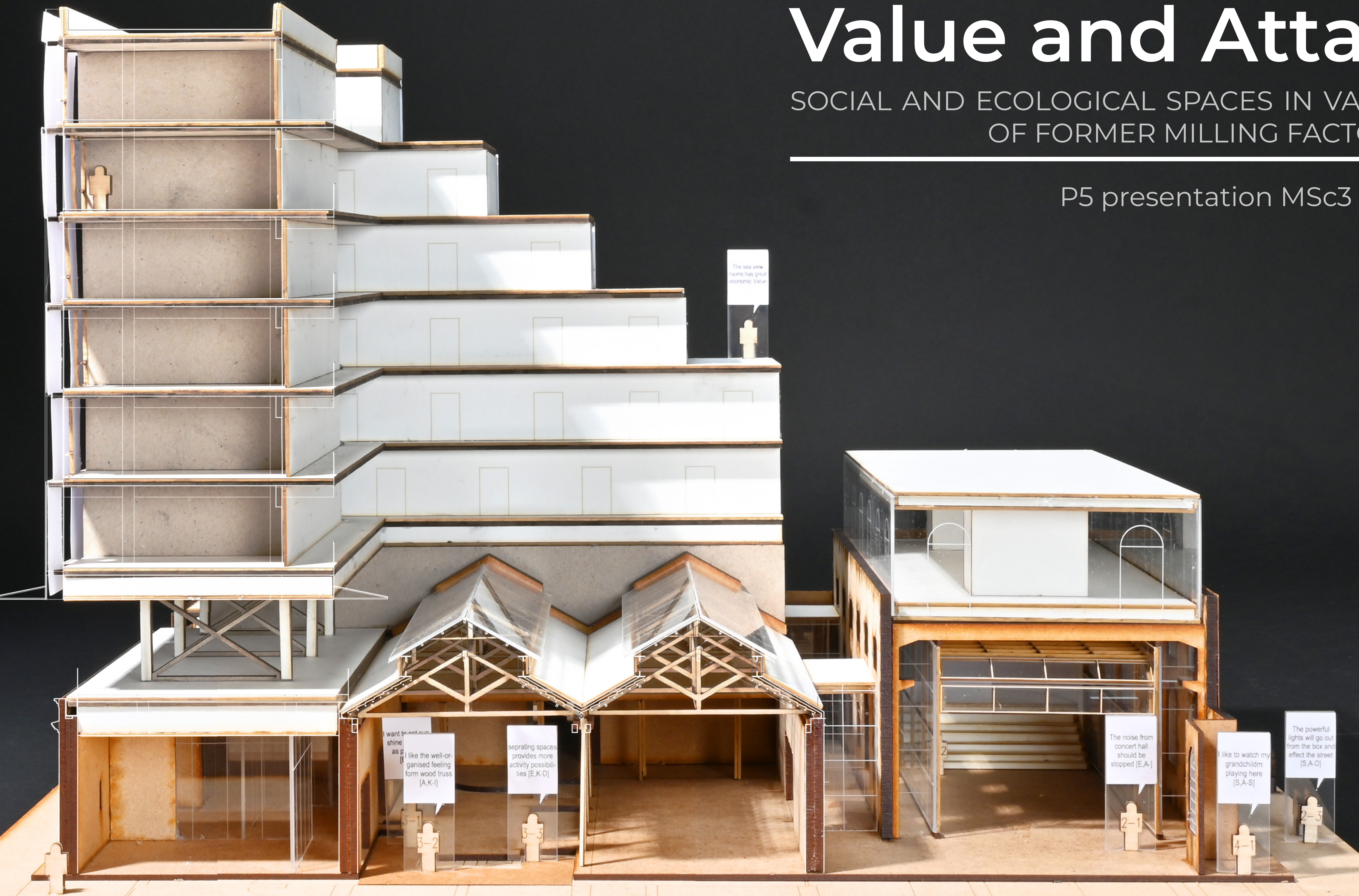
Value and Attachment

SOCIAL AND ECOLOGICAL SPACES IN VALUE-BASED REDESIGN OF FORMER MILLING FACTORY IN ESTAÇÃO, FARO

P5 presentation MSc3 Heritage & Architecture


The sea view rooms has great economic Value
I want to get sun shine as p [
I like the well-organised feeling form wood truss [A,K-I]
seprating spaces provides more activity possibilities [E,K-D]
3-1
3-2
3-3
The noise from concert hall should be stopped [E,A-]
2-1
I like to watch my grandchildm playing here [S,A-S]
4-1
The powerful lights will go out from the box and effect the street [S,A-D]
2-3

Tao Qiyang, 5260582

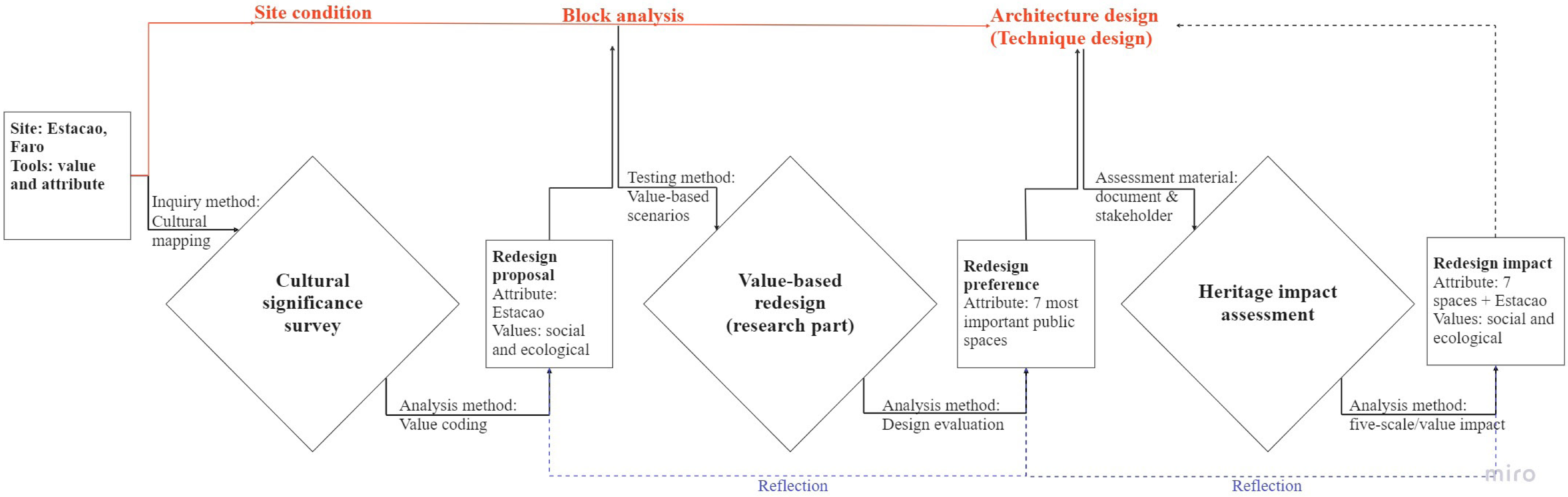
Content

Cultural significance survey

Value-based redesign

Heritage impact assessment

Content



Site condition

Block analysis

Architecture design (Technique design)

Site: Estacao, Faro
Tools: value and attribute

Inquiry method: Cultural mapping

Cultural significance survey

Analysis method: Value coding

Redesign proposal
Attribute: Estacao
Values: social and ecological

Testing method: Value-based scenarios

Value-based redesign (research part)

Analysis method: Design evaluation

Redesign preference
Attribute: 7 most important public spaces

Assessment material: document & stakeholder

Heritage impact assessment

Analysis method: five-scale/value impact

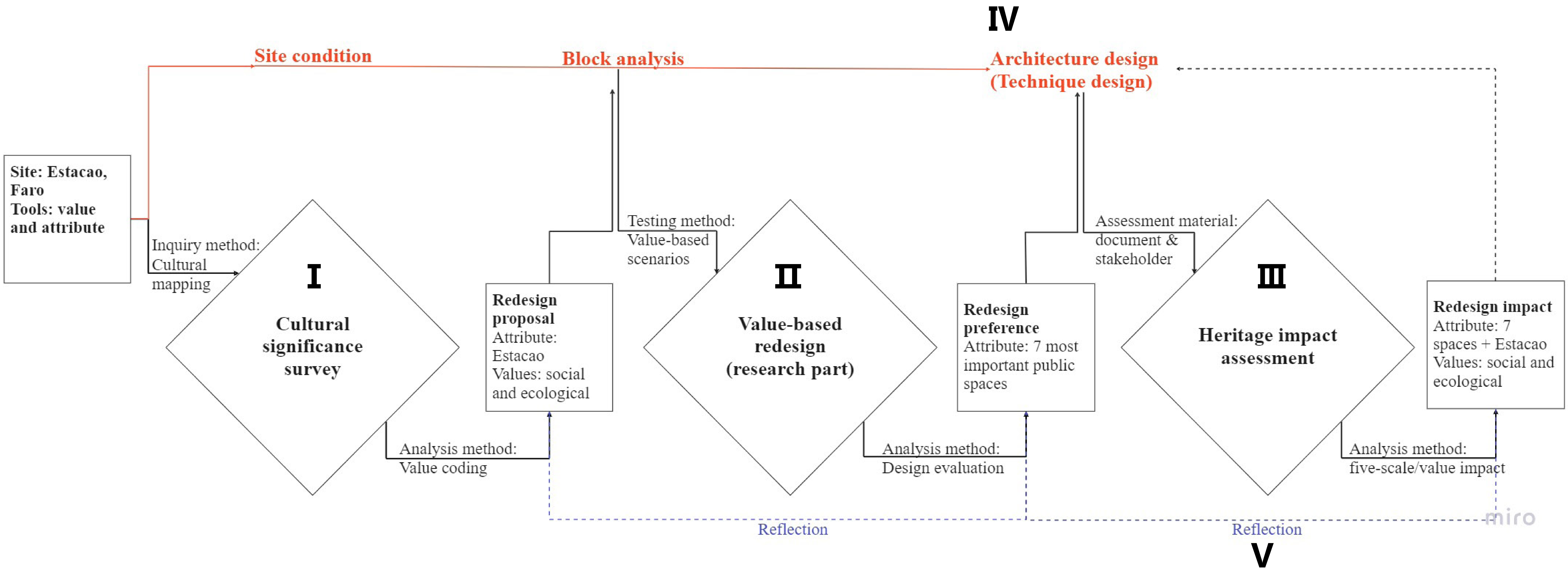
Redesign impact
Attribute: 7 spaces + Estacao
Values: social and ecological

Reflection

Reflection

miro

Content



Site: Estacao, Faro
Tools: value and attribute

Site condition

Block analysis

IV

Architecture design
(Technique design)

Inquiry method: Cultural mapping

I

Cultural significance survey

Analysis method: Value coding

Redesign proposal
Attribute: Estacao
Values: social and ecological

Testing method: Value-based scenarios

II

Value-based redesign (research part)

Analysis method: Design evaluation

Redesign preference
Attribute: 7 most important public spaces

Assessment material: document & stakeholder

III

Heritage impact assessment

Analysis method: five-scale/value impact

Redesign impact
Attribute: 7 spaces + Estacao
Values: social and ecological

Reflection

Reflection

V

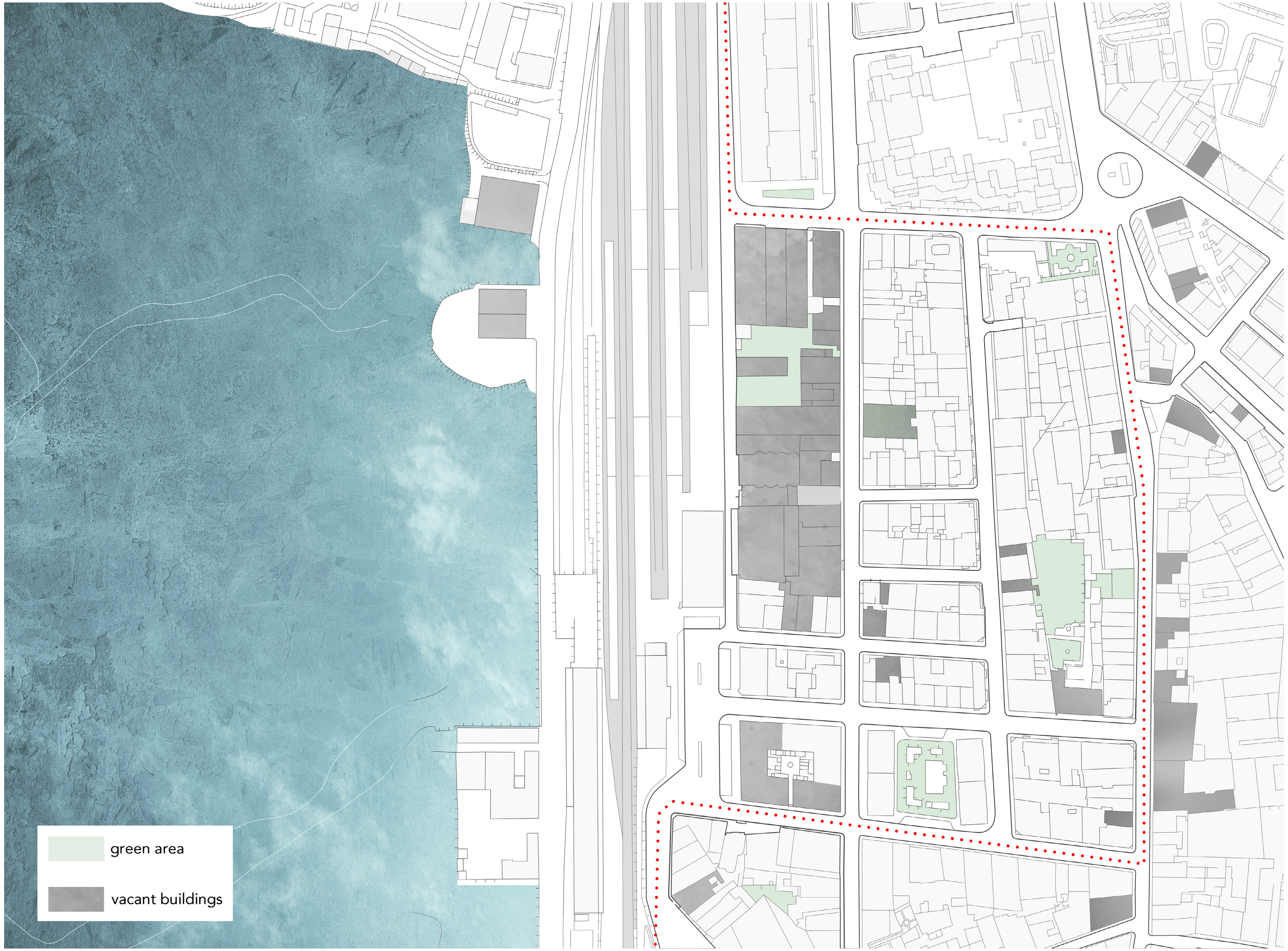
miro

Part 1

Cultural significance survey

Research question

How could the values and attributes affect residents' (the elderly and adults')place attachment to the Estação neighborhood, Faro?


green area
vacant buildings

Theoretical framework

Place attachment: a bond between people and place.

Place: a spatial or psychological scope including three factors:
1) physical settings
2) activities with people
3) meanings

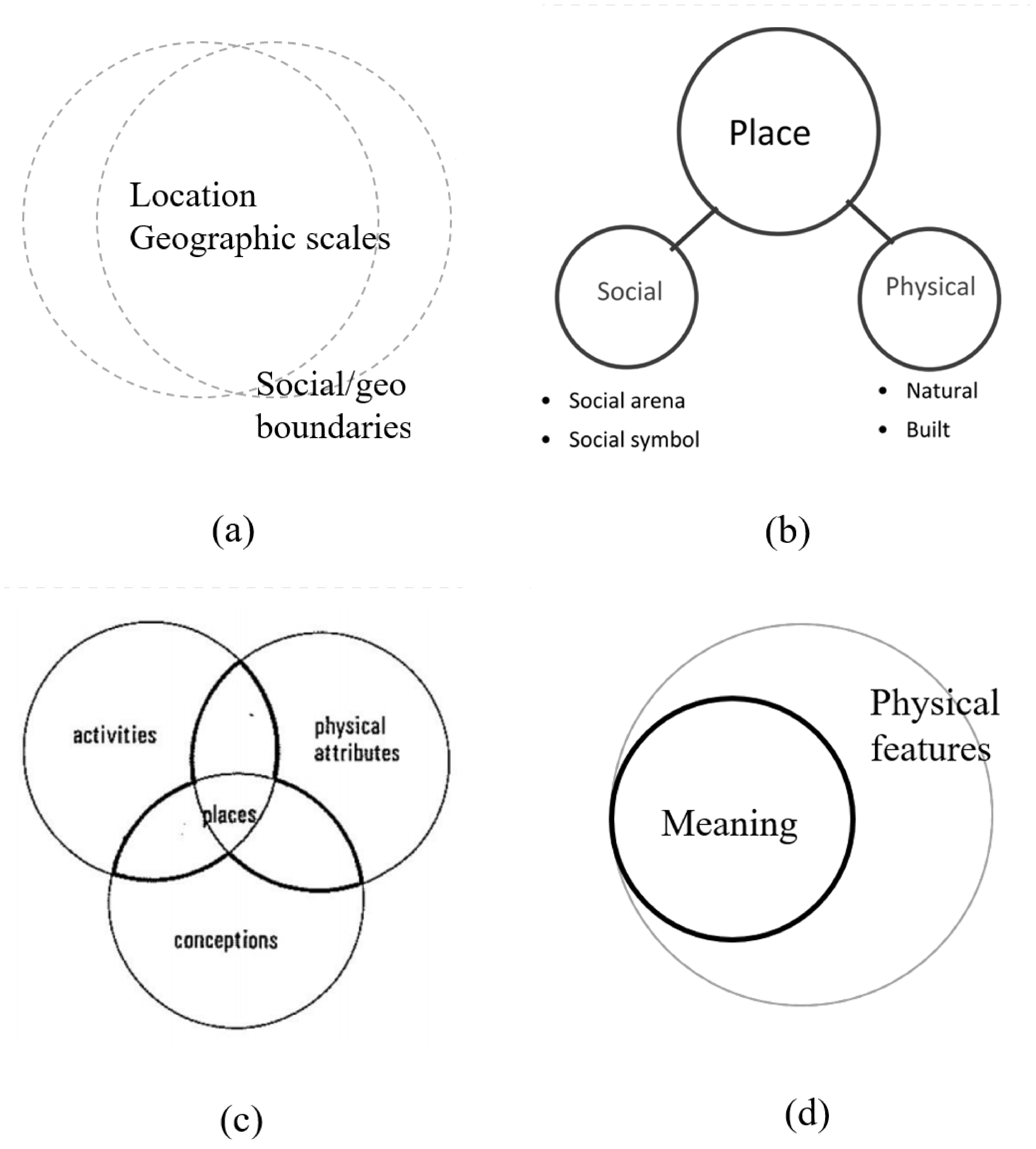
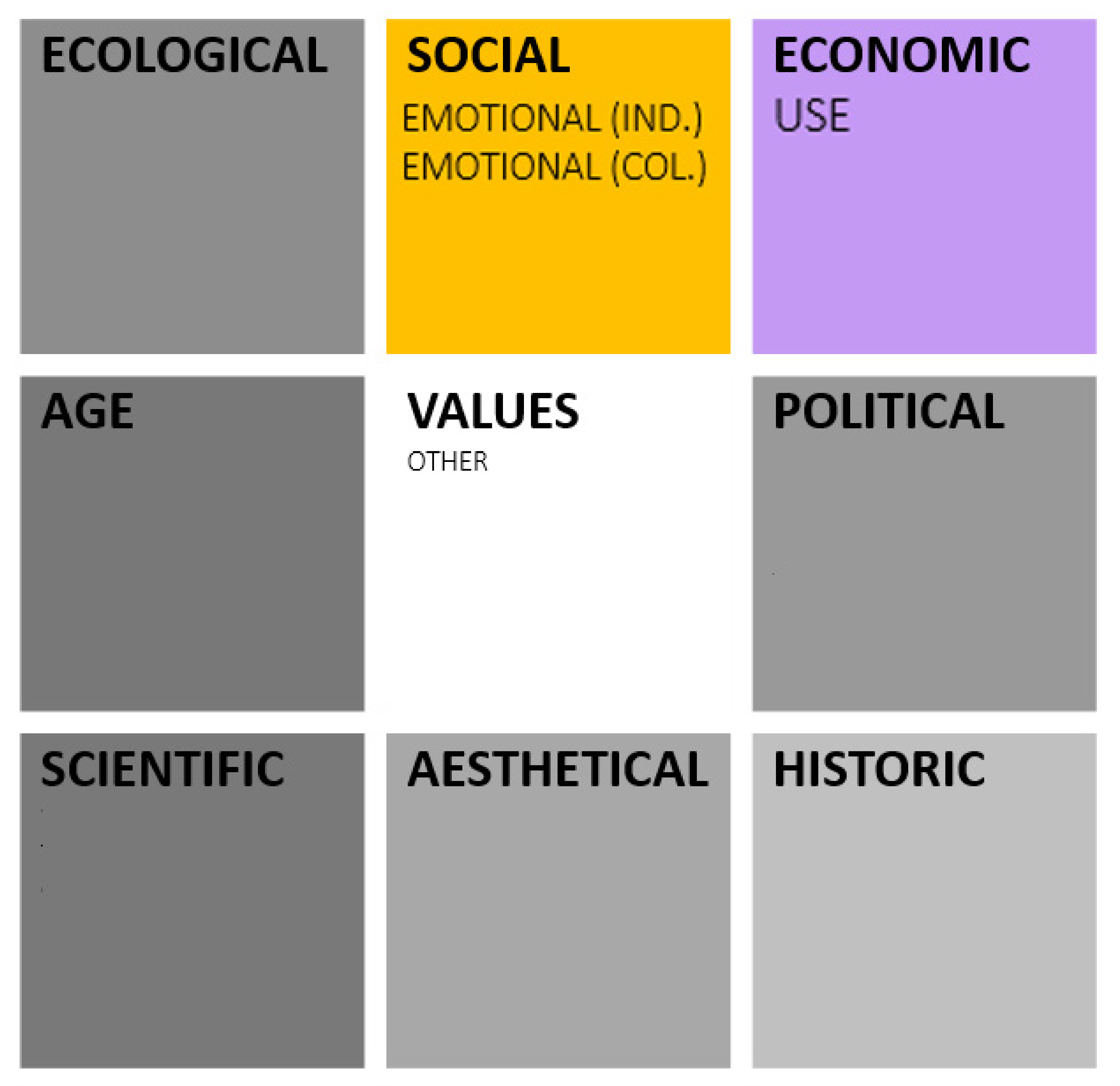

Location
Geographic scales
Social/geo boundaries
(a)
Place
Social
Physical
• Social arena
• Social symbol
• Natural
• Built
(b)
activities
physical attributes
places
conceptions
(c)
Physical features
Meaning
(d)

Fig 1-1. diagram for four space models
(b) Leila Scannell, Robert Gifford. (2009), Defining place attachment: A tripartite organizing framework, Department of Psychology, University of Victoria, Victoria, British Columbia, V8W 3P5 Canada
(c) Canter, D. (1977). The Psychology of Place. London: The Architectural Press Ltd.
(d) Stedman, R. (2003). Is it really just a social construction? The contribution of the physical environment to sense of place. Society and Natural Resources, 16, 671–685.

Theoretical framework

1. The place brings convenience to my life.
2. I feel the place is part of my life.
3. I like to get involved in this place's activities.
4. I love this place.
5. I don't want to leave this place.



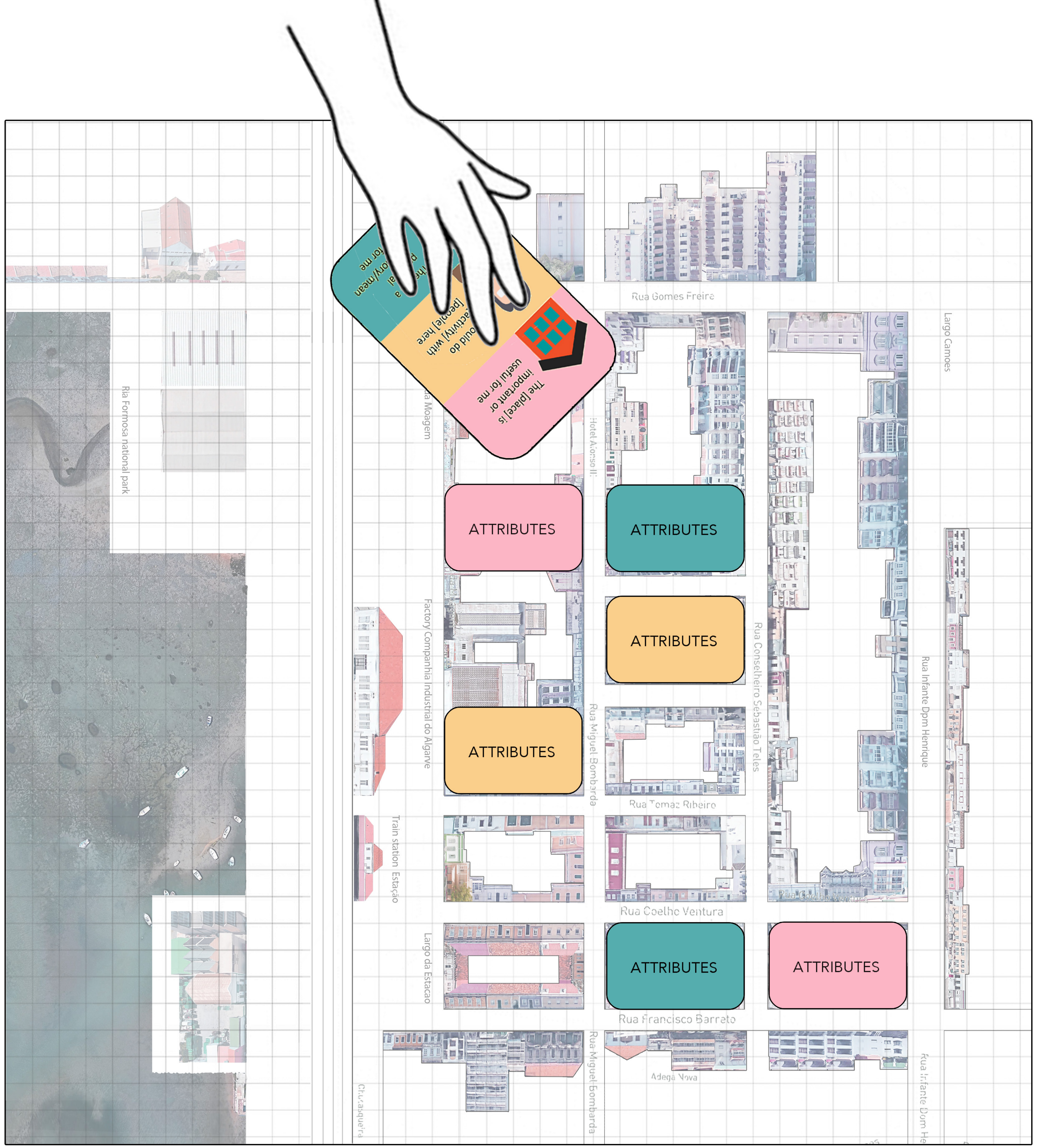
ECOLOGICAL	**SOCIAL** EMOTIONAL (IND.) EMOTIONAL (COL.)	**ECONOMIC** USE
AGE	**VALUES** OTHER	**POLITICAL**
SCIENTIFIC	**AESTHETICAL**	**HISTORIC**

ATTRIBUTE TYPES	Tangible attributes	Intangible societal attributes	Intangible relation attributes
PLACE FACTORS	Location/ Architectural elements	People/ Activity	Meaning
INTERVIEW TECHNIQUE	Draw on pictures and map	Your daily route in neighborhood	Life events happened here

Methods and tools

Step 1 mapping what participants like or dislike in Estação (attributes)

Step 2 measure participants' level of place attachment


The [place] is important or useful for me
ATTRIBUTES
ATTRIBUTES
ATTRIBUTES
ATTRIBUTES
ATTRIBUTES
ATTRIBUTES
Rua Gomes Freire
Largo Camões
Ria Formosa national park
Hotel Aorso II
Factory Companhia Industrial do Algarve
Rua Miguel Bombarda
Rua Conselheiro Sebastião Teles
Rua Infante Dom Henrique
Rua Tomaz Ribeiro
Train station Estação
Rua Coelho Ventura
Largo da Estação
Rua Francisco Barreto
Adega Nova

Methods and tools

Step 3 point out relevant attributes and explain reasons (values)

Step 4 Coding values and attributes, overlapping attribute cards.

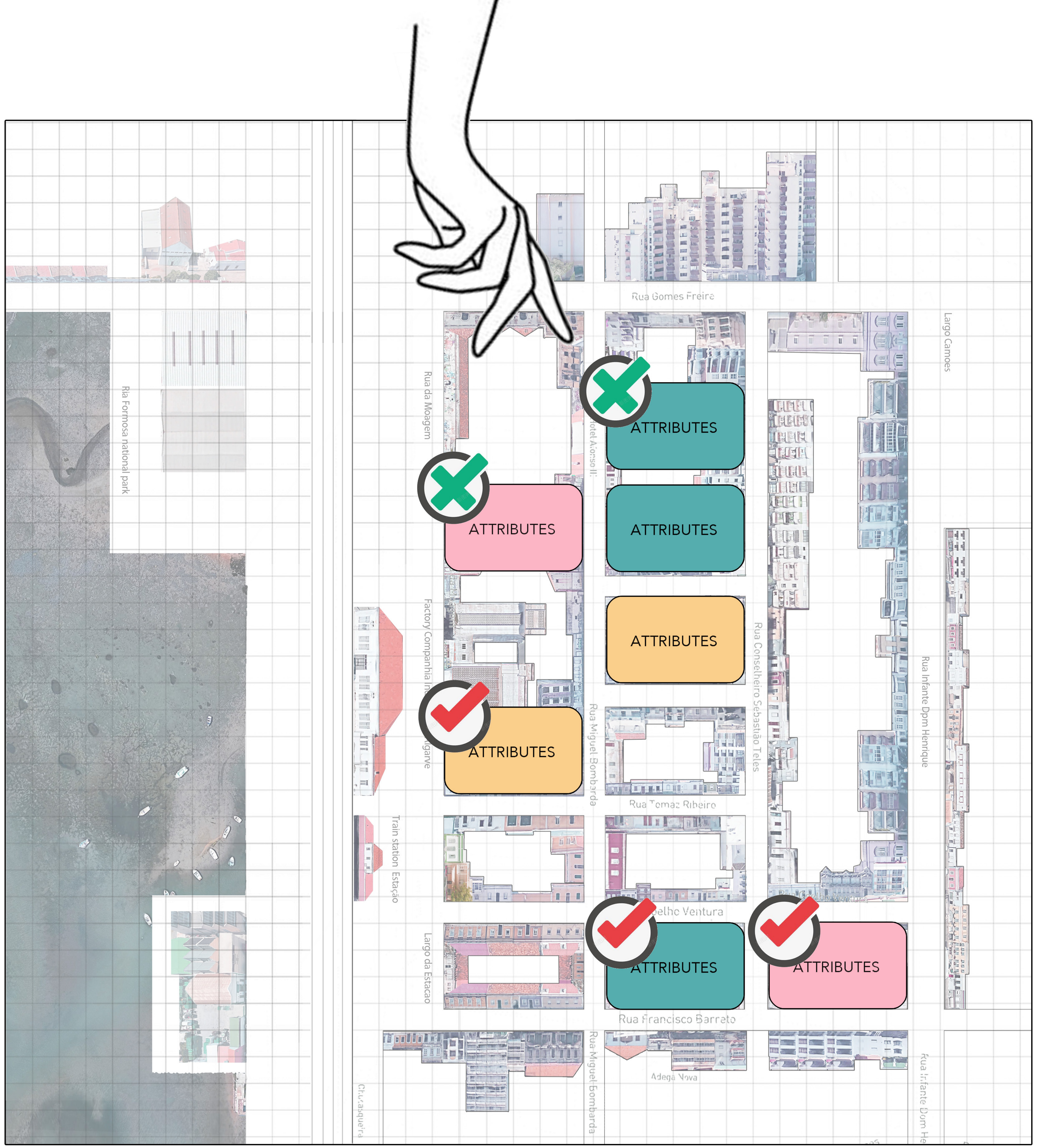
I like Estação because I could **meet different people** here, **the train station** provides this ......

I like the **little square** between two pink buildings because ......

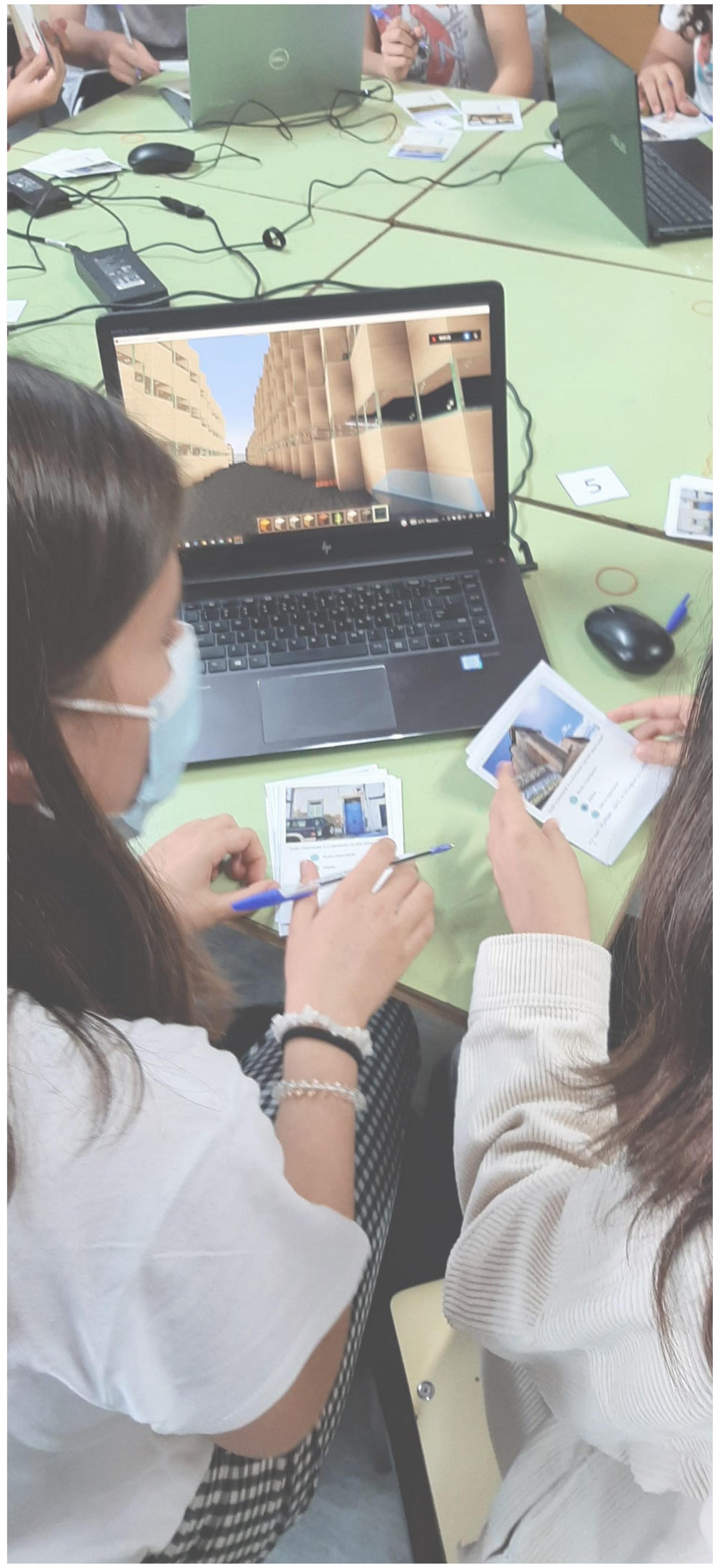
This is **very few public spaces** in Estação to support **activities** ....

There is **no activity** in Estação so I cannot participate ......

I don't like the poor condition of **the factory** because ......


