

Between the Known and the Possible

Reconstructing Identity Through Architecture in Sana'a, Yemen

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Between the Known and the Possible

**Reconstructing Identity Through Vernacular Architecture and
Post-Conflict Design Frameworks in Yemen**

Old city of Sana'a



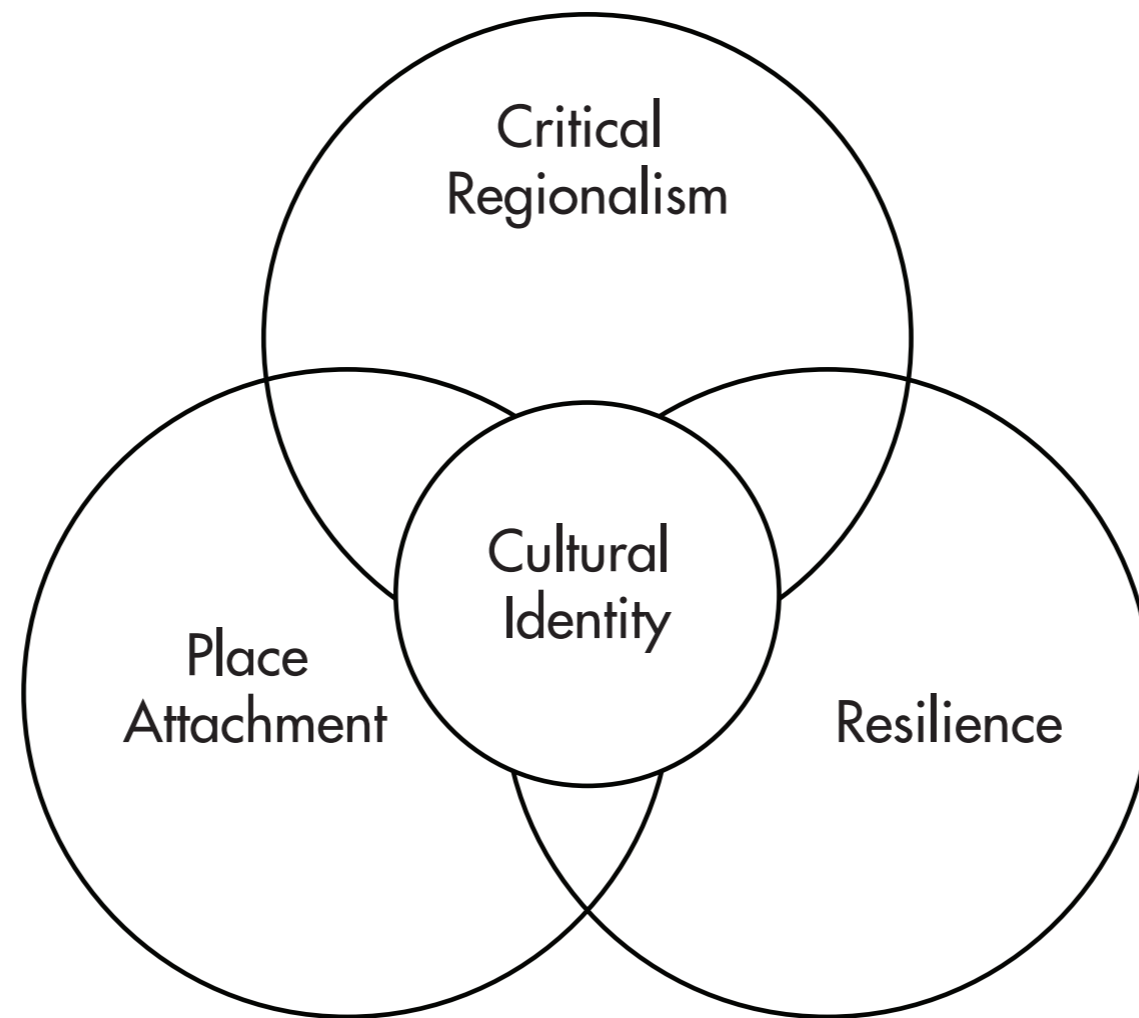
Sana'a post destruction

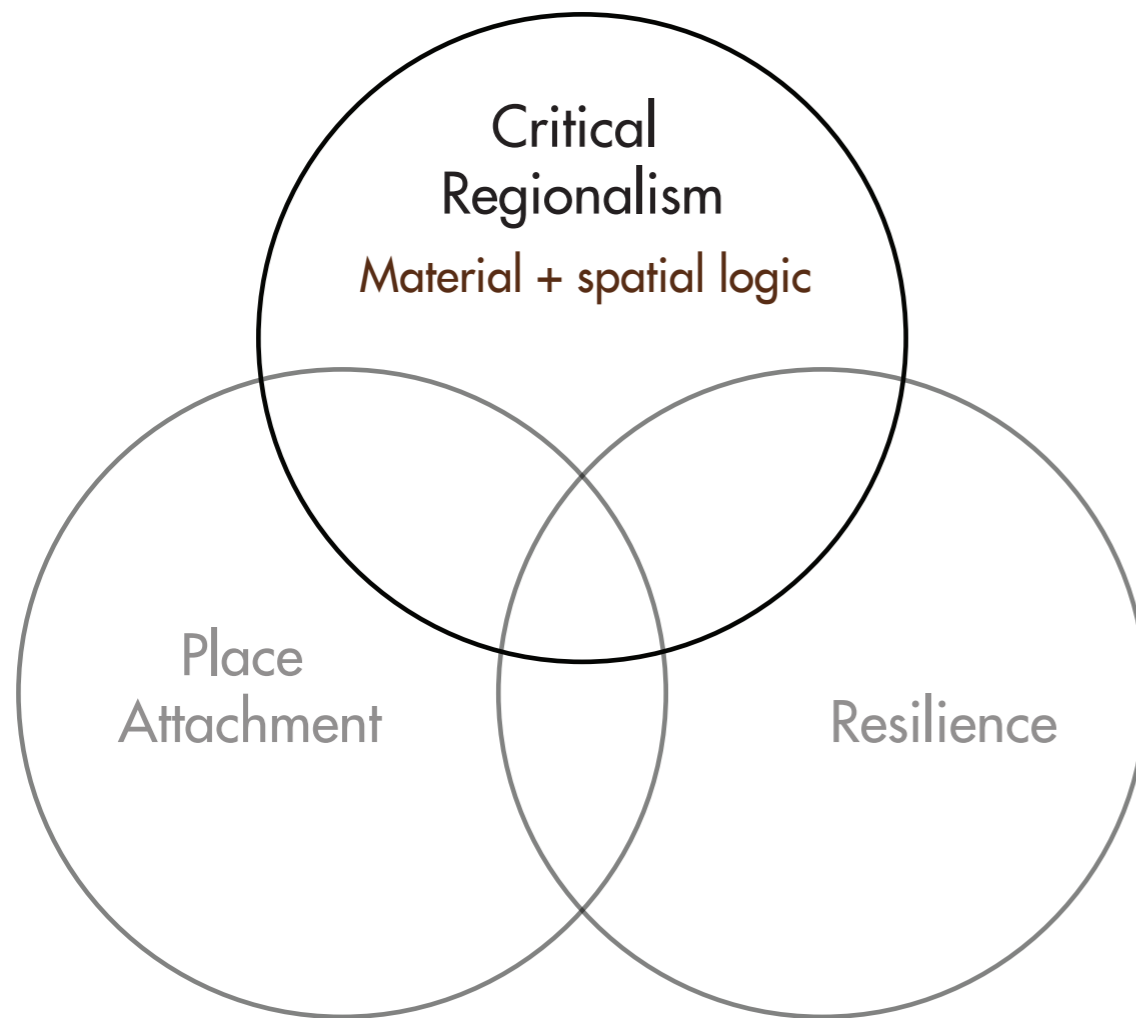


Sana'a today

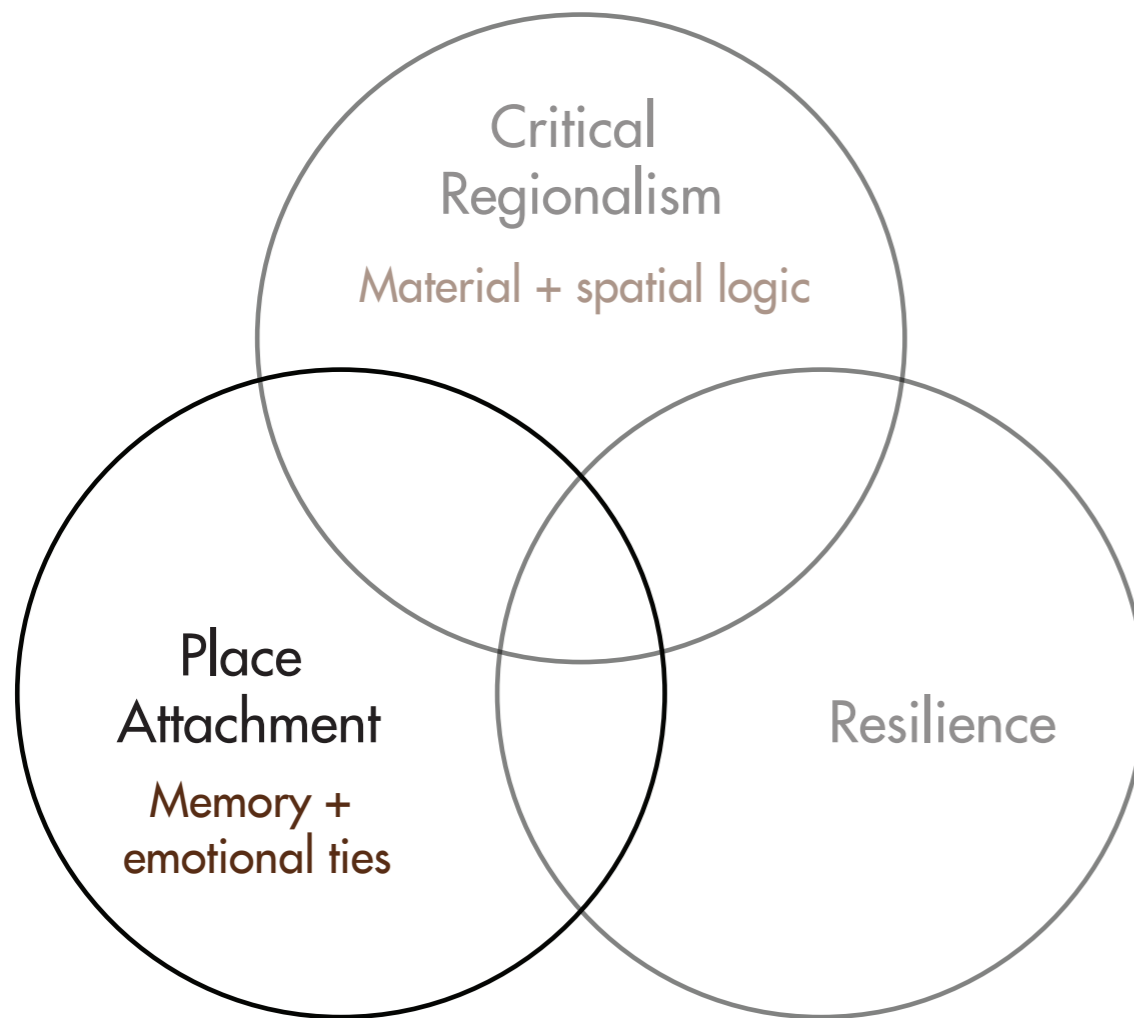


How can vernacular elements contribute to a more sustainable, culturally and contextually sensitive reconstruction of Sana'a, Yemen?

