

Dematerializing the City

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MASTER OF ARCHITECTURE IN ARCHITECTURE

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Abstract

The project is a local cultural center located in Gulou area in the old city center of Beijing, China. This urban intervention establishes a series of harmonious relationships between the city and the architecture, between the urban and the autonomous and between the old and the new. The pattern of the city's fabric, the local traditions, and the basic ways of life serve to guide the spatial organization and the development of architectural elements.

The building is dematerialized. Paintings and diagrams are abstracted from the physical reality of the building. Drawings and models are made to further present the spatial orders and conditions. The containment of the architecture has always drawn as much attention from me as on the building itself. This thesis is more about searching for the intangible contained by physical elements.

Acknowledgements

My graduate education in Architecture would not have been possible without the unending support from my family. I can not be more grateful for what they have done to encourage me to seek what I desire and to discover my own self.

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I also want to say thank you to all my dearest friends who shared their inspiring ideas and honest critiques with me. I am fortunate to have your company for the past three years.

Thank you.

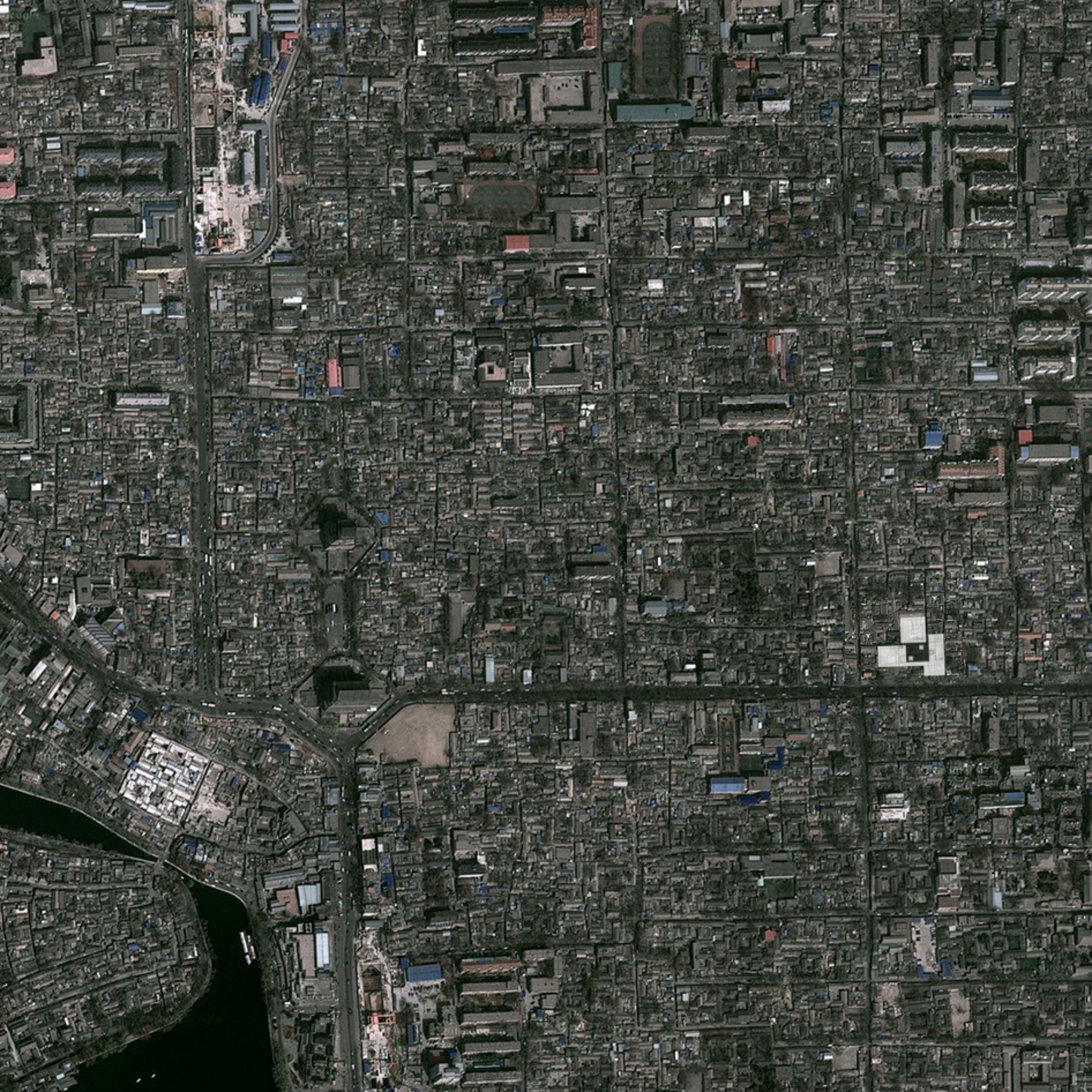
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The City: Beijing

There are altogether six rings around the center of Beijing and the seventh is under construction. The skyscrapers start to rise outside the second ring which serves as the border of the old city. Most of the buildings within the second ring are single-floor courtyard housing structured by the weaving fabric of "Hutong" which is a traditional patterns of streets and sidewalks for pedestrians in the old city. In this old city center the essence of the spirit of Beijing remains. After hundreds of years of dwelling the traditional house typology endures against the forces of unfettered urbanization.

right page: bird's-eye view of Gulou area, the cultural center is located two blocks away from Gulou (the drum tower)

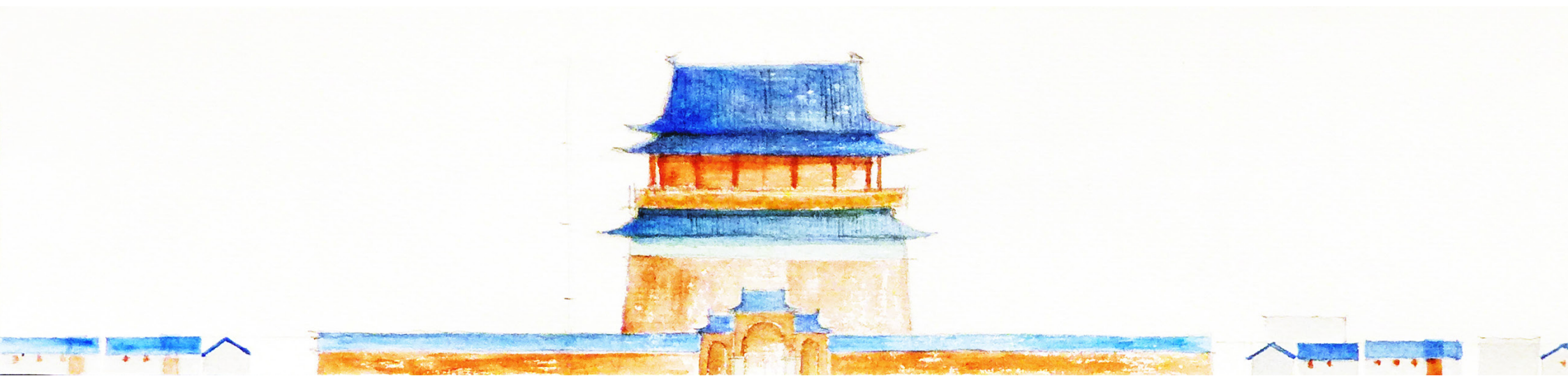


The urban invasion has changed the city fabric dramatically, yet on the other hand, the central area remaining has been enhanced. New interventions have brought new energy to the part of the city. Often the interventions do not make positive contributions to the city.

right page: change of the city's section

* Large red represents the drum tower Gulou and small reds are modern structures embedded in the old city center.





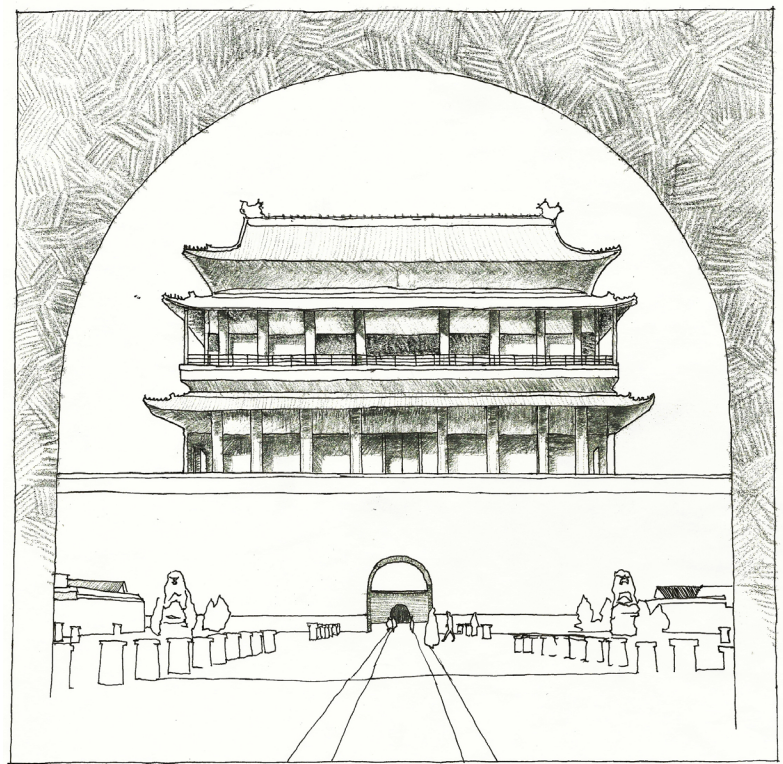
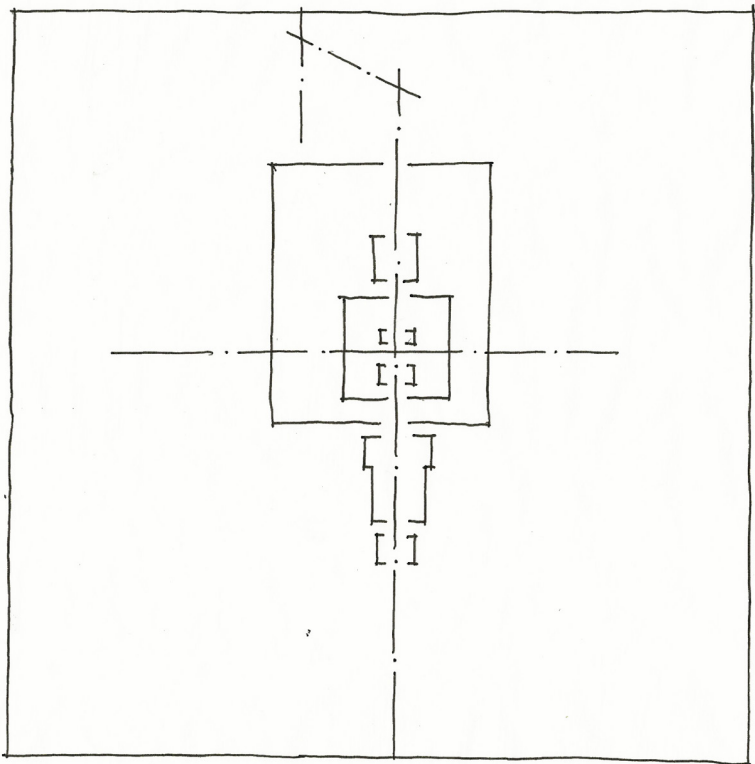


