

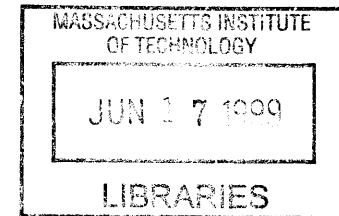
Population Policy and Urban Housing in China

by

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ROTCH

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE DEGREE OF
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Population Policy and Urban Housing in China

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Mingzheng Gao

Submitted to the Department of Architecture
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requirements for the Degree of Master of Architecture

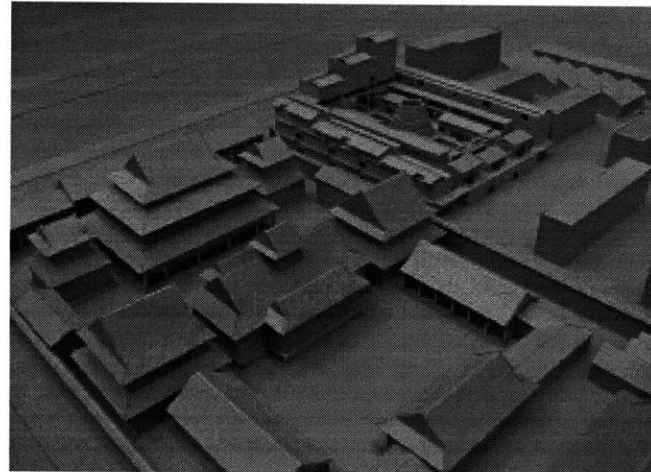
ABSTRACT

This thesis will focus on how urban housing design reflects the new one-child family population policy in the traditional urban context in Beijing, China. The population policy has changed the size and structure of traditional family, and further affected children's growing up environment. Children, used to grow up in a joint family of three generations in a traditional courtyard house, now have isolated by apartment box. The traditional social and spatial relationships among children, families, and neighbors have been extremely weakened. My intention is to restore the lost relationships for lonely children in a high density residential complex. This complex, transformed from the traditional single story courtyard house, becomes one big house, where all neighbors live under one roof as one big family. As a consequence, children in a one child family still have the same feeling of multi generations living together as their old generations had before.

Thesis Supervisor: Wellington J Reiter

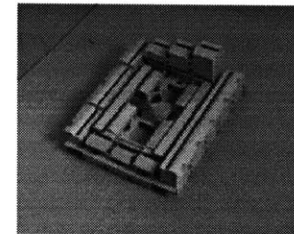
Title: Associate Professor of the Practice of Architecture

For my parents



Contents

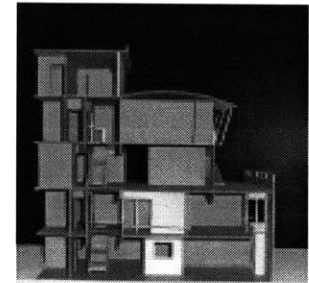
1	Introduction	6
2	A Big Family & A Big House	9
3	A Family & A Courtyard House	14
4	One Child Family Policy & New Urban Housing	18
5	Conclusion	49



Introduction

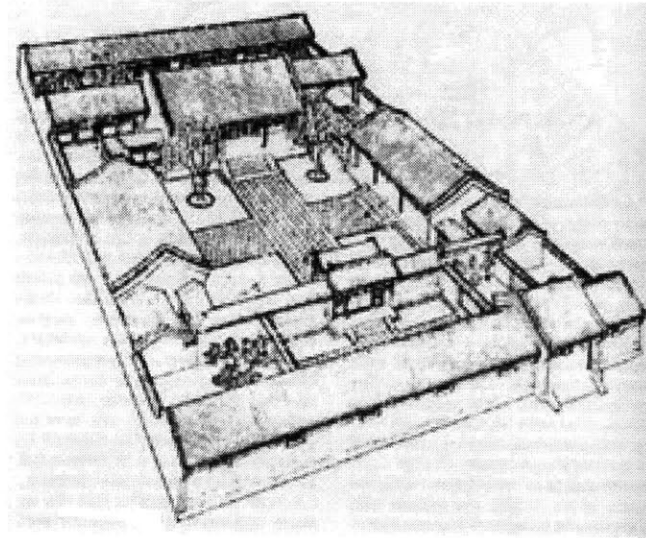
For a decade both social scientists and designers have concerned the quality of the urban living environment for a child to grow up in. The population density, neighborhood safety, and neighborhoods isolation have made the urban atmosphere unpersonal to children. These qualifications of the city strongly differ from the traditional image of a harmonious, arcadic society, as can be found in the traditional Beijing city.