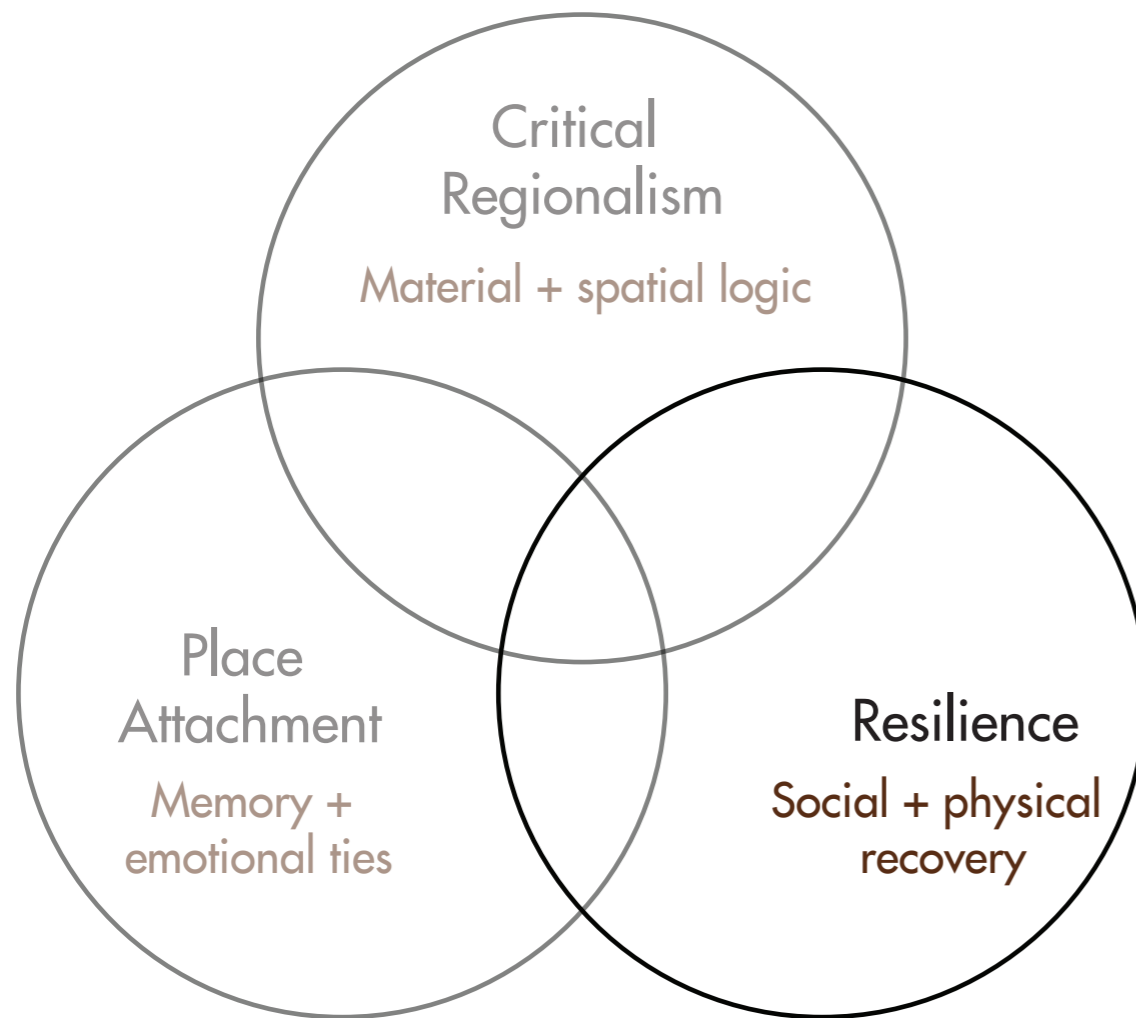




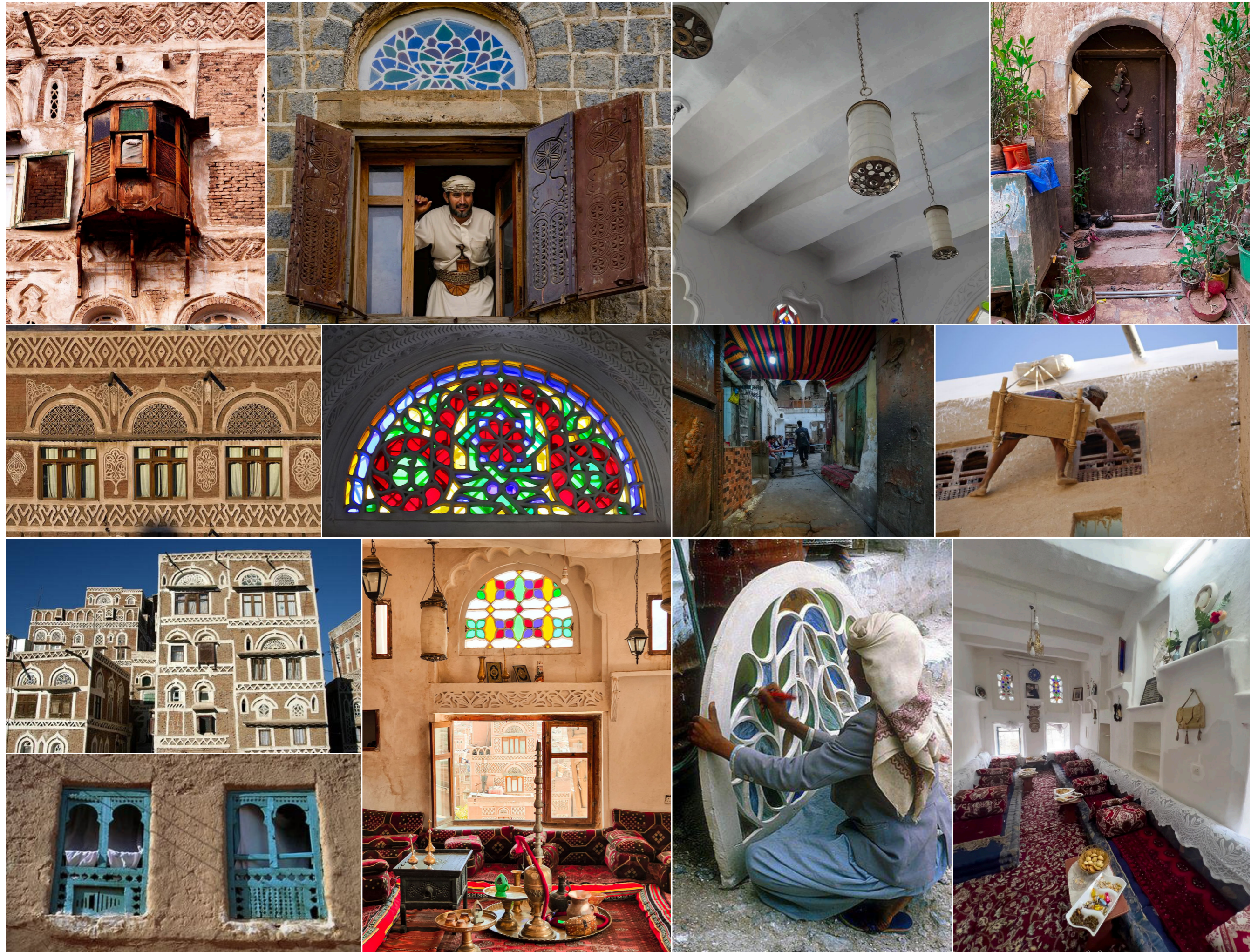
Critical regionalism is an architectural approach in which the importance of cultural, historical, and environmental context is emphasised throughout the design process.



Place Attachment Theory is the emotional and psychological bonds that people form with their physical environments.



Resilience can be described as the ability of a city or community to recover from trauma and rebuild itself.





