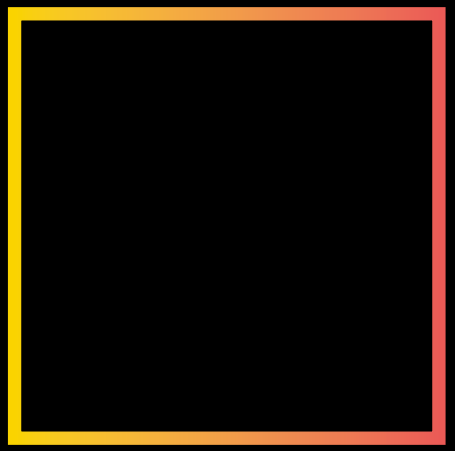


COMPLEX PROJECTS

LIBRARY AS CIVIC INTERFACE

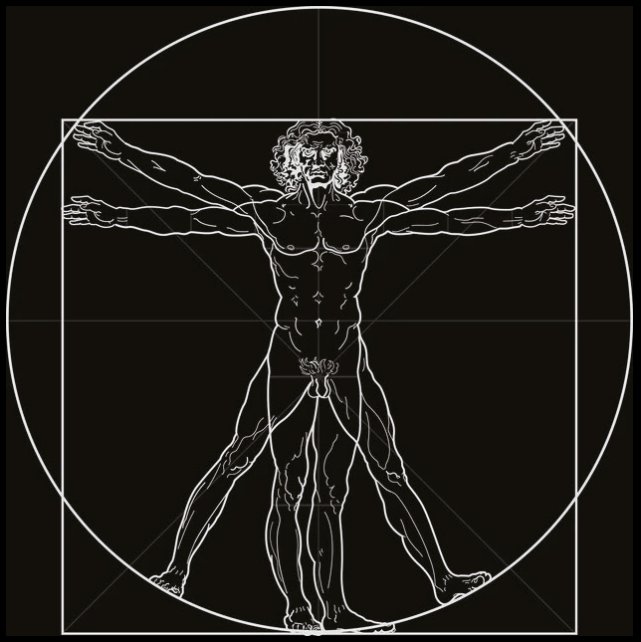
navigating knowledge in an age of informational abundance