Traditional city was designed as one big house. From the large scale city to a block, a quarter, and to individual building, each was one enclosed unity. These independent unities were connected by the circulation system, streets, hutongs, and courtyards. The scale of the buildings, streets, and courtyards represents the social hierarchy of the owners. This social and spatial hierarchy in the city gave people a sense of personal relationship at home. So the city can be best described as a house at a large scale, and all people live in one unity.



The spatial arrangement, from a large city to a small house, strengthened this social hierarchy. The center of the city, the forbidden city, is a city inside the city, and separated by high city wall and river around with only one gate on each side. A series of grand courtyards and buildings in the forbidden city sit along the urban axis to emphasize the social level and status of the owner. Who could access to where at what time and how to get there highly depended on the social hierarchy. This characteristic was reflected at any corner of the city, the imperial city, the inner city, and the outer city. The farther the place is from the forbidden city and the urban axis, the lower the social level is. Even in a lowest social level environment, a small courtyard, the space layout was closely correspondent to its social status. As one unity, architecture can improve people's personal relationship.

A courtyard house for the family is more than a static vessel for daily life. As humanized space the



dwelling is symbolic of family unity and sanctuary, a public statement of status as well as a tangible expression of the family's aspirations. It is dynamic entity that expresses in varying degrees the changing relationship within the family, symbolizing and accommodating evolving hierarchical patterns. The individual is essentially disregarded in the layout of a chinese dwelling. Space is defined in terms of family rather than personal needs.



So far we know that from a large scale city to a small scale courtyard house, architecture does not focus on individual building, but a group of buildings. In this group, the spacial structure support the social structure in order to maintain a harmony relationship among children, families, neighbourhood, and one city was one family. Nowadays one family and a house are sliced by the one-child family population policy. One is totally seperated from another, people do not know each other even they live side by side for years. Urban city become a restricions for children's lives, rather a active living environment.

Finally, a new architecture typology in a old urban context for one child family is proposed. It not only meets the modern living standard today, but, more important, to restore the traditional social and spacial relationships they used to have in the cityas well.





Fig 2-1. One big family -
Beijing city.

2

A Big Family & A Big House

From the beginning, China had been ruled like a family. Without exception, and the same is the capital Beijing. The city was designed exactly like a big house to accommodate this big family.

In the ancient Chinese cosmology, which considered heaven round and earth square, space is imagined as a series of squares, so is the city. The center of this ranked space is the urban center- a square core marked by four gates at the four cardinal points towards which the cosmic influences converge. This leads to a geometrical image of the universe, enlivened by an elementary network of spatial correspondences. The alternations and contrasts of opposites inherent in this notion of the univers are ideally determined by the same total order.