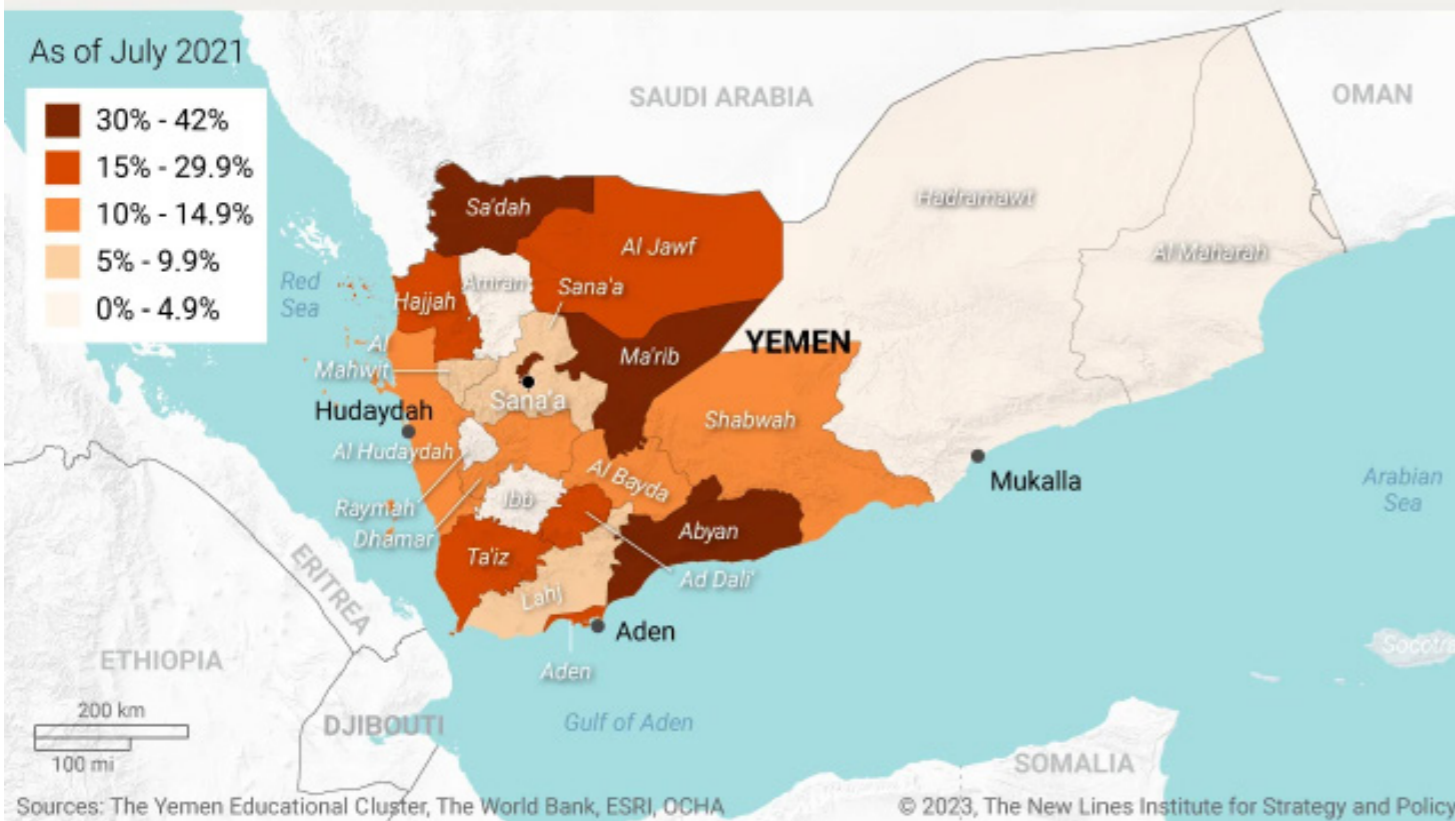
Beirut, Lebanon



Aleppo, Syria

Yemen's Schools Affected by War

This analysis uses damage estimates from the Yemen Educational Cluster and school locations from the World Bank to show which governorates have sustained the greatest damage to educational facilities from the country's conflict.



Eligible Girls and Women Not Attending School

Data from the Yemen Educational Cluster shows that the percentage of young women and girls not attending school is high across the country, and exorbitantly so in certain governorates.



Between the Known and the Possible

**Al-Qaws Girls Primary School - A Hybrid Vernacular Learning
Environment in Sana'a**

1

Culture continuity

Respecting and reinterpreting Yemeni Vernacular traditions to preserve identity after conflict.

- Earth based buildings
- Courtyards
- Local craftsmanship

2

Community & belonging

School as a social anchor to rebuild Collective identity.

- Shared courtyards
- Multi-purpose community halls
- Visual connections
- Gathering spaces

3

'Human scale' environment

Promoting comfort, safety, and familiarity for students in and outside the classroom.

- Transitional spaces
- Private nooks
- Low rise clusters

4

Adaptability & resilience

Designing spaces that can evolve, adapt, transform. Responding to social and environmental needs.

- Shaded outdoor learning spaces
- Space for growth or adaptation
- 'Consistent' layout

5

Climate responsiveness

Using passive design to ensure comfort and reduce energy reliance.

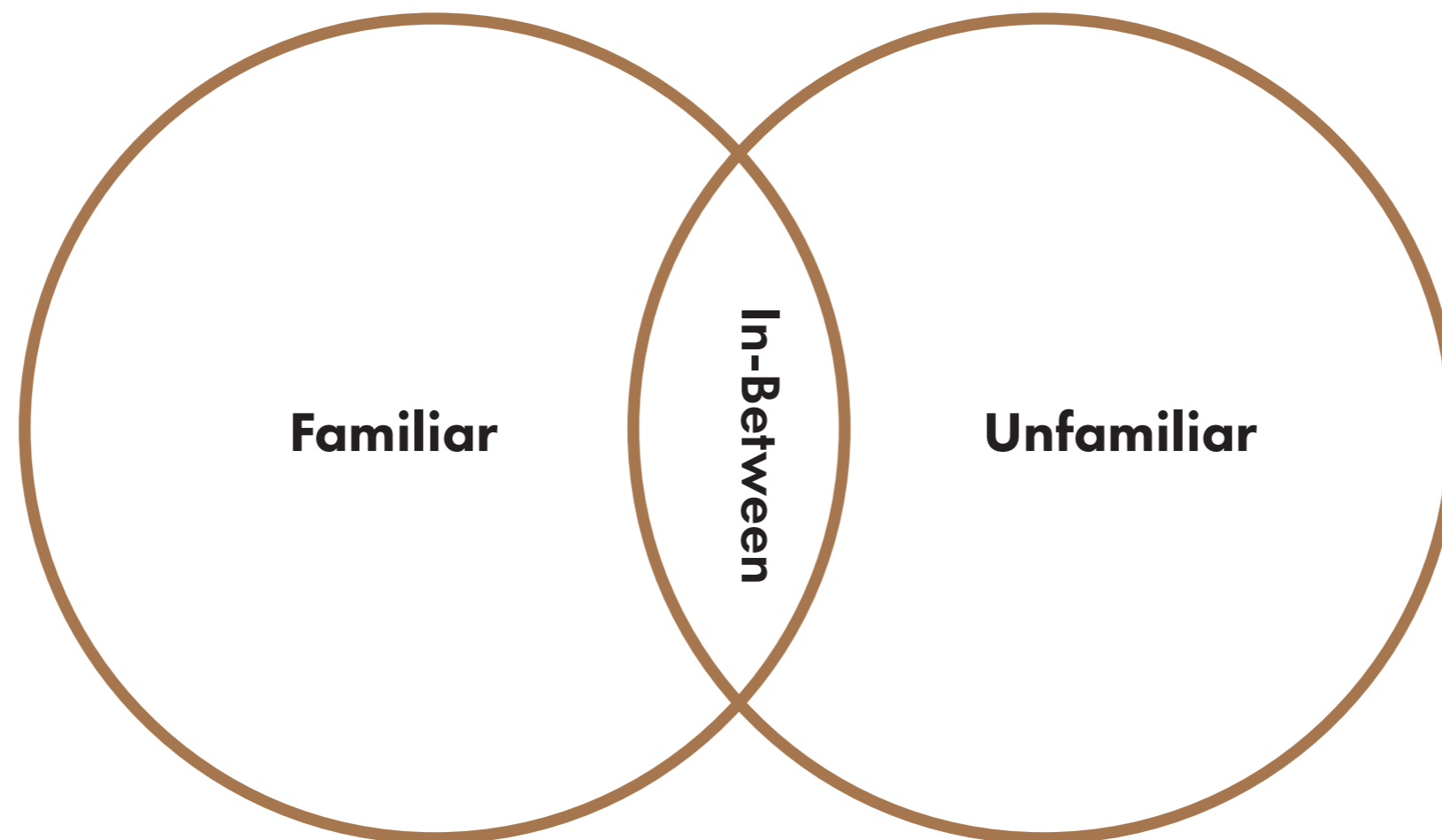
- Thick earthen walls
- Courtyards
- Shaded walkways
- Cross-ventilation

6

Inclusivity & gender sensitivity

Reflecting Yemeni social customs while Promoting equality and adaptability.