Roman Weber

23 / 06 / 2026

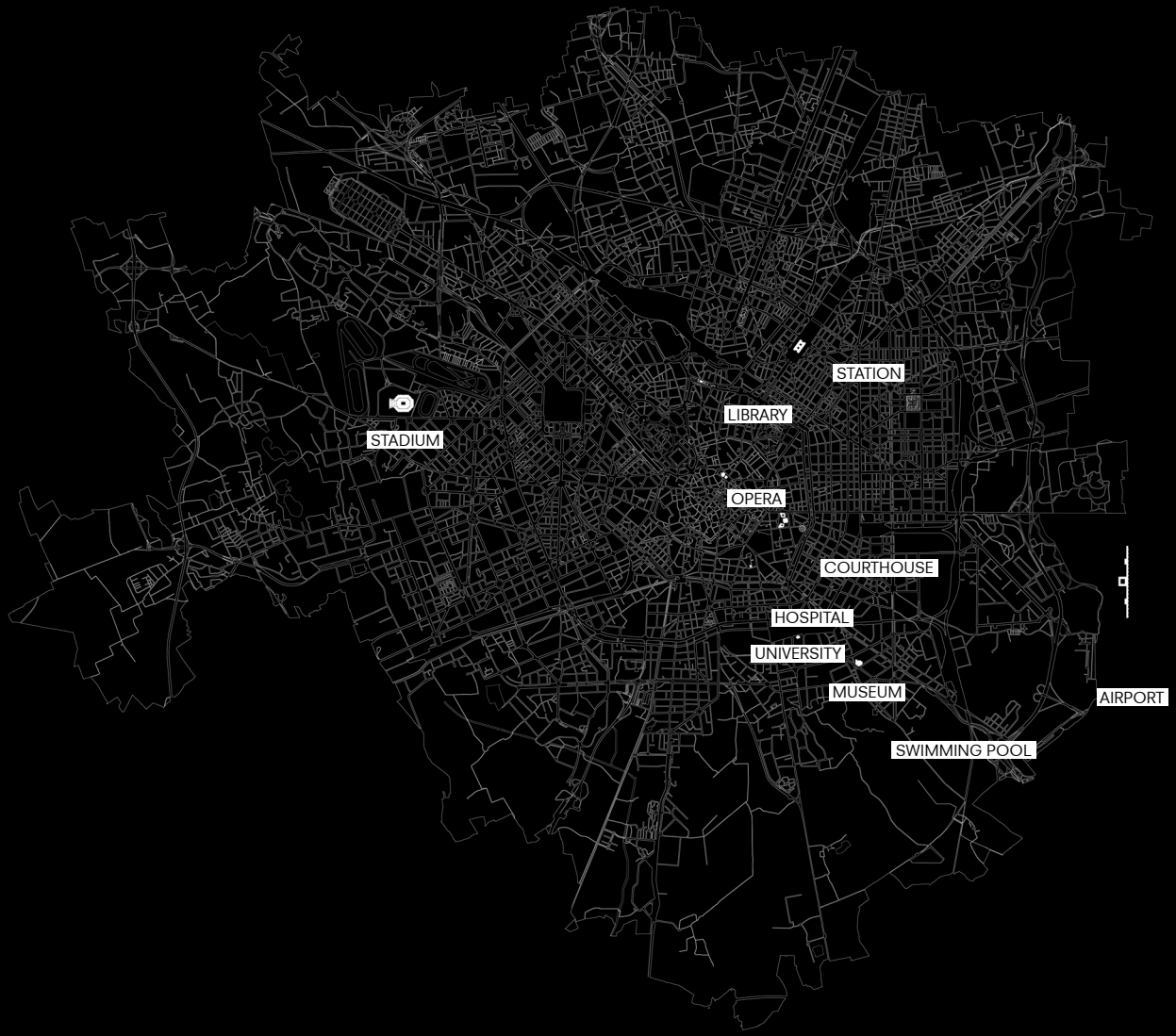
Complex Projects

BODIES AND BUILDINGS MILAN



Complex Projects

BODIES AND BUILDINGS MILAN



CONTENTS

INTRODUCTION

RESEARCH

SITE

CONCEPT

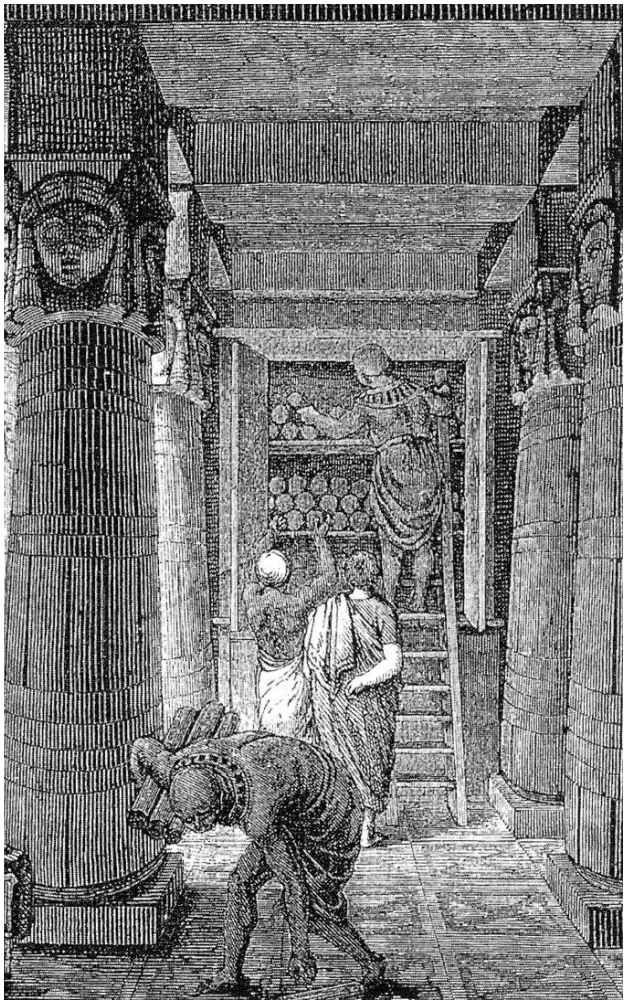
DESIGN

CONCLUSION

chapter I

INTRODUCTION

DEFINING THE PROBLEM



Rendering of the ancient Library of Alexandria

DEFINING THE PROBLEM



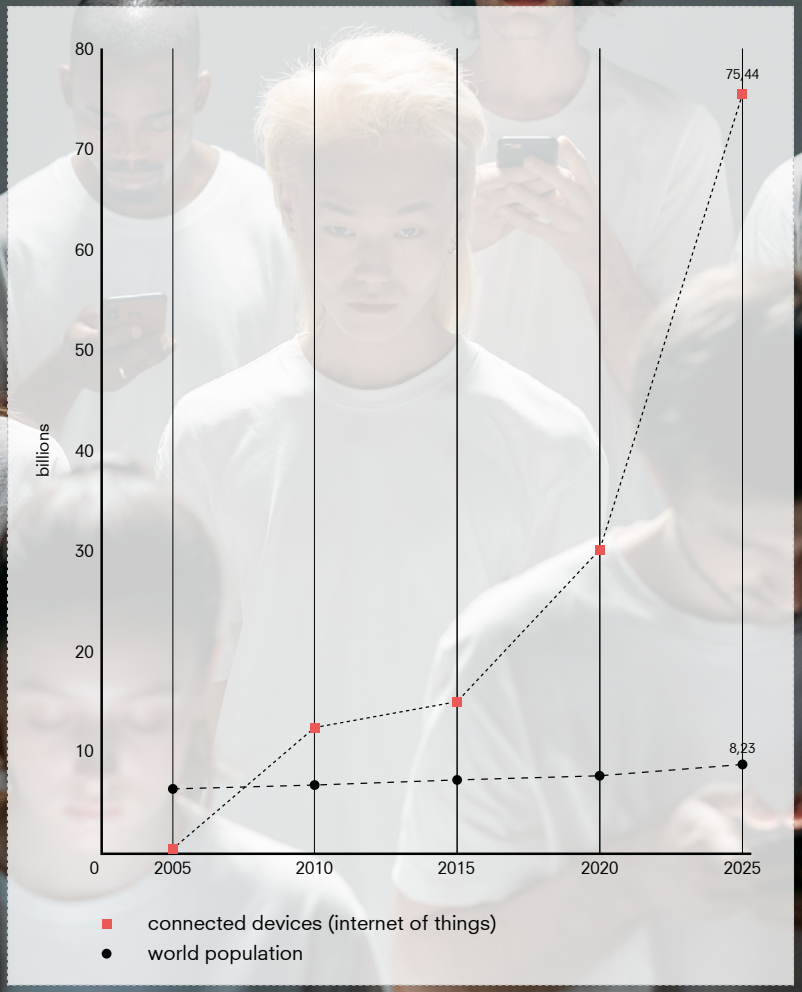
Cottonbro

DEFINING THE PROBLEM



Cottonbro Studio

DEFINING THE PROBLEM



Cottonbro Studio

DEFINING THE PROBLEM



Cottonbro Studio

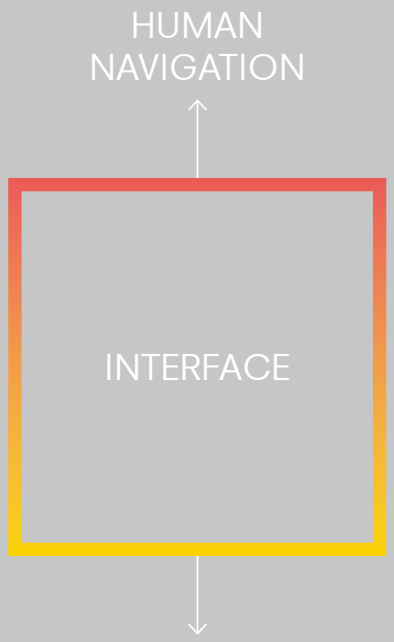
DEFINING THE PROBLEM



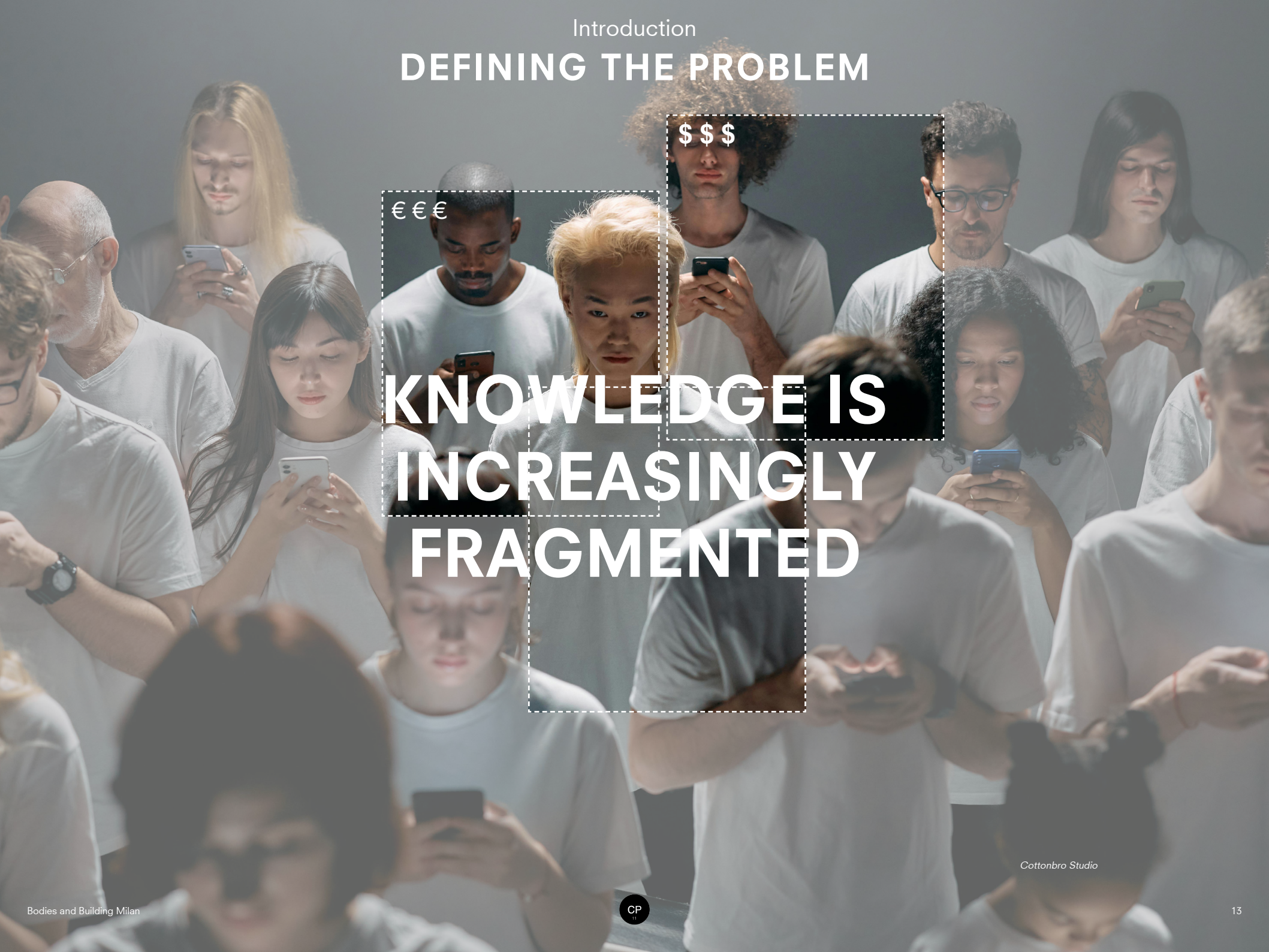
CRISIS OF NAVIGATION

Cottonbro Studio

AMBITION 1

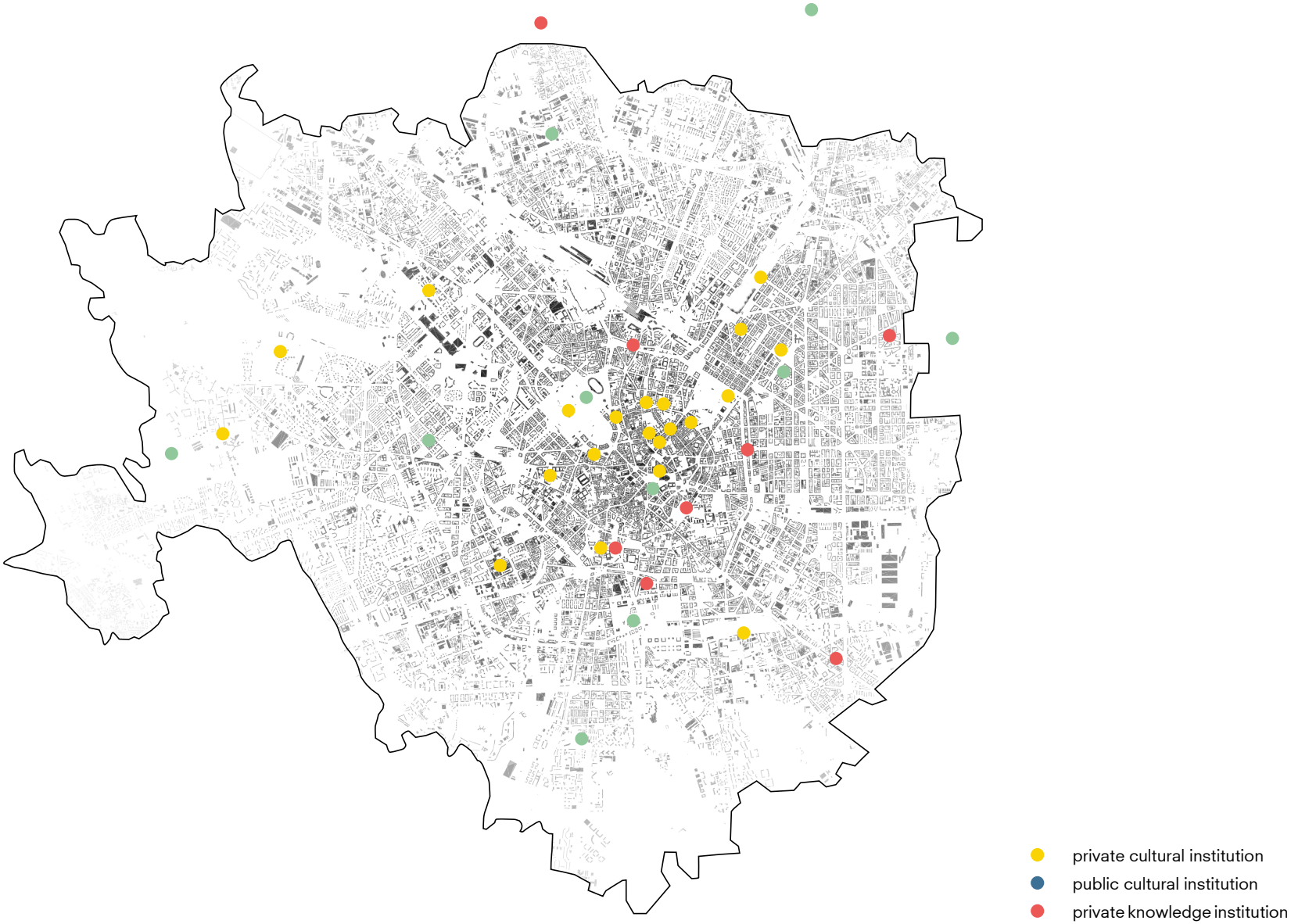


DEFINING THE PROBLEM

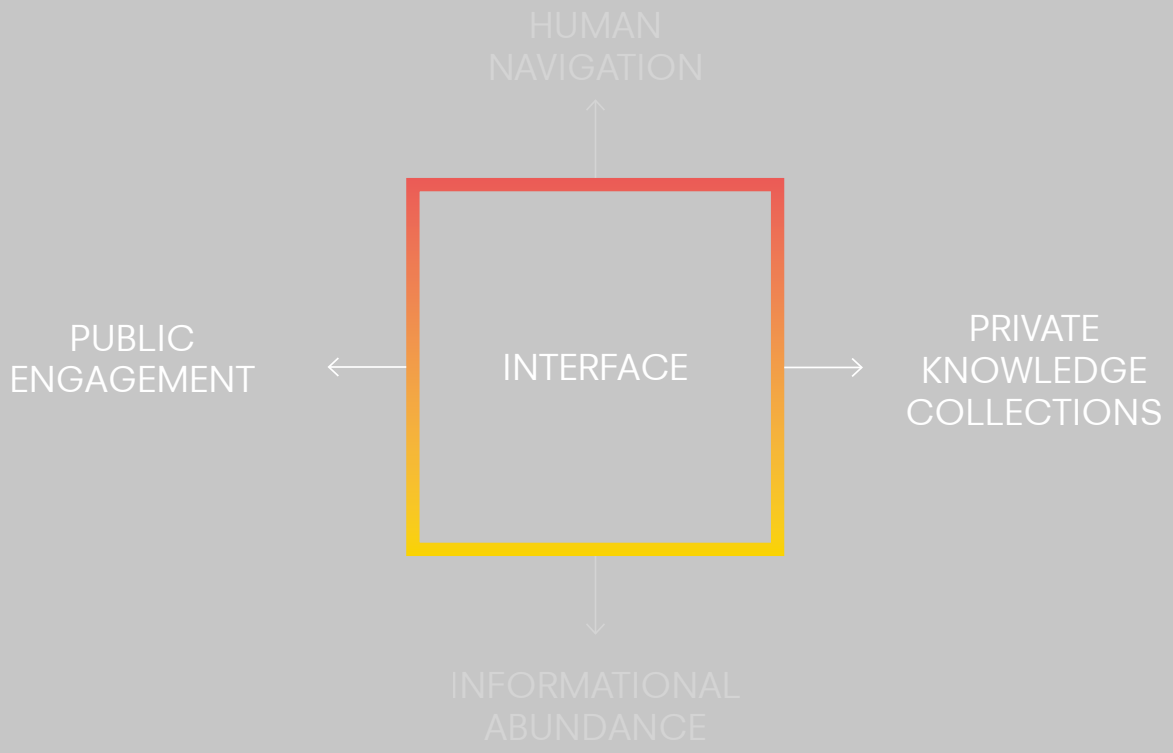


Cottonbro Studio

DEFINING THE PROBLEM



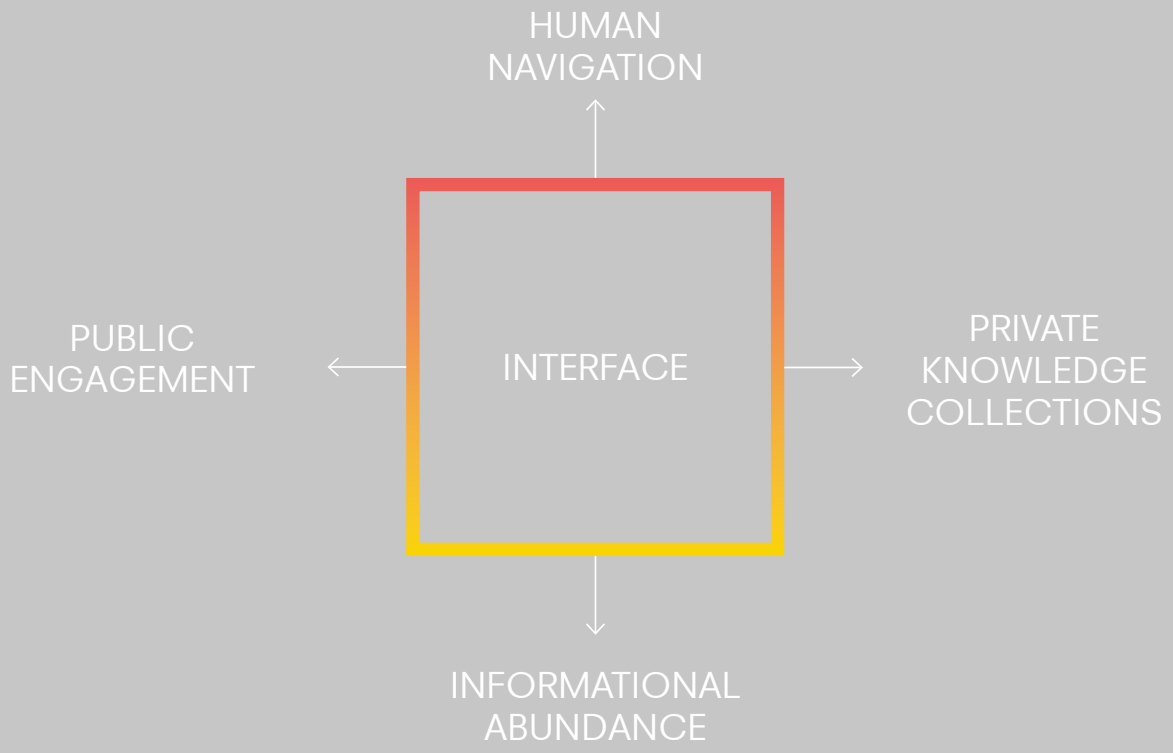
AMBITION 2

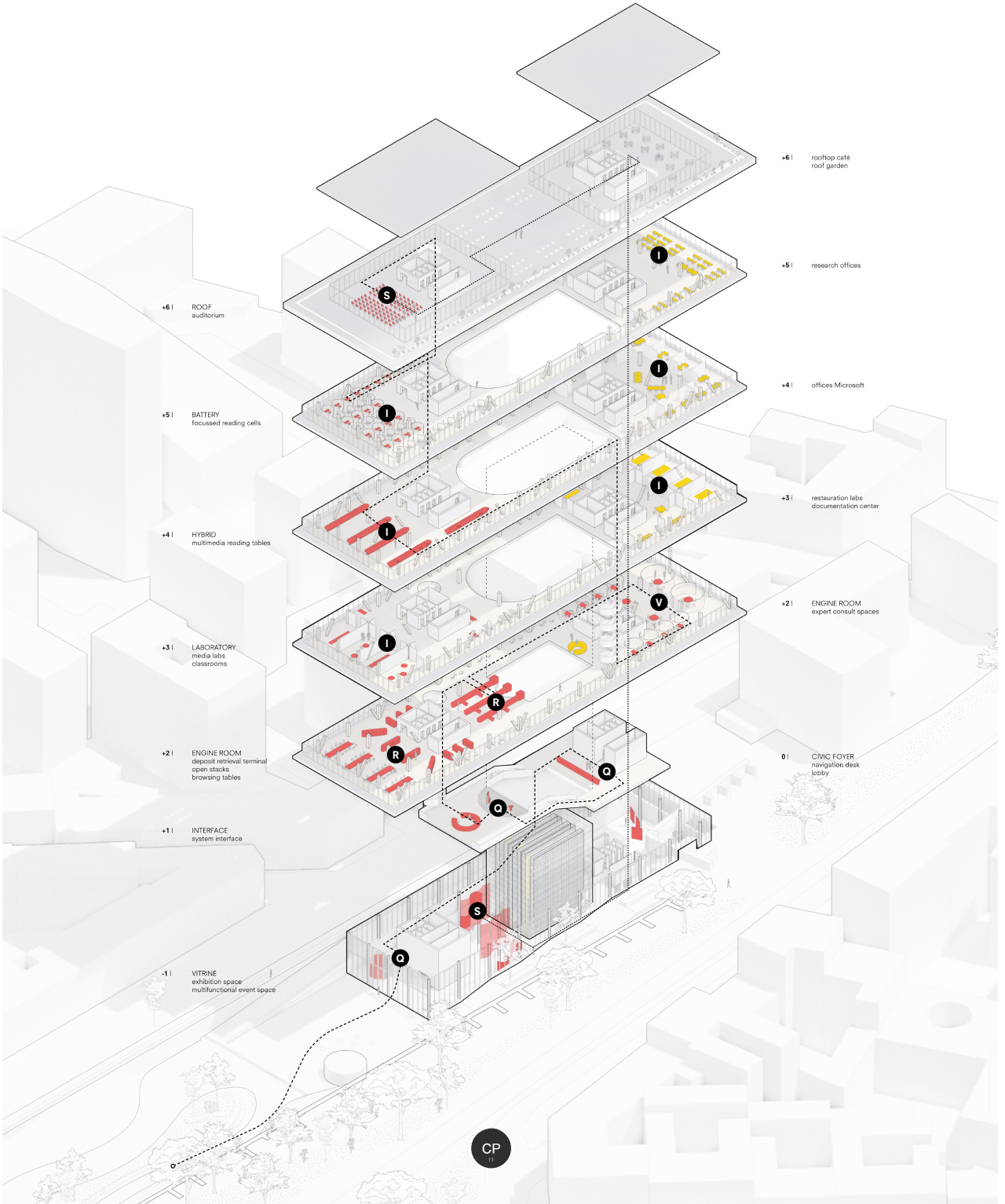

HUMAN
NAVIGATION
PUBLIC
ENGAGEMENT
INTERFACE
PRIVATE
KNOWLEDGE
COLLECTIONS
INFORMATIONAL
ABUNDANCE

RESEARCH QUESTION

How can the contemporary library be designed as a **civic interface** for *navigating knowledge* in an age of informational abundance?

PROPOSAL


HUMAN
NAVIGATION
PUBLIC
ENGAGEMENT
INTERFACE
PRIVATE
KNOWLEDGE
COLLECTIONS
INFORMATIONAL
ABUNDANCE


+6 | ROOF
auditorium
+5 | BATTERY
focussed reading cells
+4 | HYBRID
multimedia reading tables
+3 | LABORATORY
media labs
classrooms
+2 | ENGINE ROOM
deposit retrieval terminal
open stacks
browsing tables
+1 | INTERFACE
system interface
-1 | VITRINE
exhibition space
multifunctional event space
+6 | rooftop café
roof garden
+5 | research offices
+4 | offices Microsoft
+3 | restauration labs
documentation center
+2 | ENGINE ROOM
expert consult spaces
0 | CIVIC FOYER
navigation desk
lobby

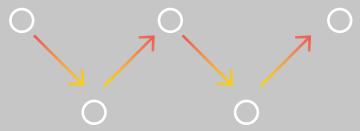
chapter II

RESEARCH

MAIN FINDINGS

1.

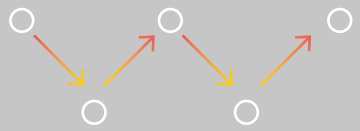
knowledge as process



MAIN FINDINGS

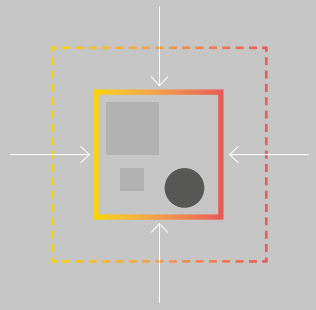
1.

knowledge as process



2.

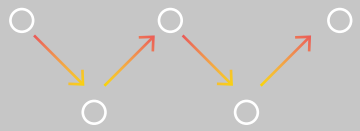
library as interface



MAIN FINDINGS

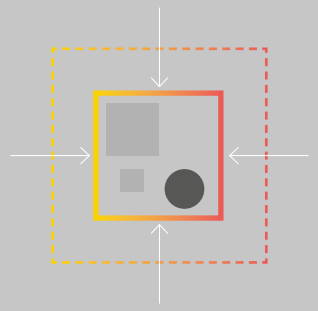
1.

knowledge as process



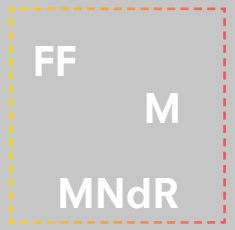
2.

library as interface



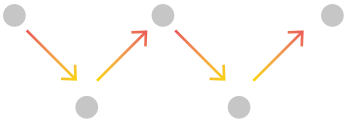
3.

three institutions in shared knowledge infrastructure



1.

KNOWLEDGE AS SPATIAL PROCESS

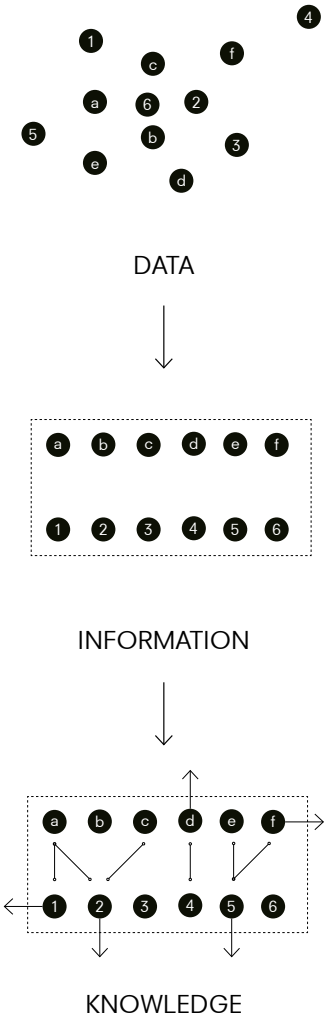


THEORETICAL FRAMEWORK

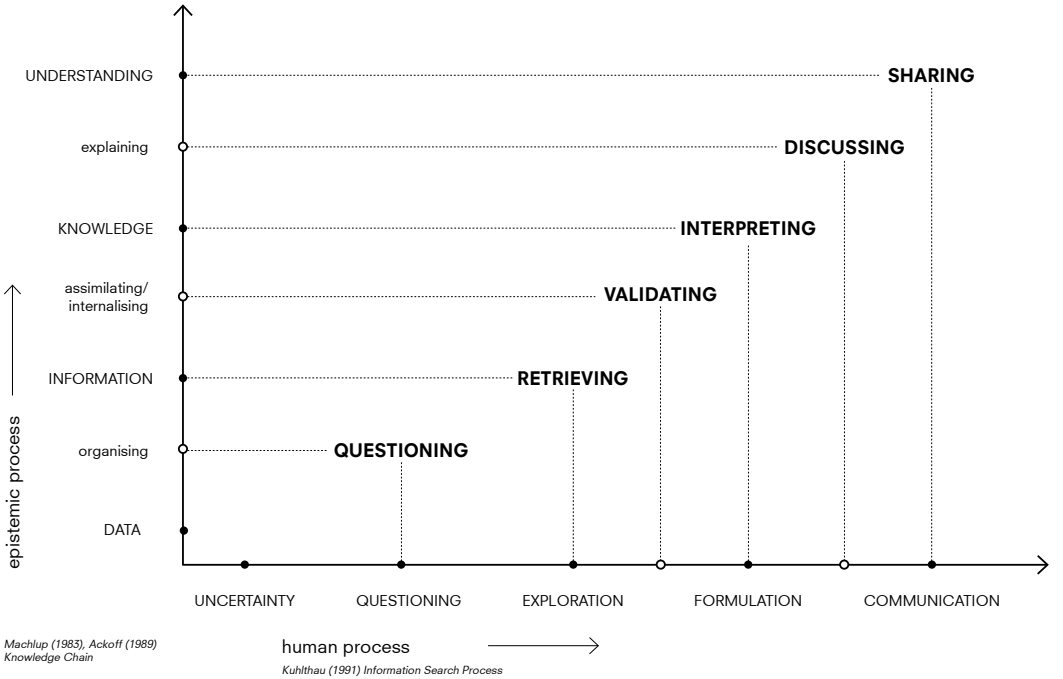
WHAT IS KNOWLEDGE?

LITERATURE RESEARCH

1



2



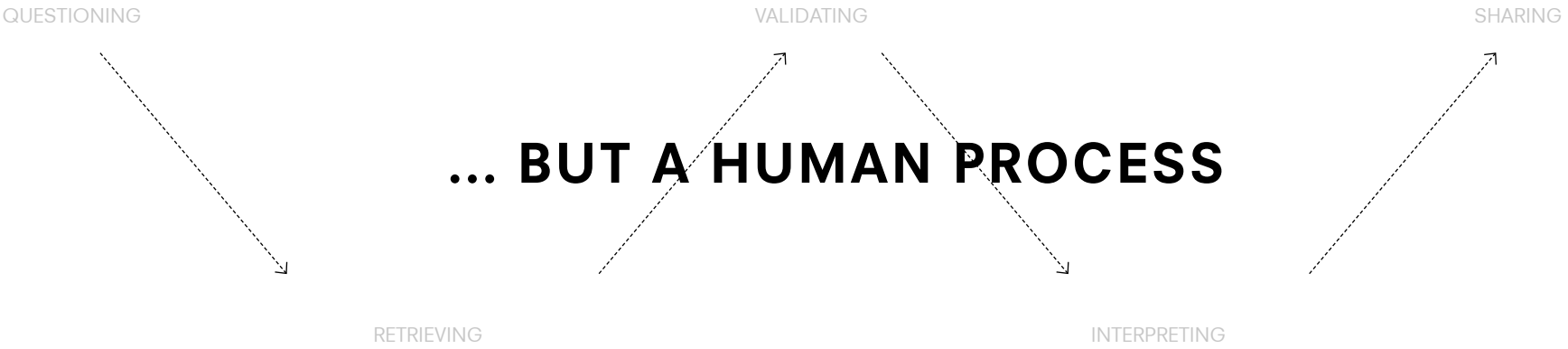
Machlup (1983), Ackoff (1989)
Knowledge Chain

Kuhlthau (1991) Information Search Process

THEORETICAL FRAMEWORK

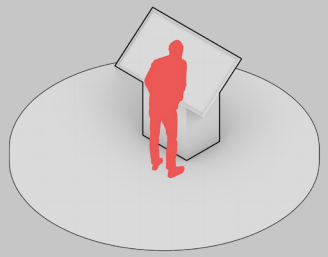
KNOWLEDGE IS NOT A STATIC OBJECT...

THEORETICAL FRAMEWORK

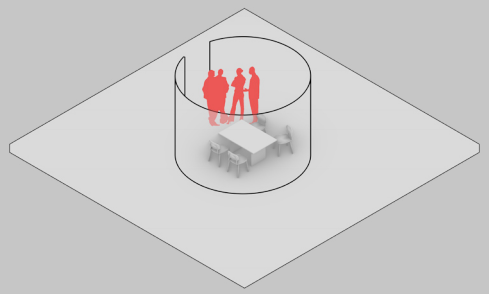


... BUT A HUMAN PROCESS

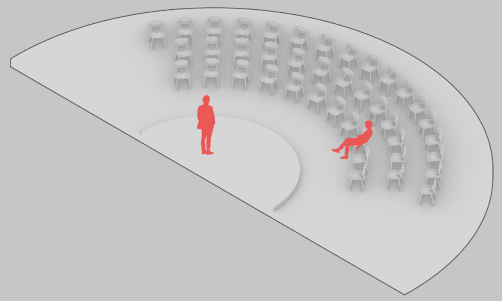
THEORETICAL FRAMEWORK



QUESTIONING



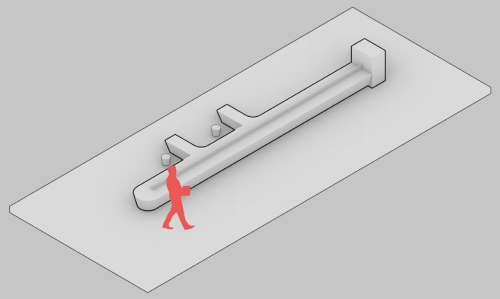
VALIDATING



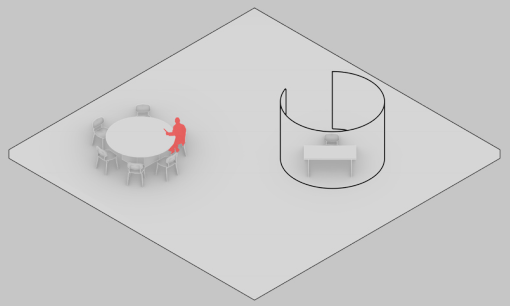
SHARING

... THAT CAN BE MADE SPATIAL

RETRIEVING

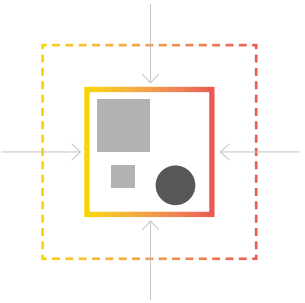


INTERPRETING

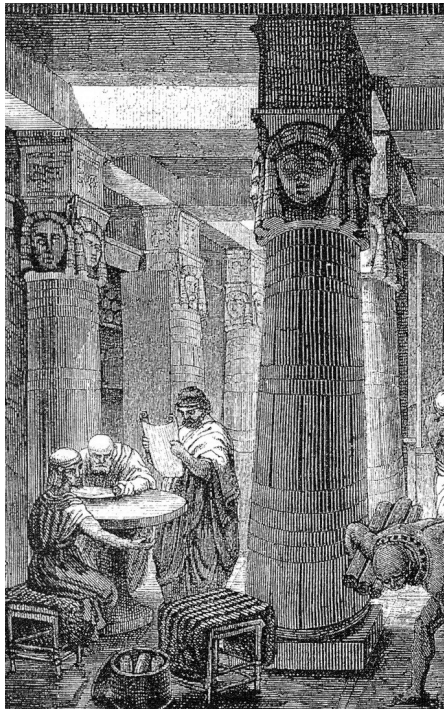


2.