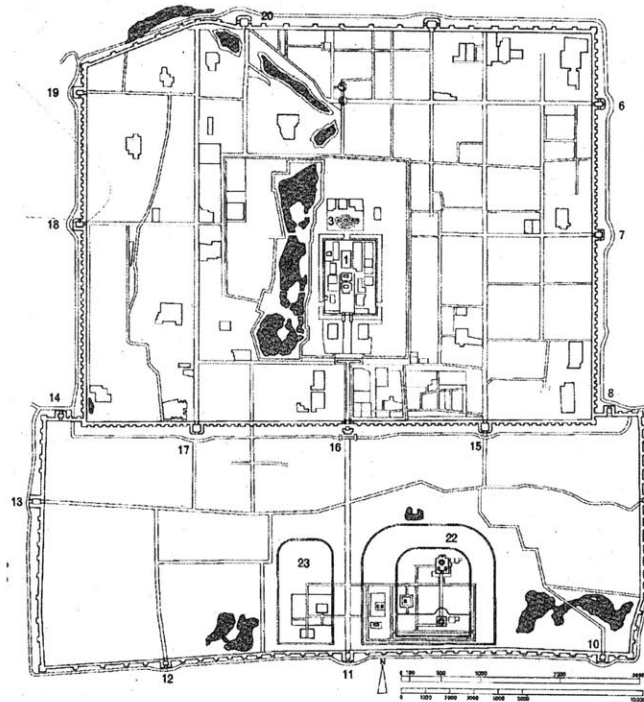
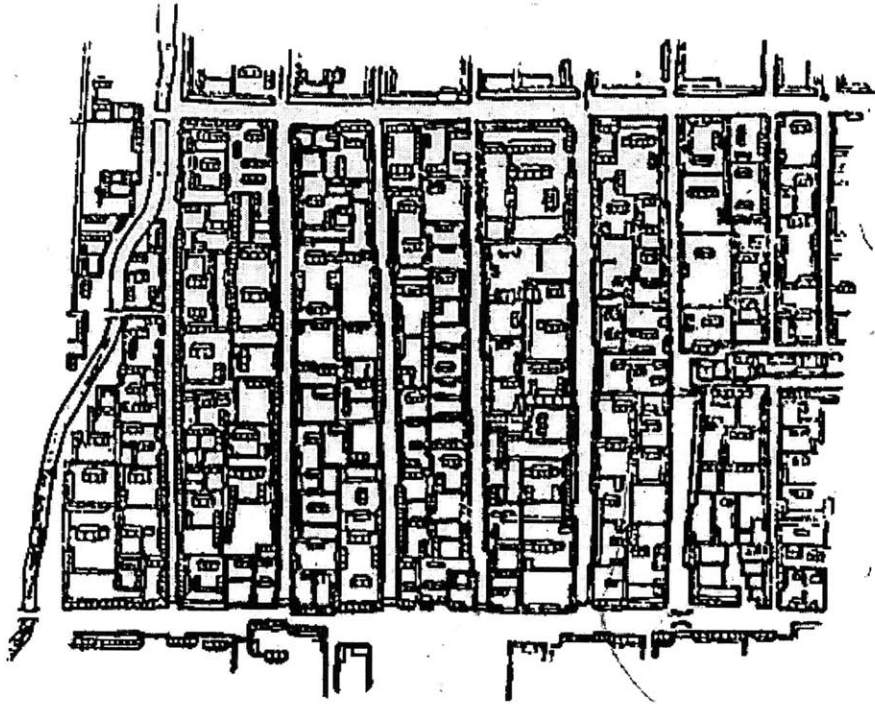


Fig 2-2. The city - A Big House.

The purpose of this was to make the city a cosmos - a true image of the universe as an ordered whole. This pursuit of order and harmony explains the great importance of orientation. As the ideal city, it was a quadrilateral girt round with walls. The royal residence, also square and walled, lay in the center like a city within the city. Each edifice had its proper place. In the middle, the audience hall opened on a road that passed between the Alter of Sun and the Temple of the ancestors and ended at the south gate. Situated at the very heart of the city and, symbolically, at the heart of the universe, the palace faced south and turned its back on the market, which has located at the northern most edge of the enclosure, an inferior position reflecting the status of trade and commerce (figure 2-2)¹.

The orientation of the city determined the circulation system within the city. The south-north and east-west avenues that divided the city into blocks performed a function of social control. Each

1. Pirazzoli-t'serstevens, Living Architecture, p14.



block was surrounded by walls and formed a self-contained little city, the unit for census and recruitment for forced labor and military service. As it consisted of a quantity of closed cells, the city had no open center for civic activity like the forum or the crossroads. Rather were its architectural features strung out along an axis in a given direction.

The administrative enclosure containing the royal residences and the government offices always formed a hiatus. The officials who had an entry to the imperial palace were not free to come and go as they pleased. Some could go only to certain offices others only to the servants' quarters; and their points of entry were rigidly prescribed. Personal relationship was clearly corresponding to the social hierarchy, which the city layout was based on.