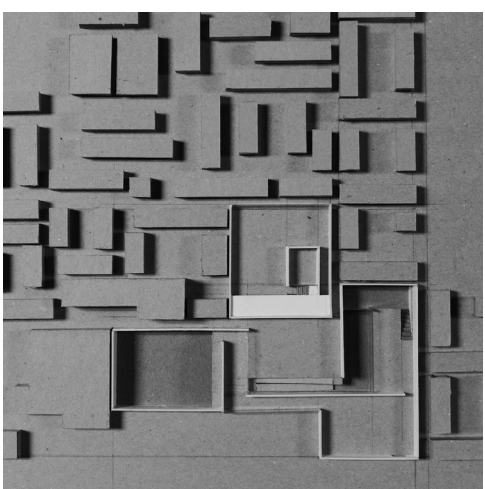
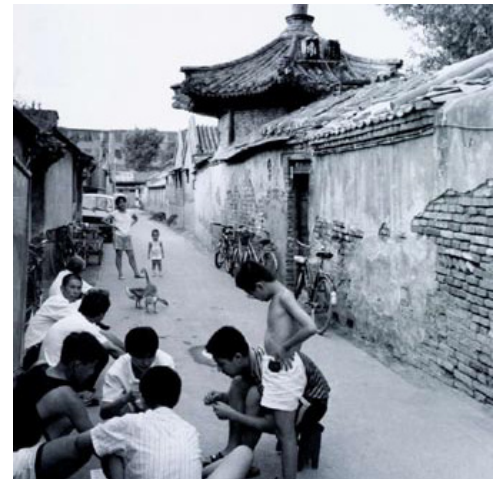




The old inner city of Beijing, which is also called the Forbidden City, was arranged under certain rules mainly decided by the hierarchy of the empire. The intermittent yard space created a sense of order along the axis.

right page: Qian Men, Link between the Forbidden City to the north and the Outer City to the south of Beijing, China, 15th century





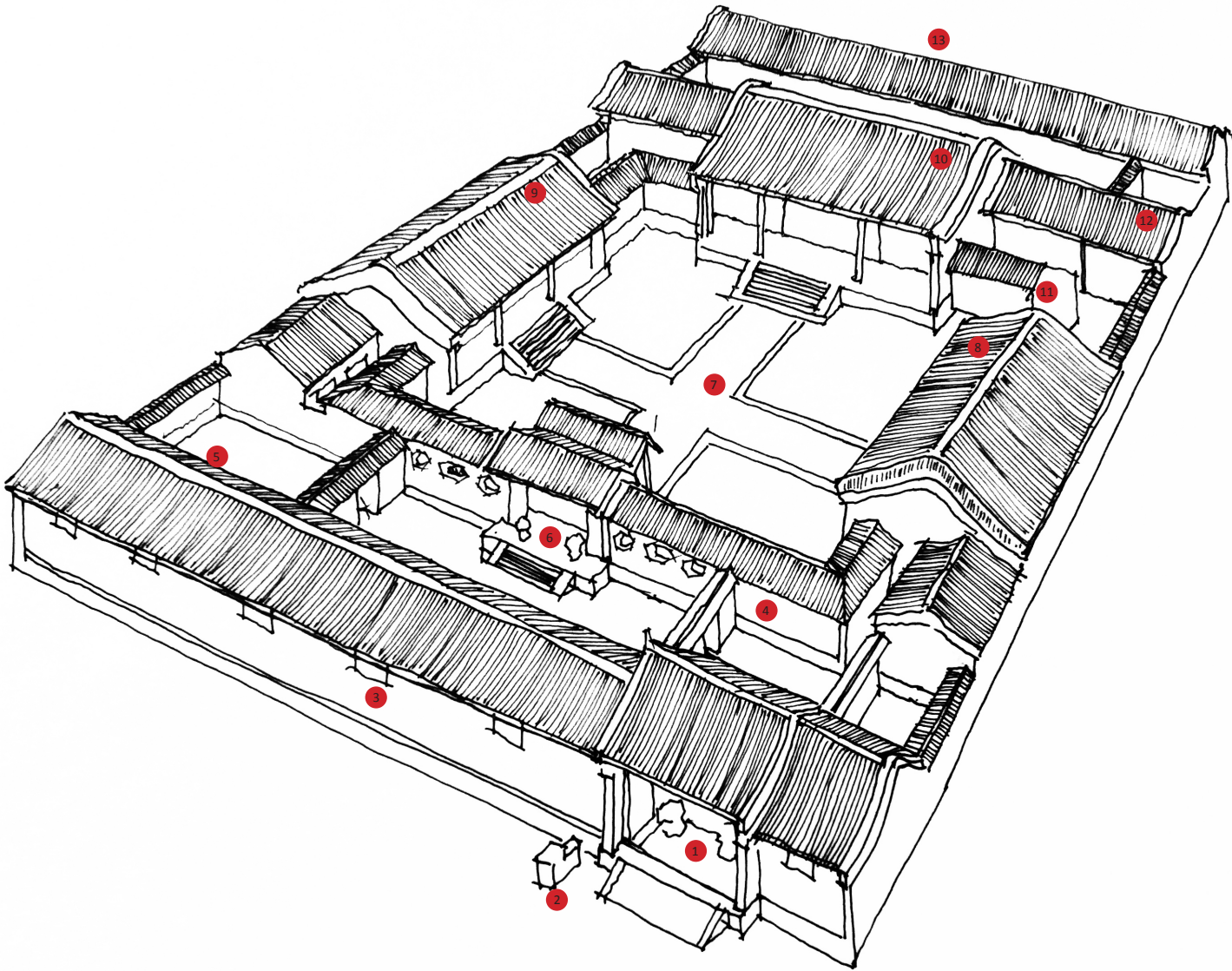
The Neighborhood

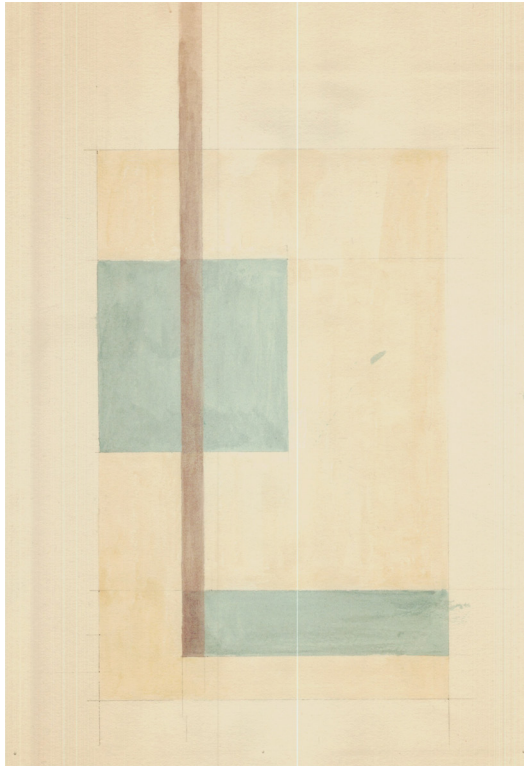
The art of buildings was always subject to certain rules. The courtyard house has become a characteristic type in Beijing after long-term domination of feudalism. I would like to respect the courtyard as a unifying element, still, I am challenging the tradition with allowing more accessibility without destroying the integrity.

However, new patterns of the city will always emerge from the existing layers of the fabric.

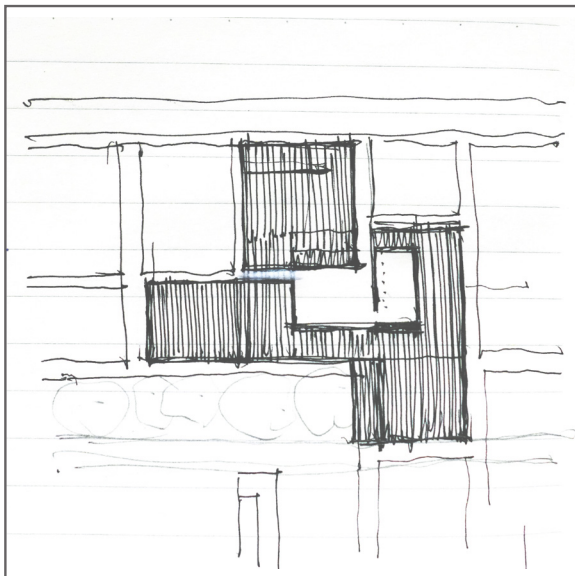
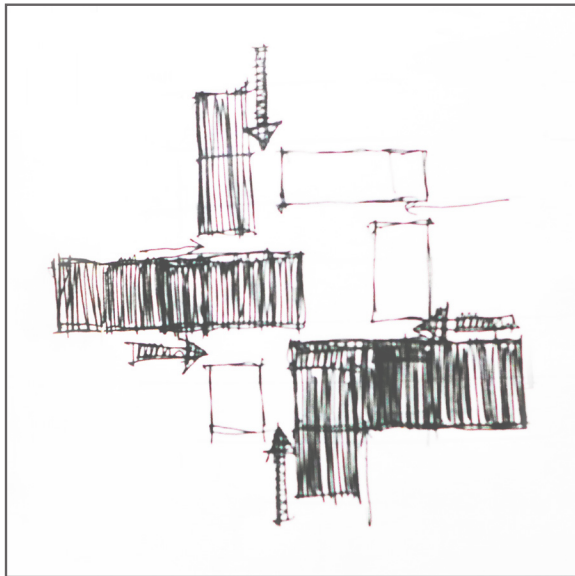
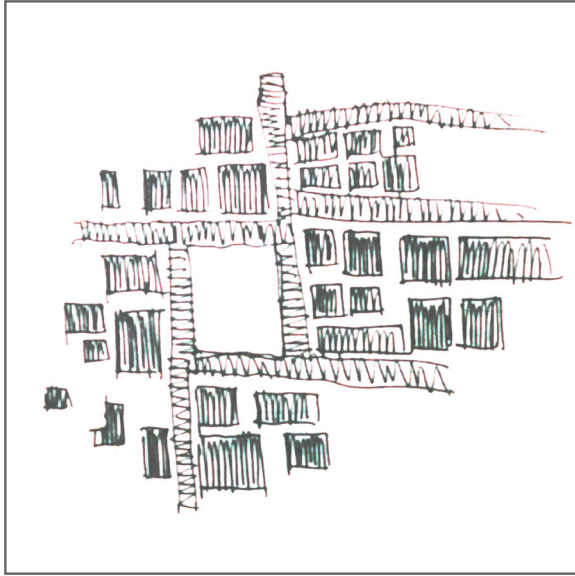
right page: traditional courtyard house in Beijing

1. main entrance
2. lion sculpture
3. inverted rooms
4. shadow wall
5. side yard
6. fallen-flower gate
7. courtyard
8. east room
9. west room
10. master room
11. corridor
12. ear room
13. servants- quarters

