POLITECNICO DI MILANO

FACOLTÀ DI ARCHITETTURA E SOCIETÀ

SEDE DI PIACENZA

MASTER COURSE IN SUSTAINABLE ARCHITECTURE

OF MULTI-SCALE PROJECT

SOCIAL HOUSING

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Ⅰsolution of social housing

Ⅰ-Ⅰ definition of social housing

Varieties of social housing are arisen by the unique relationship between private and public dimension in modern urban space, however, the priority of housing for human is still staying together. After the development of contemporary urban strategies, housing obtained its own definition, which is not only considered inhabitation concept, but also the relationship between private and public space.

1, Urban relationships

During the international planning, besides ideal blueprint, it is easily to find a lost space in urban environment. Lost space is a complex residual area located in the centre of urban margin and industry region, which is compromised both by the principle of history conservation and modern development requirements. These days city planner is obliged to adopt strategies, being sensible to the local context, in order to gain a value for the urban space. Urban housing means to be inside the environment. The relationship between private and public dimension is the Urban Space. Nowadays the urban space is quite different from the rational concept, because there are new needs and questions, but the priority for everyone is staying together.

2, Inhabitation requirements

One of the significant requirements of social housing is achieving the basis of living needs. Space is a container which supplies a physical environment for living. Consider the three basic architectural elements: durability, utility, and beauty, a basic house should be in a good structural condition, function well for using and delight life.

In this prospective, my interest is not only to develop a prototype of Social Housing but the character of the relationships between private and public space inside the surroundings. The starting point is the image of building, and the architectural idea becomes a union between represented forms and internal space

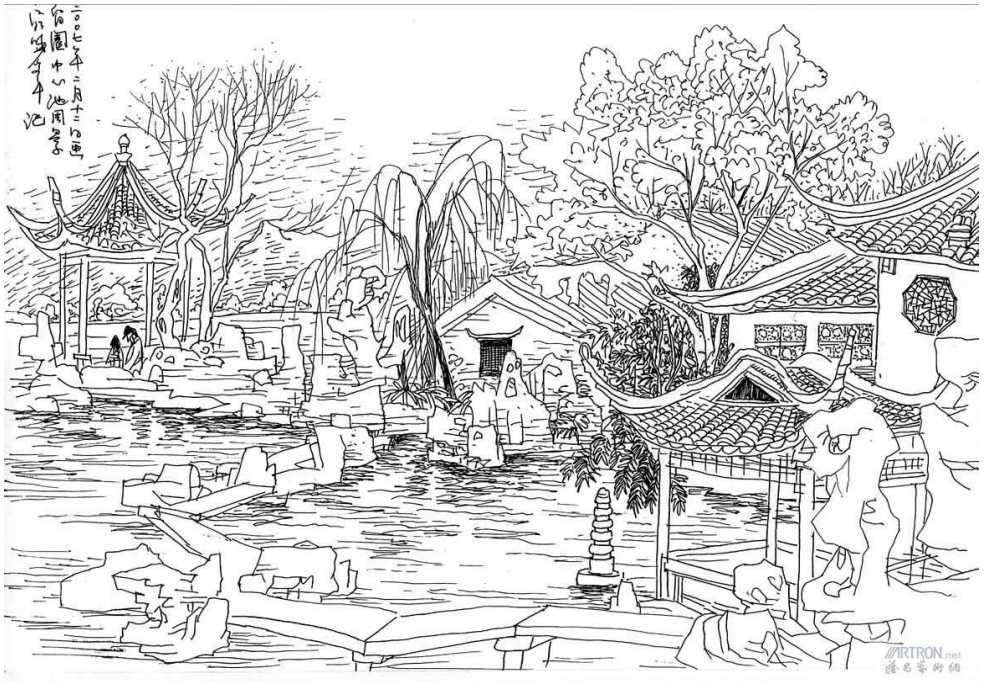
Ⅰ-Ⅱ Relationship by A cultural solution

Consider about opportunities of mutating conditions of collective culture, Attempt to find a culture principle to from the relationships between private and public space

1, Possibility of mutate collective culture

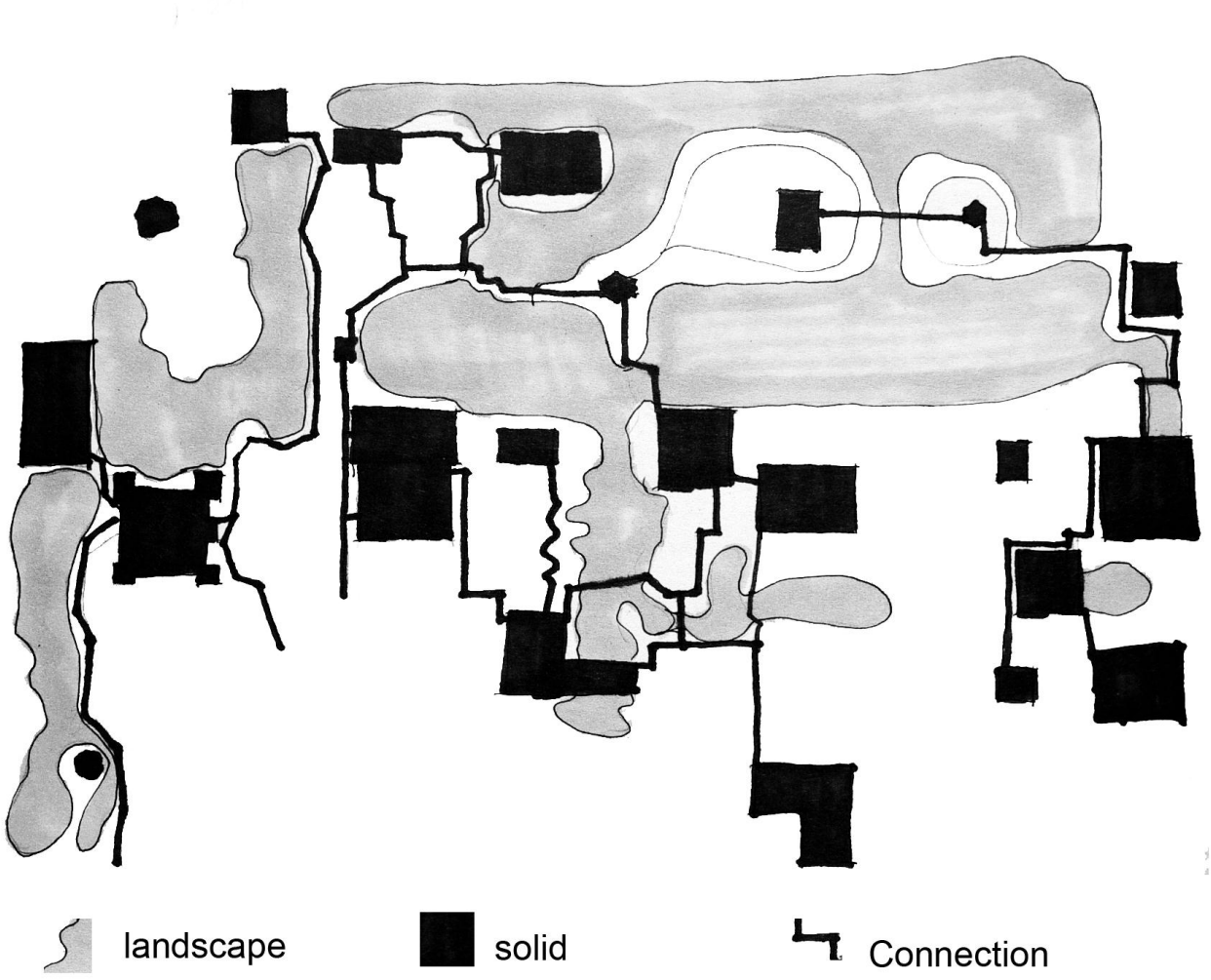
From the ancient Chinese Architectural philosophy, building cannot stand out alone without surroundings; background is not only a cultural reference but a physical solution of providing characters (fig.1). This co-worker with nature is Gardening (fig.2). Ancient garden included every necessity of living space, physical building, natural landscape, artificial transportation and mental circumstance.

