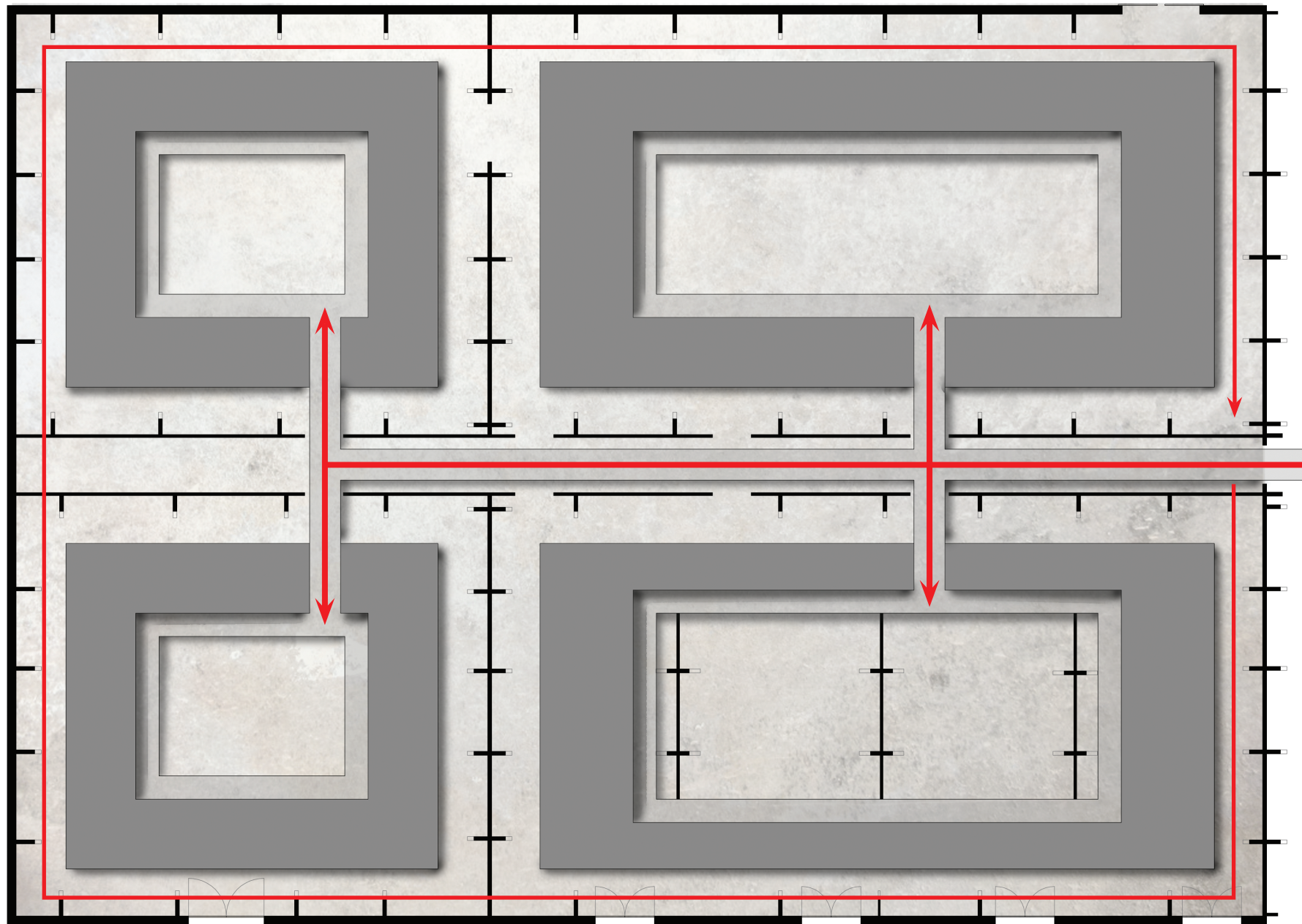
house of the body



development of the new infill

## IV. Architectural design

house of the body

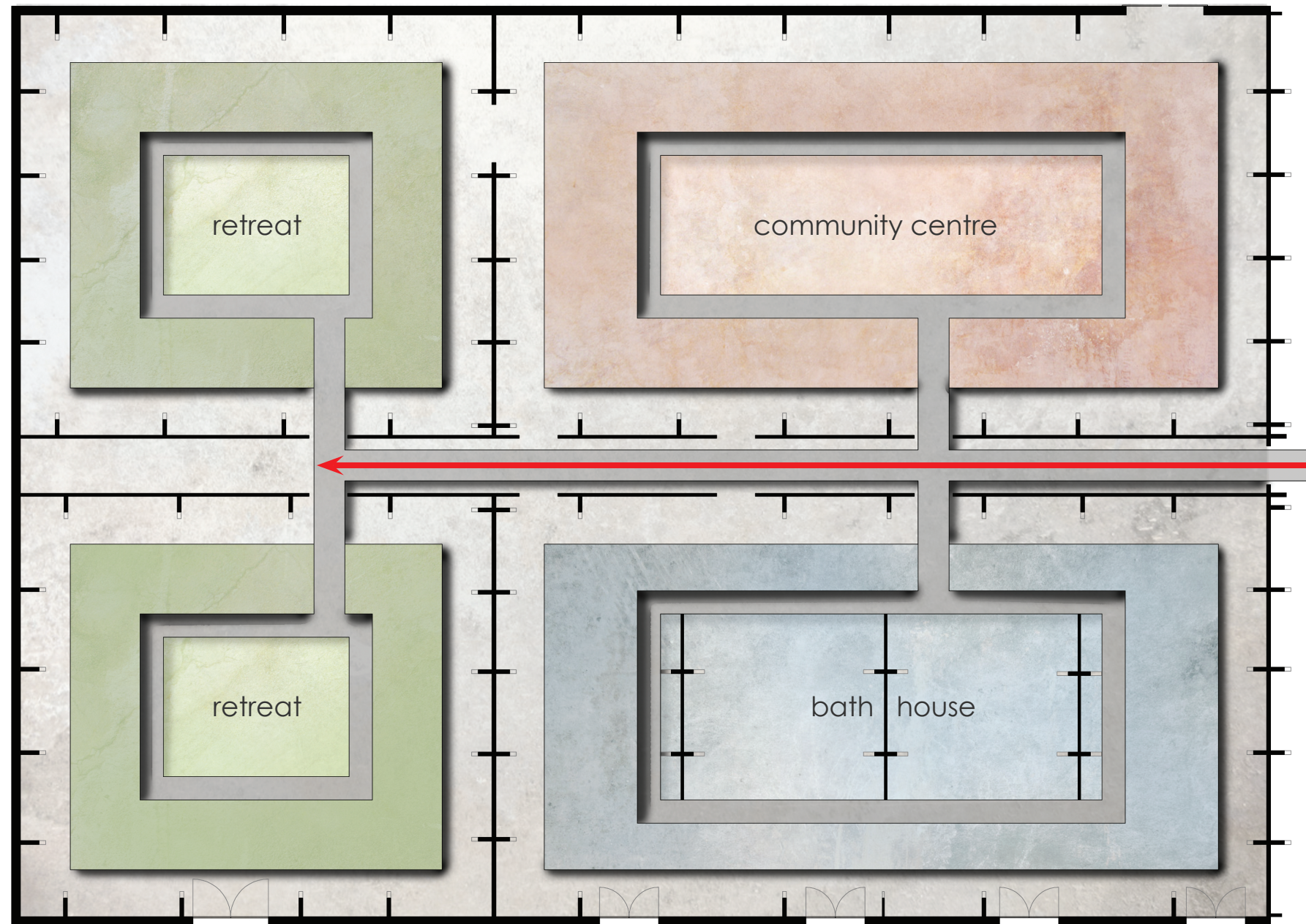


transformation of the existing: creation of a primary and secondary route



## IV. Architectural design

house of the body

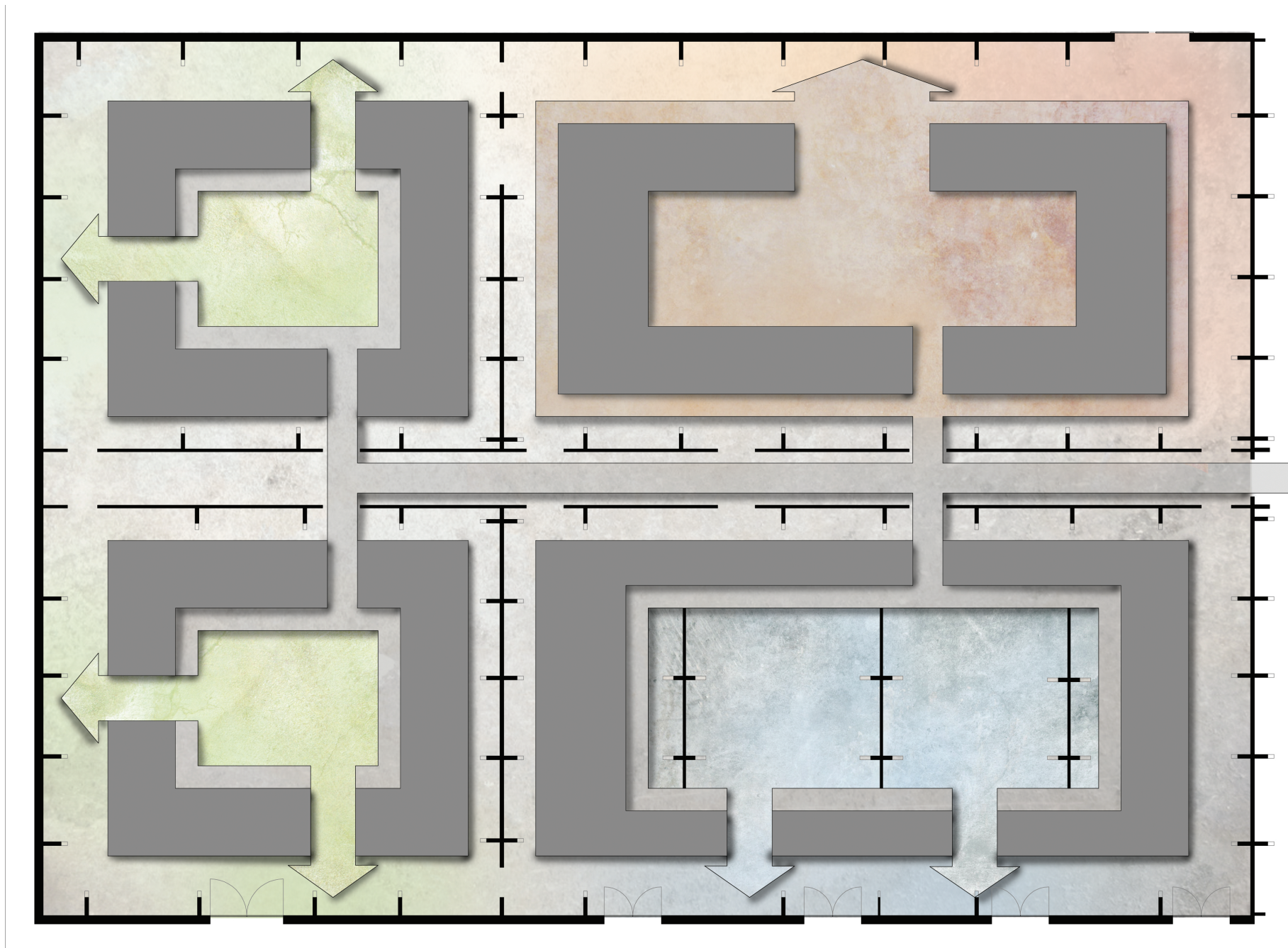


transformation of the existing: placement of the programme, creation of a privacy range



## IV. Architectural design

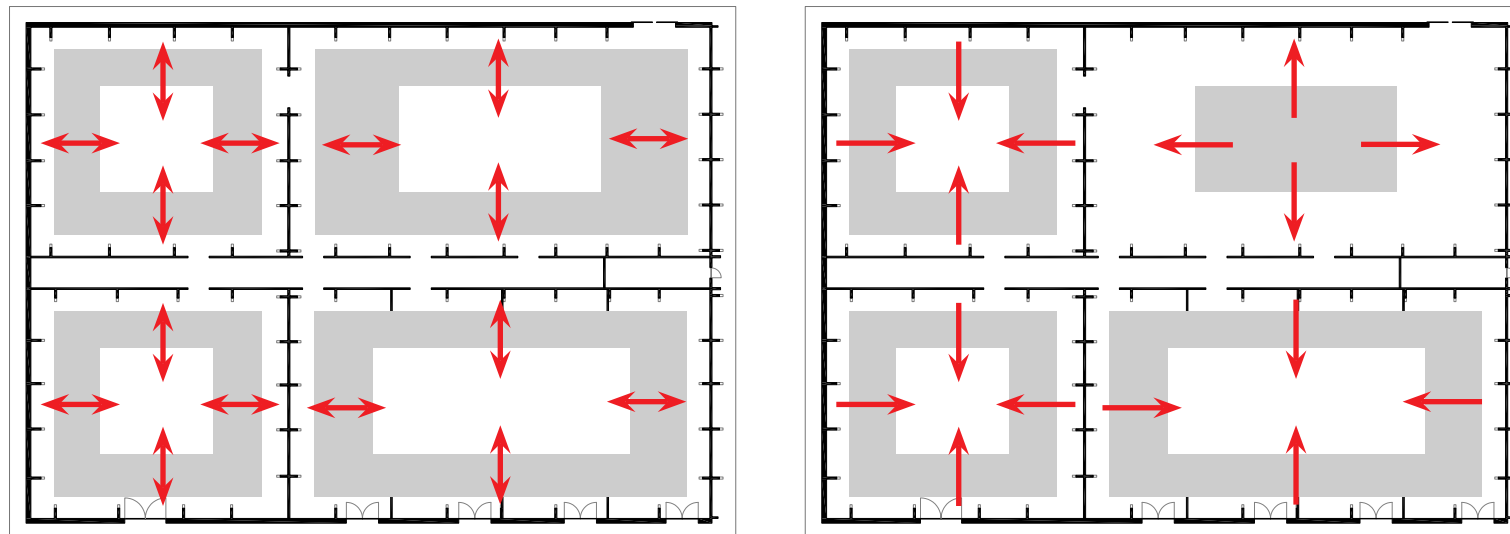
house of the body



transformation of the existing: extention of the different characters of the courtyards into the meditation route