The city was laid out with such unity and audacity that the idea of increasing the magnificence of

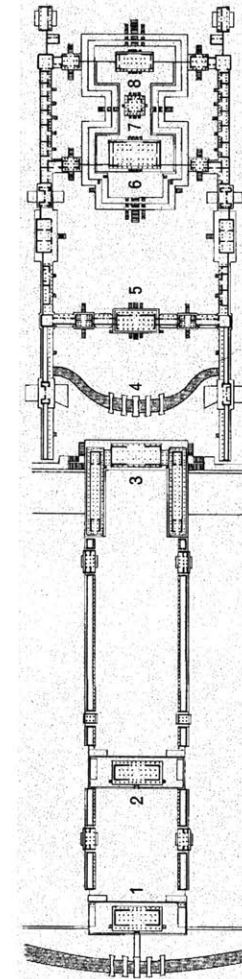
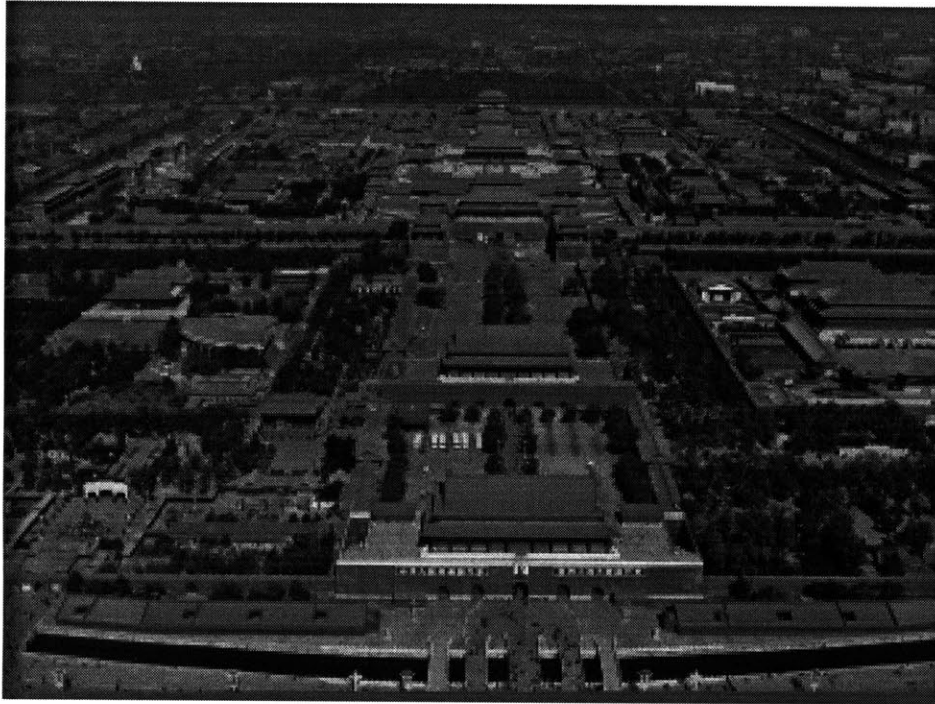


Fig 2-3. Urban Streets, blocks, and courtyard houses.

Fig 2-4. Urban Axis



a pageant always dominant, especially that of imparting an imposing effect to the appearance of the Emperor. The ruler's power and authority were unchallenged, but the emperor at any time was more than an absolute authority. He was the son of Heaven, an intermediary between human labors and heavenly favor. This can be clearly reflected by the layer and the scale of the city.

The road network focuses on the palace city which forms the heart of the whole imperial city. Similar to the main arteries of a human body, these roads link the palace city with all parts of the imperial city and, through its wall gates, to the entire empire beyond. The road network in a chessboard style has also reinforced the centrality of the palace city and the central axis of the whole city.

The major north-south and east-west streets crossed the city at right angles. The city roads and

Fig 1. The Big Family

avenues ran from a northern to a corresponding southern gate, giving way to a design feature that can be called articulated and directed space. The principal north-south thoroughfare ran along a line that passed through the central northern and southern gates of each city wall. Parallel to the gate-initiated streets in both directions were smaller avenues, and parallel to them were *Xiang* and *hu-tong*, east-west and north-south oriented lanes and alleys. The unambiguous articulation of north-south and east-west space was such that even the city's smallest regions were encased by walls or streets that ran perpendicular to one another.