1, Chinese architectural group imagination



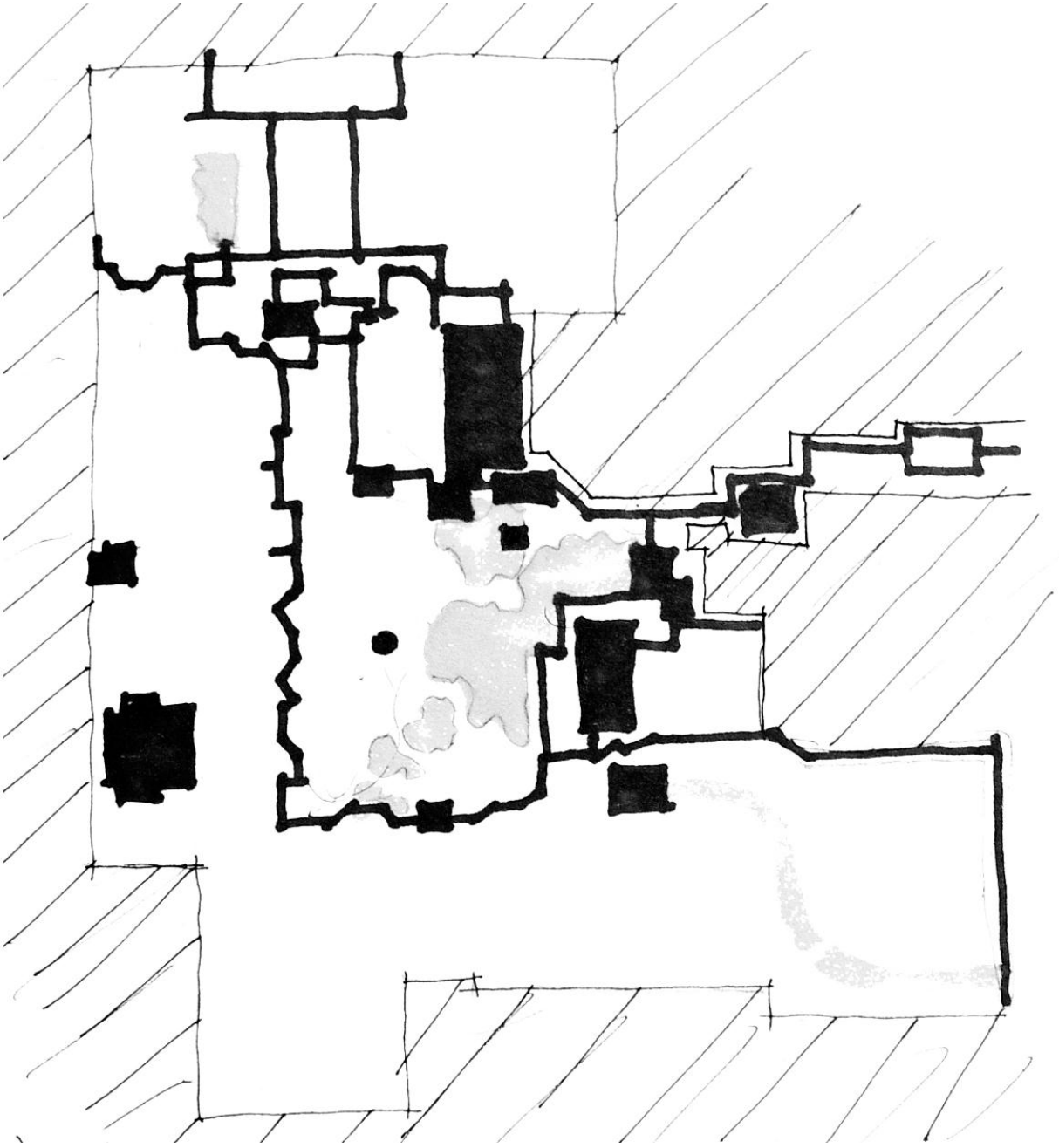
2, Perspective of The Lingering Garden, Suzhou, china

Consider about urban planning, the method is starting from the connection between landscape and artificial space, which create new public area with a nature outlook, the rest physical space after occupied is modified by social hierarchy and nature law. For human using, connection between buildings is the last step which assign transportation nets to the whole planning (fig.3).



3 Ancient Chinese city configurations

Thinking of a single inhabitation region, it is possible to mutate the conditions of making city. This inhabitation garden is a village considered about the daily life in the dimension of people, while city is a place take care of the urban scale. (fig4)



4, Perspective of The Lingering Garden, Suzhou, china

2, Establish space relationships according to culture solution

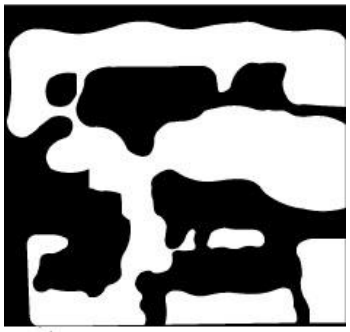
The site of project social housing is in San Giorgio, which is a typical “lost space” after modern development, located in the margin of the city, instead of starting from urban analysis; this project begins from the inner relationship.

Here are five steps to making space according to the principals of ancient Chinese gardening.

Starting from **void**

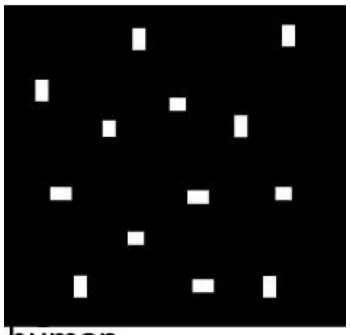
void

Transferred by **nature** texture



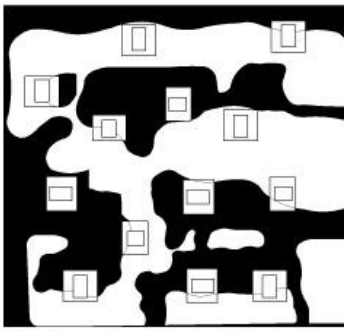
nature

Invaded by **human** being



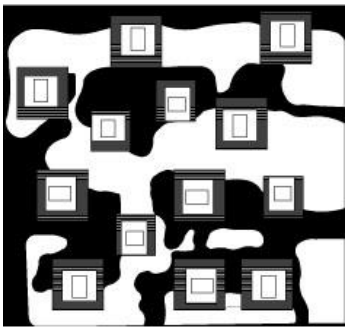
human

Modified by living **behaviour**



behavior

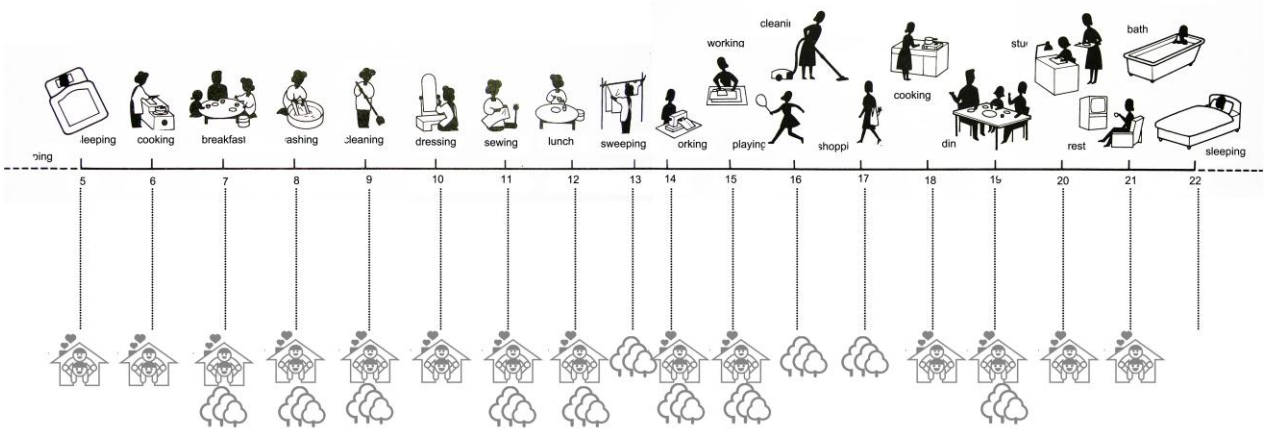
Shaped by **space** volume



space

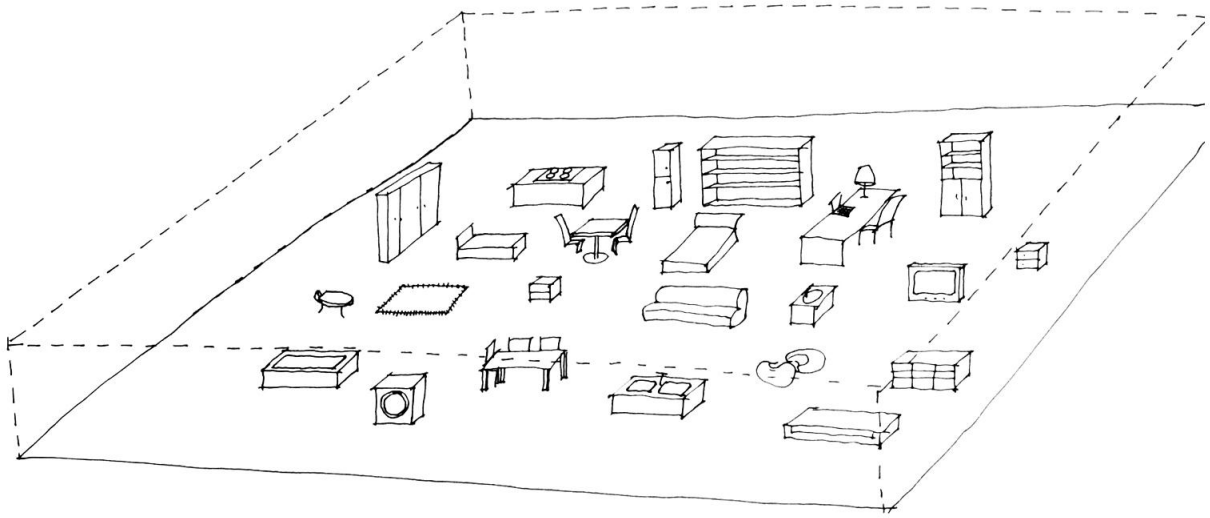
Ⅰ-Ⅲ Prototype by living behaviour

The significant inhabitation requirements should meet the basic needs of house wife. According to a report, most of the living space is designed for housewife, and obtain reference from the schedule of their life (fig5), woman is the one who is really use the function of living space, they spend almost the whole day and the whole life inside the building.

