

ZEEMANSHUIS THE THIRD LAYER

Lightweight co-living, informed by Amsterdam's historic timber joinery



Current Condition



GLOBAL CONDITION

Timber is adopted everywhere — but often as a technical system. Materially present, architecturally placeless.

This project lets lightweight densification be informed by Amsterdam's own material culture.



LOCAL CONDITION

Amsterdam must densify its protected fabric. Rooftop top-ups are strategy — yet draw little on the city's own timber culture.

*Timber
rooftop extension*

*Timber
facades*

*Logs for
construction*

*Timber
expansions*

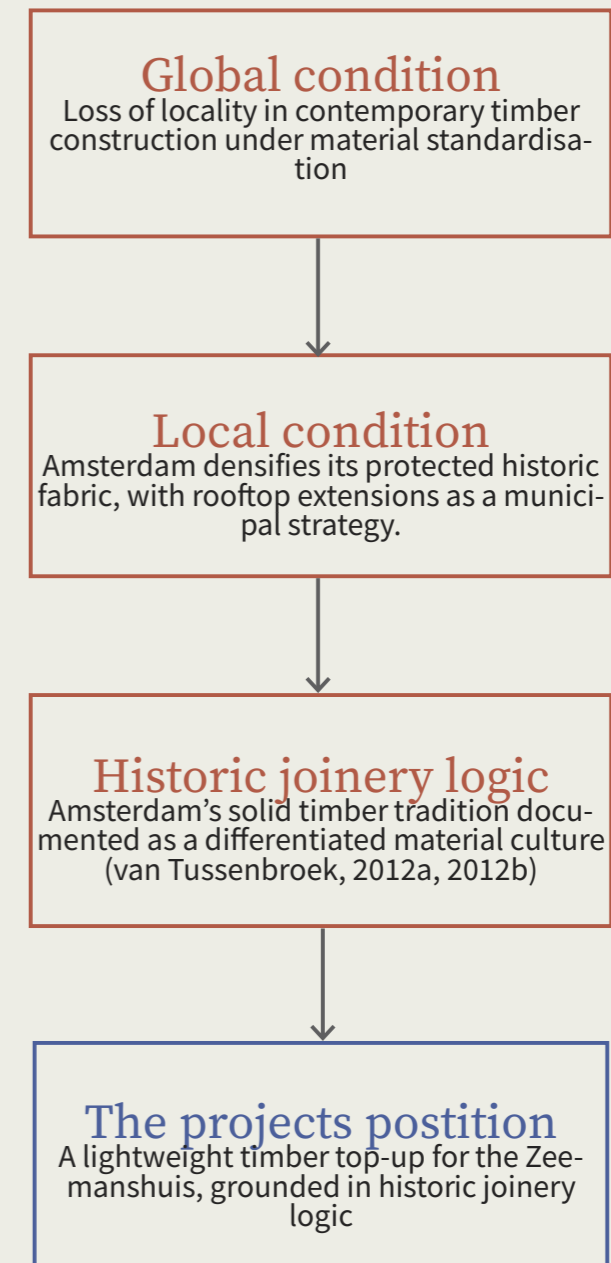
*Overhanging
timber expansions*



RESEARCH QUESTION

*Can Amsterdam's **historic timber joinery logic** inform an architectural language for **new lightweight timber layers**?*

Research by design — analysis · repositioning · operation



The transferrable method

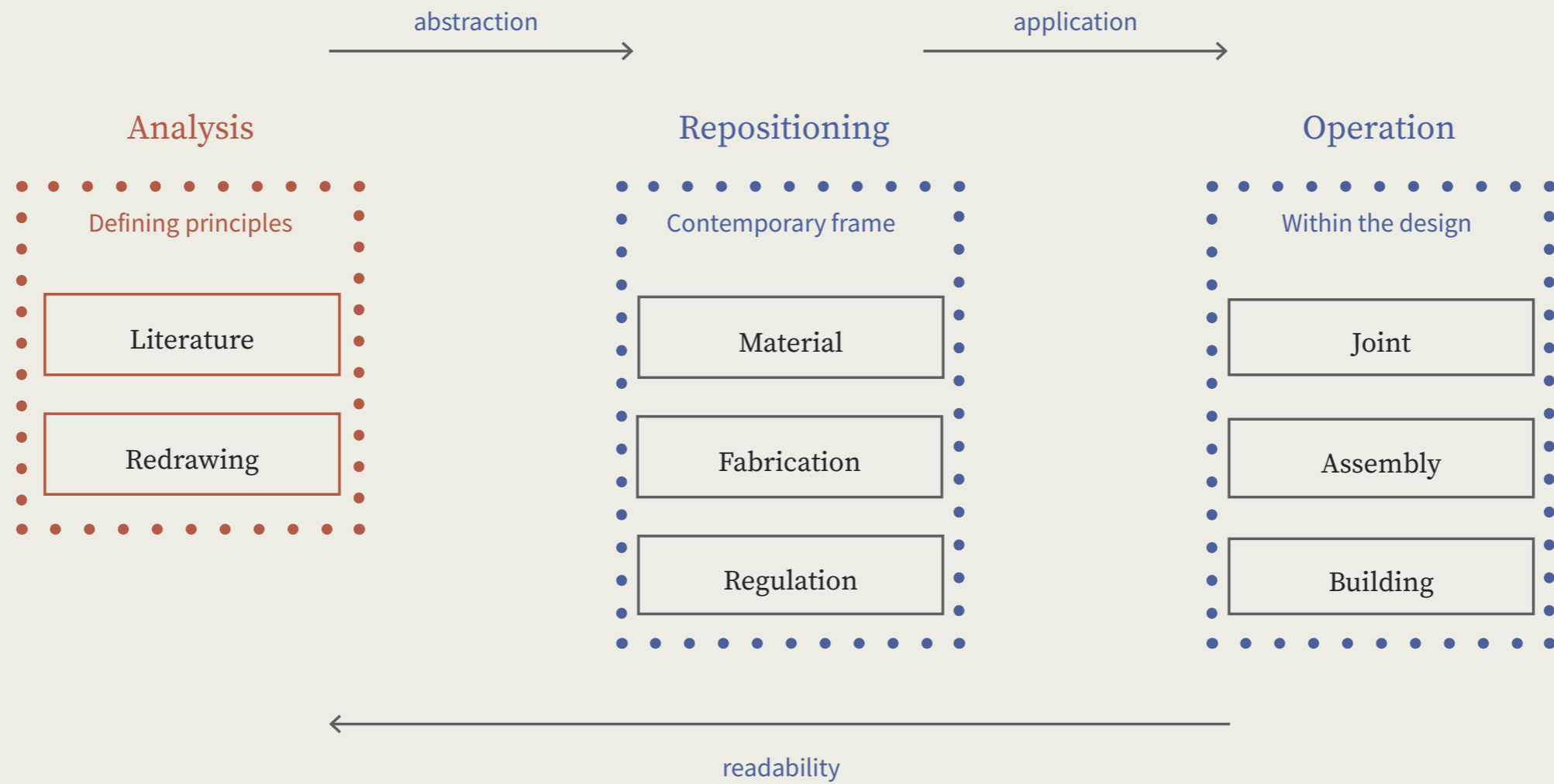
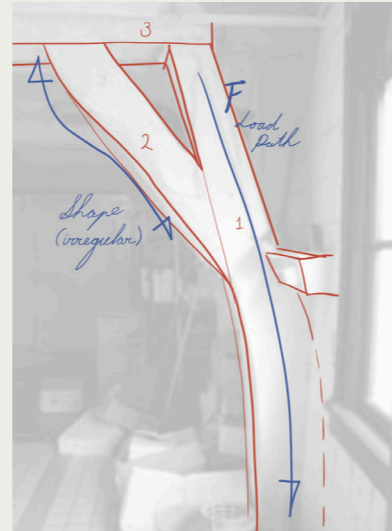


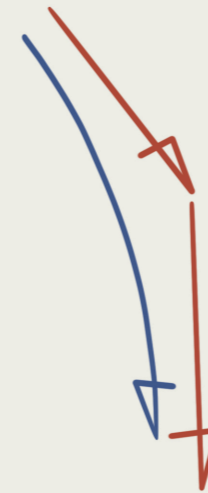
Fig. 4.1.1. The framework.

The principles

Analysis

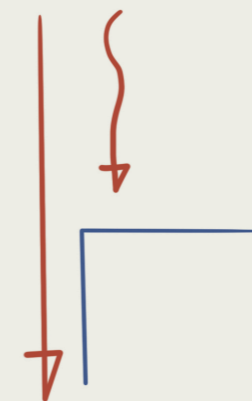


abstraction →



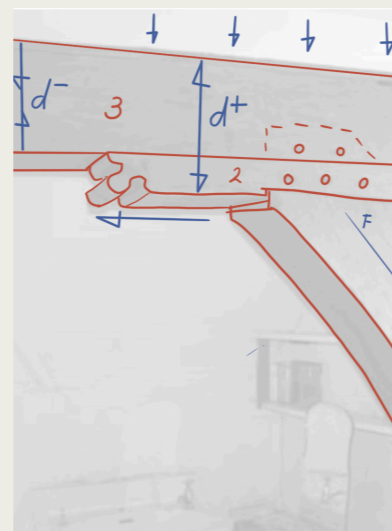
Curvature

Curvature is the use of natural grain direction to carry a directional change in load path.