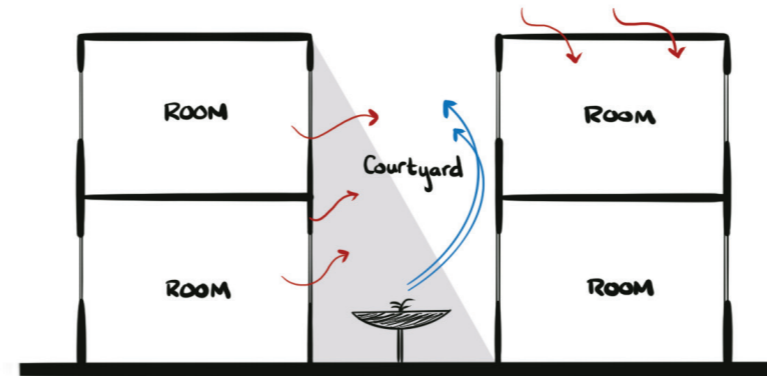
- Girls-only school
- Visual privacy screens
- Community focused spaces
- Room for expansion



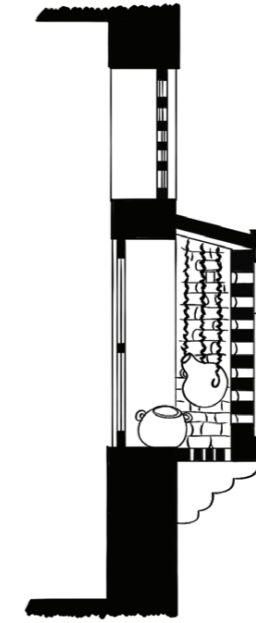
Familiar



Mashrabiya
Material + spatial logic

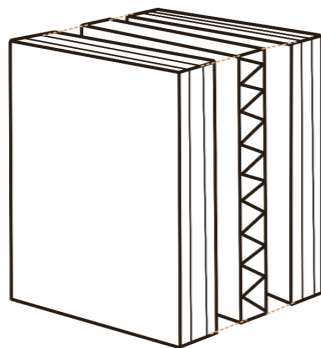


Courtyard
Memory + emotional ties

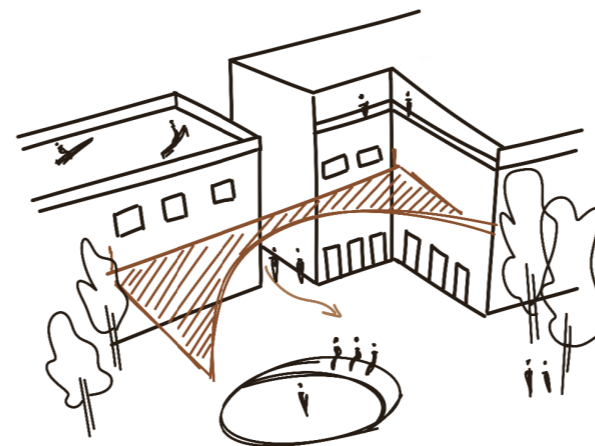


Thick walls
Material logic

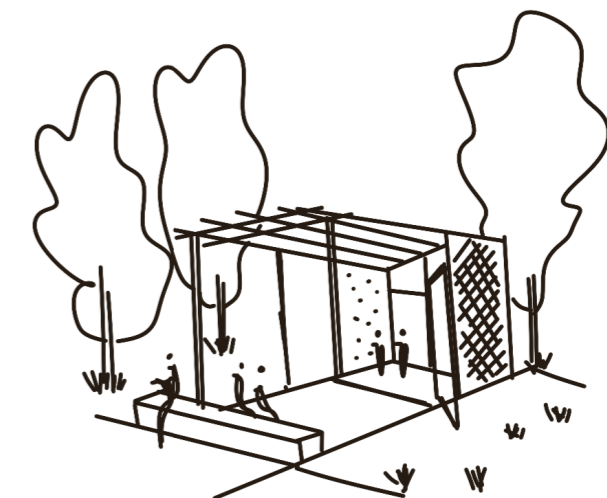
Unfamiliar