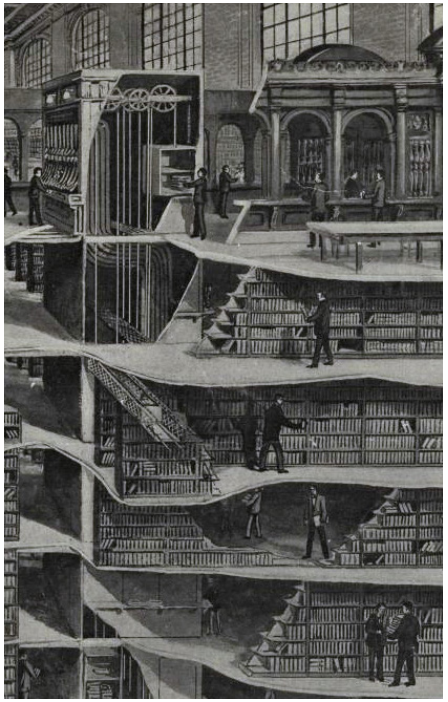
THE LIBRARY AS INTERFACE



THE LIBRARY: A BRIEF HISTORY



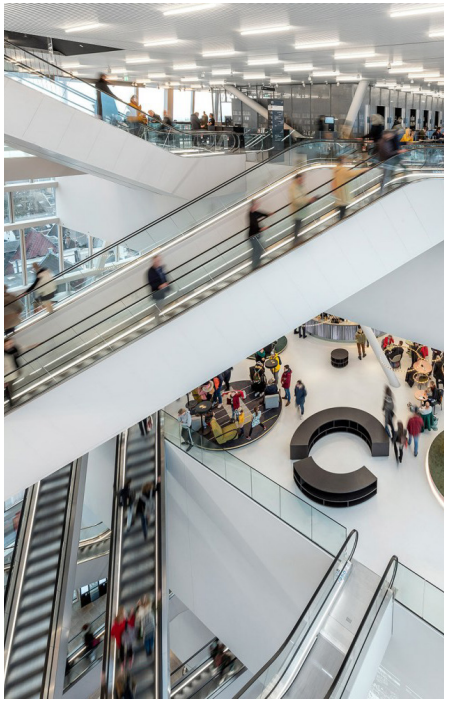
library as **container**
emphasis on preservation



library as **public institution**
democratisation of access

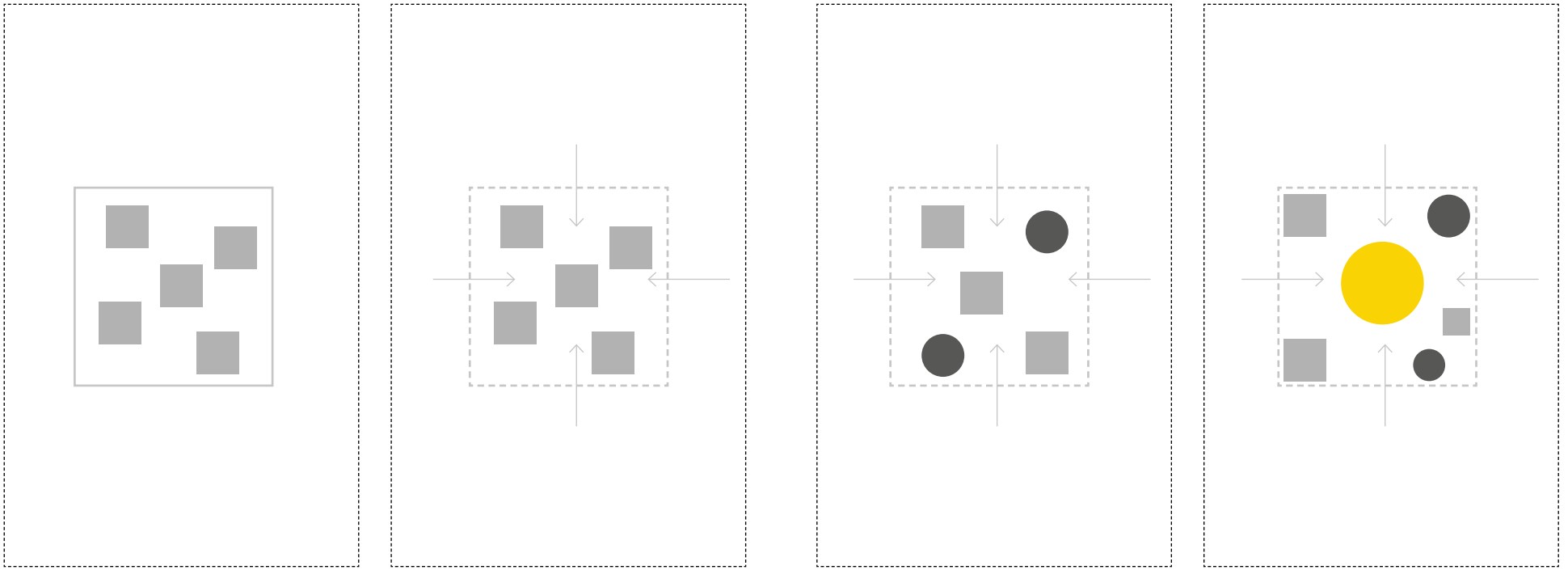


library as **hybrid platform**
facilitating both digital and physical media



library as **community space**
emphasis on social program

THE LIBRARY: A BRIEF HISTORY



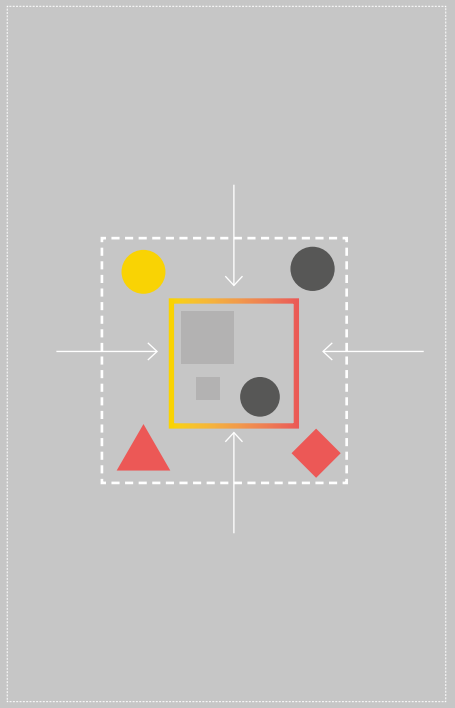
library as **container**
emphasis on preservation

library as **public institution**
democratisation of access

library as **hybrid platform**
facilitating both digital and physical media

library as **community space**
emphasis on social program

LIBRARY AS INTERFACE



library as **interface**
actively mediating interaction with knowledge

3.

THREE INSTITUTIONS IN A SHARED KNOWLEDGE INFRASTRUCTURE



CLIENTS

Museo Nazionale della Rezistenza

NAZIONALE DELLA RESISTENZA

Microsoft

Microsoft

Gruppo Feltrinelli

Gruppo Feltrinelli

CLIENTS

Museo Nazionale della Rezistenza

NAZIONALE DELLA RESISTENZA

knowledge dissemination,
knowledge exchange

Microsoft

Microsoft

knowledge production

Gruppo Feltrinelli

Gruppo Feltrinelli

knowledge preservation,
knowledge production,
knowledge exchange

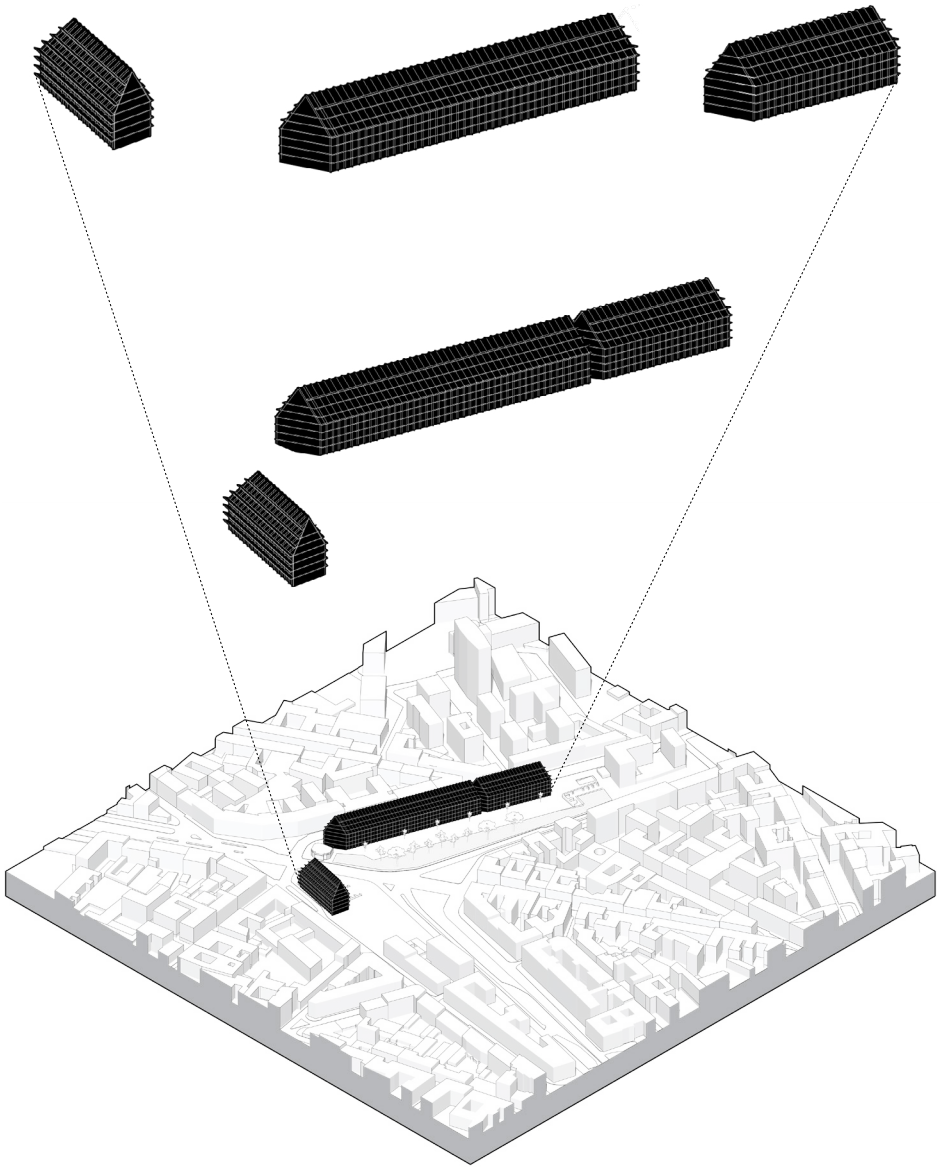
Research

CLIENTS

Museo Nazionale della Rezistenzia

Porta Volta Offices

Fondazione G. Feltrinelli



CLIENTS

Museo Nazionale della Rezistenza



Microsoft



Gruppo Feltrinelli



SHARED INFRASTRUCTURE



SHARED INFRASTRUCTURE

existing program organisation

26.710m²

Feltrinelli

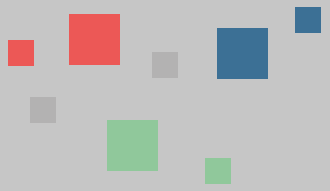
Porta Volta Offices

Museo Nazionale
della Rezistenza

three separate institutional buildings

organised based on relationship
to knowledge

programmatic extraction



proposed program organisation

18.000m²

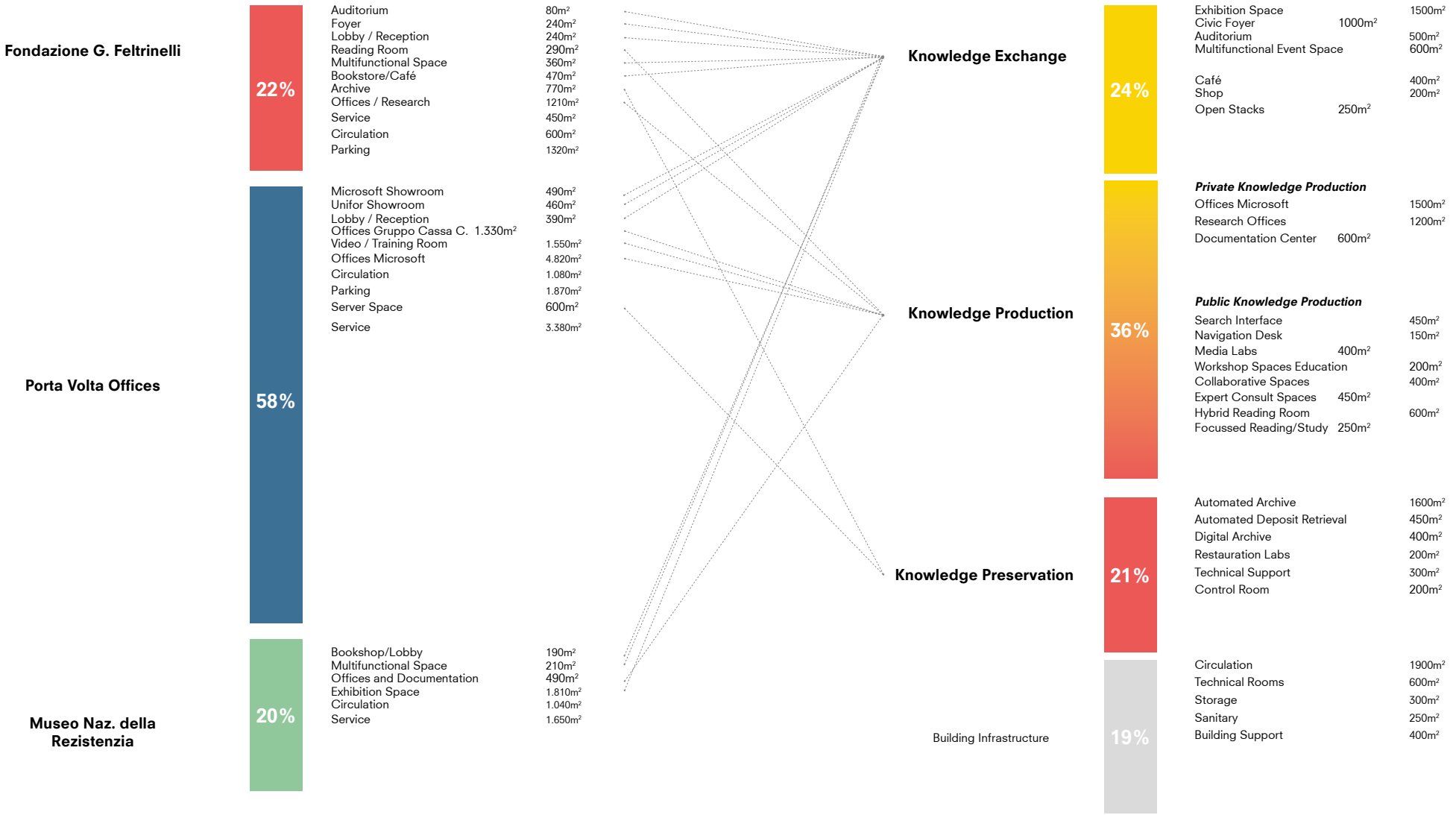
Knowledge Exchange

Knowledge Production

Knowledge Preservation

one compact, shared civic infrastructure

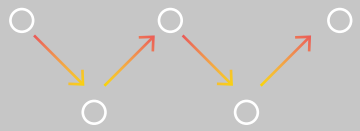
PROGRAM DISTRIBUTION



CONCLUSIONS

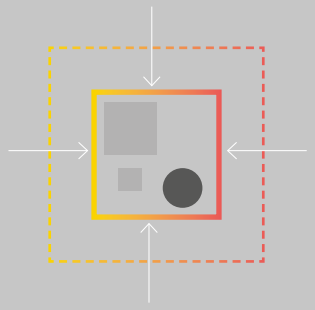
1.

knowledge as process



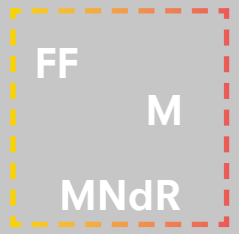
2.

library as interface



3.

shared knowledge infrastructure



chapter III

SITE

Site

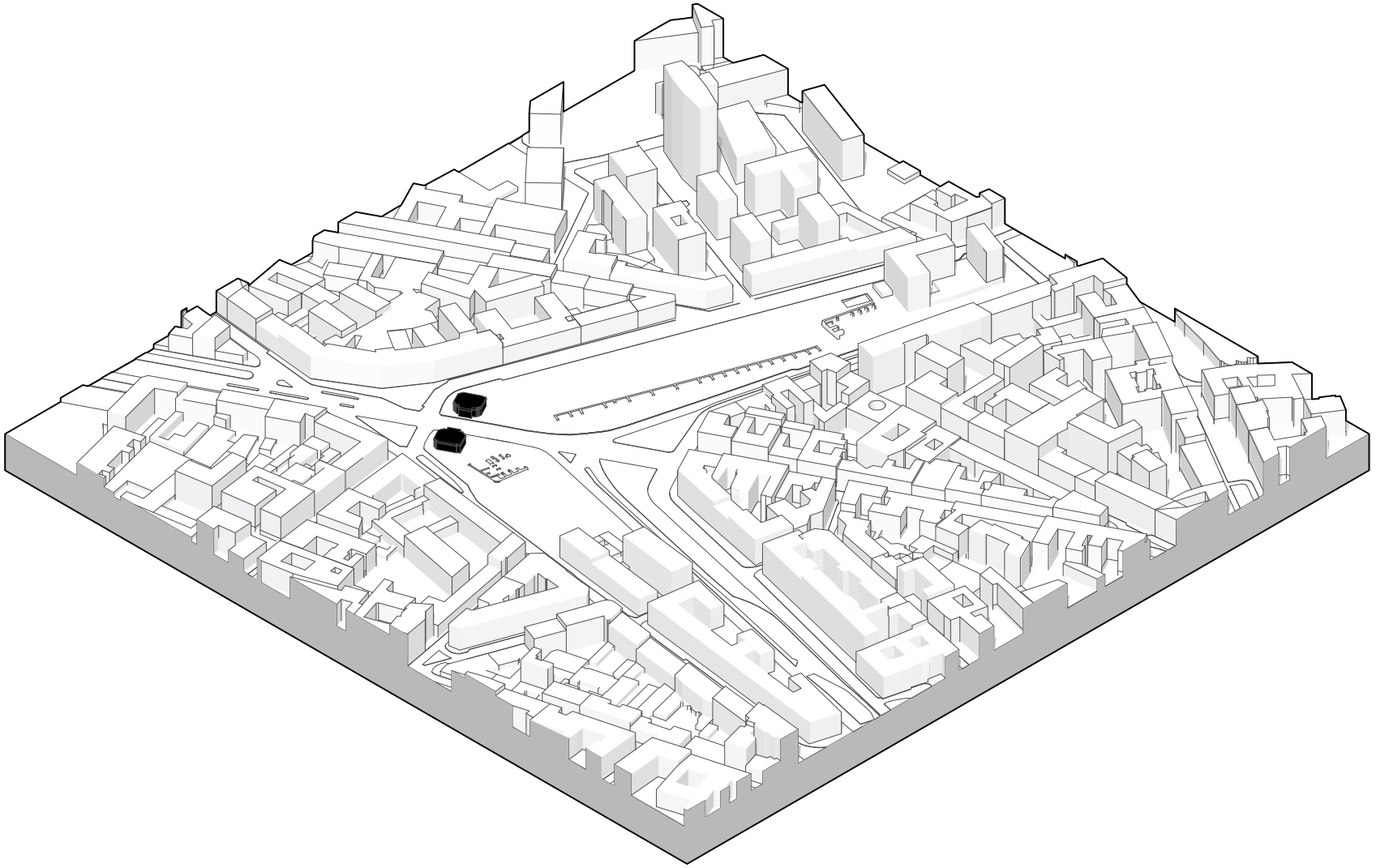
L | CITY OF THRESHOLDS



- Spanish Wall (ca. 1556)
- Medieval Wall (ca. 1156)
- Roman Wall (ca. 49 a. C.)