## IV. Architectural design

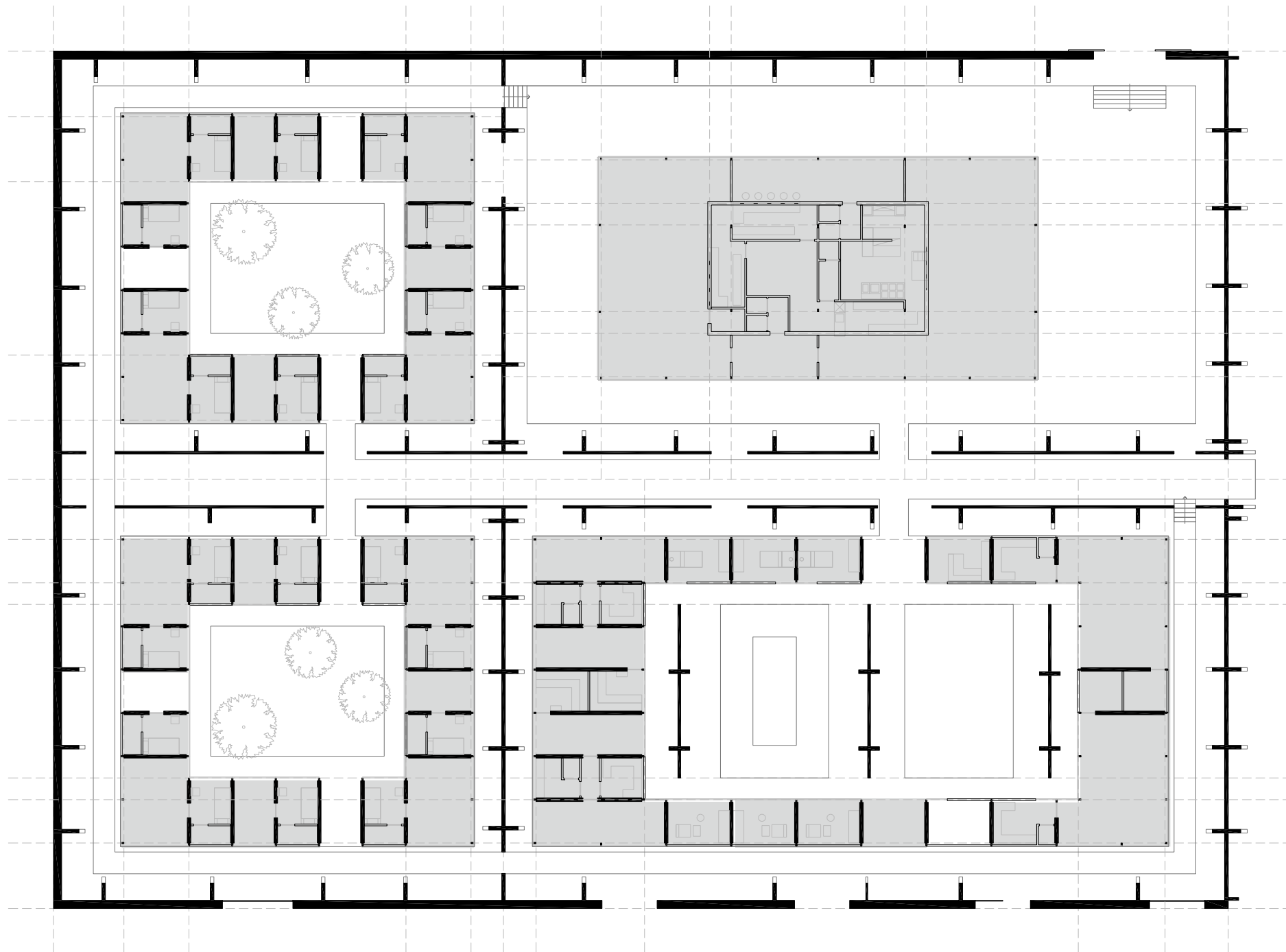
house of the body



differentiation between the public and the private infill

## IV. Architectural design

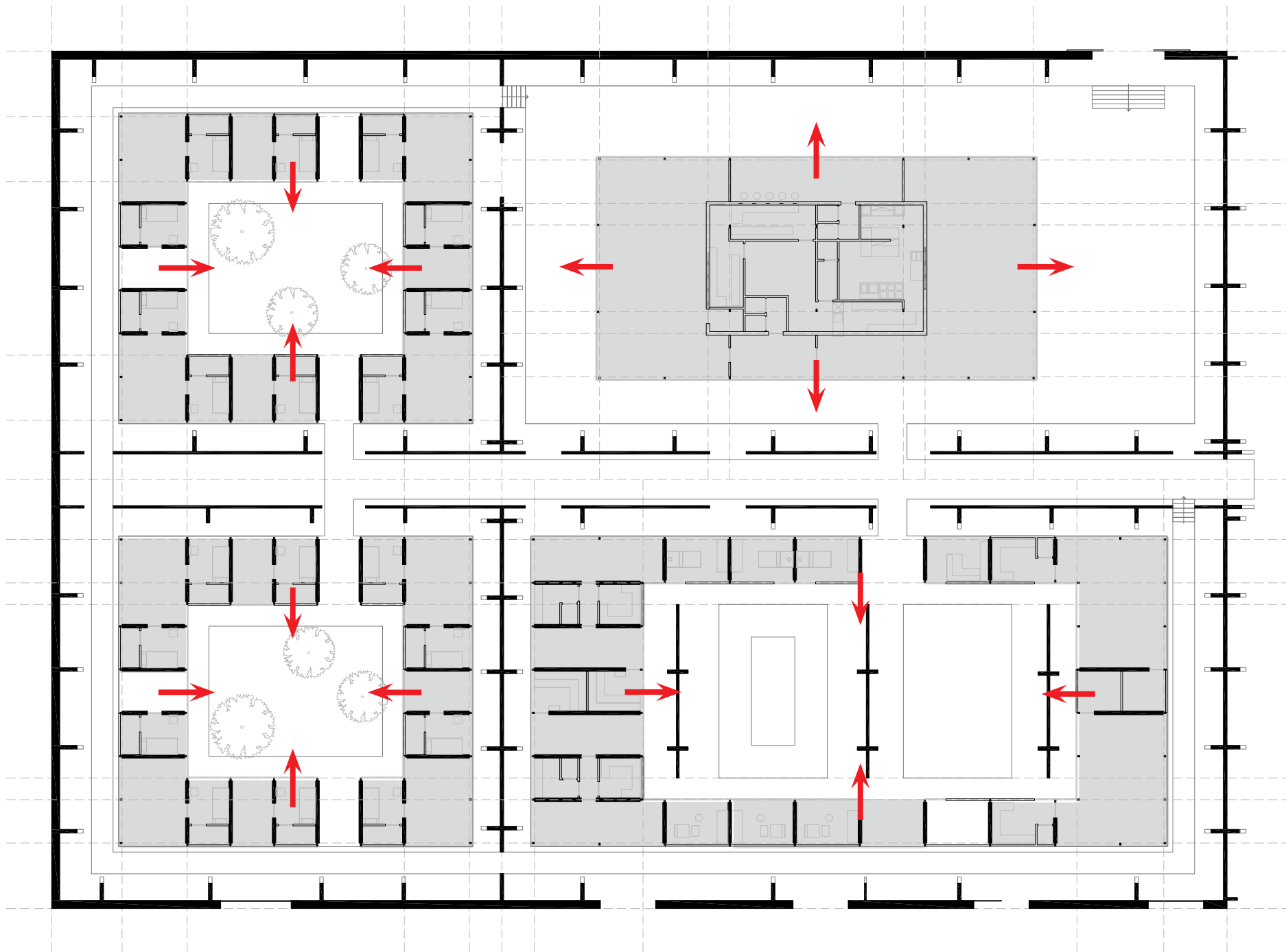
house of the body



differentiation between private and public infill

## IV. Architectural design

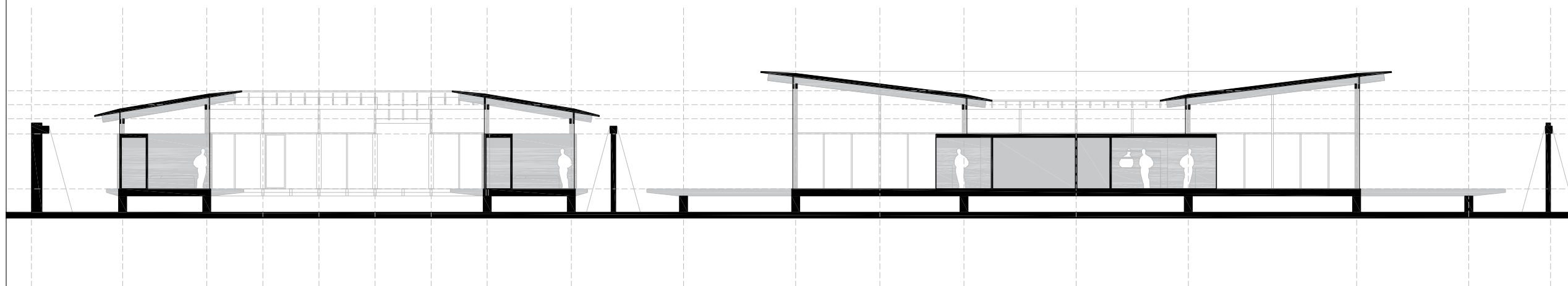
house of the body



differentiation between private and public infill

## IV. Architectural design

house of the body

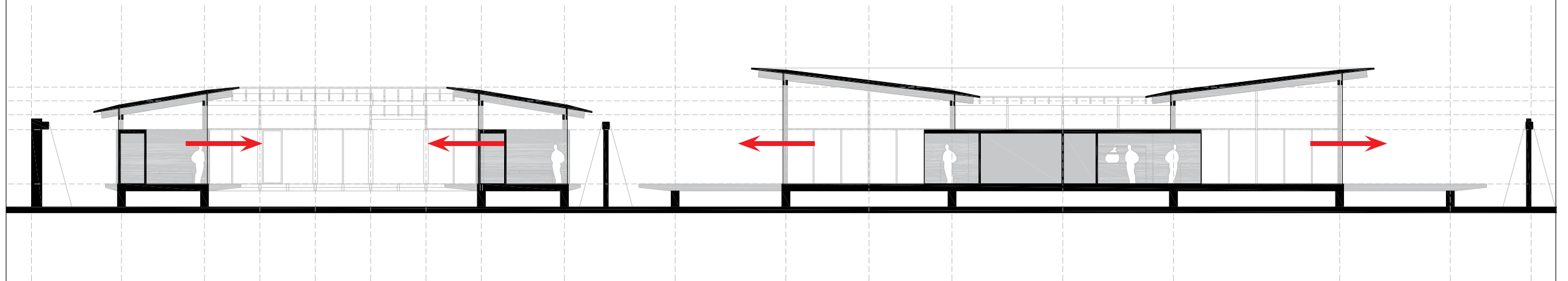