Four-sided enclosure of the city and cardinal orientation of its major routes lent themselves to the further enclosure of virtually every city sector according to the four cardinal directions. The essence of Beijing resides in its adherence to a hierarchic order the system which has been handed down for four thousands of years.

In summer, the space layout for the city as one unity was totally based on the social hierarchy as one big family. The spacial relationship was closely corresponding to personal relationship. When people moved from one place to another, they knew where and who they were and what the relationship they had at one particular place. The strong relationships, both social and spacial, are attribute to the unity of the city designed as one group. Even a small courtyard house, a cell of the city, followed the same principle as the city. This will be discussed in the following chapter.

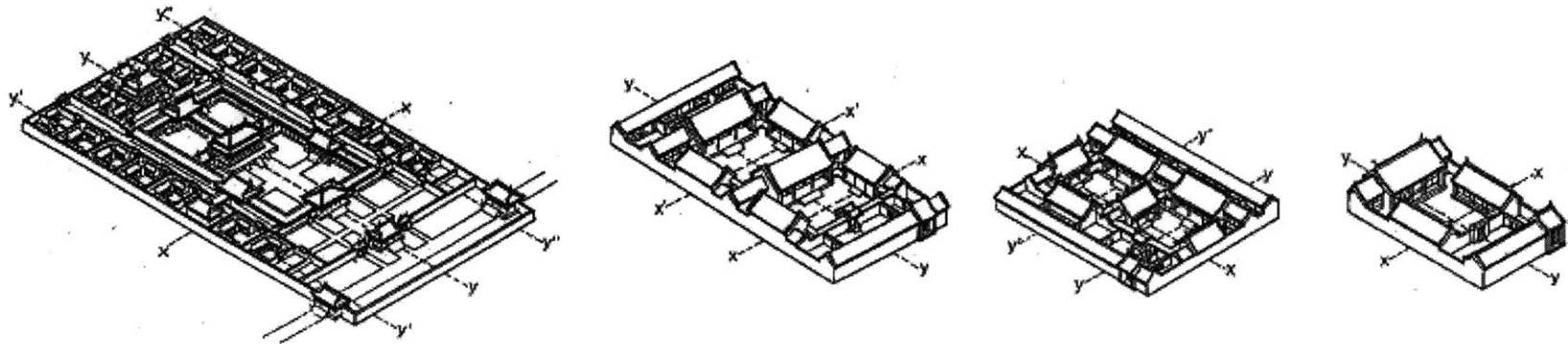


Fig 3-1. Similarity of the courtyard idea in the city and a houses.

3

A Traditional Family & Courtyard House

This order of the city has been applied consistently to the last city neighbourhood and the most humble courtyard house. Just as the city itself is laid out in a cardinal grid, so the courtyard house is the quintessential microcosm of the larger city-and the reverse also holds true (figure 3-1)¹.

The art of bulding was always subject to certain rules. It was an art subservient to the dictates of the state and intended to ensure a frame for the social structure and to fit into the ordered system of the surrounding universe. All the components of the building depended on rules which reflected the status of its owner economically, socially and aesthetically. The purpose of the rules was to allow a large number of people to live together in civilized harmony in a very small space.