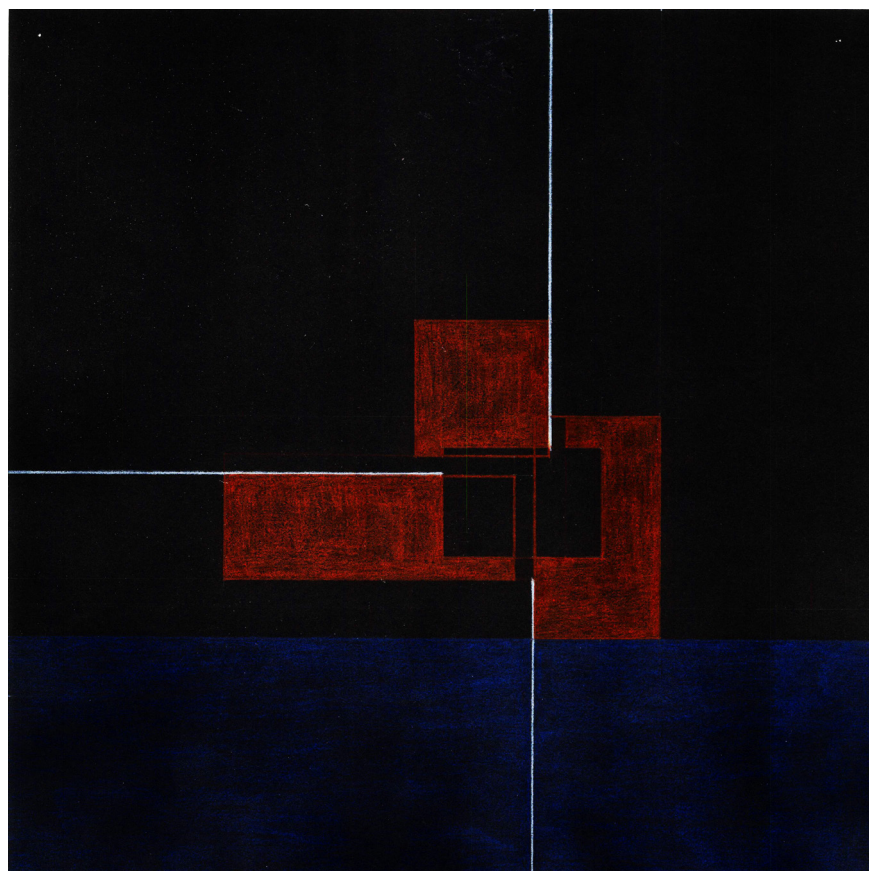




initial painting of interaction between space and path



sketches of the idea of the approach to the cultural center

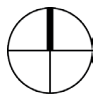
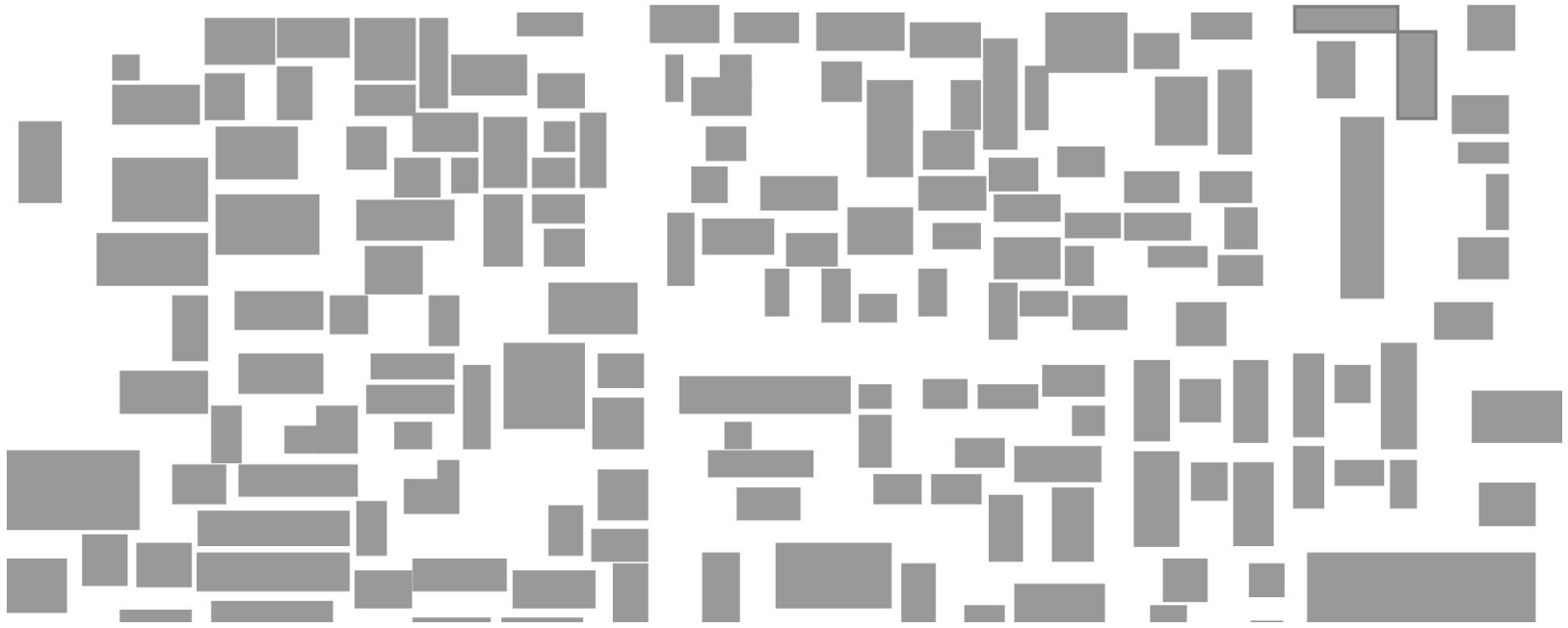


The courtyard houses are separated by the grid of the Hutong roads. Usually one Hutong ends when interrupted by another Hutong or road in the perpendicular direction, and then goes on, which is like making a net. However, the Hutong roads lead people directly into the courtyard then into the building. In this case Hutongs are not simply pathways but approaches to the core of the community cultural center.

left page: three approaches to the cultural center

There are three approaches leading to the cultural center. One is the main entrance located adjacent to the main street of the Gulou area. The other two approaches are actually Hutong streets. They lead directly into the courtyard of the cultural center. The main entrance is meant to be used by the public while the other two are oriented to the local community.

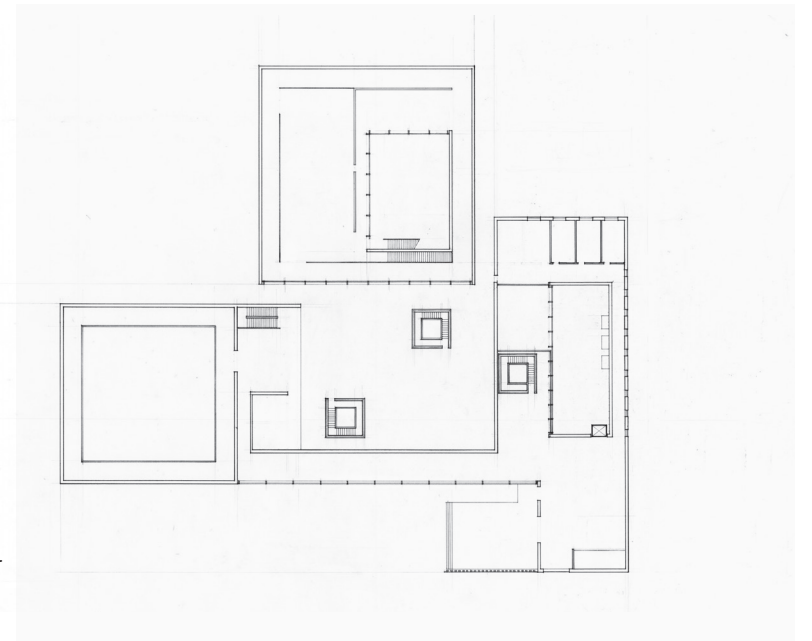
right page: from the outside to the inside