Tolerance

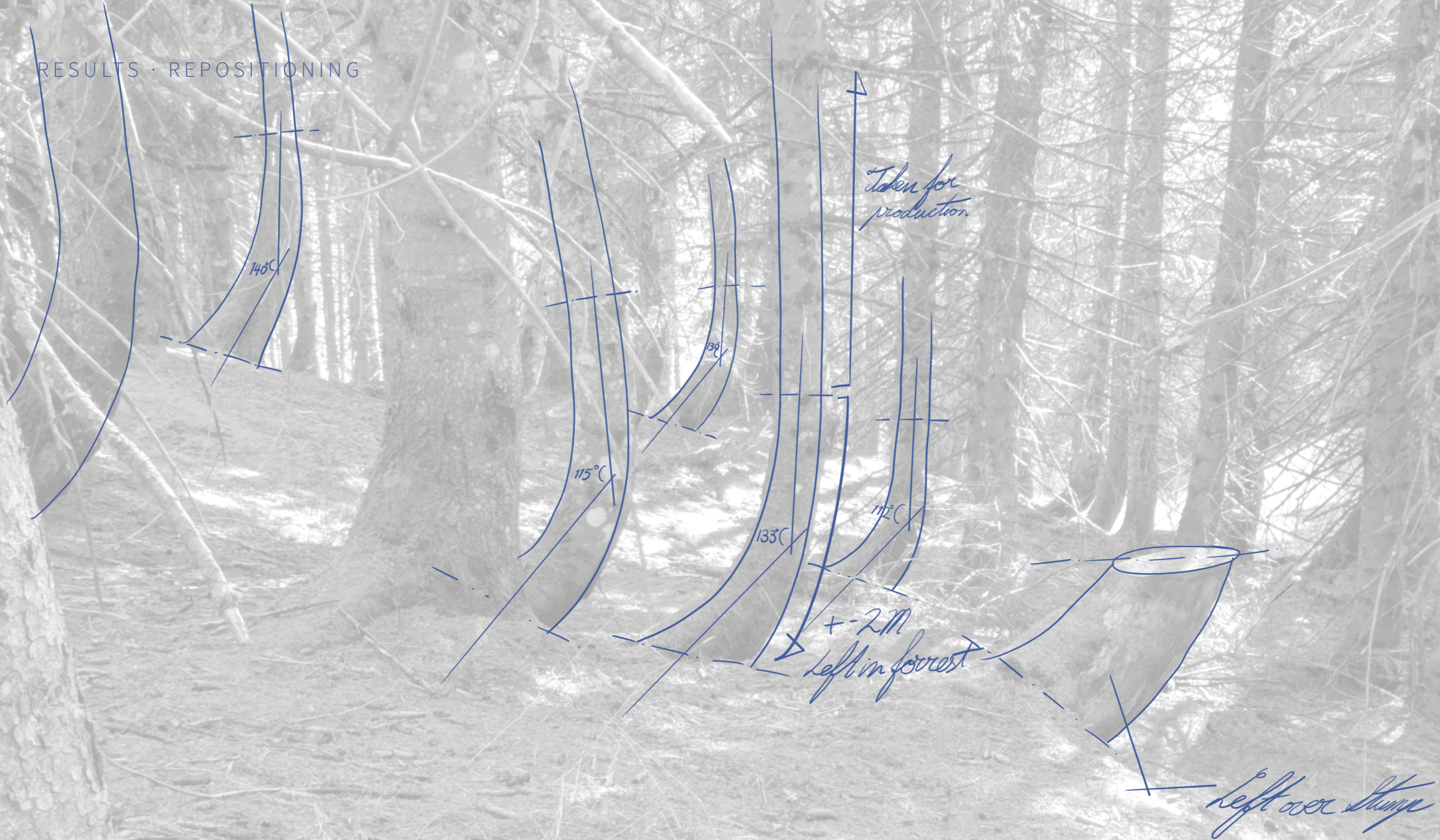
Tolerance is the absorption of variation at a chosen interface so that the rest of the structure stays geometrically fixed.



Node articulation

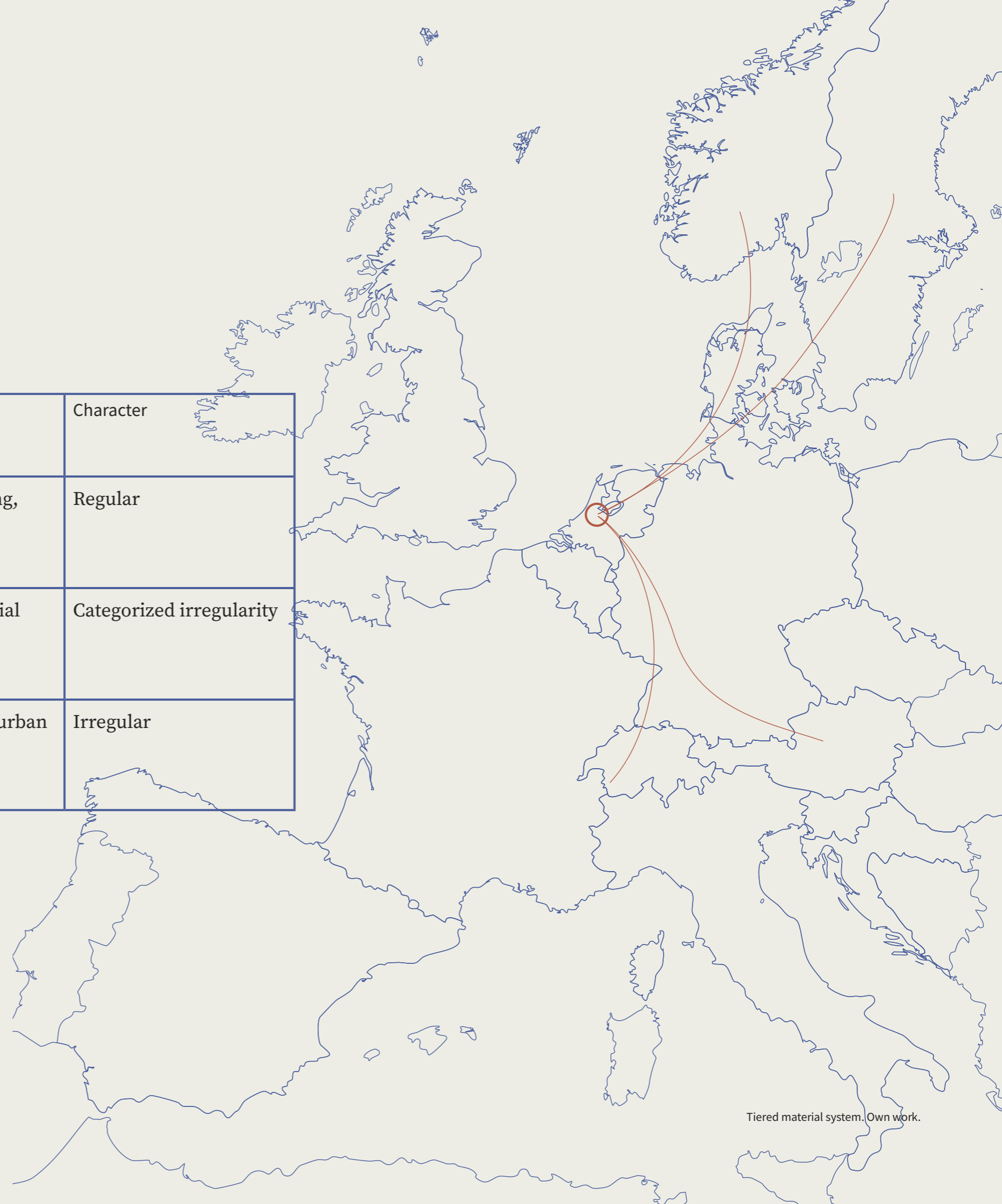
Node articulation is the resolution of several members meeting at one point into a thickening.

RESULTS · REPOSITIONING



The material

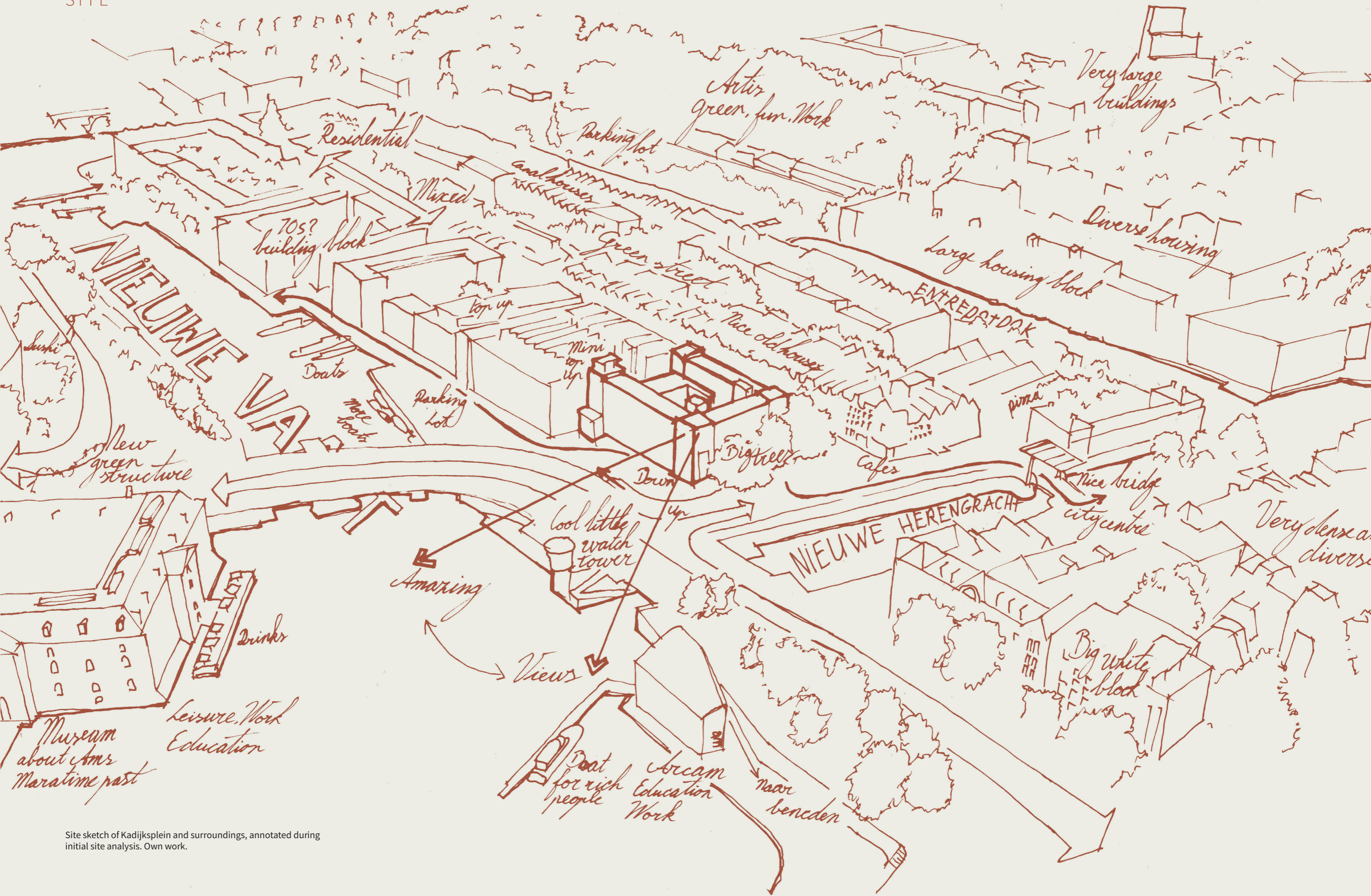
	Structural role	Fabrication	Character
Tier 1 European grad- ed softwood	Primary structural field	Industrial milling, prefab	Regular
Tier 2 Slope grown spruce	Directional change	Adapted industrial milling, Prefab	Categorized irregularity
Tier 3 Urban hard- wood	Node intensification and cladding	Hand tools and urban milling, on-site fitted	Irregular