differentiation between private and public infill



## IV. Architectural design

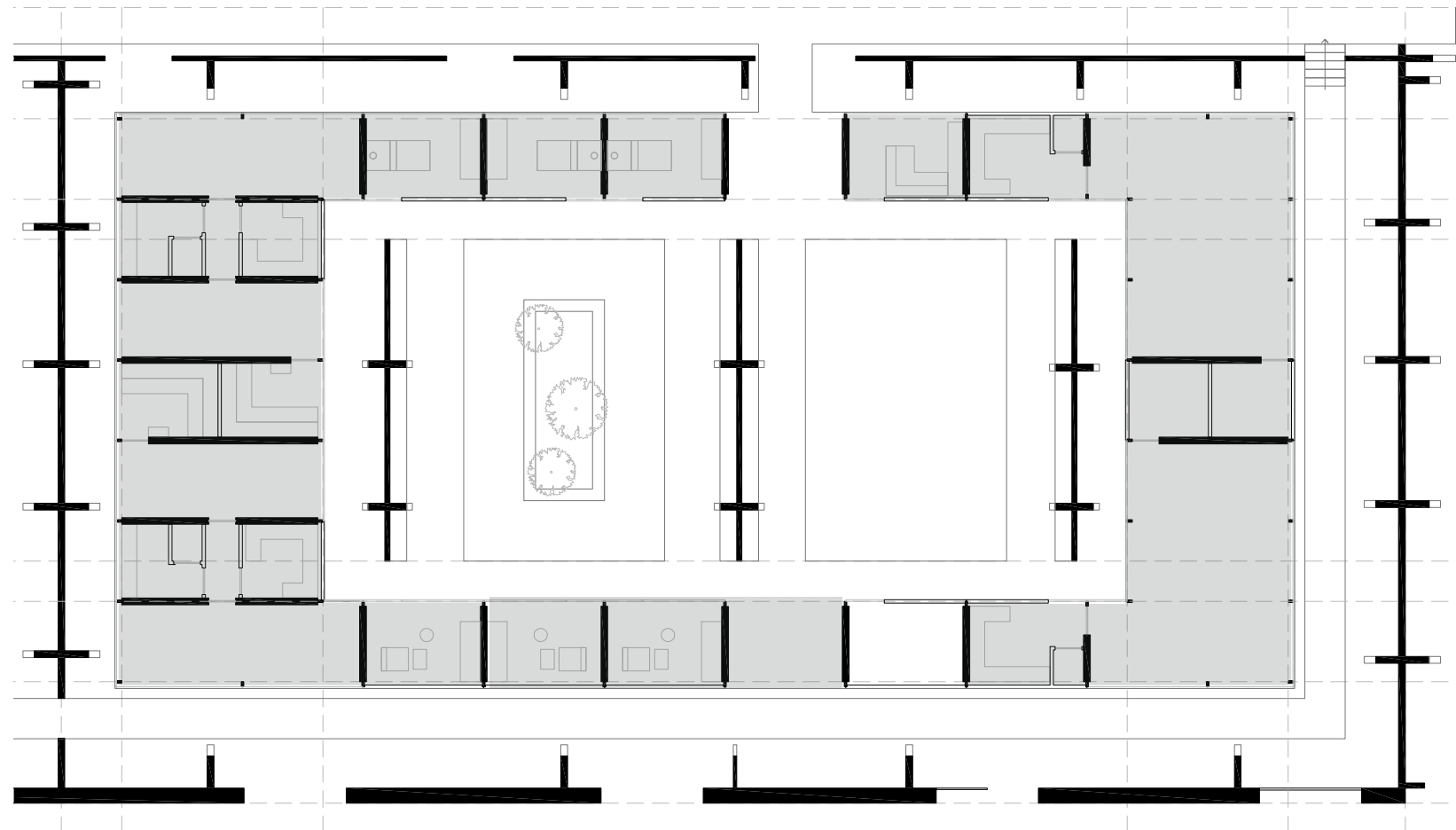
house of the body



differentiation between private and public infill

## IV. Architectural design

the private infill



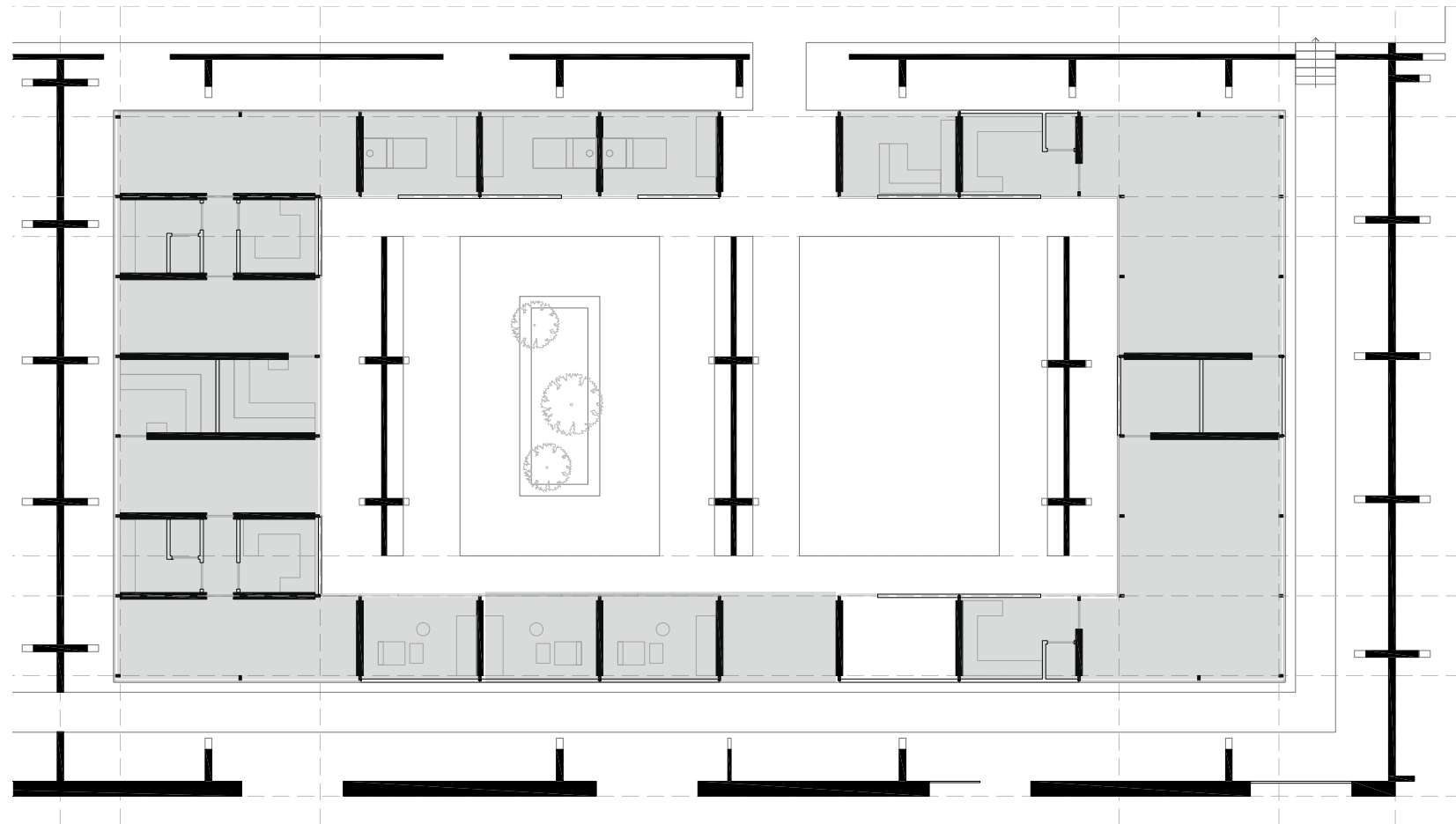
treatment

exercise

the bath house: placement of the programme

## IV. Architectural design

the private infill



the bath house: privacy range

## IV. Architectural design

---

the private infill