Site

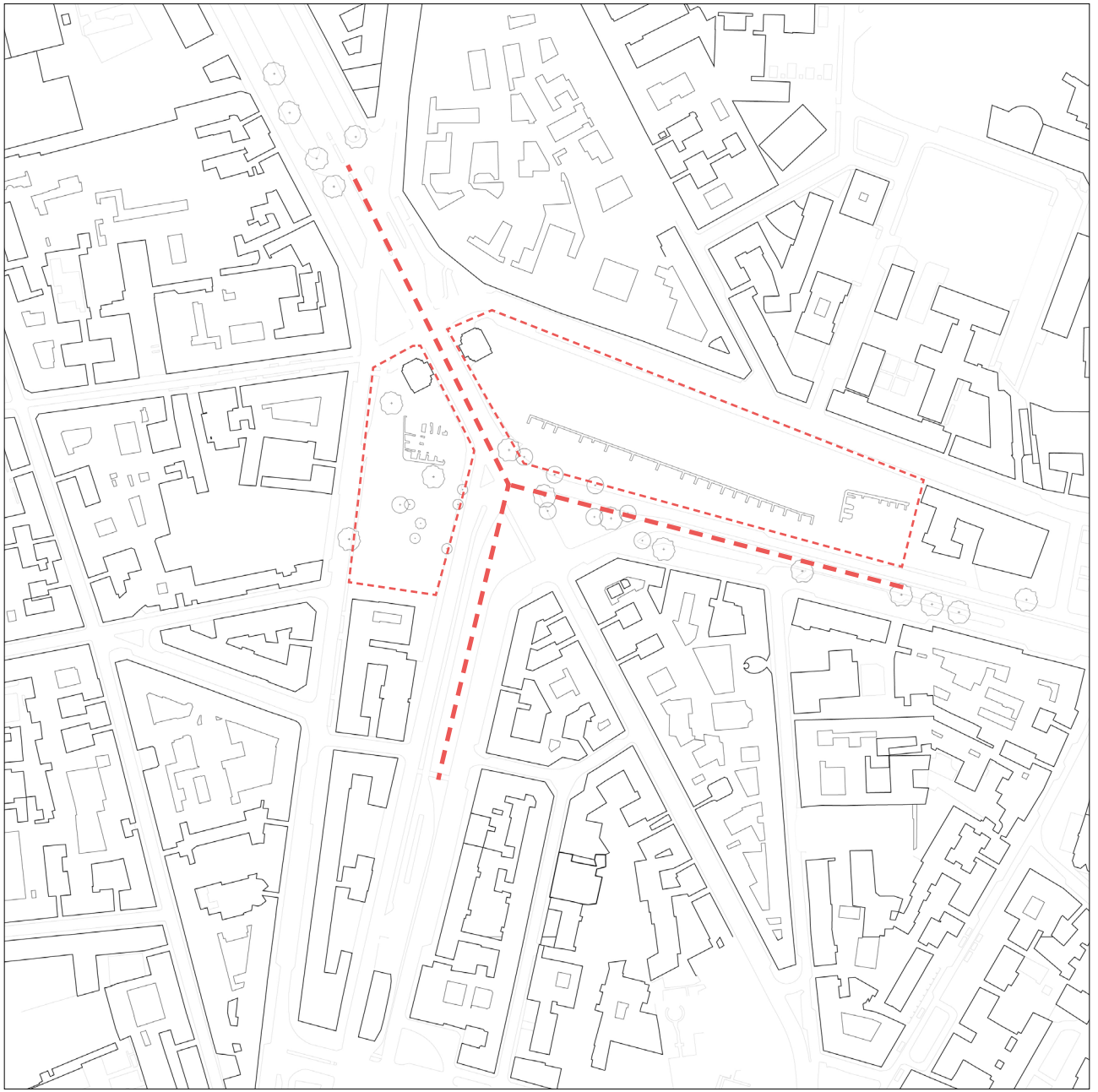
PORTA VOLTA



M | GREEN CONNECTIONS



S | FRAGMENTED PLOTS



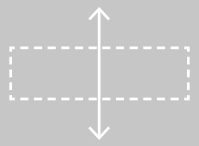
XS | SPANISH WALL





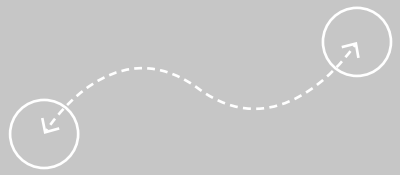
Site

AMBITIONS



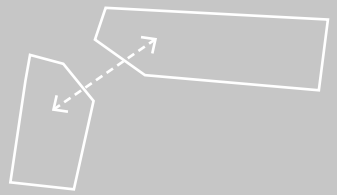
1. (L)

retain threshold condition



2. (M)

connect green spaces



3. (S)

connect fragmented plots



4. (XS)

reveal historic layers in the landscape

chapter IV

CONCEPT

Concept

3 x 3 EXERCISE

	LINEAR	OBJECT	LANDSCAPE
SITE	linear farmhouse  + good use of plot + large interaction facade - large footprint	slendered tower  + recognizeable object + small footprint - minimal interaction facade	follies  + connects the plots + responds to urban sightlines - spread out program
PROGRAM	continuous infrastructure  + good use of plot + large interaction facade - large footprint	tower and platform  + good use of plot + large interaction facade - large footprint	radical separation  + connects the plots + large interaction facade - large footprint
AMBITION/CONCEPT	vitrine  + good use of plot + large interaction facade - large footprint	rotating volumes  + good use of plot + large interaction facade - large footprint	thresholds  + good use of plot + large interaction facade - large footprint