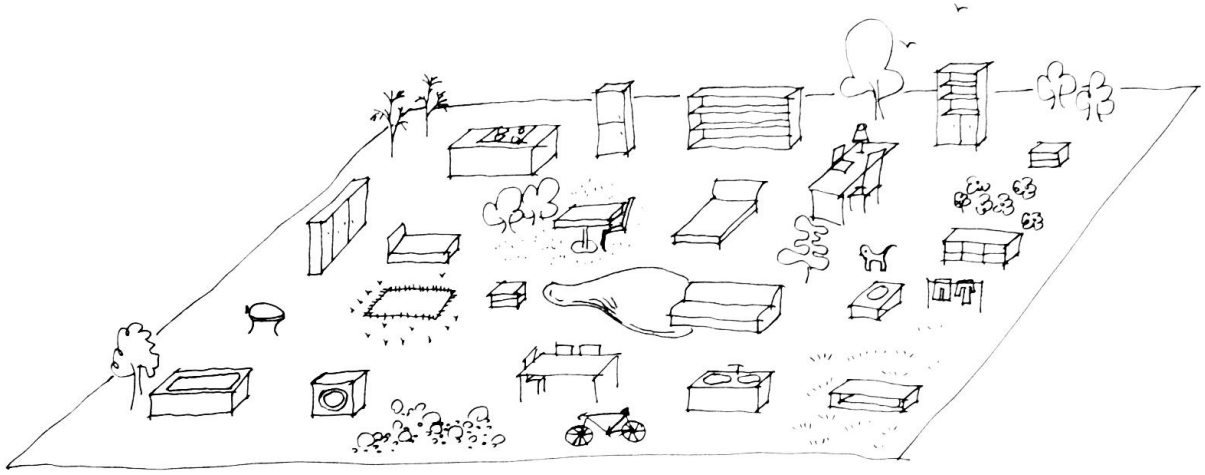


5, Schedule of housewife

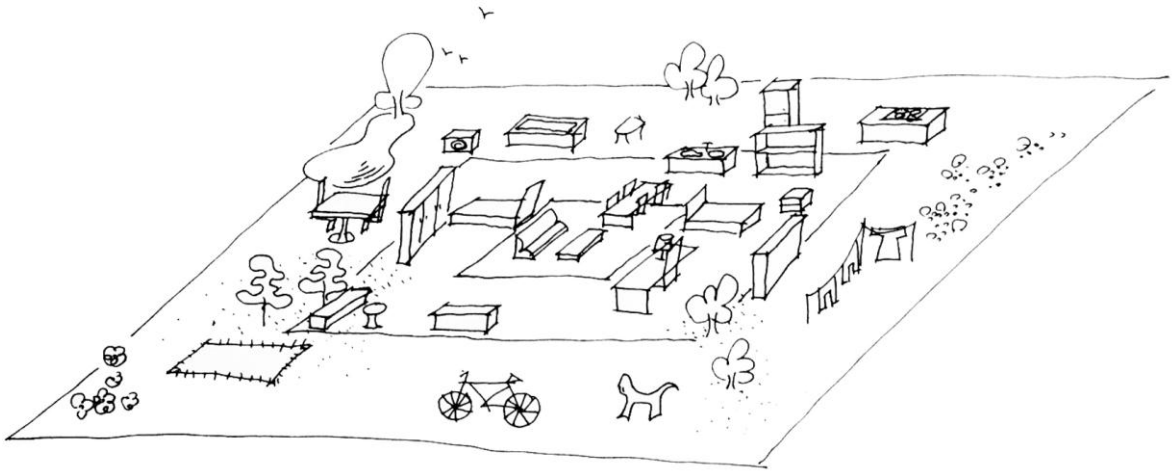
Working on the model of inhabitation necessities, and resulting the configuration of living space in a daily life.



House is a container which carries physical necessities.

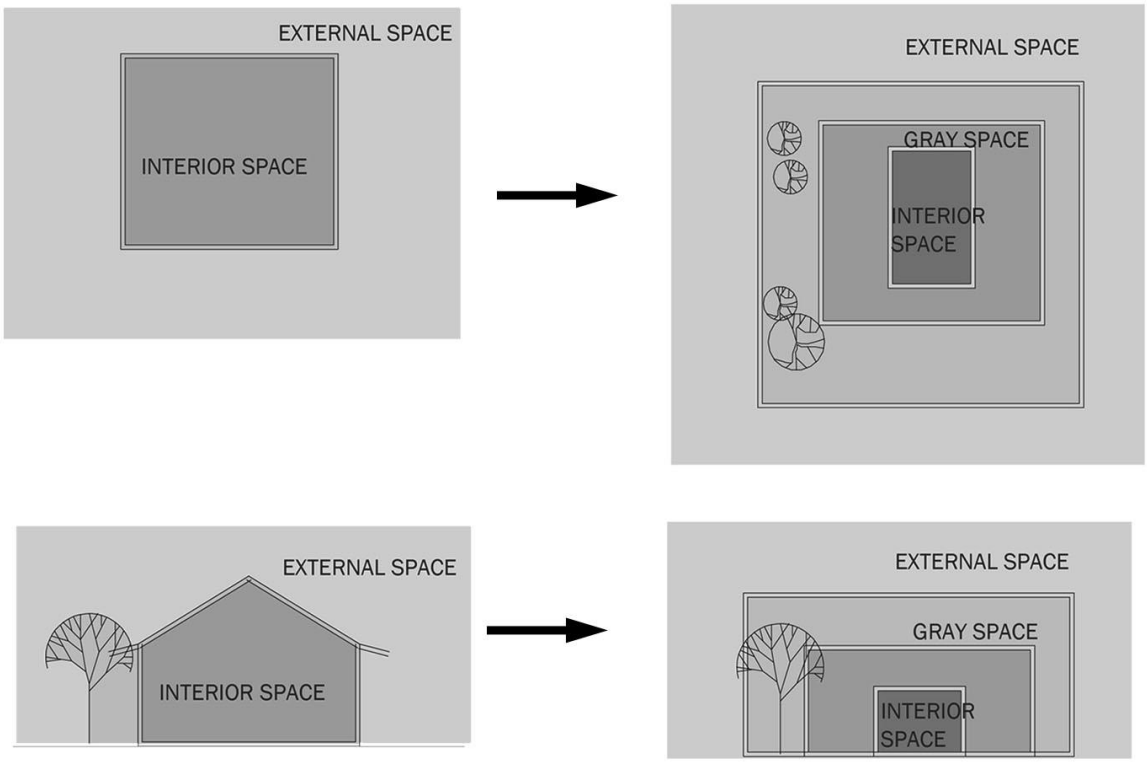


House is a container which carries both physical necessities and natural landscape



There are three hierarchies in the relationships between private and public inside living container. The inner part is dedicated to basic basic needs (black space), the outer layer is designed for public circulation (white space), and the middle part becomes a gray space which deals with the physical needs and mental circumentance.

As a result, the configuration of living units is constituted by “black-gray-white” space carried inhabitation necessities. (fig6)



6, Prototype of living unite

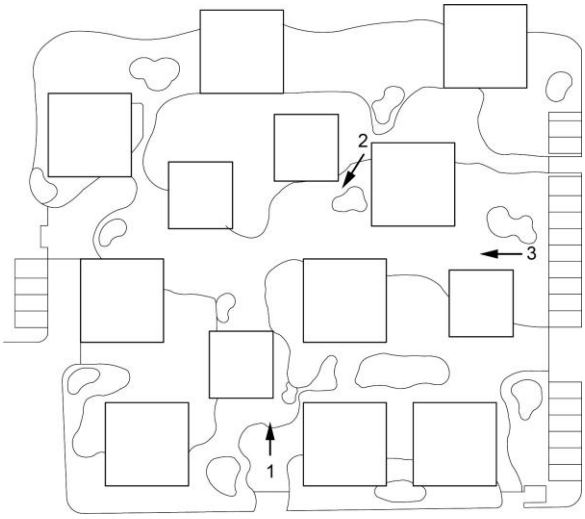
Conclusion:

1, Urban relationships and inhabitation requirements are the key points which define social housing.

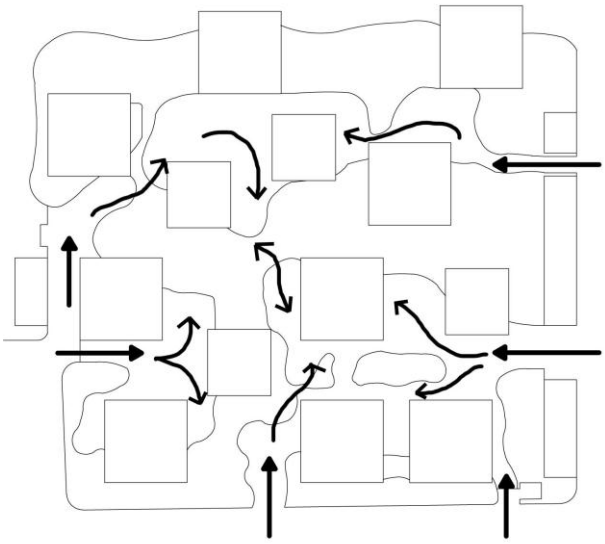
2, Urban relationships are planned by the principle of Chinese gardening.

3, Inhabitation requirement is confirmed by a living prototype which is a result of daily life configuration.