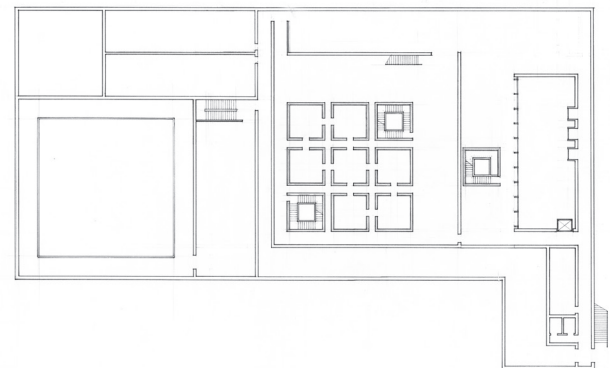


left page: weaving through the community

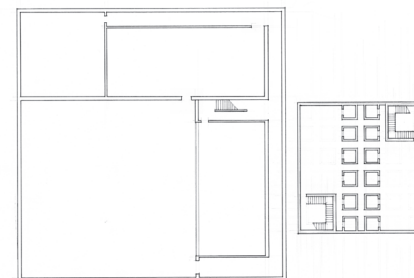
plan: ground floor

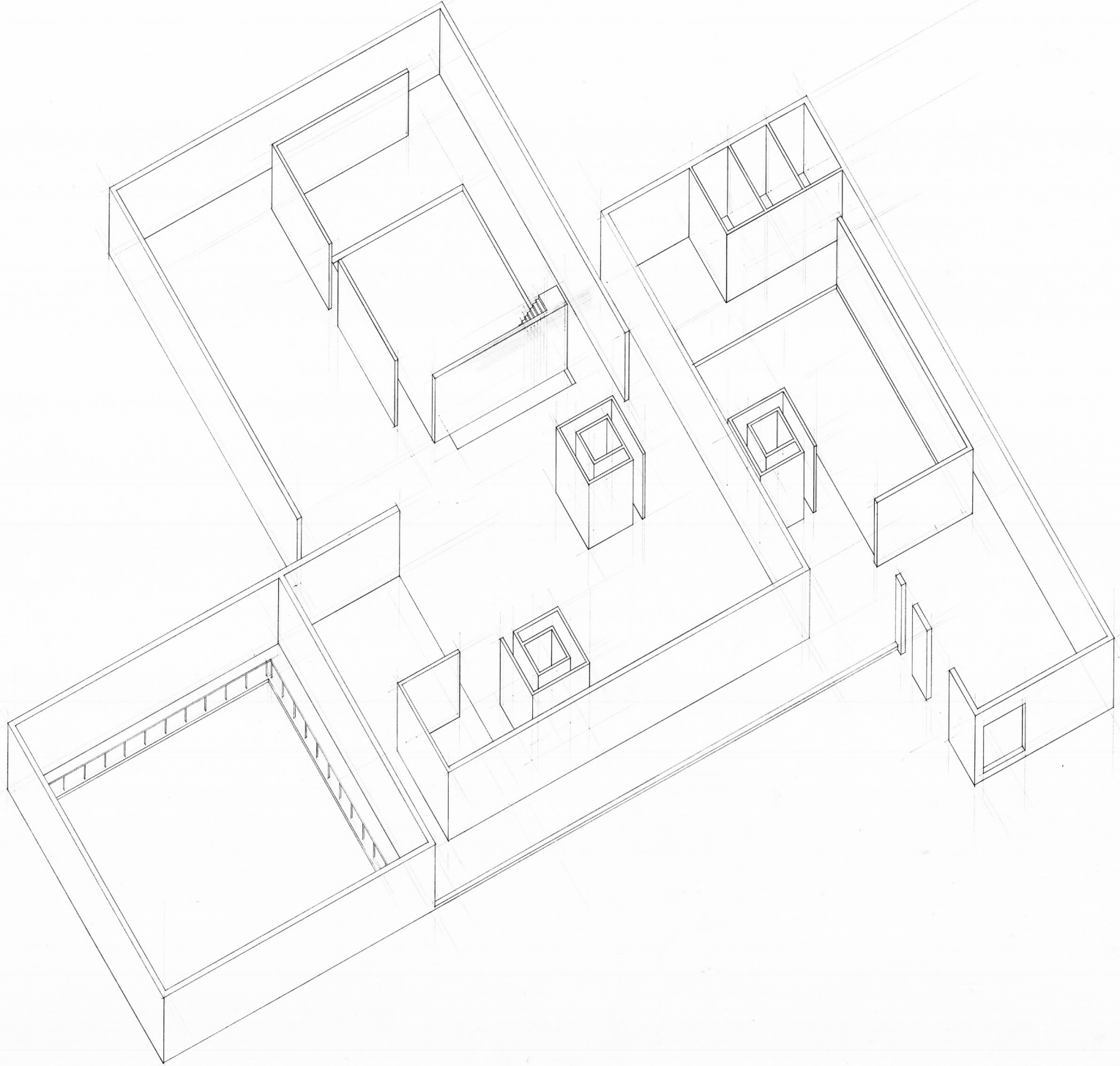


plan: first floor underground

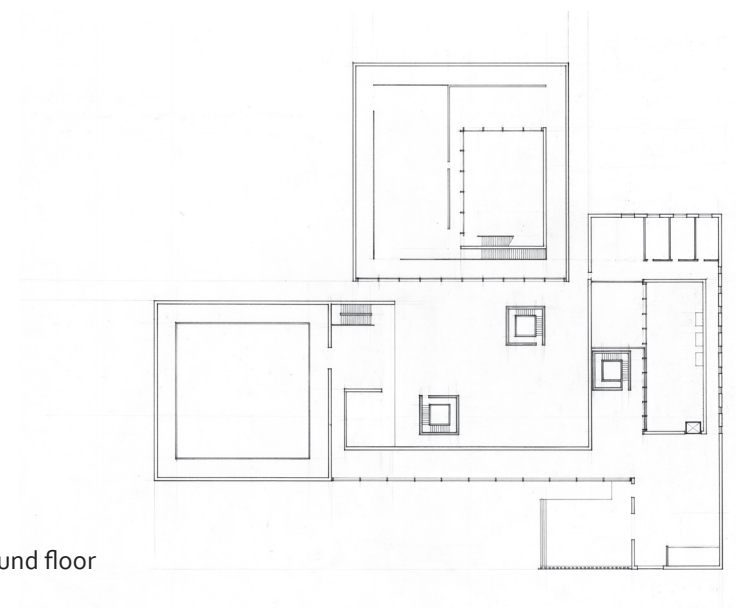


plan: second floor under ground

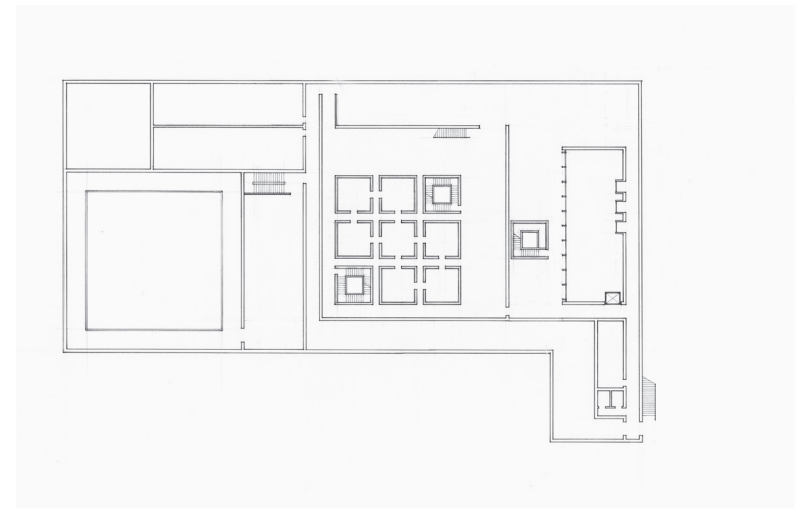




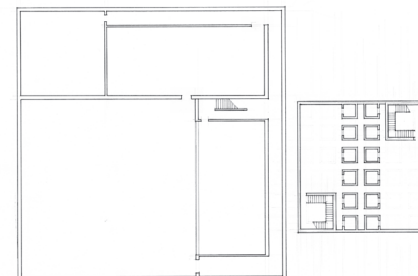
axonometric: first floor above ground



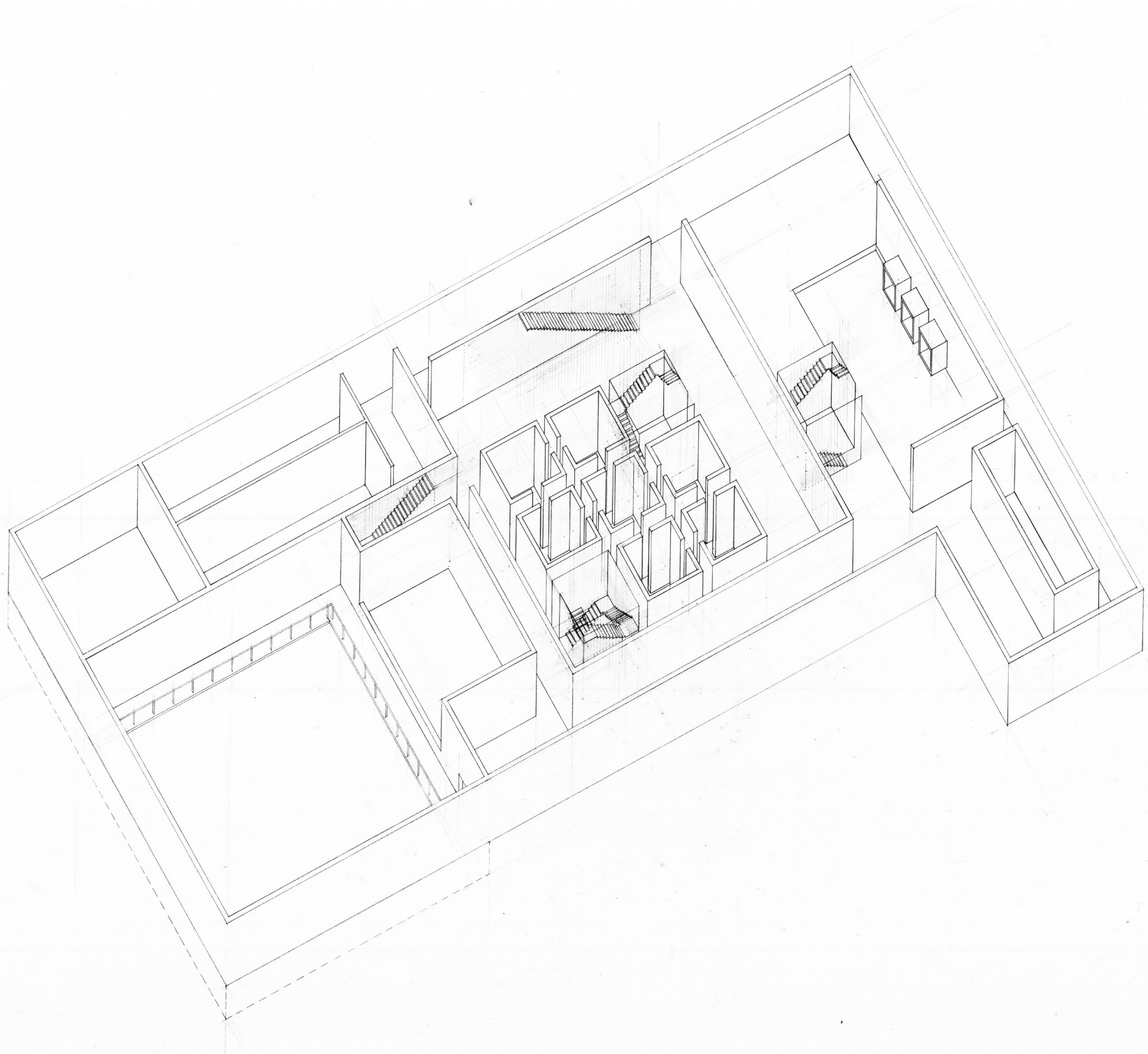
plan: ground floor



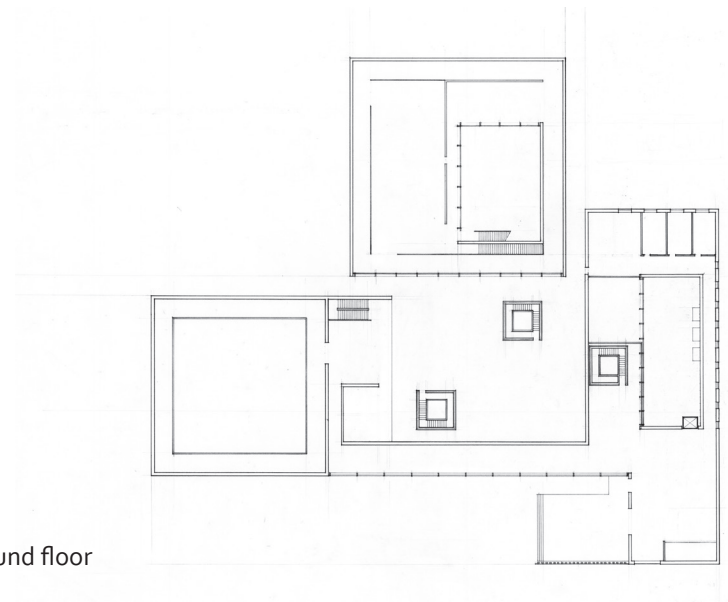
plan: first floor underground



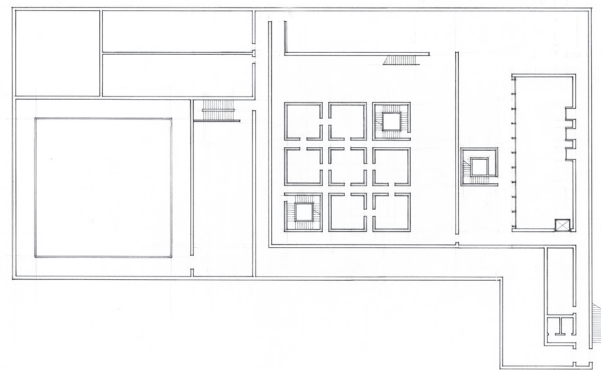