Concept

3 x 1 EXERCISE



















OBJECT

LANDSCAPE / OBJECT

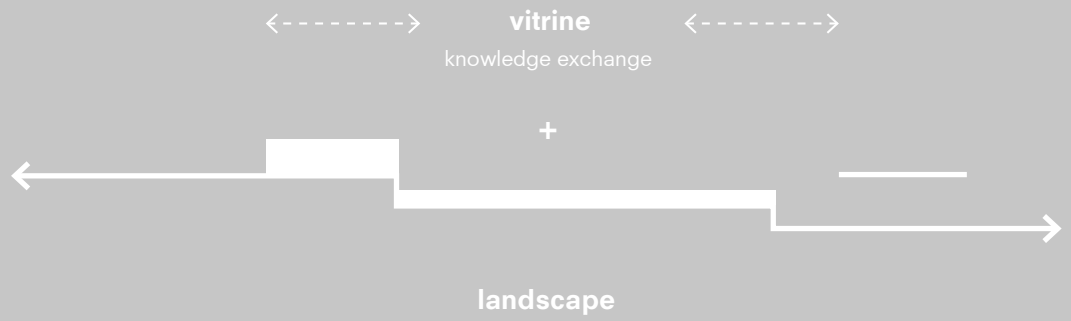
LINEAR / LANDSCAPE

FINAL CONCEPT

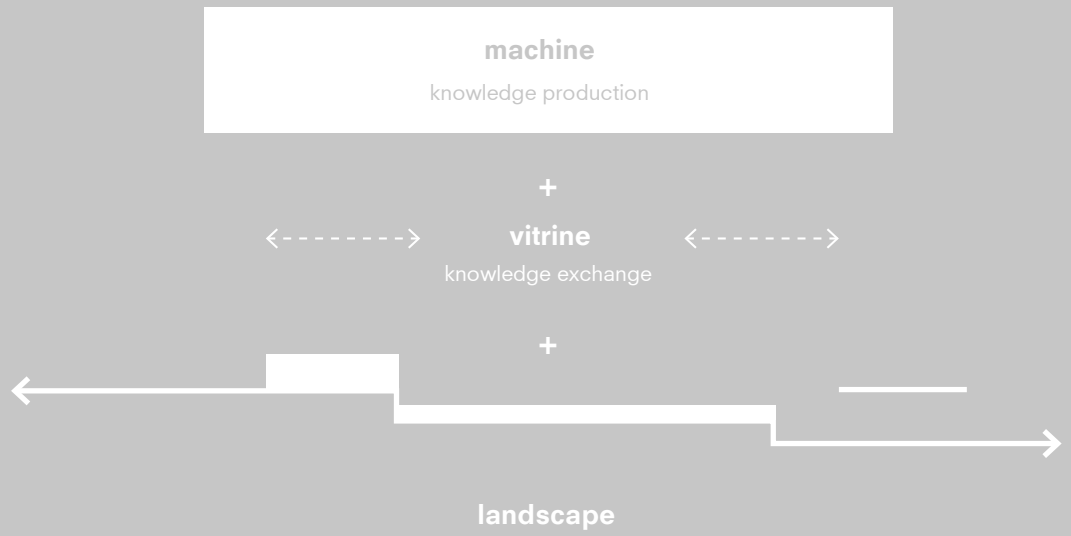


landscape

FINAL CONCEPT

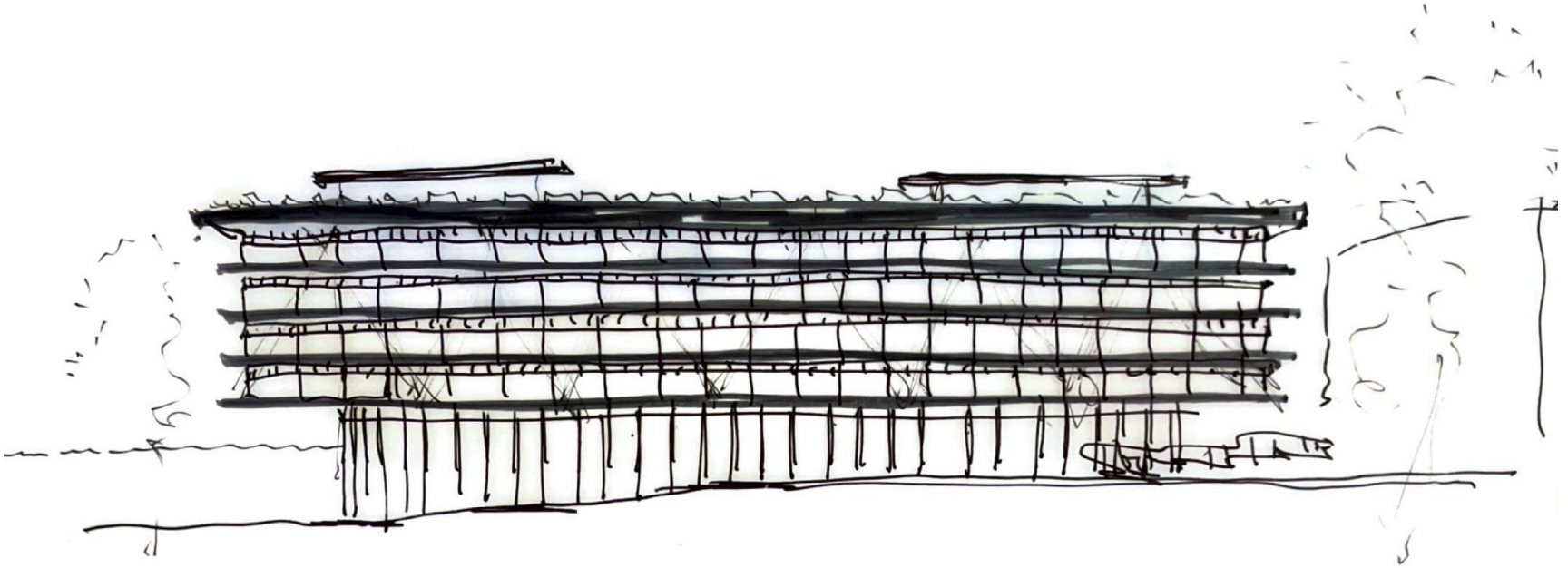


FINAL CONCEPT



Concept

FINAL SKETCH

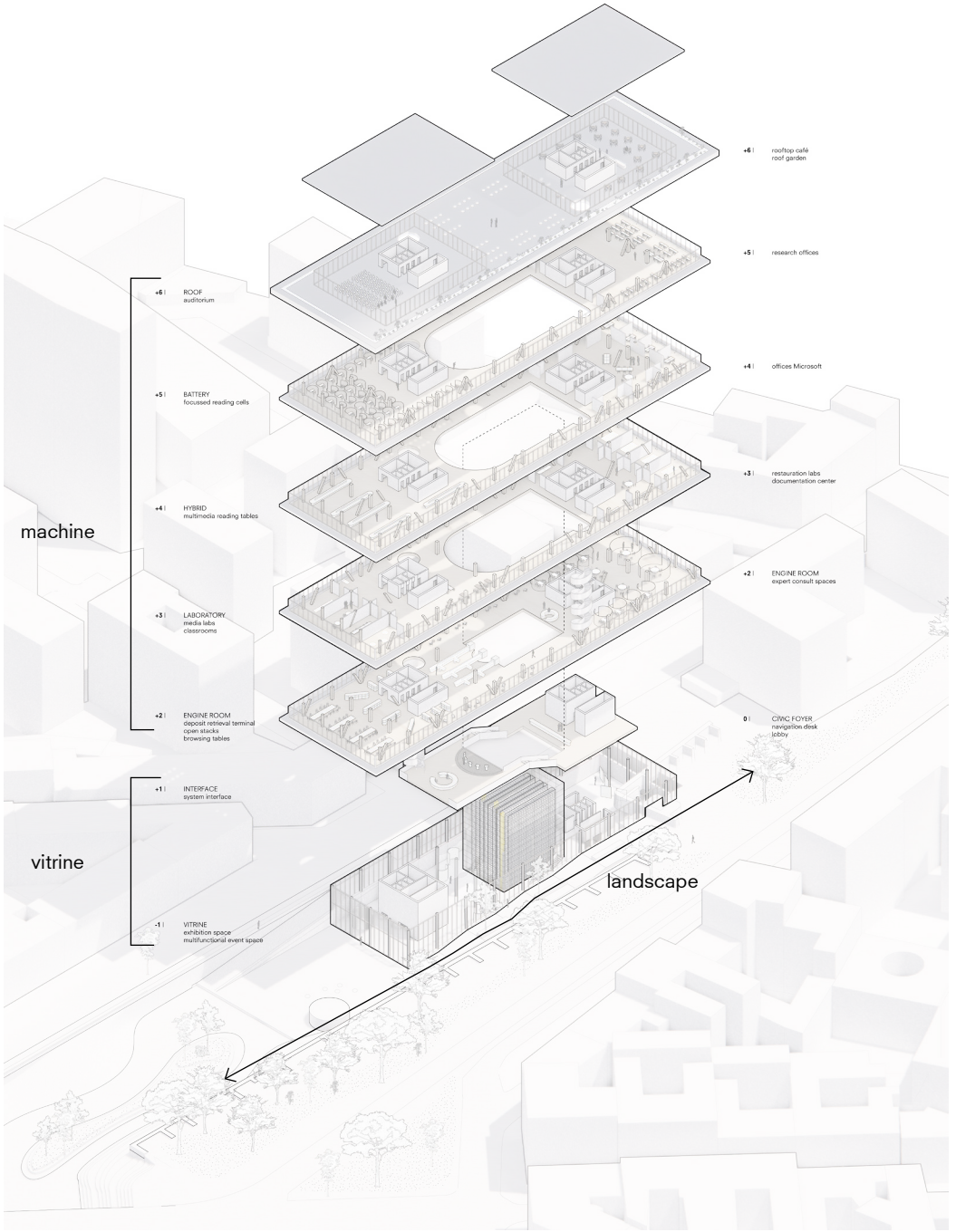


chapter IV

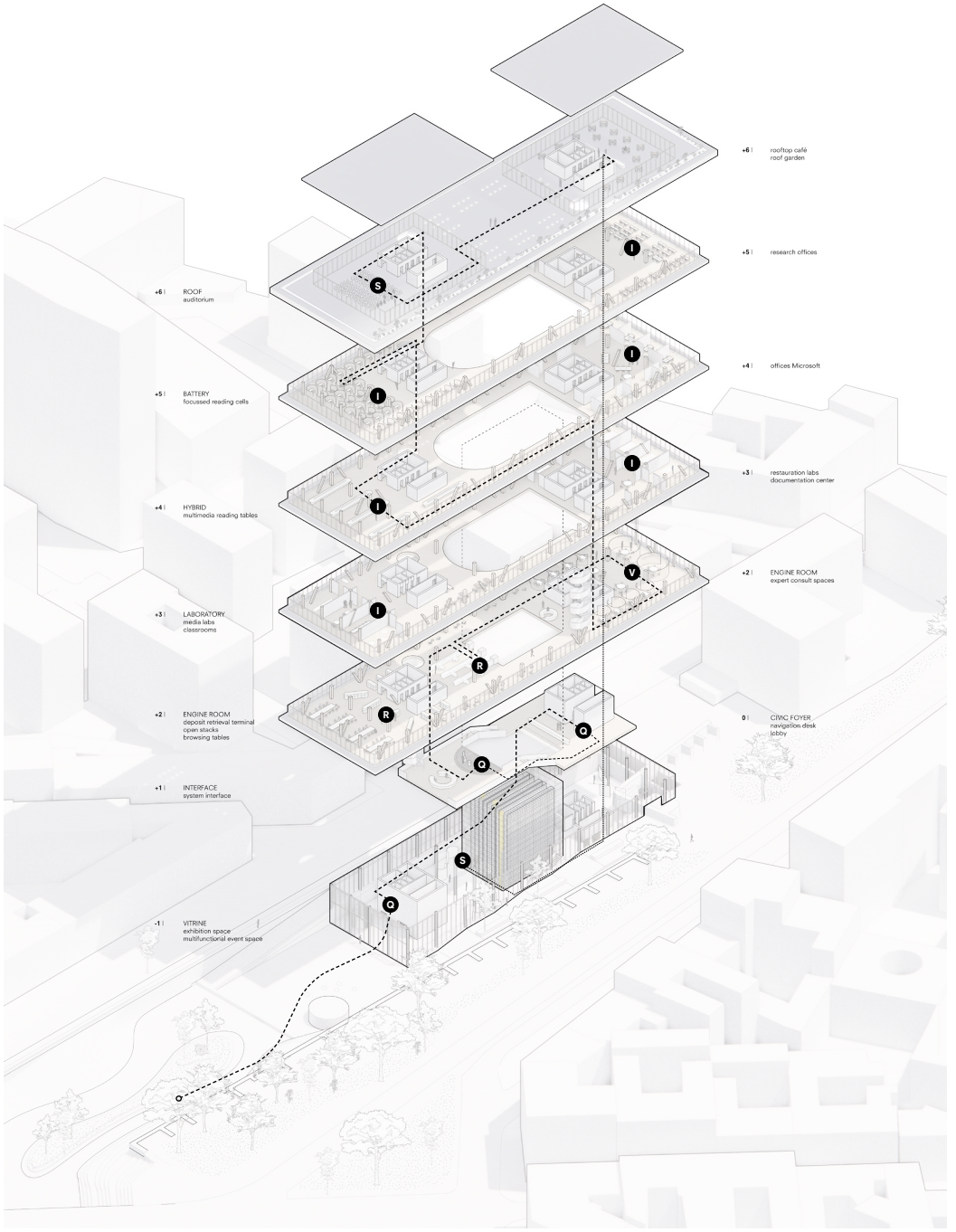
DESIGN

Design

ELEMENTS



SPATIALISING THE KNOWLEDGE PROCESS



- Q Questioning
- R Retrieving
- V Validating
- I Interpreting
- S Sharing

MEET GIACCOMO

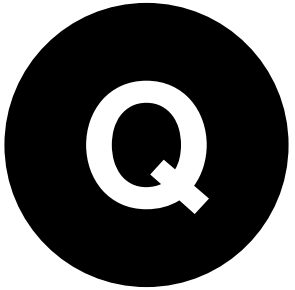
Hi there, ciao raggazi





Design

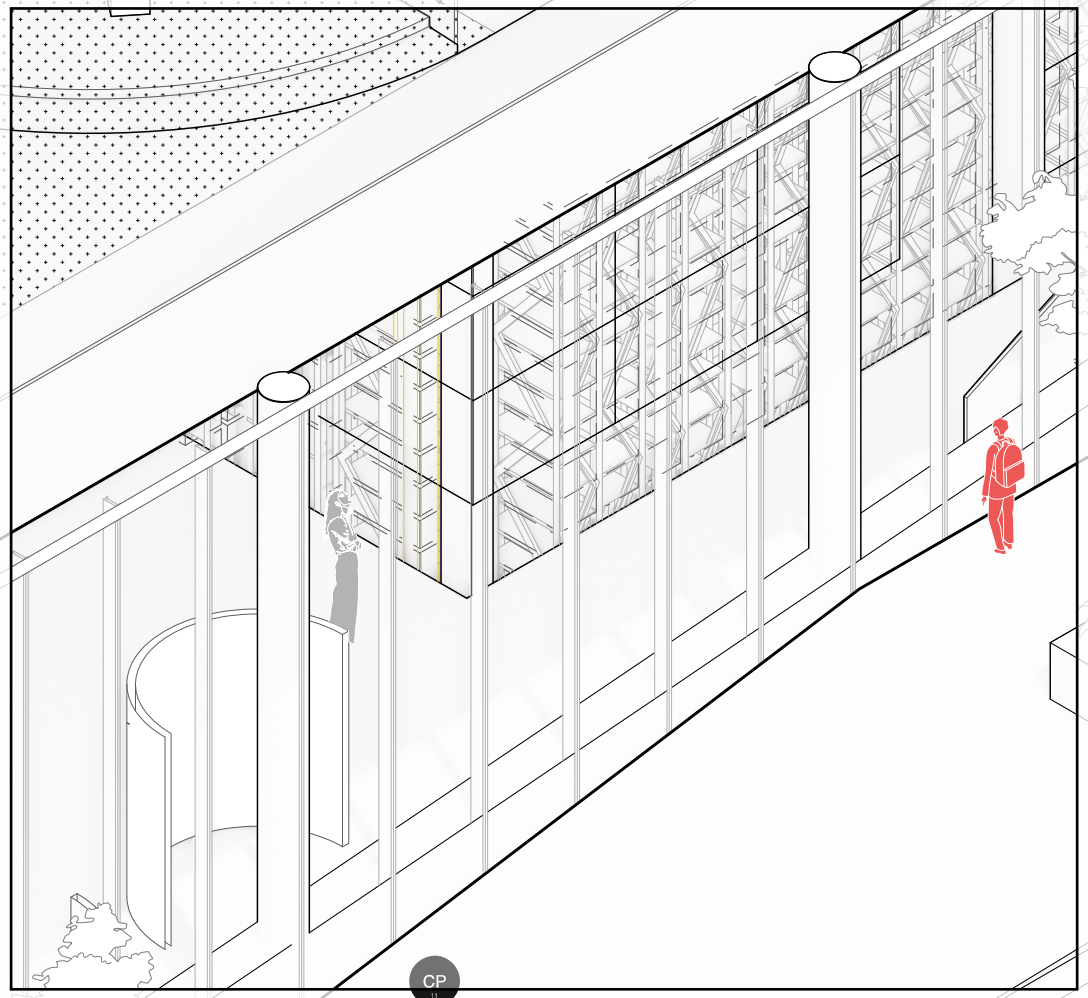
QUESTIONING



Design

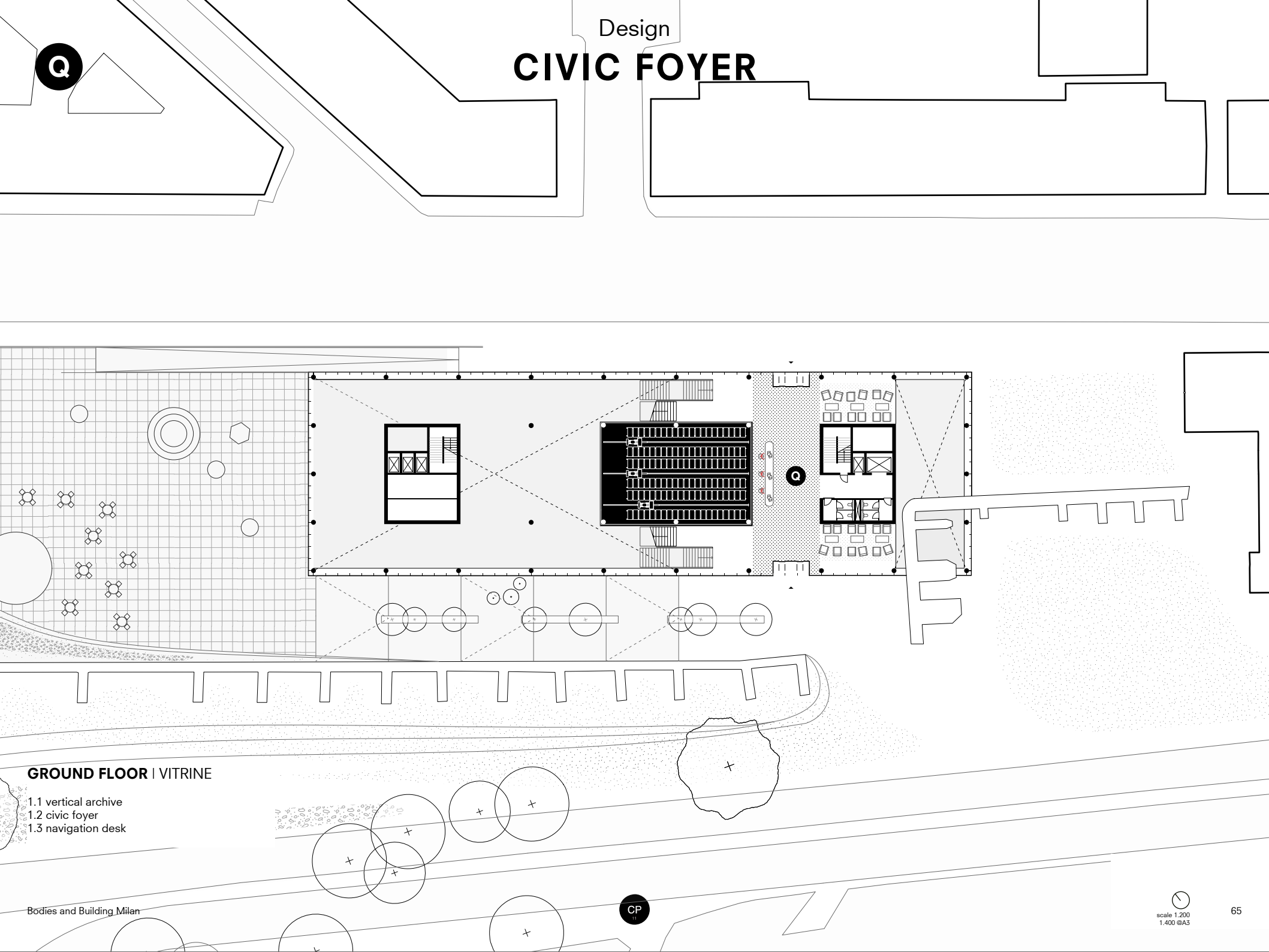
VITRINE

As he walks through the vitrine, he comes across an exhibition on labour movements in Milan. What a coincidence.



Design

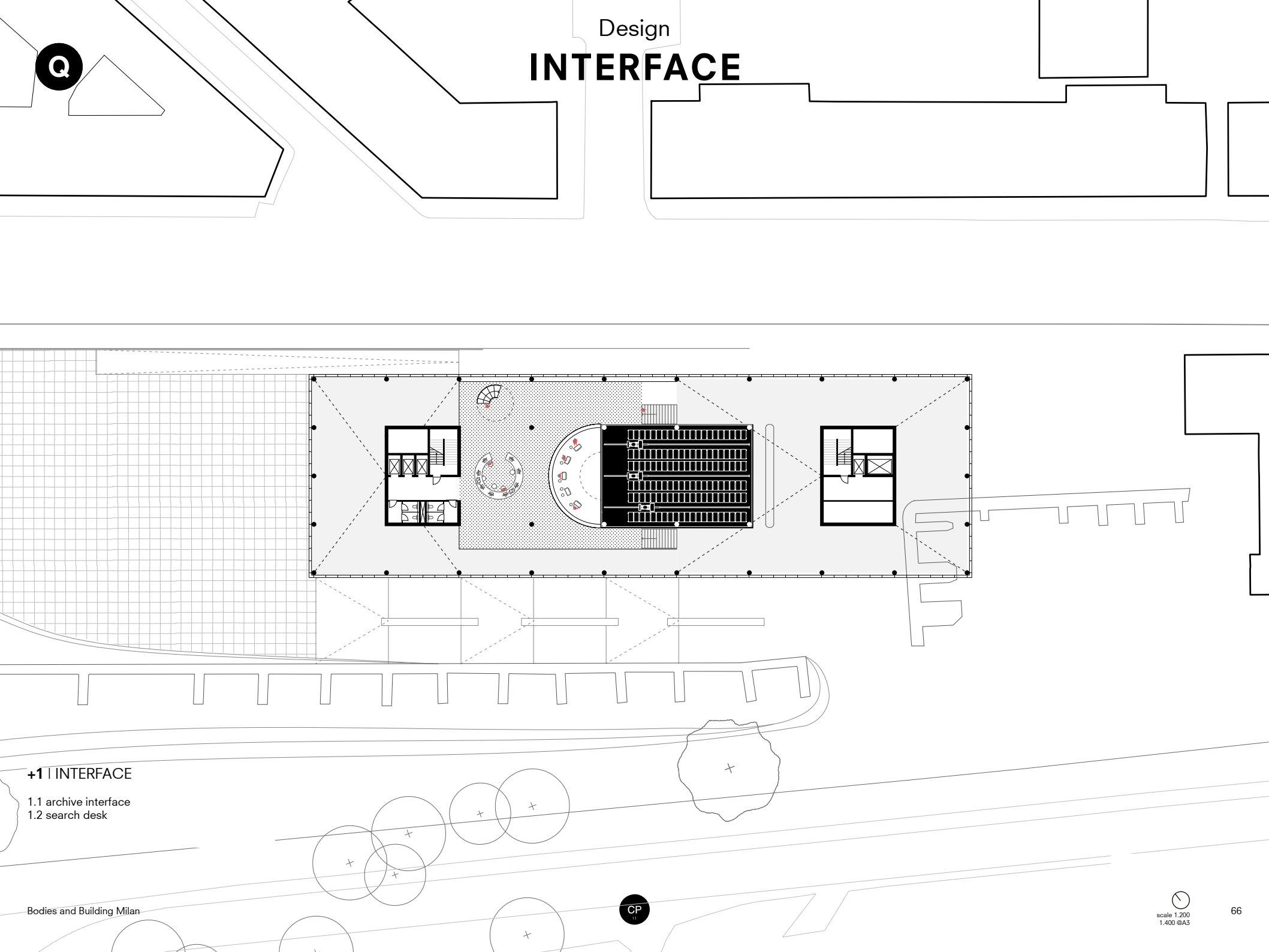
CIVIC FOYER



GROUND FLOOR | VITRINE

1.1 vertical archive
1.2 civic foyer
1.3 navigation desk

INTERFACE

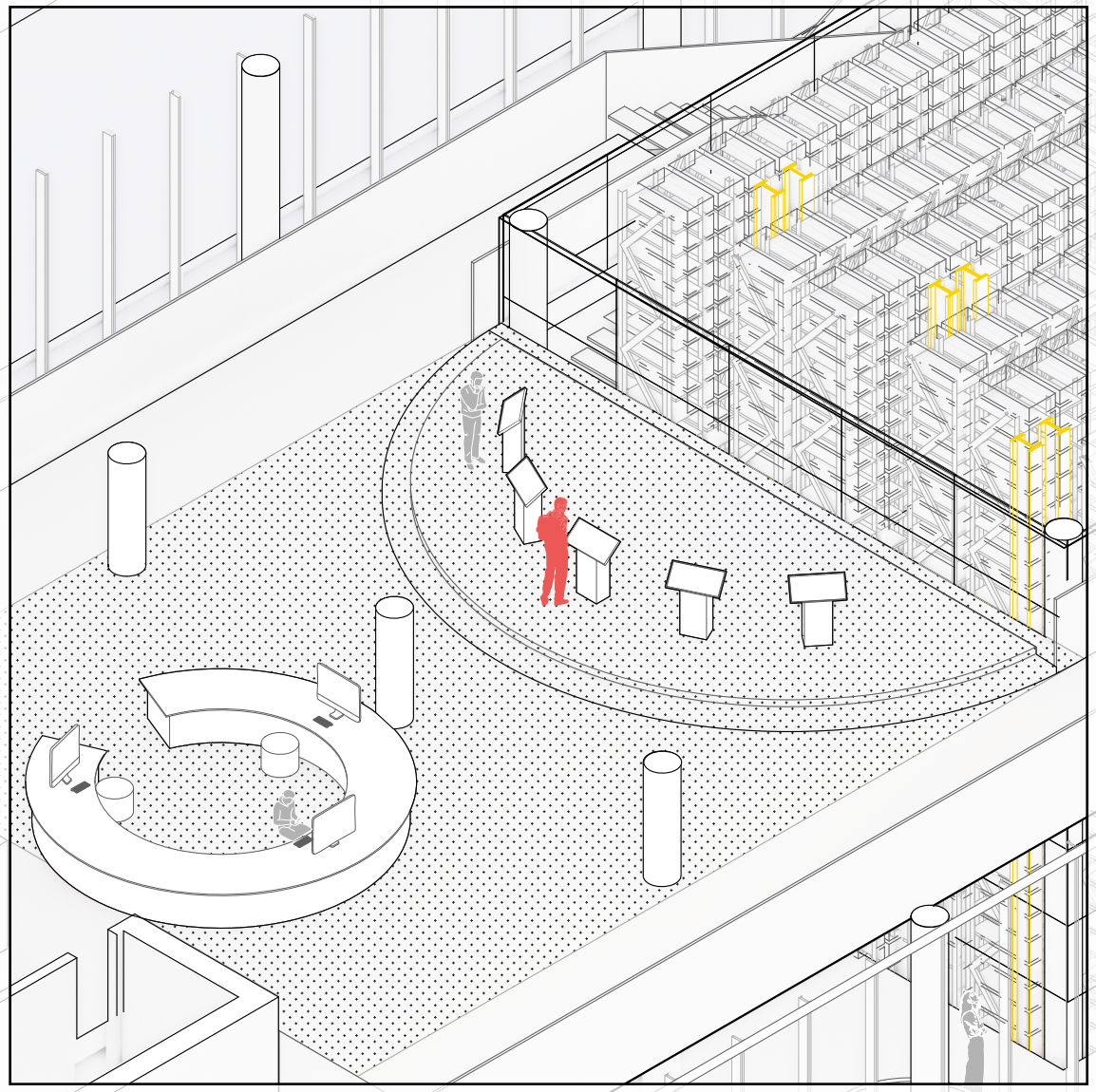


+1 | INTERFACE

1.1 archive interface
1.2 search desk

Design

INTERFACE



At the interface he asks the library for help. Not by searching for a specific book.
...But by asking a question

LIBRARY SYSTEM

Dewey Decimal system

000 – Art
- 010 - Architecture
- 001 - Architecture in Europe
- 001.1 - Architecture in Milan
- ...

100 – Philosophy

200 - History

- difficult to expand
- hierarchical system
- fixed categories

Library of Congress system

A – Art
- A.100 - Architecture
- A.010 - Architecture in Europe
- A.001 - Architecture in Milan
- A.001.1 - Libraries in Milan
- ...

B - Philosophy

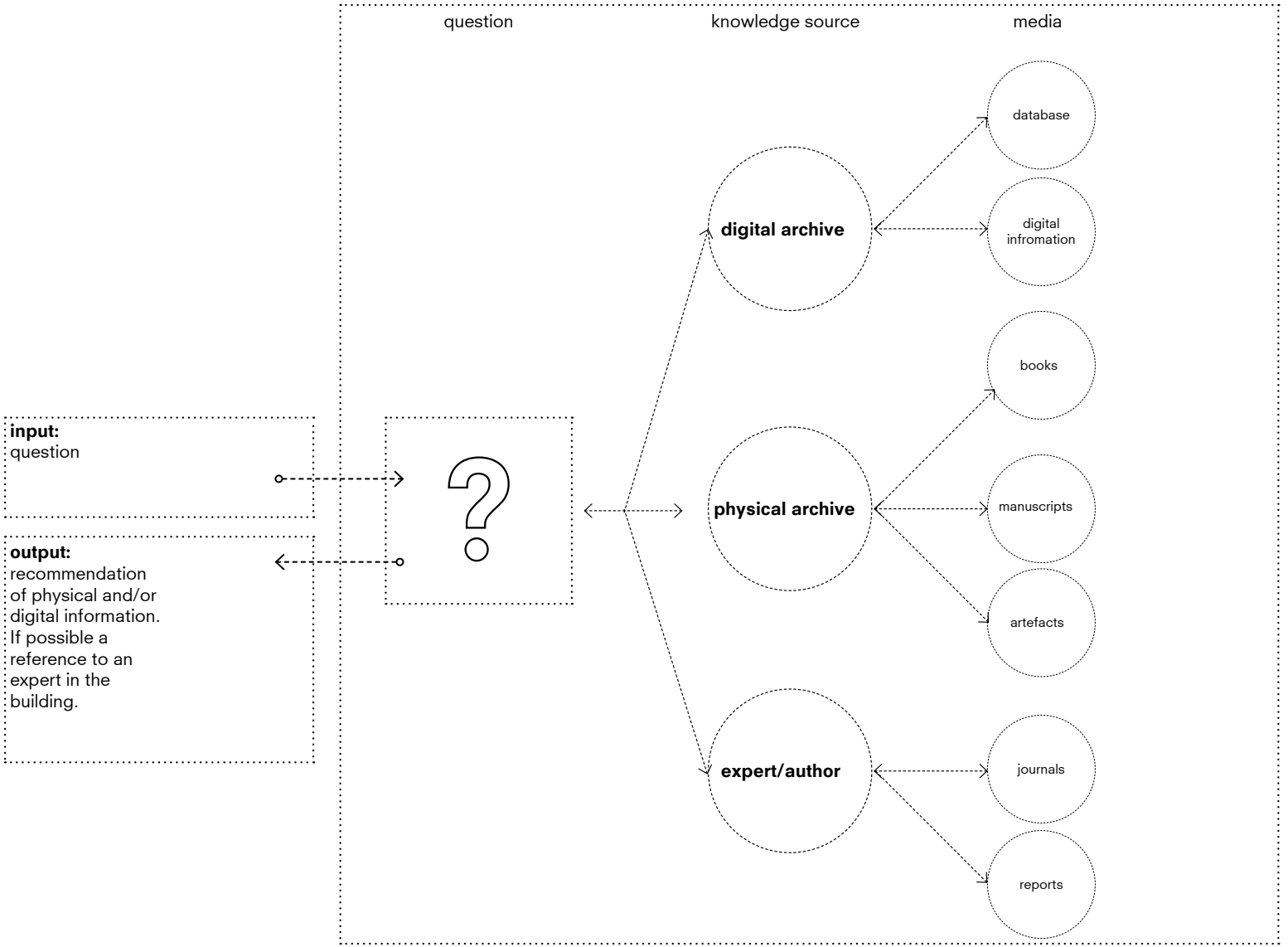
C - History

+ more easy to expand
- hierarchical system
- fixed categories

Design

LIBRARY SYSTEM

Question based system



+ easy to expand
+ non-hierarchical system
+ no fixed categories
+ connects collection, expert and digital media