Modular timber systems
Material logic

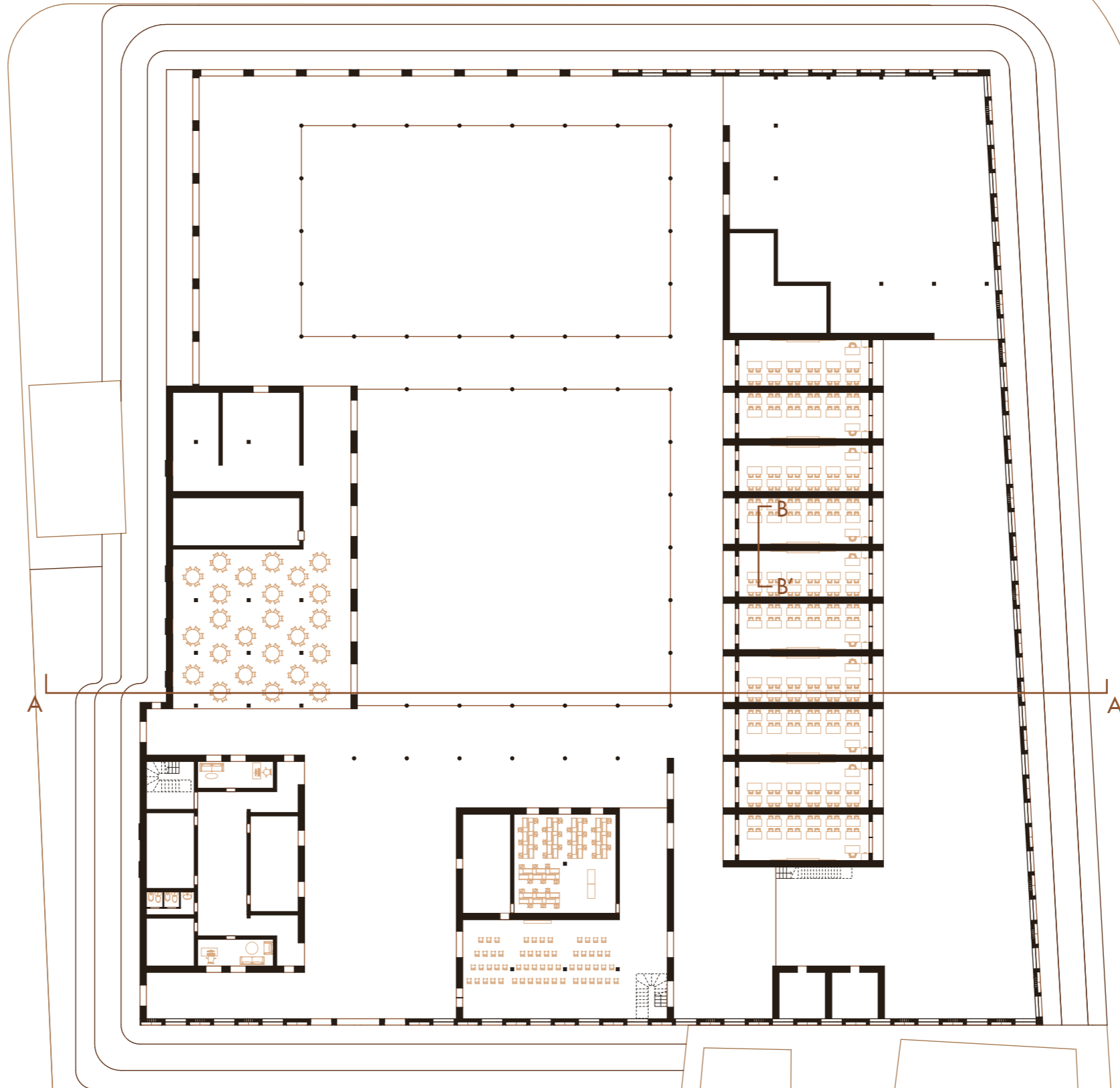


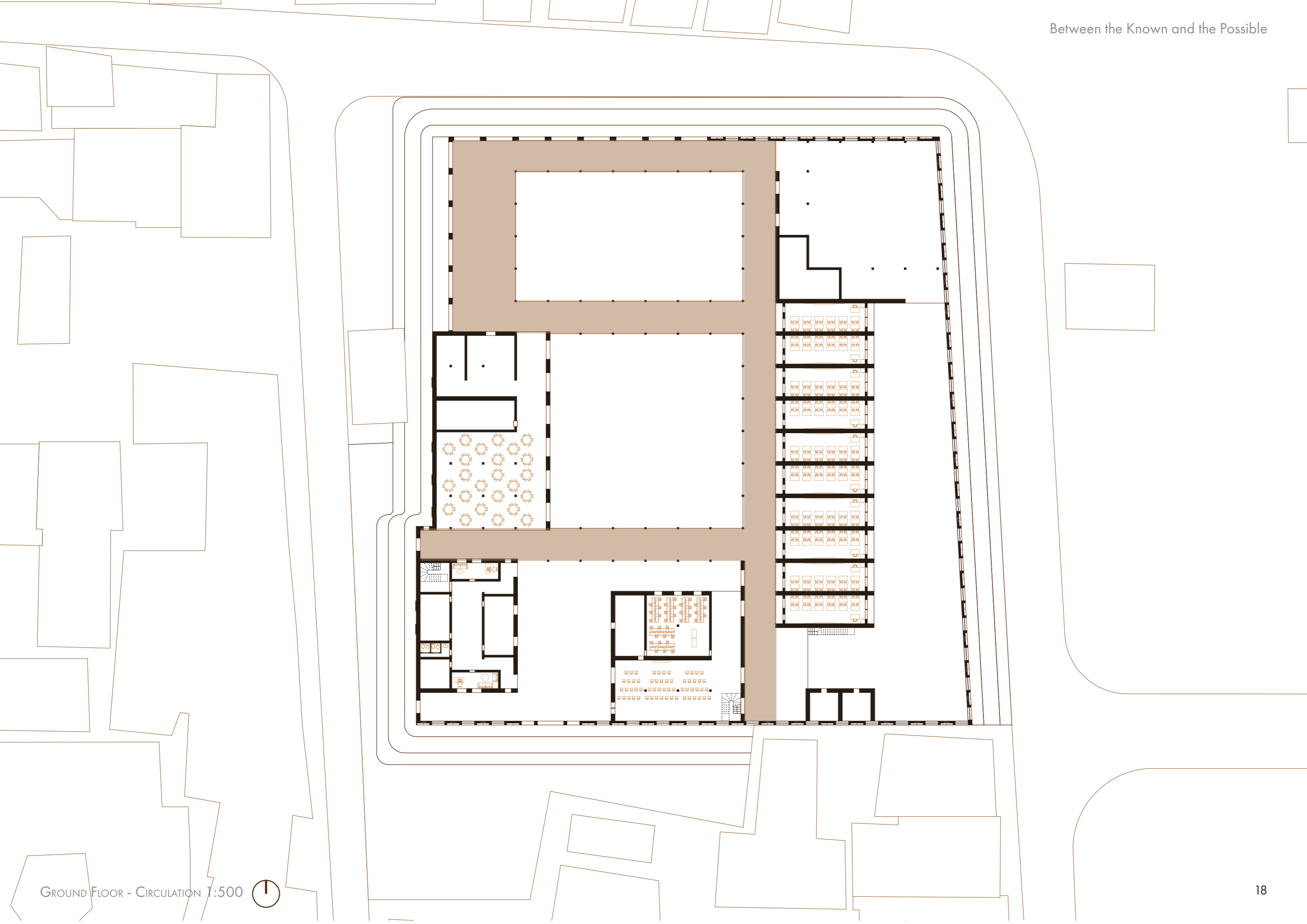
Community access
Emotional ties

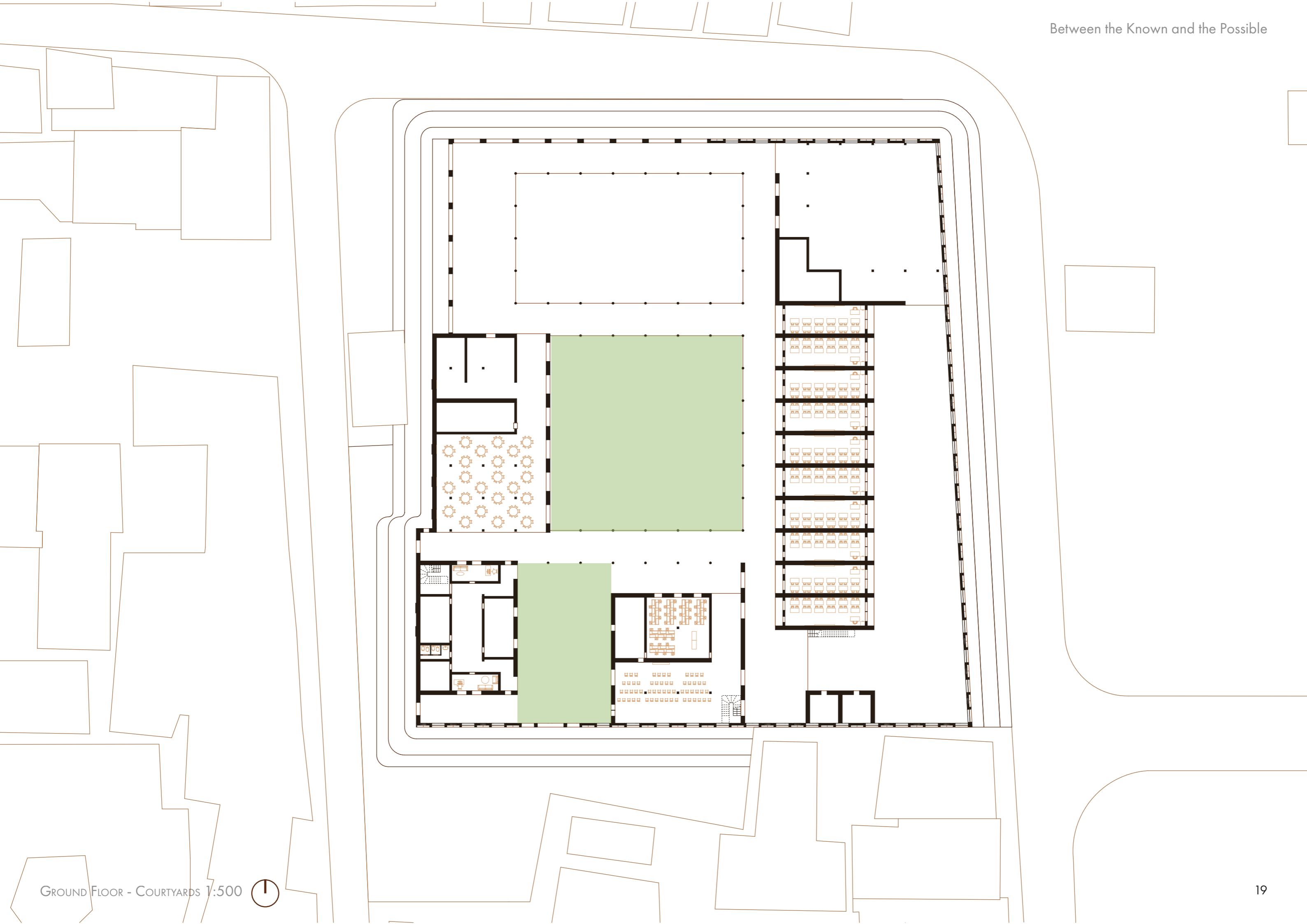


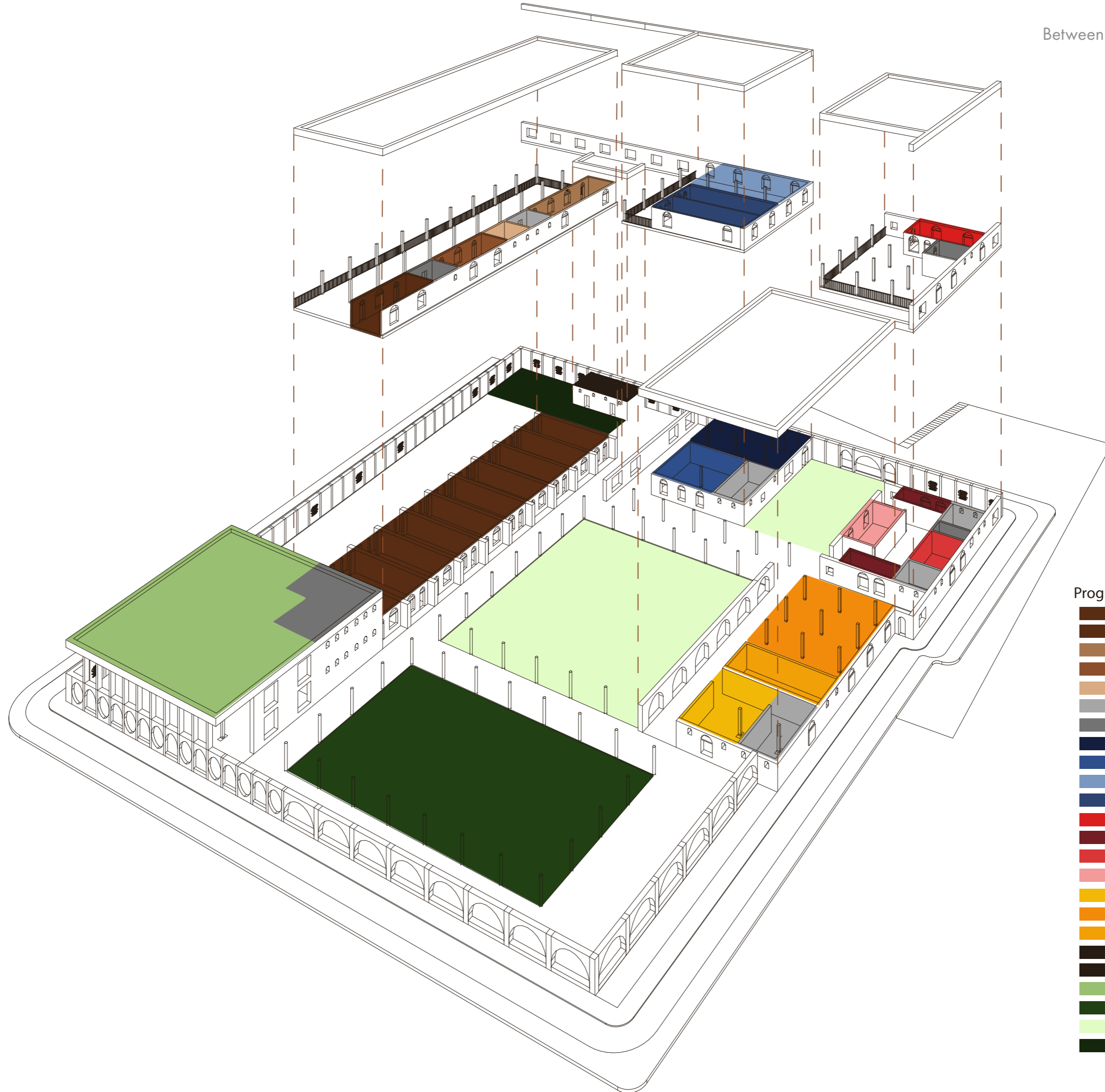
Flexible learning space
Spatial logic



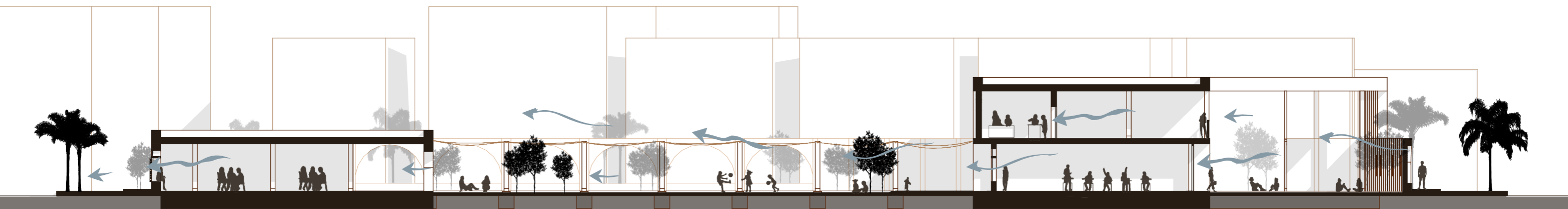


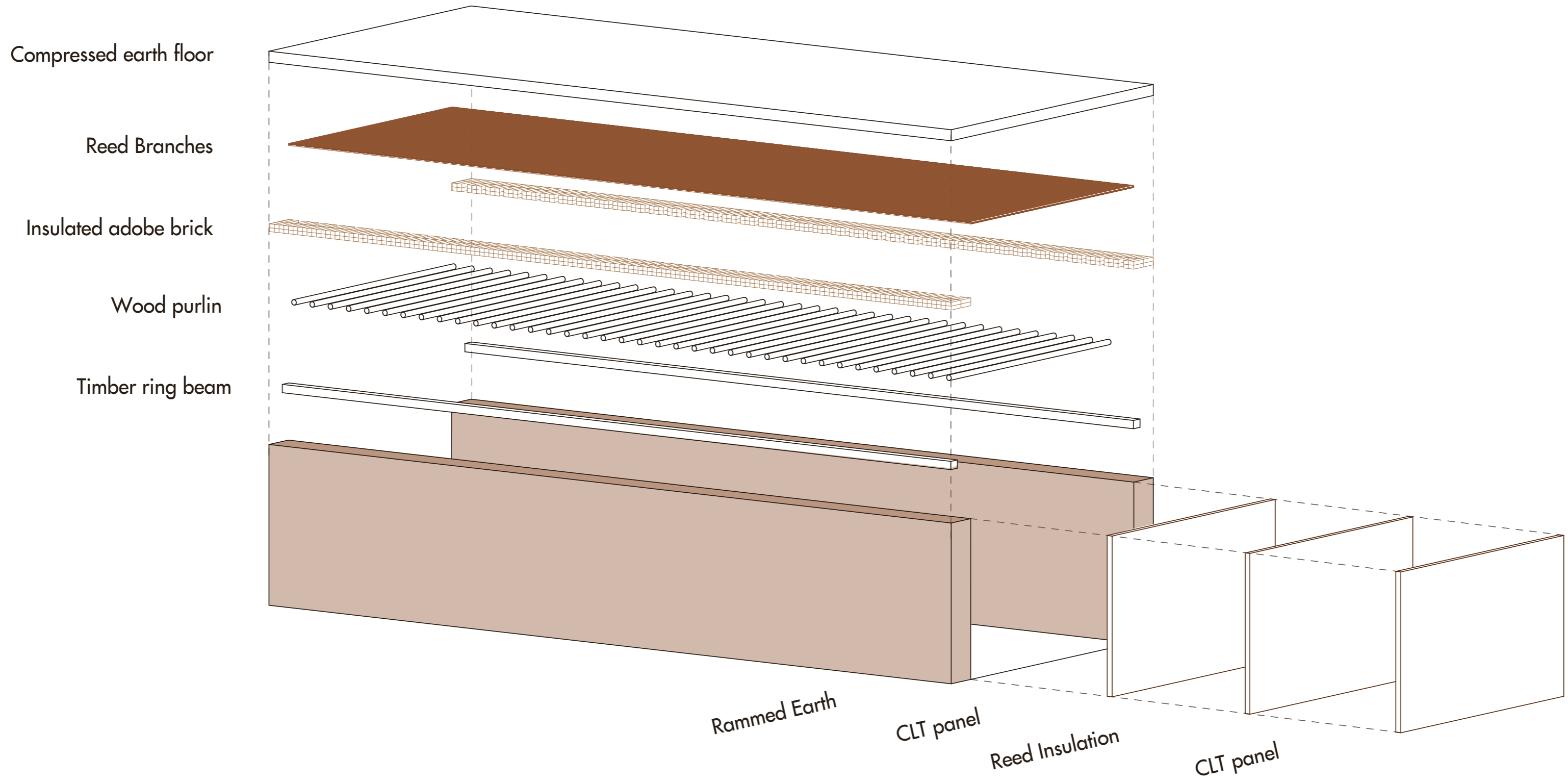


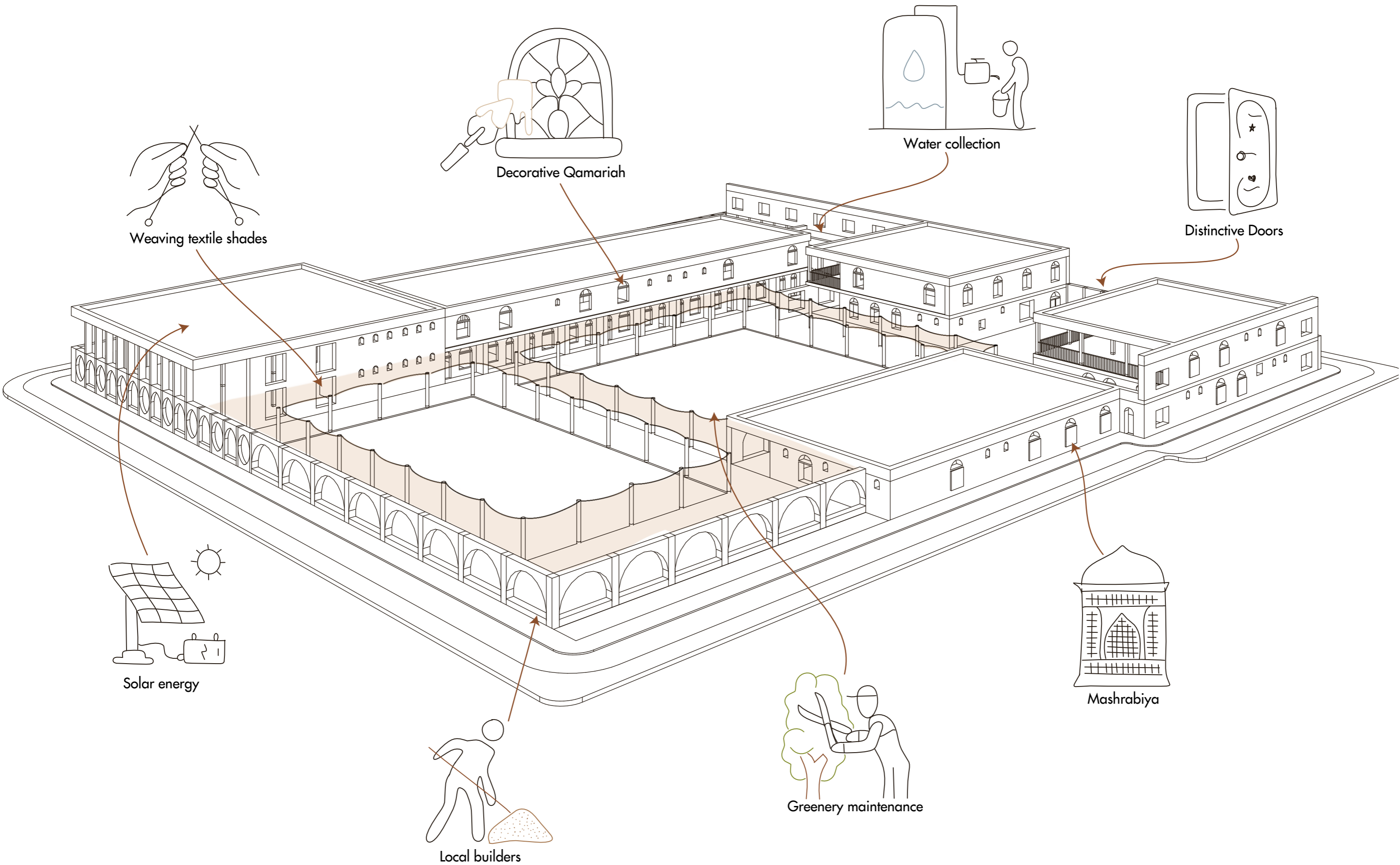


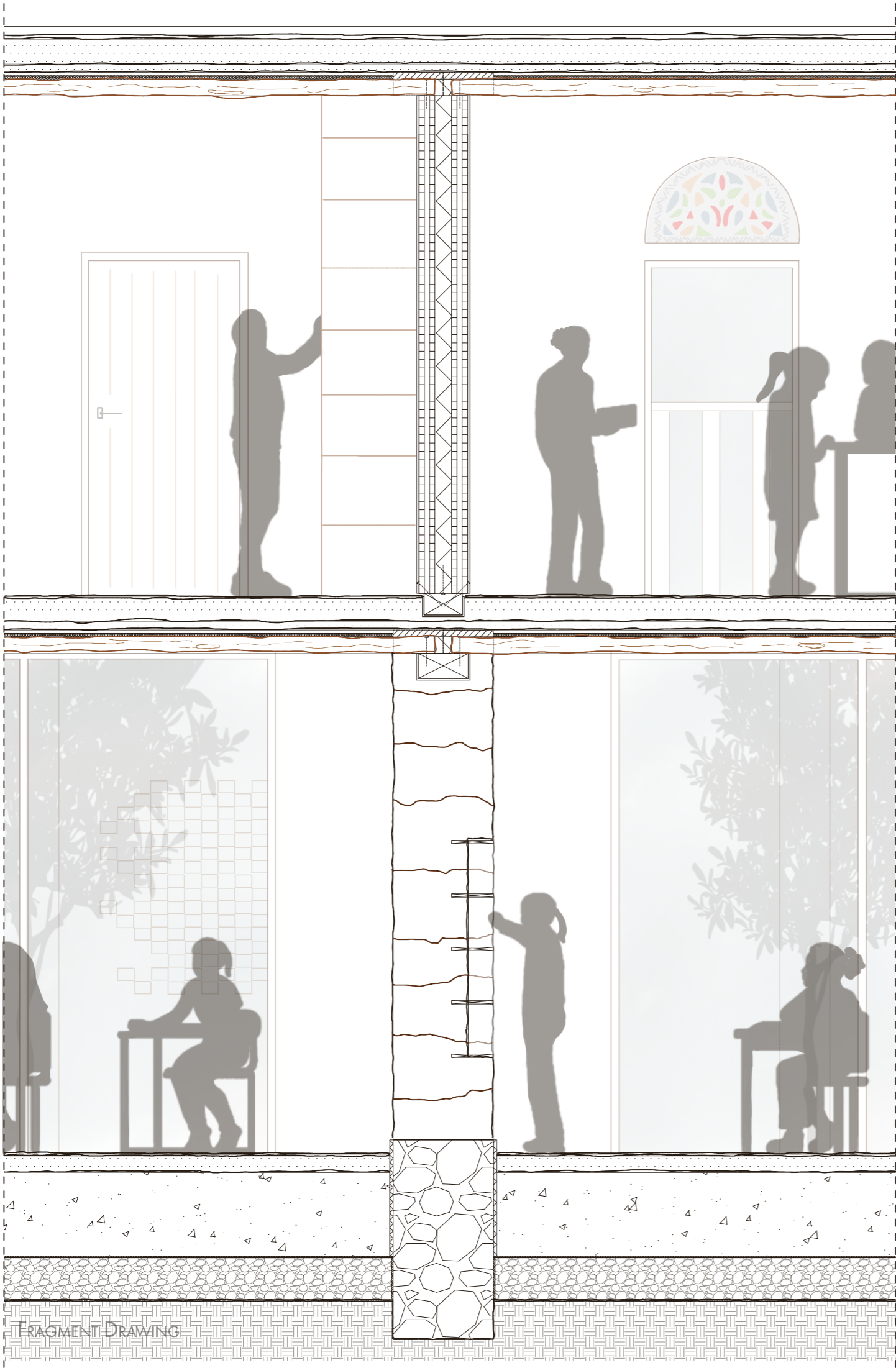


- Programme distribution
- Classrooms
 - Multi-purpose classroom
 - Science lab
 - It lab
 - It maintenance
 - Storage
 - Rest-rooms
 - Multi-purpose hall
 - Workshop space
 - Library
 - Art & music room
 - Prayer room
 - Offices
 - Teachers lounge
 - Meeting room
 - First aid room
 - Canteen
 - Kitchen
 - Solar energy technical room
 - Water collection space
 - Indoor sports area
 - Outdoor sports field
 - Courtyard
 - Garden