Rua Gomes Freire
Largo Camões
Ria Formosa national park
Rua da Moagem
ATTRIBUTES
ATTRIBUTES
ATTRIBUTES
ATTRIBUTES
Factory Companhia
Rua Miguel Bombarda
Rua Conselheiro Sebastião Teles
Rua Infante Dom Henrique
ATTRIBUTES
Rua Tomaz Ribeiro
Train station Estação
Largo da Estação
Ventura
ATTRIBUTES
ATTRIBUTES
Rua Francisco Barreto
Adega Nova

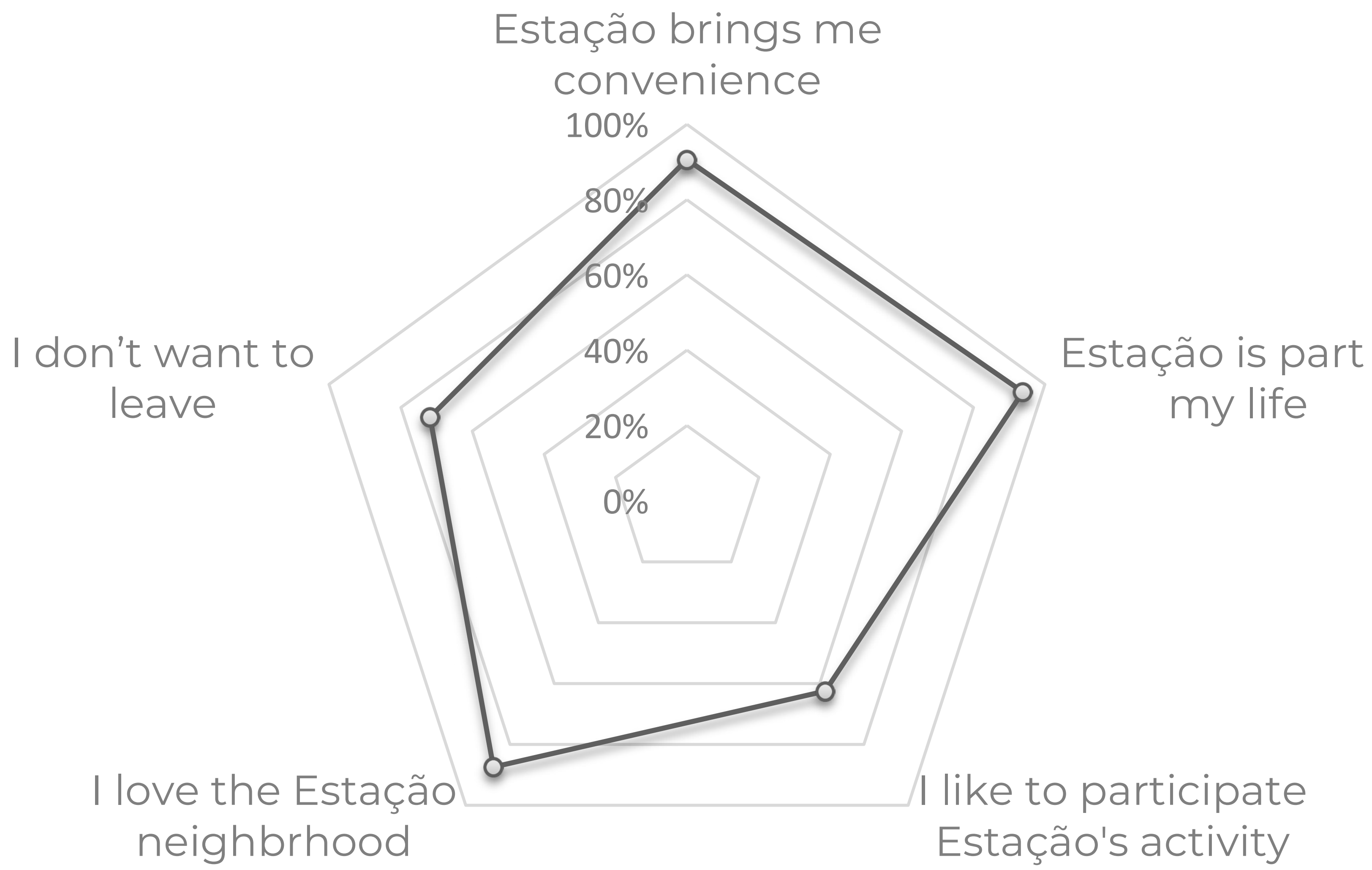
Fieldwork

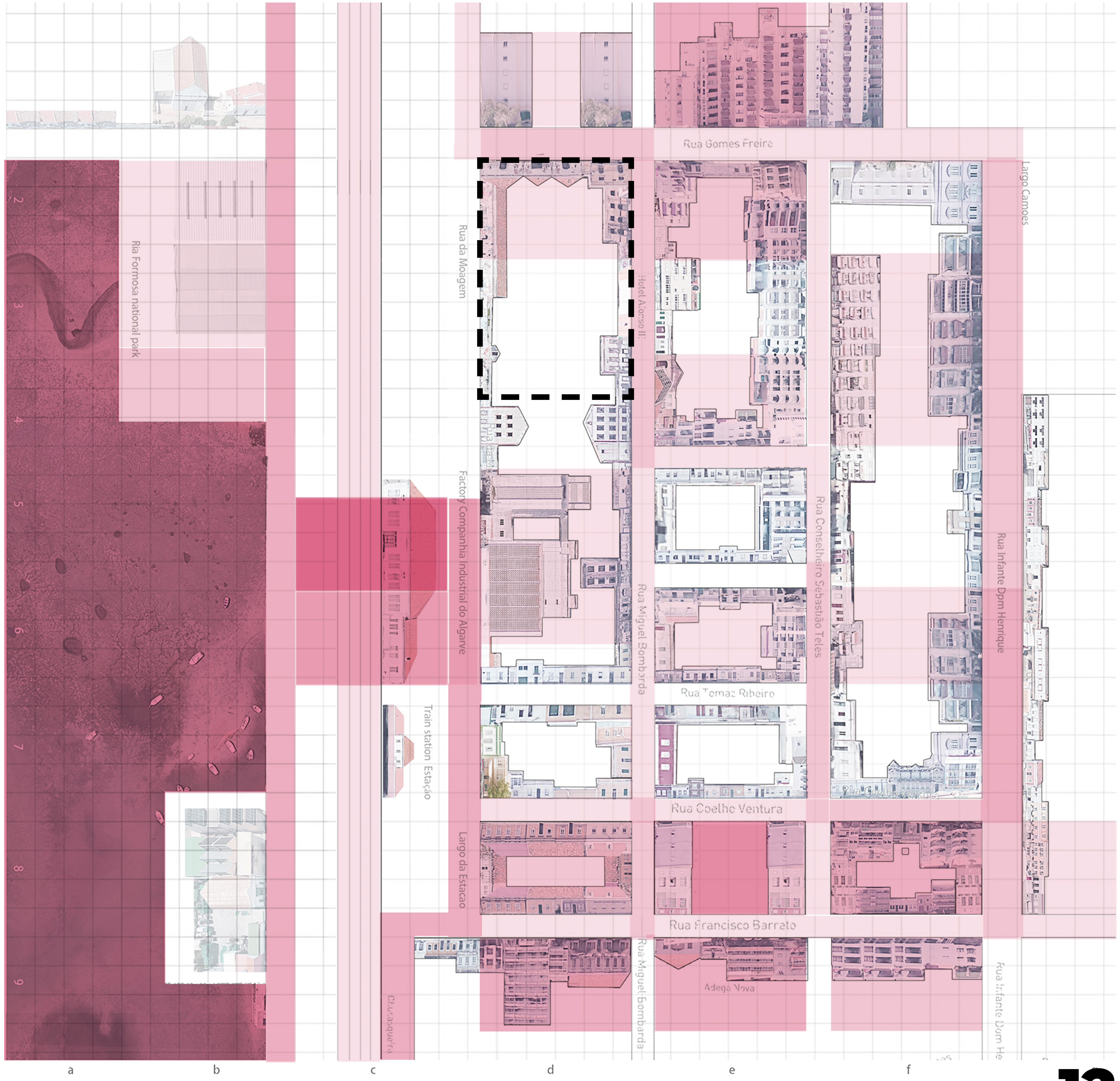


Result 1

Sub-question : What is the level of place attachment of locals to the Estação neighborhood? Which areas do they feel more attached to?

People love Estação, they feel more attached to the edge areas of the neighborhood.




Rua Gomes Freire
Largo Camoes
Ria Formosa national park
Rua da Moagem
Hotel Afonso III
Factory Companhia Industrial do Algarve
Rua Miguel Bombarda
Rua Conselheiro Sebastião Teles
Rua Infante Dpm Henrique
Rua Tomaz Ribeiro
Train station Estação
Largo da Estacao
Rua Coelho Ventura
Rua Francisco Barreto
Adega Nova
Rua Miguel Bombarda
Rua Infante Dom He
2
3
4
5
6
7
8
9
a
b
c
d
e
f

Site selection

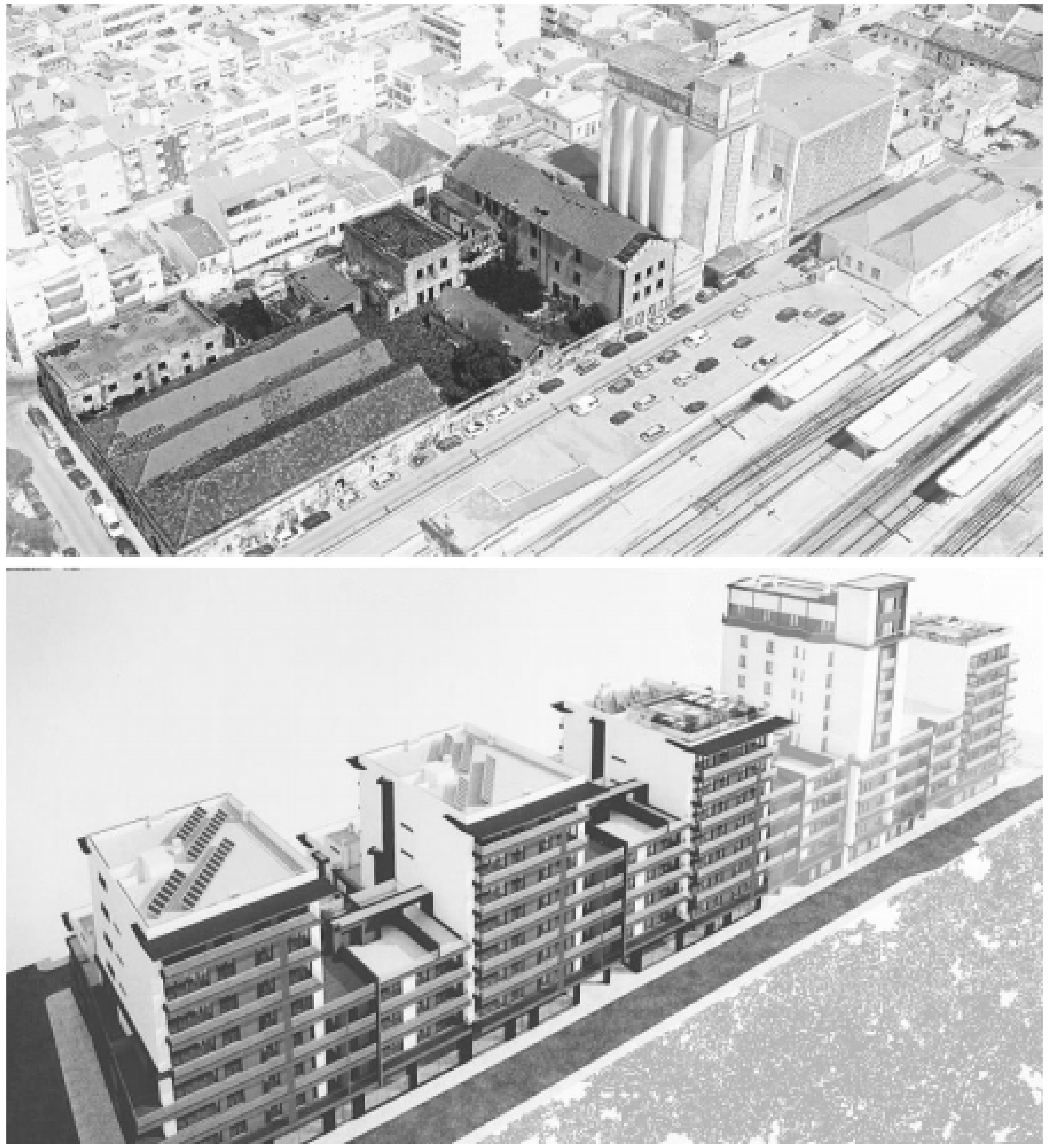
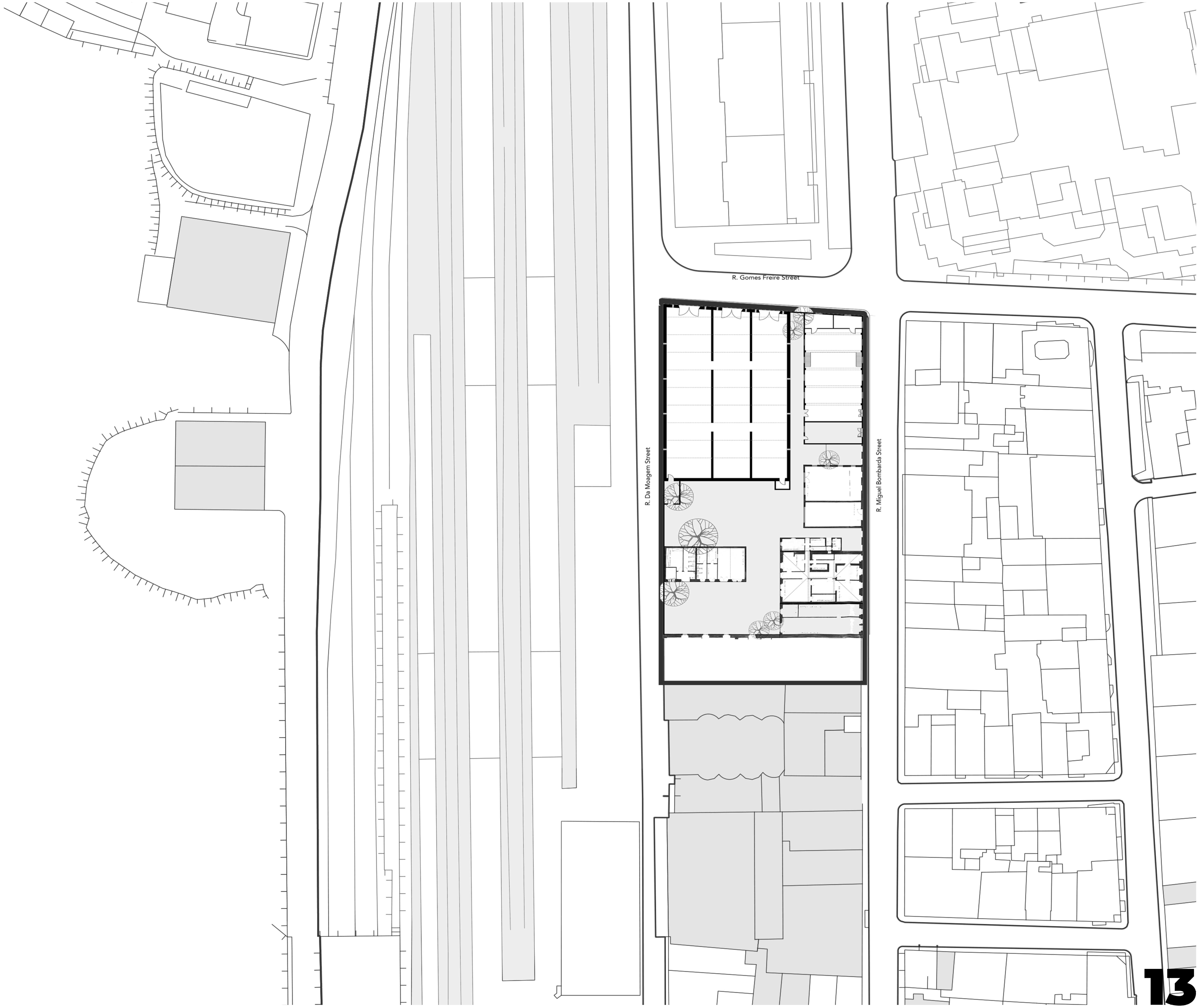
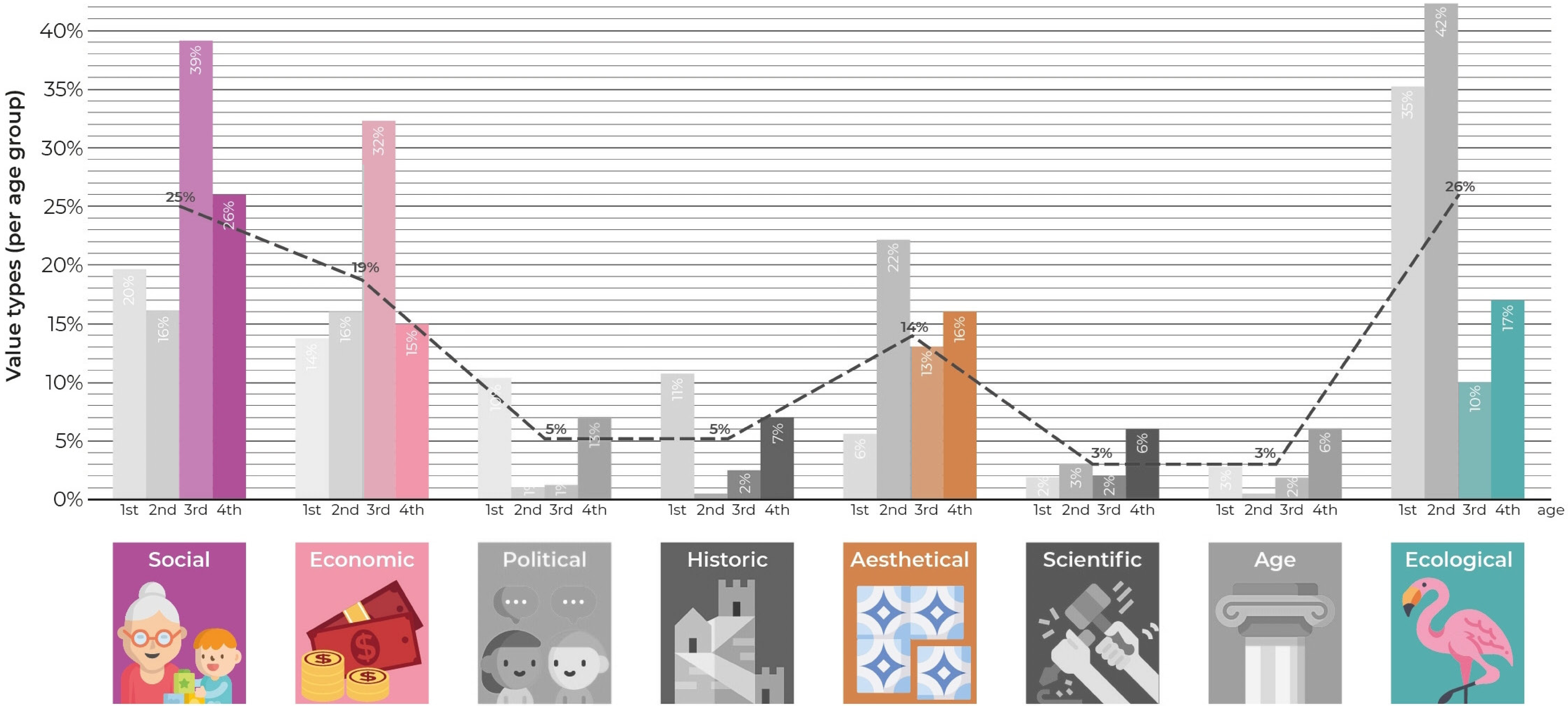


Fig 1-2. New project rendering from internet


R. Gomes Freire Street
R. Da Moagem Street
R. Miguel Bombarda Street

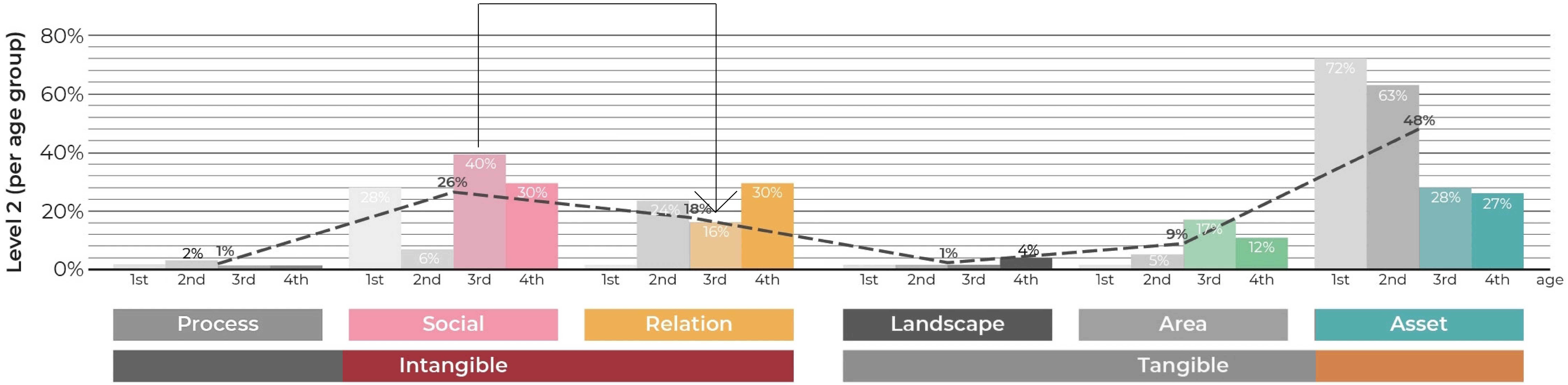
Result 2

Sub-question : Which values are more relevant to residents' place attachment?
Value type hierarchy: Social > Economic >> Ecological > Aesthetical >> Others



Result 2

Sub-question: What are the differences between the elderly and adults' place attachment?
There is a translation from (I) social attributes to (I) relation attributes between adults and the elderly.



Design proposal

	Attribute (direct)	Urban level attributes (indirect)	Building level attributes (indirect)	adults	elderly
Social	Friend & family	Outdoor space	(Playground and square)	+	+
		Interior leisure space	(View to the sea)	+	
		(Green corridor)	(Park and courtyard)		
	Calm atmosphere	The street	Continuous façade	+	++
			Entrance	-	
	Emotion	Sense of ownership	(Accessibility)		+
		Sense of safety	Lights	+	
	Memory	Flour factory: buying bread	Window		+
		Former concert hall	(interior open space)	+	
		Childhood: playing football	Courtyard (playground)		
Economic	(Use)	Poor condition	Poor facades	-	-
		Homeless people	Shadow spaces	-	
		Using drugs	Narrow alley	-	-
	Leisure activity	(Nightclub)	(Bar)	+	
		(Concert hall)	(Stage)	++	
				+	+
	Exercise	The street	Pedestrian	+	
		(Outdoor space)	(Park and square)	+	+
Ecological	The sea	(Green corridor)	(Park and courtyard)	+	+
		Visual corridor	(Rooftop)	+	+
	Animals	The street: walking dogs	Pedestrian	+	+
		Vacant factory: cats	Ventilation windows	-	+
Aesthetical	Design	The tower	Building volume		+
		The facade	Façade decoration		

Design proposal

Target: improve place attachment

1. (ADD) Make use of the outdoor space with nature and potential indoor activity spaces to support people's interaction with family and friends, relaxation, and exercise.

2. (KEEP) Activate the abandoned areas without affecting the calm atmosphere of the neighborhood. Introduce new leisure use for the young generation without affecting the elderly's memory and sense of ownership.

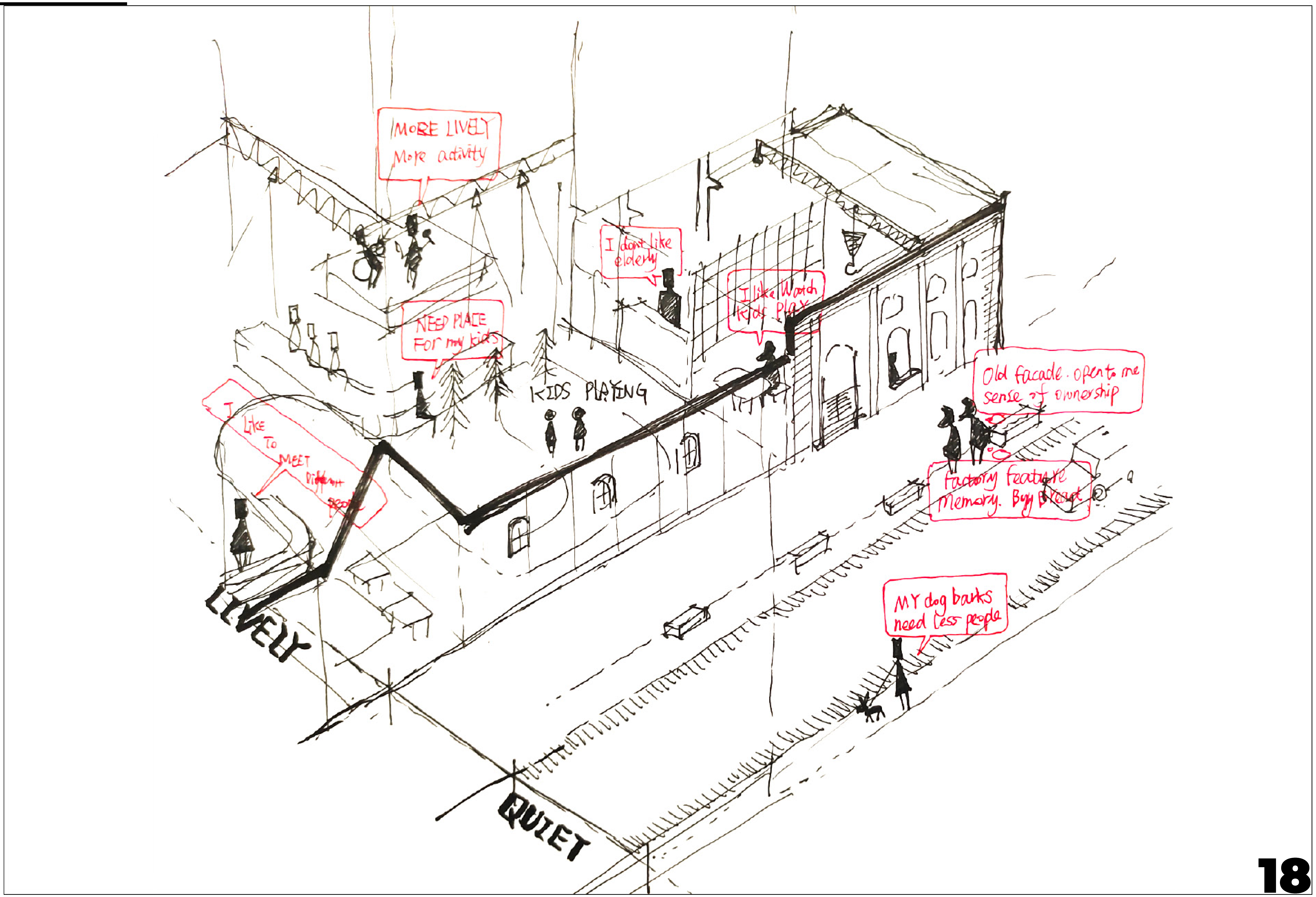
Research to design

Value - social and ecological

Attribute - milling factory

Research - cultural mapping

Desgin - design proposal


MORE LIVELY
More activity
I dont like elderly
I like Watch kids play
NEED PLACE For my kids
KIDS PLAYING
I like To MEET Different people
Old facade. open to me sense of ownership
Factory feature memory. Buy Bread
MY dog barks need less people
LIVELY
QUIET

Part 2

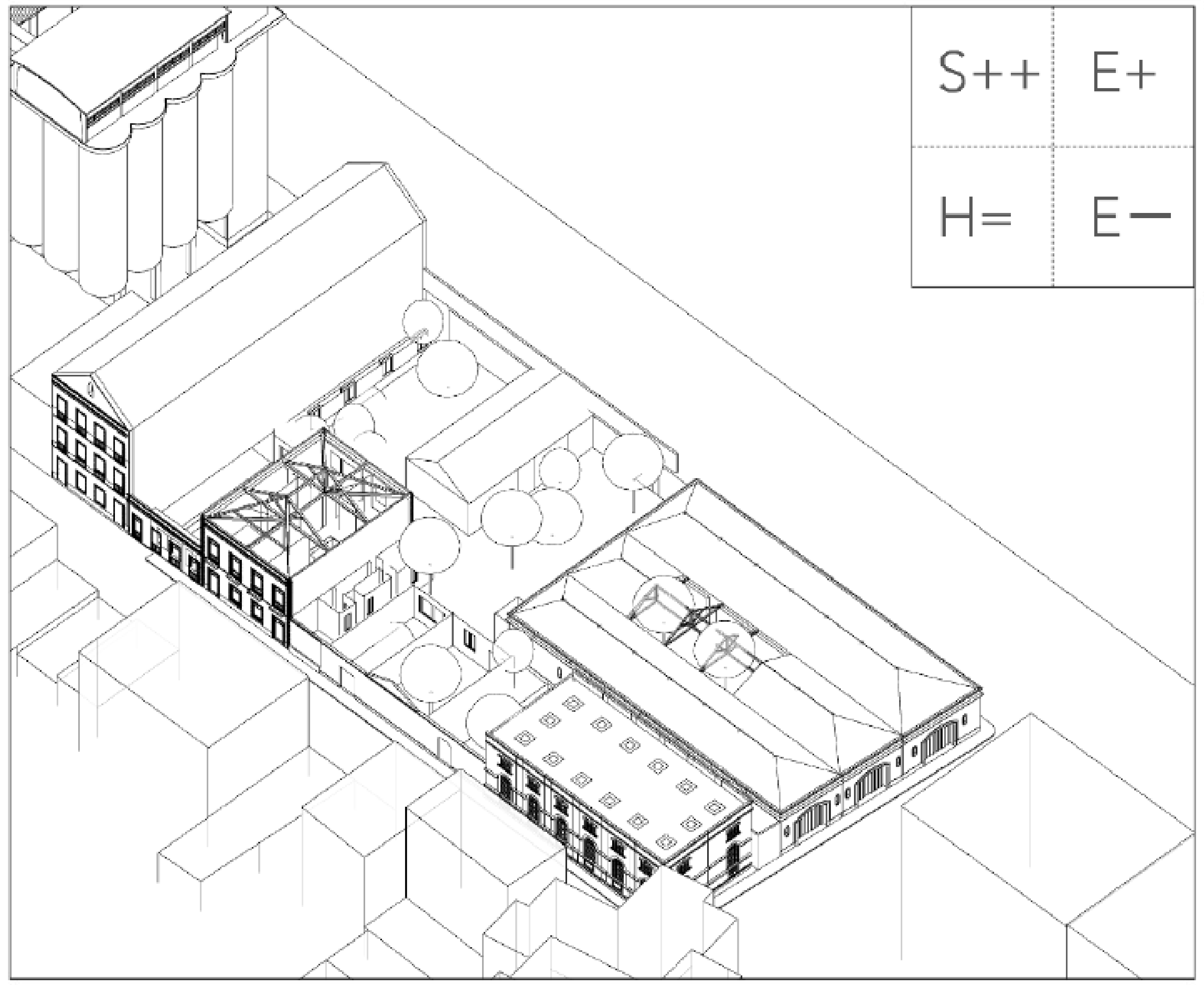
Value-based redesign

Block analysis

Entertainment use

(ecological value +)

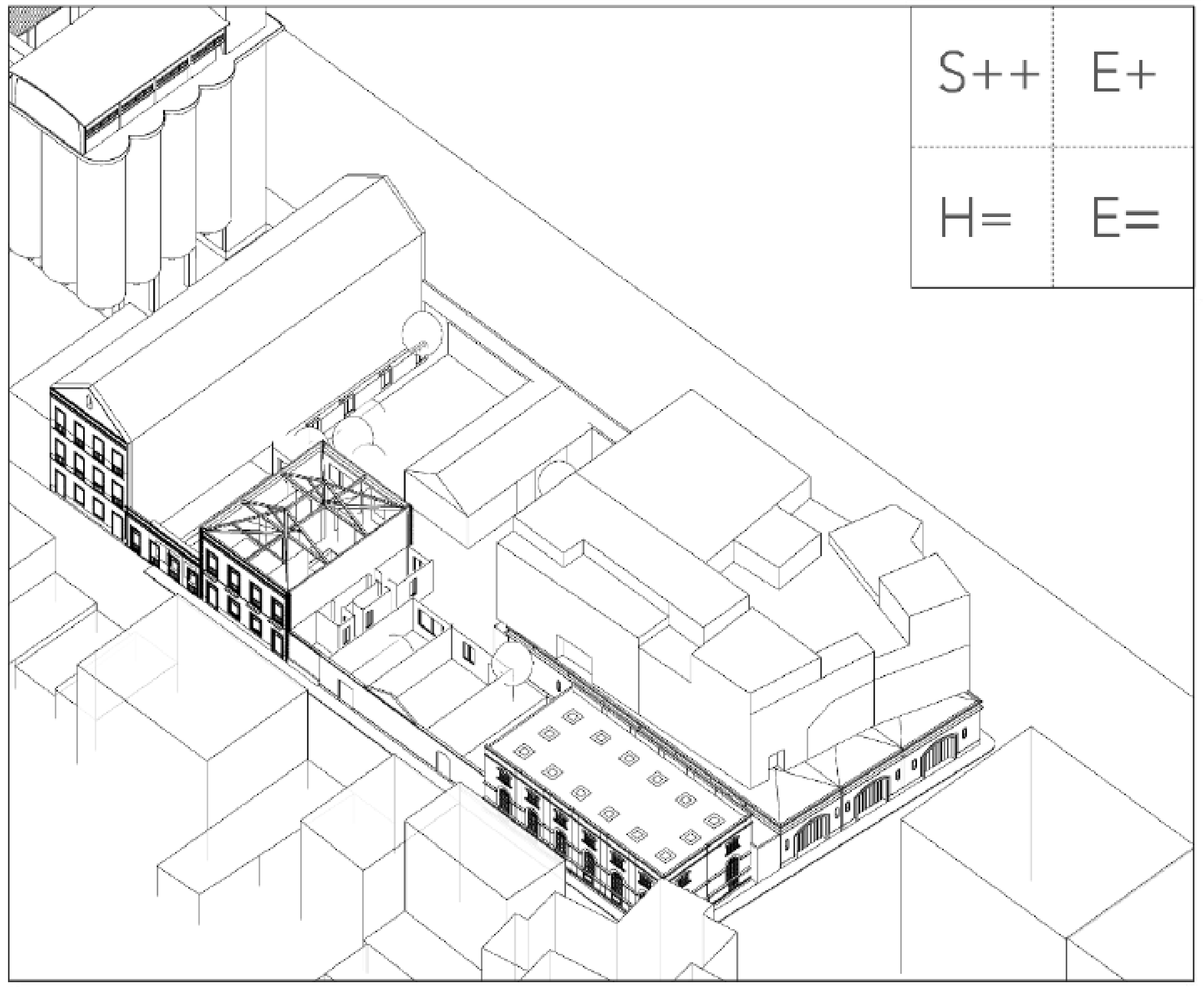
no waterfront



Commercial use

(social value +)