1. Chang, Chao-Kang, China, Tao in Architecture, p50.

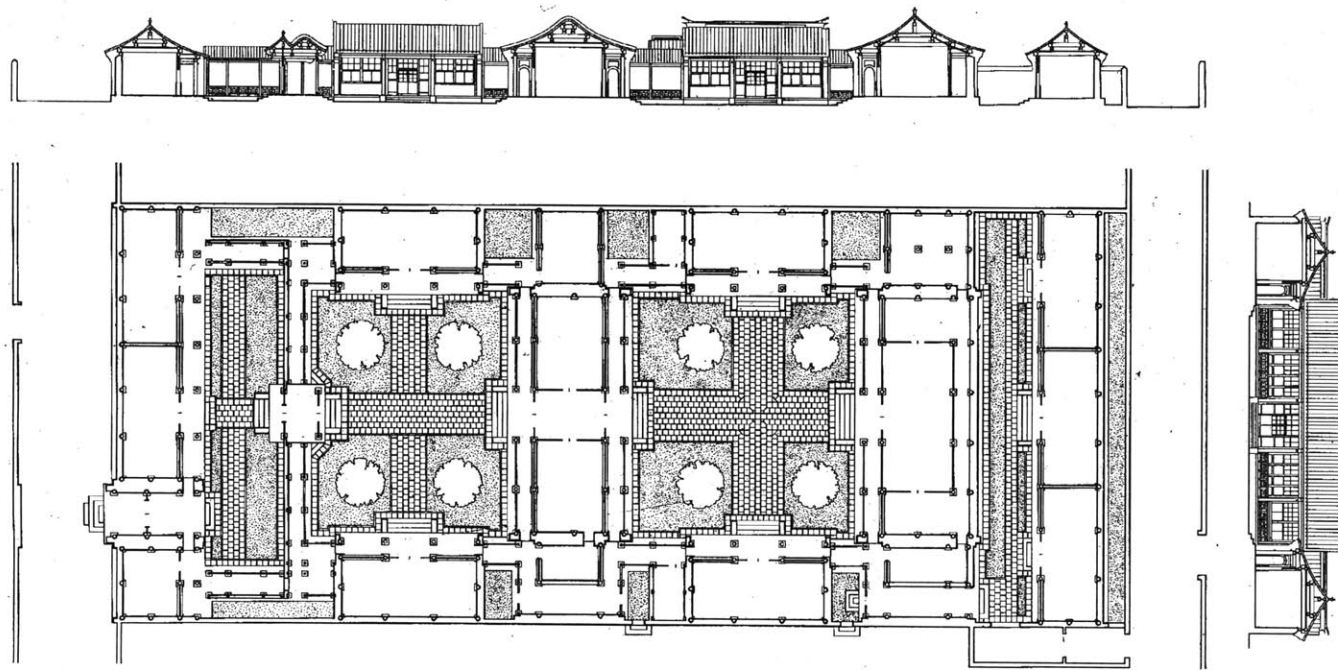
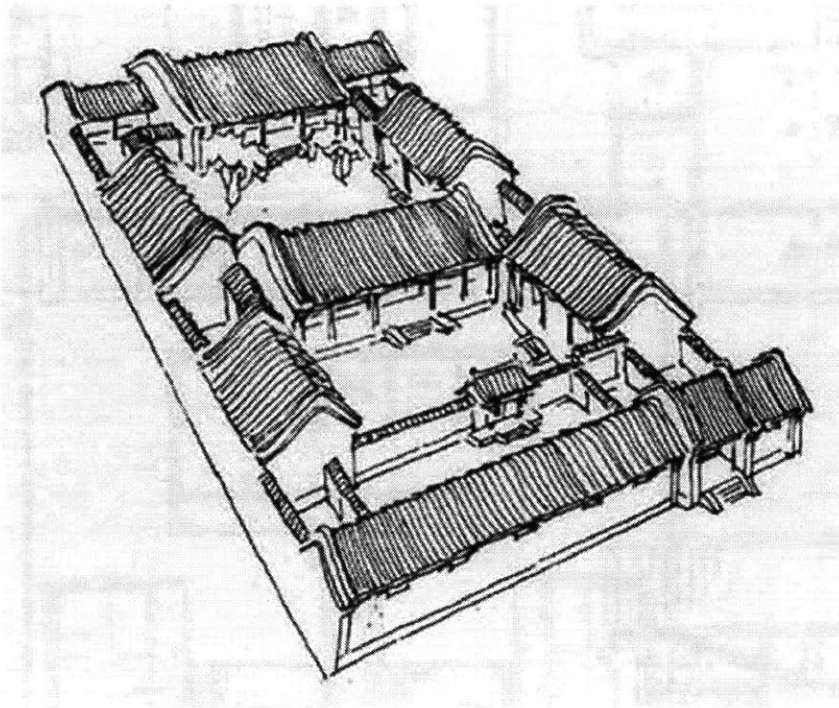


Fig 3-2. Plan and sections for a typical courtyard house.

Traditional architectural space is, like a series of closed worlds, of complete independent, progressively smaller units - from the city to the private house - which repeat on a reduced scale the forms of the larger units. A house may be viewed as a city in miniature; the city as a house on a vast scale. Symmetry, axially are the universal rule, every single courtyard and home was strictly controlled in accordance with the rank and position of its chief occupant (figure 3-2)¹.