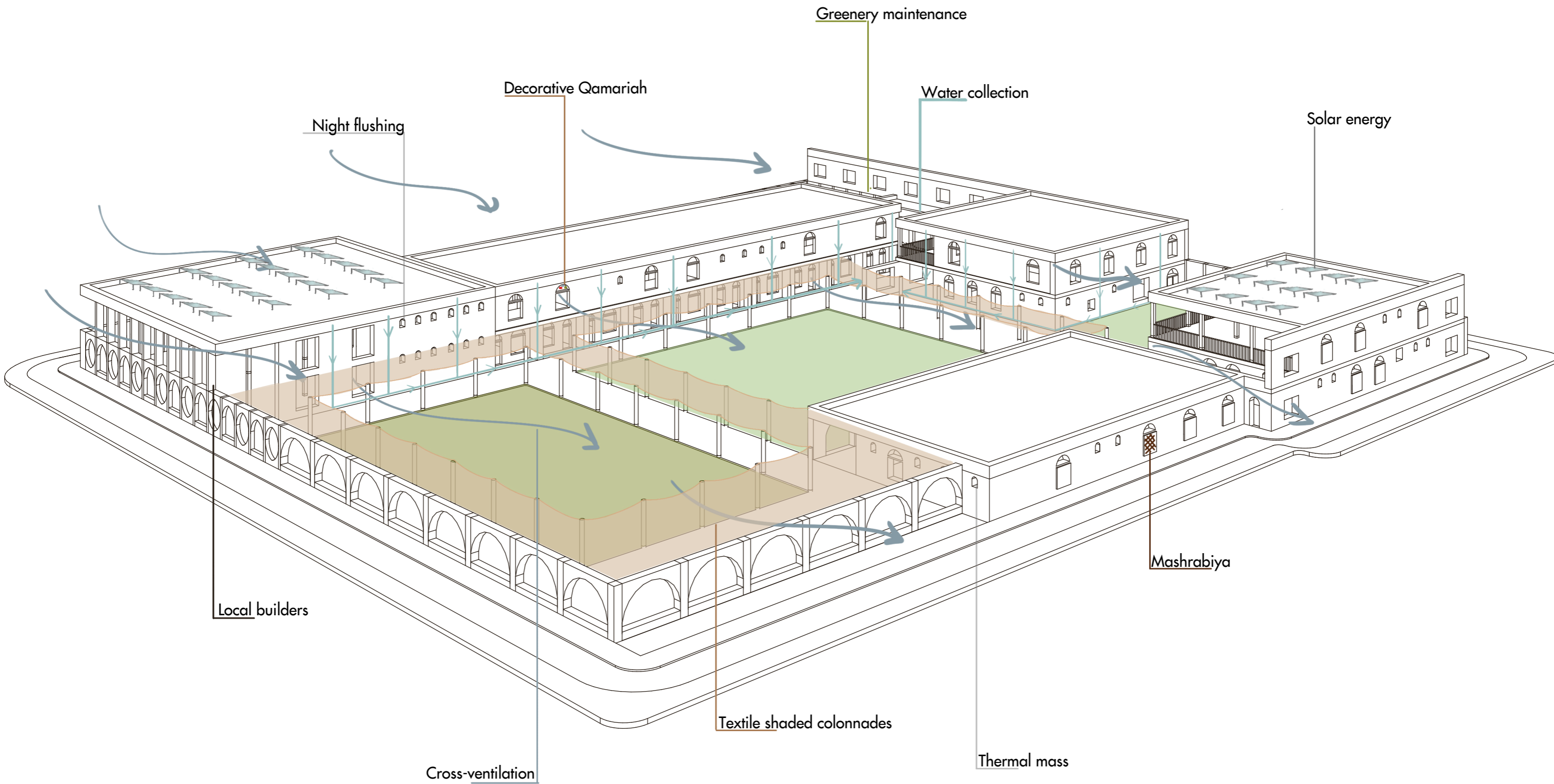












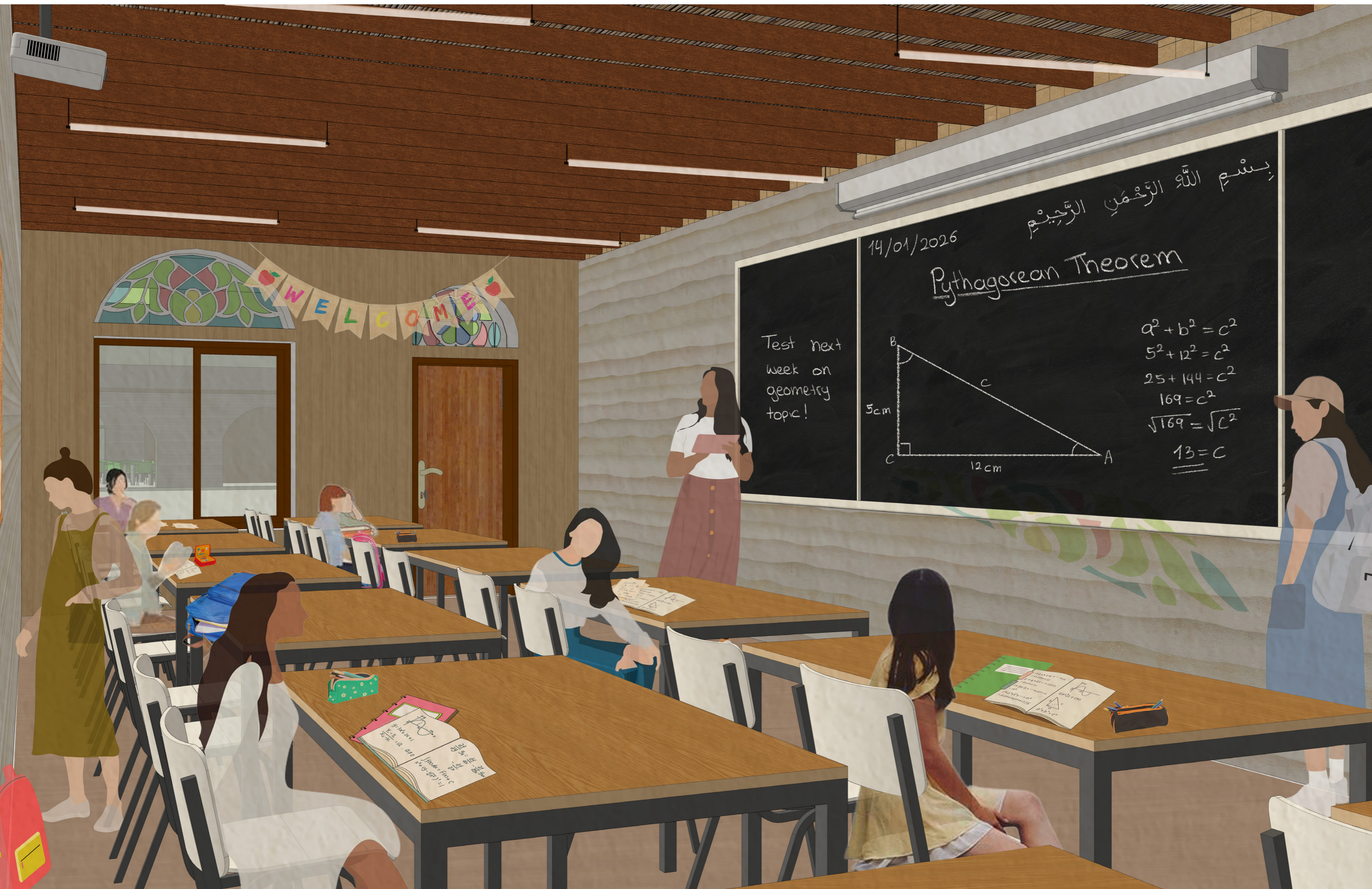
Current Primary School Schedule

				9:00-9:45	9:45-11:00	11:00-12:00		12:10-13:10		13:15-14:05	14:05-14:50	14:50-15:30
SUN	8:00-8:30 Assembly and Drills	8:30-8:50 Break	8:50 National Anthem	Maths	English	Science	Break	Geography	Break	History	Social studies	Maths
MON				English	Maths	IT		Quran		Islamic studies	History	English
TUE				Maths	English	Social studies		Science		PE	Arabic	Maths
WED				Quran	Islamic studies	Arabic		Geography		History	English	Homework
				9:00-9:40	9:40-10:20	10:20-11:00		11:10-11:45		11:55-12:40	12:40-13:00	
THU				PE	Islamic studies	Geography		Social studies		Science	Homeroom	

Proposed Primary School Schedule

				9:00-9:45	9:45-11:00	11:00-12:00		12:10-13:10		13:15-14:05	14:05-14:50	14:50-15:30
SUN	8:30-8:50 Assembly and Drills	8:50 National Anthem	Break	Maths	English	Science	Break	Geography	Break	History	Social studies	IT
MON				English	Maths	PE		Quran		Islamic studies	History	Geography
TUE				Maths	English	Social studies		Science		IT	Arabic	Geography