exercise

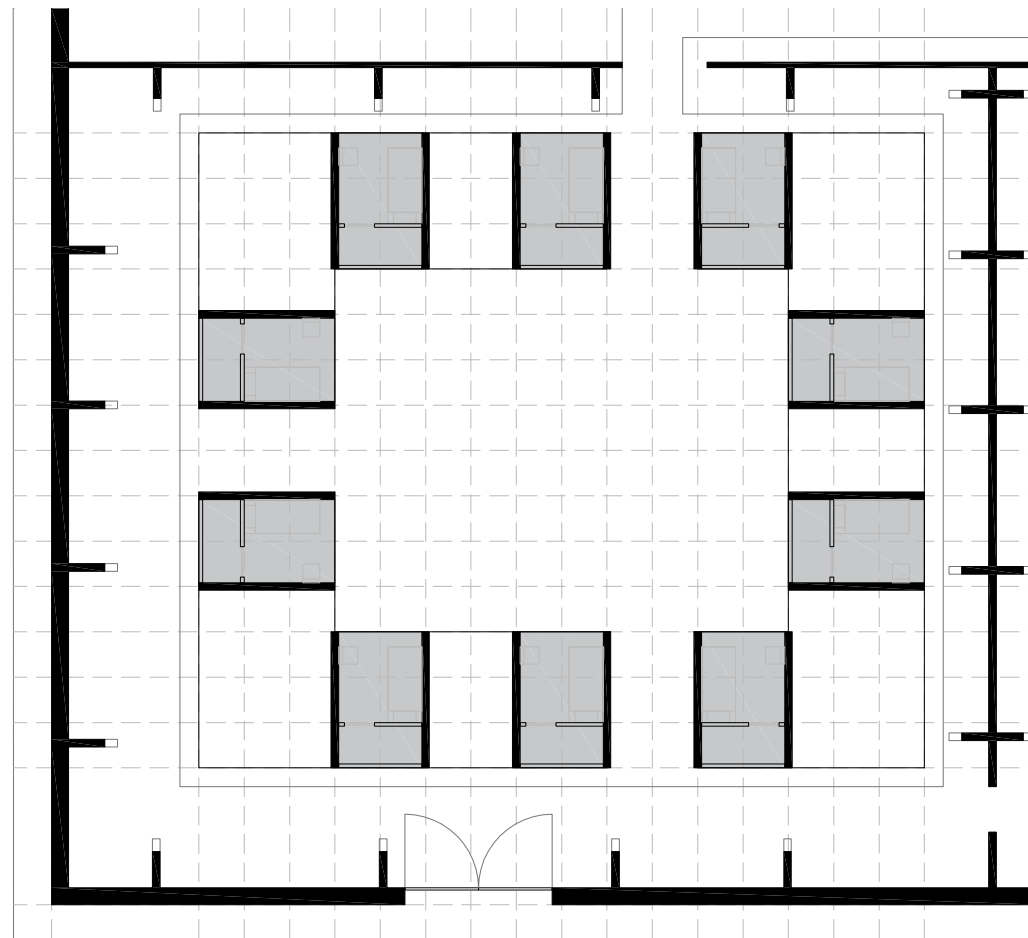


treatment

the bath house: privacy range

## IV. Architectural design

the private infill

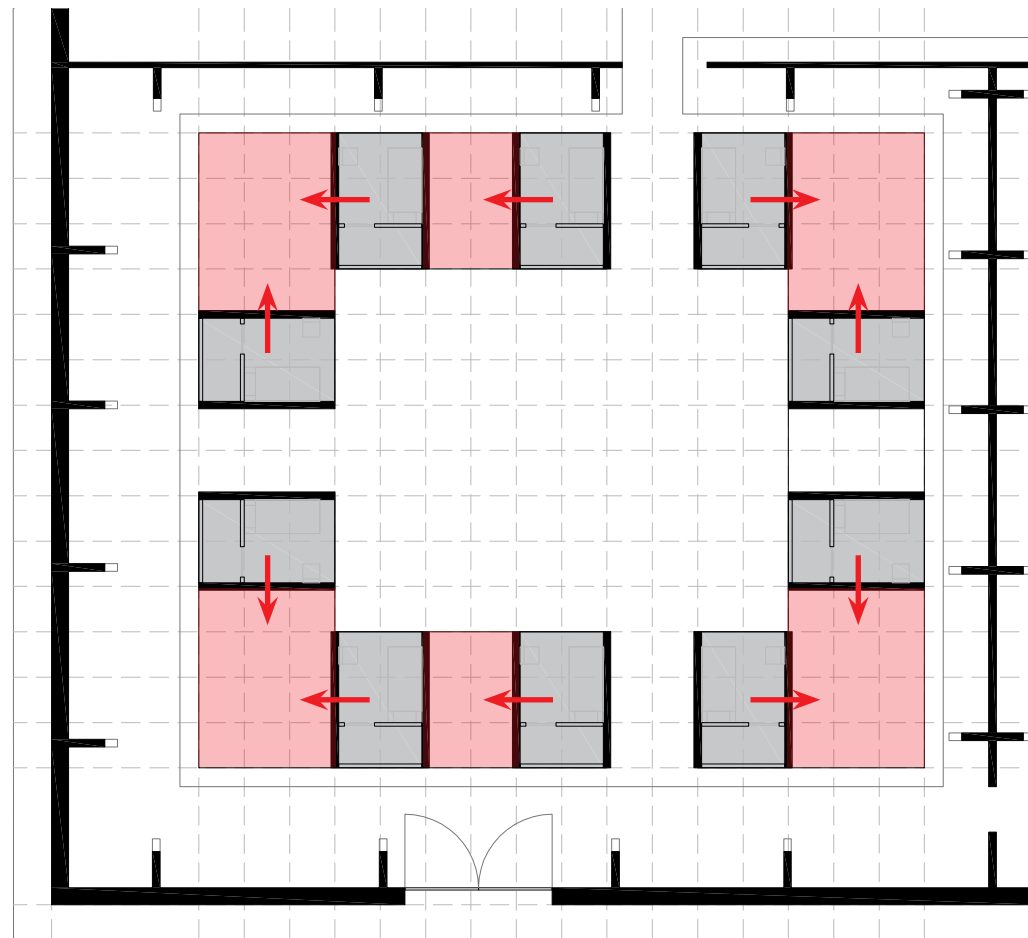


retreat rooms

retreat: placement of the programme

## IV. Architectural design

the private infill



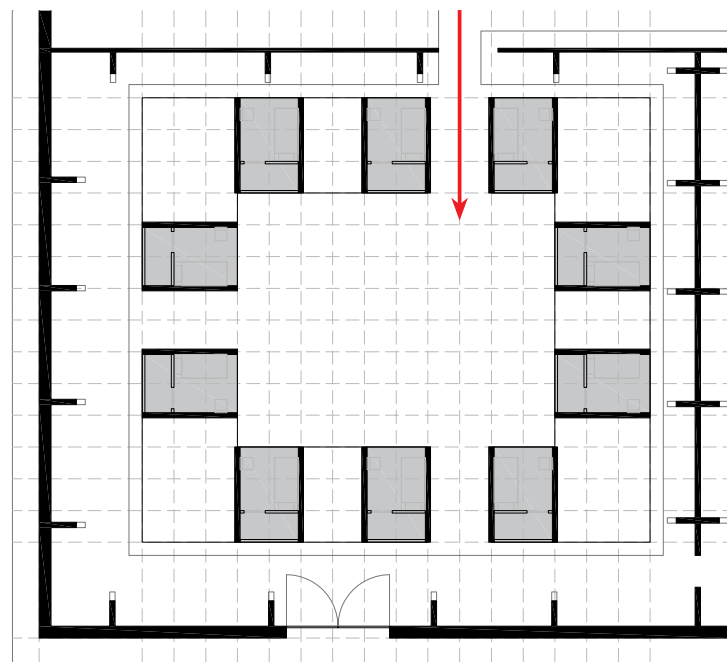
shared common space

retreat: placement of the programme

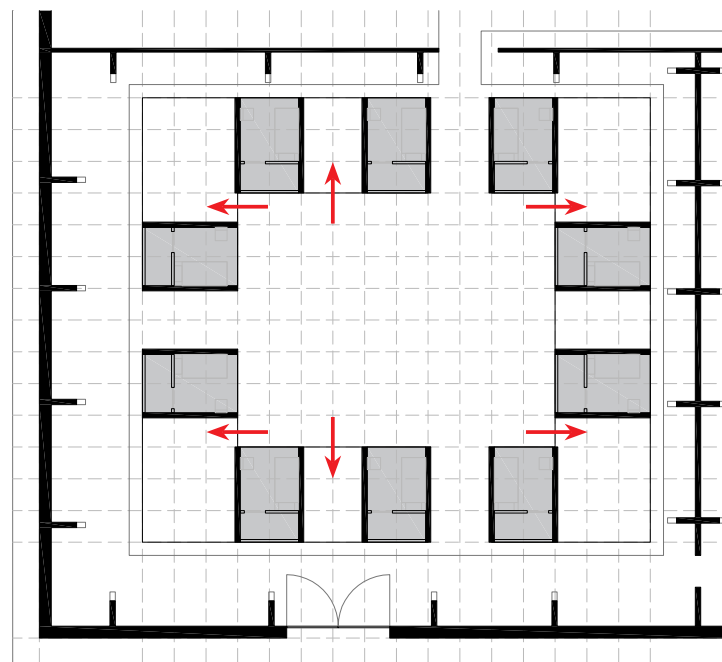


## IV. Architectural design

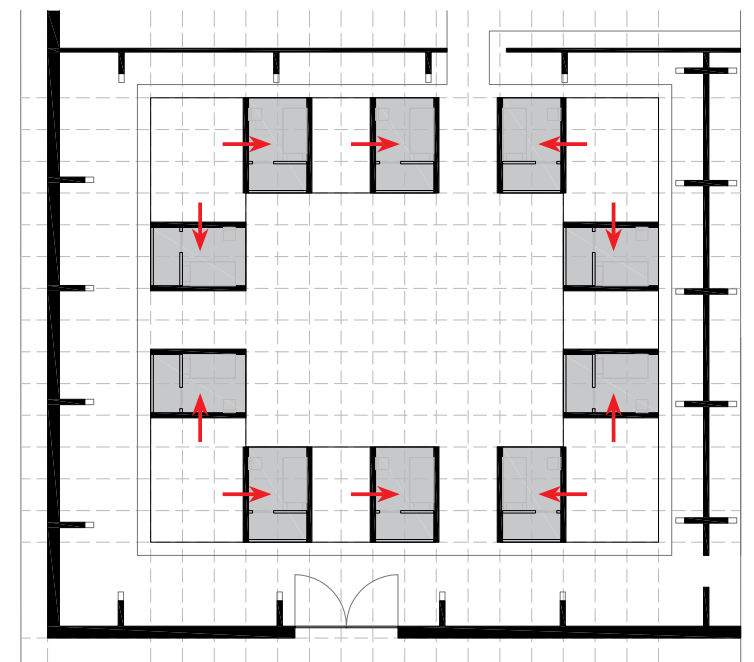