EXTERIOR ZEEMANSHUIS (OWN IMAGE)

SITE



Site sketch of Kadikjksplein and surroundings, annotated during initial site analysis. Own work.

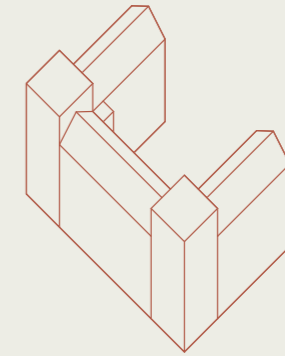
SITE



1856



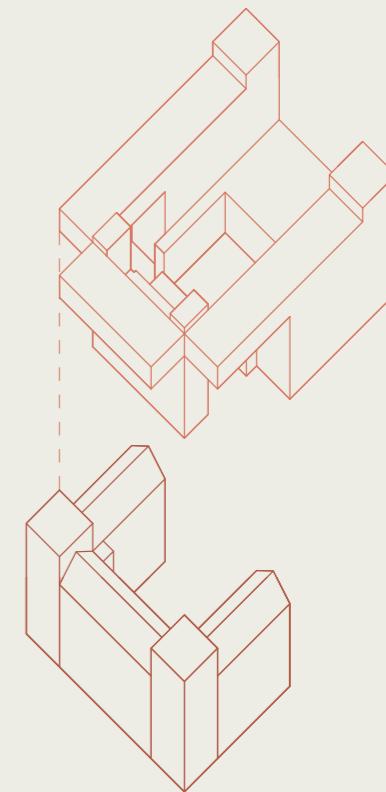
Founded for sailors
Community, dignity, belonging, education



1920



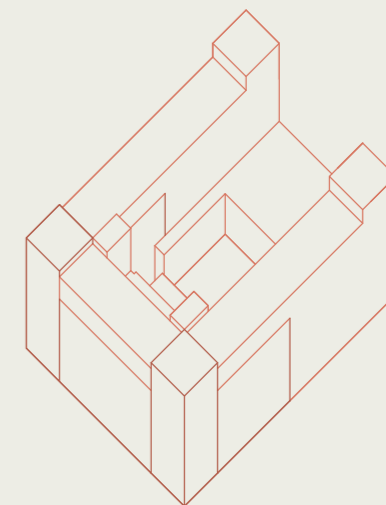
Expansion by Baanders
The second layer



2026



A new community
Community, dignity, belonging, education



User Precedents



Restarters

- typically aged 25-45
- socially-minded, short stay
- diverse set of collective spaces



Creatives

- do creative work professionally or as a hobby
- strong community bonds
- need space for their passion
- need space for thought exchange



Young Professionals

- socially-minded
- have a lot of friends
- co-working spaces



Local Starters

- grew up in the city and want to stay there
- long and short term
- socially-minded
- have a lot of friends and family



Educators

- range of ages
- short and long term stay
- socially-minded
- concentration spaces, work spaces, debate spaces



Active later living

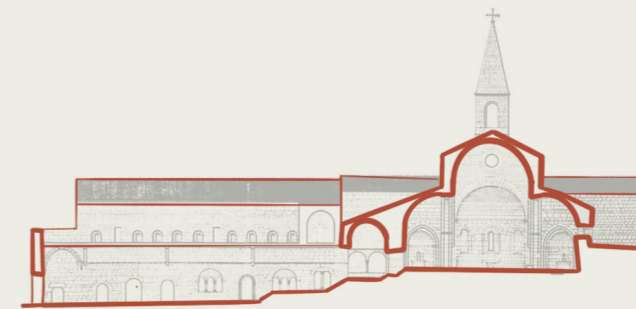
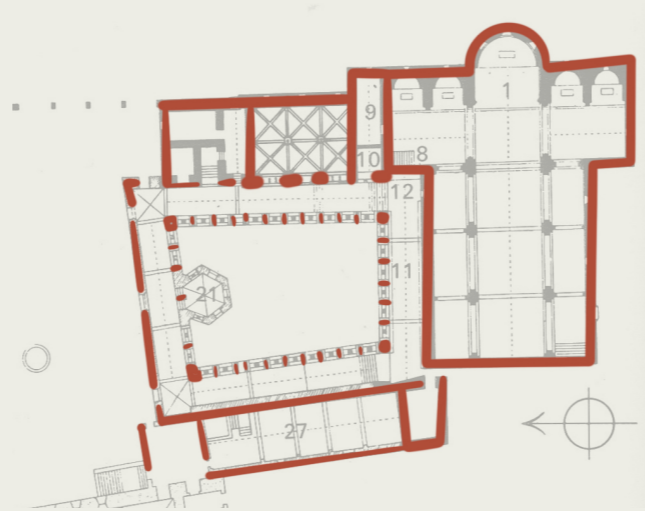
- aged 60+
- want to be surrounded by vibrant -city life
- long term stay
- socially-minded, very active
- spaces for (grand)children to stay



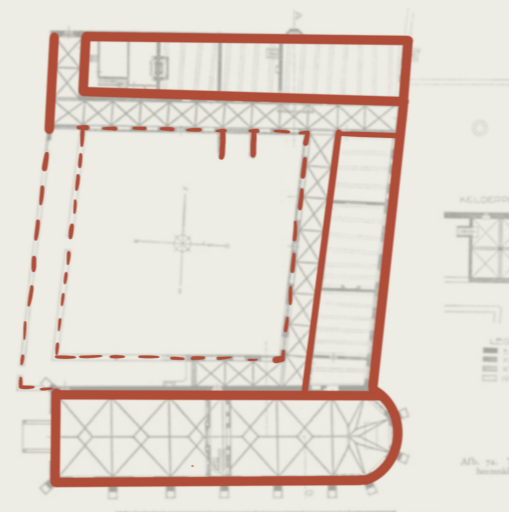
Spatial Precedents

Stripped of its religious function, the cloister offers one spatial rule: a gallery fully encloses a courtyard and mediates between private cell, shared room, and open centre.

The gallery need not sit beside the courtyard at every point — as long as its continuation always brings you back.

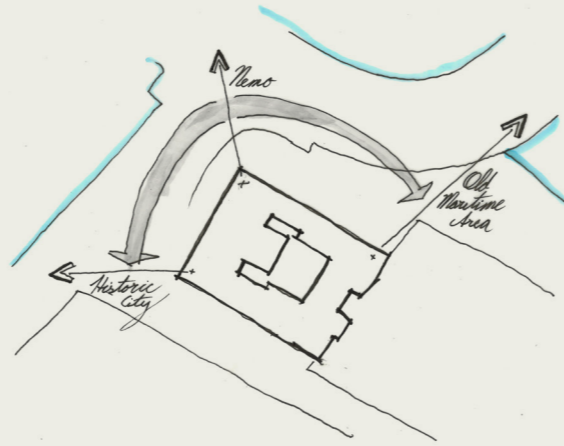


Plan and section of Abbaye du Thoronet. Base drawing: after Le Thoronet abbey survey drawings (CMN). Overlay: own work.

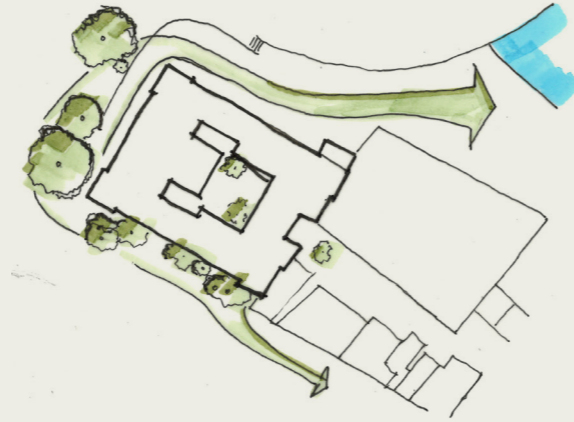


Plan and section of Klooster Ter Apel. Base drawing: Rijksdienst voor het Cultureel Erfgoed. Overlay: own work.