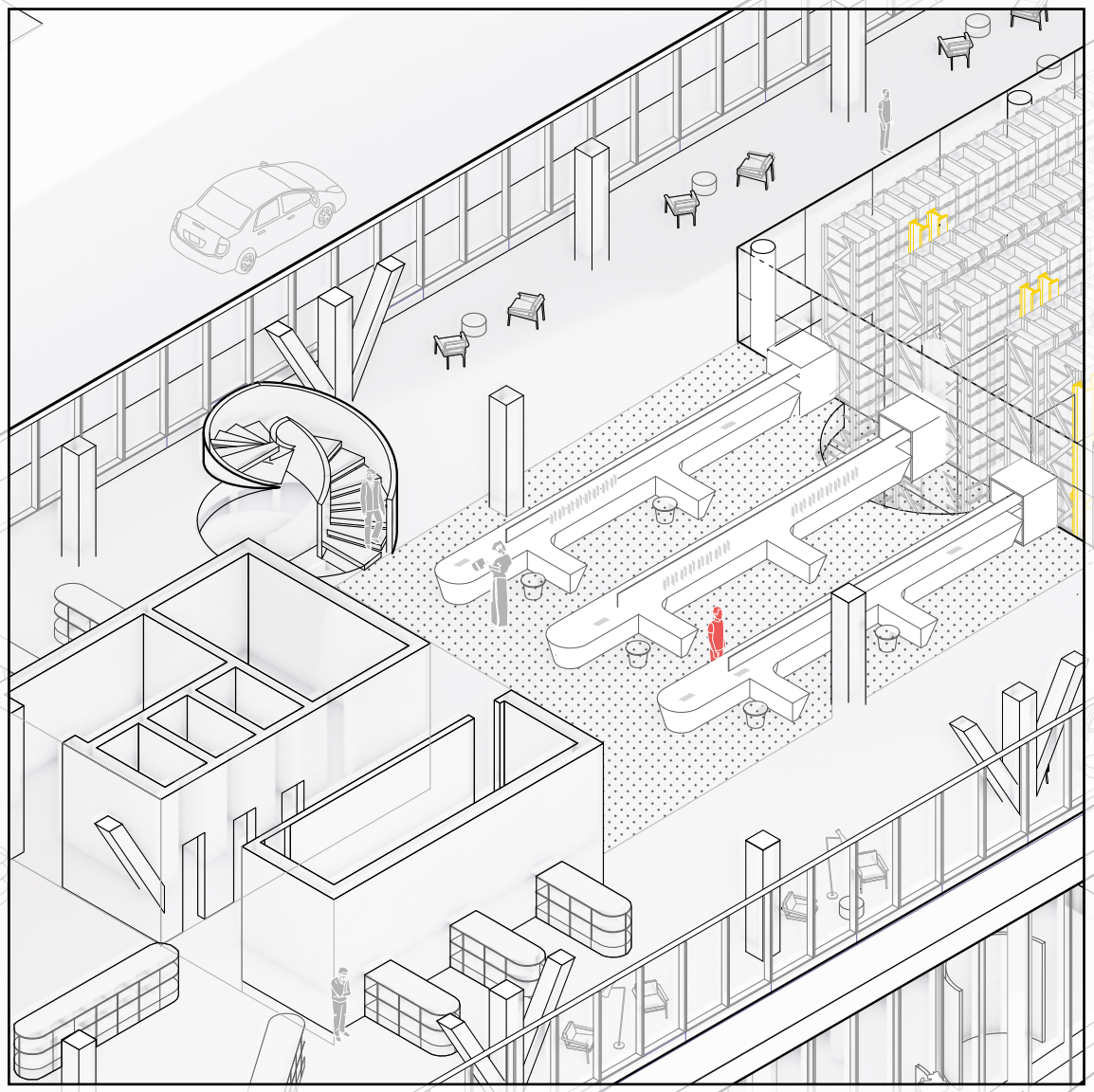
Design

RETRIEVING



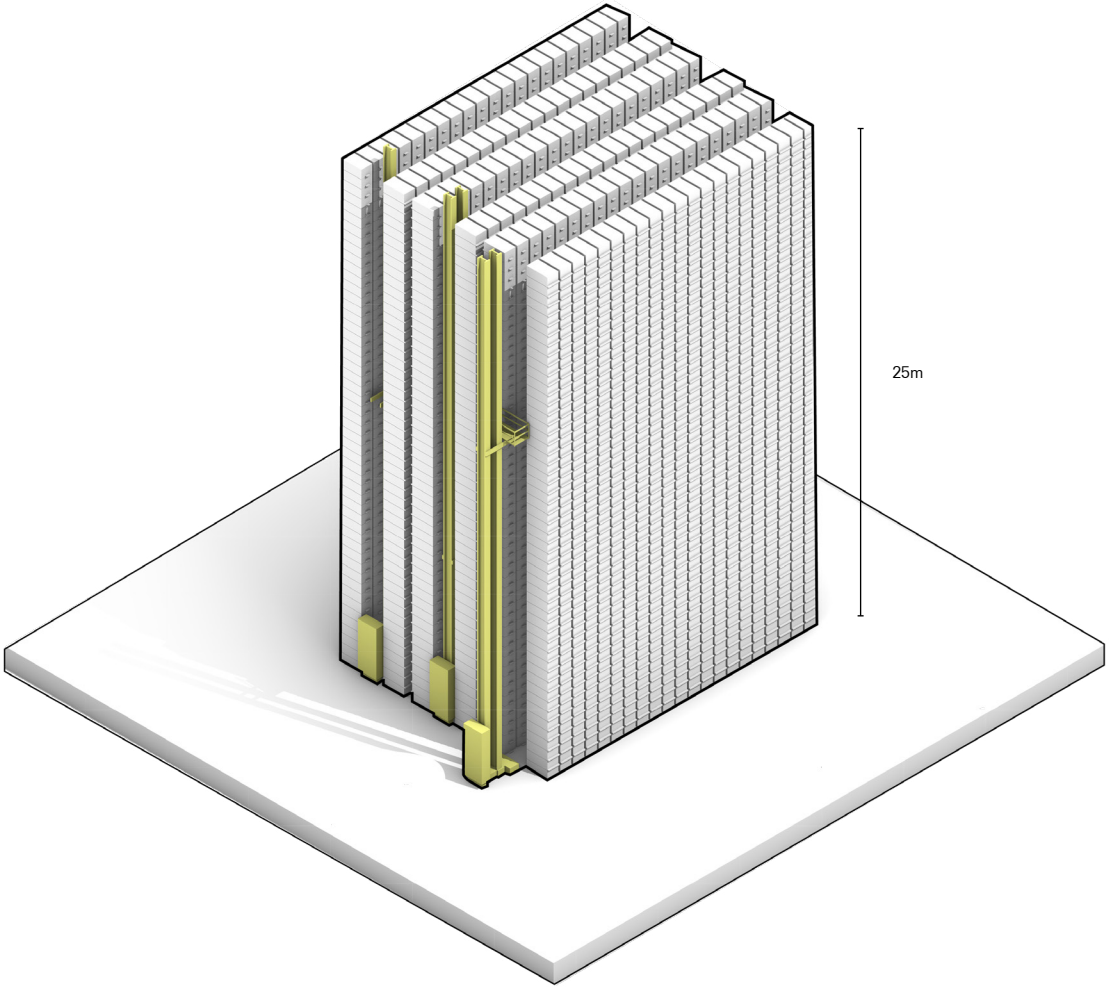
R RETRIEVING

A few minutes later, the requested material arrives from the archive.
The material is ready for him at the deposit retrieval terminal.



scale 1.50

THE AUTOMATED BOOKSHELVE



+ increase navigability (central retrieval)
+ increase preservation conditions
+ free up floor plan for specific program


+2
DEPOSIT
RETRIEVAL

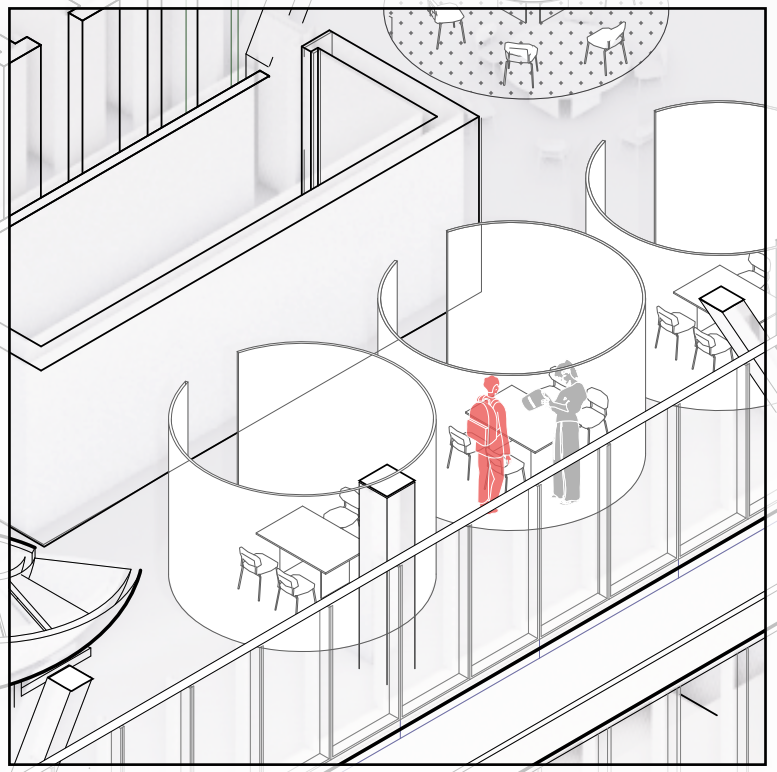
Design

VALIDATING



V
VALIDATING

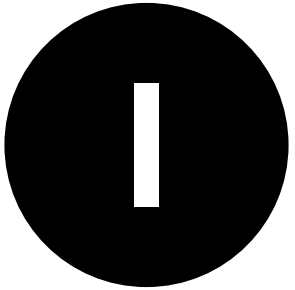
Giaccomo has an appointment with Francesca,
a researcher from the Fondazione Feltrinelli.



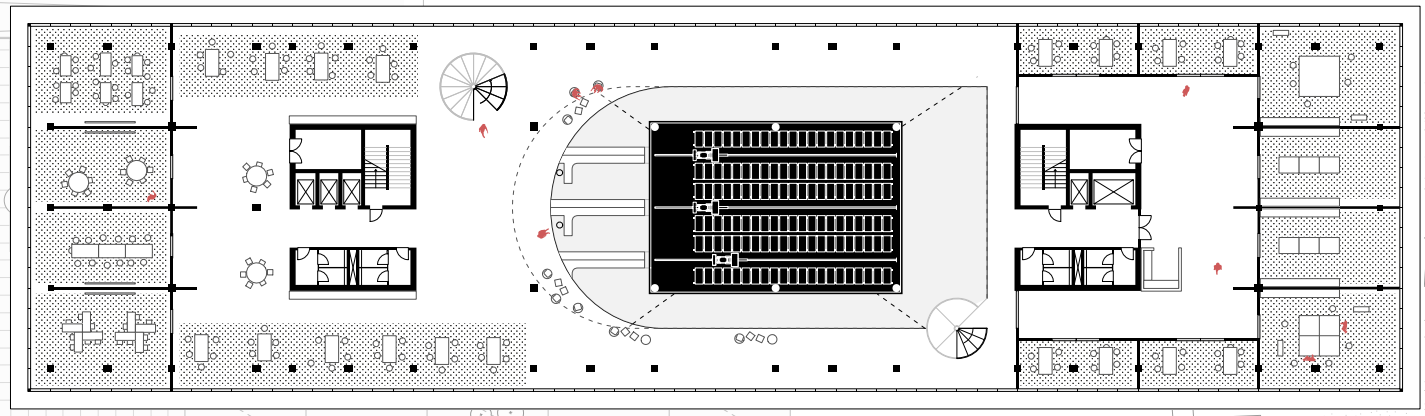
scale 1.50

Design

INTERPRETING



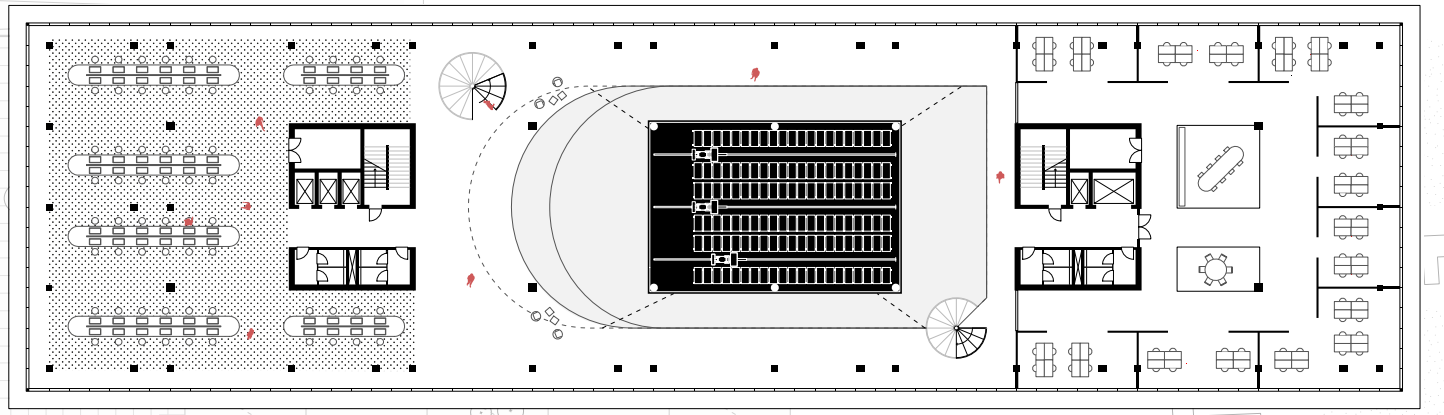
I INTERPRETATION



+ 3 | MACHINE | LABORATORY

3.1 media labs
3.2 collaborative spaces
3.3 restauration labs
3.4 documentation center

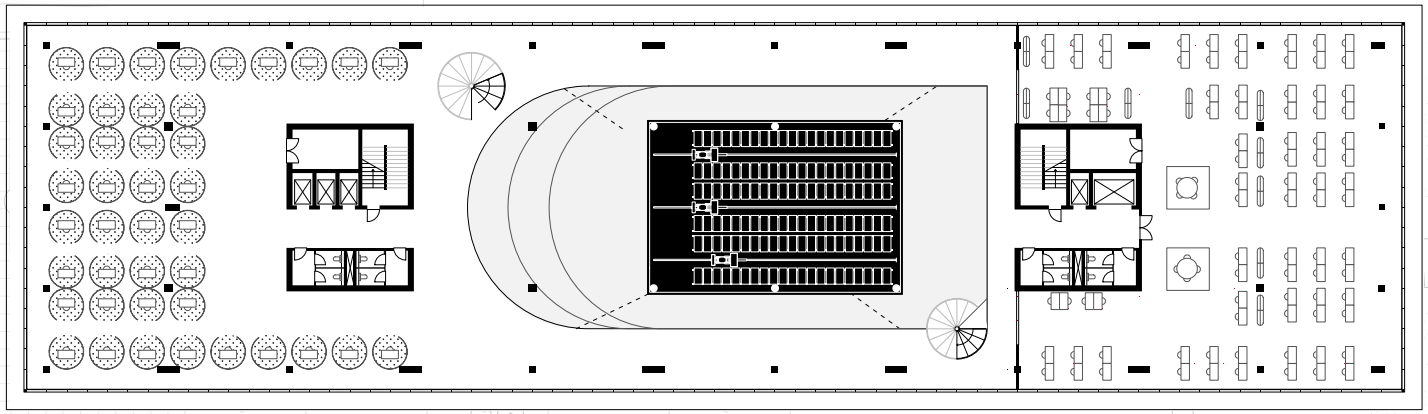
I INTERPRETATION



+4 | MACHINE | HYBRID READING ROOM

4.1 hybrid reading spaces
4.2 research offices
4.3 meeting spaces

I INTERPRETATION



+ 5 | MACHINE | BATTERY

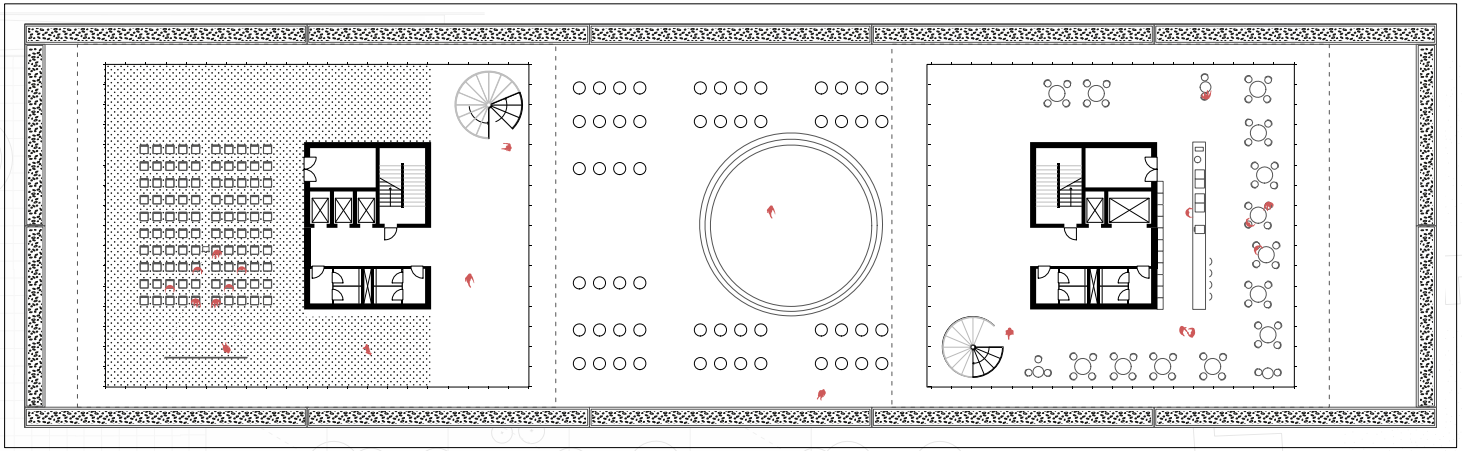
5.1 focussed reading spaces
5.2 offices

Design

SHARING



SHARING



ROOF

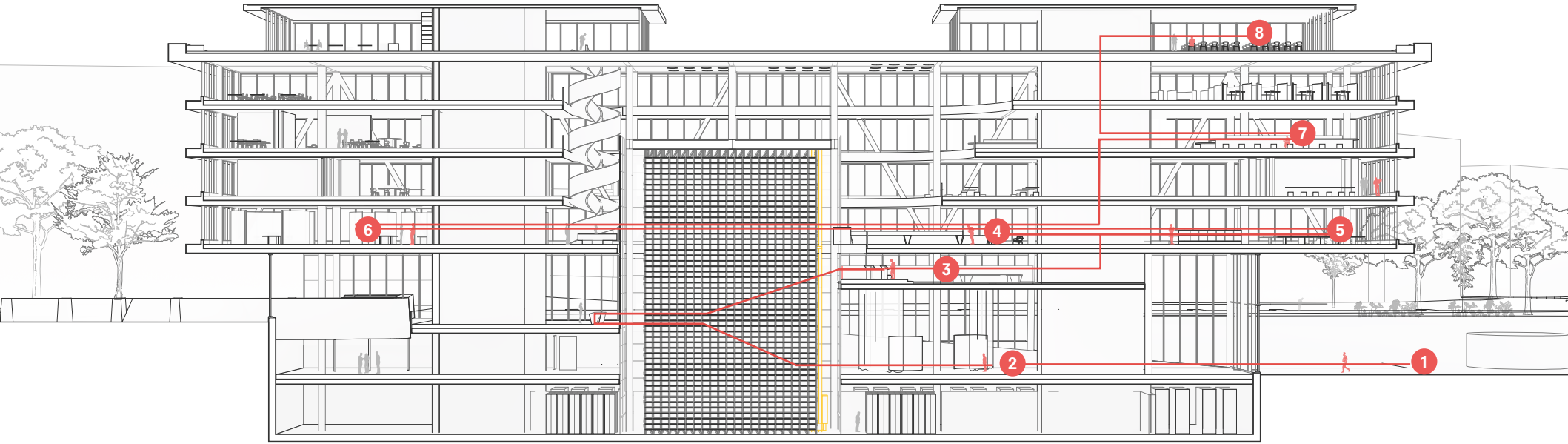
R.1 auditorium
R.2 rooftop café
R.3 rooftop garden

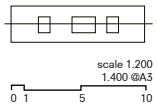

// NEW EXHIBITION // 17.00 JOIN THE DEBATE ON SOCIAL LABOUR RIGHTS // NEW EXHIBITION //

FLOW 1 | VISITOR

Visitor

1	**8.55**	he enters the building from the park
2	**9.00**	exploring the new exhibition
3	**10.15**	question at the interface
4	**10.30**	pickup material at the deposit retrieval
5	**10.45**	quick browse
6	**11.15**	consult with Francesca
7	**12.30**	focussed study time
8	**16.00**	evening lecture
	17.00	leaving the building



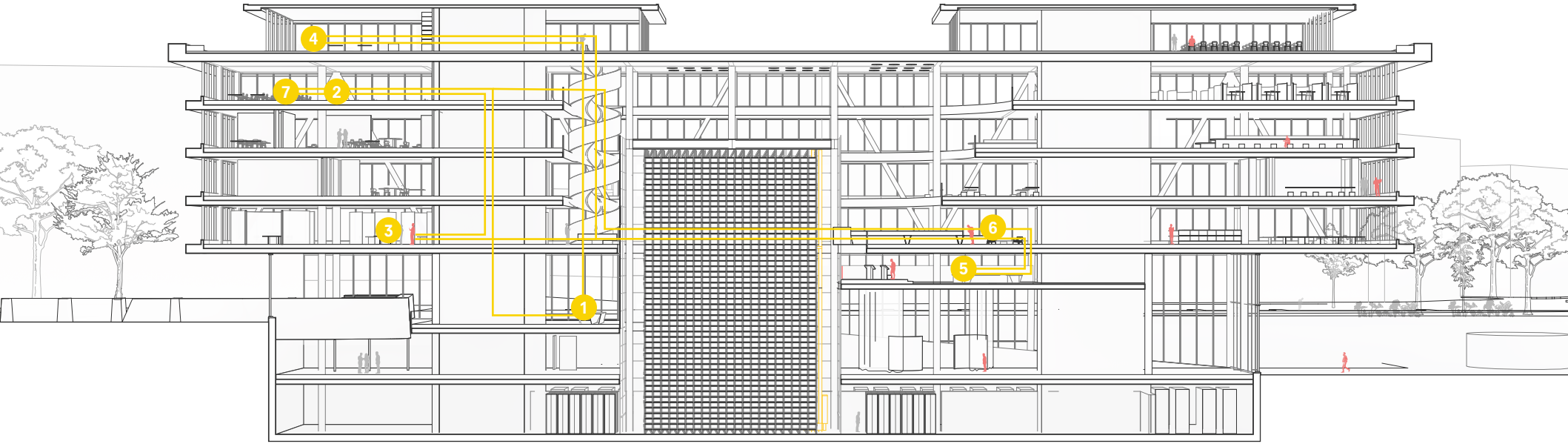


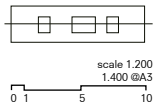
FLOW 2 | RESEARCHER

Feltrinelli Researcher

1. **8.55** she enters the building in the civic foyer
2. **9.00** goes and sit at one of the flexible desks in the research offices
3. **11.15** consult with Giacco
4. **12.00** lunch at rooftop café with collegue
5. **13.00** request material for her own research
6. **13.10** pickup material
7. **13.30** continue working