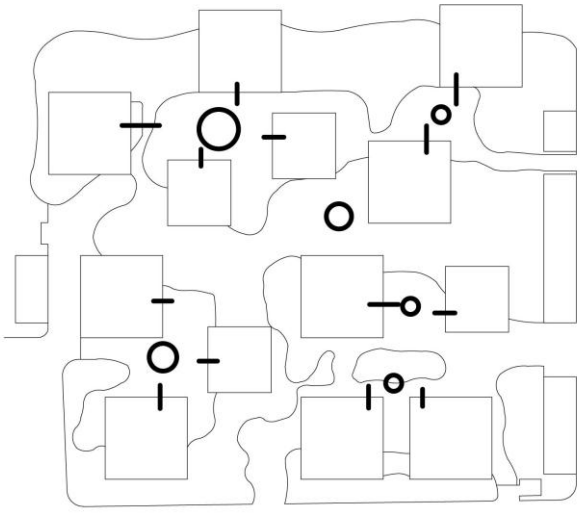
Ⅱ Analysis of housing group



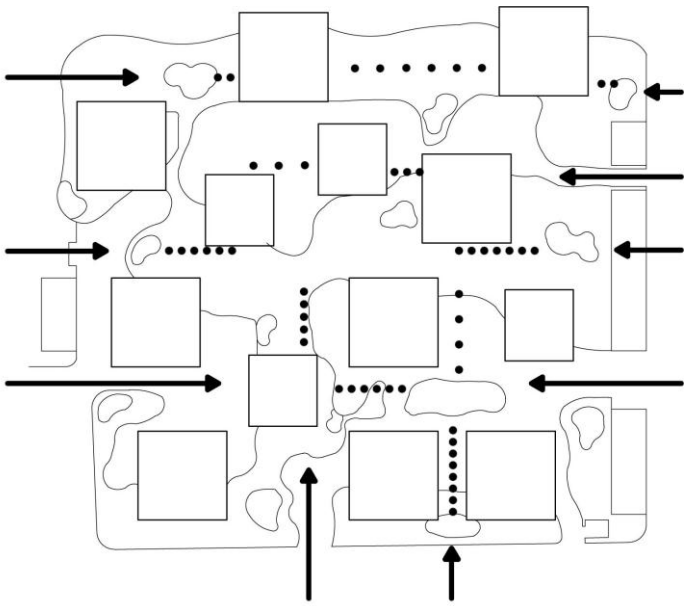
Master Plan



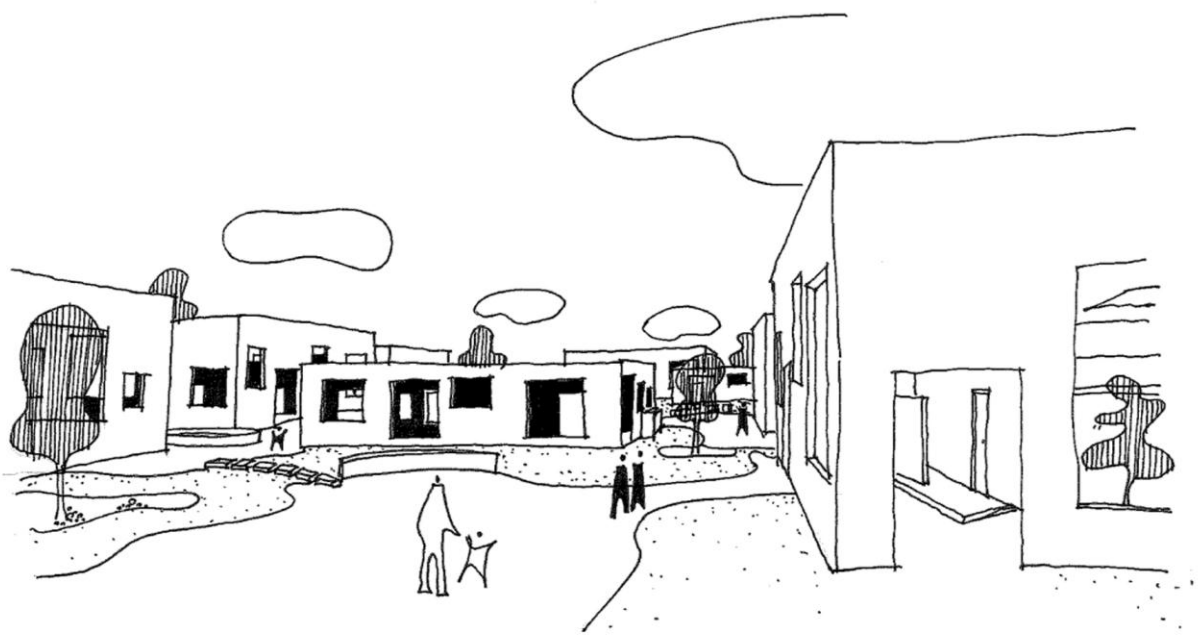
Circulation



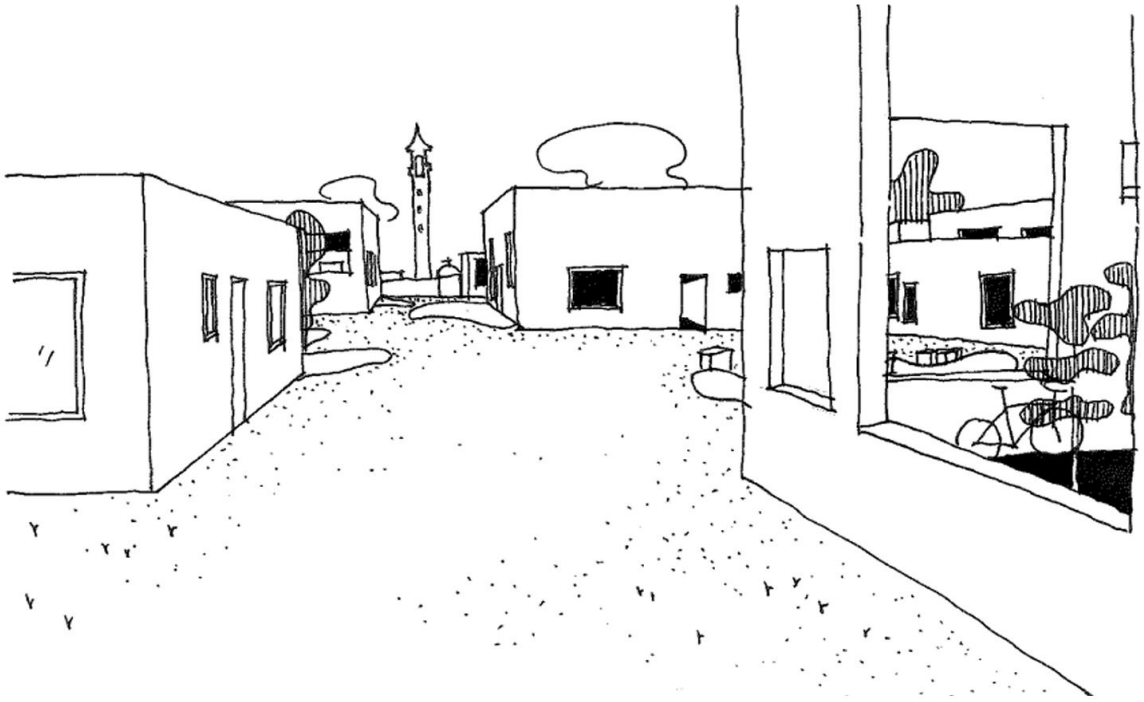
Cluster



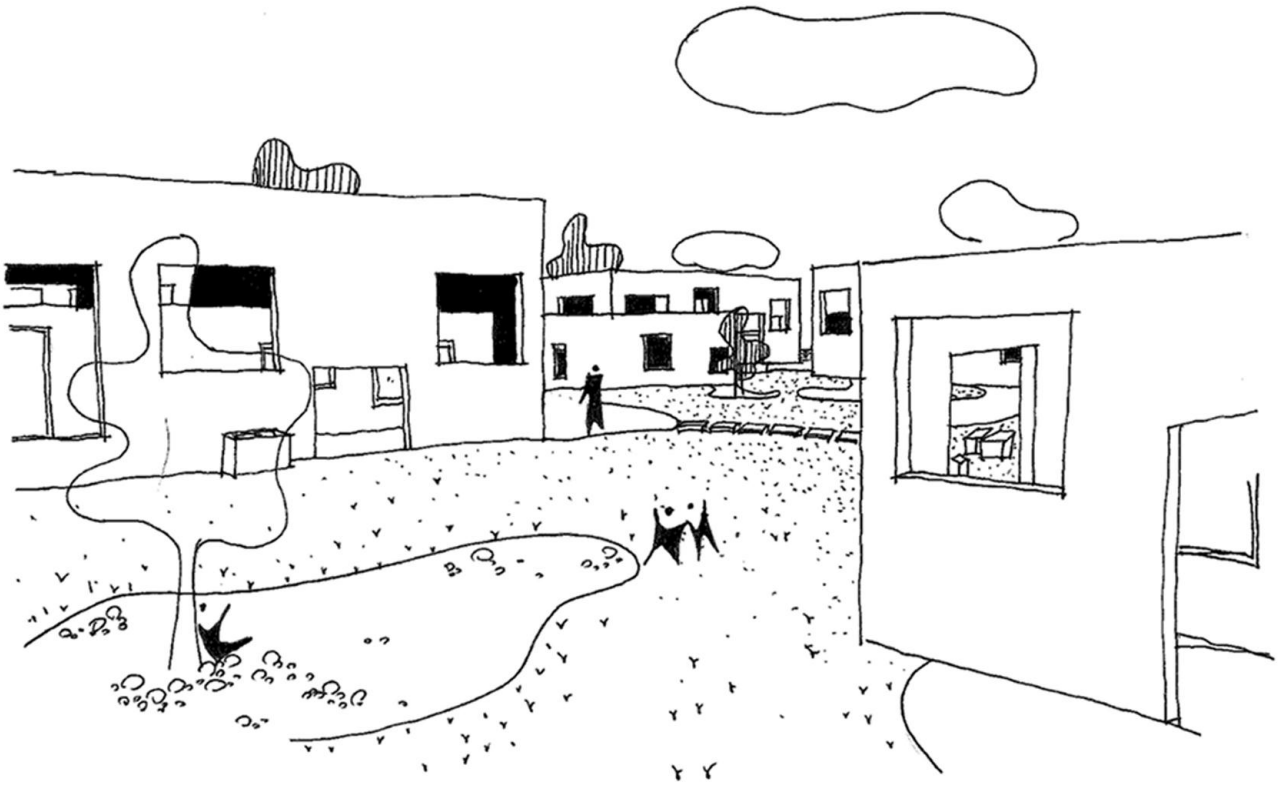
Vision



View 1, from main urban entrance.