plan: second floor under ground



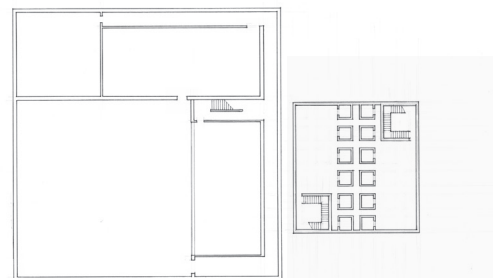
axonometric: first floor underground



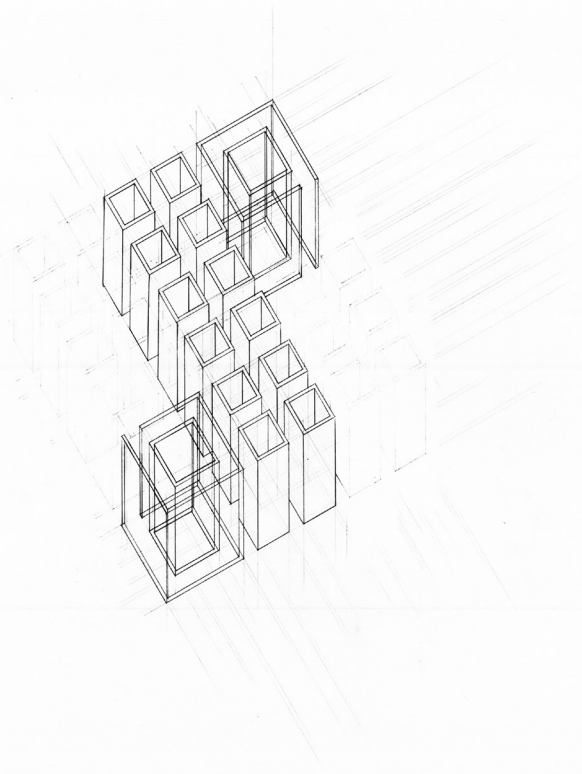
plan: ground floor



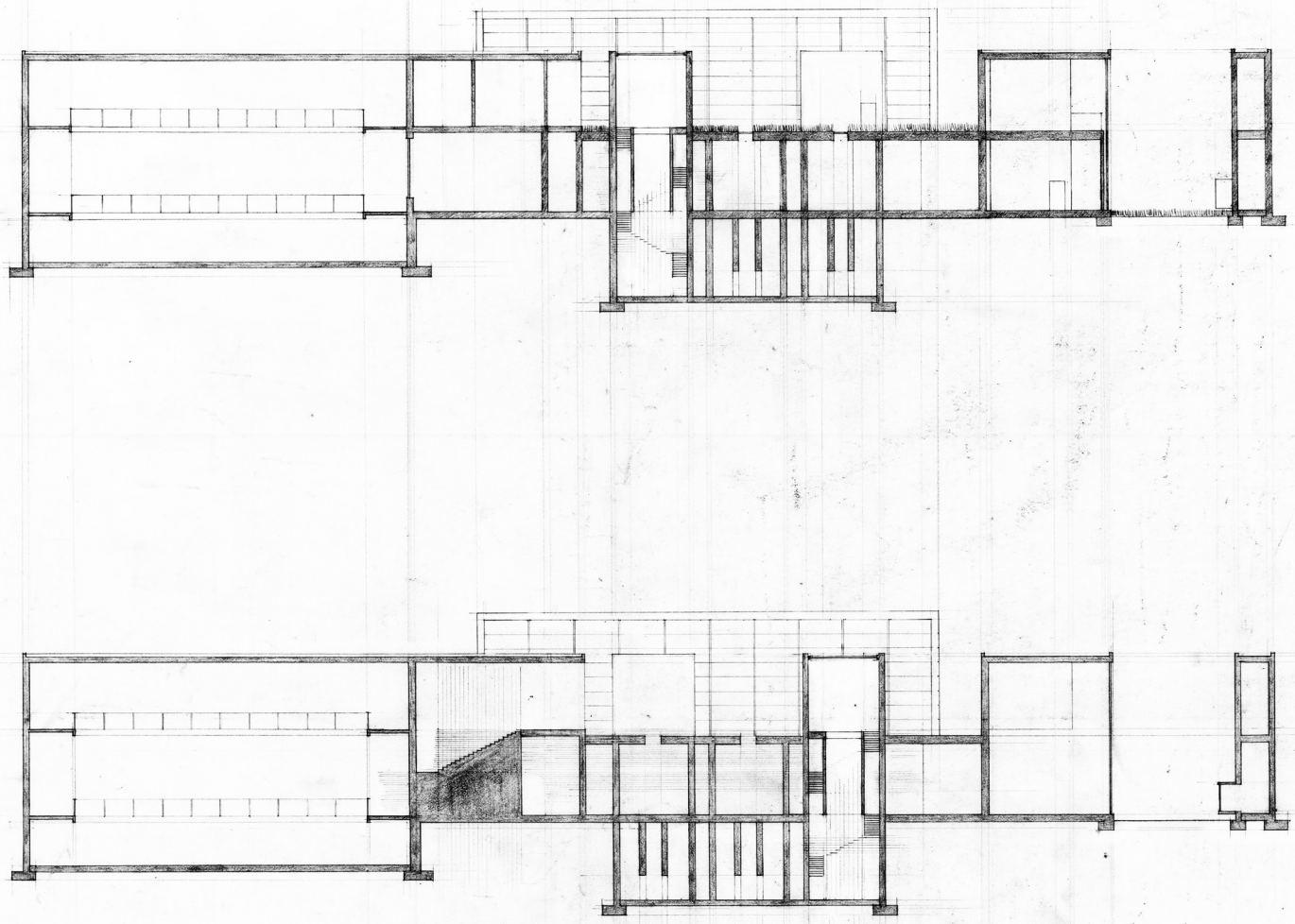
plan: first floor underground



plan: second floor underground



axonometric: library on the second floor under ground



east-west spatial sections

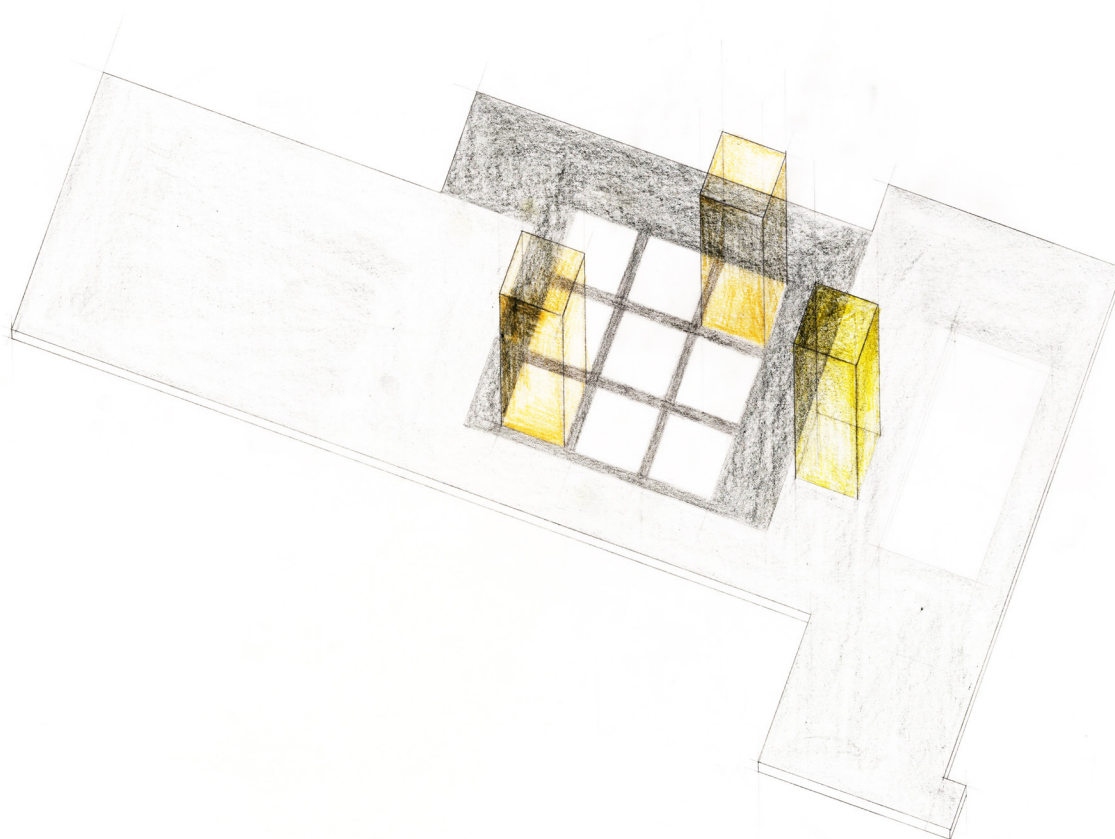


diagram: anchors of the building (1)

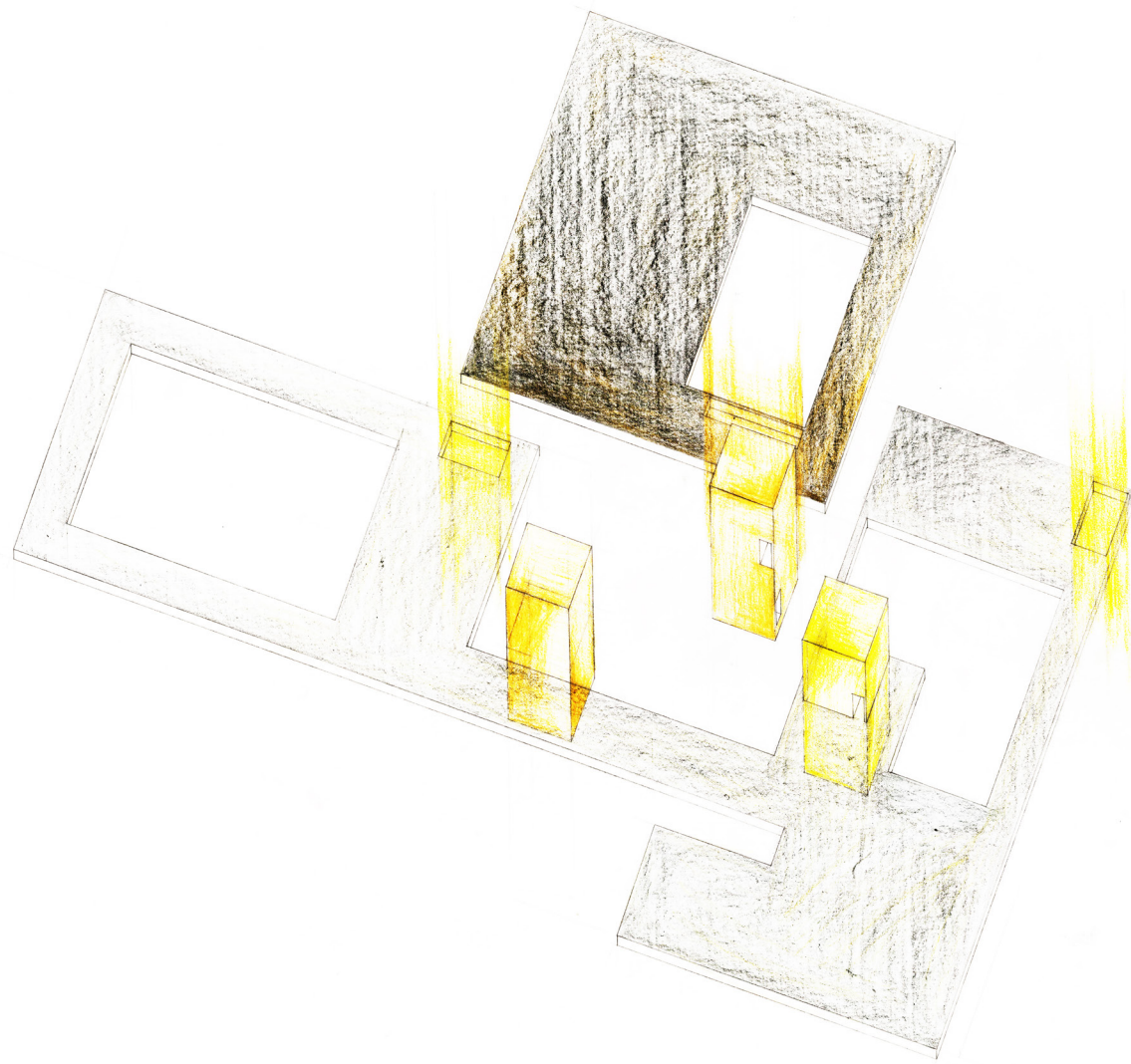
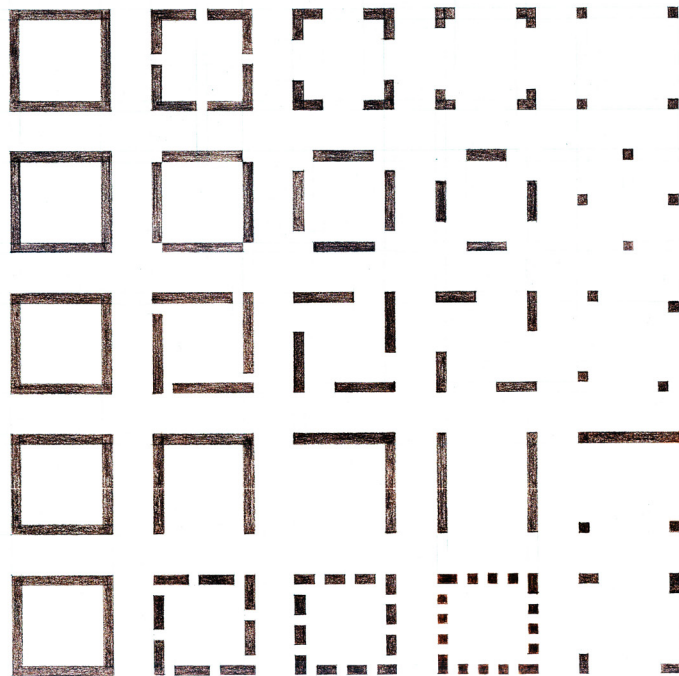
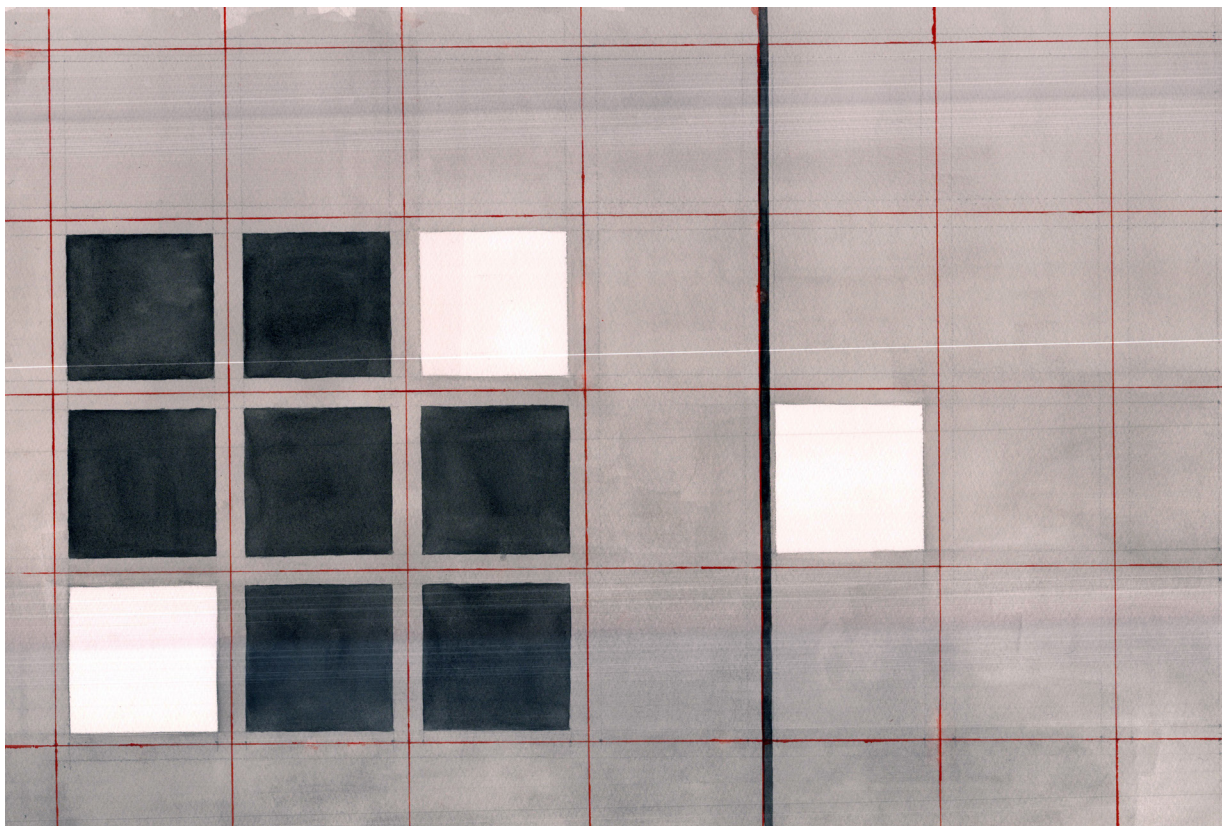