17.30 leaving the building





FLOW 3 | BOOK

Book in Feltrinelli Collection

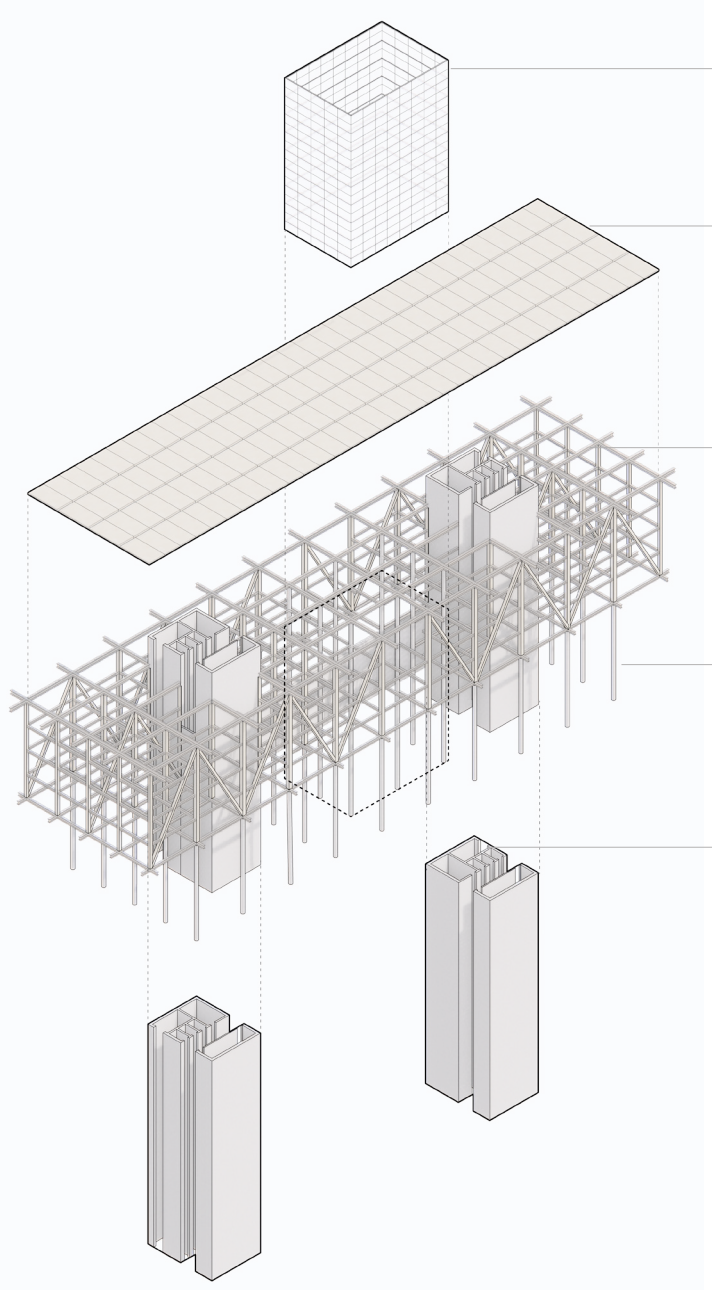
1. in storage in the central archive
2. **9.55** small restauration in restauration lab
3. **13.00** requested and picked up by researcher
4. **13.15** used for research
5. **16.00** deposited, in storage in the central archive





Design Elaboration

CONSTRUCTION



glass archival core
steel support structure

prefab CLT floor panels

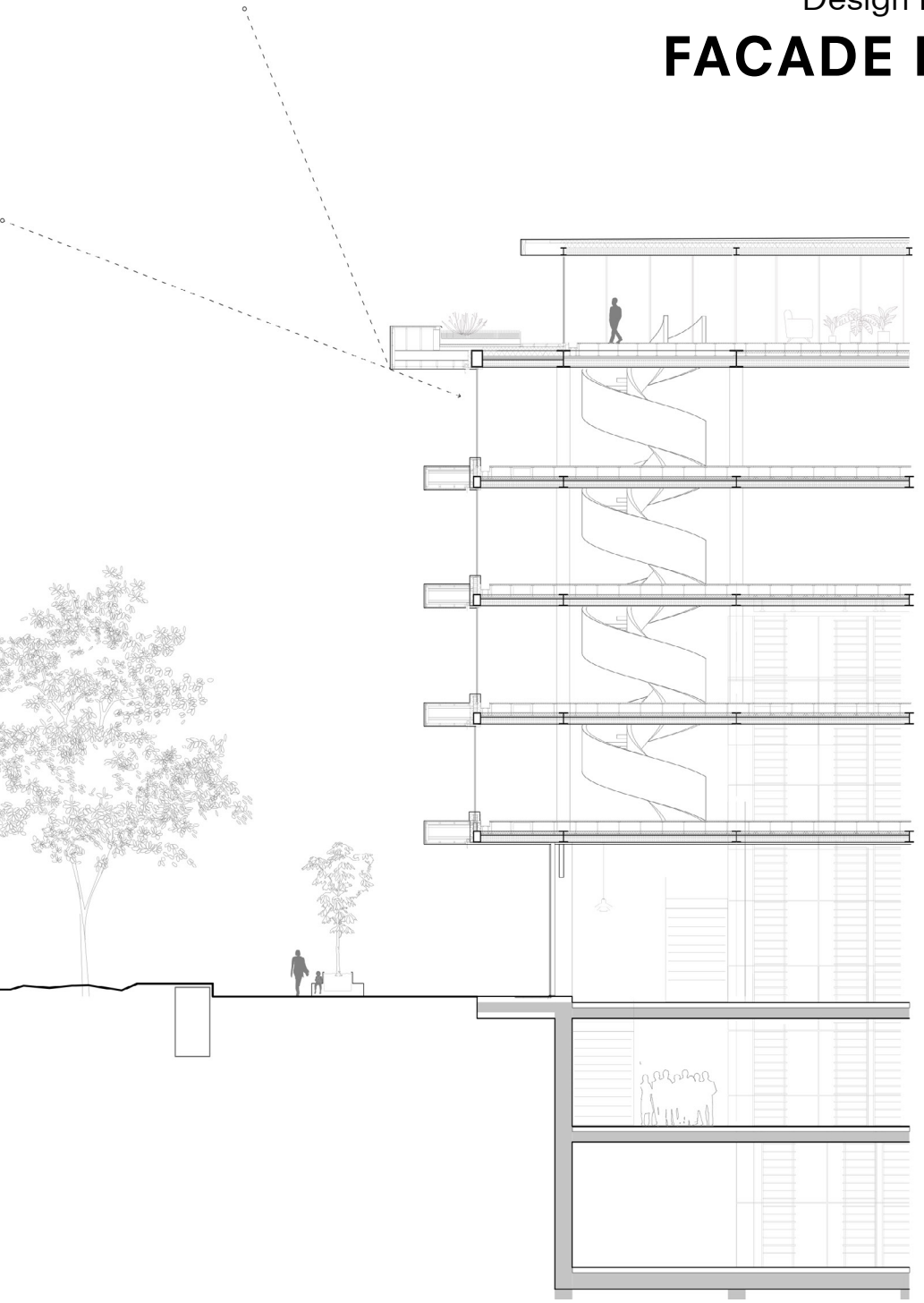
hybrid steel-timber structure

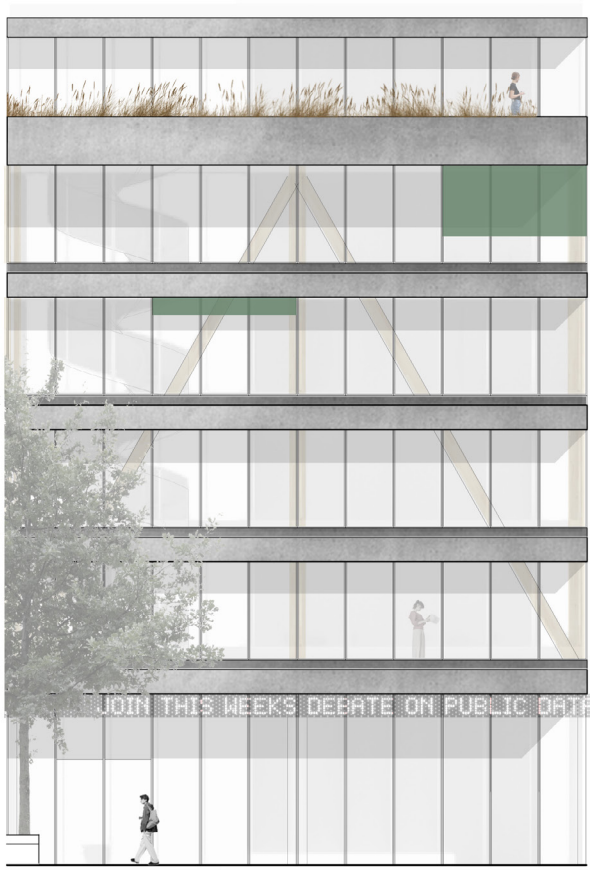
steel beams (450-600mm)
glulam columns (600mm)

concrete base columns (600mm)

concrete stabilisation cores

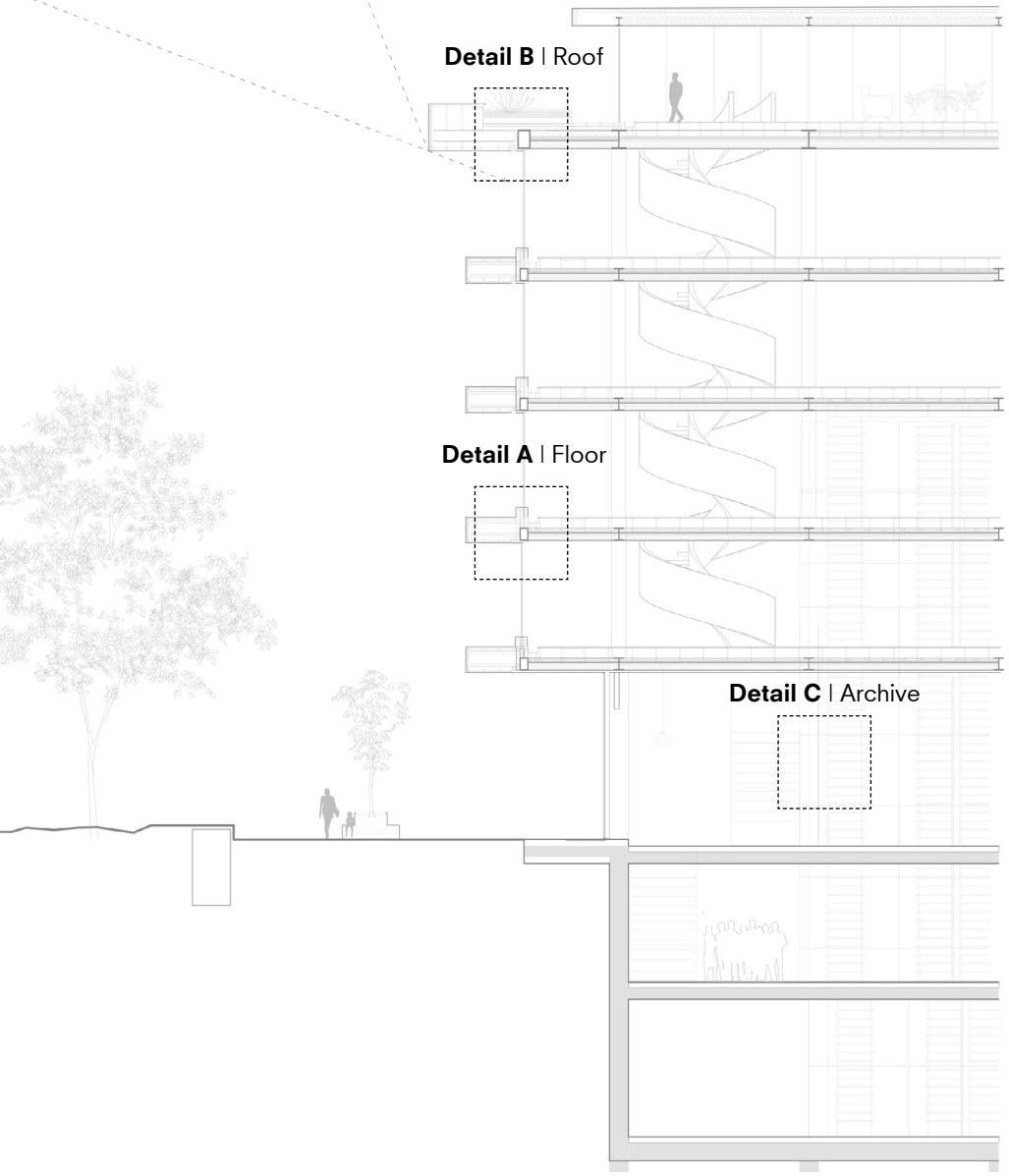
FACADE FRAGMENT





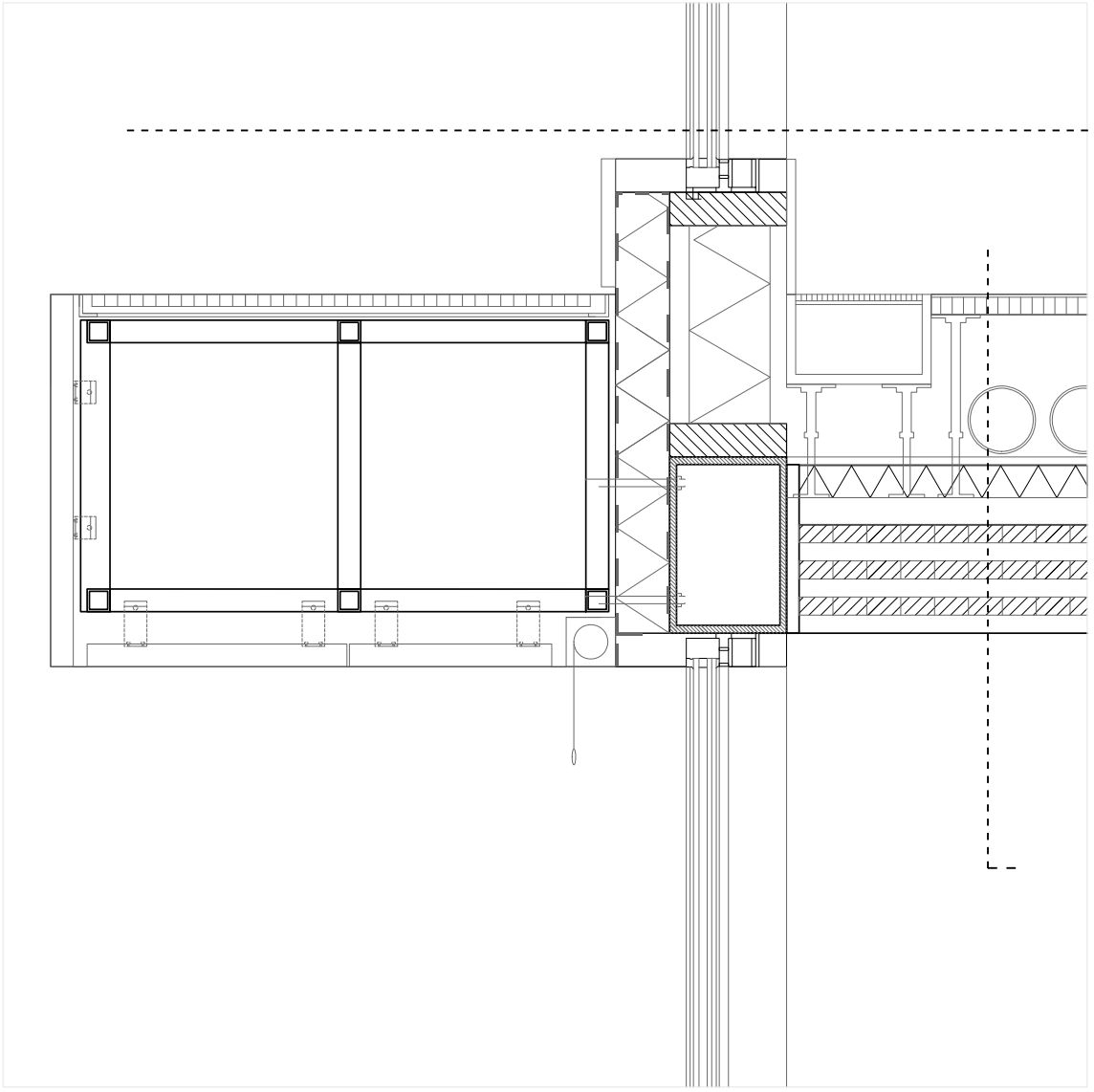
scale 1.20
1.50 @A3

DETAILS



Design Elaboration

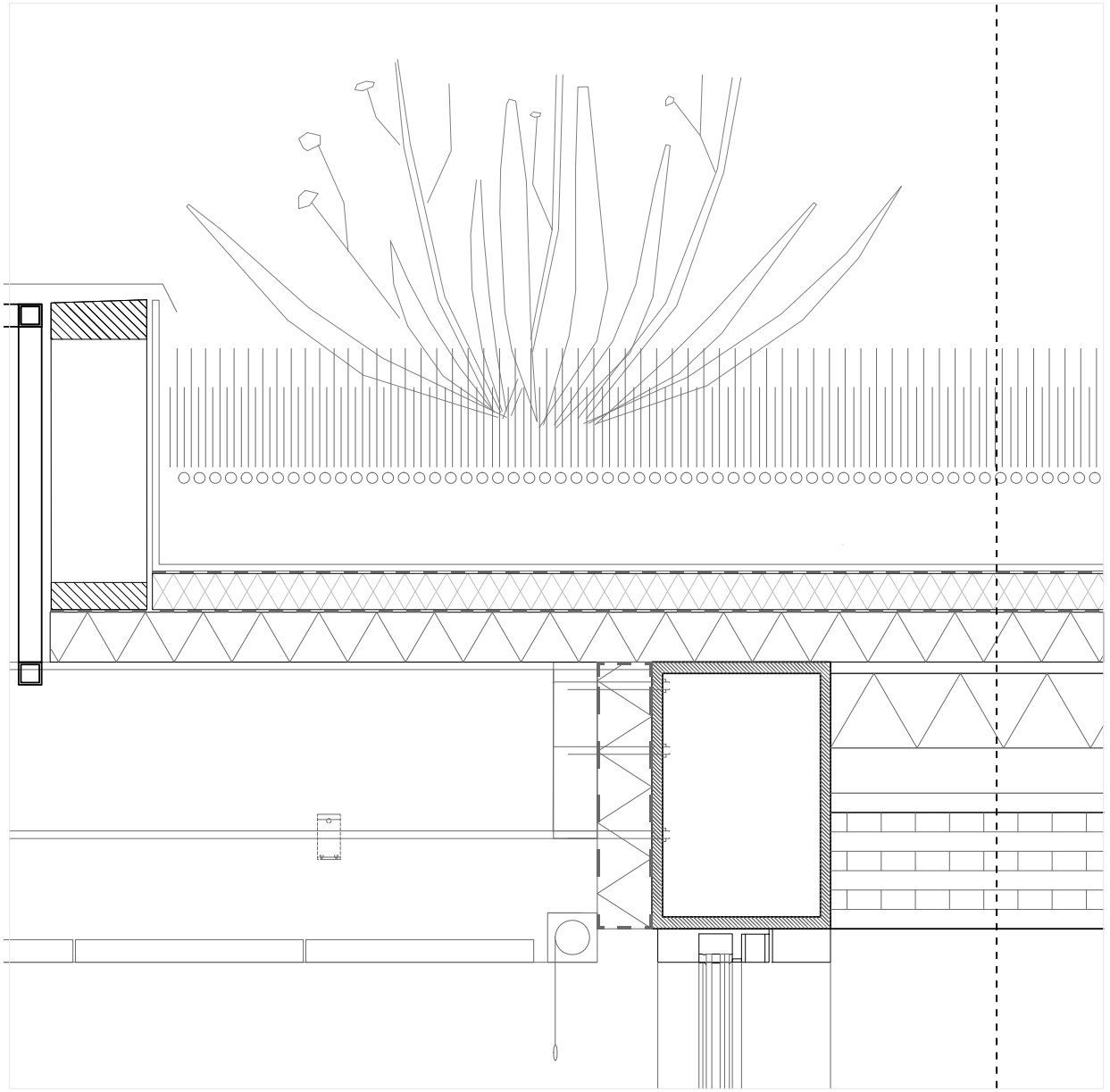
DETAIL A | FLOOR



FACADE
aluminum anodized facade panel 50mm
insulation glazing with sun/
thermal protection coating in
aluminium frame;
toughened glass 12 mm
cavity 18 mm
laminated safety glass 2× 10 mm

FLOOR
raised floor 300mm
(integrated installations)
insulatation layer for sound absorption
concrete slab 50mm
Prefab CLT panel 300mm