This concept matches on the moral and social plane the supreme importance of balanced overlapping relationships between individual and family, human order and cosmic order. This interplay of relationships strengthens the independent family cells, just as the symbolic organization of space harmonizes the architectural units. The traditional courtyard house as a form of community housing in Beijing, bears testimony to the exemplary character of the family.

1. Blaser, Werner, Courtyard House in China, p17.



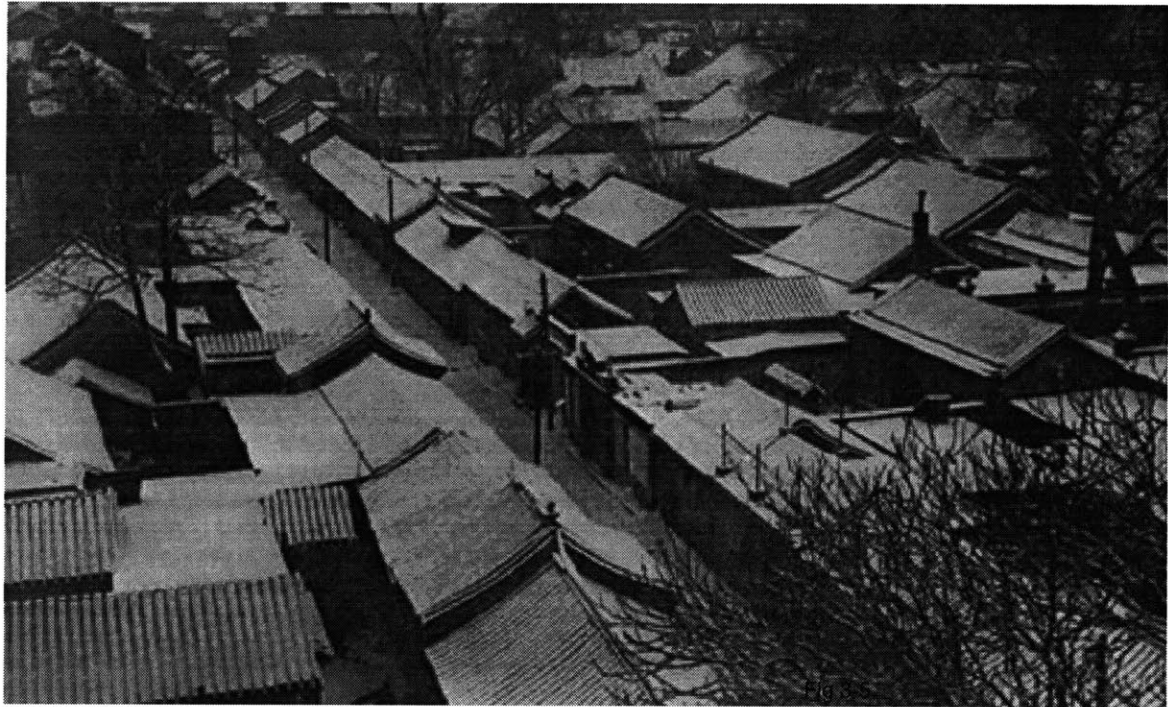
The courtyard has the significance for the individual families. The 'world' was, as it were, concentrated round the center of the house. The one-storeyed courtyard house, known as the 'hu-tong' house (small lane house) which comprises one or more interior courts. Between the access streets, which link up with the traffic routes, the lots of the courtyard houses extend back between 60 and 70 meters.

The families lived here in isolation from the world outside. An encircling wall with buildings facing inwards creates the courtyard. Frequently there are also courtyards looking like rooms open to the sky and arranged at the sides of the main court. Continuous roofed corridors lead to the courtyards. The house is entered from the little-frequented side street by way of an off-center main gate which gives access to a narrow outside court, this courtyard served for the reception of guests. The inner court was intended as accommodation for the women and girls of the family



Fig 3-3. The Traditional Courtyard House.

Fig 3-4. The relationship between the young and the old.



as well as the servants. The second inner court was the living area of the master of the house and was oriented to the south. The buildings on the east and west were meant for his married sons. In the front part - the outer court - the kitchen and the service and store rooms were located backing onto the street.