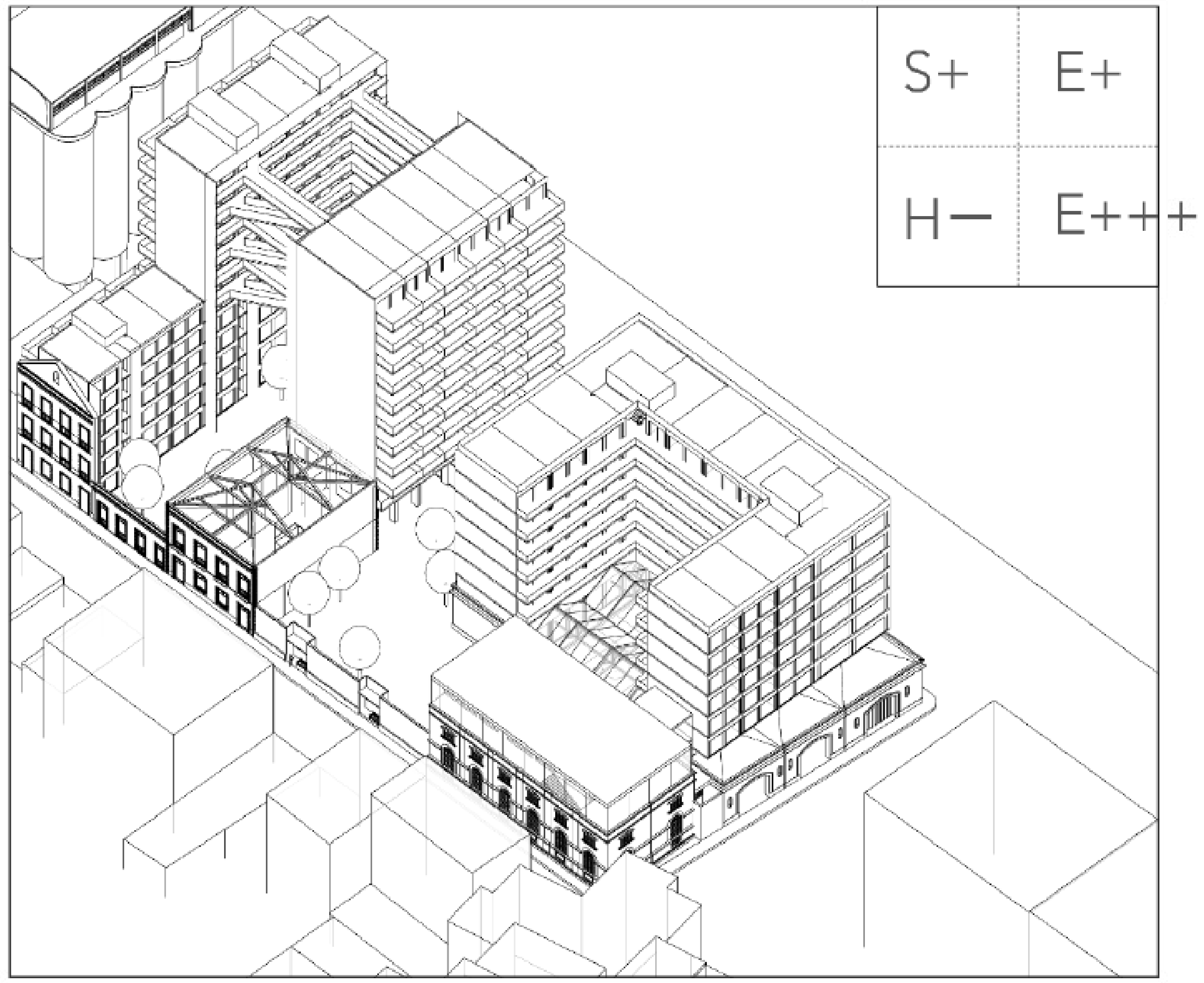
no public center or high-density area



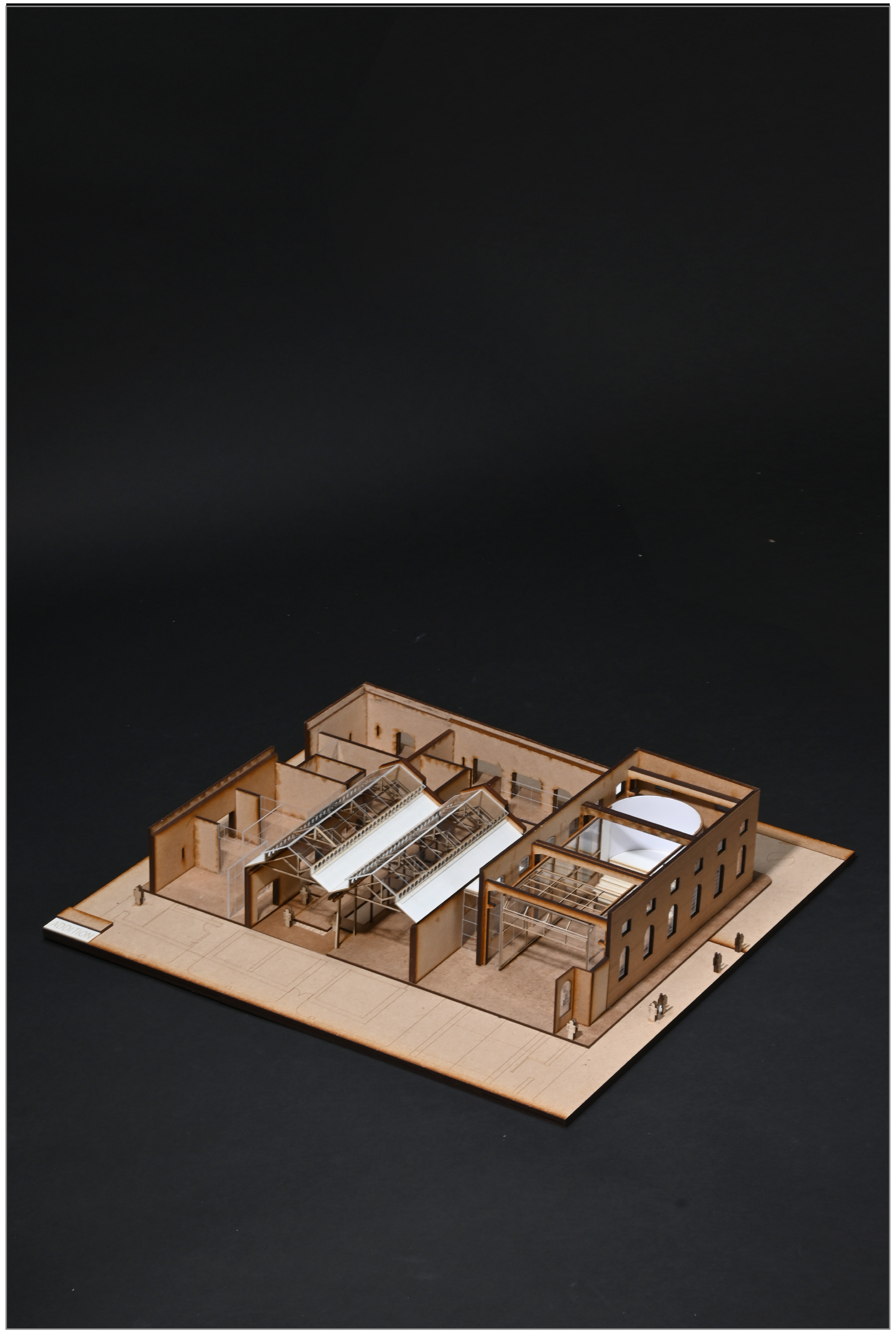
Residential use

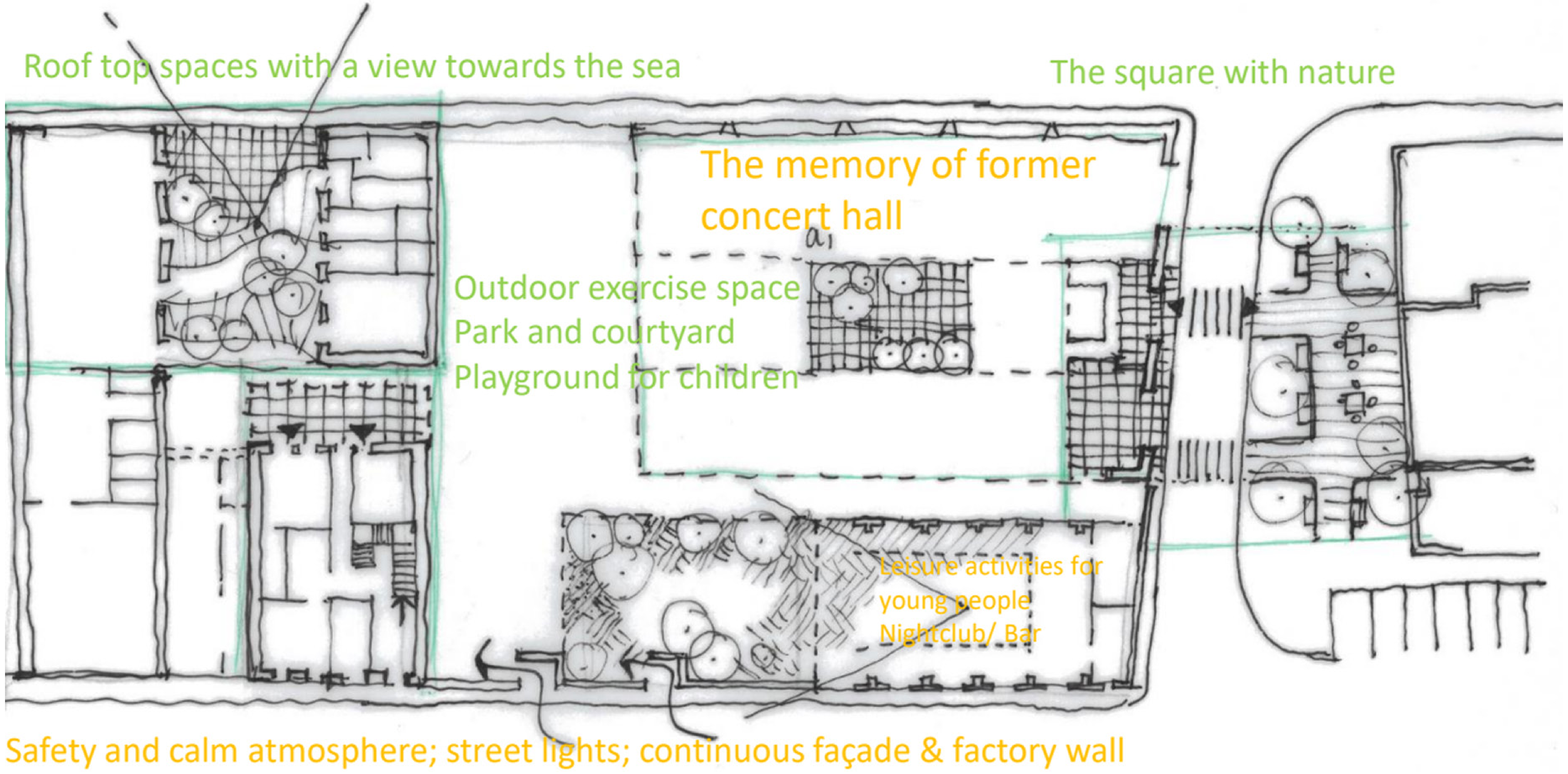
(economic value ++)

make use of the accessibility

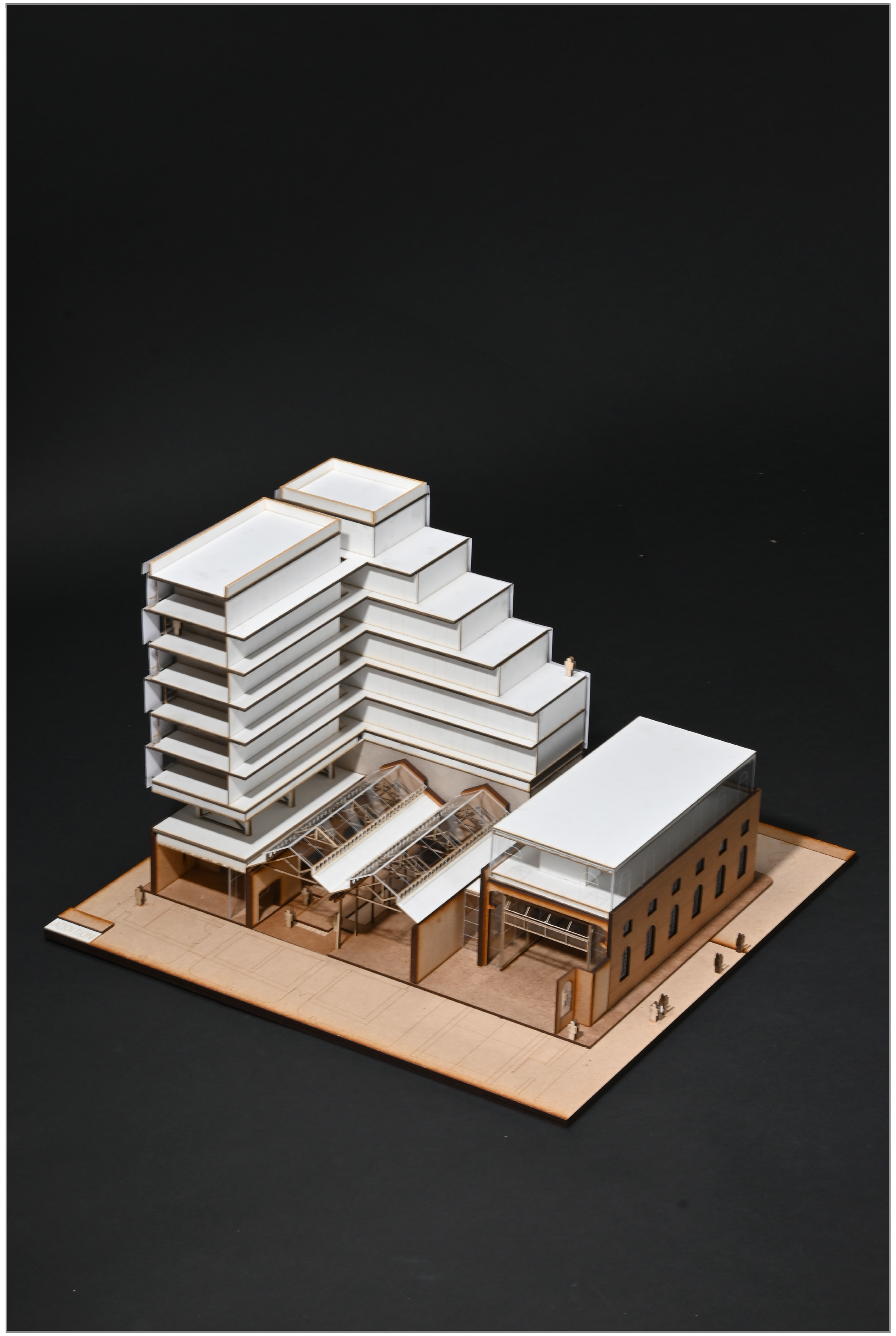


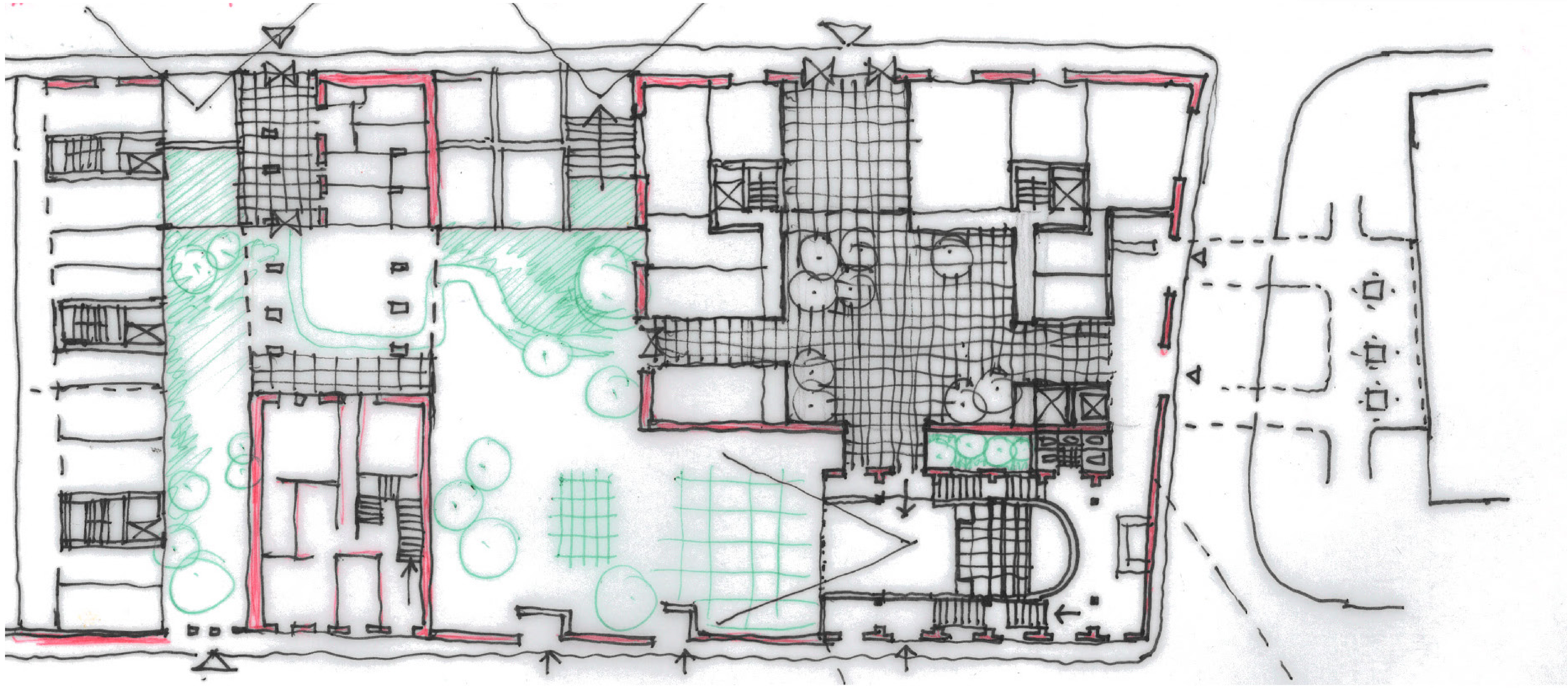
Block analysis



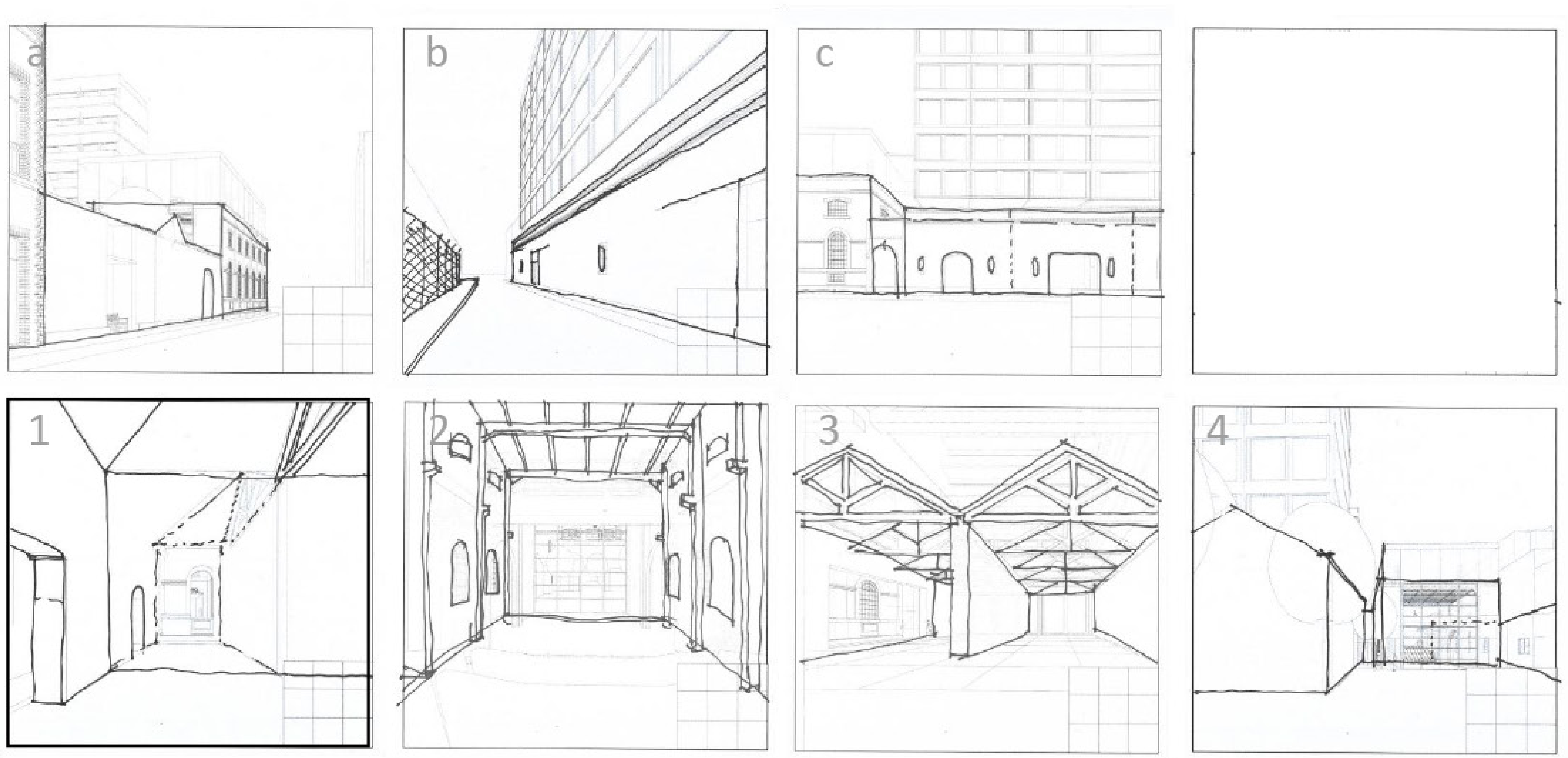

Roof top spaces with a view towards the sea
The square with nature
The memory of former concert hall
Outdoor exercise space
Park and courtyard
Playground for children
Leisure activities for young people
Nightclub/ Bar
Safety and calm atmosphere; street lights; continuous façade & factory wall

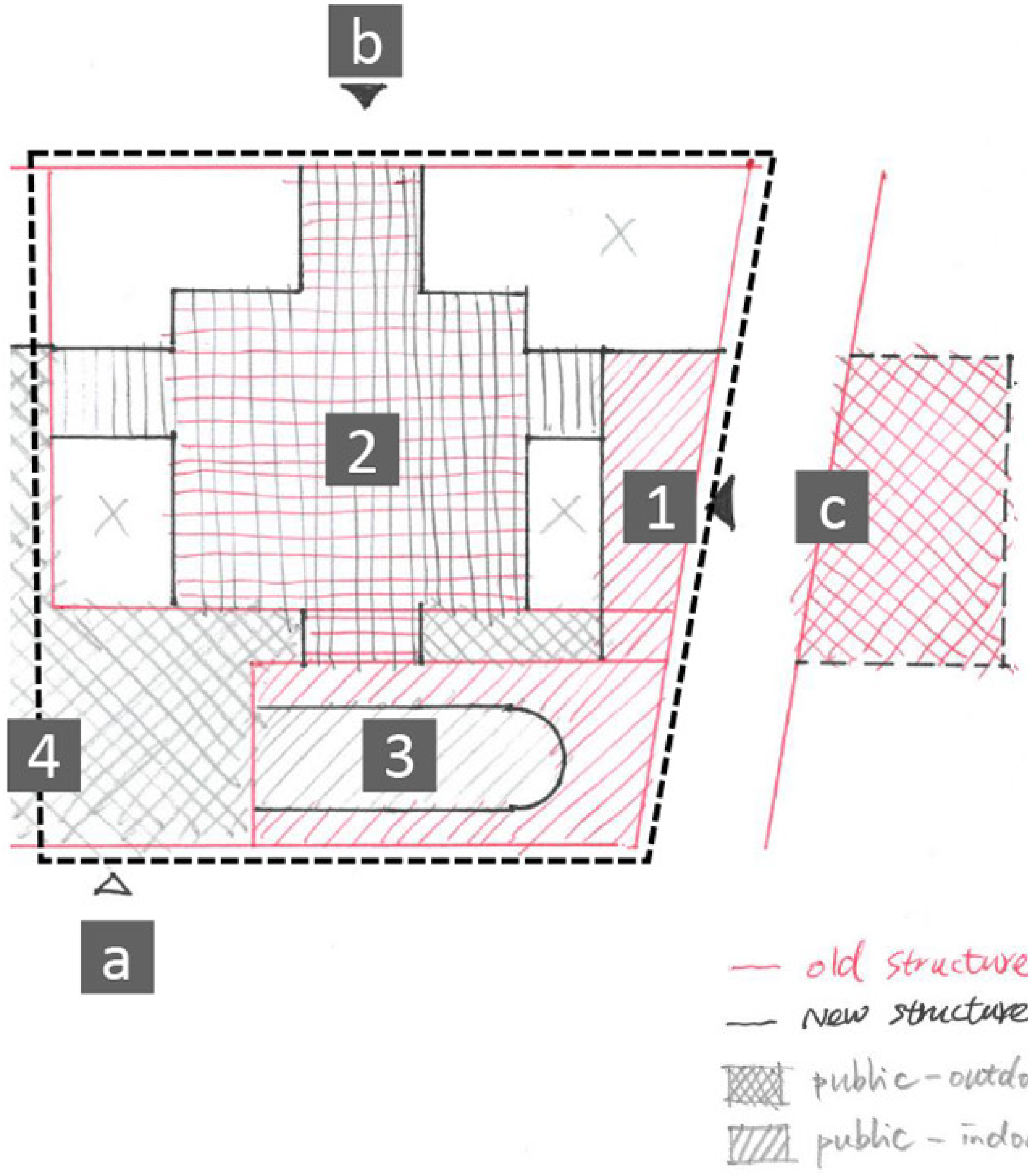
Block analysis





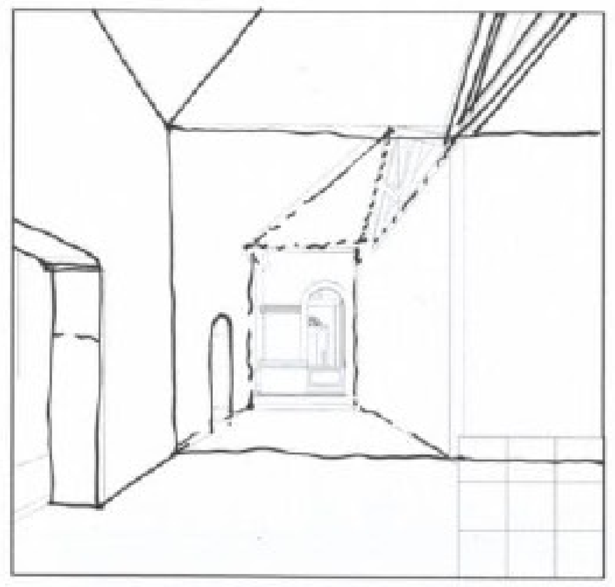
Value-based scenarios

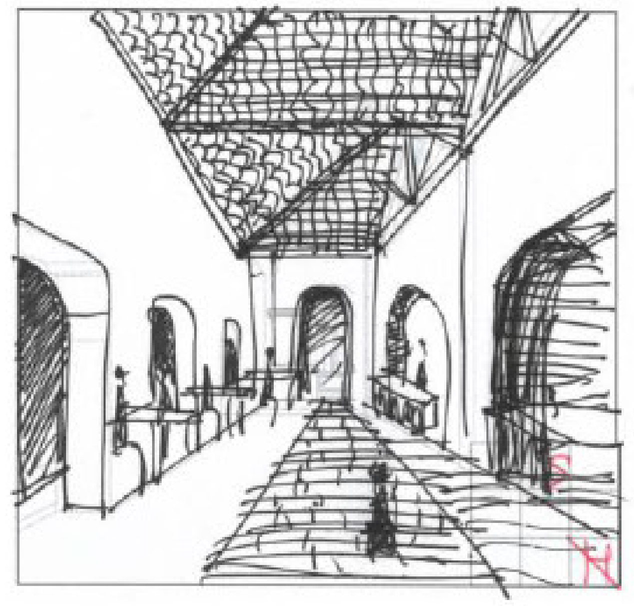



b
2
1
c
4
3
a
old structure
New structure
public-outdoor
public - indoor

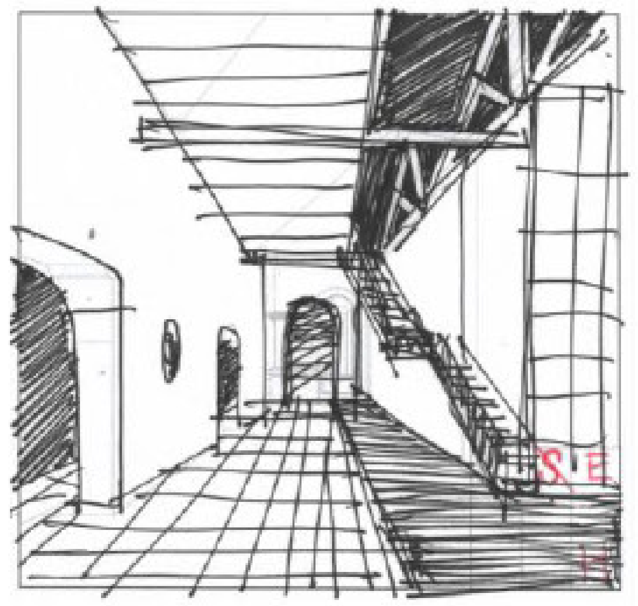
1 west entrance & café
2 public living room
3 multifunctional theater
4 outdoor playground

Value-based scenarios

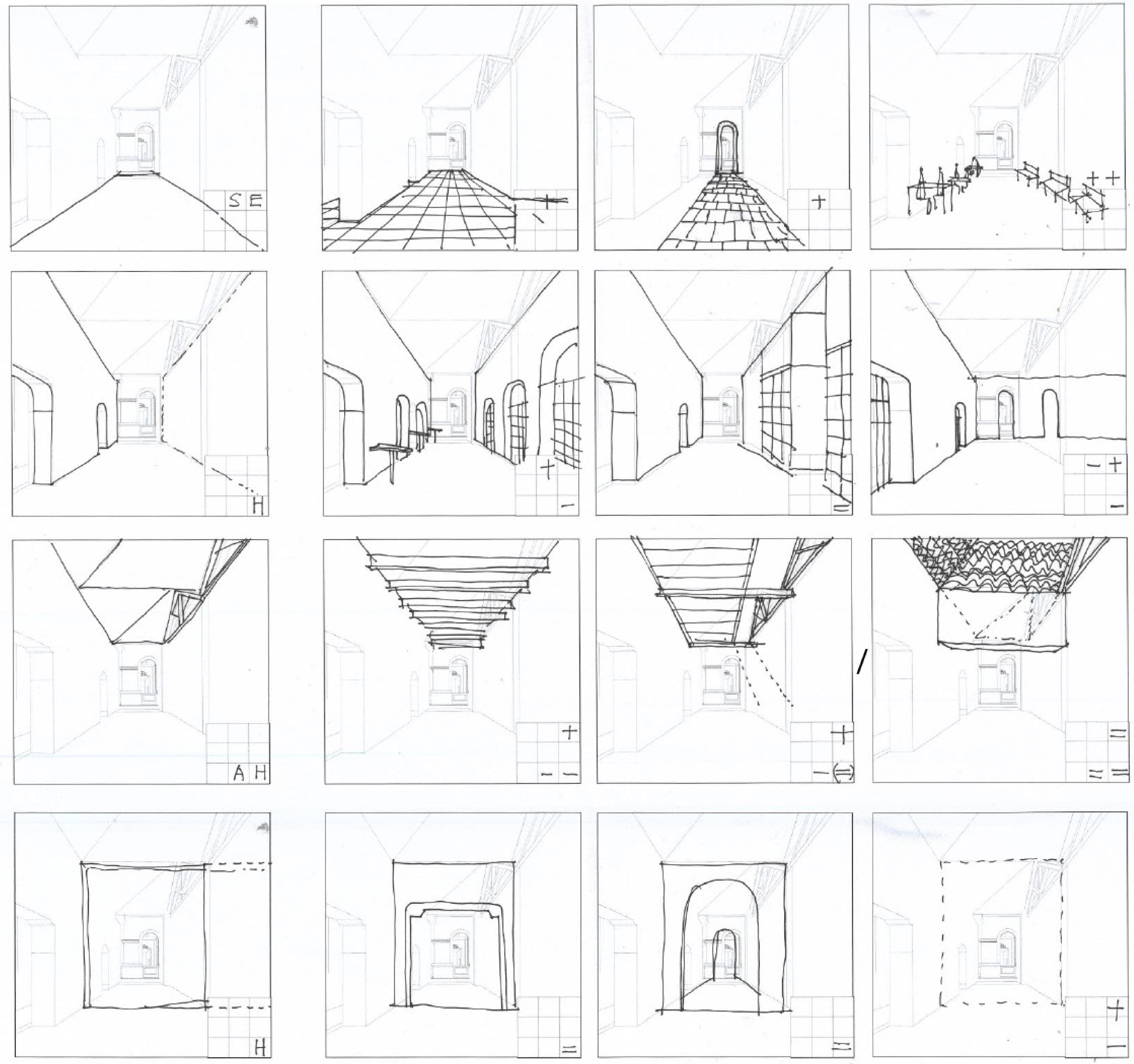




Scenario 1-1
Historic value



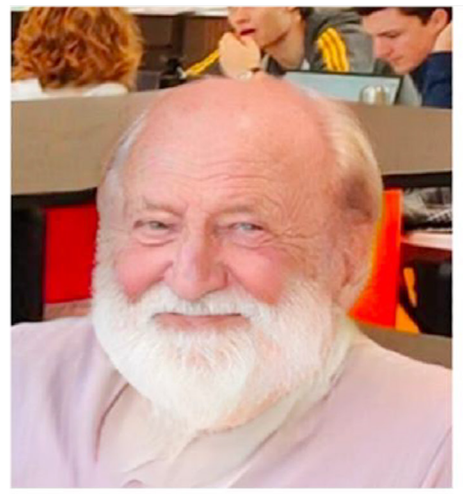
Scenario 1-2
Economic value



Value-based scenarios

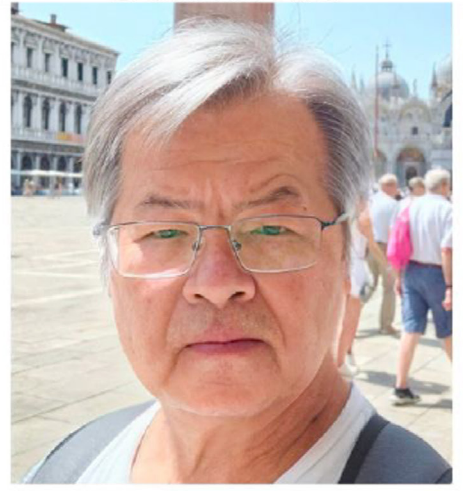
“4th age”

The period of dependancy
and frailty



Guilherme

Sara



Estatao

Maria

“2nd age”

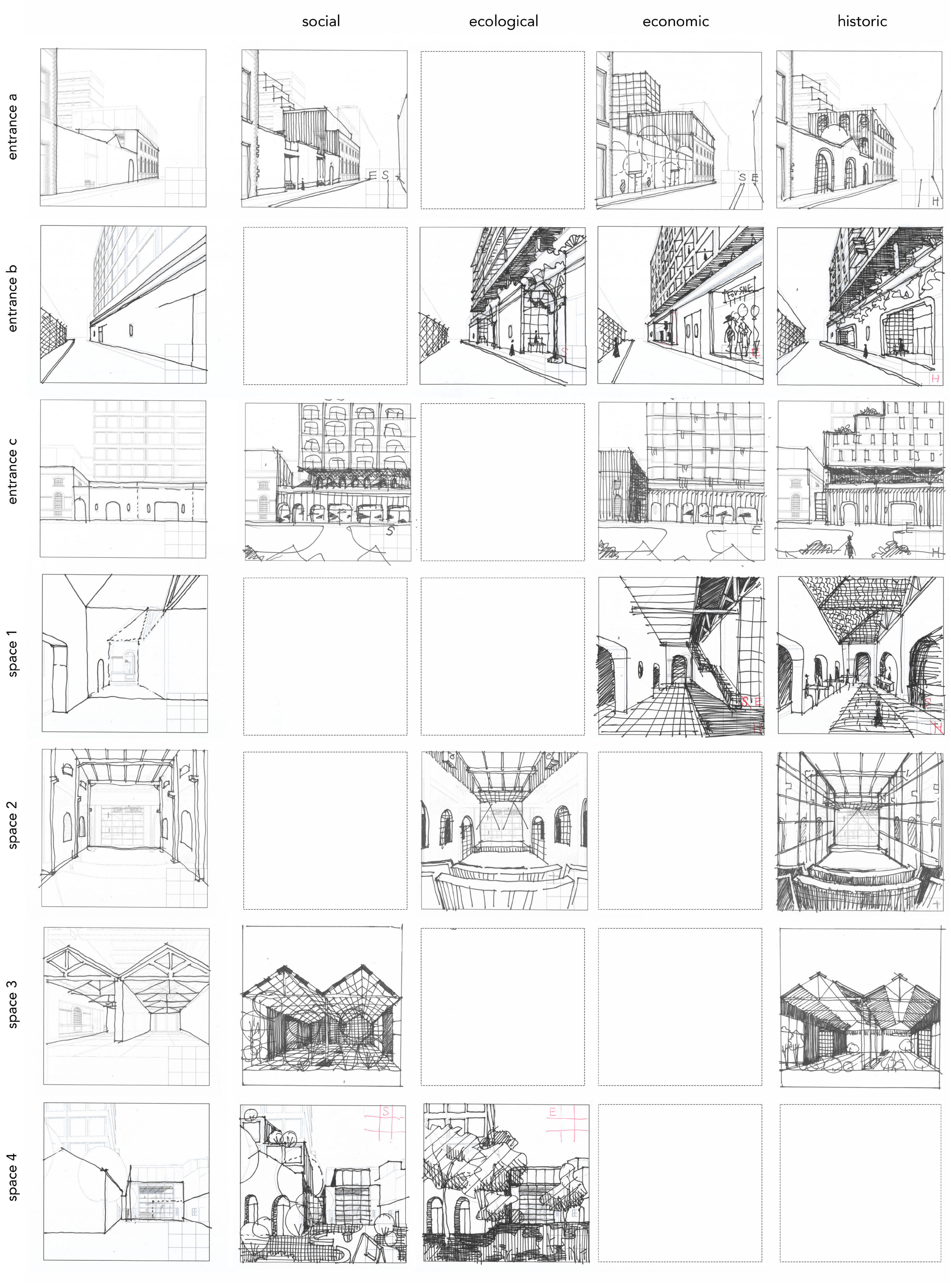
The period of responsibility
and work life