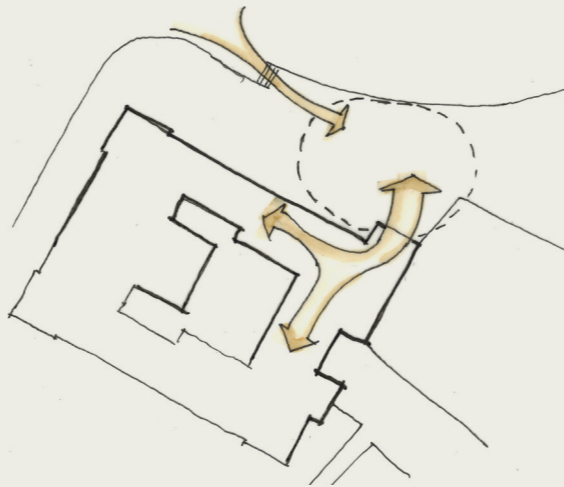
Key Takeaways



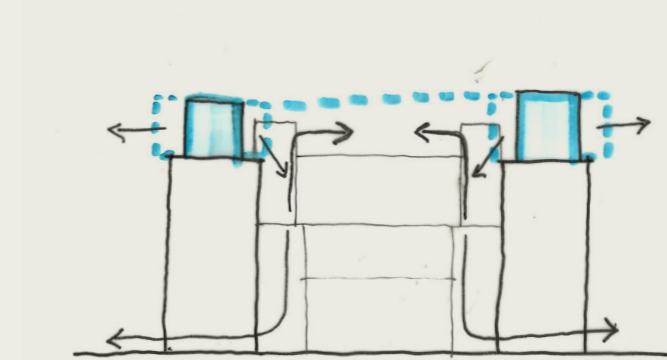
Designing with a view



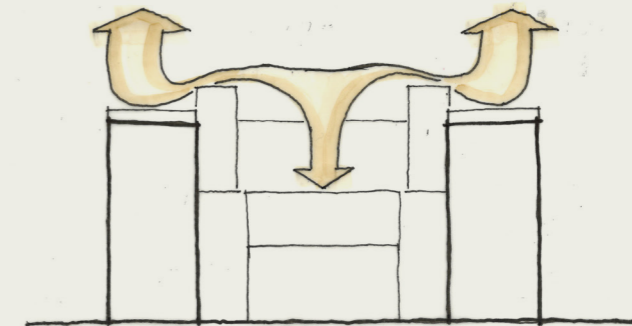
Expanding green structures



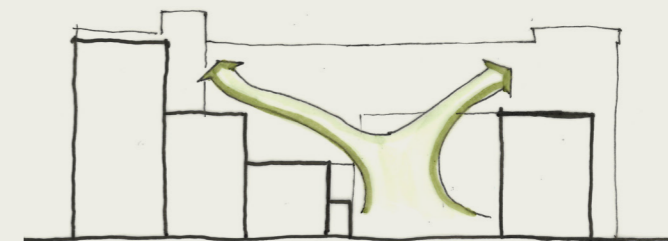
Reactivating the street area



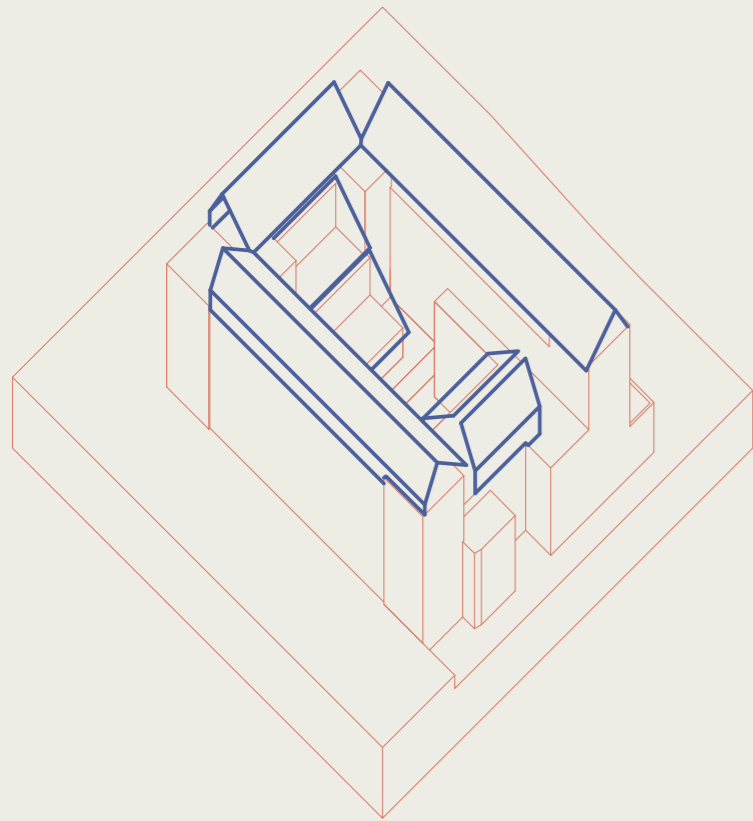
Courtyard informed circulation



Utilizing the available roofscape

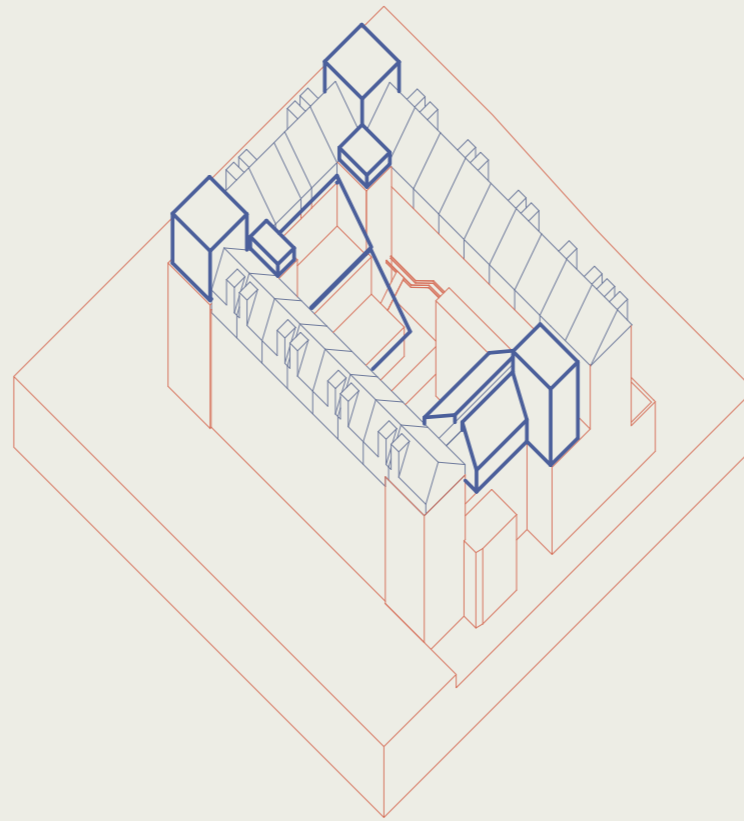


Extending the courtyard vertically



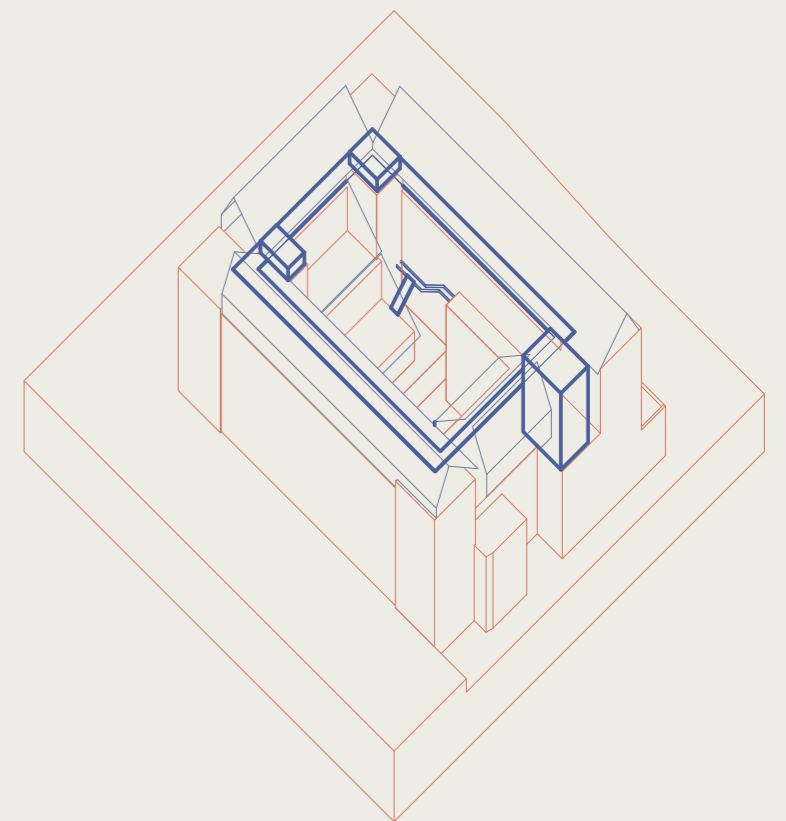
ROOFSCAPE AS SPATIAL ORGANISER

Roofscape as spatial organiser. The added roof becomes the primary spatial organiser. A new attic level above the building and a cascading glass roof inside the courtyard mediate between old and new, structuring circulation and shared use across multiple levels.