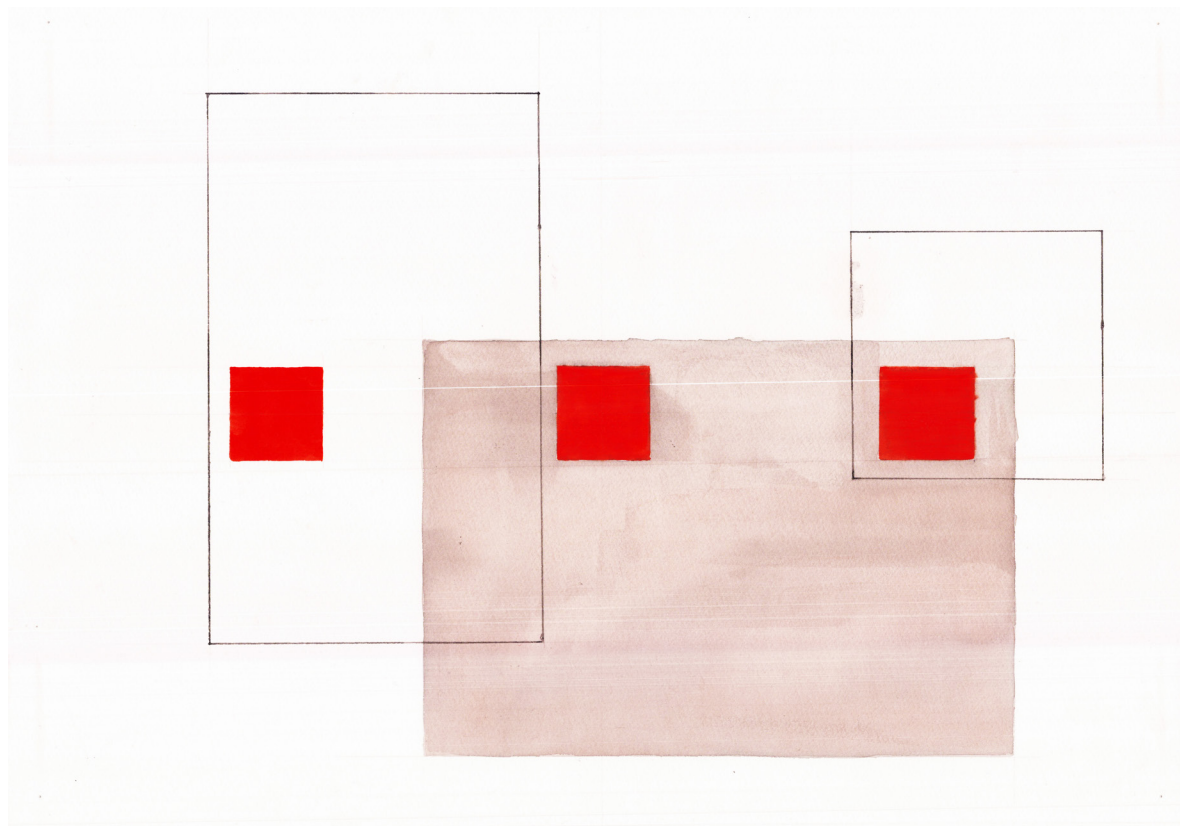
diagram: anchors of the building (2)

The Building Parts

When we see something, we see with our eyes first, and then with our minds. One has already seen the beauty of things before he/she knows it.

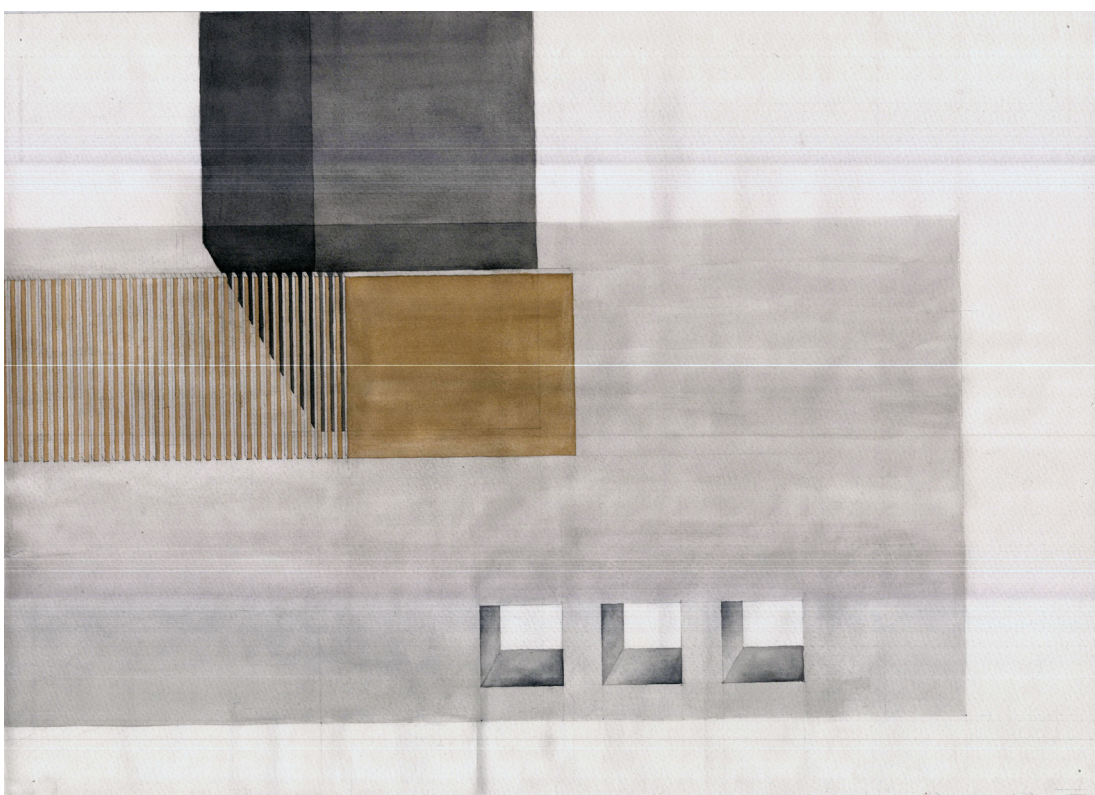








I started my design with paintings and diagrams and went back to them when the project comes towards a completion . The process of mental-physical-mental helped me further develop my thesis.