Joao Costa

Rojo

Elena

Judite Bandeira

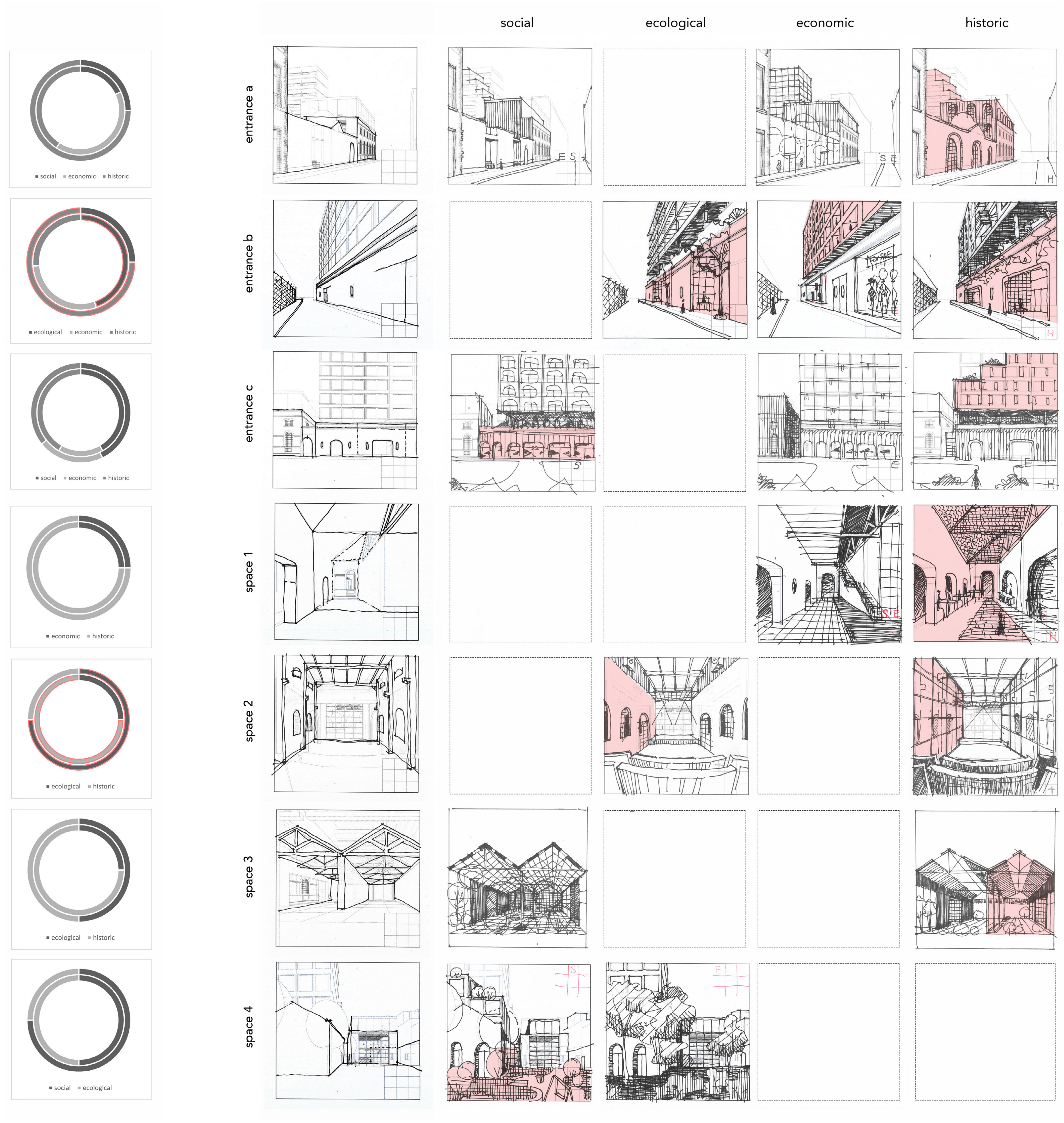

social
ecological
economic
historic
entrance a
entrance b
entrance c
space 1
space 2
space 3
space 4

Research results

The keywords for preferences:

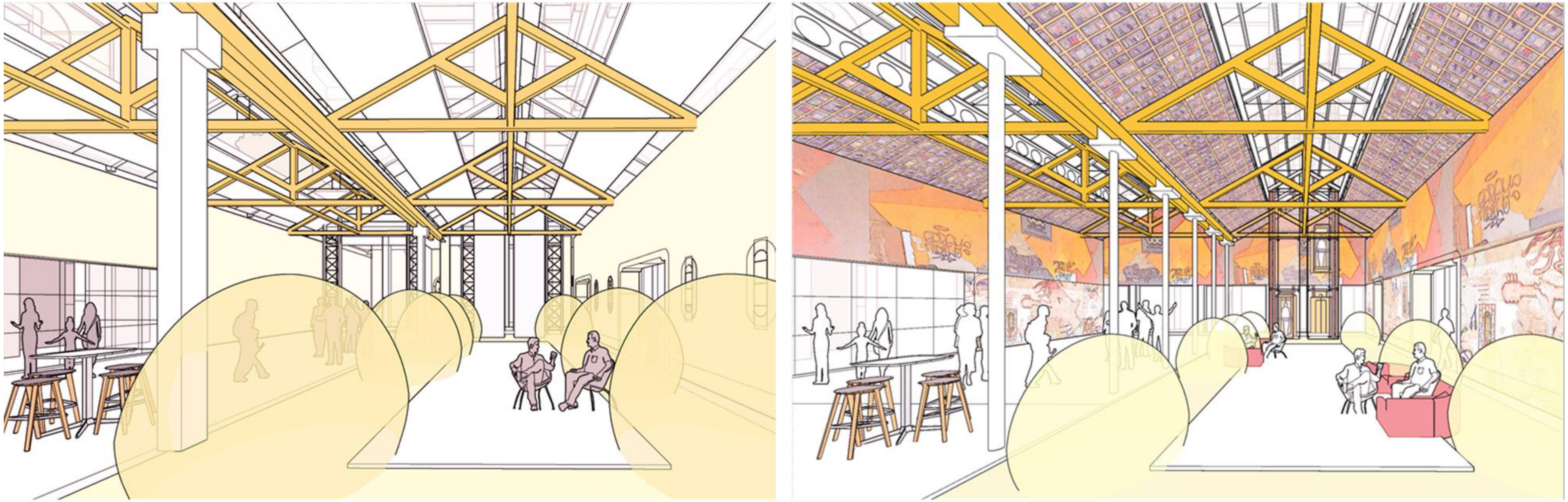
The typical arch form (entrance a); openness of the ground floor and lively building outline (entrance c).

Keeping the original roof (space 1); the well-organized order from the former division of space (space 3); more furniture to support activities happening (space 4).


social
ecological
economic
historic
entrance a
entrance b
entrance c
space 1
space 2
space 3
space 4
■ social ■ economic ■ historic
■ ecological ■ economic ■ historic
■ social ■ economic ■ historic
■ economic ■ historic
■ ecological ■ historic
■ ecological ■ historic
■ social ■ ecological

Research results

The application of preferences:
“Fruit salad problem” & further decoding



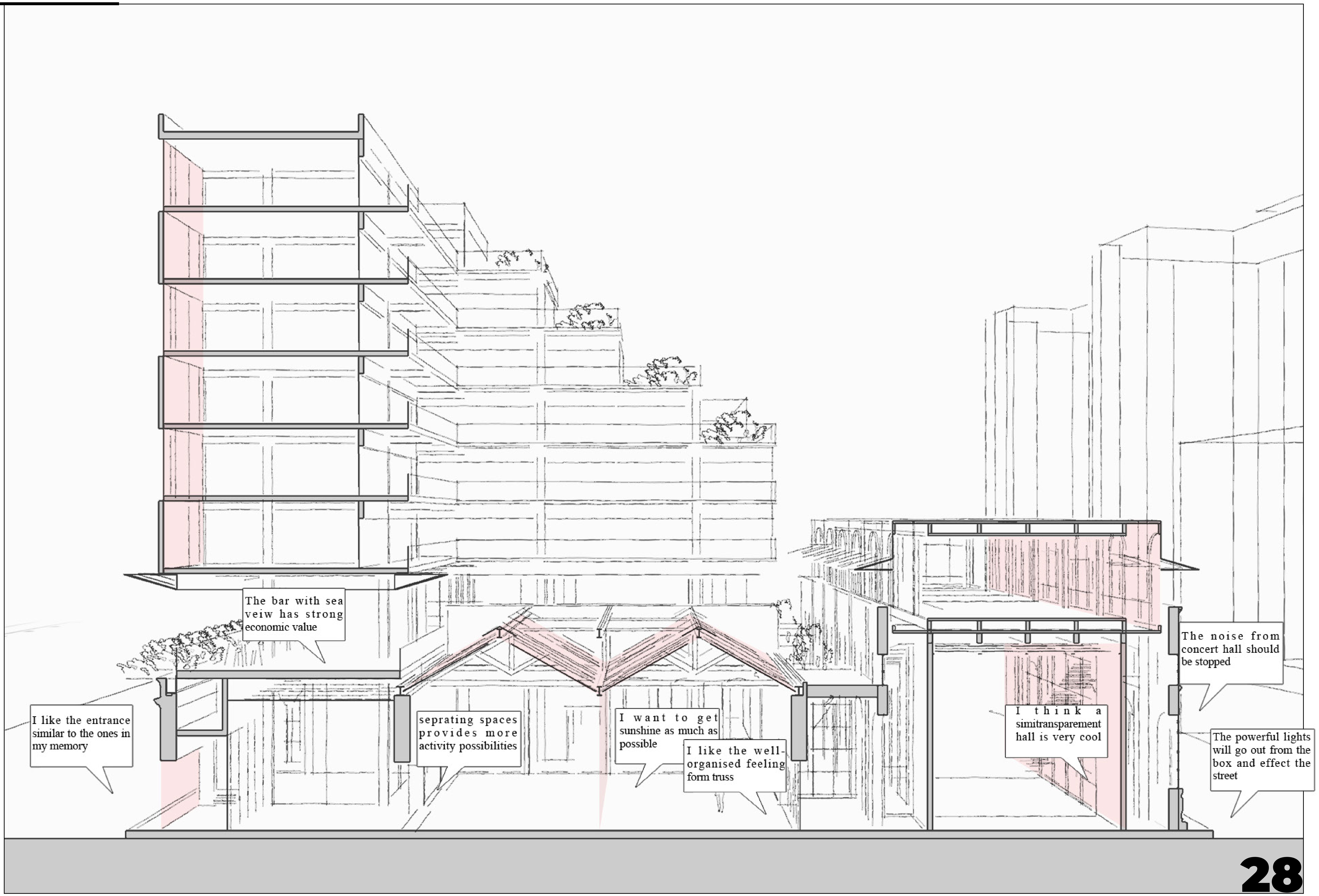
Research to design

Value - social and ecological

Attribute - 7 core spaces

Research - value-based scenario

Desgin - controversial enclosure


The bar with sea veiw has strong economic value
I like the entrance similar to the ones in my memory
seprating spaces provides more activity possibilities
I want to get sunshine as much as possible
I like the well-organised feeling form truss
I think a simitransparement hall is very cool
The noise from concert hall should be stopped
The powerful lights will go out from the box and effect the street

ECONOMIC
ECOLOGICAL
SOCIAL
HISTORIC
20%
40%
Adults (inter)
Elderly (outer)

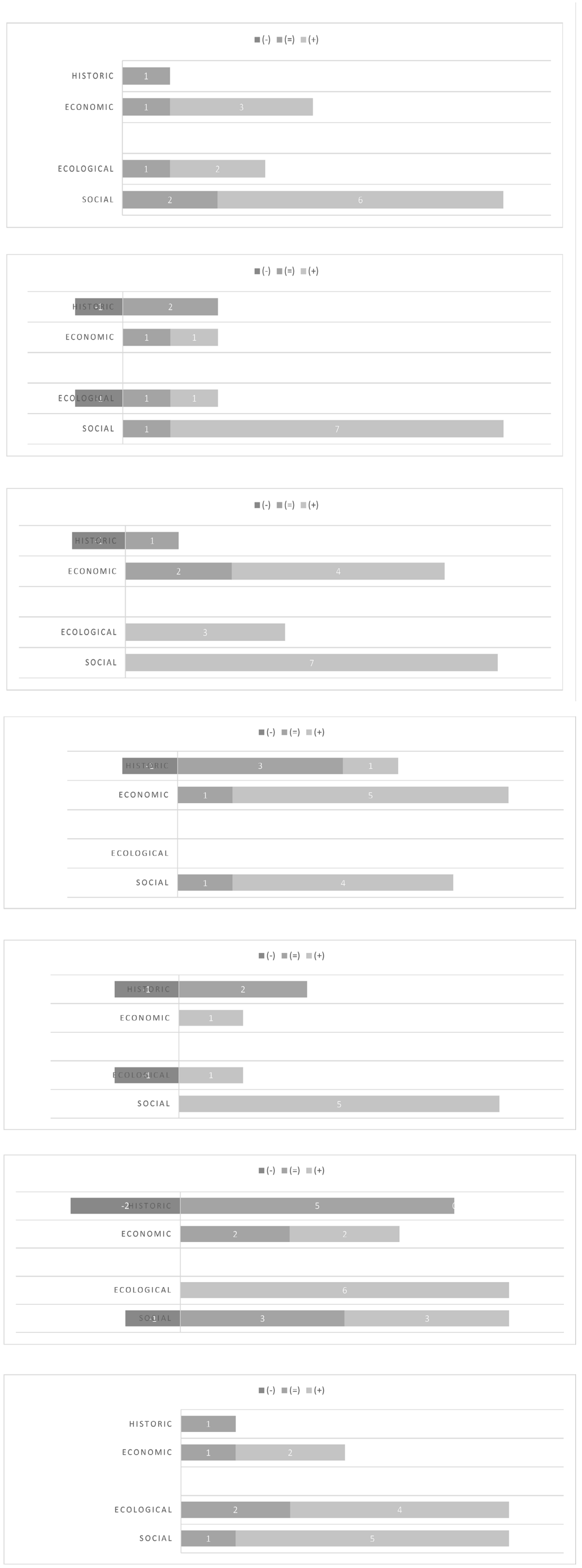
Part 3

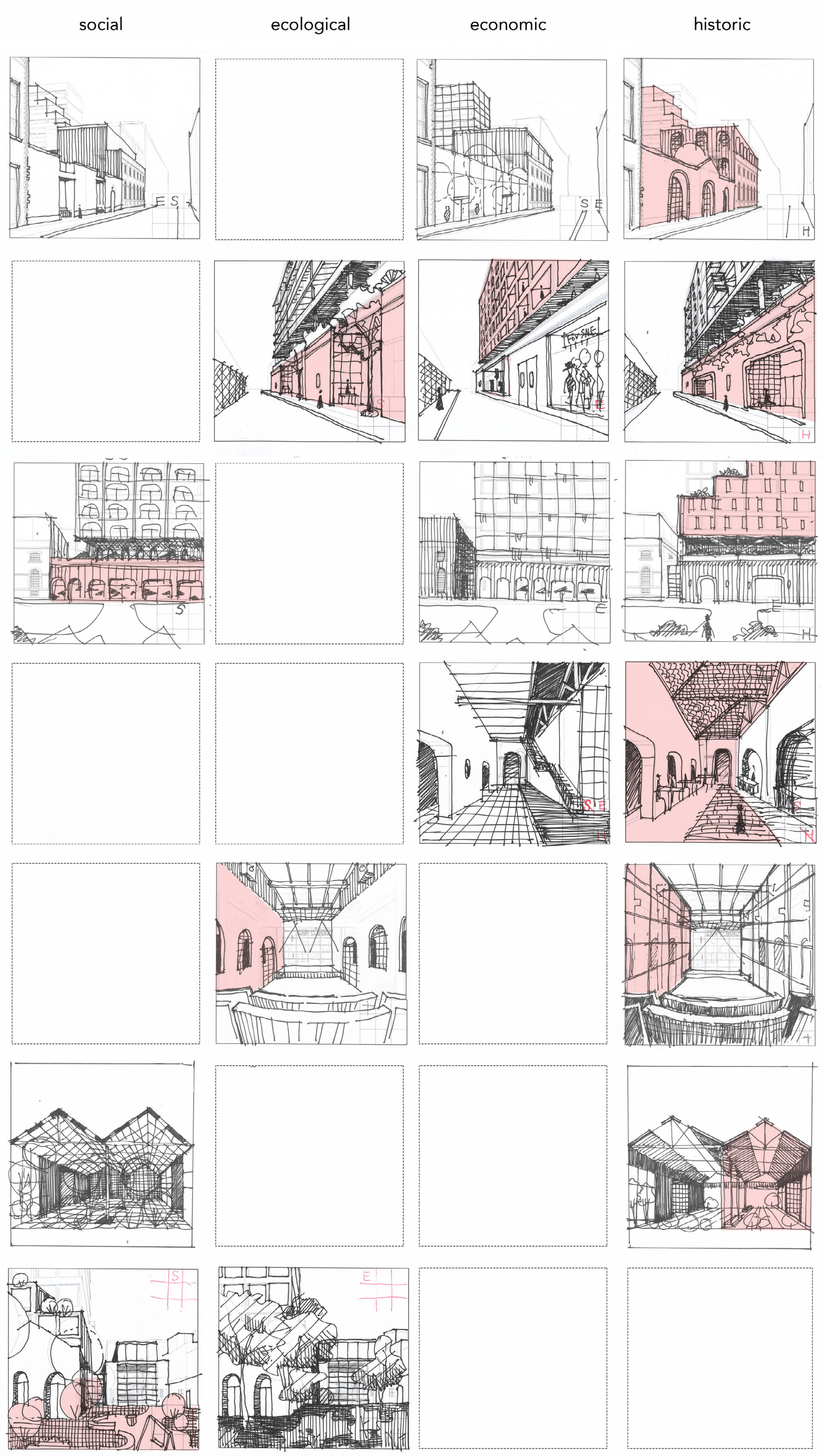
Heritage impact assessment

HIA approach

The general value-metioned frequency from heritage impact assessment:

Historic value: from 15 to 10
Economic value: from 7 to 25
Social value: from 8 to 44
Ecological value: from 4 to 19

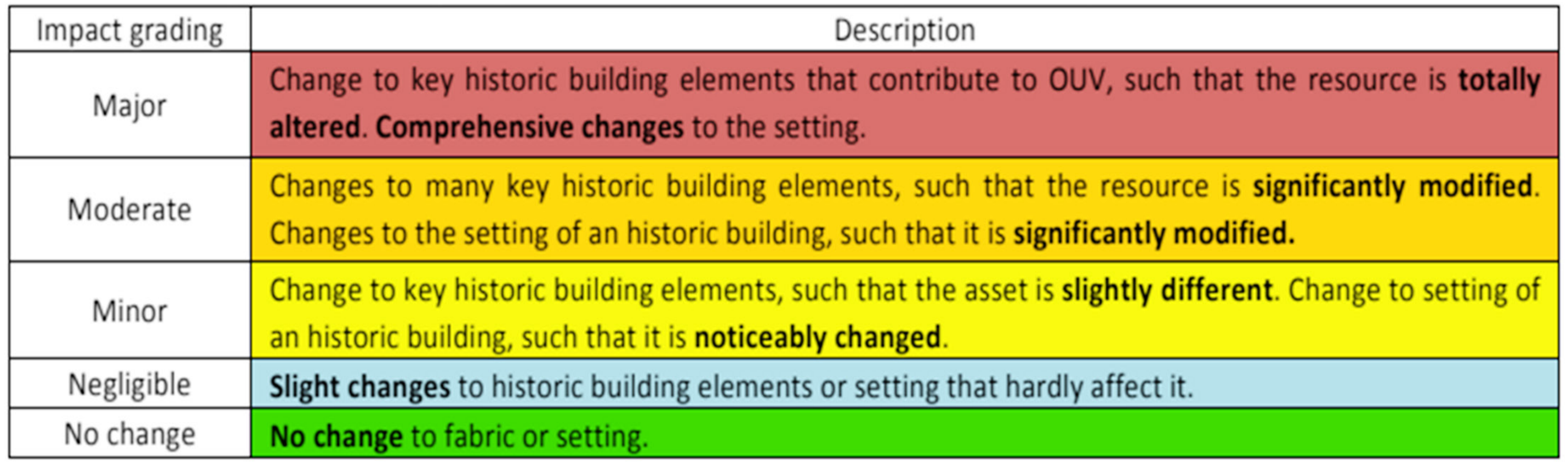



social
ecological
economic
historic

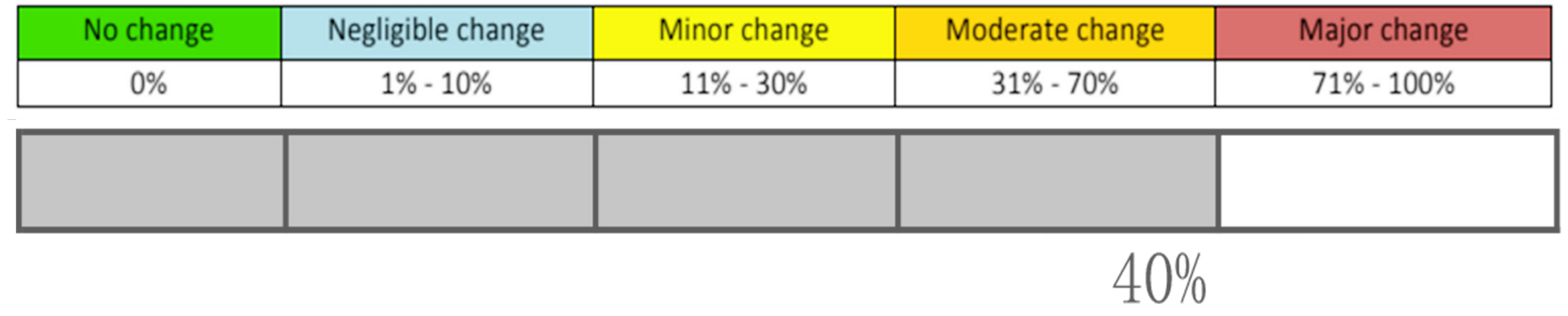
HIA results

This project has caused a “moderate change” to the original site, around 40% of the attributes have been changed.

It greatly improves the ecological value and social value of the site at the cost of reducing part of the historical value.



Impact grading	Description
Major	Change to key historic building elements that contribute to OUV, such that the resource is **totally altered**. **Comprehensive changes** to the setting.
Moderate	Changes to many key historic building elements, such that the resource is **significantly modified**. Changes to the setting of an historic building, such that it is **significantly modified.**
Minor	Change to key historic building elements, such that the asset is **slightly different**. Change to setting of an historic building, such that it is **noticeably changed**.
Negligible	**Slight changes** to historic building elements or setting that hardly affect it.
No change	**No change** to fabric or setting.



No change	Negligible change	Minor change	Moderate change	Major change
0%	1% - 10%	11% - 30%	31% - 70%	71% - 100%

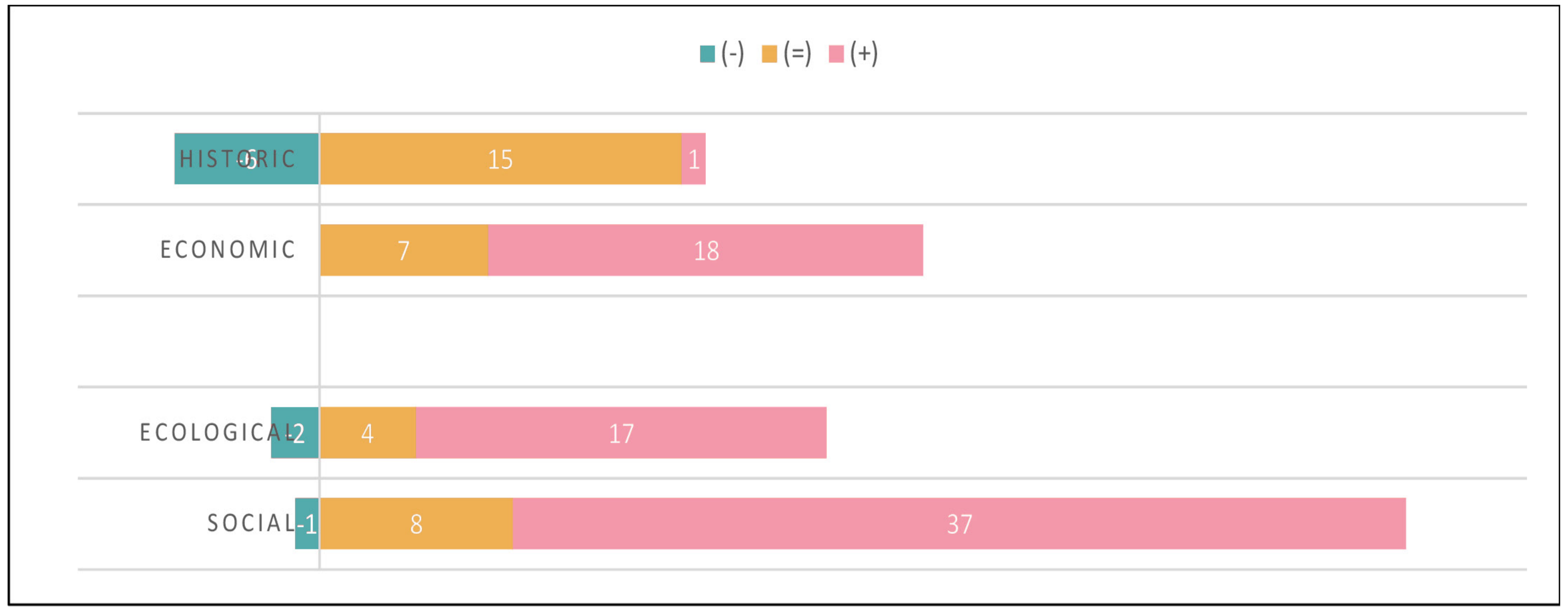


Fig 3-1. 5-scales for assessment of magnitude of impact (Yavari, P. 2015)

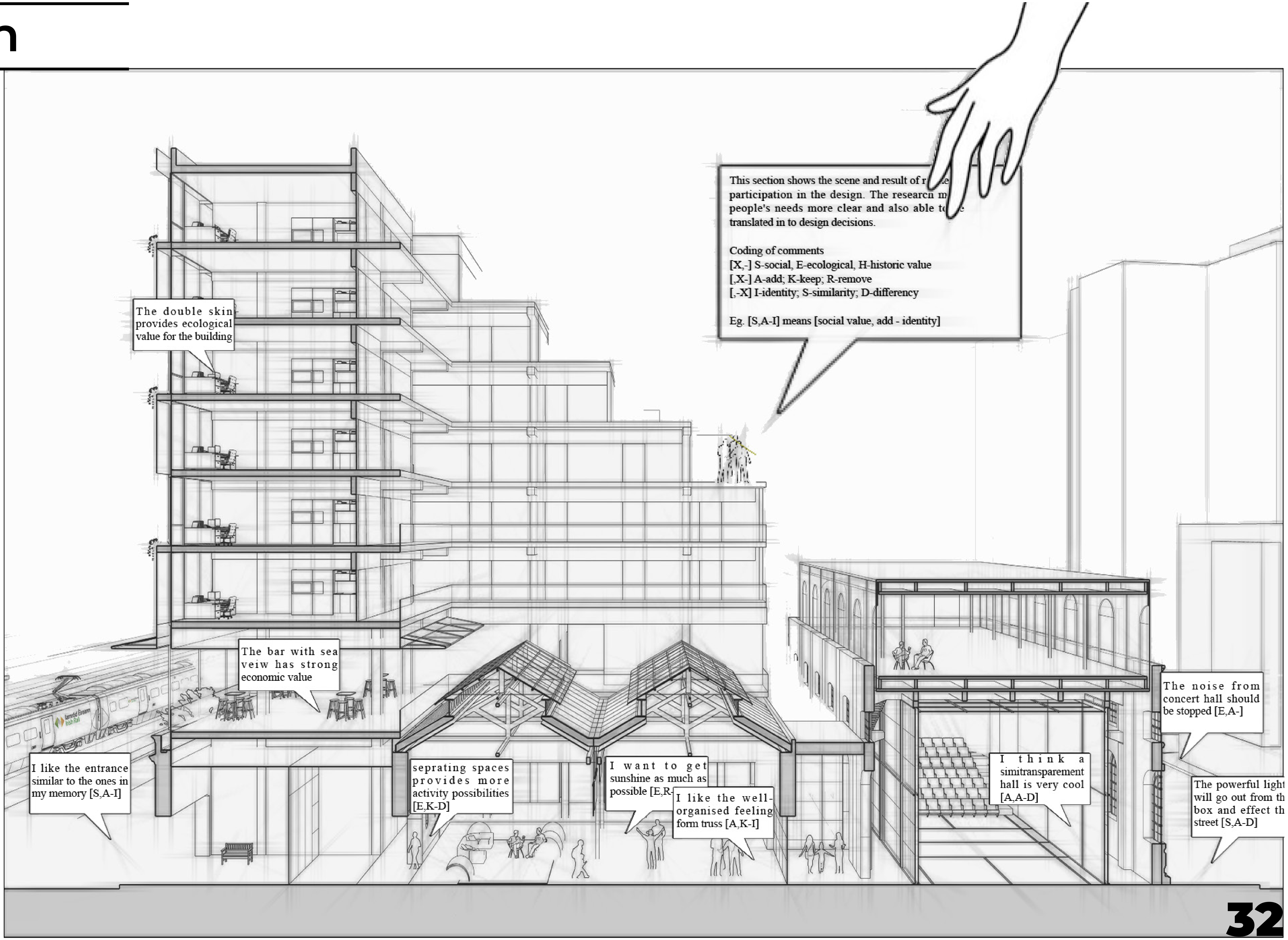
Research to design

Value - social and ecological

Attribute - redesign project

Research - heritage impact assessment

Design - material & detail

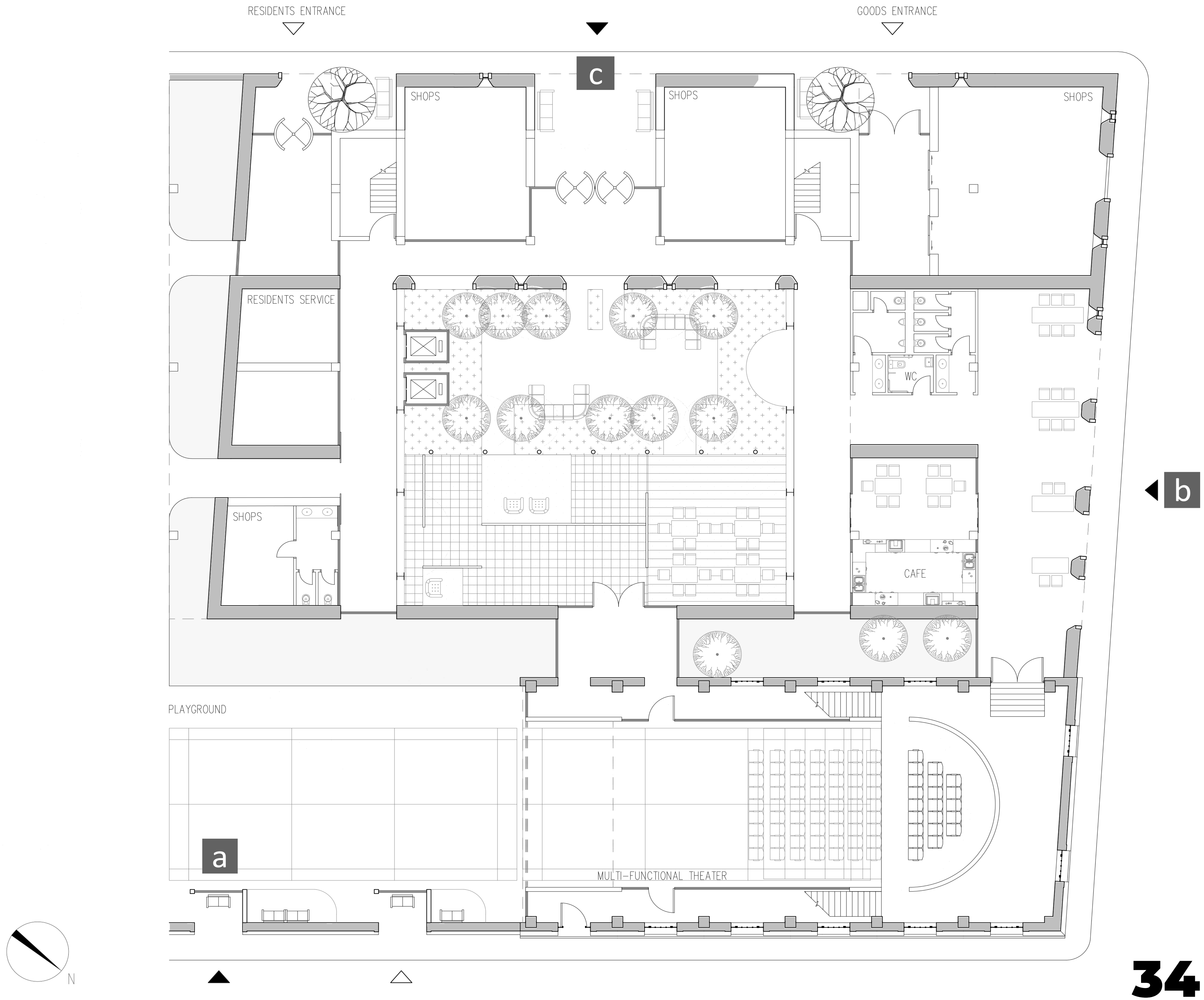

This section shows the scene and result of r[illegible] participation in the design. The researcn m[illegible] people's needs more clear and also able to [illegible] translated in to design decisions.
Coding of comments
[X,-] S-social, E-ecological, H-historic value
[,X-] A-add; K-keep; R-remove
[,-X] I-identity; S-similarity; D-differency
Eg. [S,A-I] means [social value, add - identity]
The double skin provides ecological value for the building
The bar with sea veiw has strong economic value
I like the entrance similar to the ones in my memory [S,A-I]
seprating spaces provides more activity possibilities [E,K-D]
I want to get sunshine as much as possible [E,R-
I like the well-organised feeling form truss [A,K-I]
I think a simitransparement hall is very cool [A,A-D]
The noise from concert hall should be stopped [E,A-]
The powerful light will go out from th box and effect th street [S,A-D]

Part 4

Design results

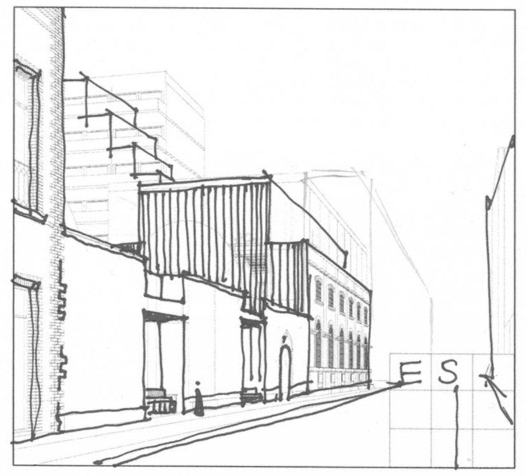
Ground floor plan (a-c)

a entrance from neighborhood center
(outdoor playground)
b entrance from street corner
(semi-outdoor relaxing)
c entrance for dwelling building
(service, dwelling)


RESIDENTS ENTRANCE
GOODS ENTRANCE
c
SHOPS
SHOPS
SHOPS
RESIDENTS SERVICE
WC
SHOPS
CAFE
b
PLAYGROUND
a
MULTI-FUNCTIONAL THEATER
N