DISTRIBUTION OF COLLECTIVE SPACE

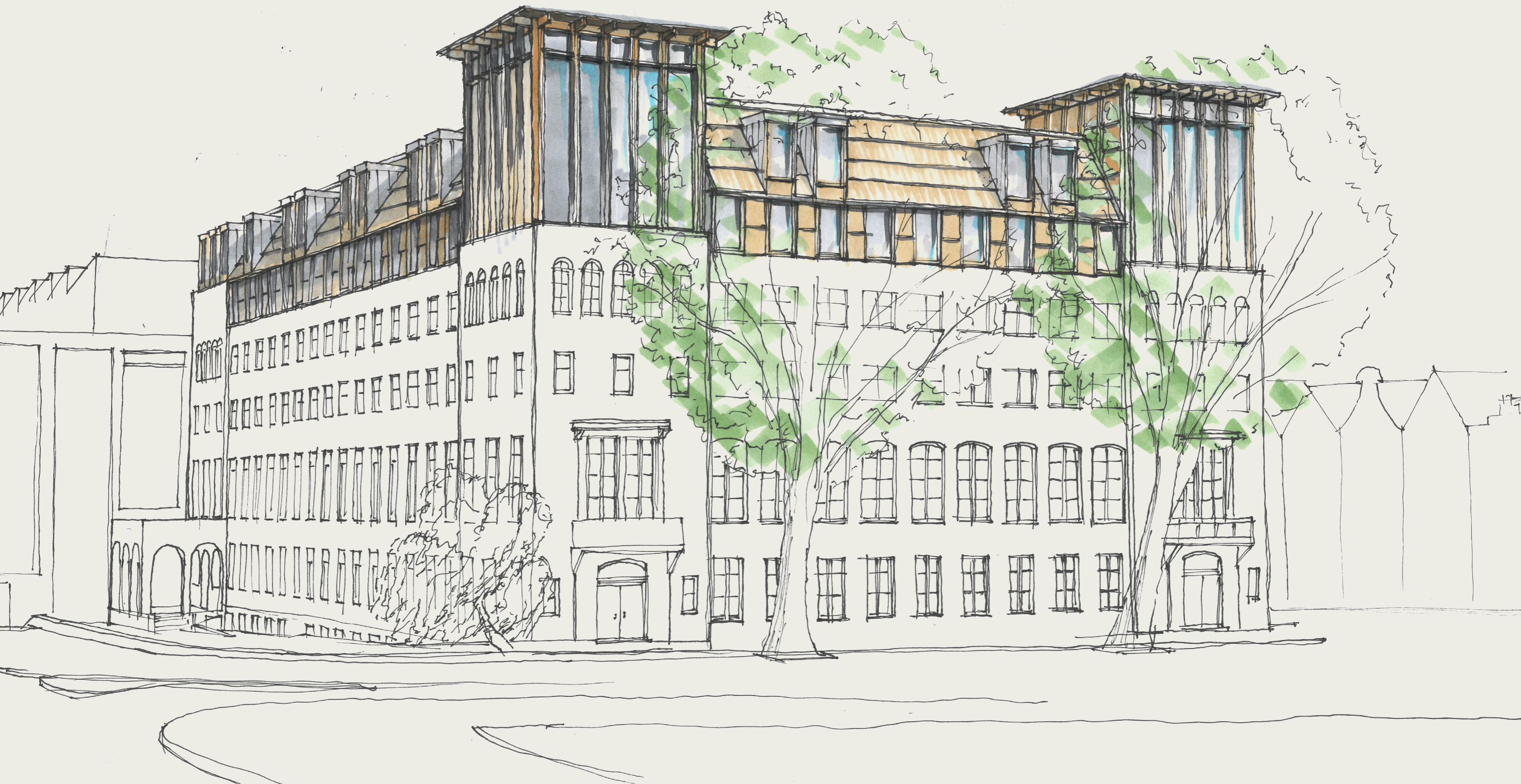
Collective spaces occupy the two corners, reinforcing the existing tower typology. A maker space and the sheltered courtyard terraces extend the shared programme to the lower levels providing communal space for both the old and new users.

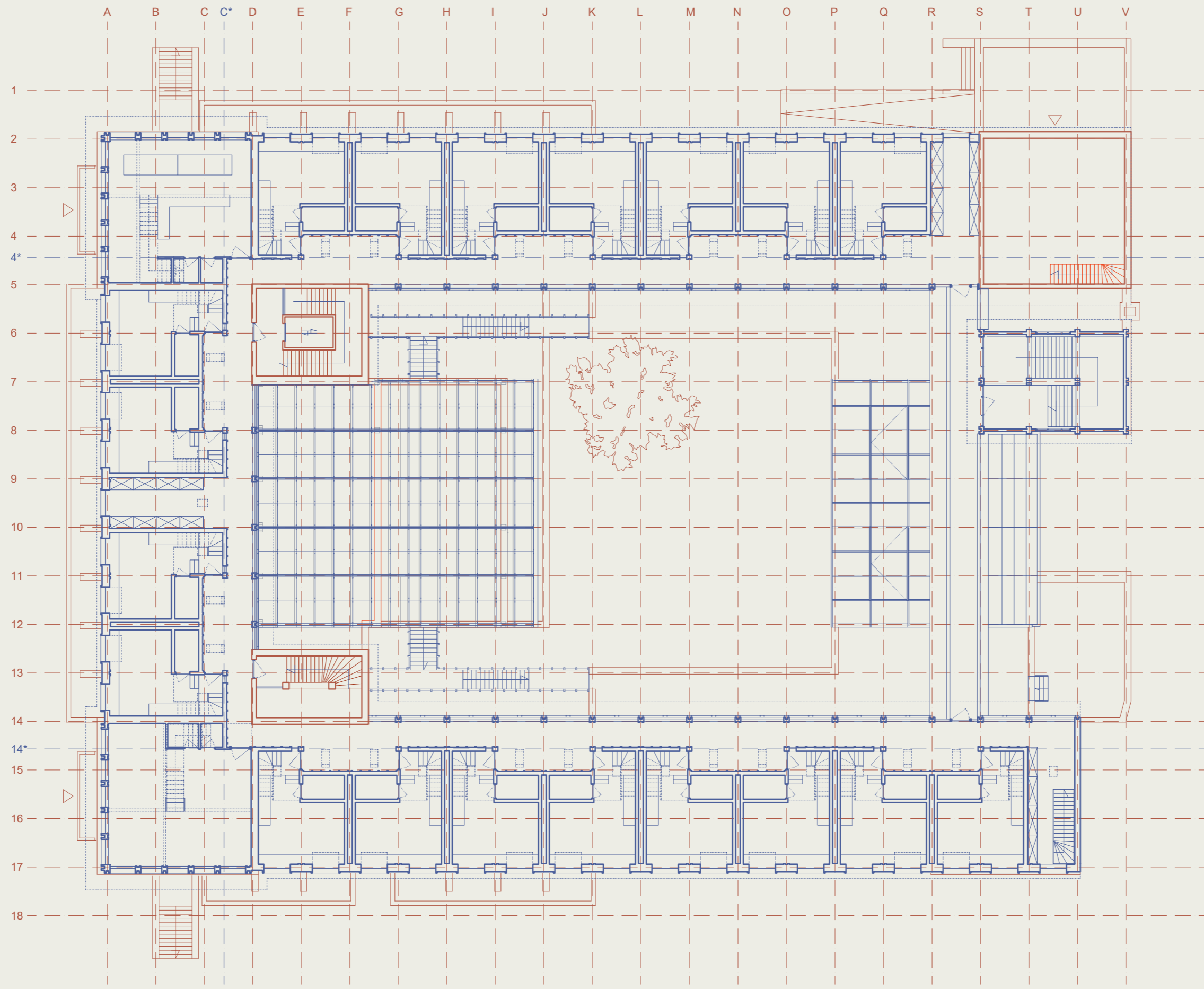


ENCLOSING CIRCULATION

A continuous gallery wraps the courtyard and binds the residential clusters together. The existing vertical cores and a new staircase integrate the addition into the circulation logic of the building below.