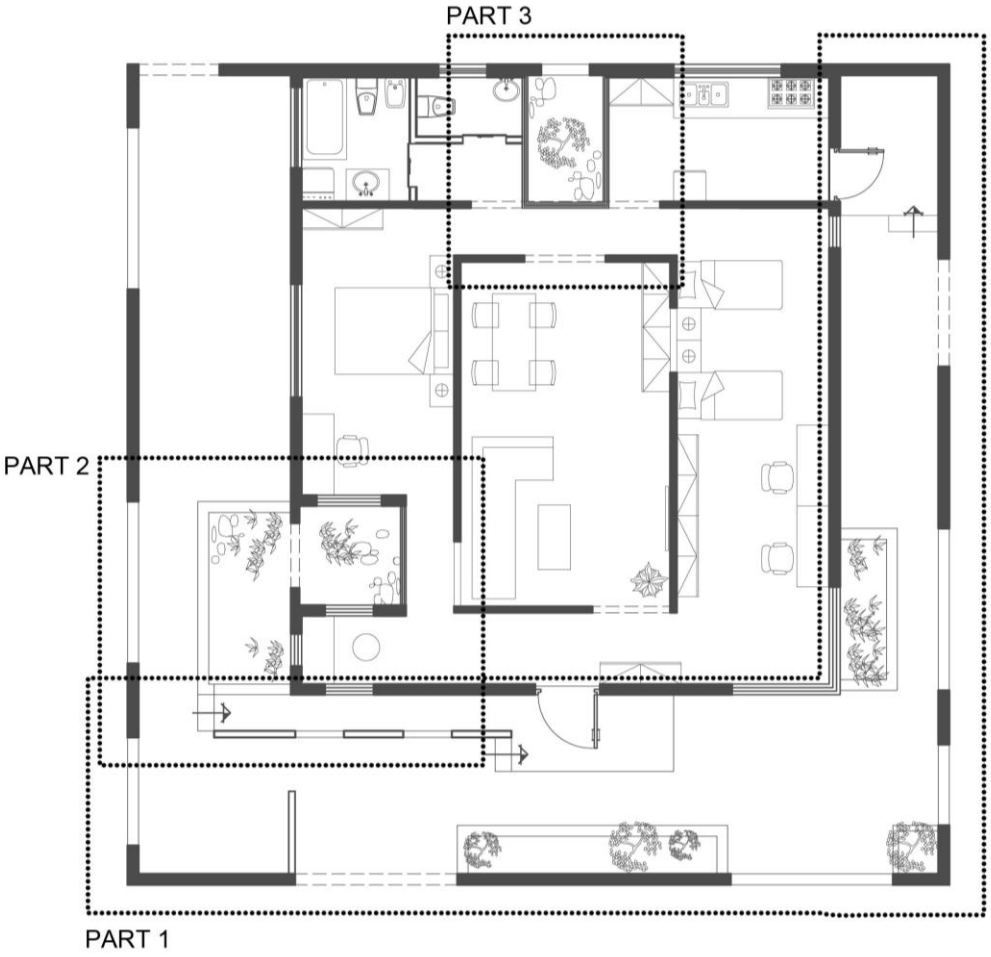
View 2, from the centre



View3, from the field entrance.

III Analysis of living unite

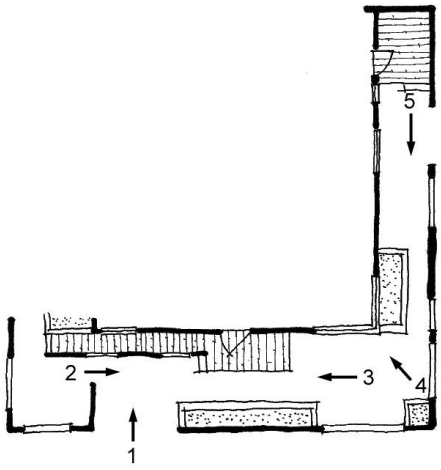
Living unite is developed from the prototype. First of all, it is considered about the space hierarchy according to private, semi-public and public space. Secondly, it is polished by the principle of Chinese Gardening which could improve the quality of single space. Third, opening is organised by vision blocking and connection.



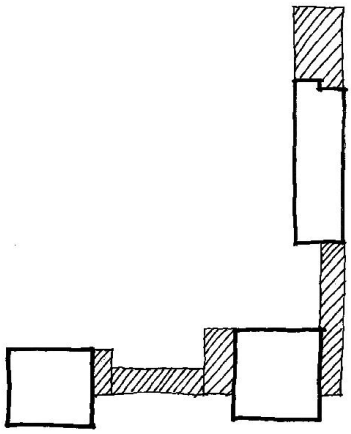
Plan

There are two main strategies which used to improve the quality of space. The space quality is not only well functional but brings interests for daily using. Changes in space dimension, direction and illumination are the first strategies which used in the first part, to correct the problems from long and narrow corridor. Second method is overlapping space layer by inner garden which enlarge the atmosphere, to verify the tension from tiny space. Third way is ending up a space using a comfortable space which both suggests the finish of previous and starting of the next.

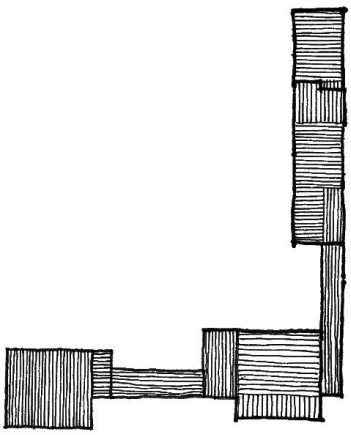
PART 1



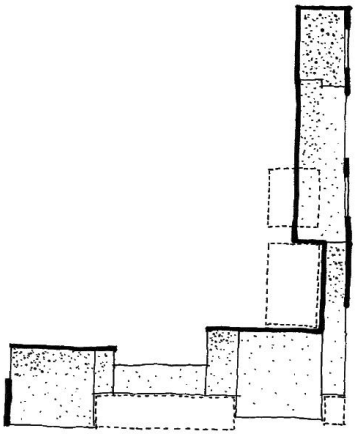
PLAN



DIMENSION



DIRECTION

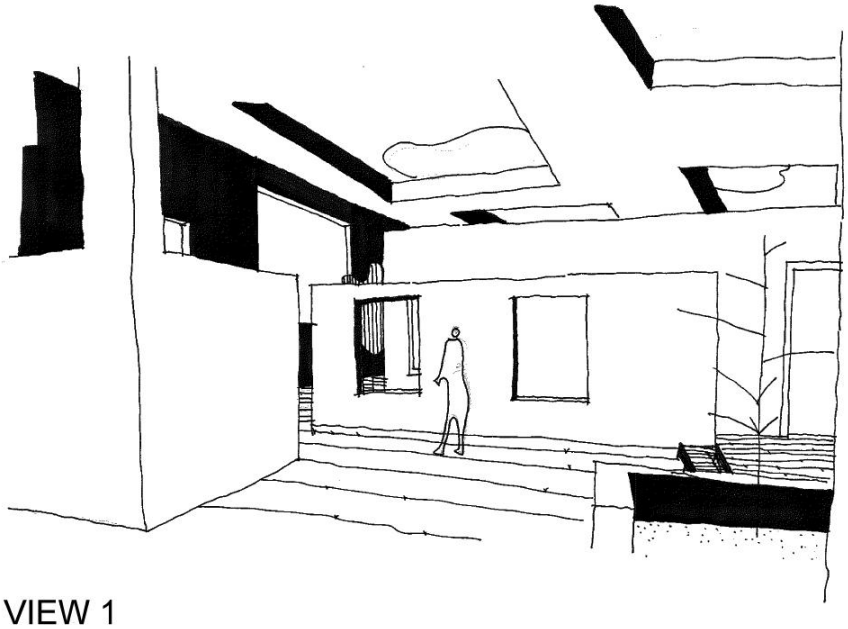


ILLUMINATION

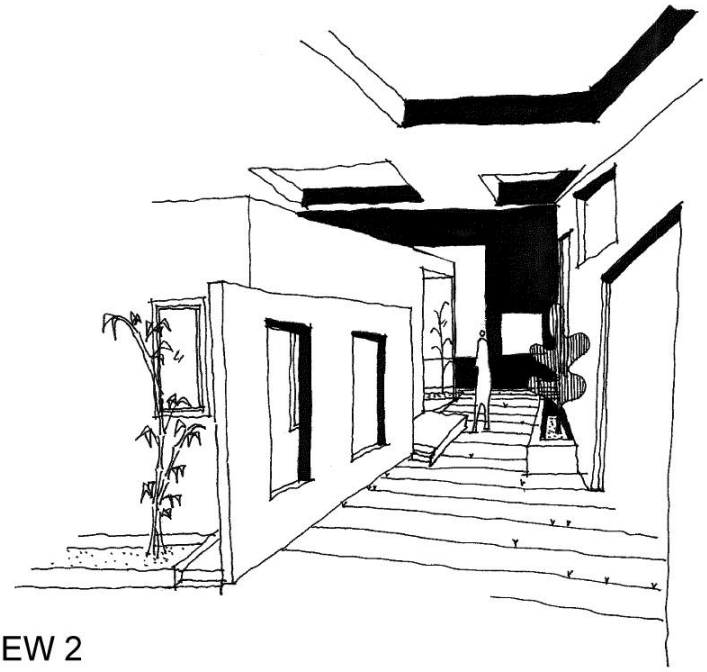
This corridor is connection main entrance to the secondary entrance, which is combined by three big spaces and a serious of small space. Changes of dimension provide alternate tension with relaxation which enlarges the feeling of a narrow connection space by contrast.