the private infill



communal garden



common room

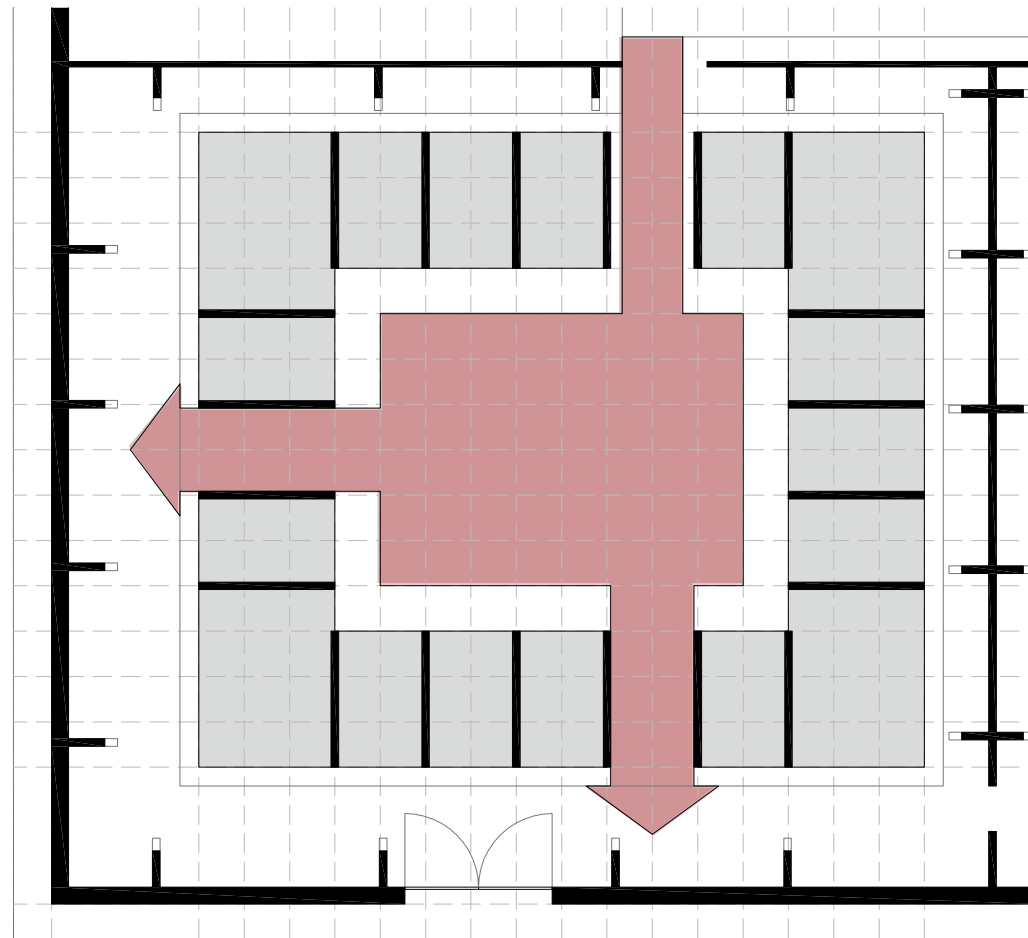


private retreat

retreat: privacy range in spatial organisation

## IV. Architectural design

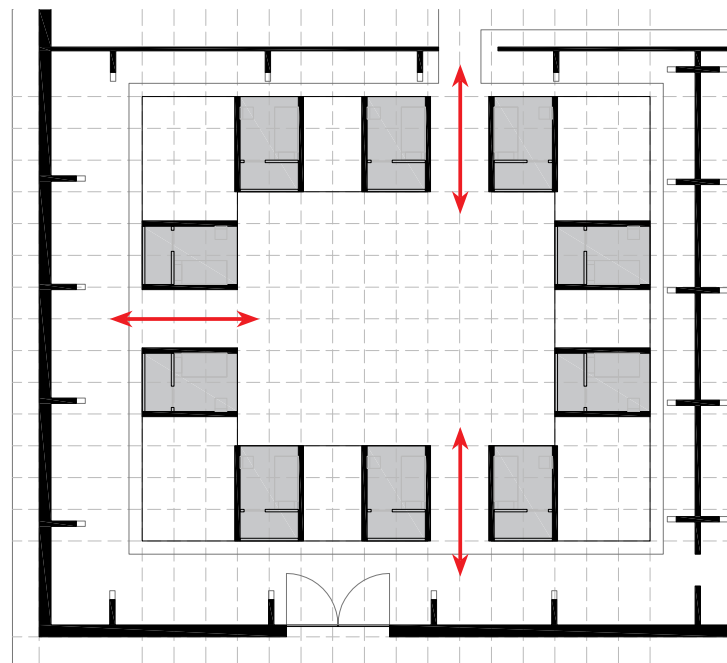
the private infill



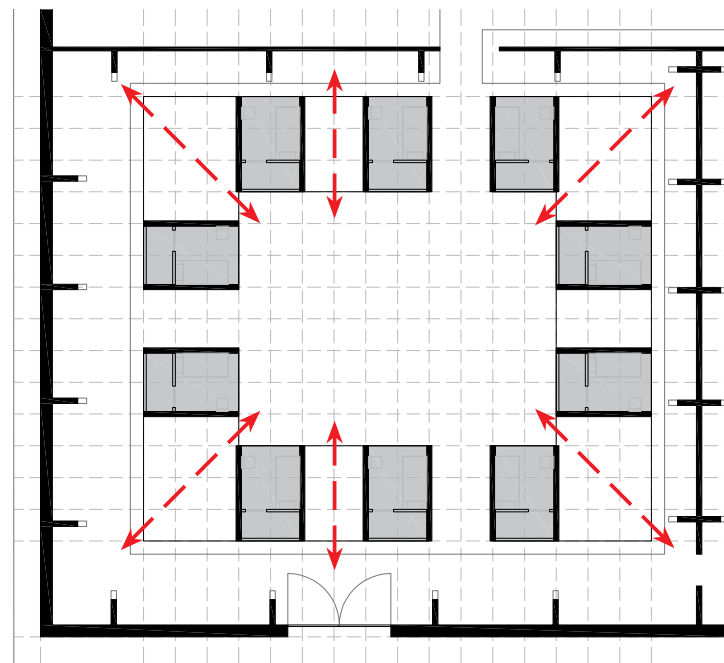
retreat: opening of the volume

## IV. Architectural design

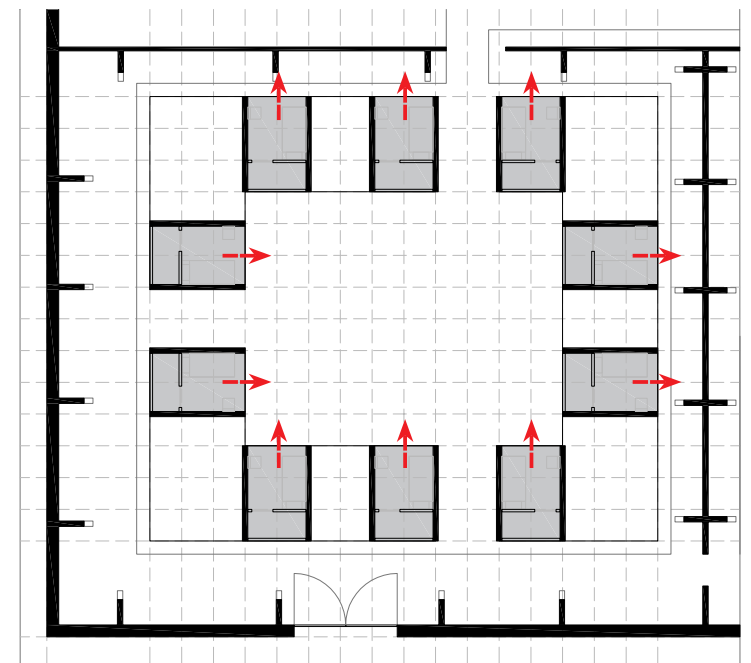
the private infill



physical relations



cross visuals

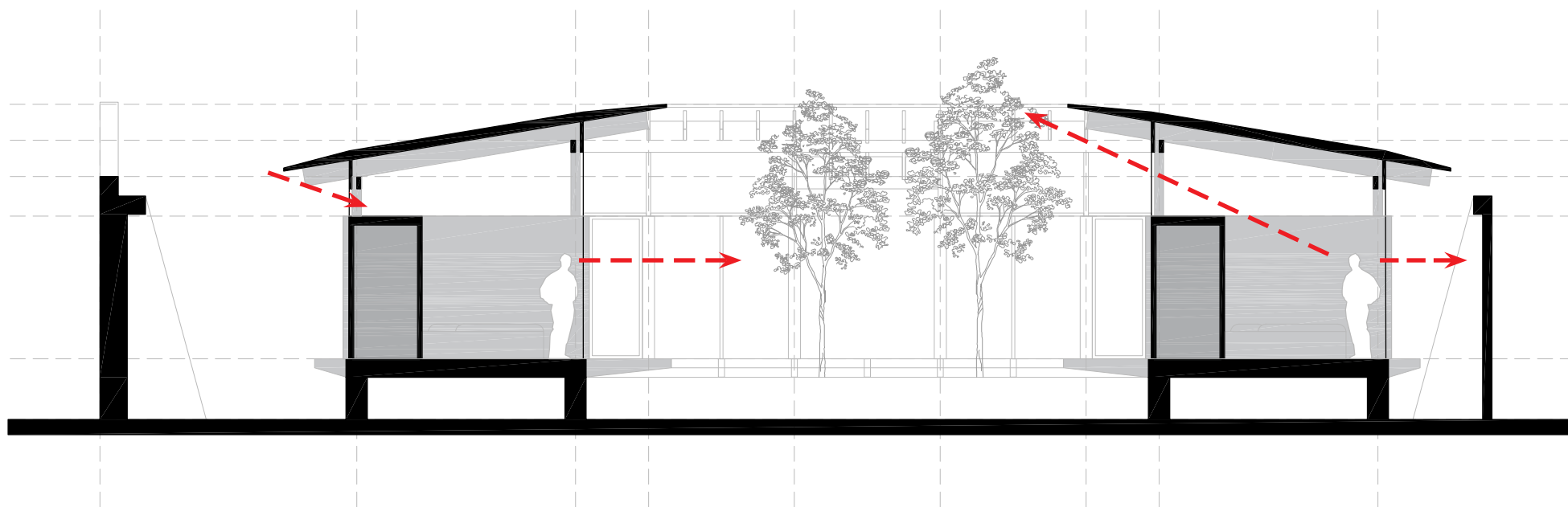