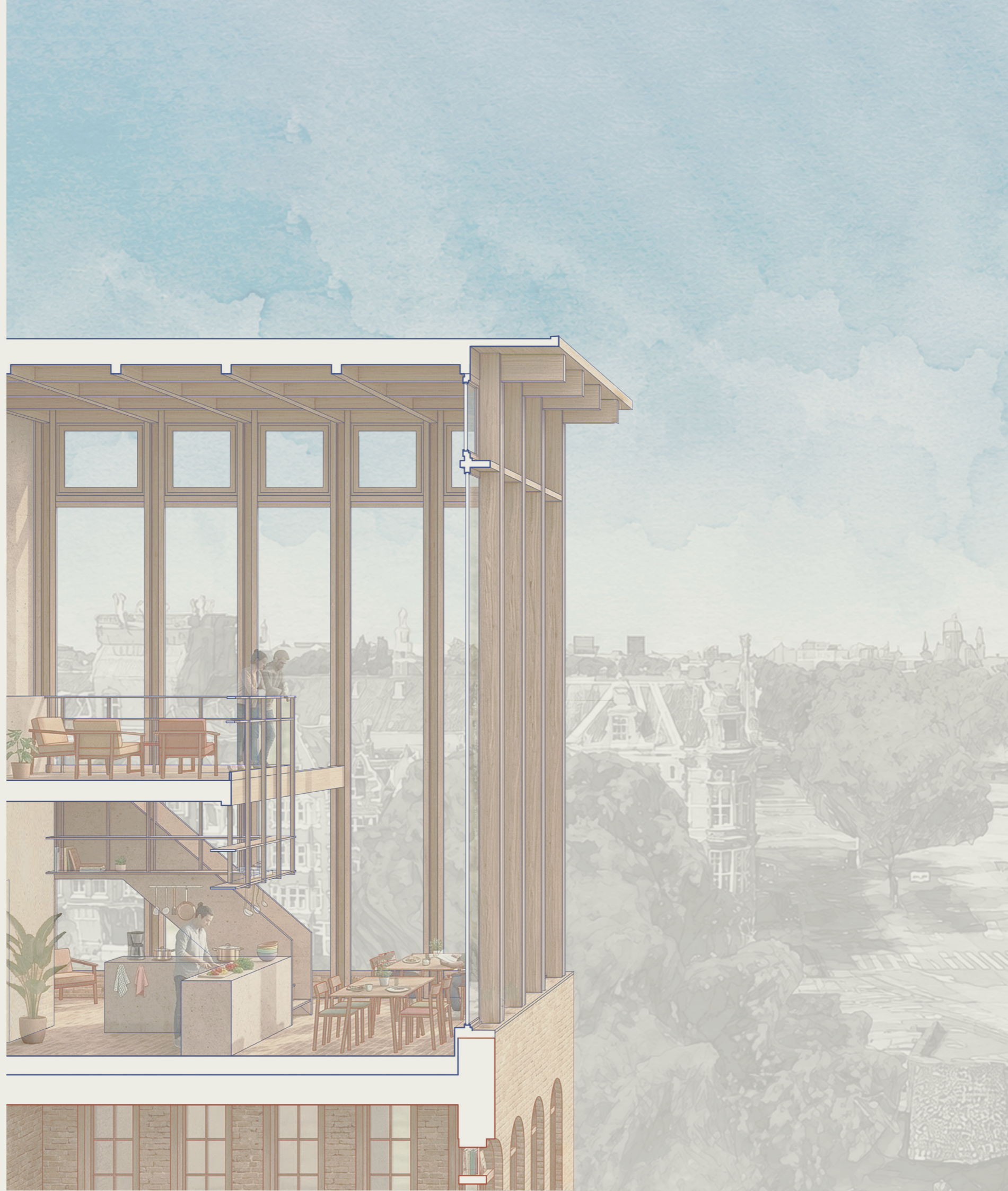
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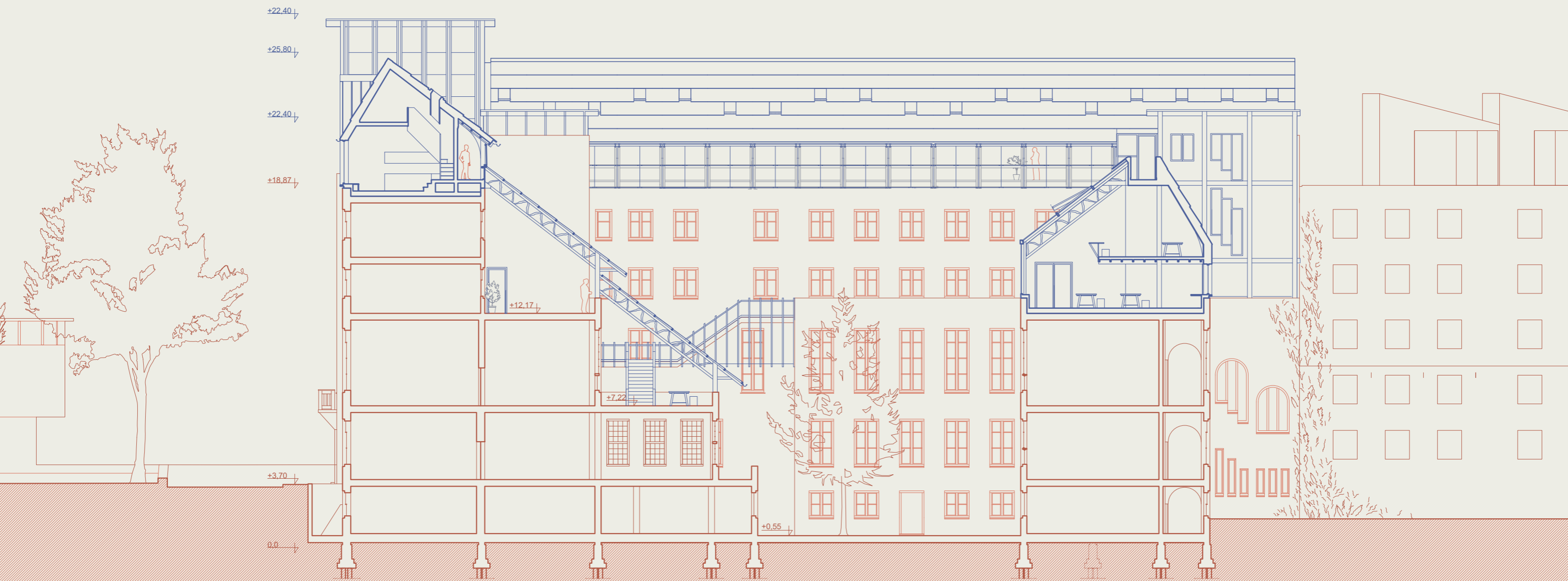