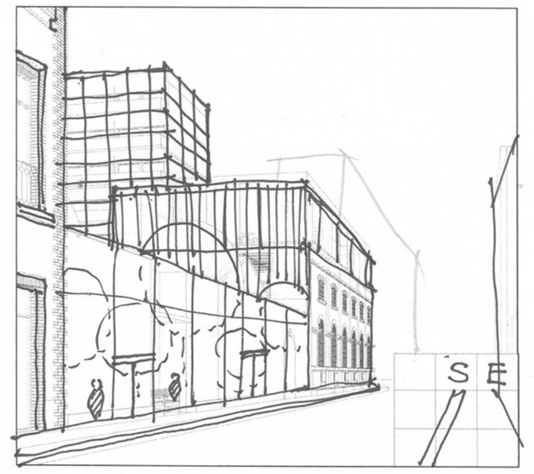
Entrance a-north elevation

social

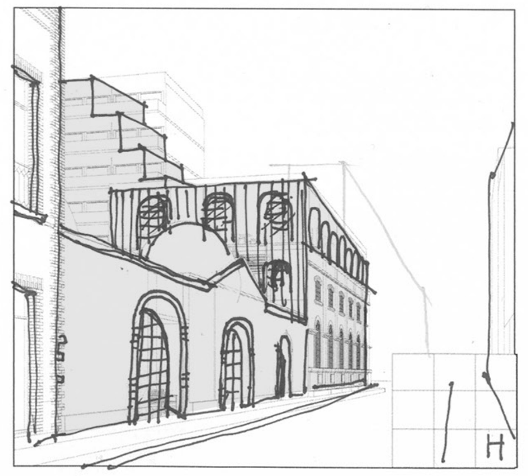


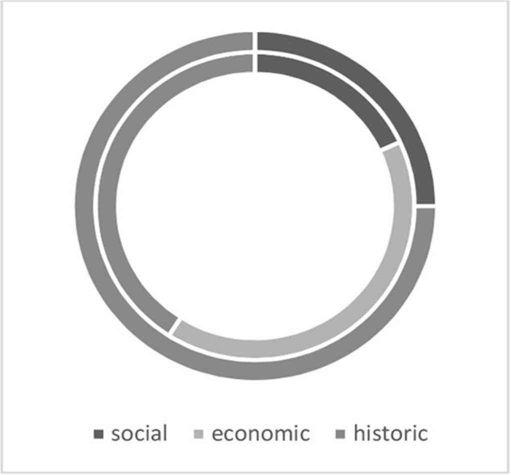
ecological

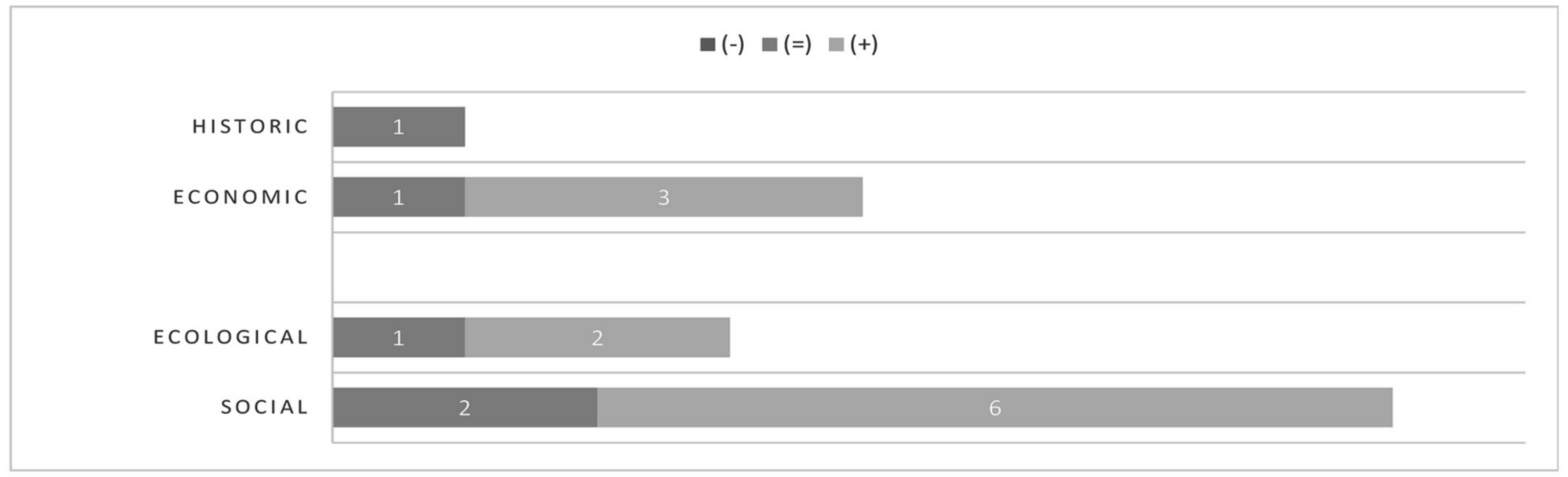
economic

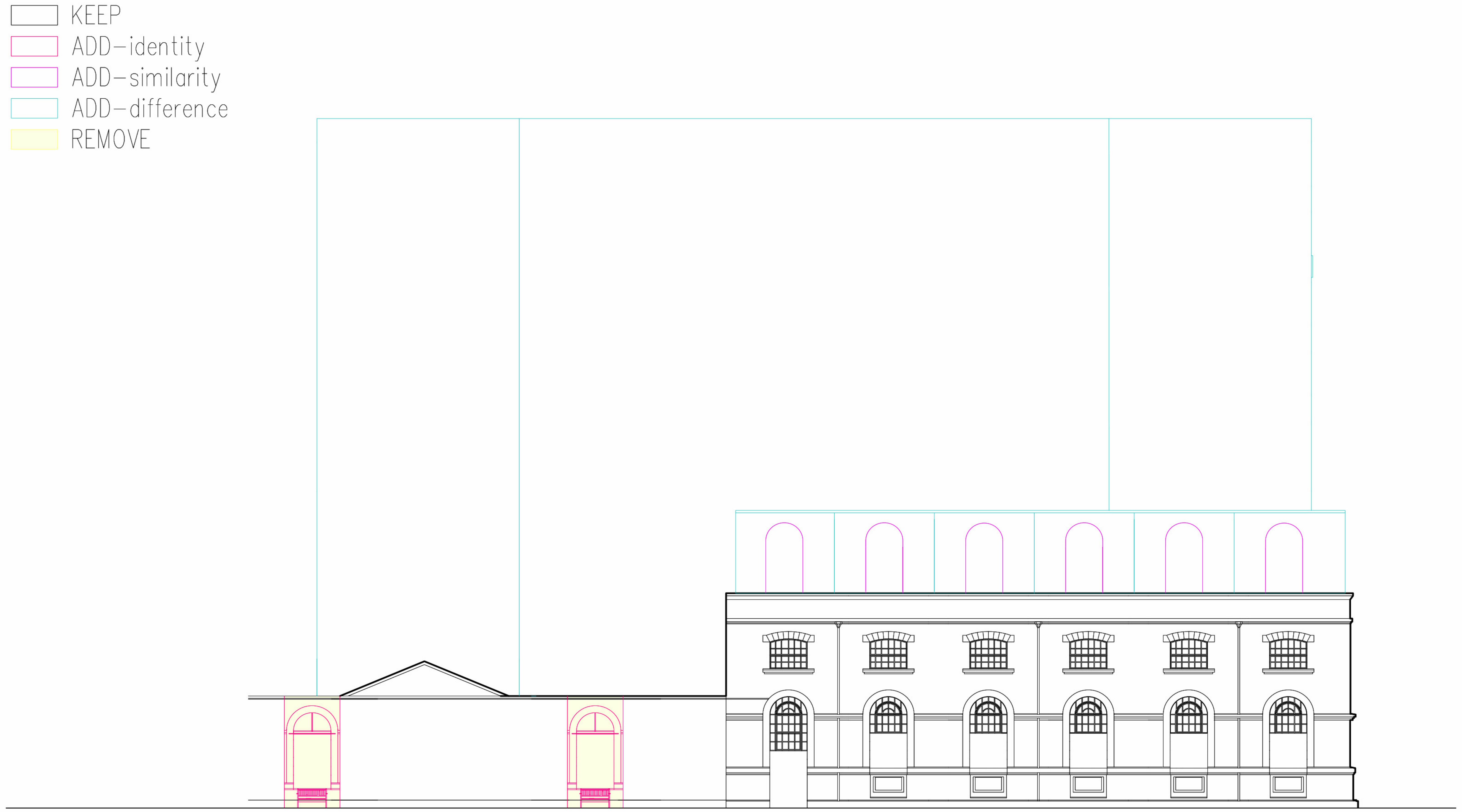


historic

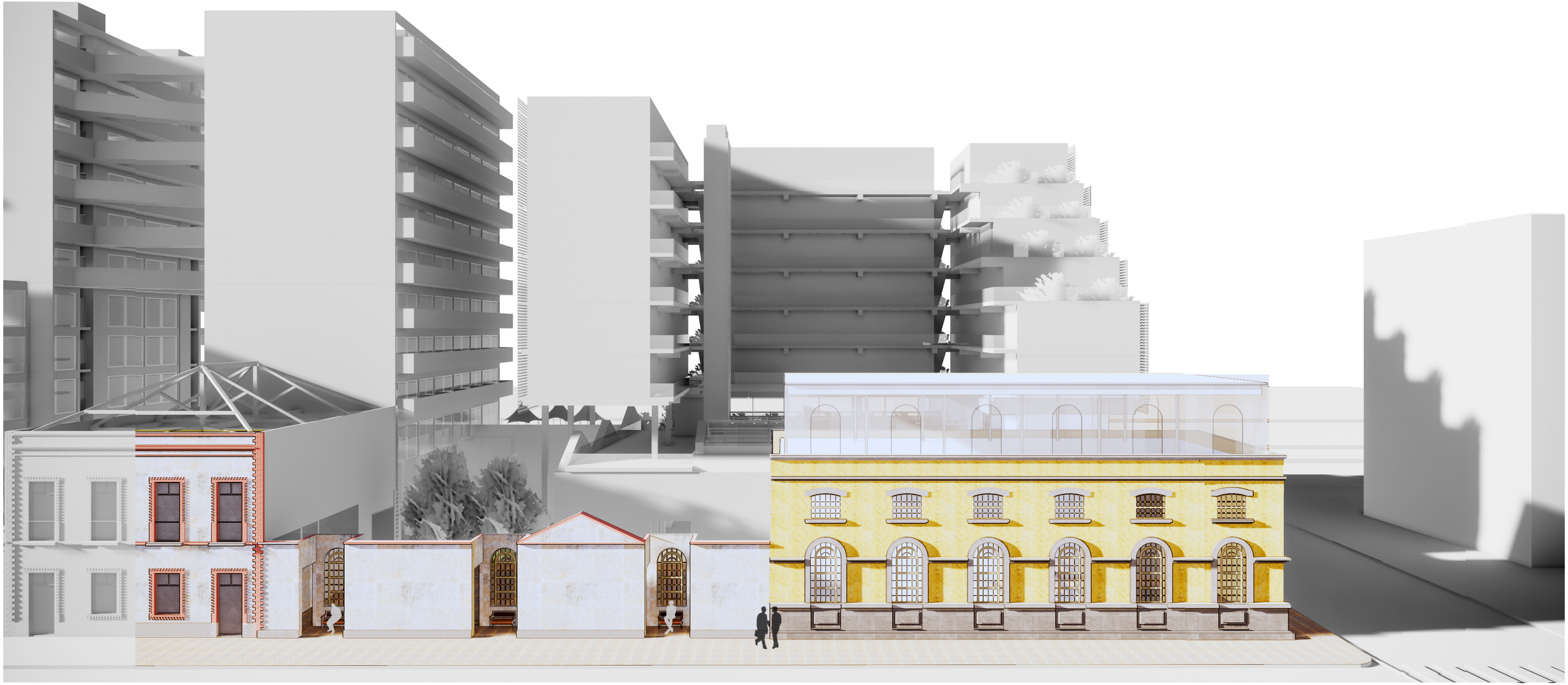






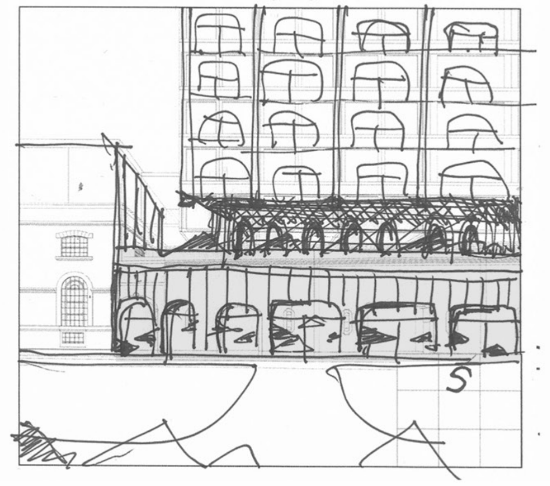

KEEP
ADD–identity
ADD–similarity
ADD–difference
REMOVE

Entrance a-north elevation



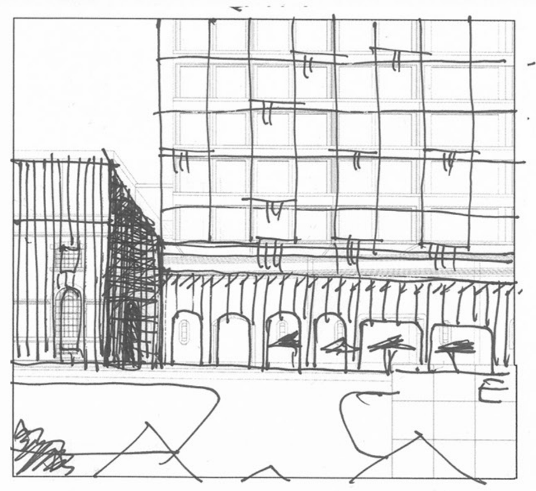
Entrance b-west elevation

social

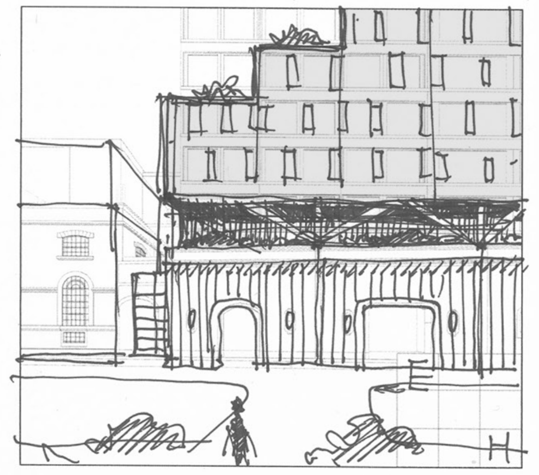


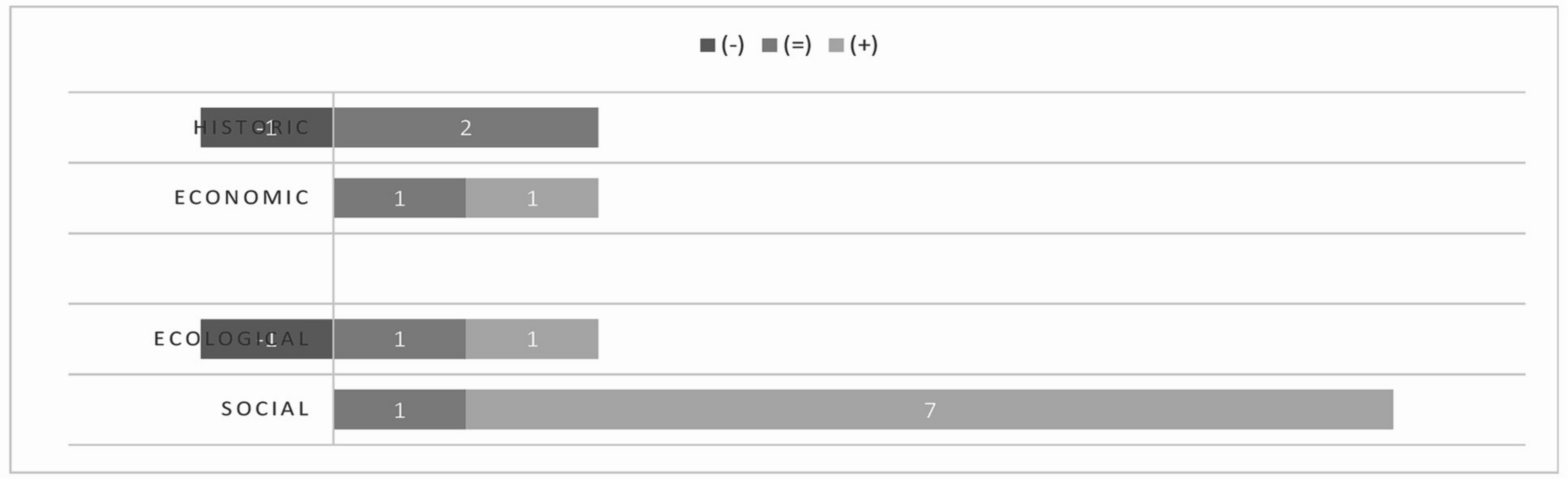
ecological

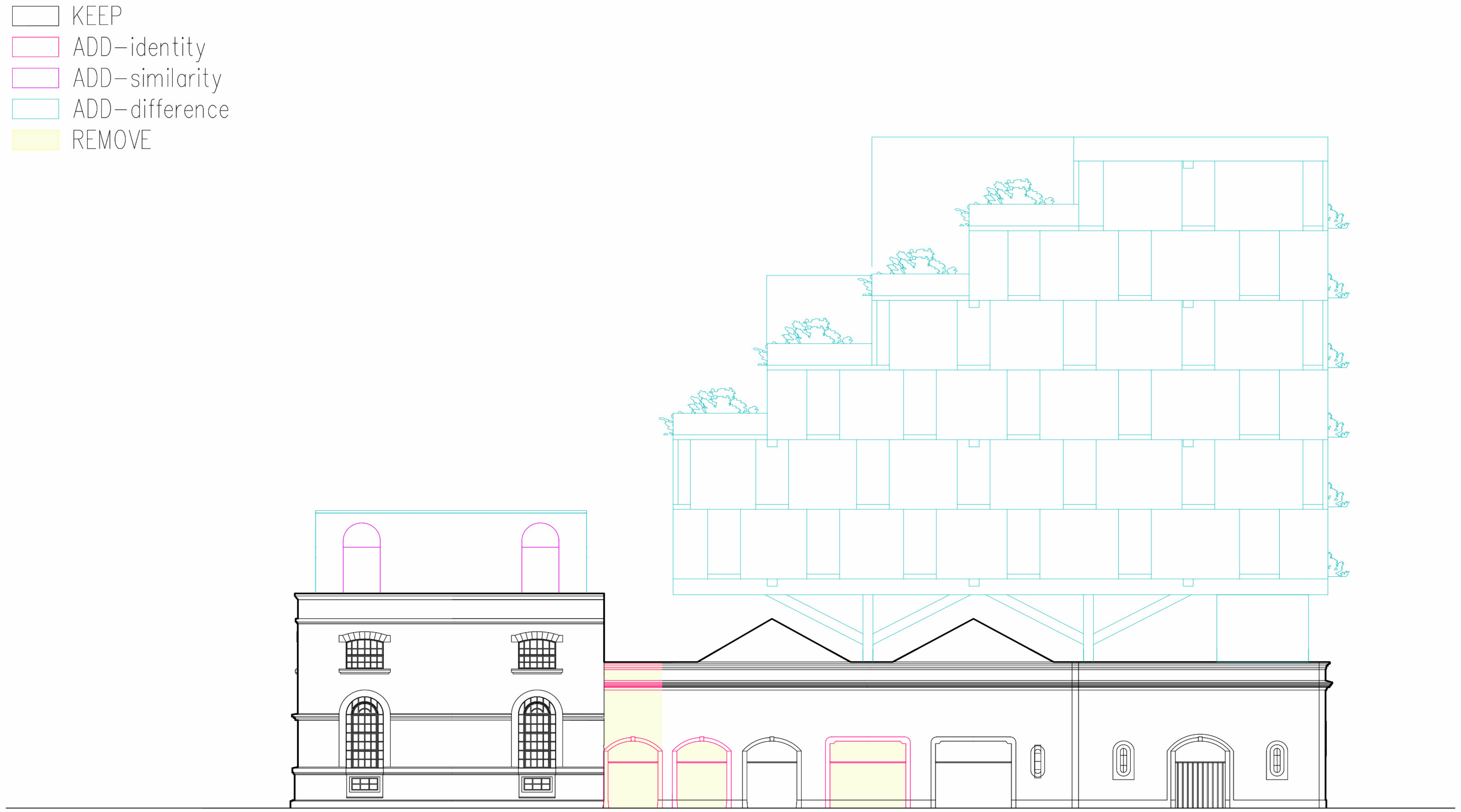
economic



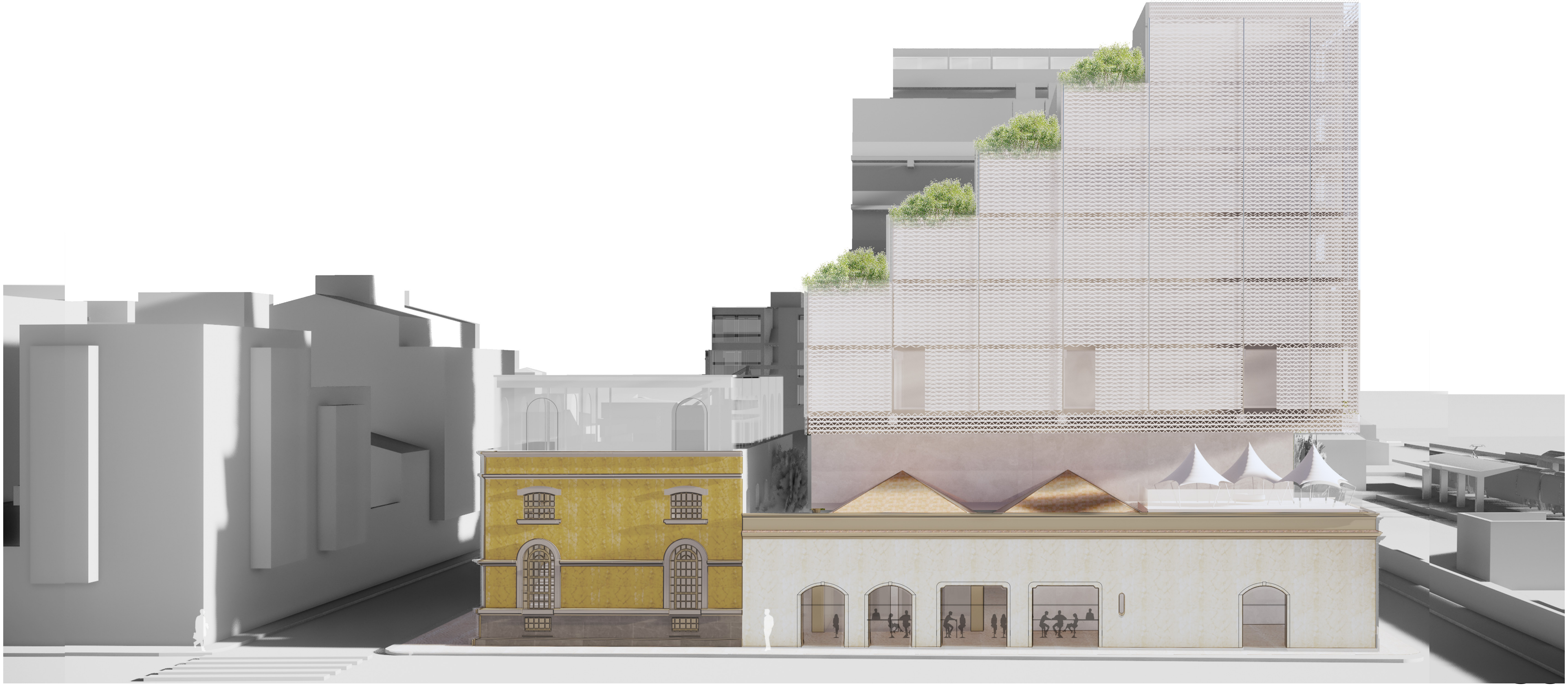
historic






KEEP
ADD–identity
ADD–similarity
ADD–difference
REMOVE

Entrance b-west elevation



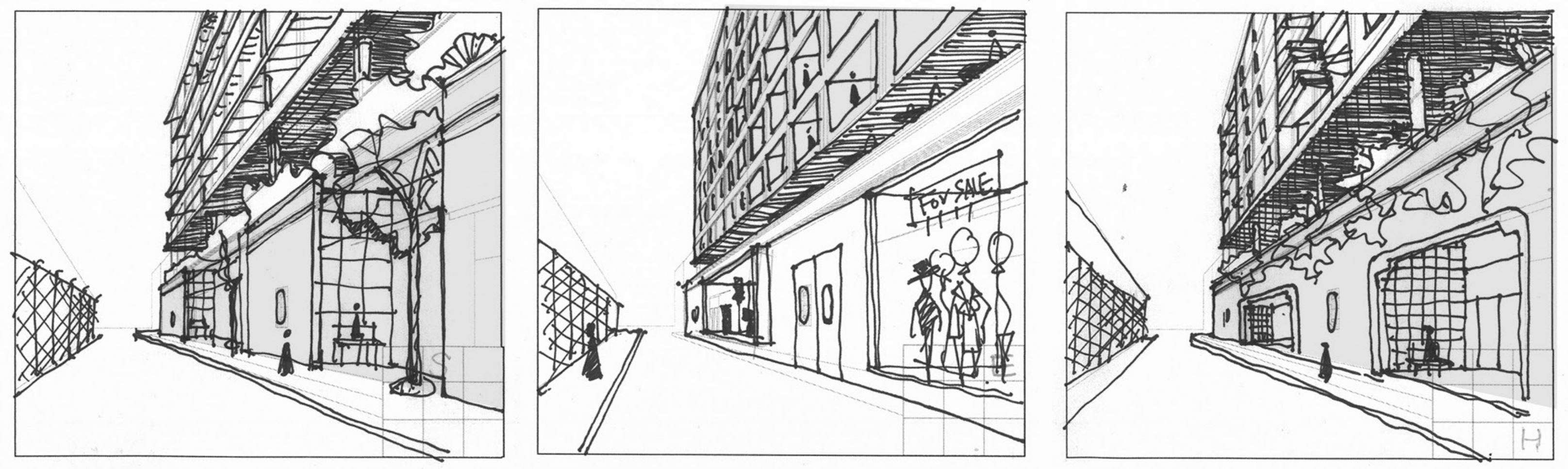
Entrance c-south elevation

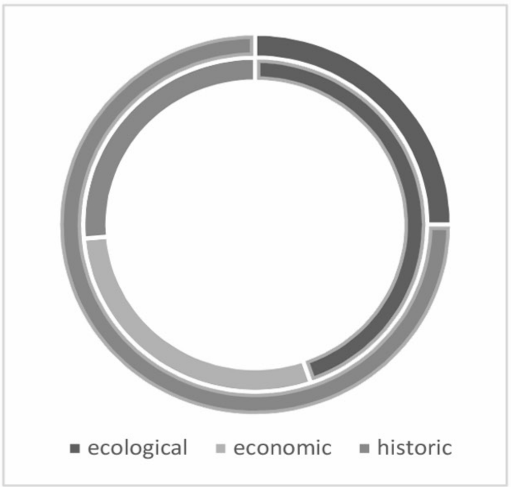
social

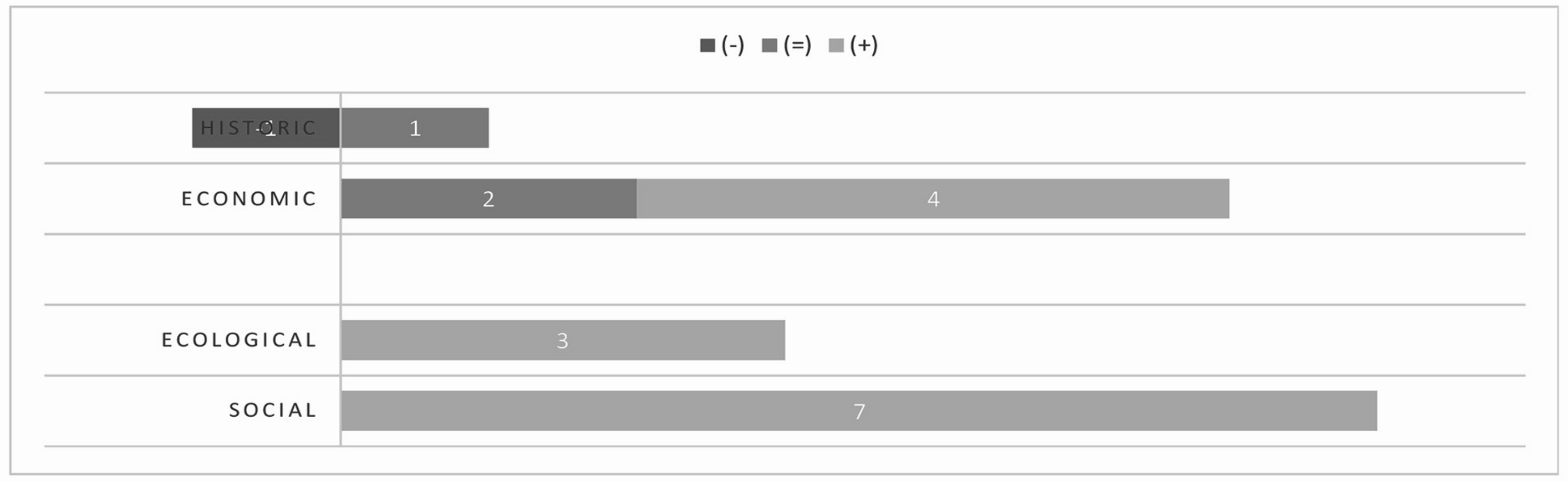
ecological

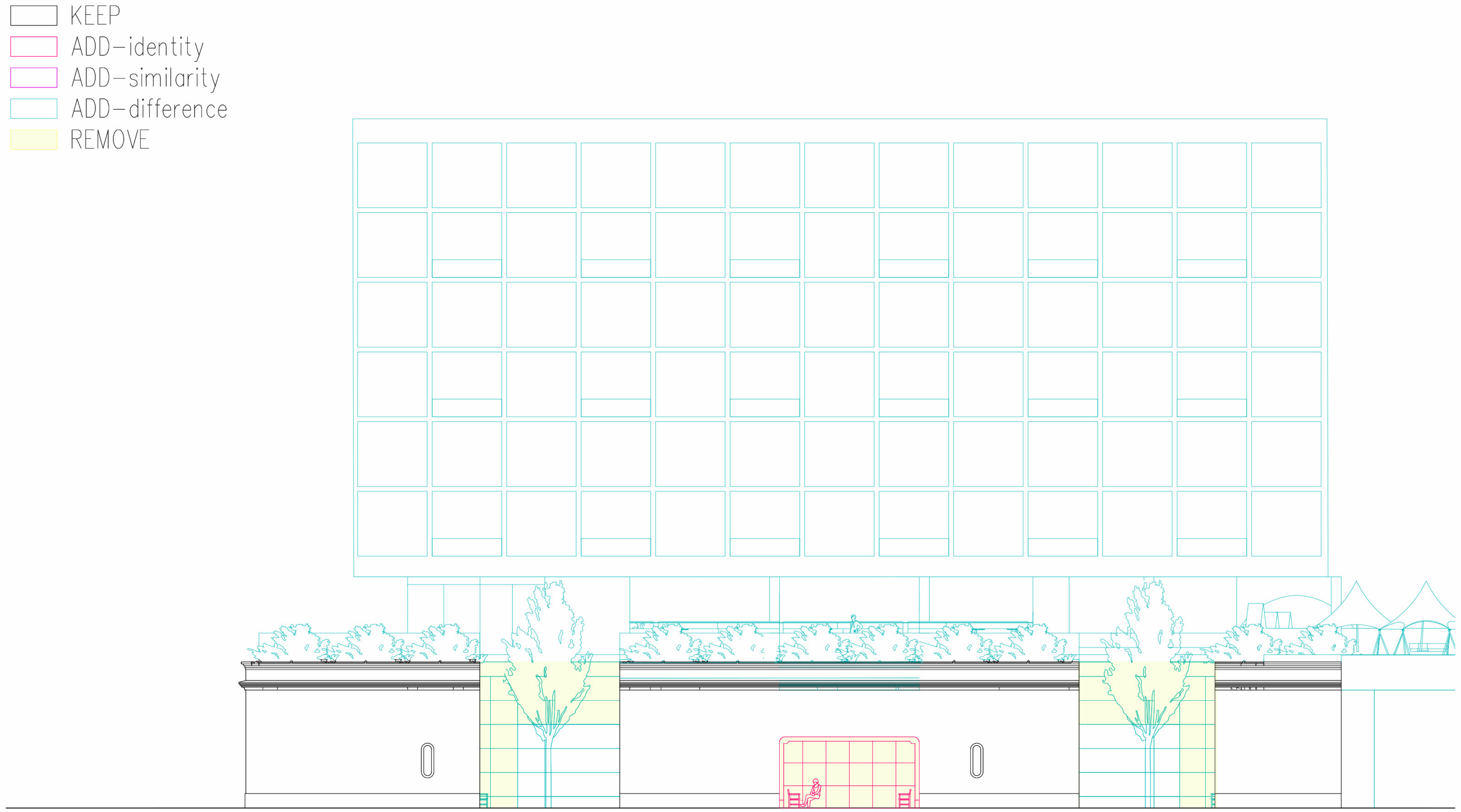
economic

historic

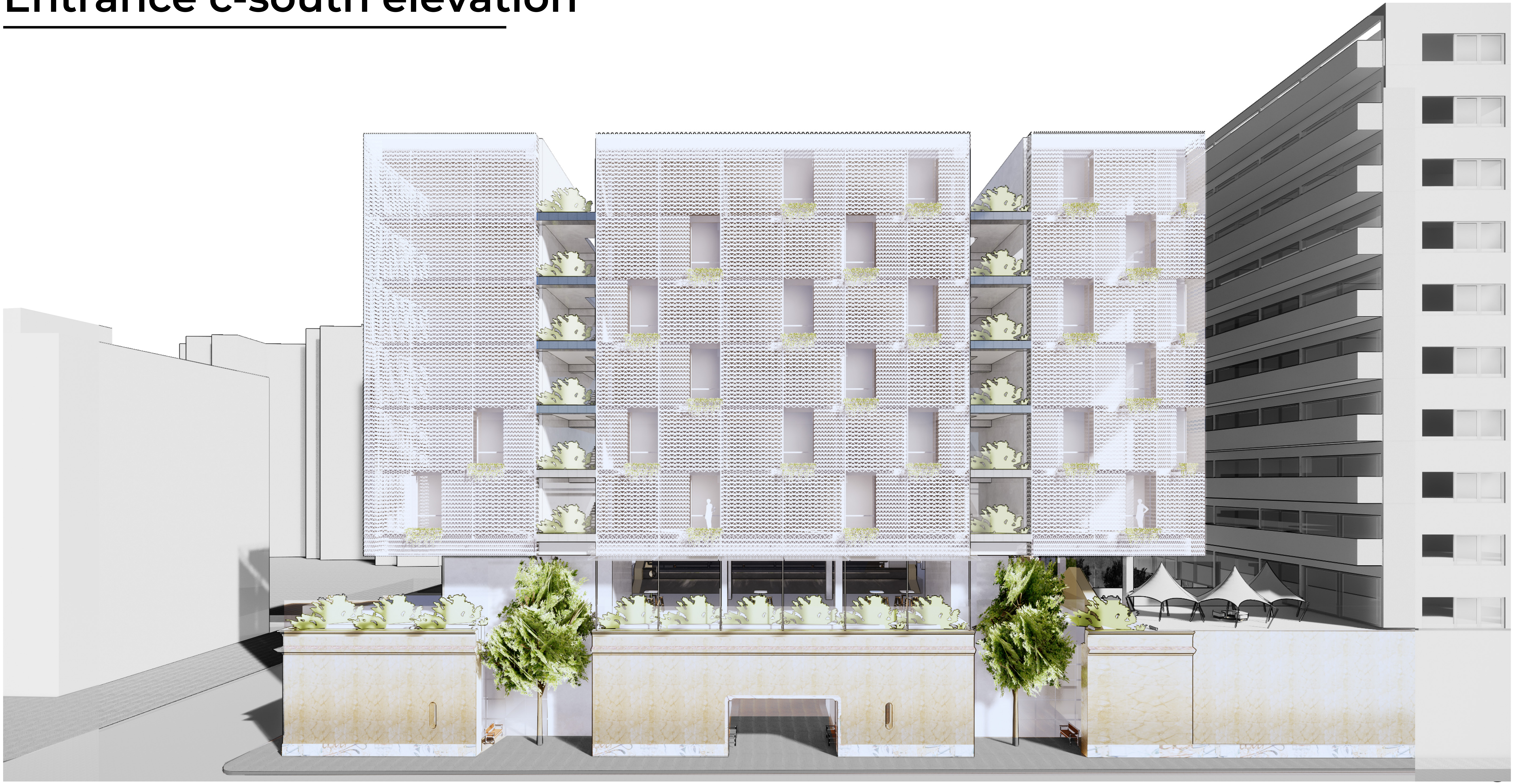




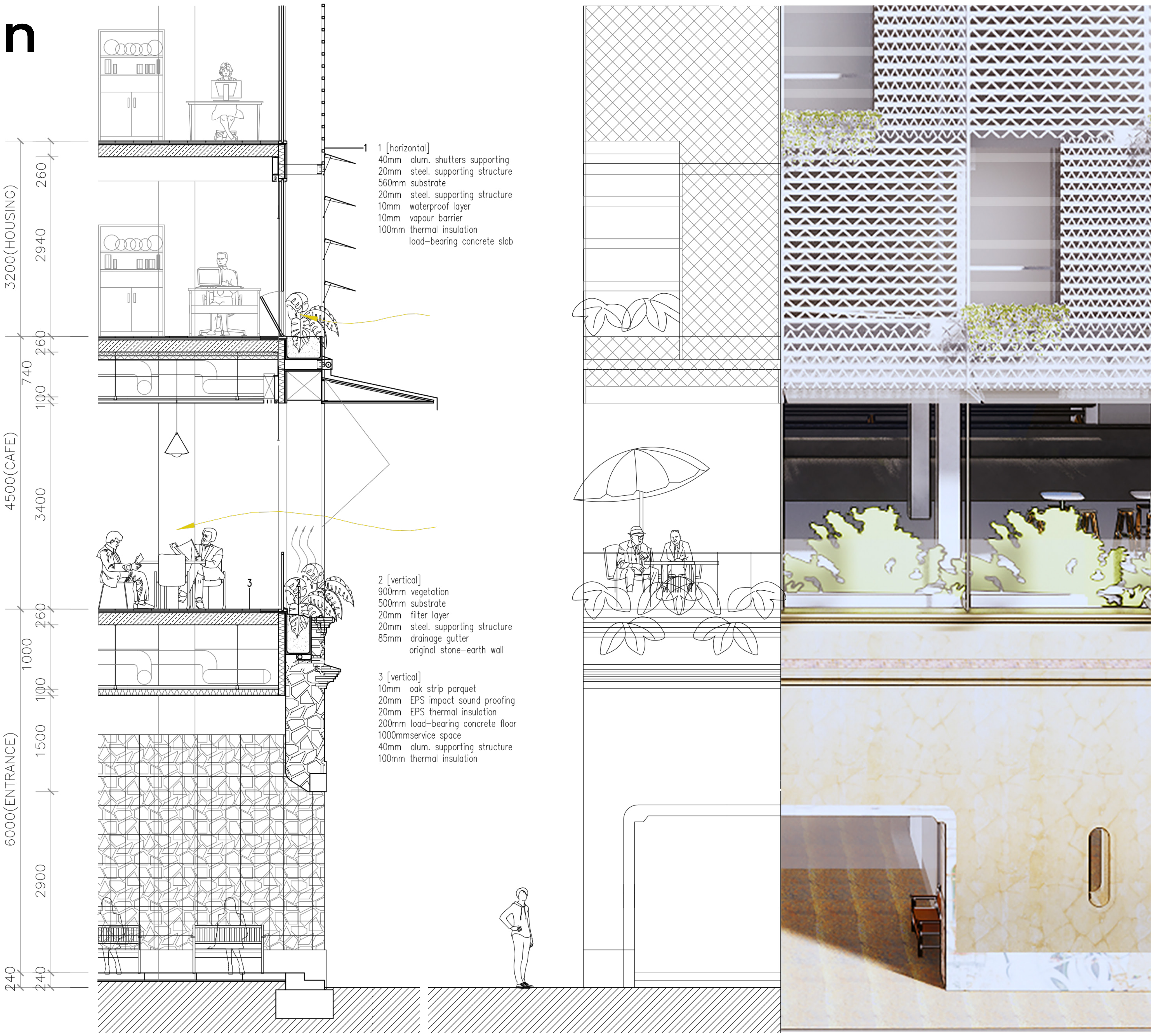



KEEP
ADD–identity
ADD–similarity
ADD–difference
REMOVE

Entrance c-south elevation



Entrance c-south elevation


3200(HOUSING)
260
2940
260
740
100
4500(CAFE)
3400
260
1000
100
6000(ENTRANCE)
1500
2900
240
240
1
2
3

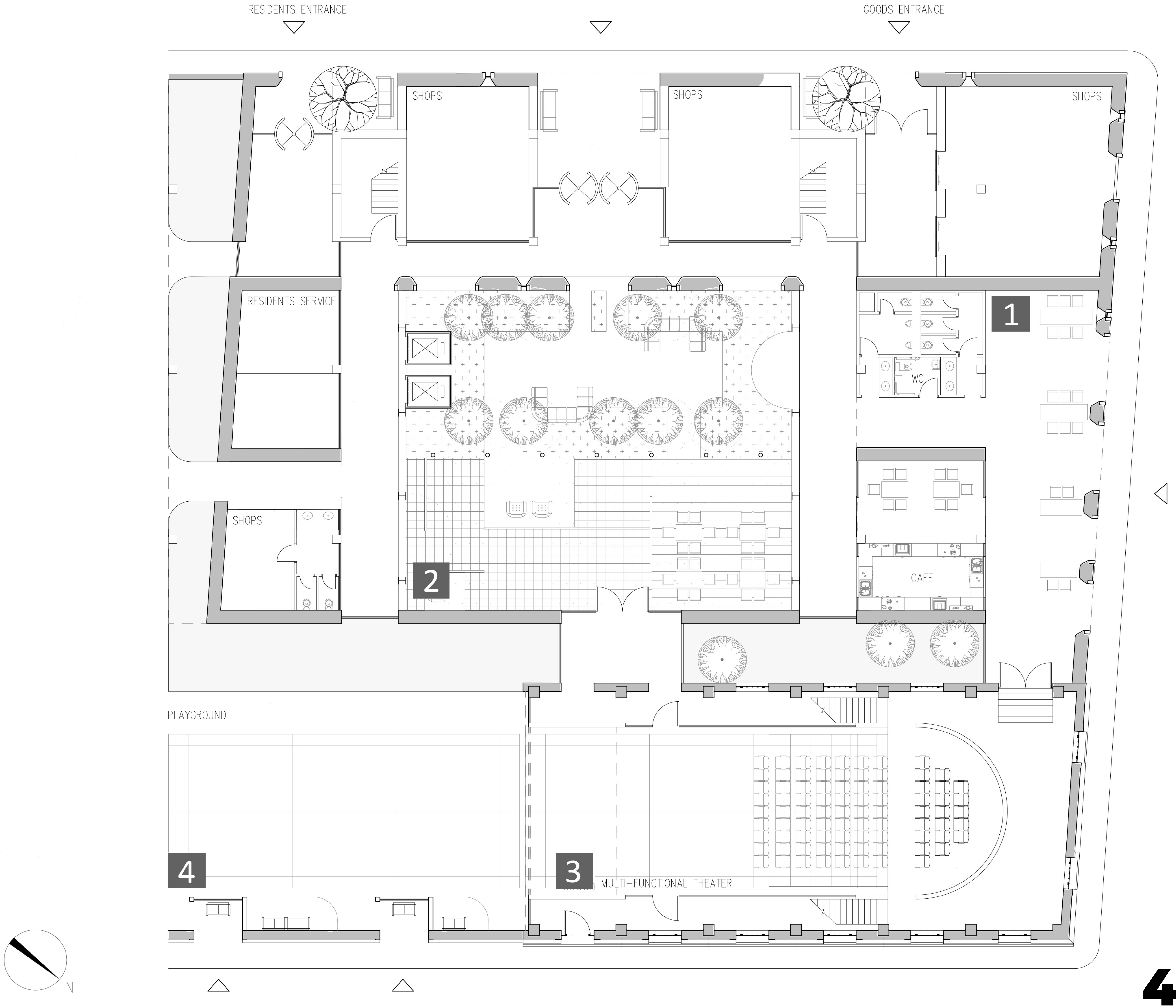