framed visuals

retreat: hierarchy in visual relations

## IV. Architectural design

the private infill



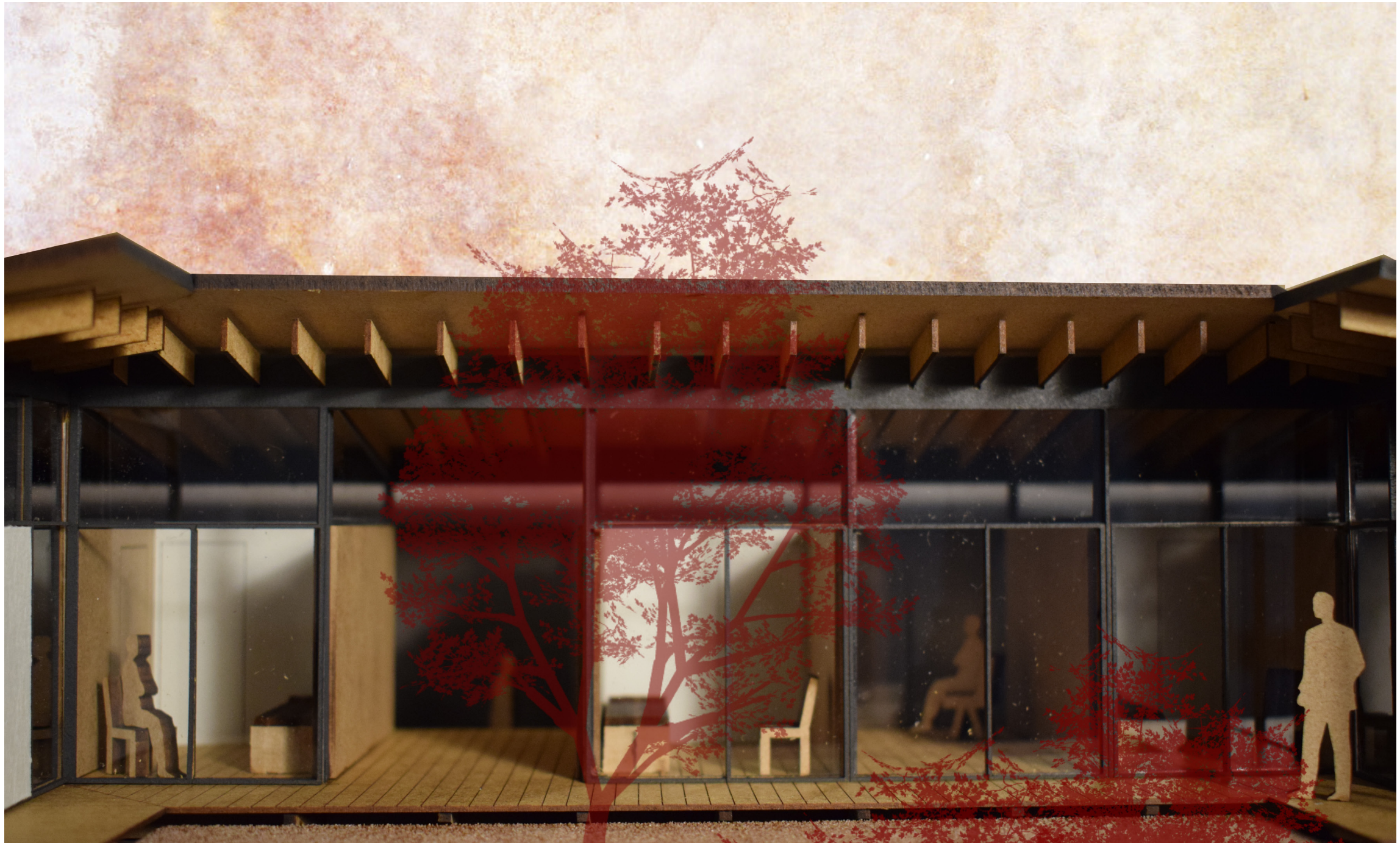
retreat: visual relations



## IV. Architectural design

---

the private infill



retreat: visual relations



## IV. Architectural design

---

the private infill





## IV. Architectural design

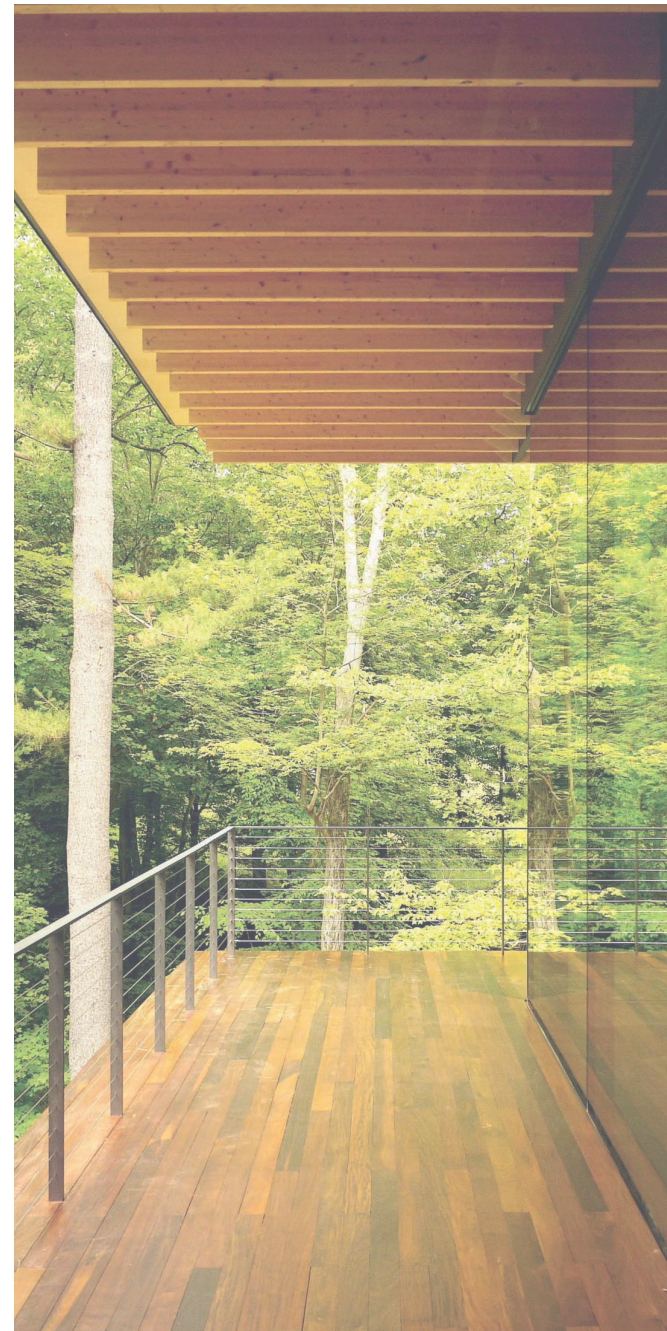
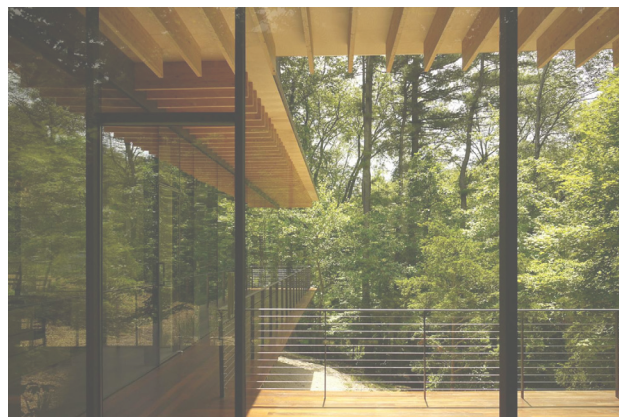
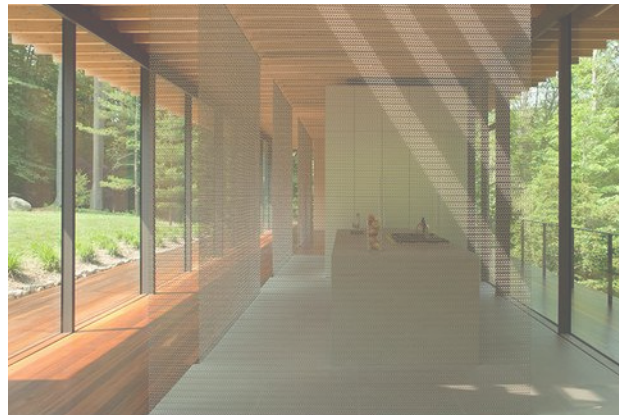
the private infill