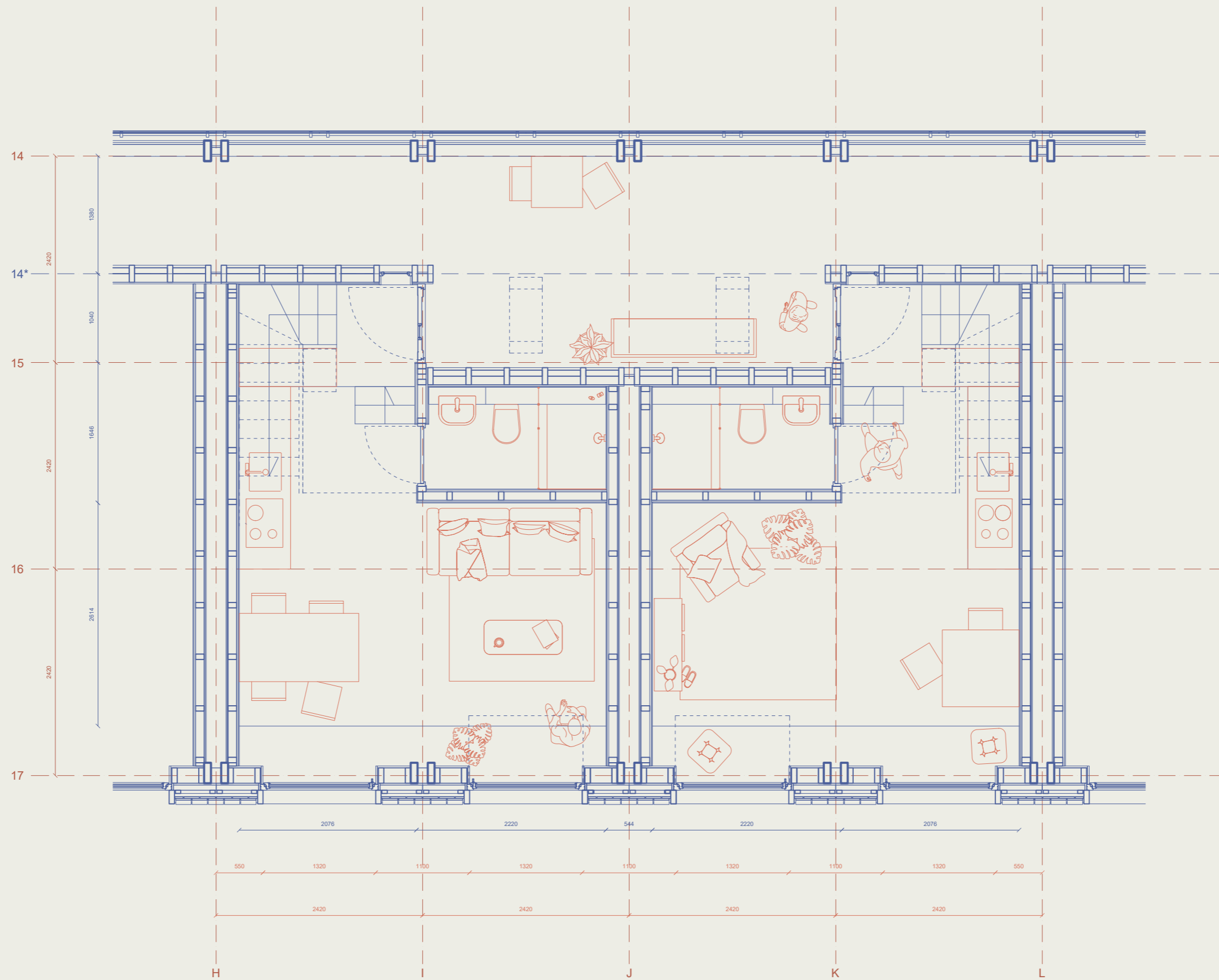
WEST ELEVATION 1:200

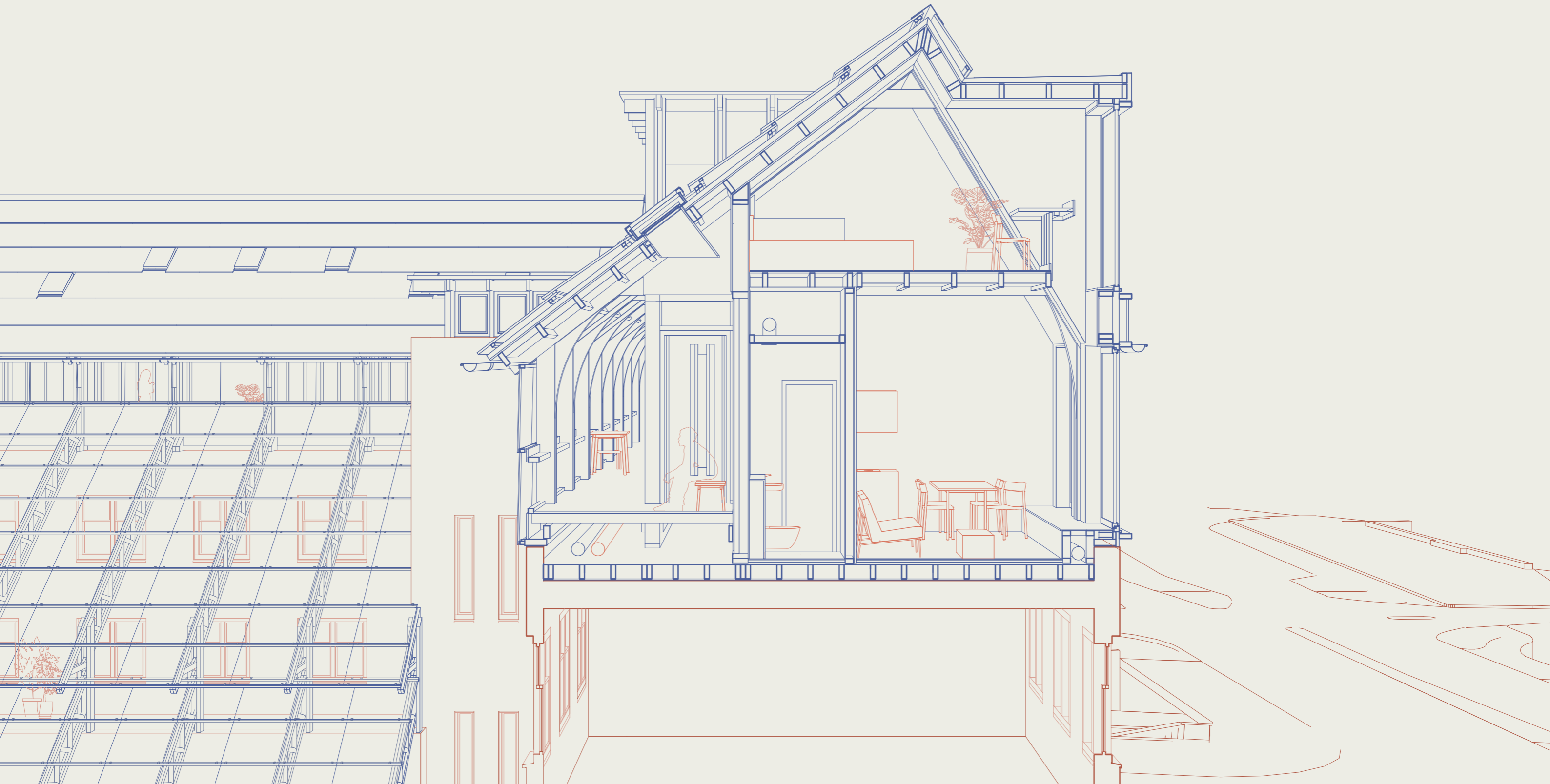


COMMUNAL KITCHEN

SECTION AA 1:200

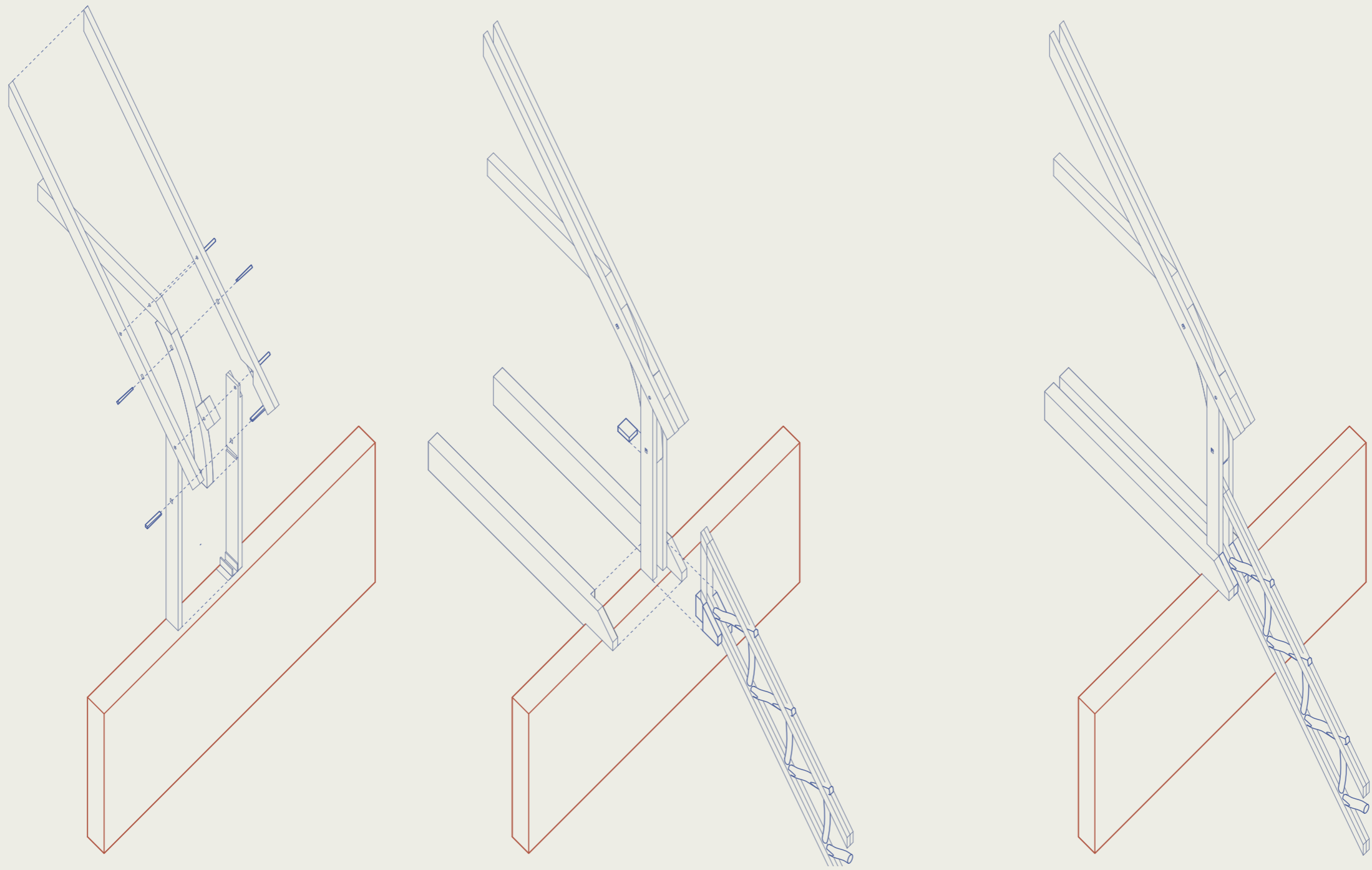


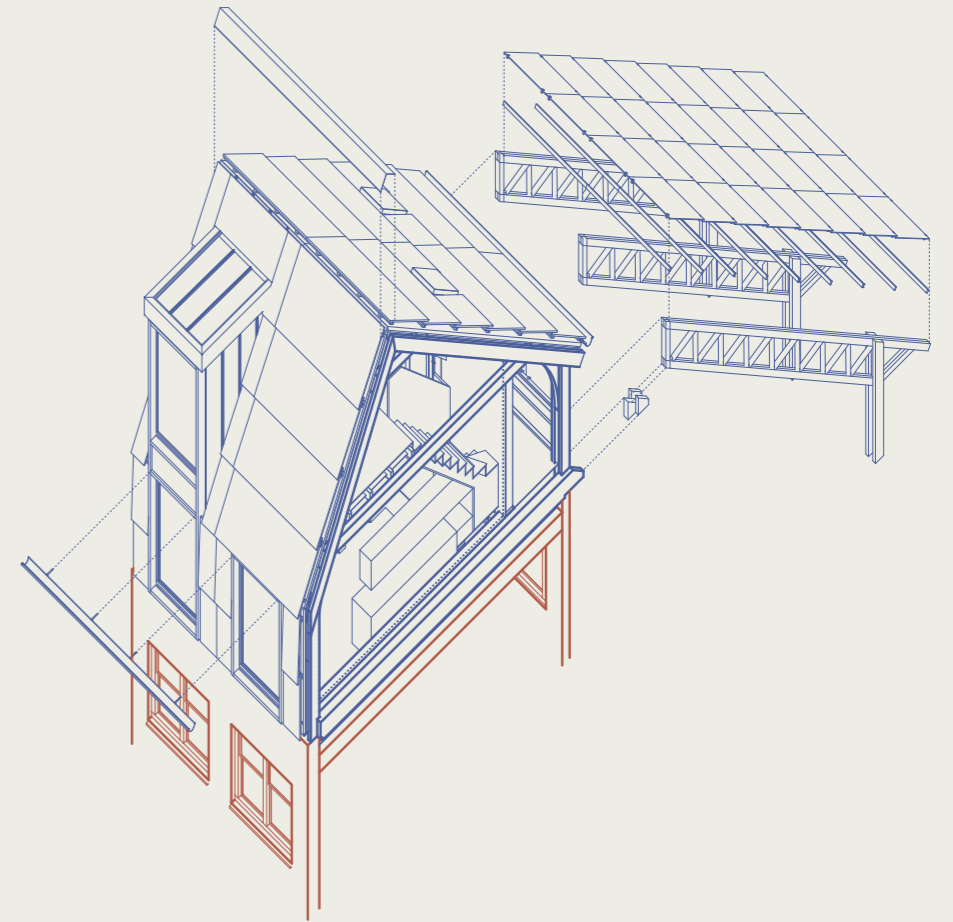
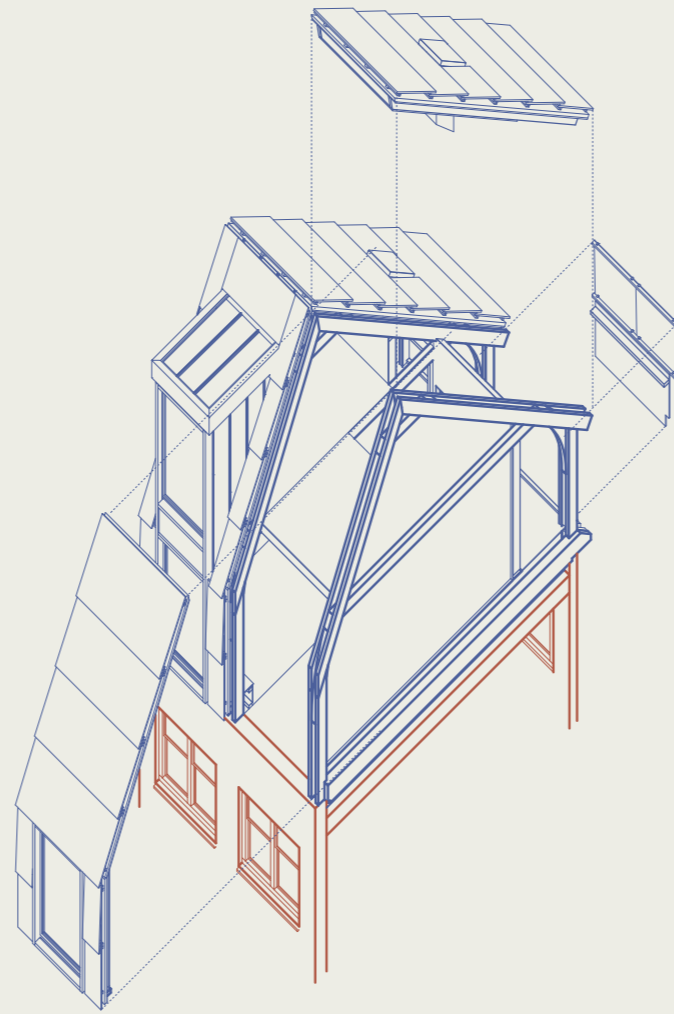
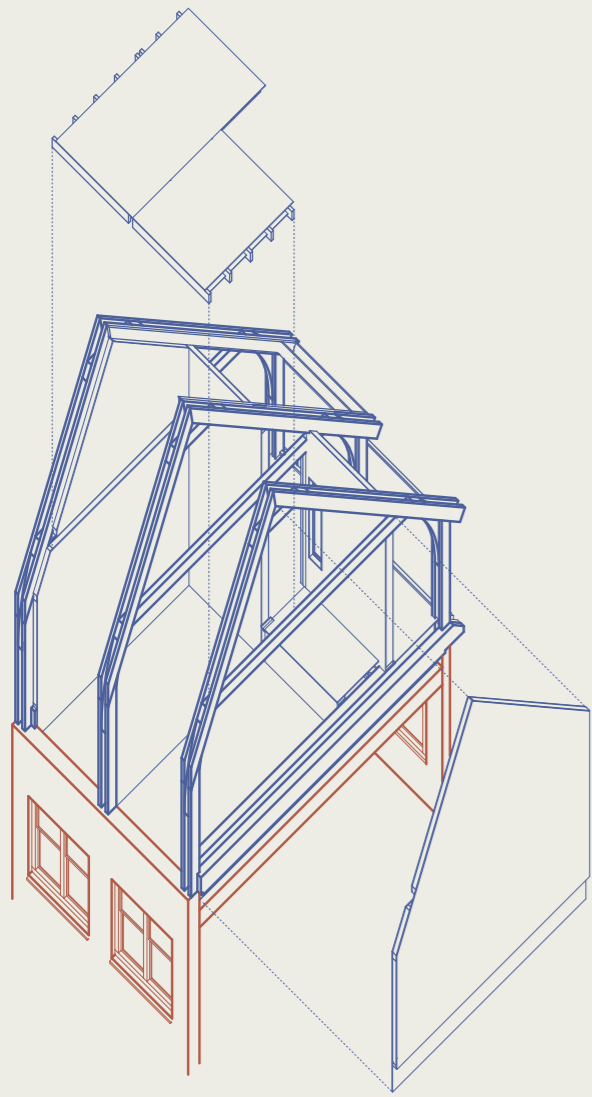