WED				Quran	Maths	Arabic		Islamic studies		History	English	Music/Art
				9:00-9:40	9:40-10:20	10:20-11:00		11:10-11:45		11:55-12:40	12:40-13:00	
THU				Maths	English	Music/Art		Social studies		Science	PE	

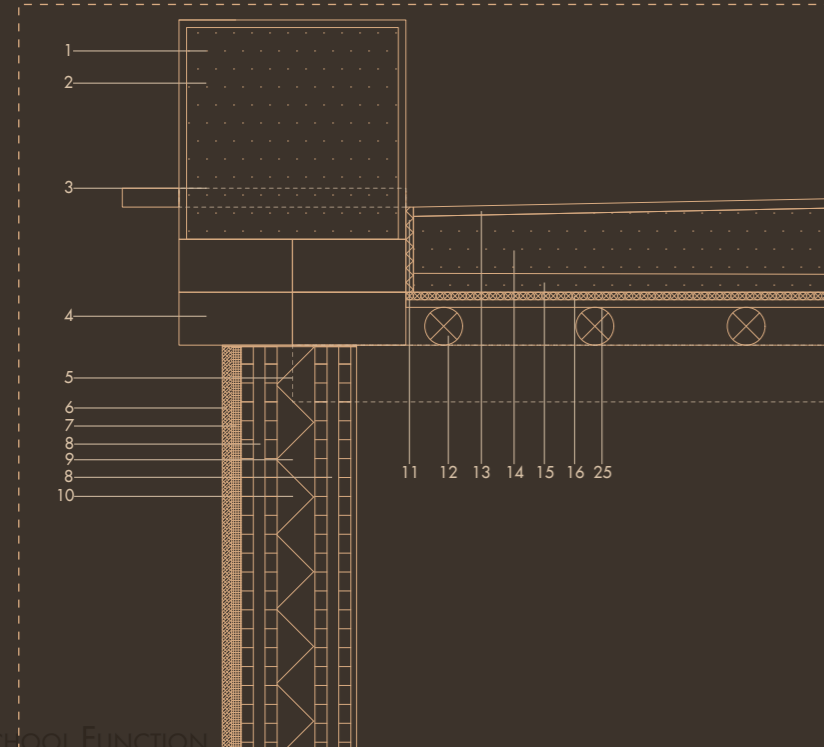




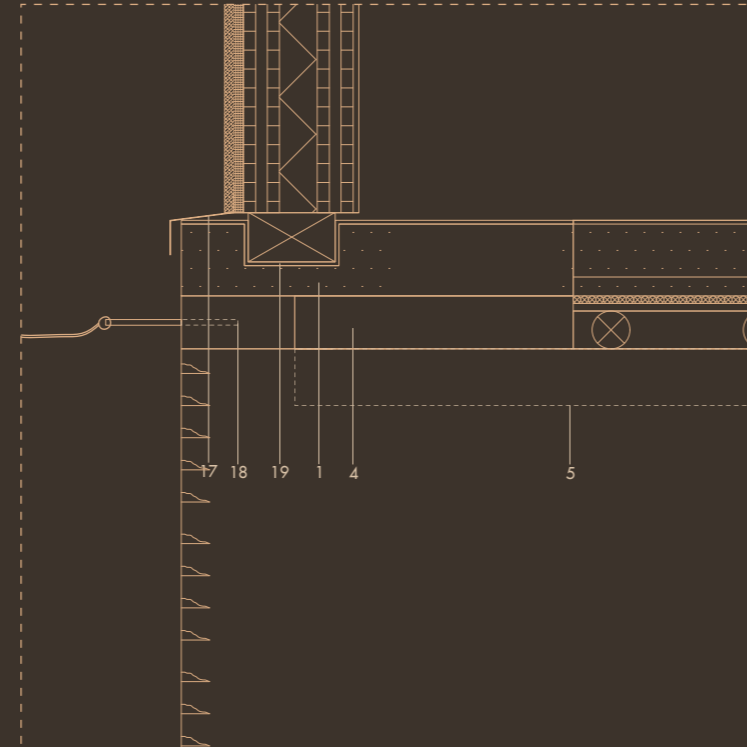




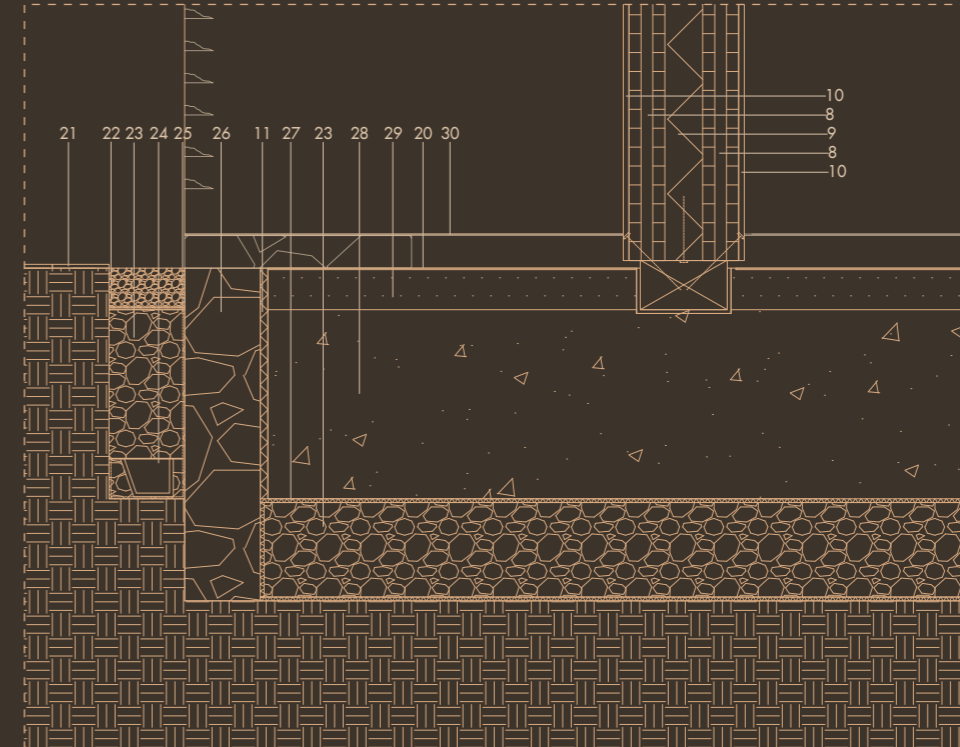
1. Roof Detail - 1:10



2. Wood Meets Earth Detail - 1:10



3. Foundation Detail - 1:10



Material catalogue:

1. Compressed earth
2. 20mm Lime render
3. Rain pipe
4. Insulated adobe brick
5. Timber ring beam
6. 25mm Lime render
7. 25mm Wood wool board
8. 95mm CLT wall
9. 100mm Reed insulation
10. 15mm Plasterboard
11. 20mm Cork board
12. 100mm Wood purlin
13. 25 Lime render
14. 150mm Compressed earth floor
15. 5mm Insulated earth floor
16. 2x 20mm Reed branches
17. Aluminium drip cap
18. Textile shade
19. Lime mortar
20. 10mm Lime render
21. Ceramic tiles
22. Fine gravel
23. Coarse gravel
24. Drain
25. Tarp
26. Large stones in lime mortar
27. 10mm Geotextiles
28. 500mm Lime creed
29. 100mm compressed earth floor
30. Bitumen layer