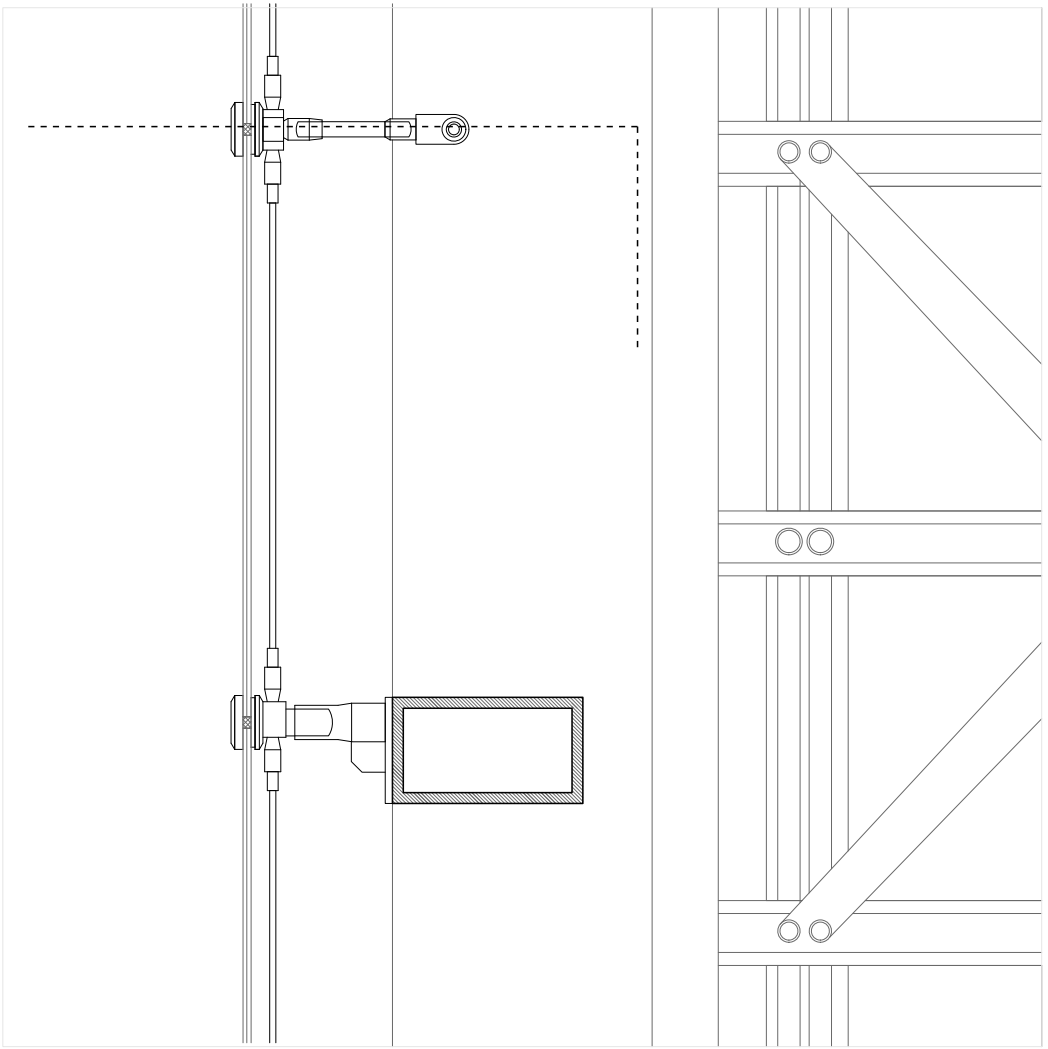
DETAIL B | ROOF



ROOF

vegetation layer	600 mm
substrate layer	
water resistant foil	
drainage	
PUR thermal insulation	2 x 110mm
vapor barrier	
concrete slab	50mm
prefab CLT-panel	350mm

DETAIL C | ARCHIVE



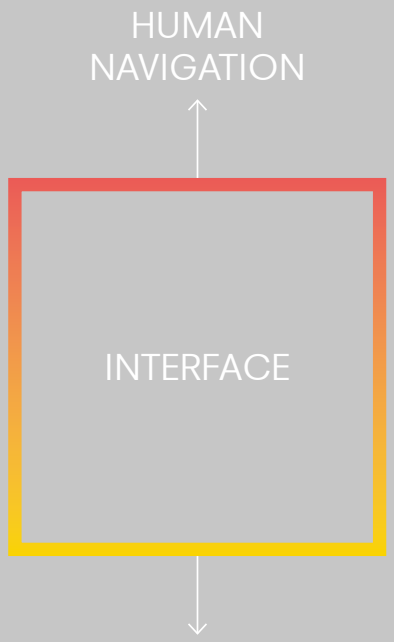
ARCHIVE CONTAINER
stainless-steel point fixing Ø 125 mm
stainless-steel cylinder Ø 35 mm
stainless-steel tension rod Ø 14 mm
stainless-steel fixing piece
steel tube beam 200x400mm
concrete column 600mm

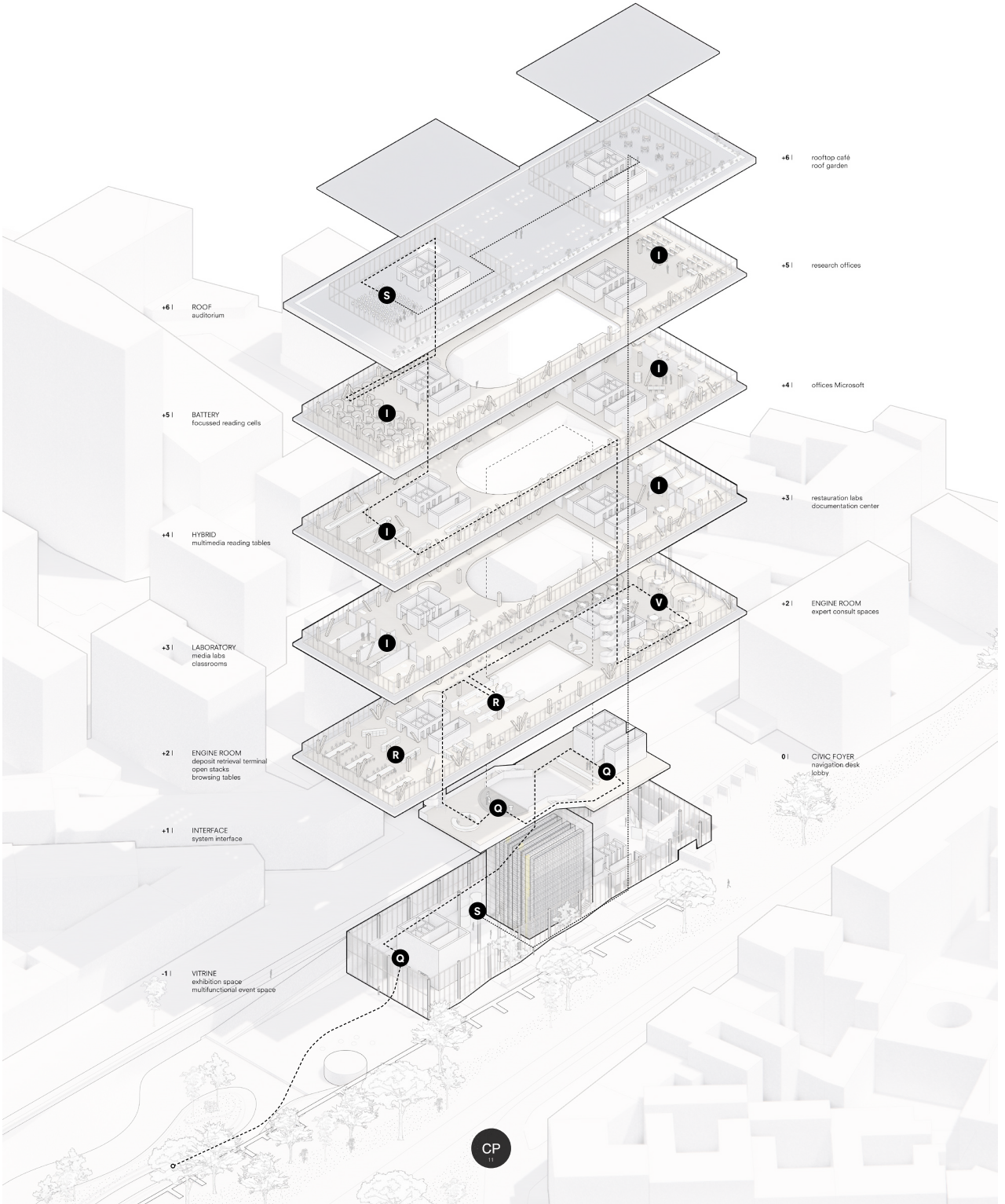
chapter V

CONCLUSION

Conclusion

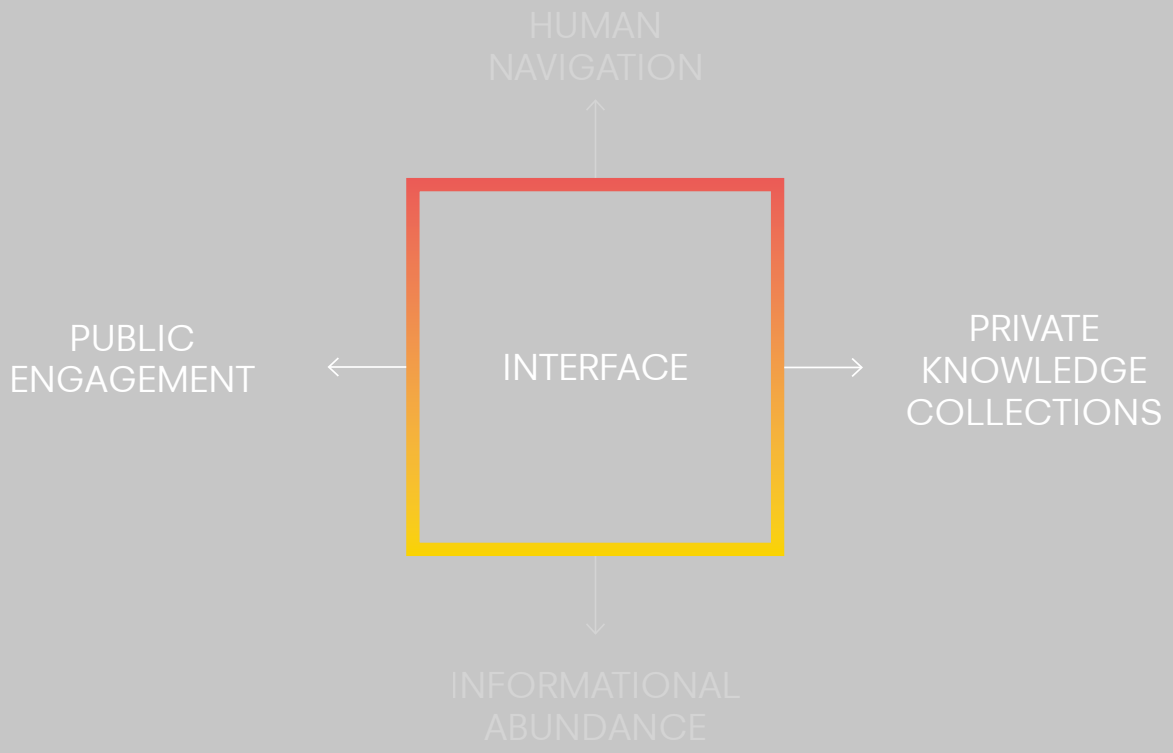
AMBITION 1

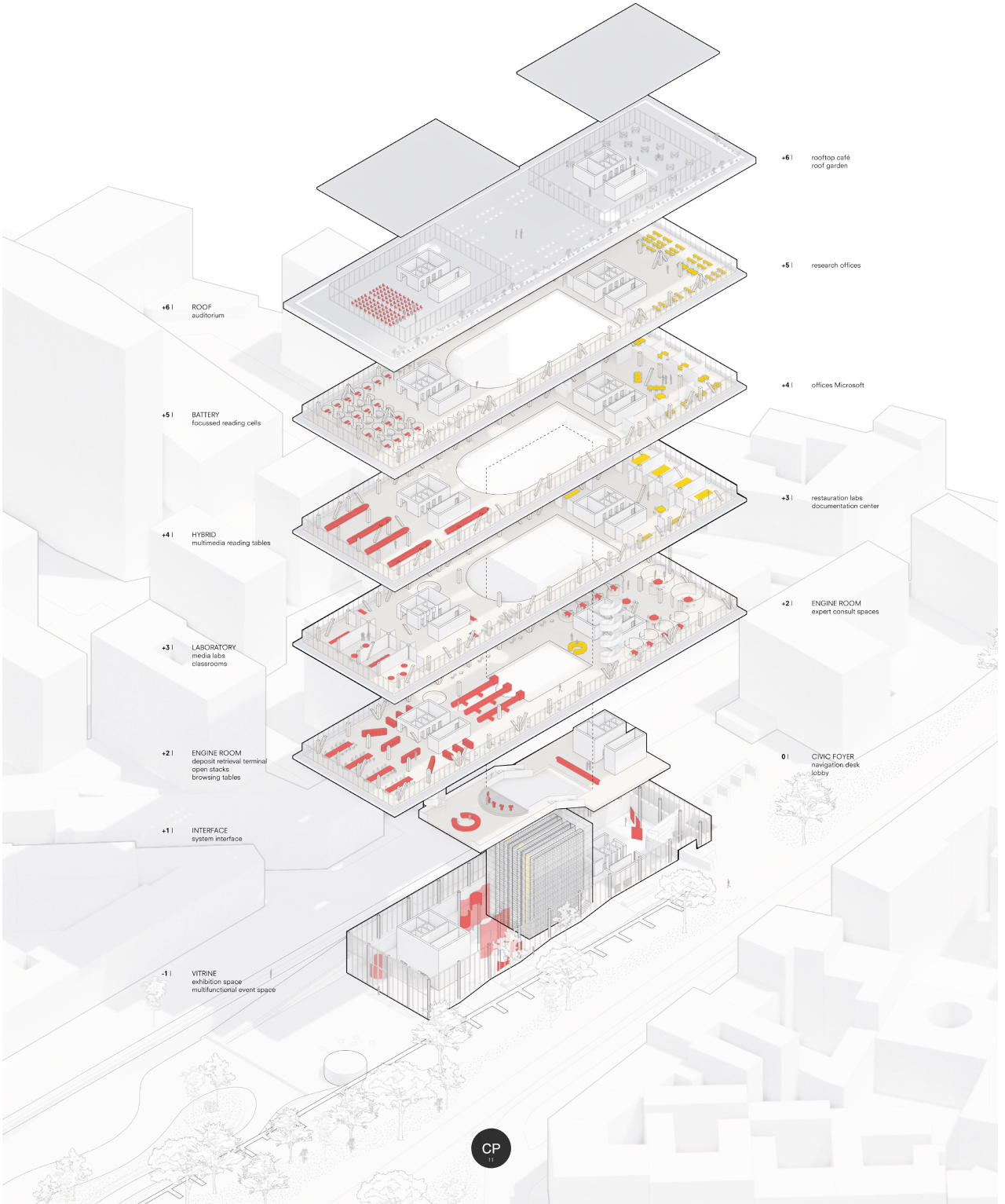




- Q Questioning
- R Retrieving
- V Validating
- I Interpreting
- S Sharing

AMBITION 2

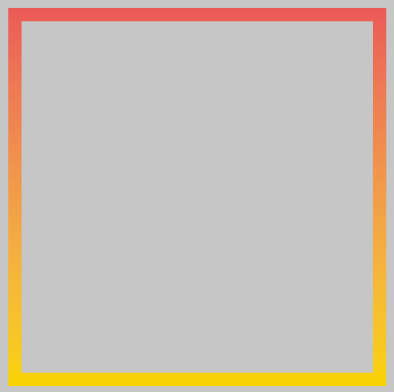

HUMAN
NAVIGATION
PUBLIC
ENGAGEMENT
INTERFACE
PRIVATE
KNOWLEDGE
COLLECTIONS
INFORMATIONAL
ABUNDANCE



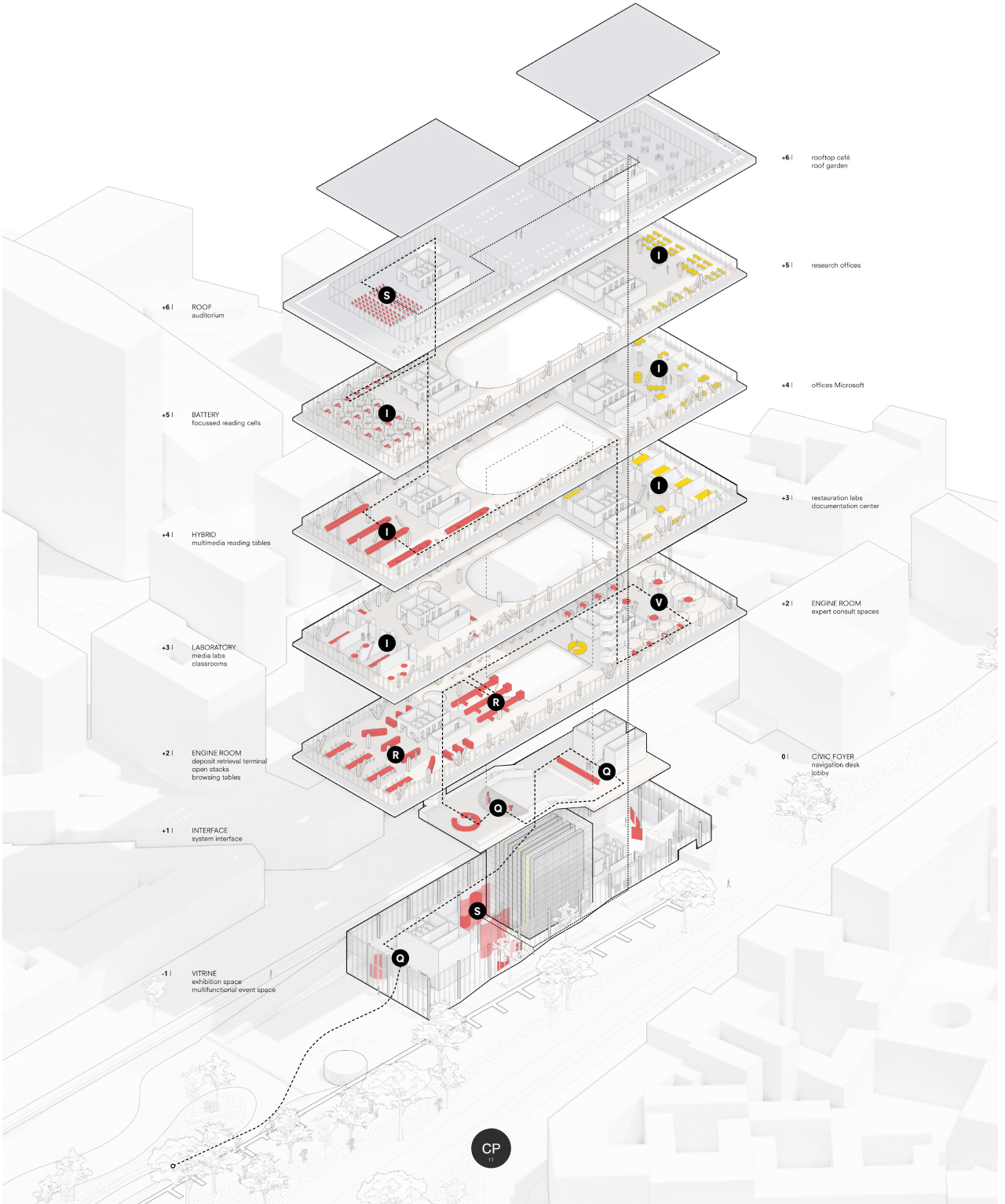
private

public

LIBRARY AS INTERFACE



navigating knowledge in an age of informational abundance


+6 | ROOF
auditorium
+5 | BATTERY
focussed reading cells
+4 | HYBRID
multimedia reading tables
+3 | LABORATORY
media labs
classrooms
+2 | ENGINE ROOM
deposit retrieval terminal
open stacks
browsing tables
+1 | INTERFACE
system interface
-1 | VITRINE
exhibition space
multifunctional event space
+6 | rooftop café
roof garden
+5 | research offices
+4 | offices Microsoft
+3 | restauration labs
documentation center
+2 | ENGINE ROOM
expert consult spaces
0 | CIVIC FOYER
navigation desk
lobby
Q Questioning
R Retrieving
V Validating
I Interpreting
S Sharing
private
public

THANK YOU!


NEW EXHIBITION // 17.00 JOIN THE DEBATE ON SOCIAL LABOUR RIGHTS // NEW EXHIBITION //




+2
DEPOSIT
RETRIEVAL


// NEW EXHIBITION // 17.00 JOIN THE DEBATE ON SOCIAL LABOUR RIGHTS // NEW EXHIBITION //

the end

THANK YOU!