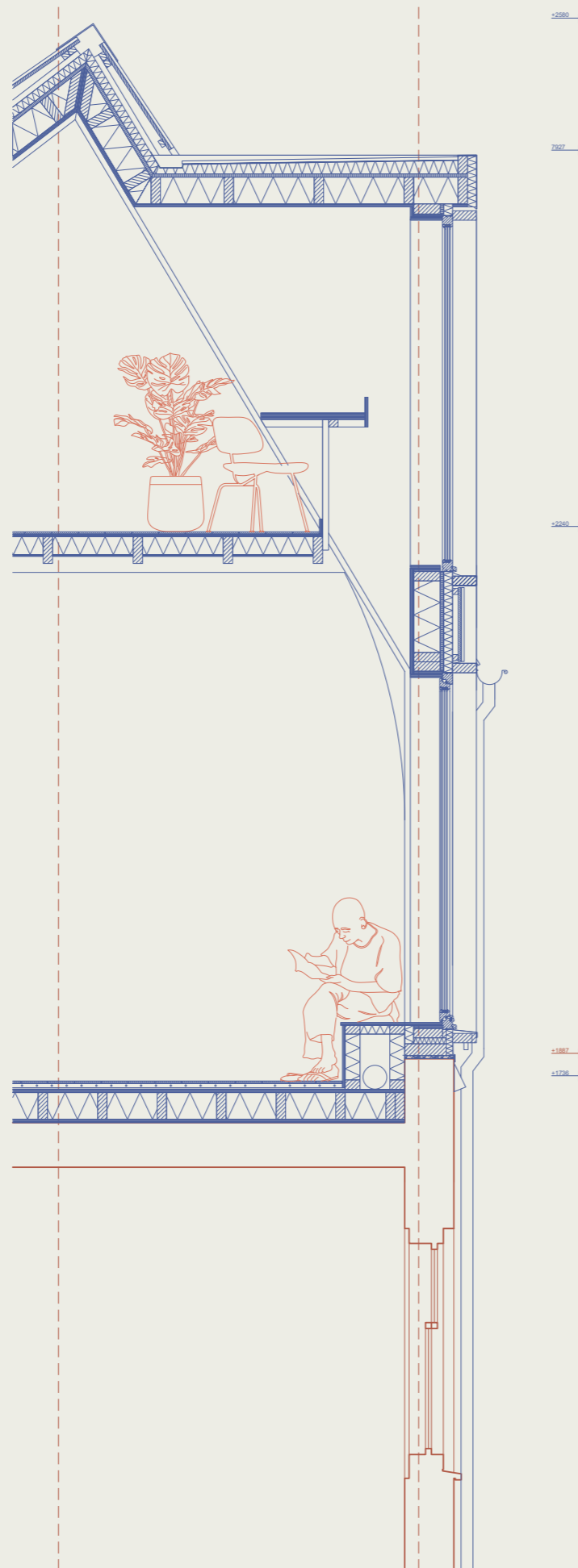












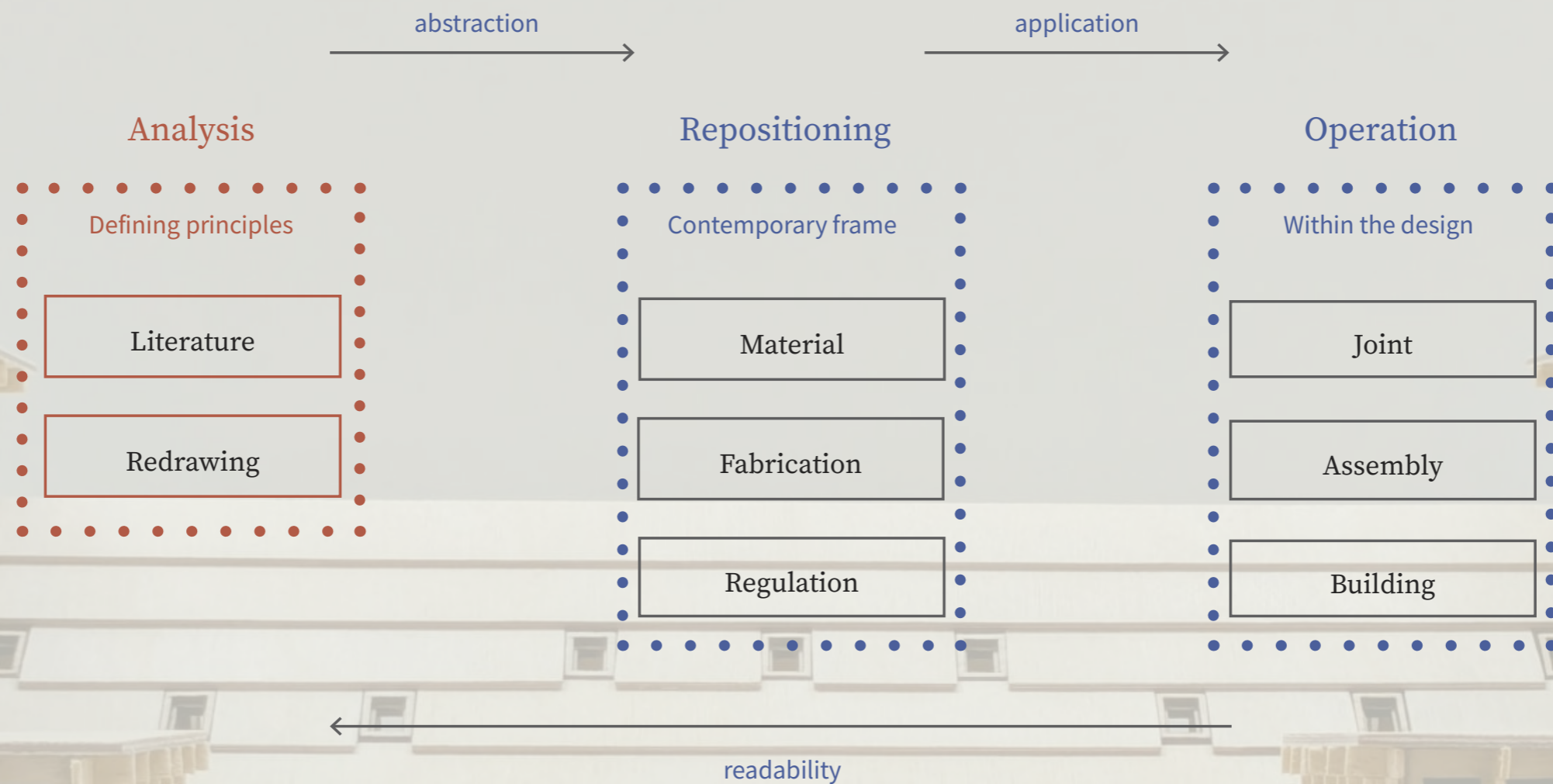
±2580
±2327
±2240
±1882
±1720





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