The direction of the space is changed eight times which gives fun to the simple transition space.

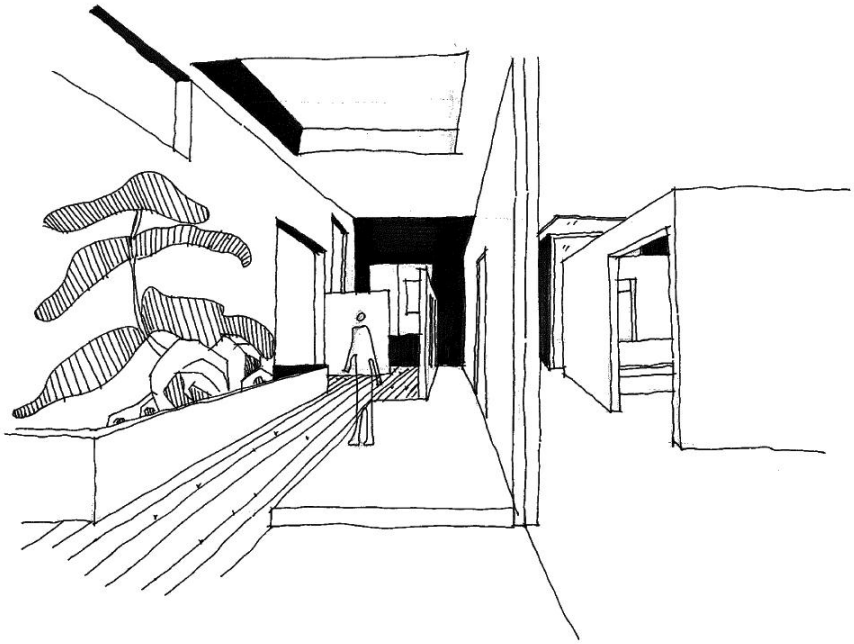
The contrast of light and shadow improves atmosphere of space which is alternately bright and dark.

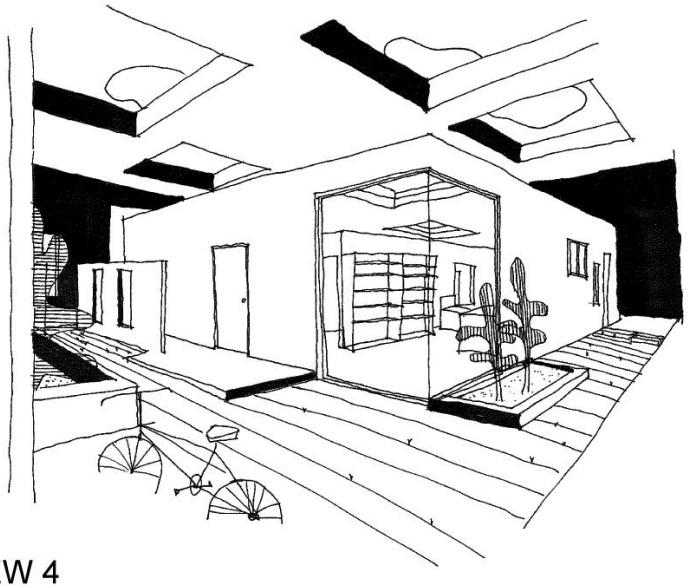


VIEW 1

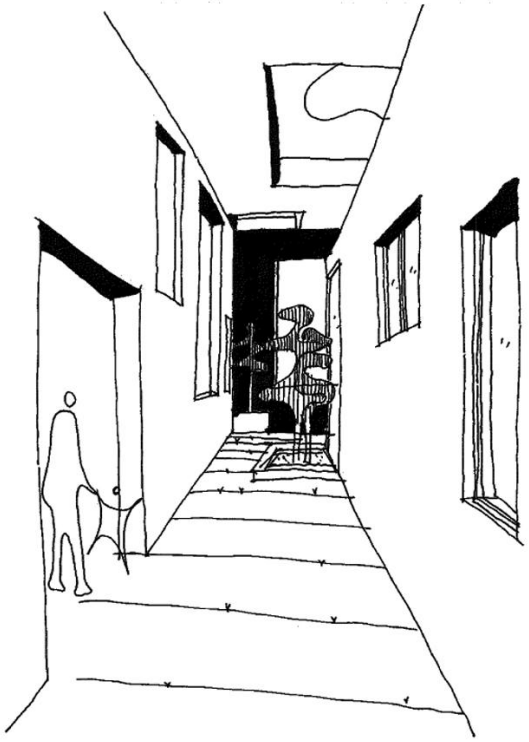


VIEW 2



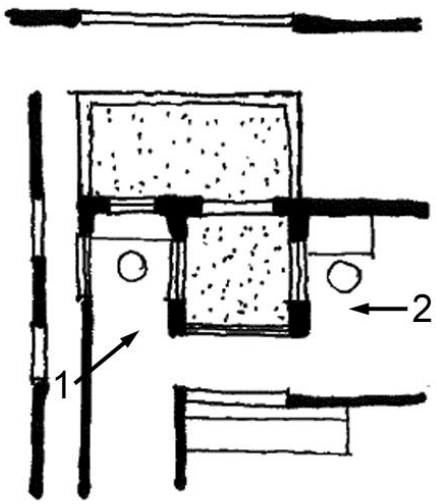


VIEW 4

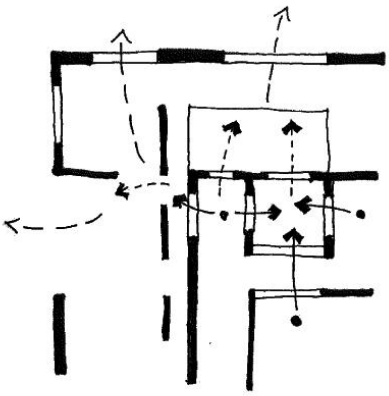


VIEW 5

PART 2



PLAN



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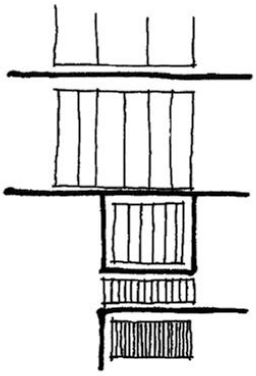
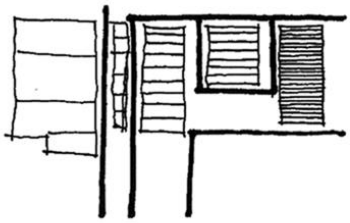
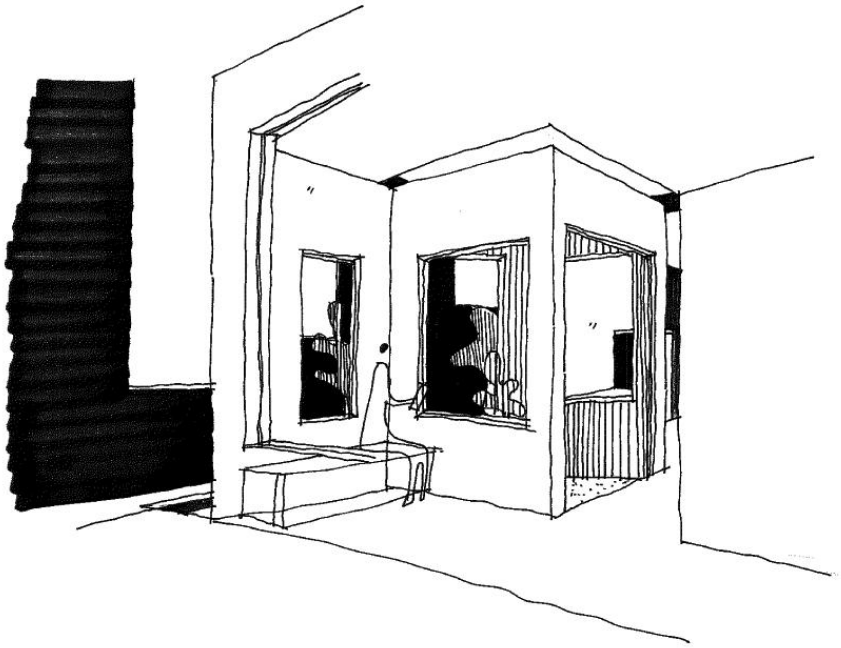


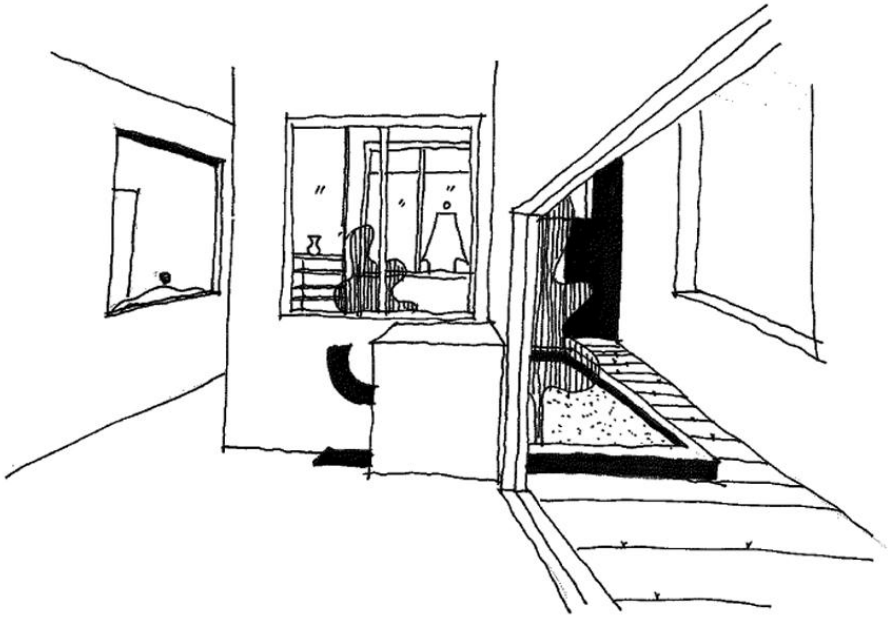


HIERARCHY

The corner of this passage is a reading space; the contradiction is small space have to express endless feeling to improve the quality of reading room. And the strategies here are overlap four spaces with opening and garden connections. Under these conditions, vision connection decrease the tension of tiny space, while numbers of space block disturbance from outside, at the same time, making a quiet and relax atmosphere for reading.