articulation of the private infill: the enclosed character

## IV. Architectural design

the private infill



articulation of the private infill: the floating roof structure



## IV. Architectural design

the private infill



articulation of the private infill: the floating roof structure

## IV. Architectural design

---

the private infill



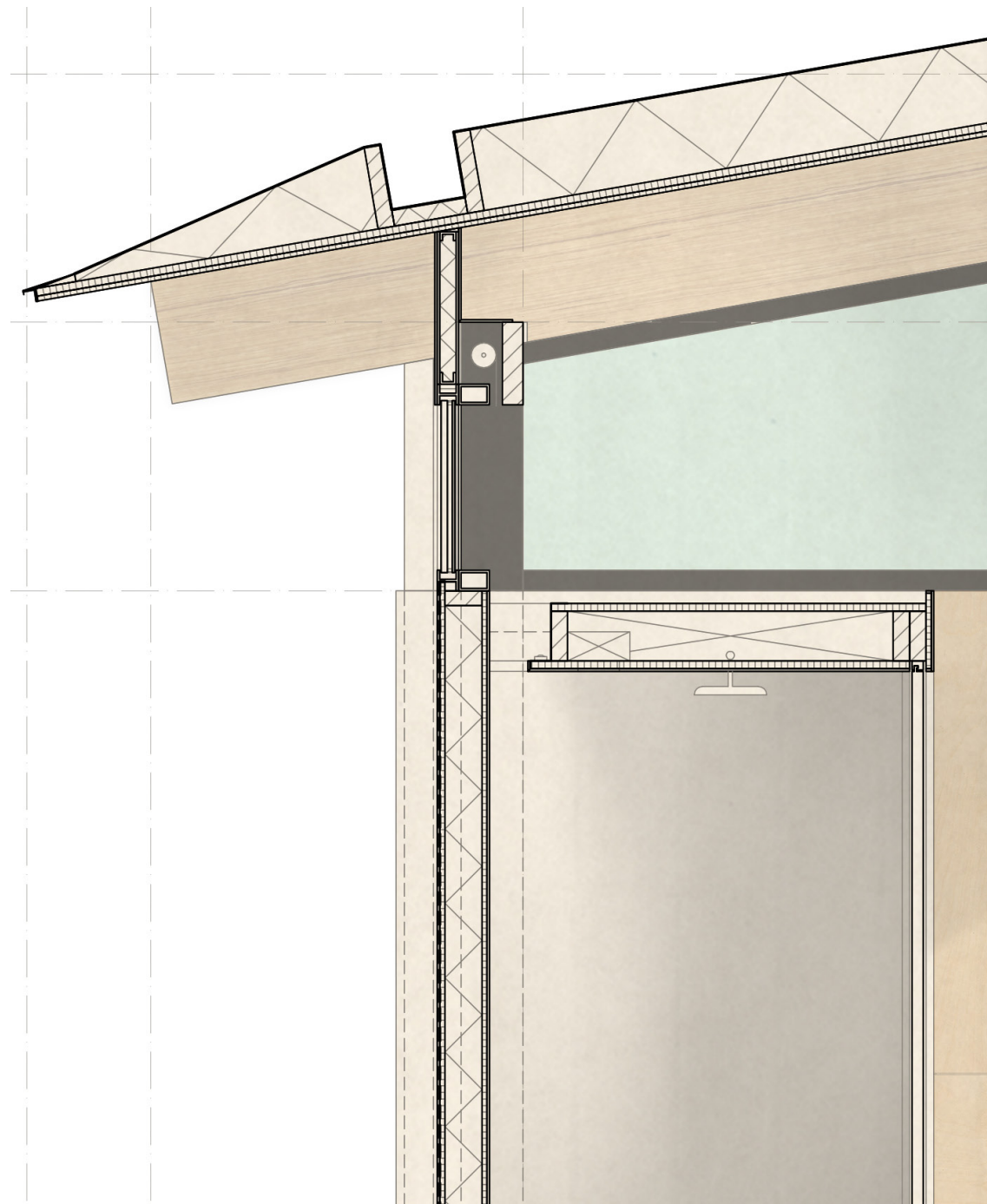
*The Walled, Yangzhou -  
Neri&Hu Design. Image:  
[www.archdaily.com](http://www.archdaily.com),  
retrieved 14-02-2018*