1 [horizontal]
40mm alum. shutters supporting
20mm steel. supporting structure
560mm substrate
20mm steel. supporting structure
10mm waterproof layer
10mm vapour barrier
100mm thermal insulation
load-bearing concrete slab

2 [vertical]
900mm vegetation
500mm substrate
20mm filter layer
20mm steel. supporting structure
85mm drainage gutter
original stone-earth wall

3 [vertical]
10mm oak strip parquet
20mm EPS impact sound proofing
20mm EPS thermal insulation
200mm load-bearing concrete floor
1000mmservice space
40mm alum. supporting structure
100mm thermal insulation

Ground floor plan (1-4)

1 west entrance & café
2 public living room
3 multifunctional theater
(nightclub/ indoor playground)
4 outdoor playground
(sports/ children playground)

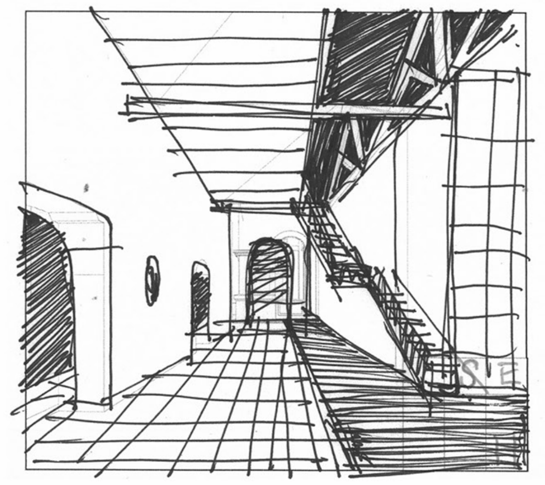

RESIDENTS ENTRANCE
GOODS ENTRANCE
SHOPS
SHOPS
SHOPS
RESIDENTS SERVICE
1
WC
2
SHOPS
CAFE
PLAYGROUND
4
3
MULTI-FUNCTIONAL THEATER
N

Space 1 West corridor

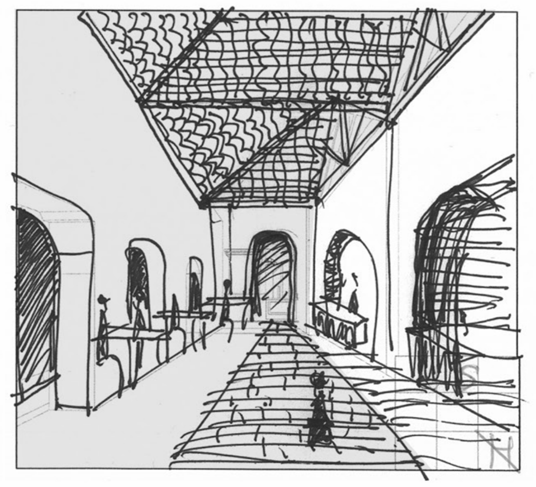
social

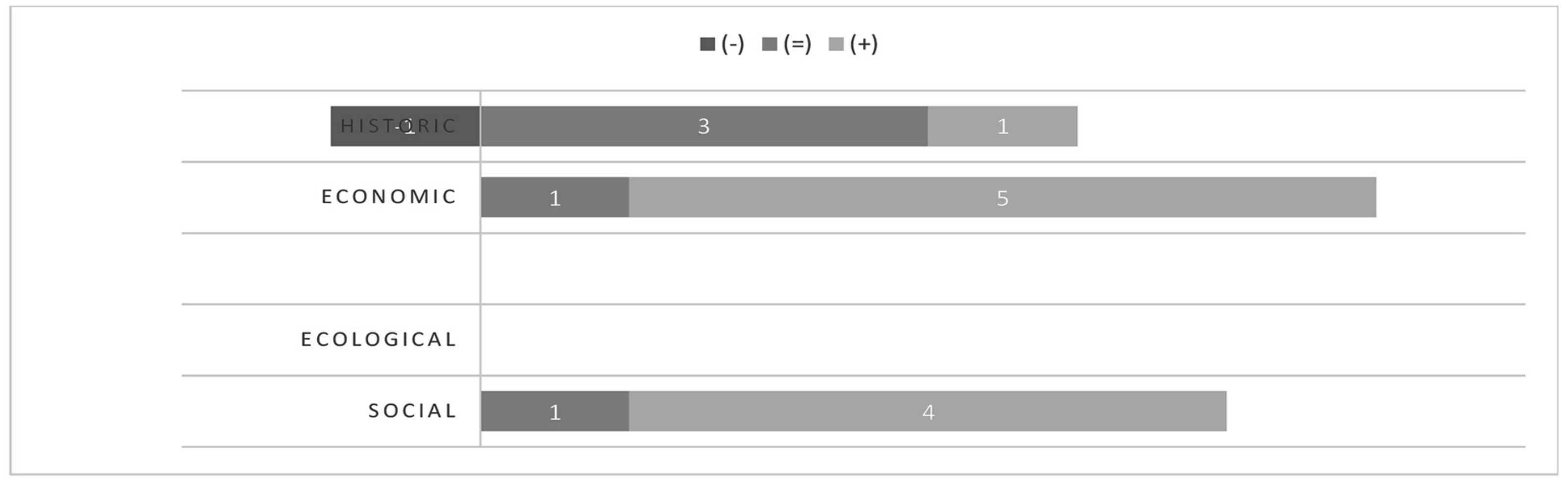
ecological

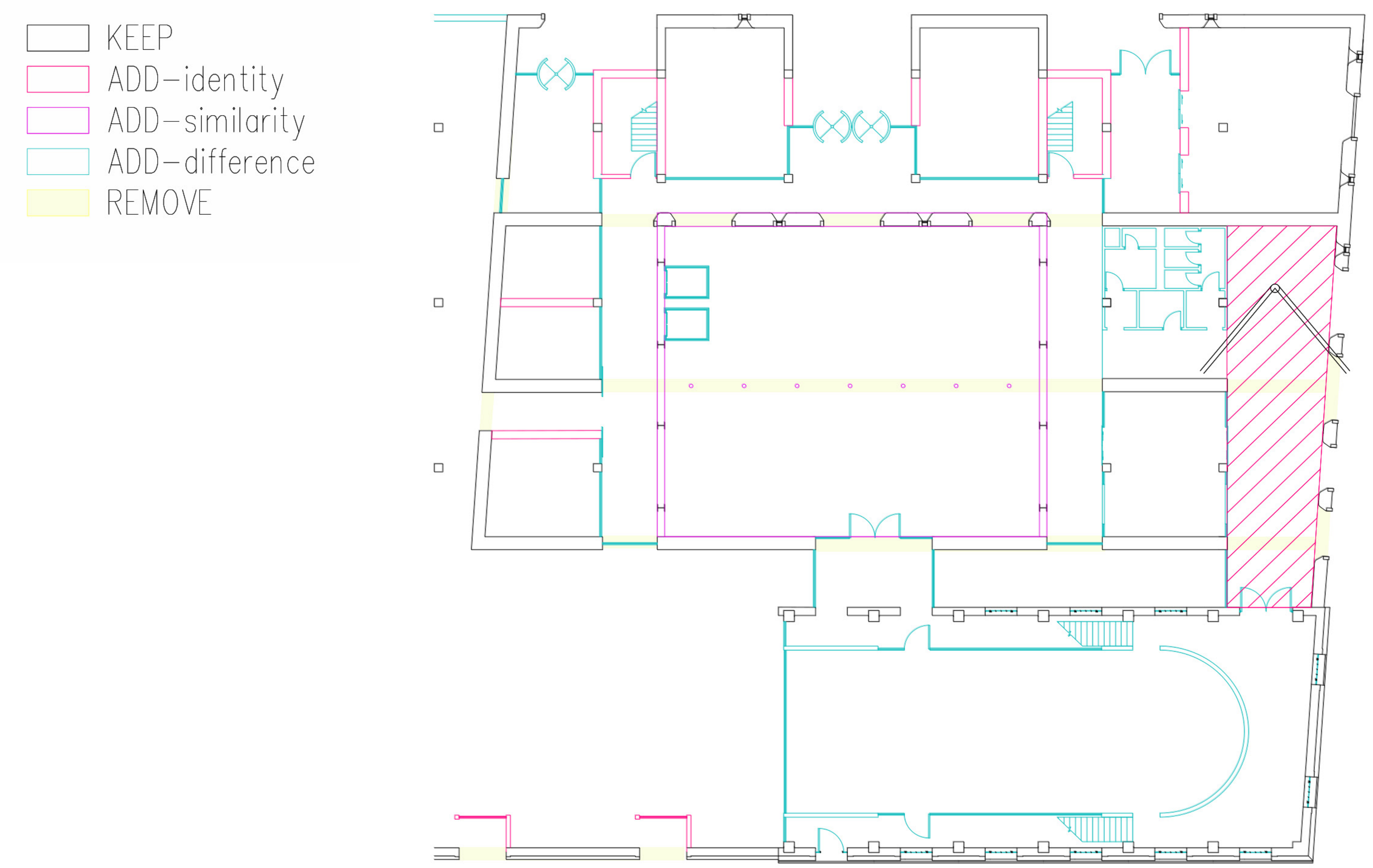
economic



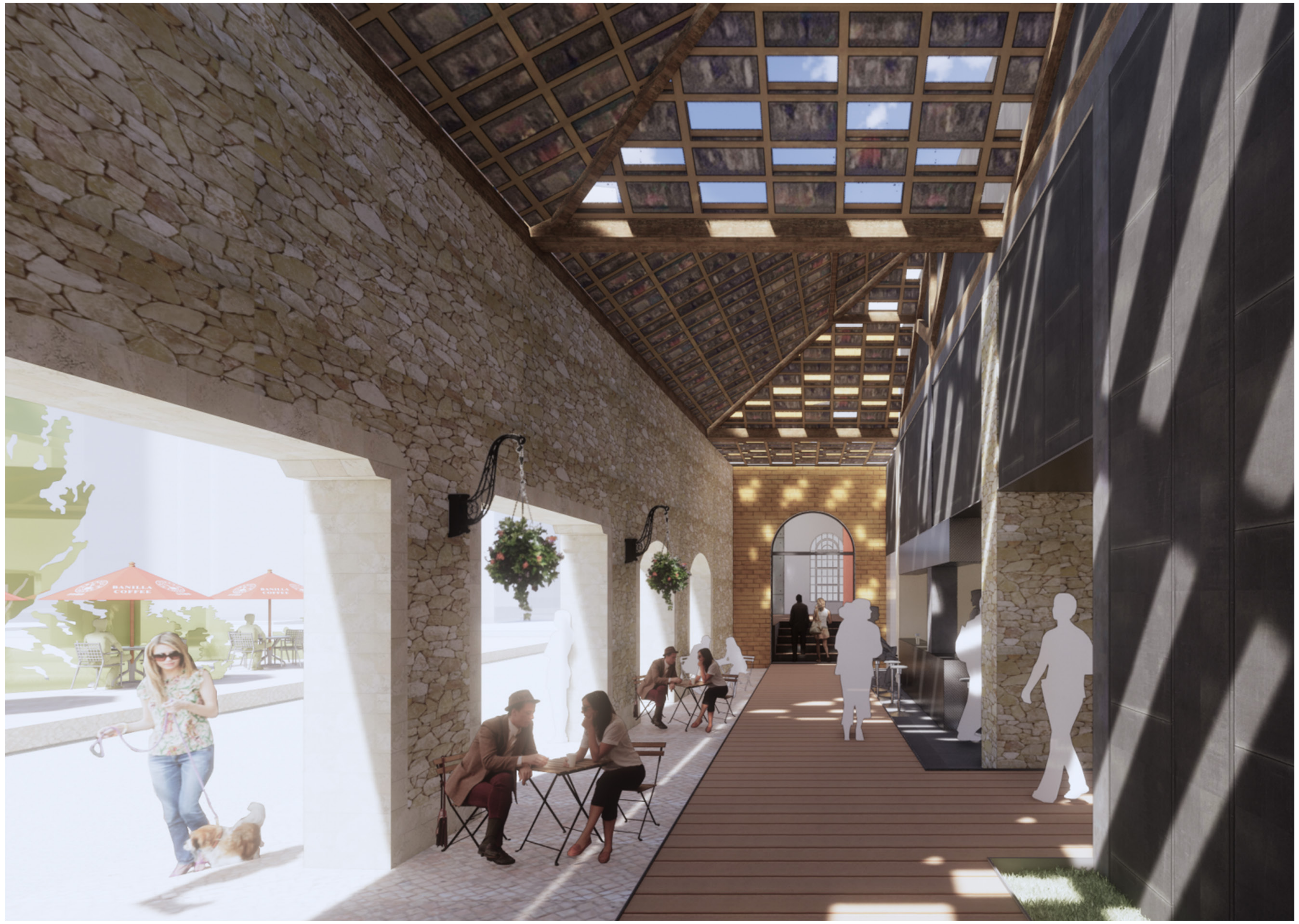
historic

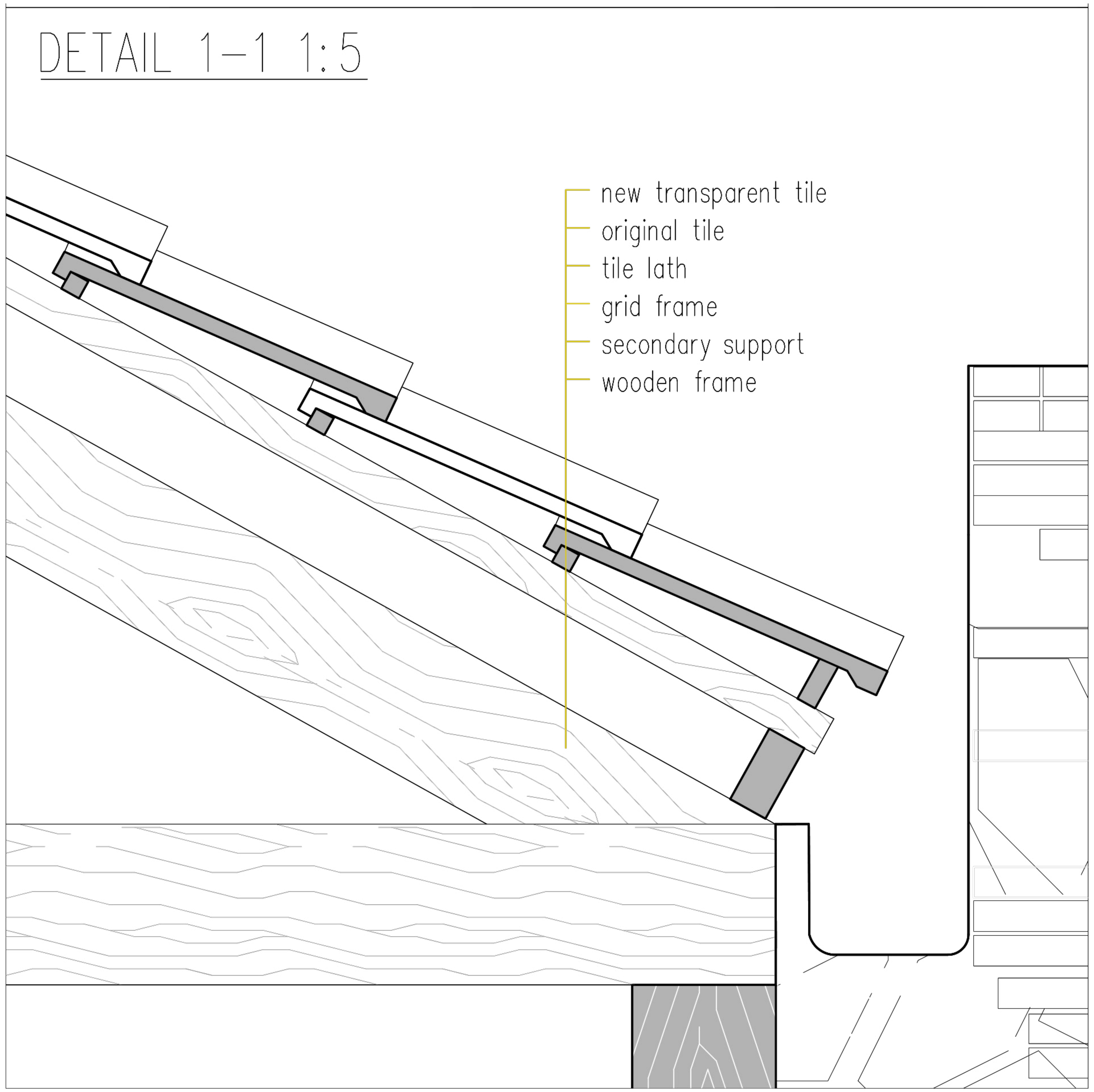





KEEP
ADD-identity
ADD-similarity
ADD-difference
REMOVE

Space 1 West corridor




DETAIL 1-1 1:5
new transparent tile
original tile
tile lath
grid frame
secondary support
wooden frame