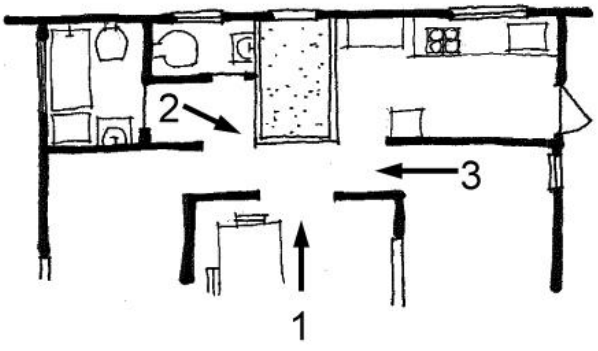


VIEW 1

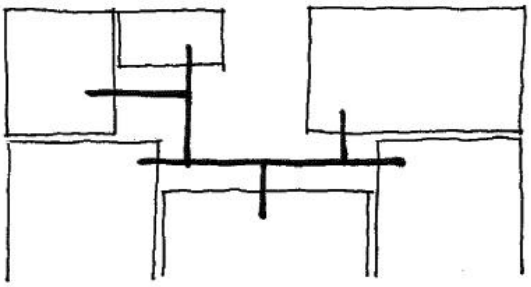


VIEW 2

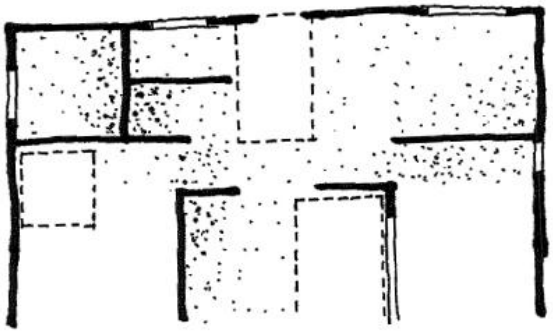
PART 3



PLAN



CONNECTION



ILLUMINATION

The space in the middle axis ends with a garden and wall with man-size opening. Which enhances the meaning of middle axis and let vision goes on, physically speaking, it is the closure, but mentally speaking, vision continues the endless feeling. Secondly, the garden with sky opening in the middle of narrow transition space supplies nature light from which decrease the tension of tiny space.

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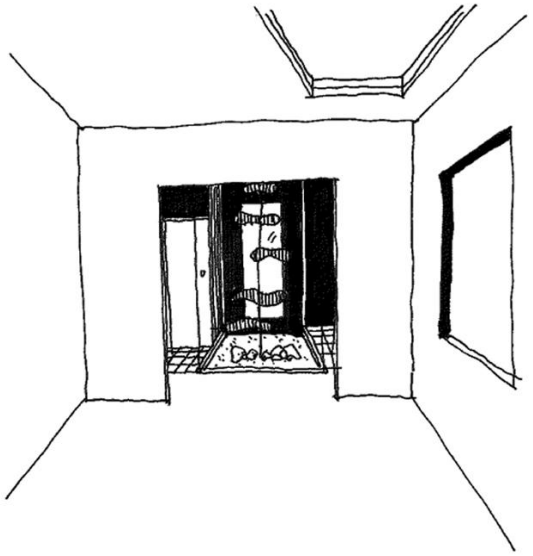
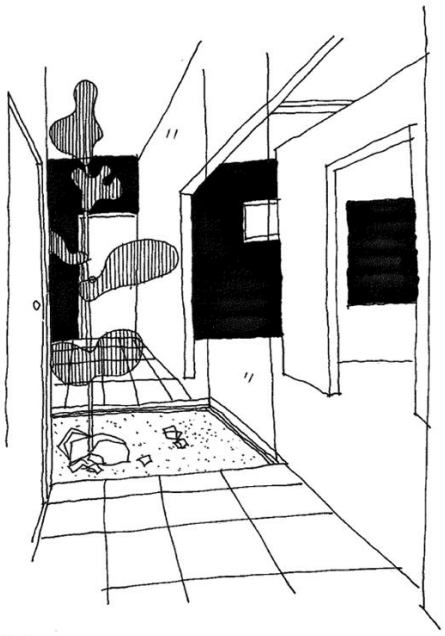


VIEW 1



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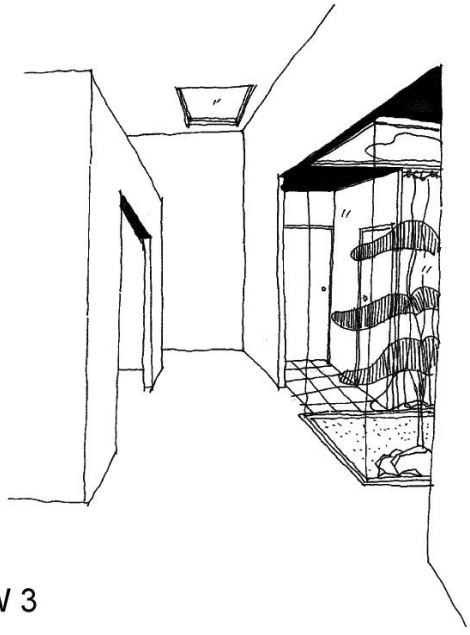
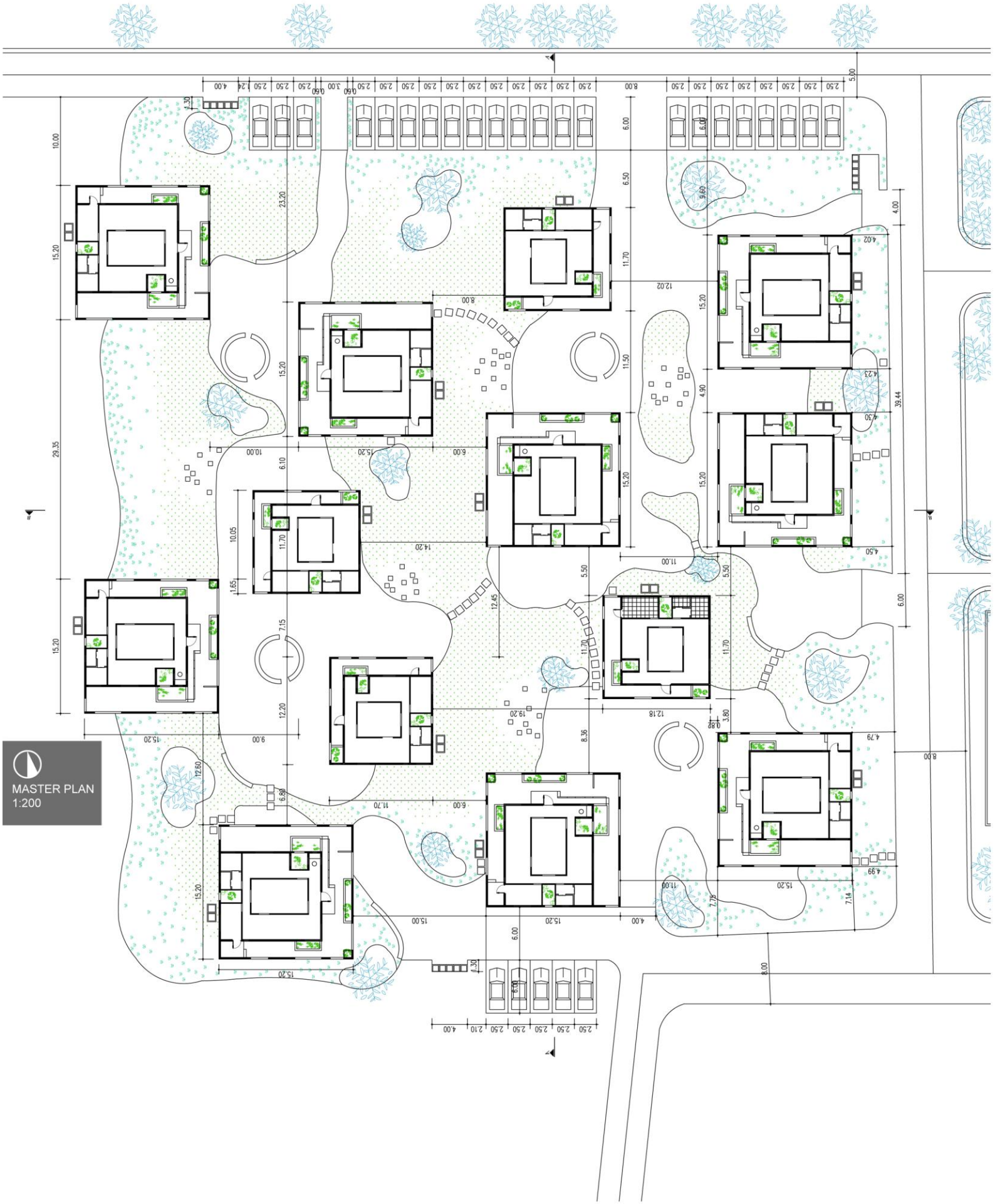