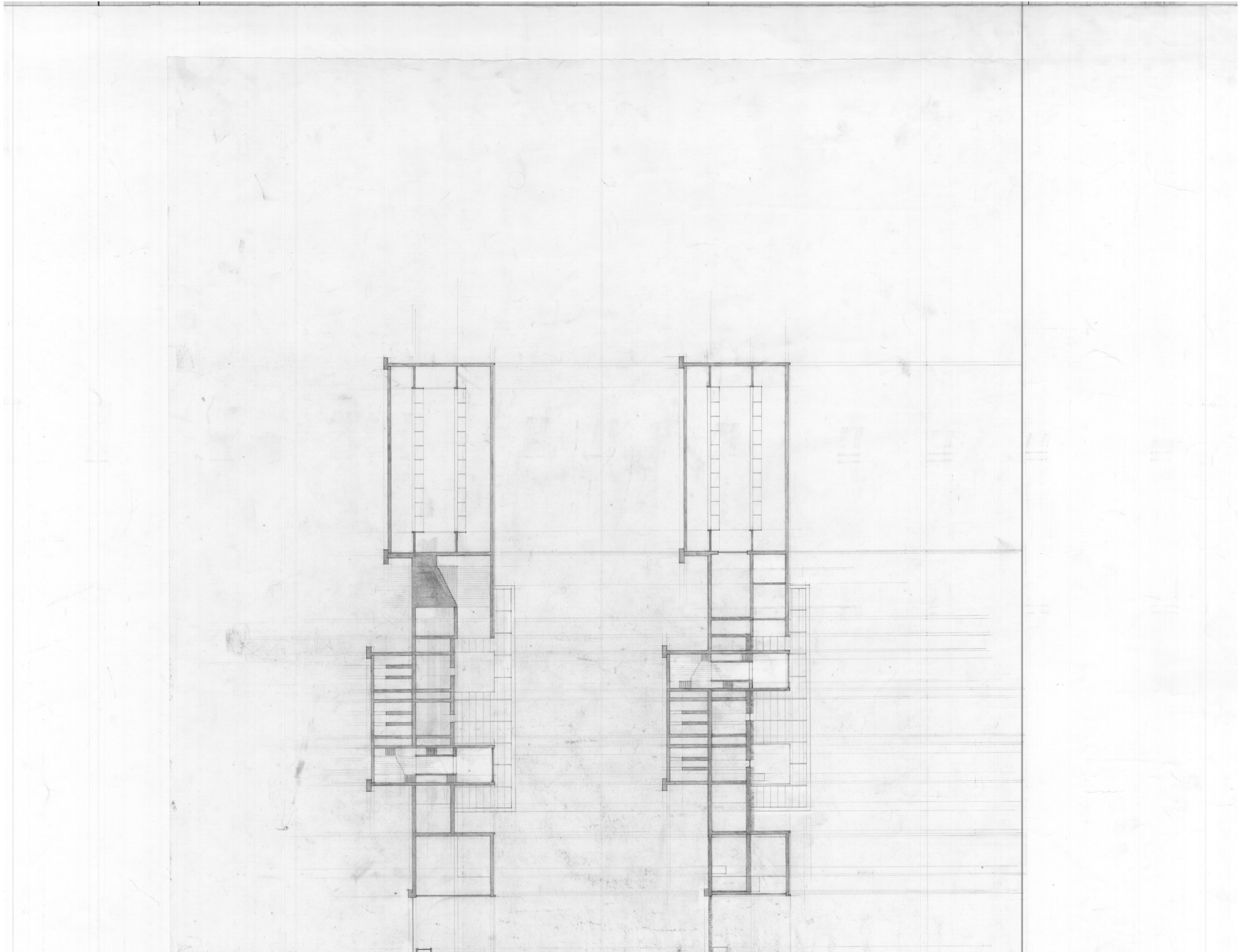


The east courtyard is an overlap of spaces. It is shared by the surrounding sections of the building from different angles at the same time.



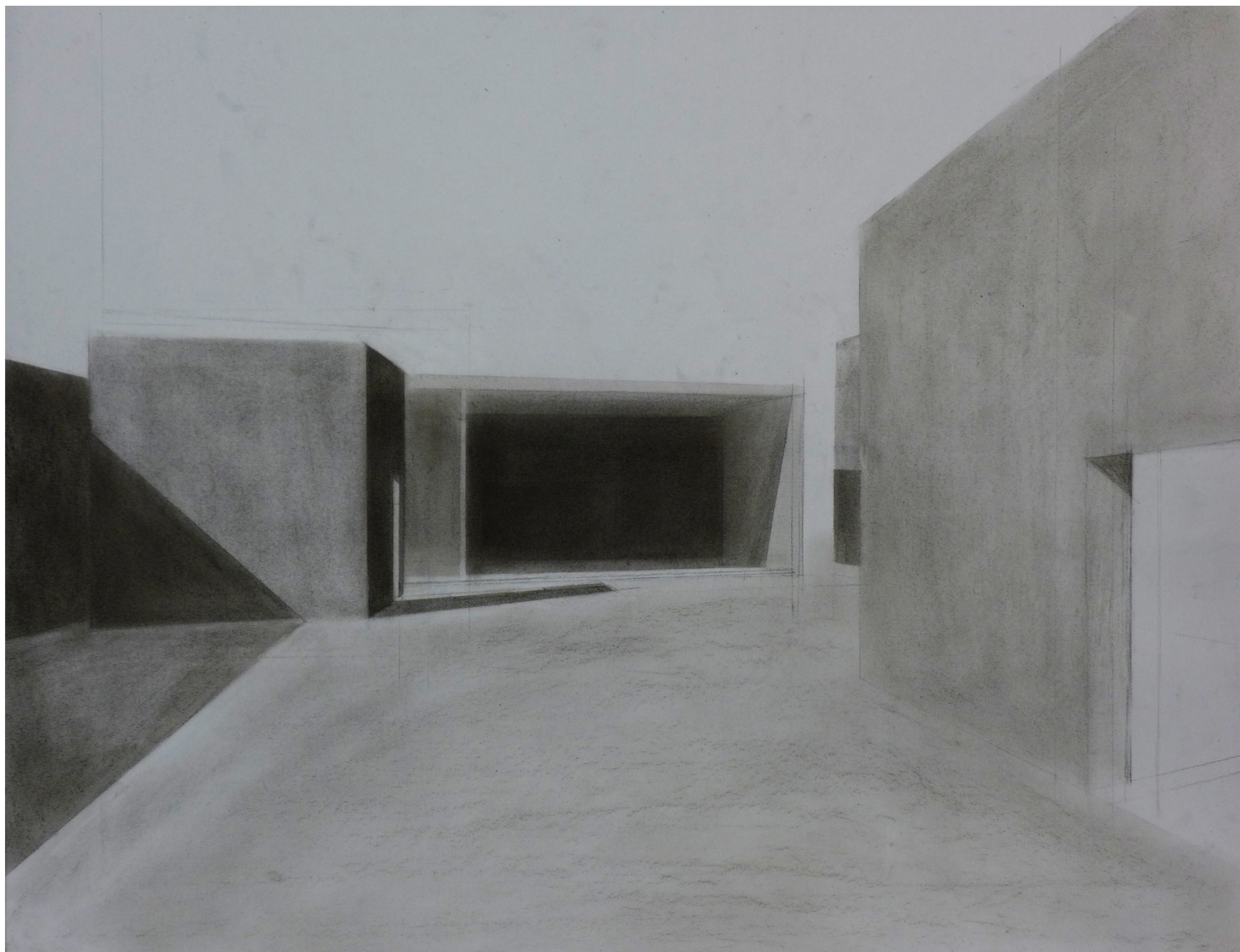


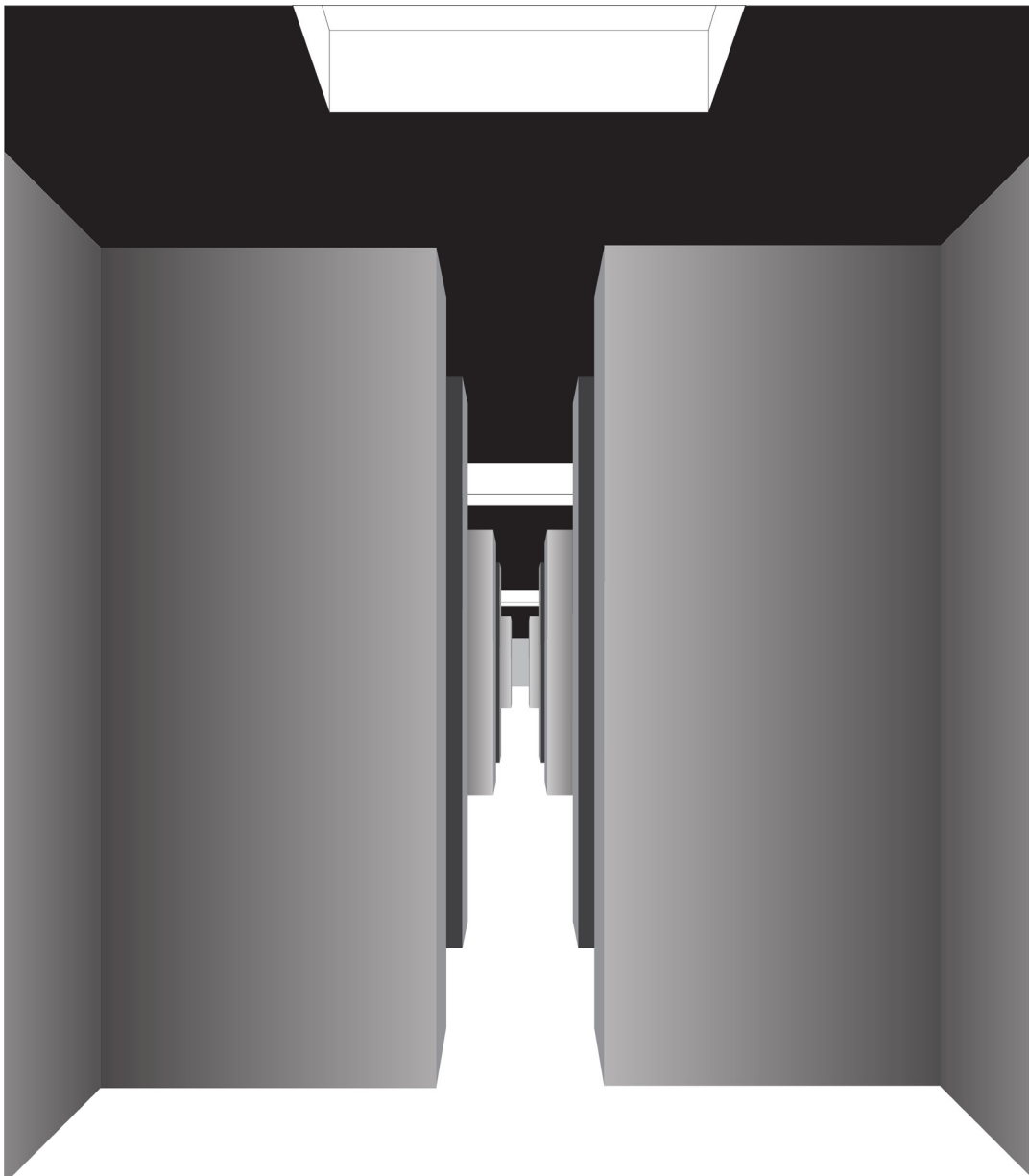
Light is brought into the gymnasium in multiple ways. Light falls on the walls, diffuses, reflects, therefore re-define the space. Elements such as walls and stairs guide the movement of human beings as well as the light.