articulation of the private infill: the experience of diffuse light



## IV. Architectural design

the private infill

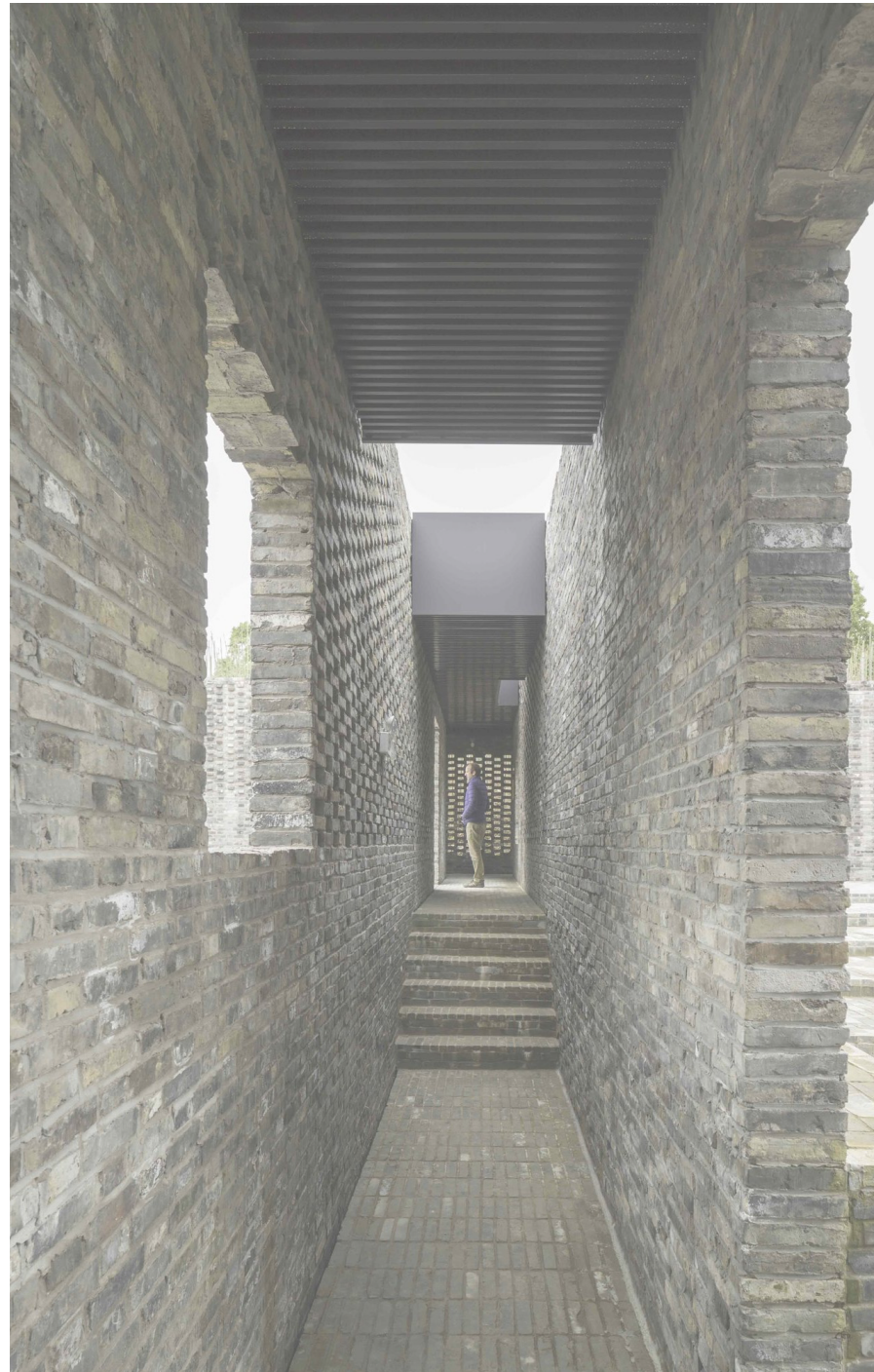


articulation of the private infill: the experience of diffuse light

## IV. Architectural design

---

the meditation route



character of the meditation route



## IV. Architectural design

the meditation route



relaxation



introspection



relativation

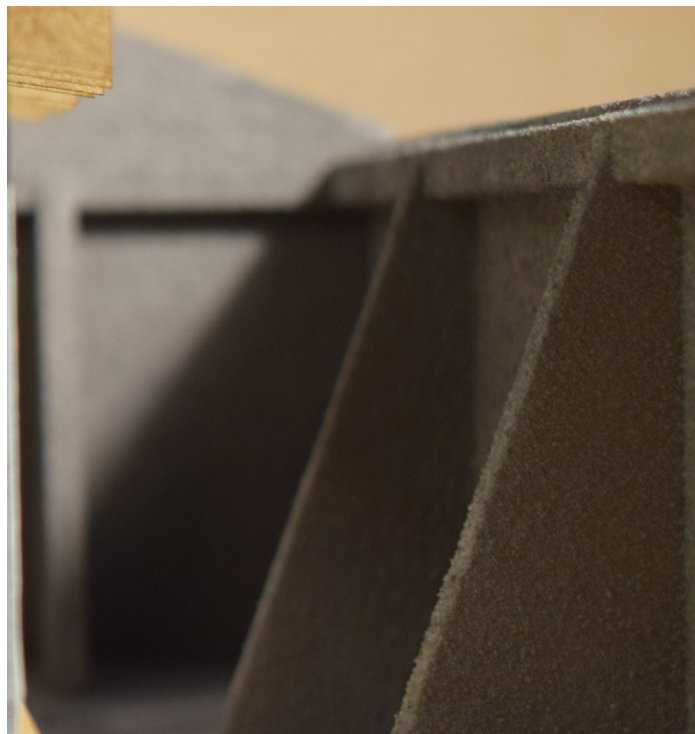
guidance of the different characters of the courtyards for the different steps of the meditation process



## IV. Architectural design

---

the meditation route



## V. Considerations

---

reflection

**“How can the design of public interiors empower the transformation of industrial sites within an existing urban structure?”**

answering the research question



## V. Considerations

---

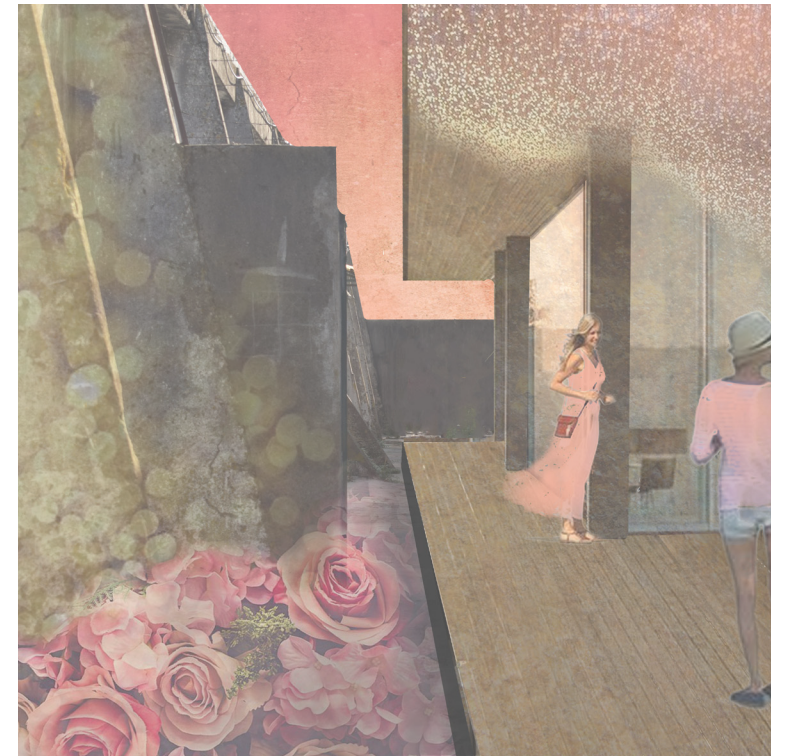
reflection



relaxation



introspection



relativation

reflecting on the design process

*Thank you for your attention.*