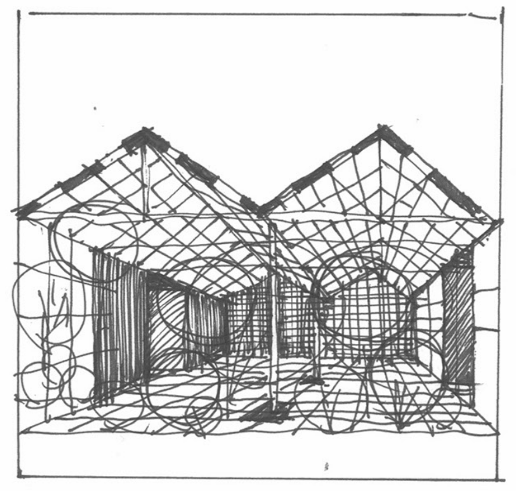
Space 2 public living-room

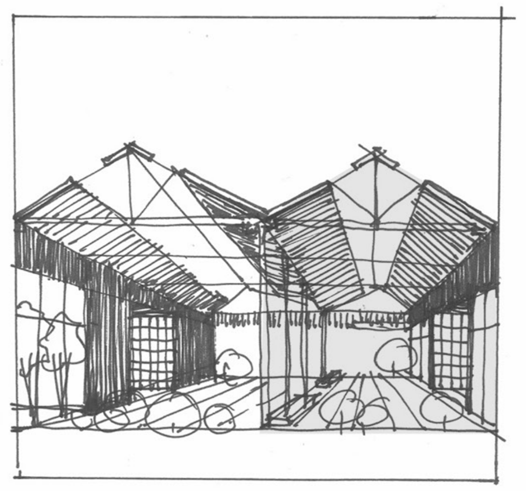
social

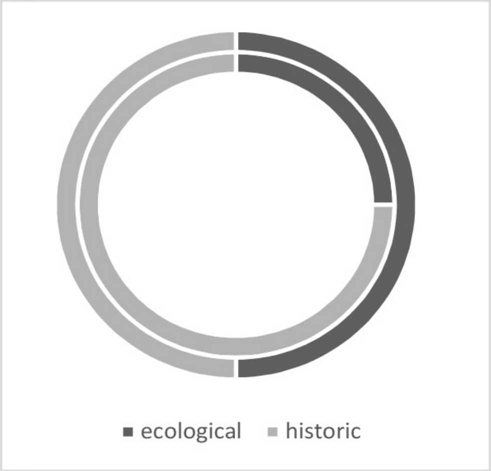
ecological

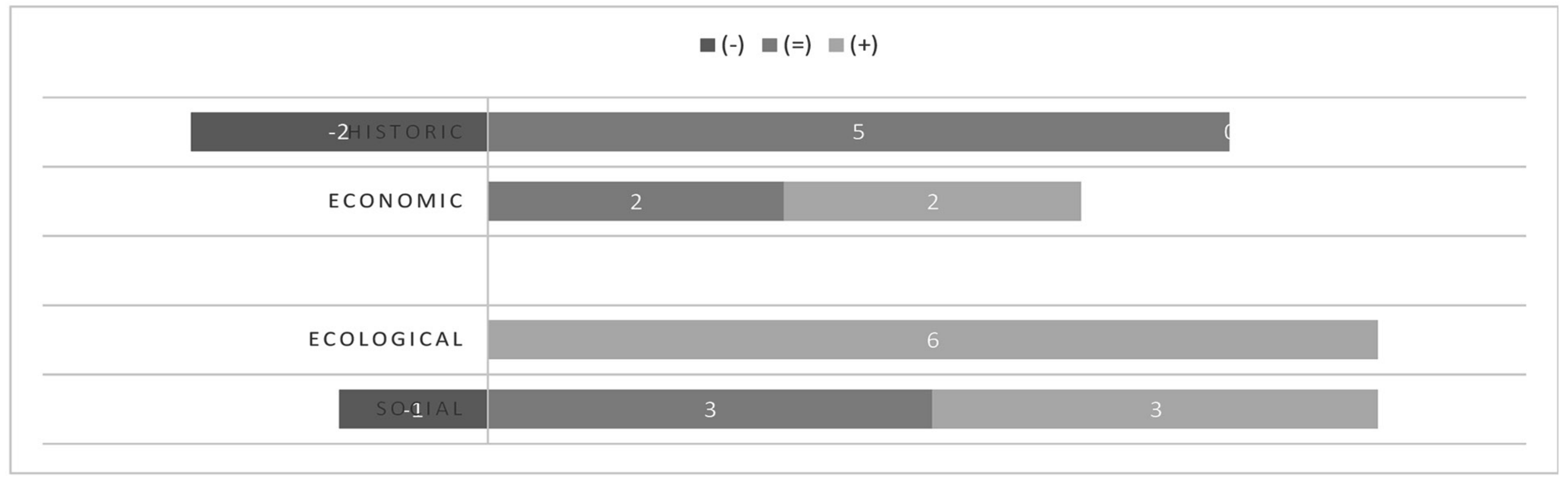
economic

historic

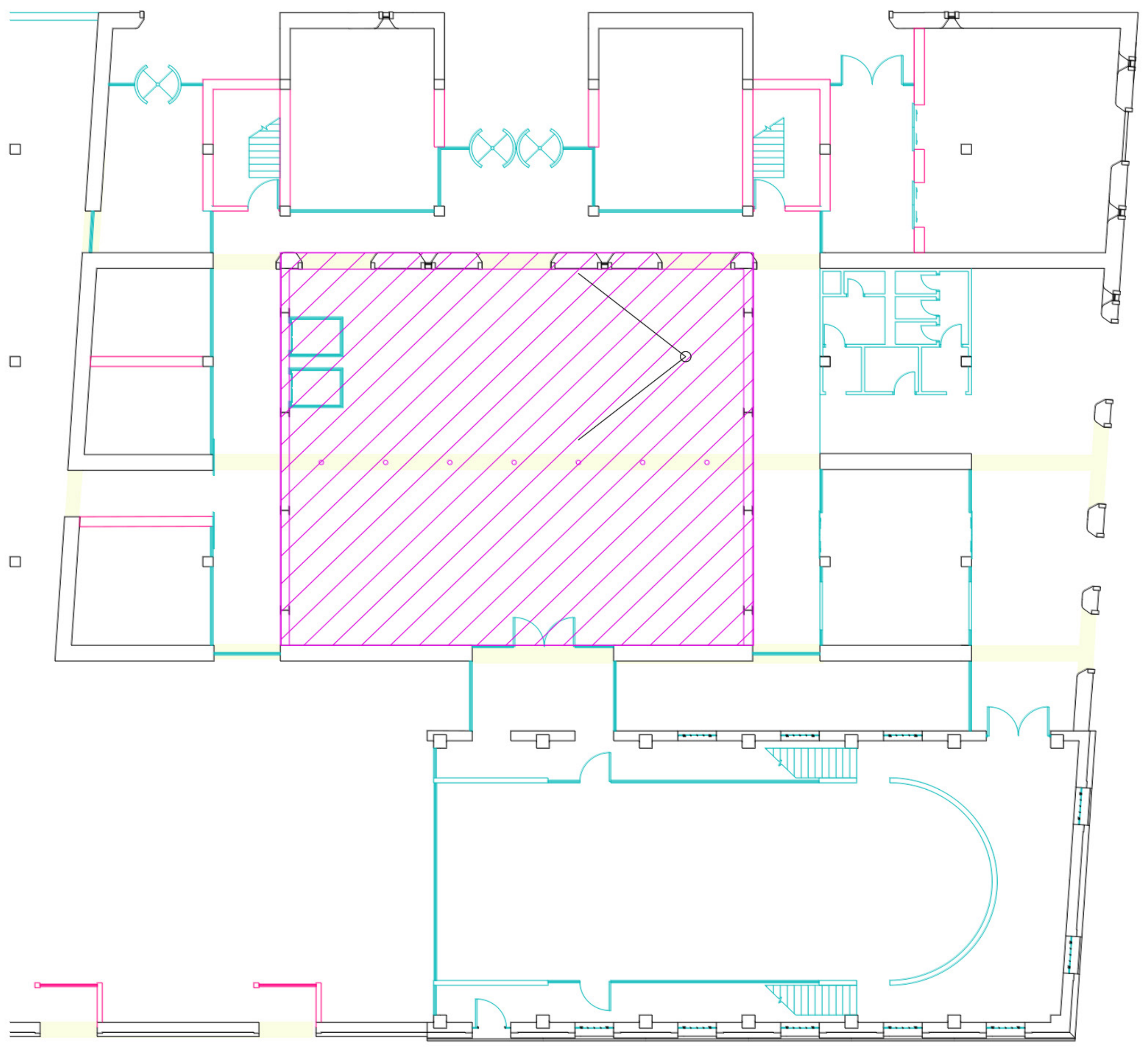




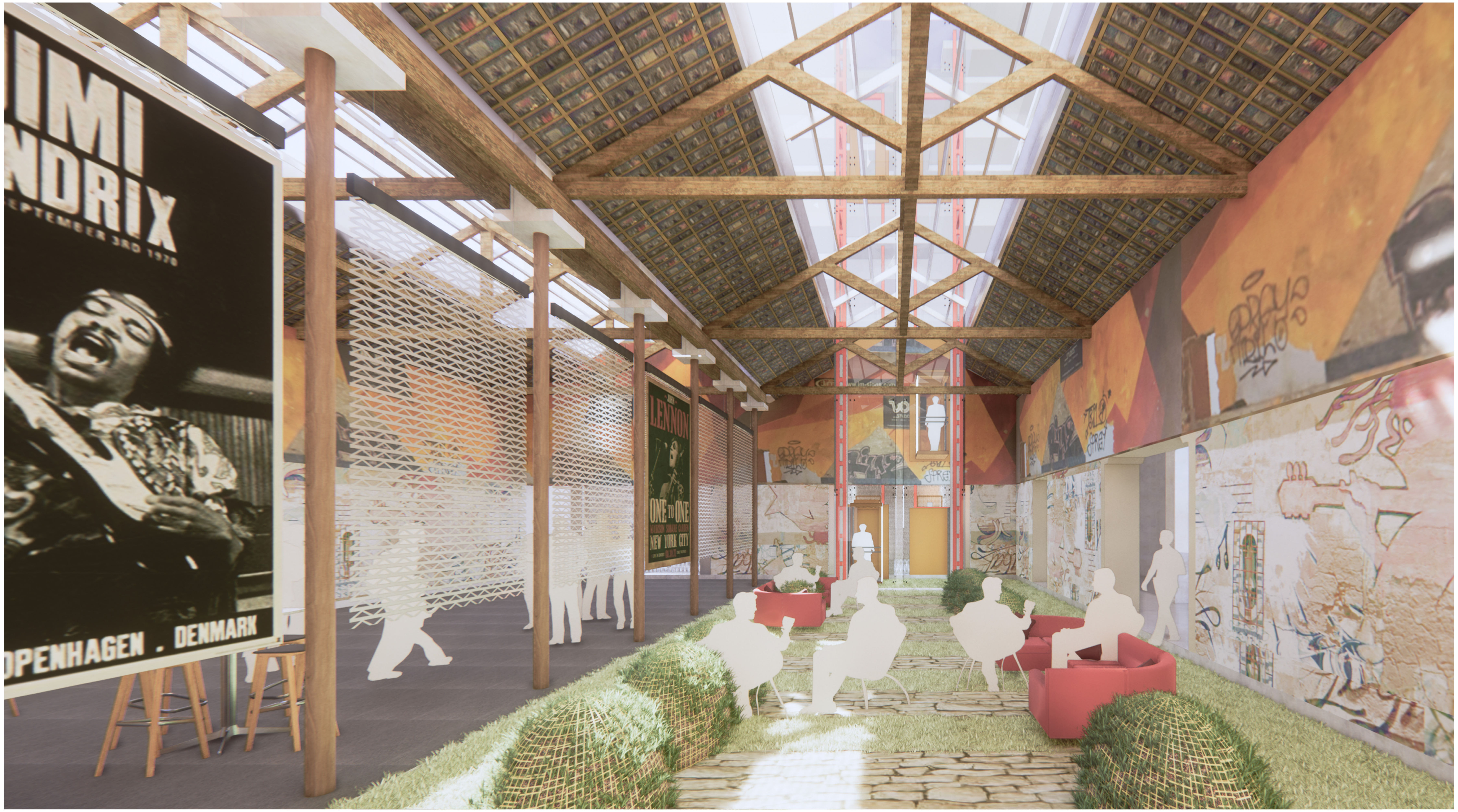


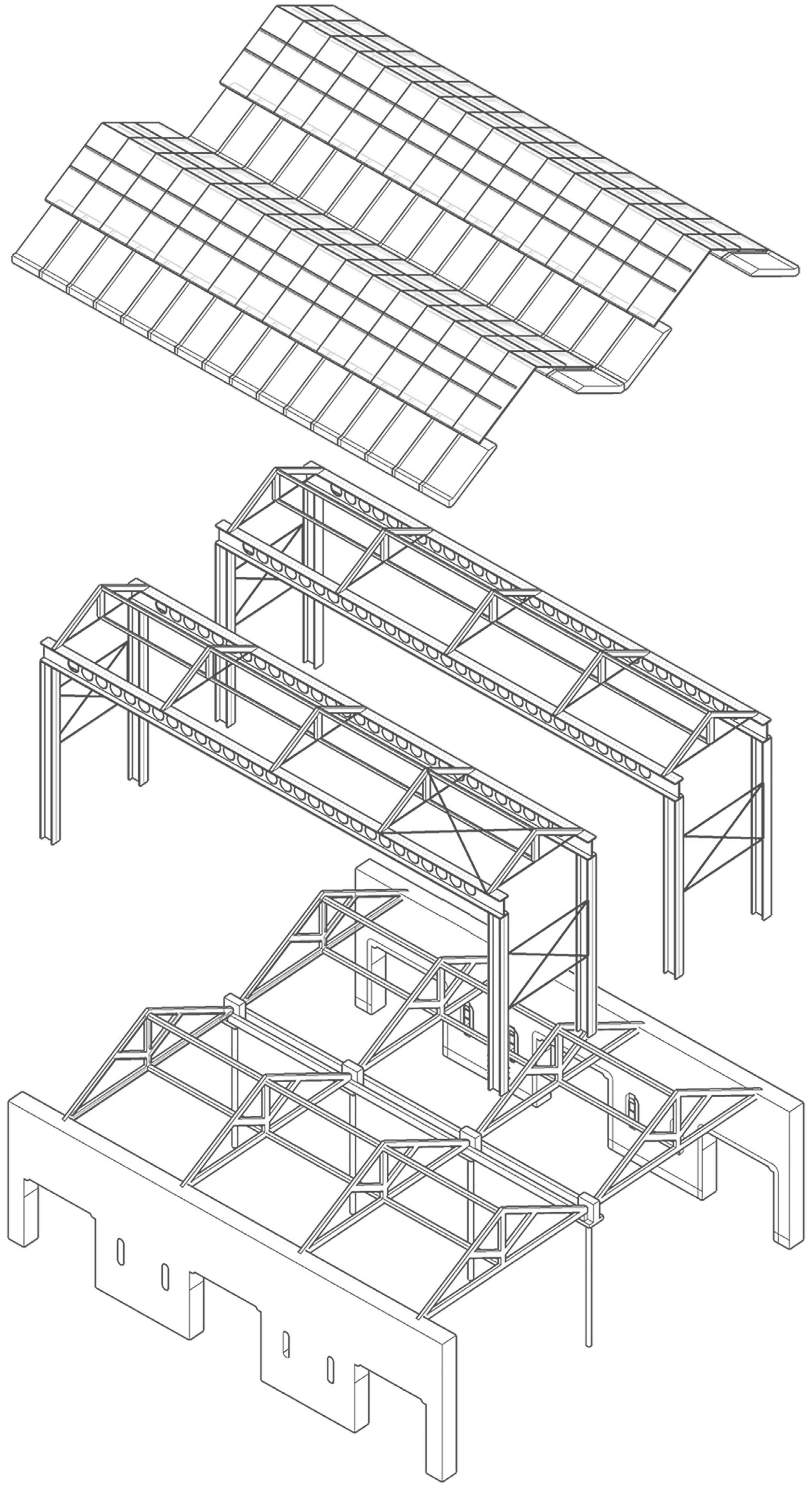


☐ KEEP
☐ ADD–identity
☐ ADD–similarity
☐ ADD–difference
■ REMOVE

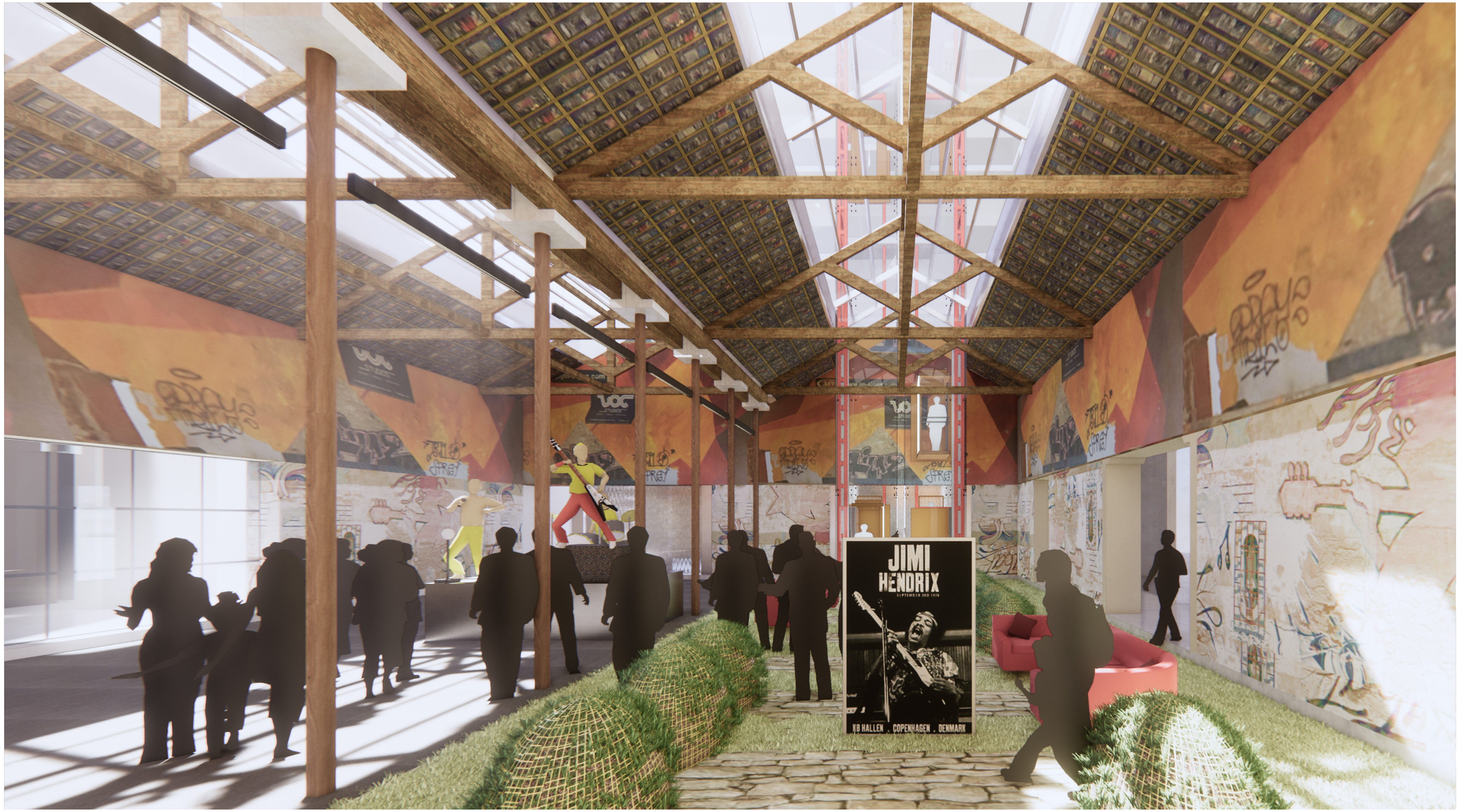


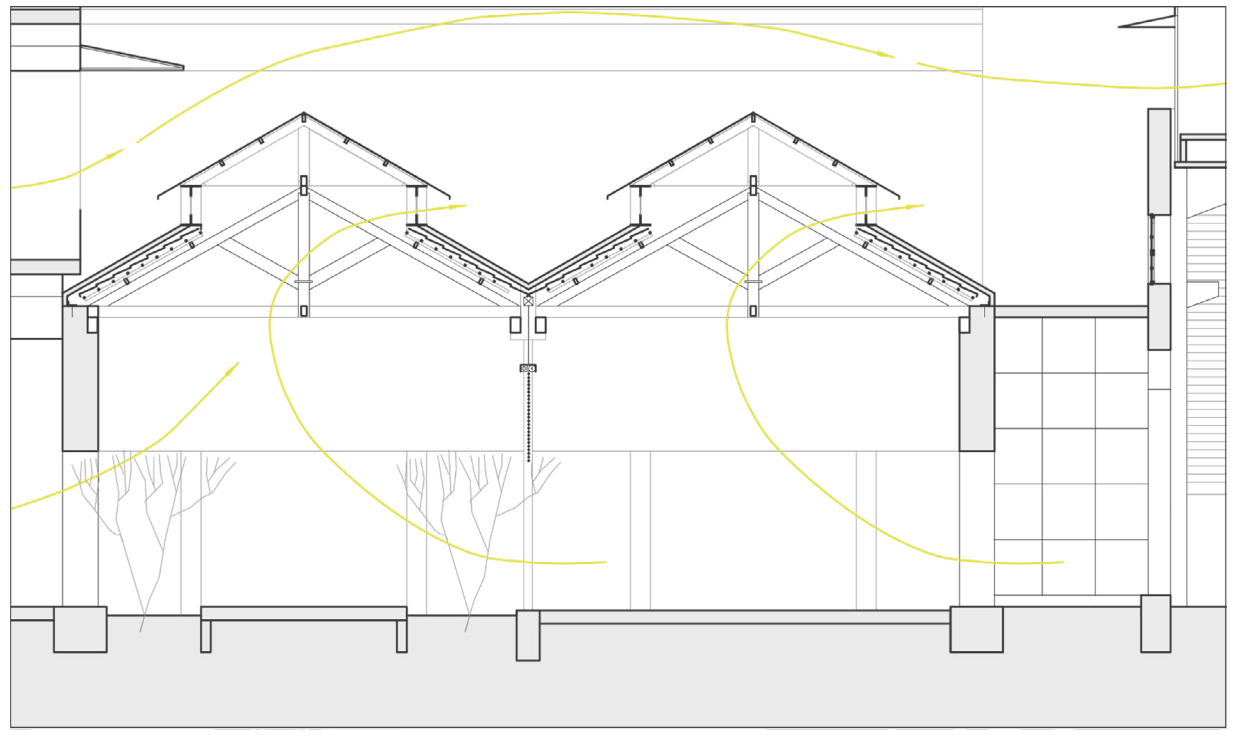
Space 2 public living-room

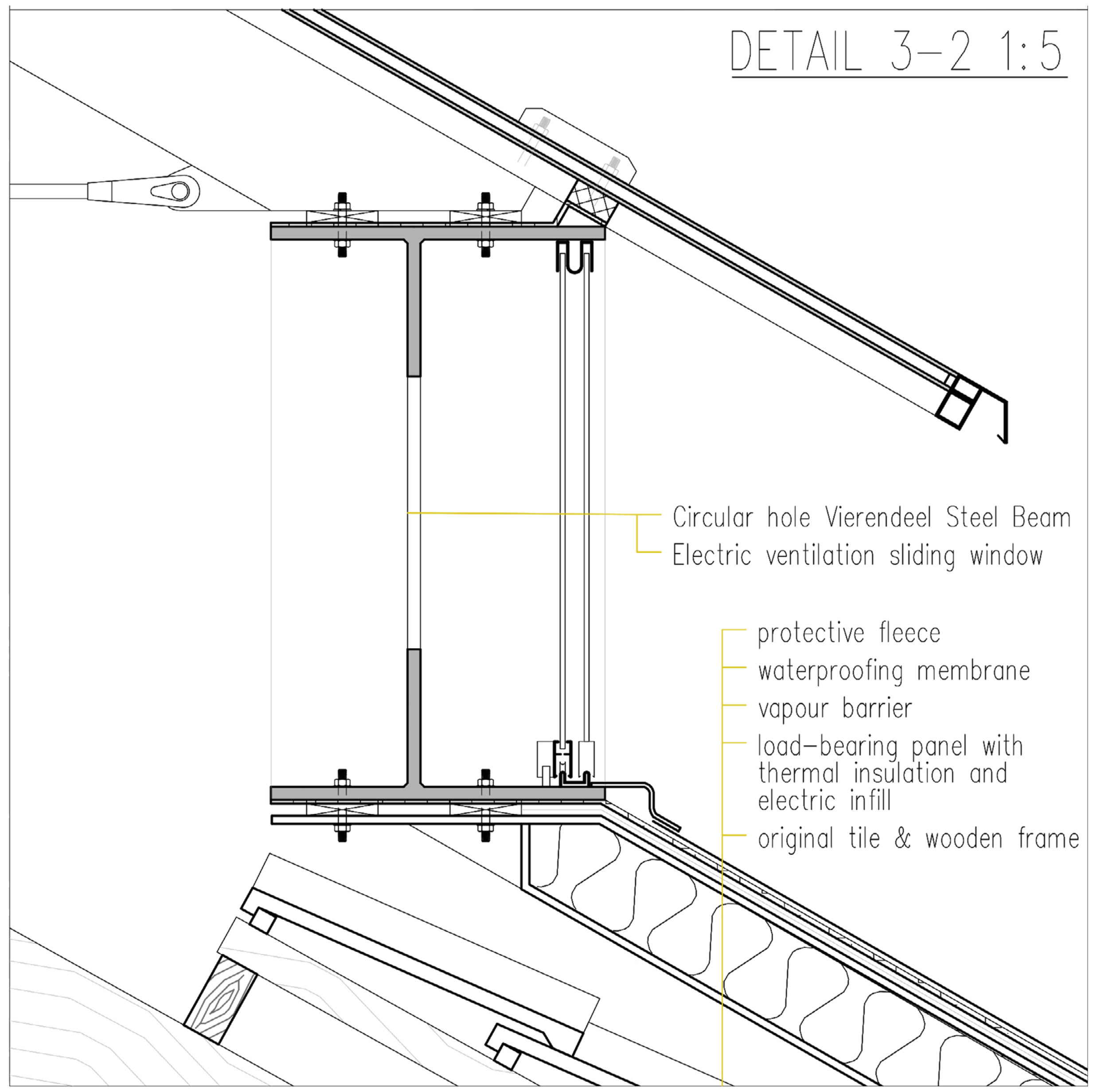

IMI
NDRIX
EPTEMBER 3RD 1970
OPENHAGEN . DENMARK
LENNON
ONE TO ONE
NEW YORK CITY



Space 2 public living-room


JIMI
HENDRIX
KB HALLEN . COPENHAGEN . DENMARK

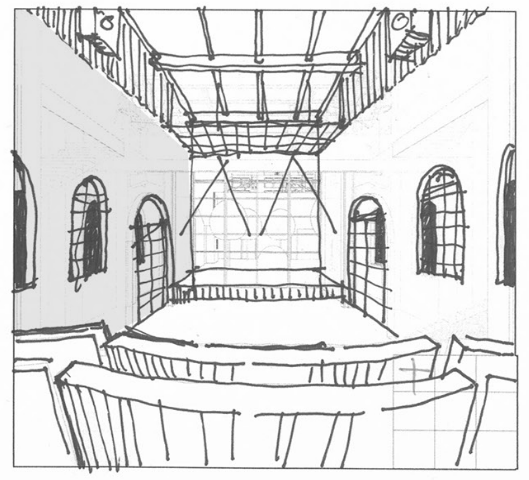



DETAIL 3–2 1:5
Circular hole Vierendeel Steel Beam
Electric ventilation sliding window
protective fleece
waterproofing membrane
vapour barrier
load–bearing panel with thermal insulation and electric infill
original tile & wooden frame

Space 3 multifunctional theater

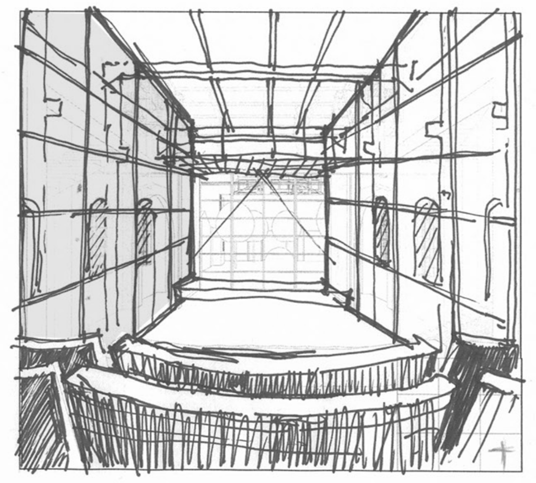
social

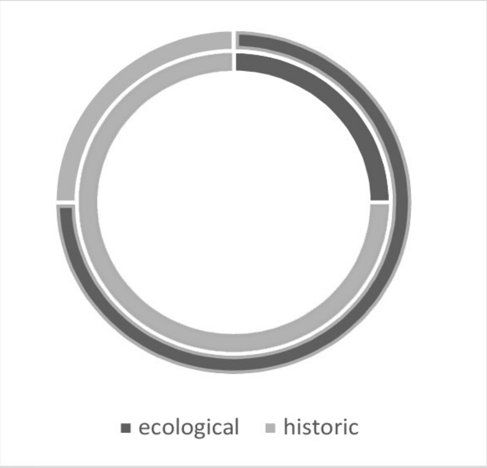
ecological

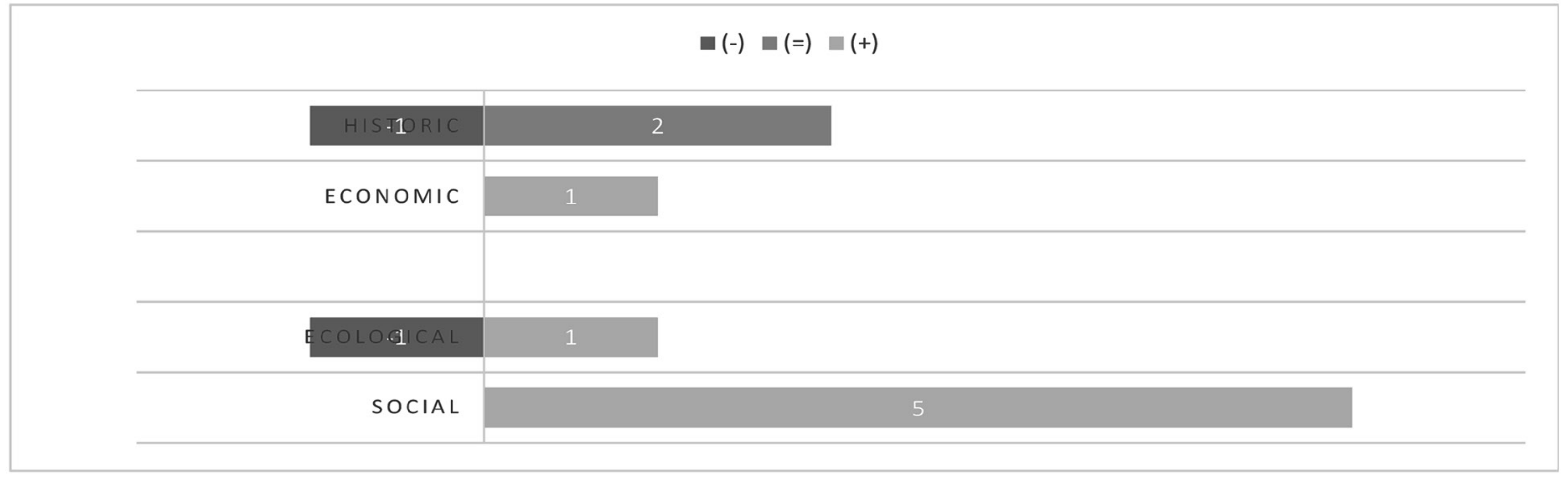


economic

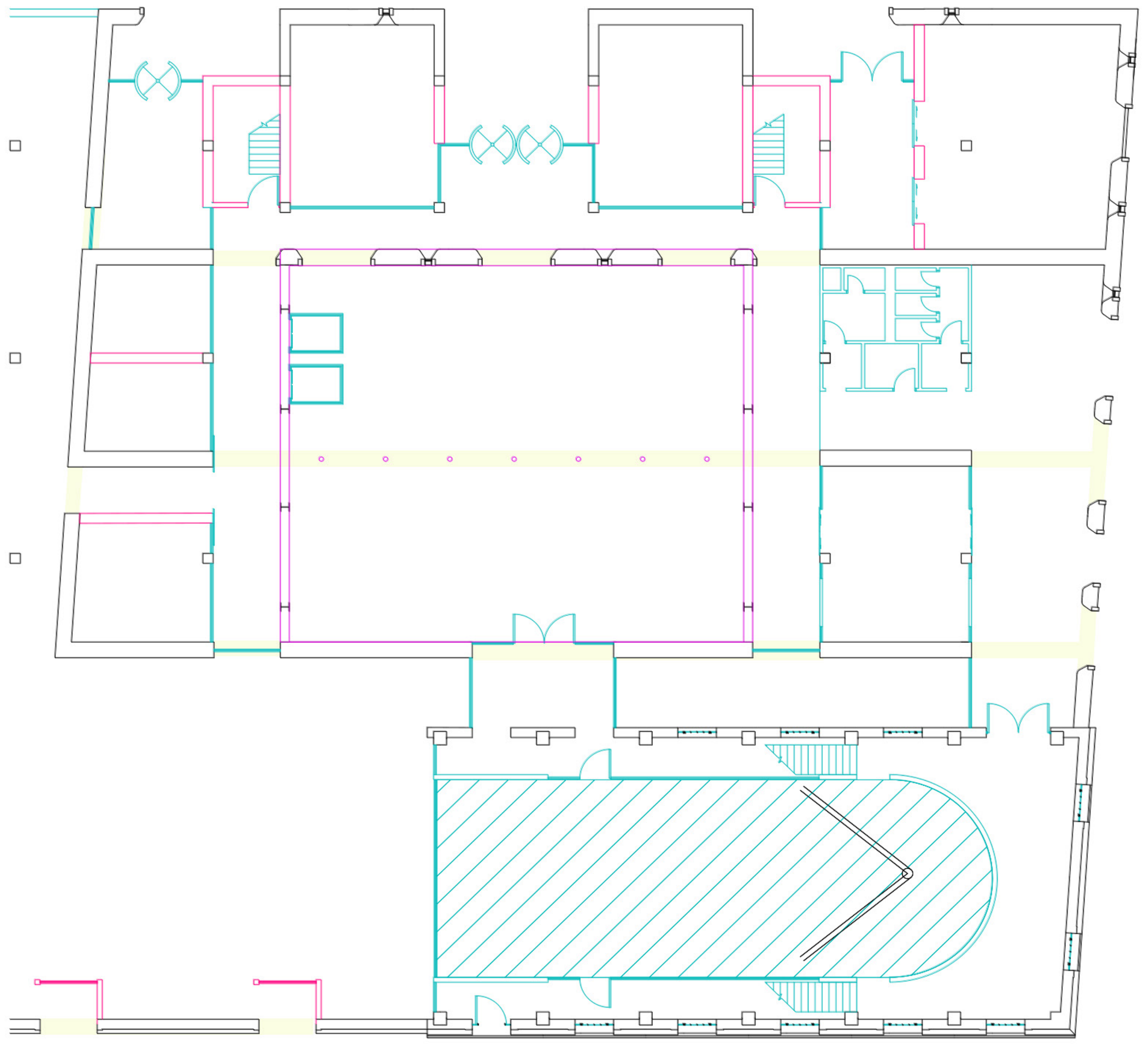
historic



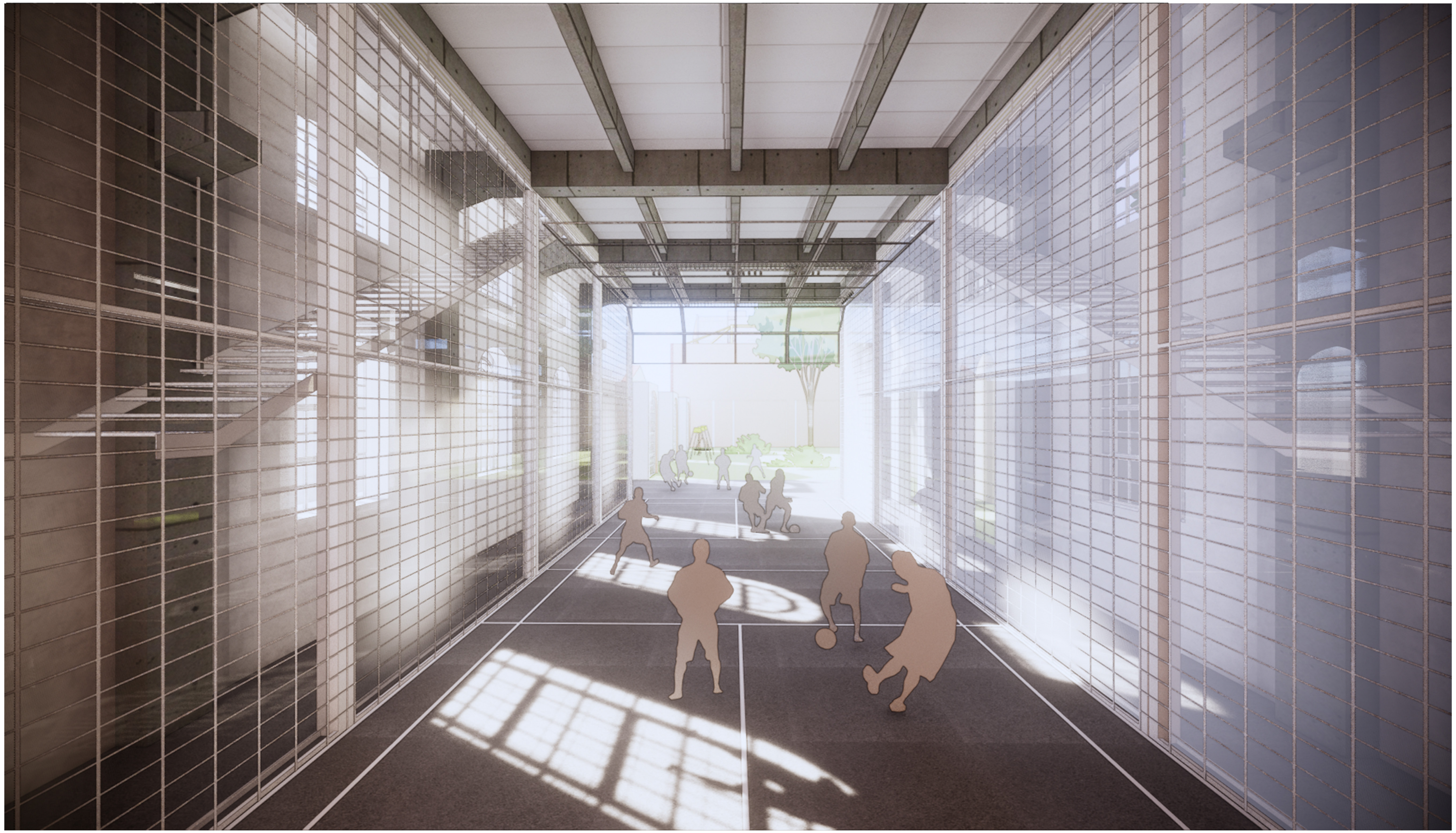


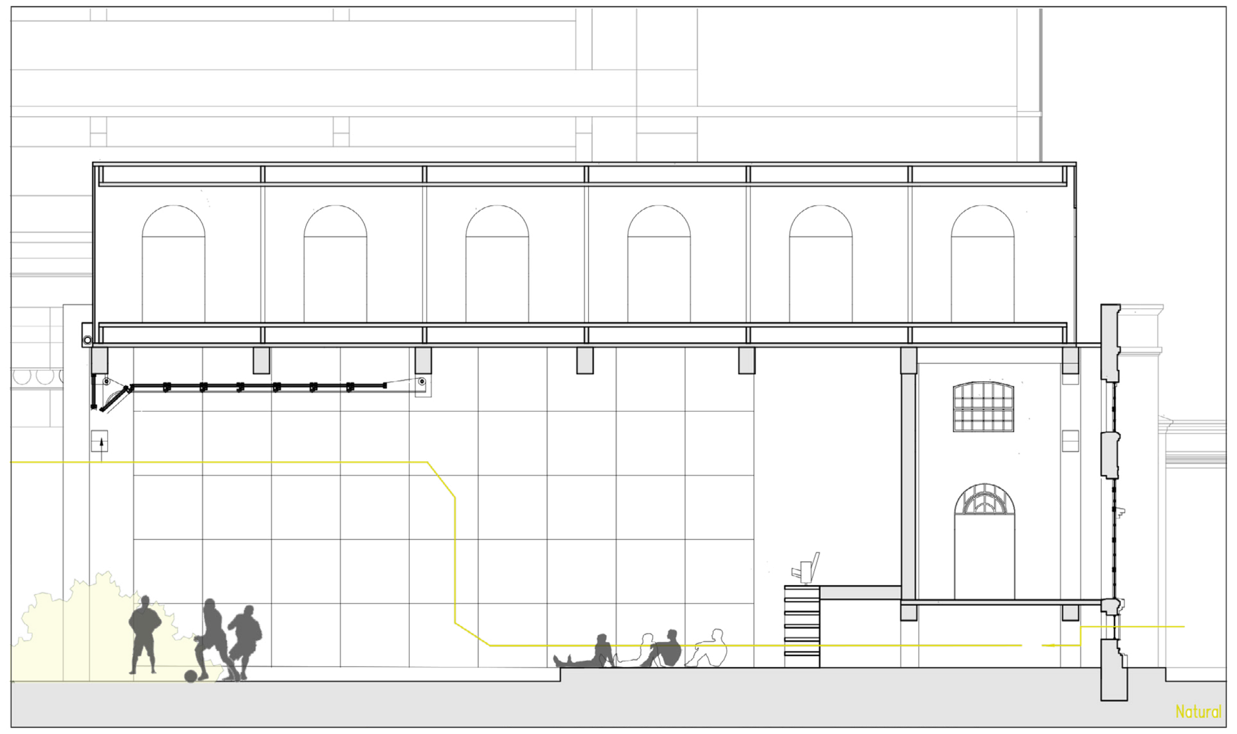


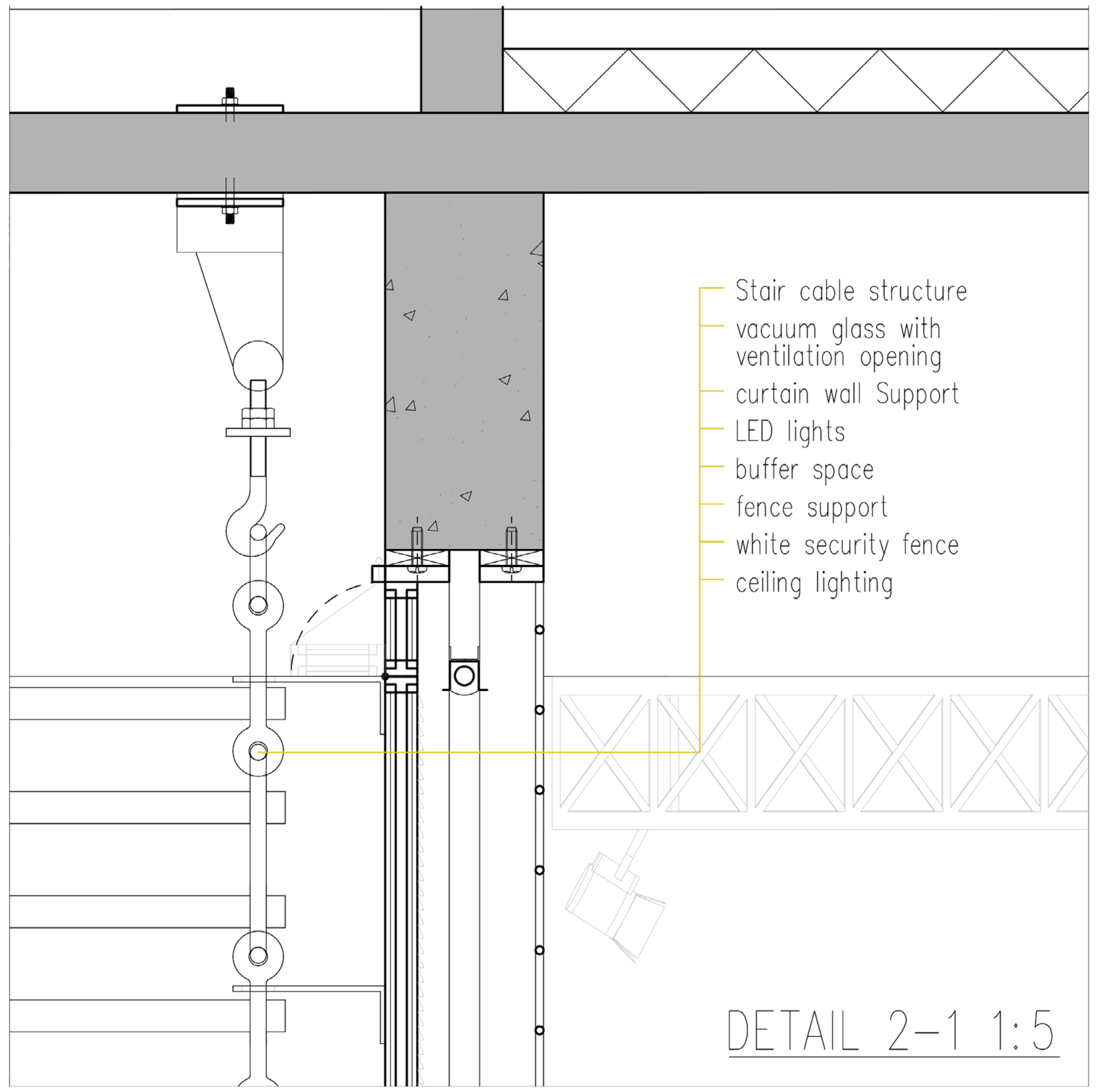
- ☐ KEEP
- 🟥 ADD-identity
- 🟪 ADD-similarity
- 🟦 ADD-difference
- 🟨 REMOVE