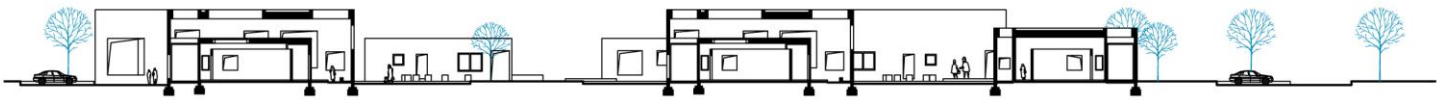
VIEW 3

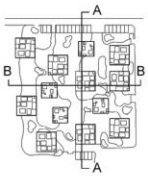
Ⅳtechnology drawing of project “13 houses” in San Giorgio

MASTER PLAN
GENERAL SECTION
1:500

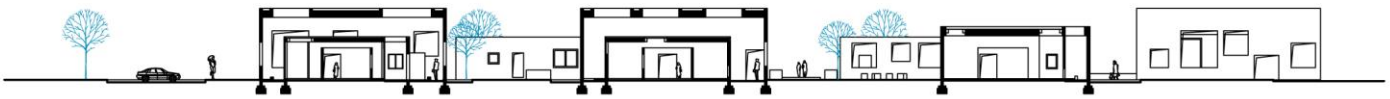

MASTER PLAN
1:200

GENERAL
SECTION
1:200

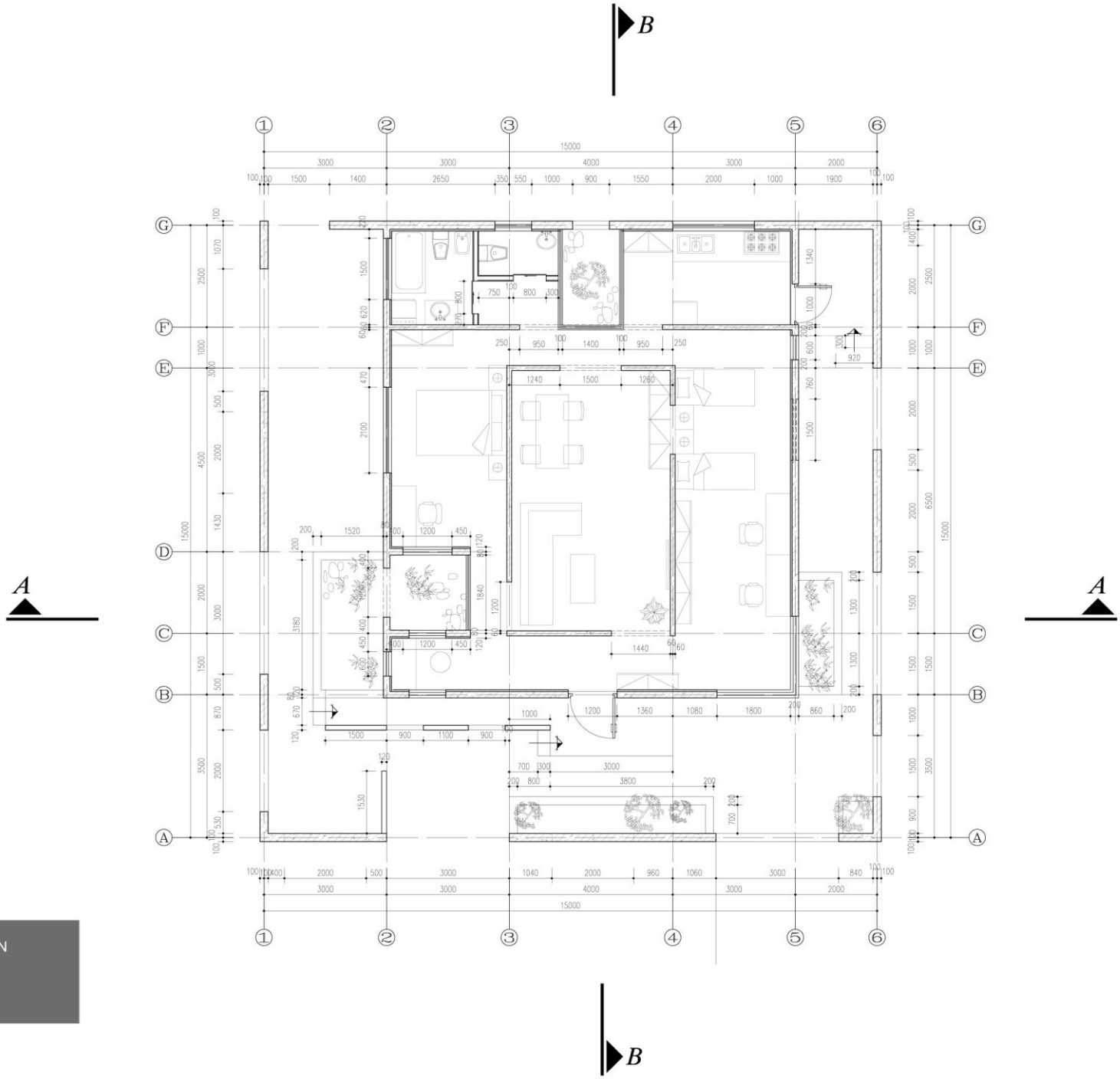




SECTION A-A



SECTION B-B



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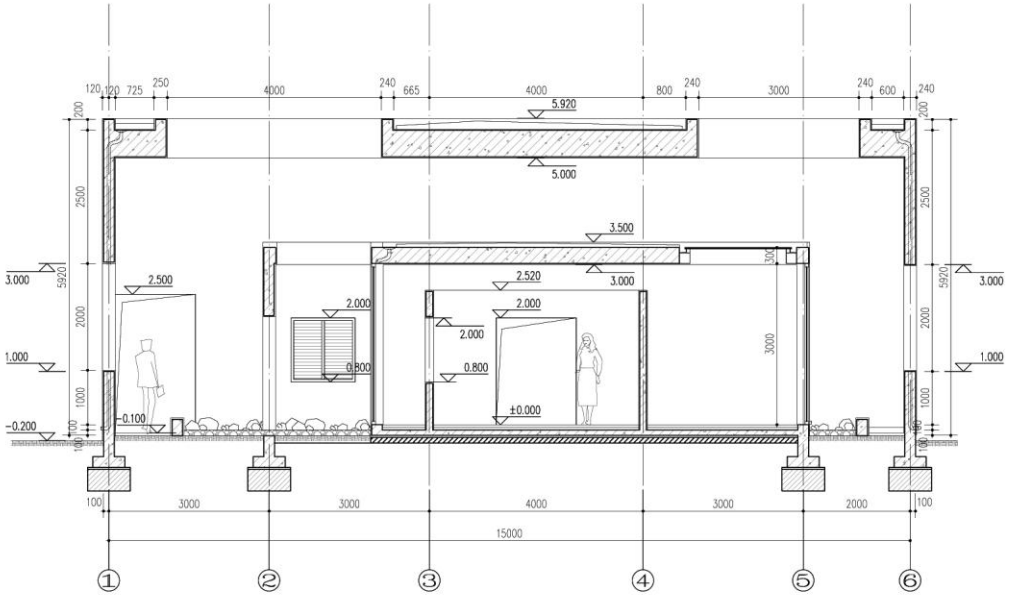
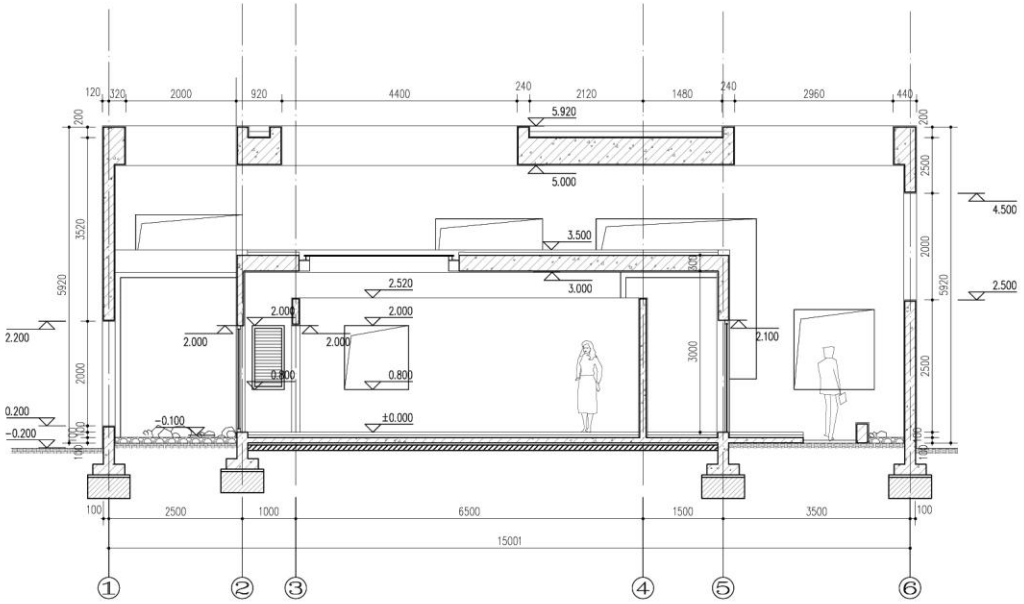


SECTION A-A

Scale: 1/50

SECTION
1:50



SECTION B-B

Scale: 1/50