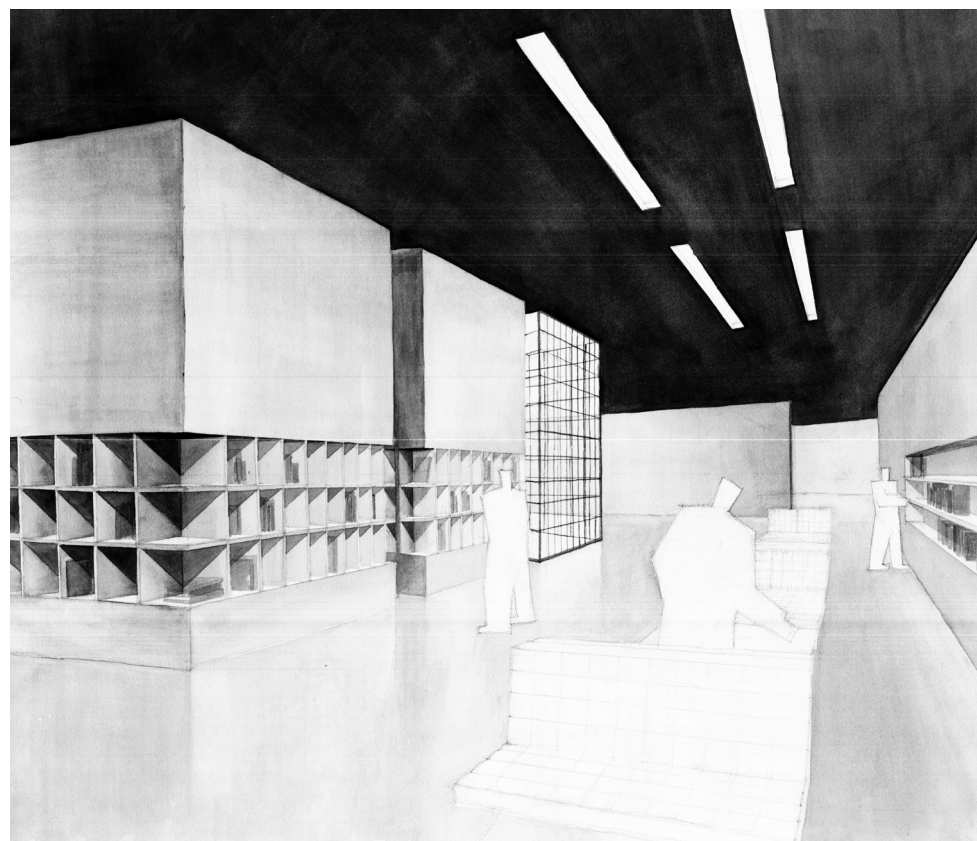
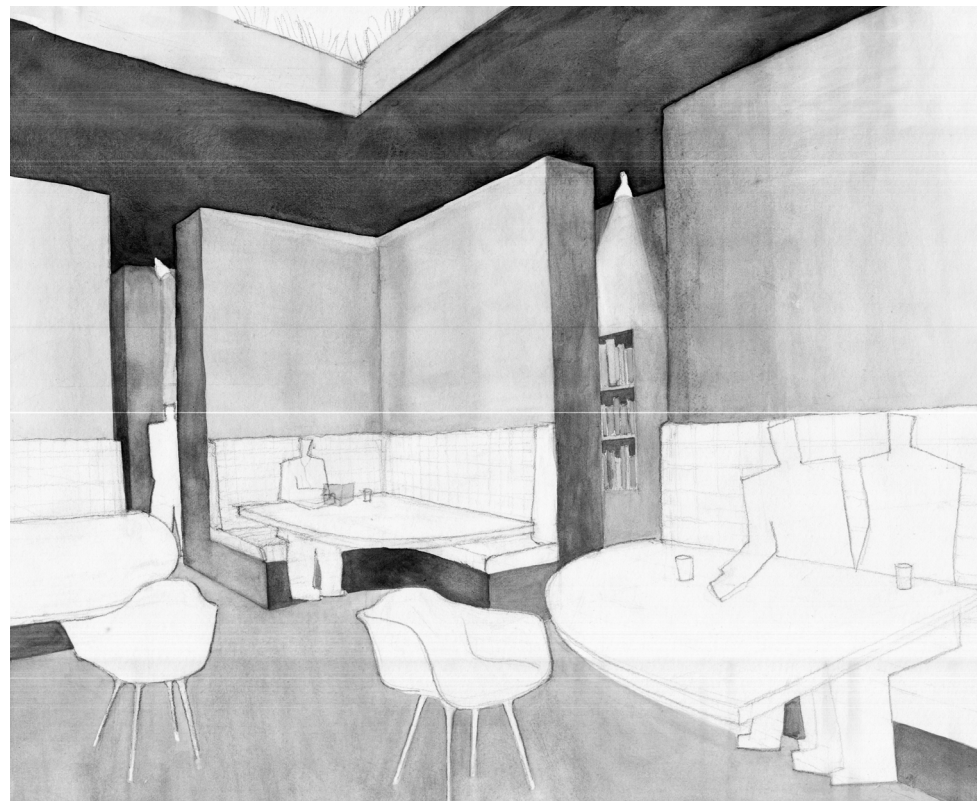


Geometry is introduced as soon as one enters the courtyard. The two staircases serve not only as the secondary entrance to the building, but also the "anchor" of the building.

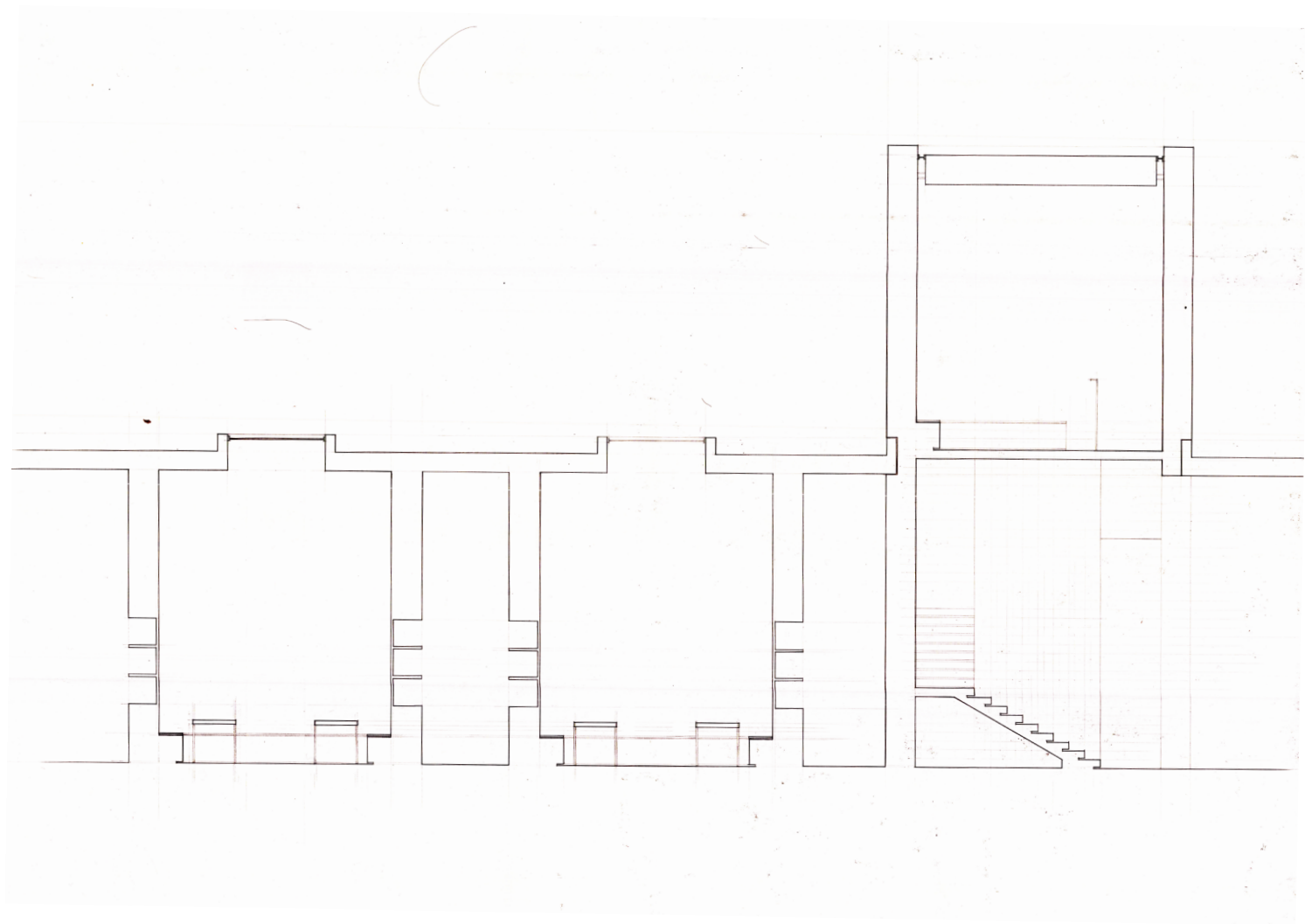


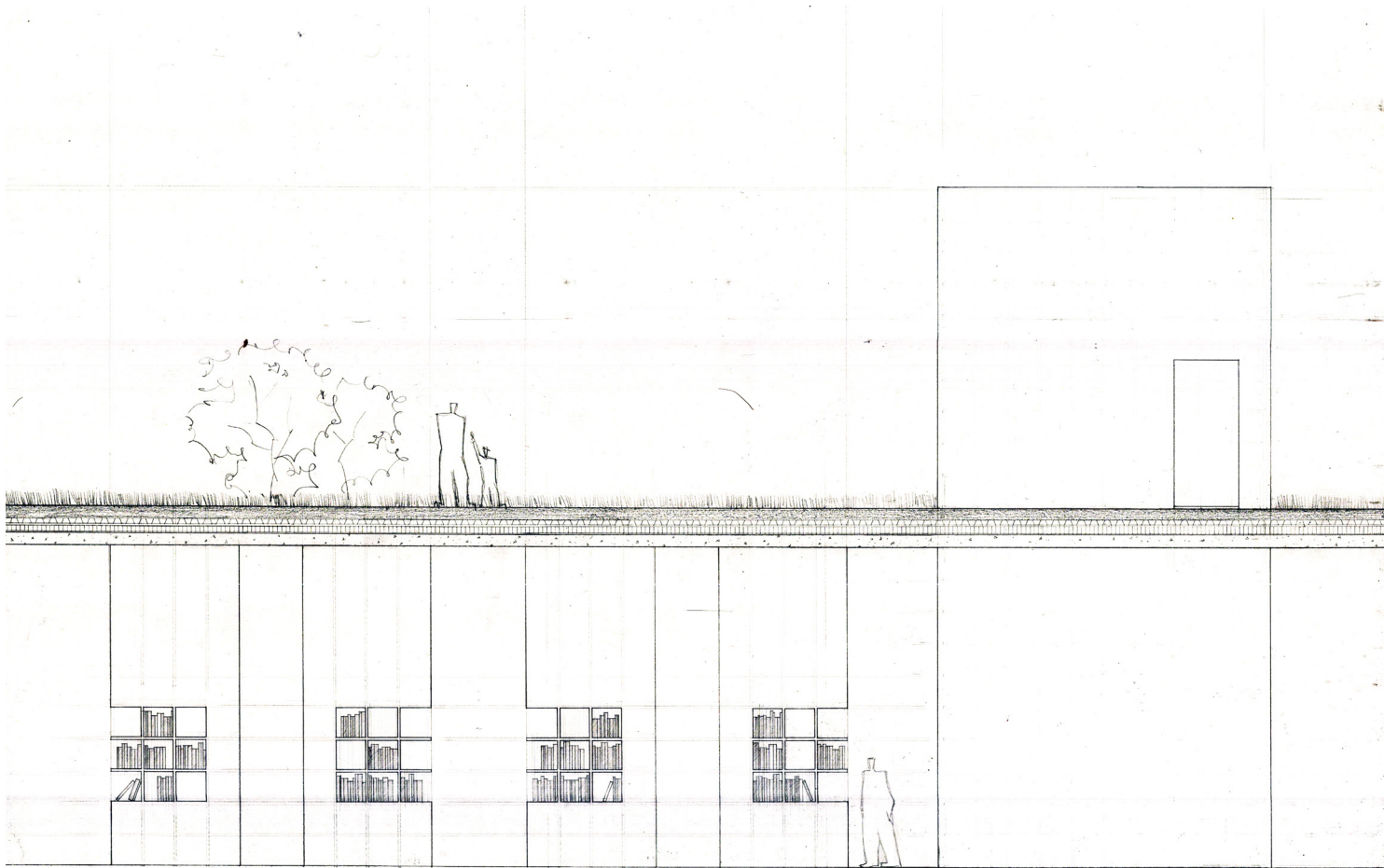


The repetition of light and building elements creates an order of the space. The cells underground are connected to the adjacent cells through free openings. Therefore each cell is relatively enclosed yet allows free movement through the cell and between the cells.



Skylight is brought down into the cells and the staircases become lightwells.





Model Photographs