Space 3 multifunctional theater

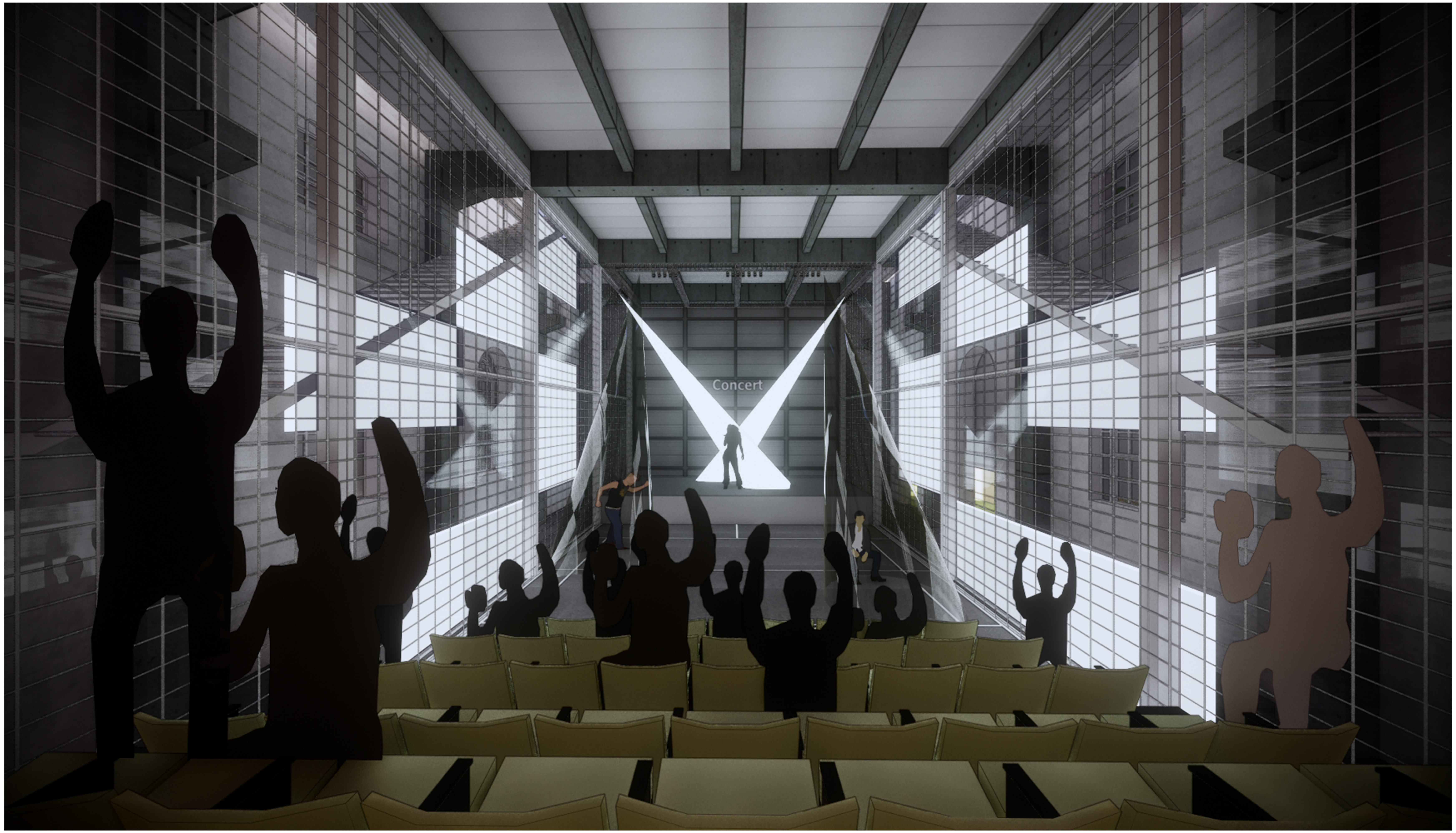


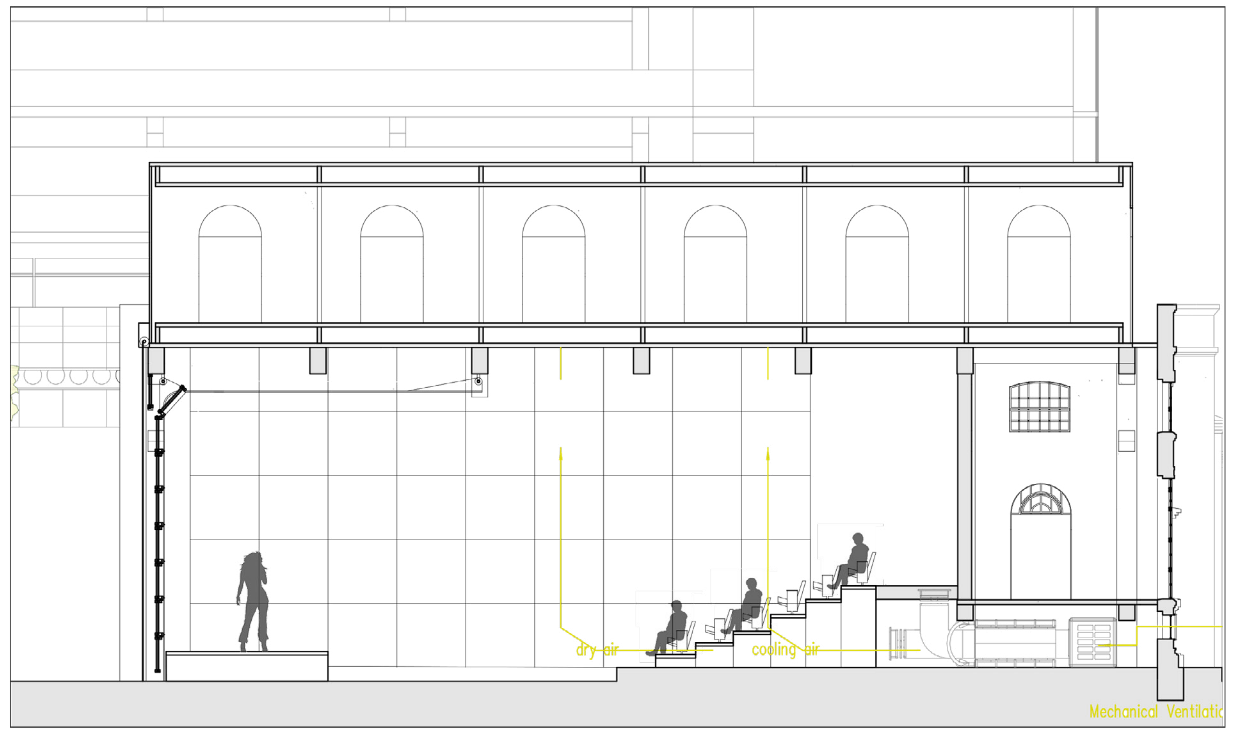


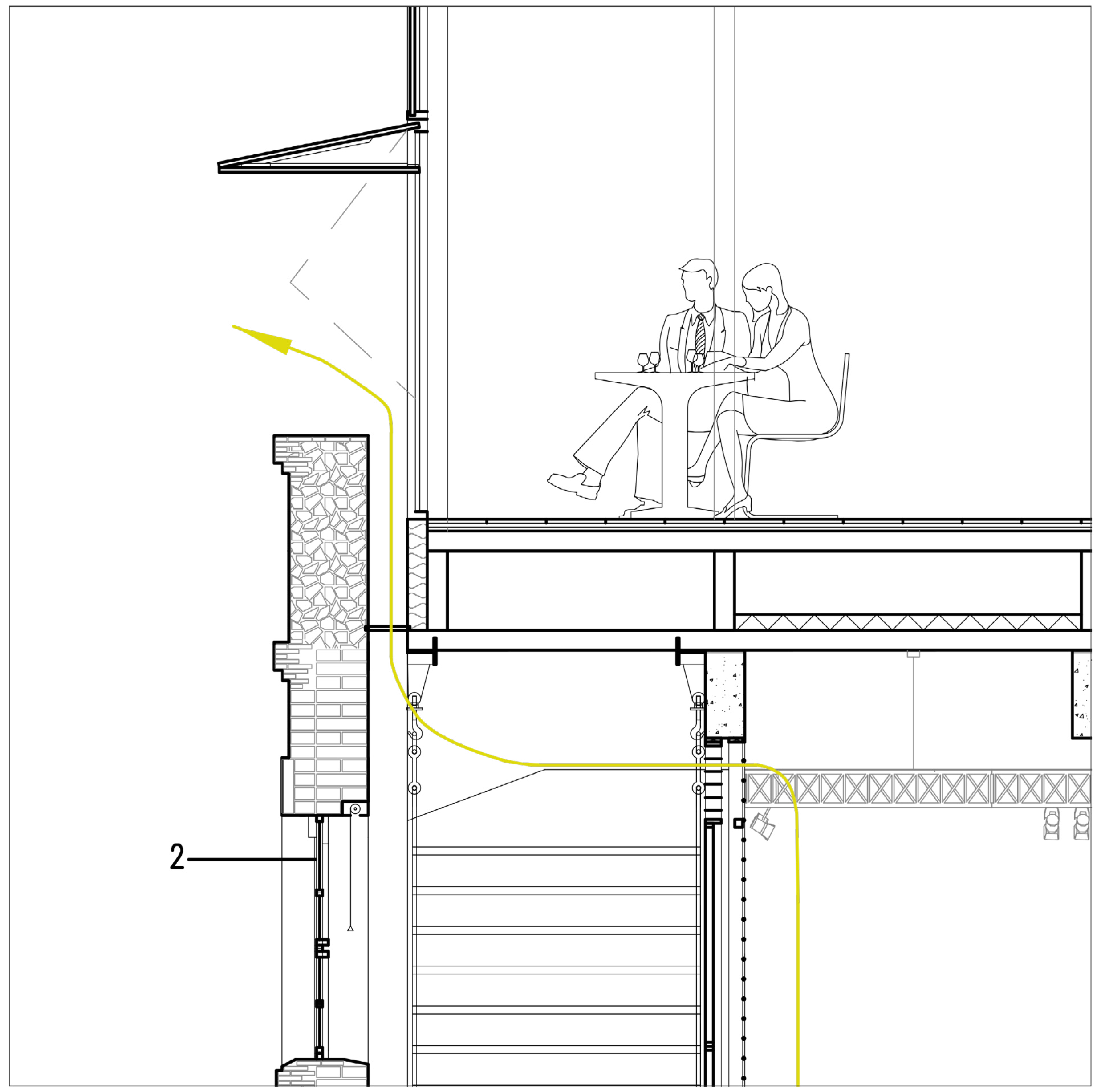


Stair cable structure
vacuum glass with ventilation opening
curtain wall Support
LED lights
buffer space
fence support
white security fence
ceiling lighting
DETAIL 2-1 1:5

Space 3 multifunctional theater

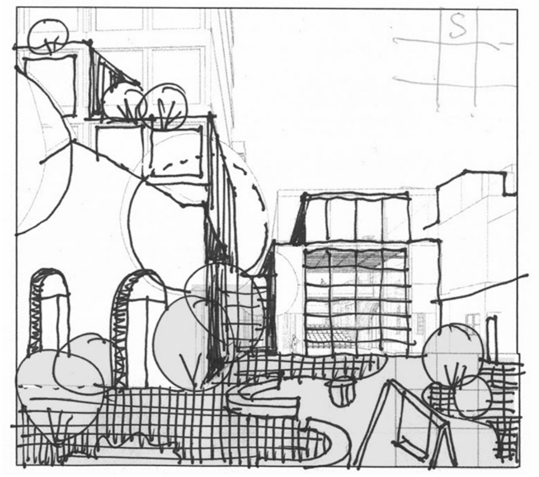



dry air
cooling air
Mechanical Ventilati

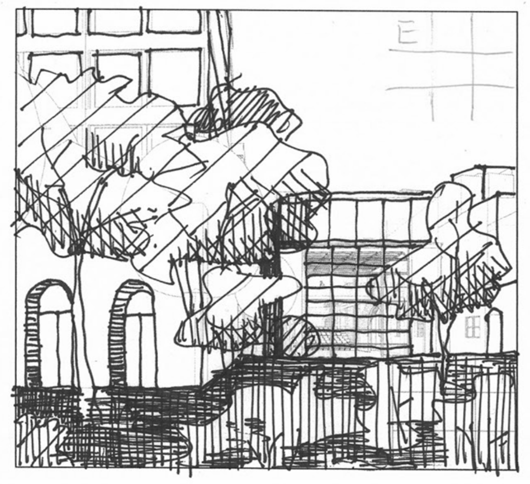


Space 4 playground

social

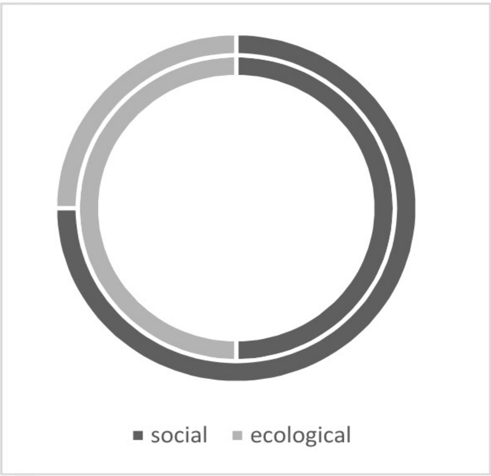


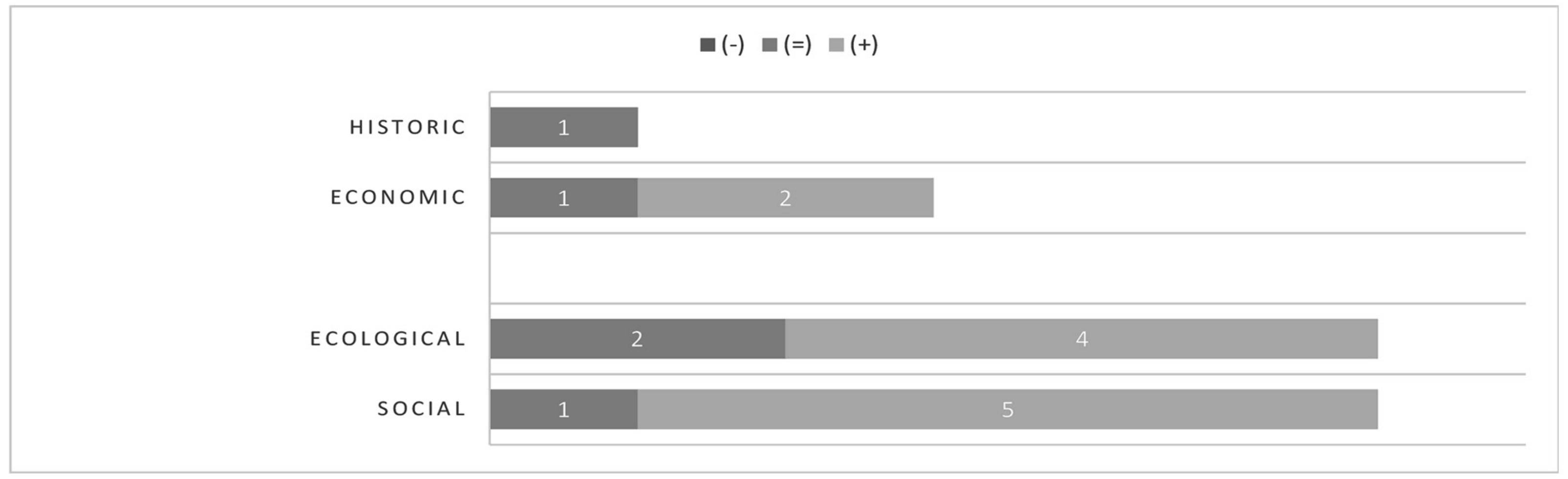
ecological

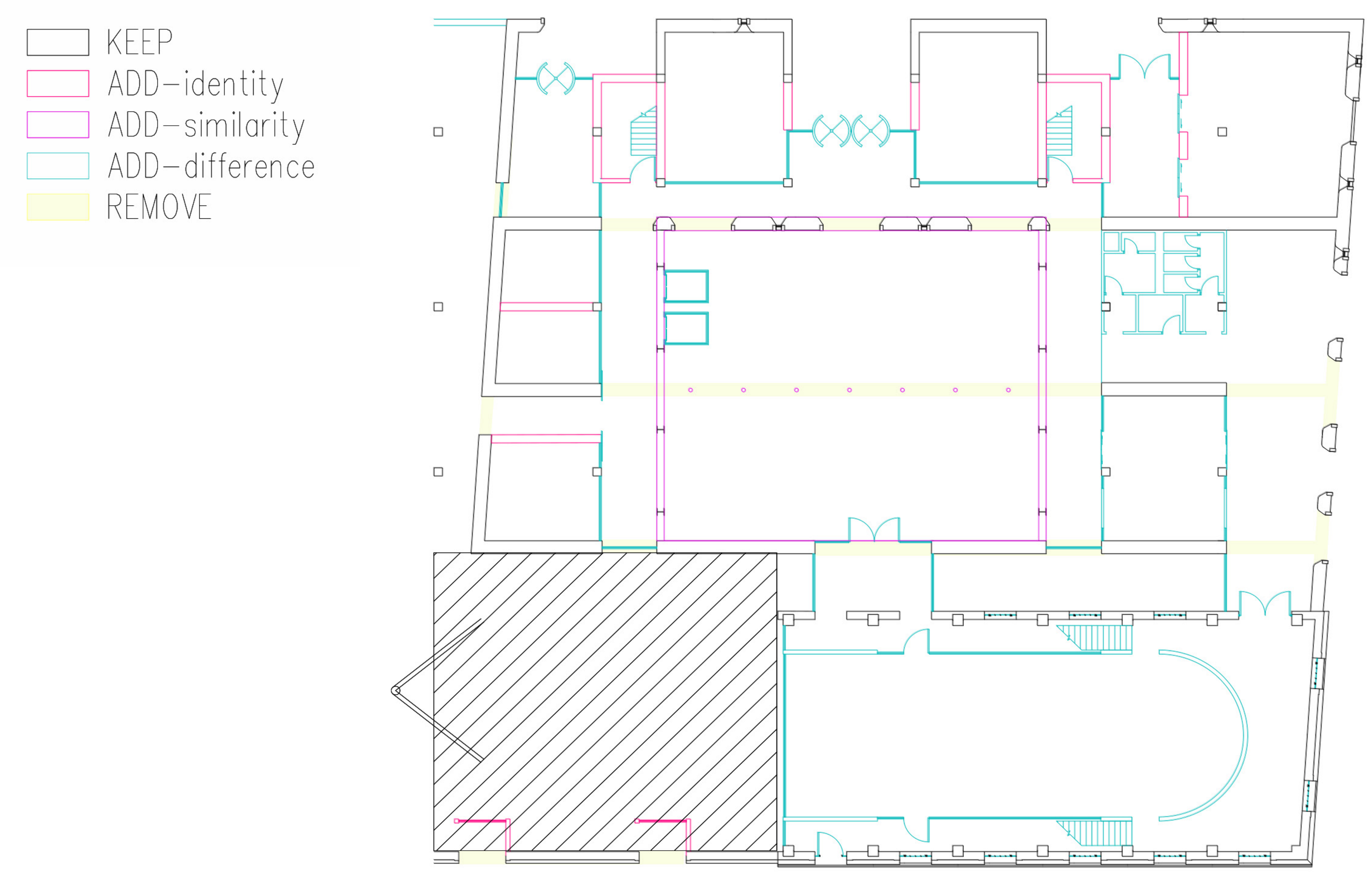


economic

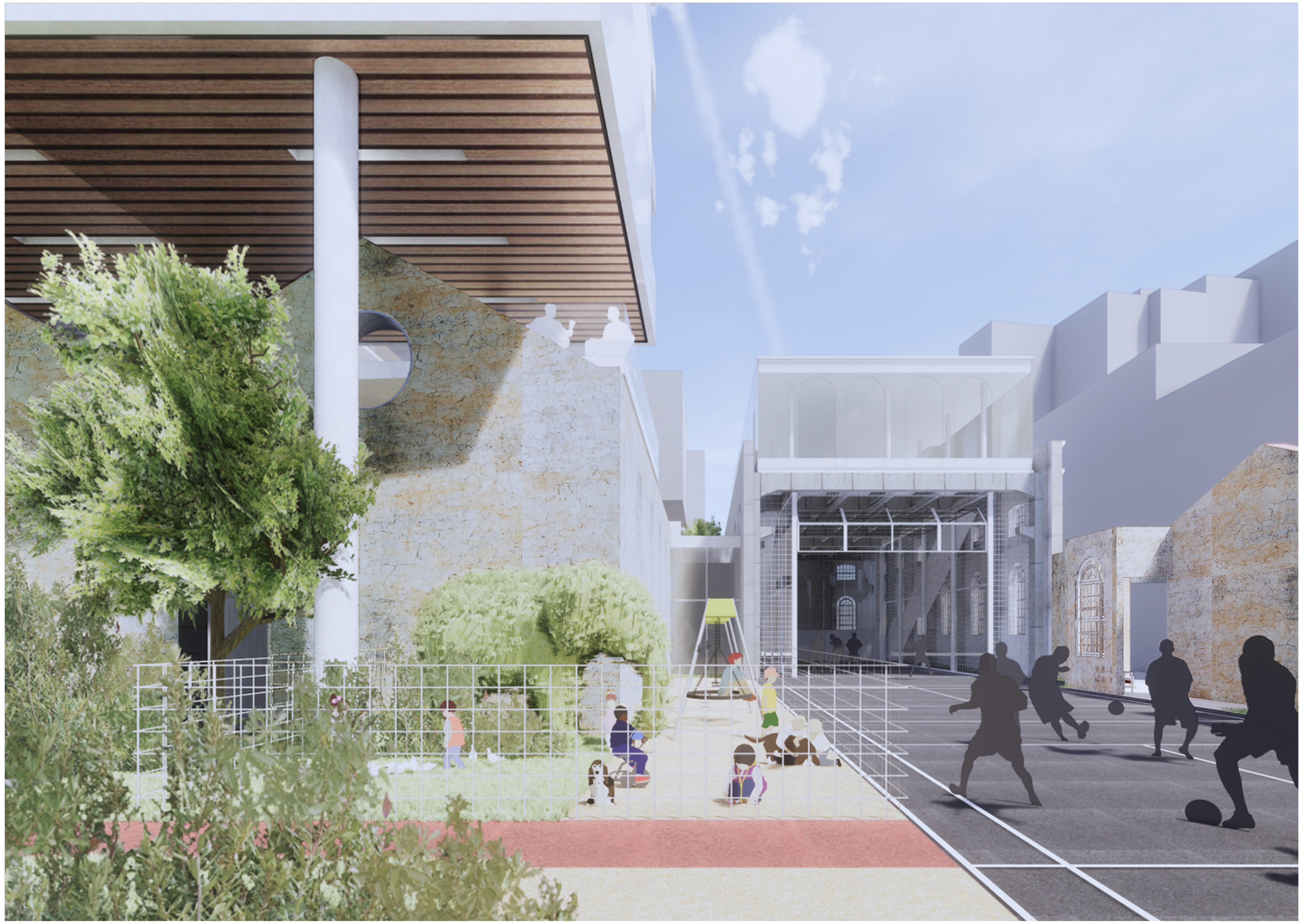
historic

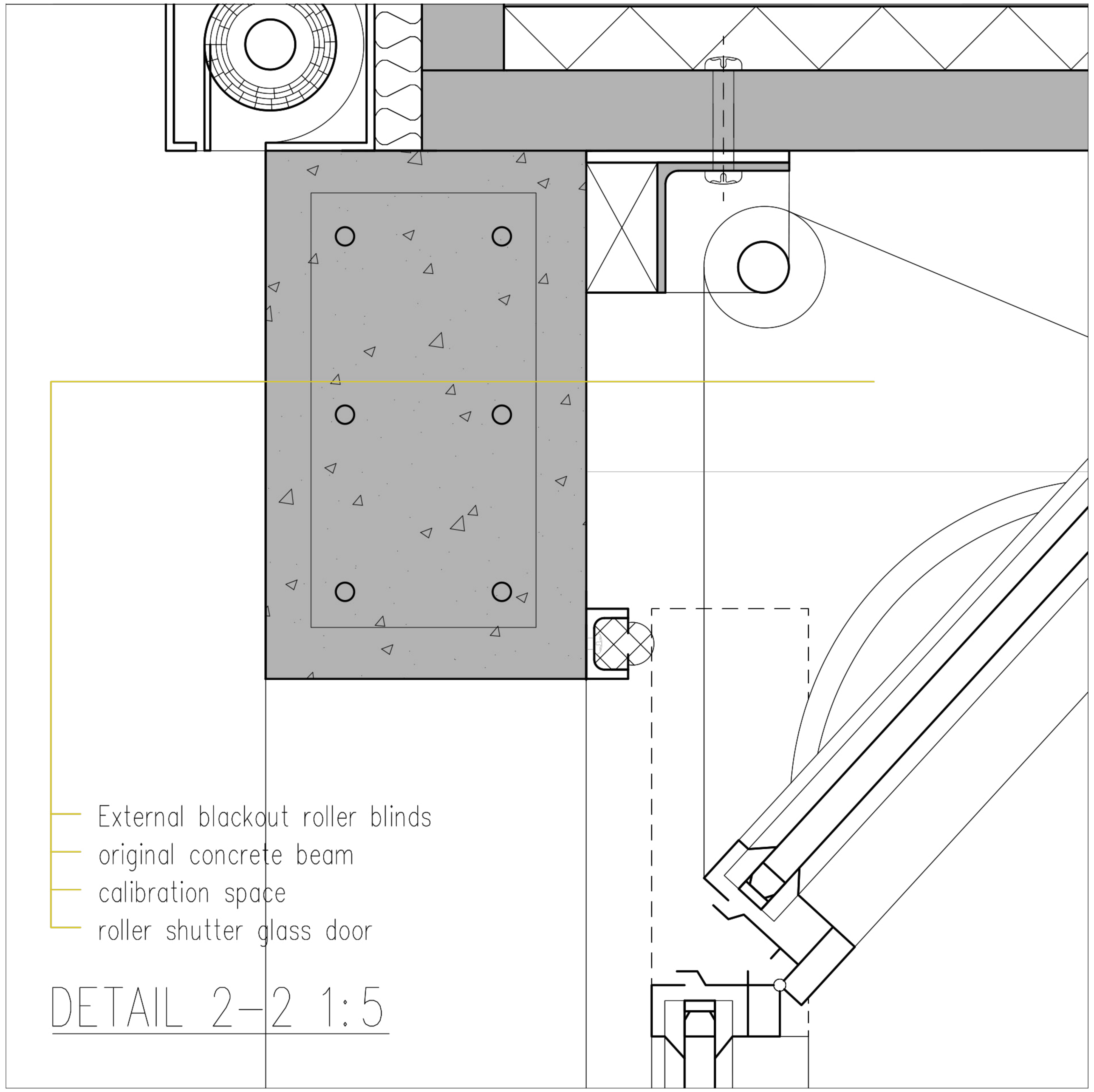





KEEP
ADD-identity
ADD-similarity
ADD-difference
REMOVE

Space 4 playground




External blackout roller blinds
original concrete beam
calibration space
roller shutter glass door
DETAIL 2-2 1:5

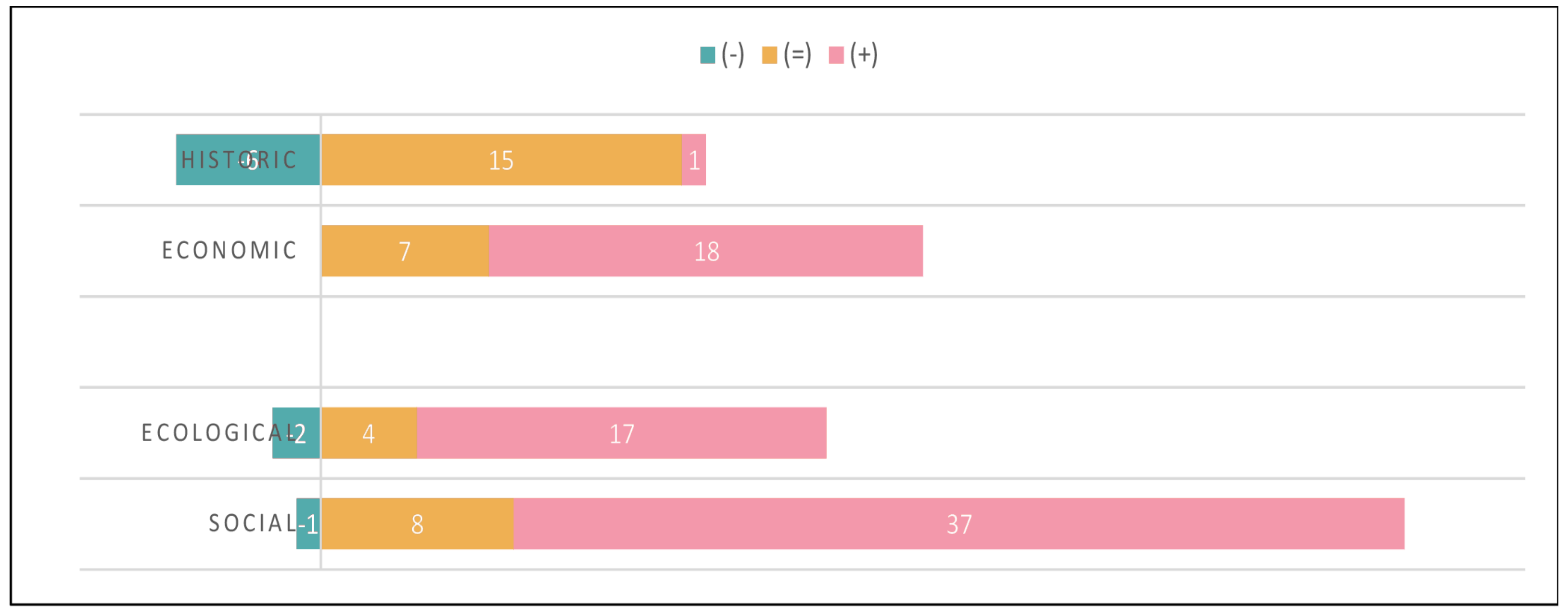
Part 5

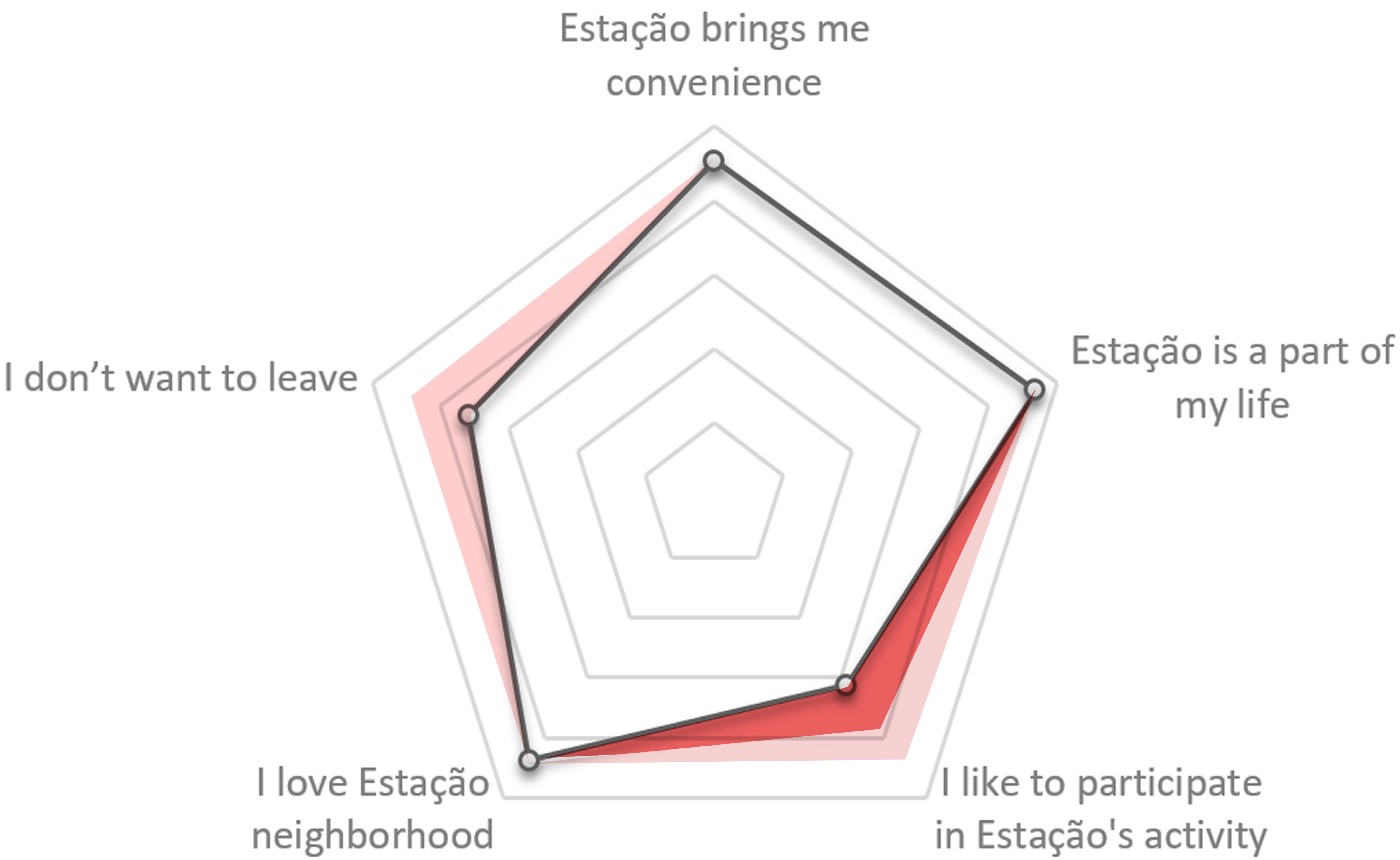
Reflection

Reflection

Place attachment: a bond between people and place through three types of attributes:

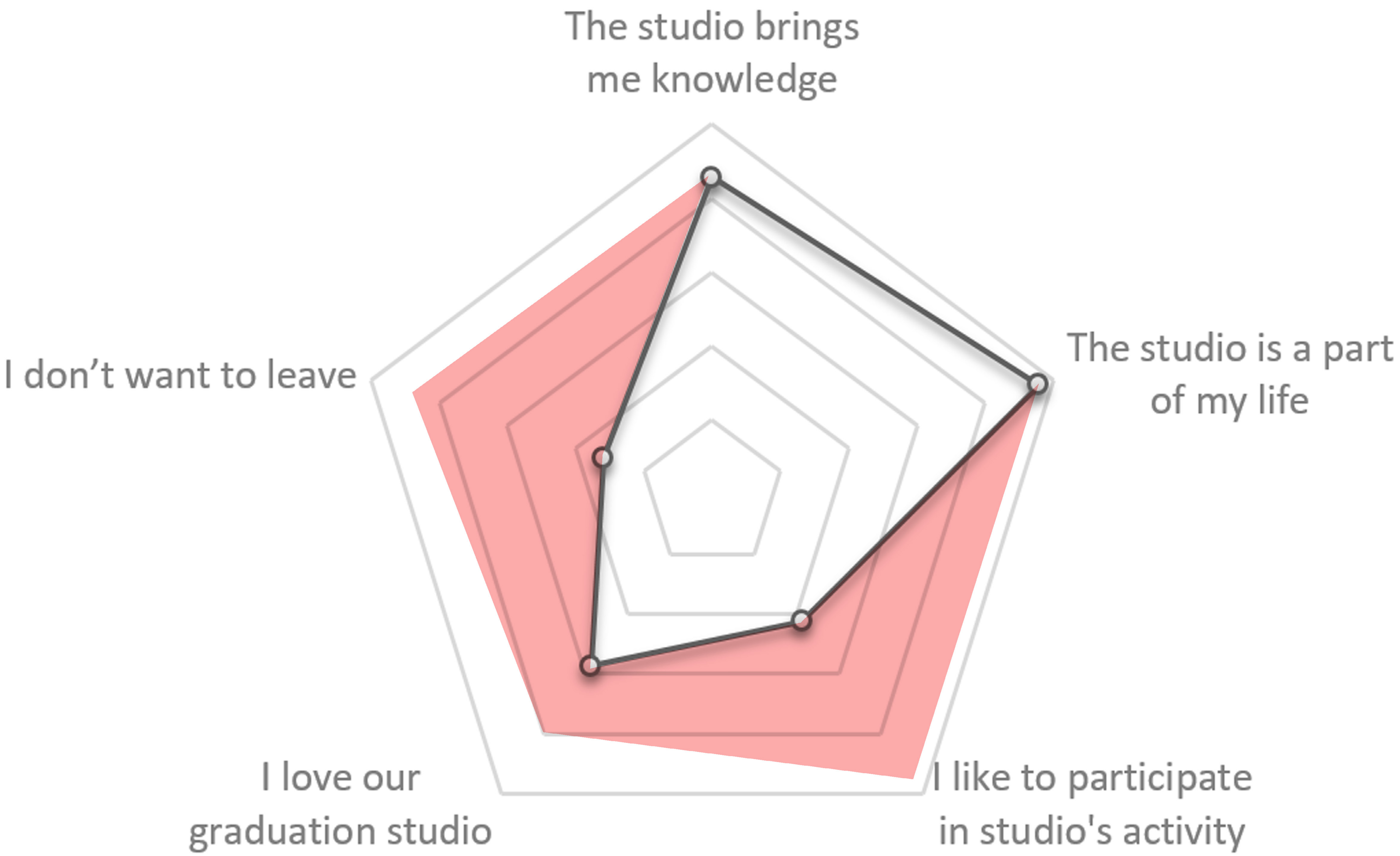
1) physical settings
2) activities with people
3) meanings





Reflection

physical setting	activitie-people	meanings
collective life in Faro		
before		
a table at the faculty	compromise in team work	potential “sad place“
after		
any bar in city center	talk and drink	part of “my regular life”



Thank you

The sea view rooms has great economic Value
I want to get sun shine as p [E
I like the well-organised feeling form wood truss [A,K-I]
seprating spaces provides more activity possibilities [E,K-D]
The noise from concert hall should be stopped [E,A-]
I like to watch my grandchildm playing here [S,A-S]
The powerful lights will go out from the box and effect the street [S,A-D]
5–1
3–2
3–3
2
2–1
4–1
2–3