Fig 3-5. Roof view of the courtyard house in Beijing. Architecture is not individual building, but a group of buildings.

It is clear that the unit of Chinese architecture is not the individual building but the group of buildings (figure 3-5). The spirit of architectural design was always more resistant to change and its evolution was more leisurely and less dynamic than in the West. Development took place over much longer period of time and on a much broader scale. This is also the policy today, to cherish the good the past has bequeathed and to pass it on to future generations in an unadulterated form. This harmony layout has been dramatically changed because of the large population in the urban city. Some innovation have to be made in order to match both the spatial and social requirements in this dense city.

The value of any place lies in the relationship between the person who uses it and the place itself. We tell whether a place is good by that active interrelation and not by any formal rules.

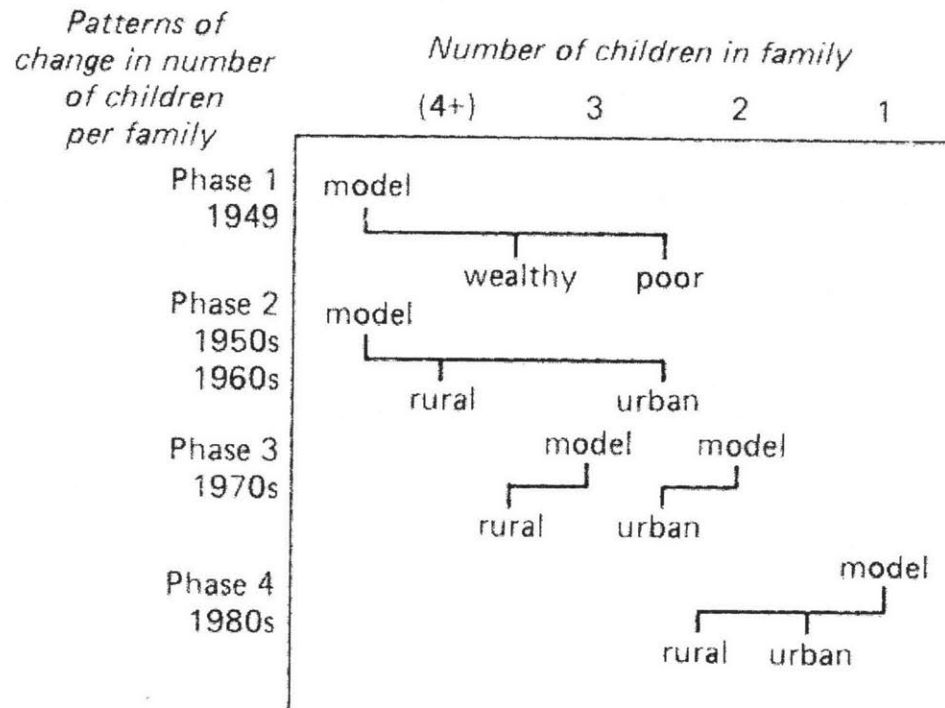
-Kevin Lynch



4

One Child Family Policy & New Urban House

The dramatic growth of population in the city became an official concern in terms of the restrictions of the urban housing space. The urban environment is not the most suitable environment for a child to grow up in. In fact, the urban environment is seen as a less favourable living environment not just for children but for growingups as well. Because of the large population and limited dwelling space, one typical courtyard house used to be occupied by one family has to be shared by several families. The density was tremendous high, but the courtyard, the central space for one family, is gone (figure 4-2), and relationships among families are no longer as strong as they used to be.



Population Policy and Family Structure

Population control became an urban policy started in 60's (figure 4-1)¹, along these lines, the one-child family policy was initiated in 1979, which has reduced the average size of the family much small than it was before, and the nuclear family has become the dominant family form.

The one-child family policy to date may be judged as rather successful in the urban arera to control the population size. However recent journalistic and related stories from China, many of which have been reported in the west have noted that the one-child family policy may not good for children because it is producing a generation of "little emperors" (the Chinese term for 'spoiled brates'). Many Chinese are expressing the fear that in the years ahead China may very well have millions of only children who are spoiled and maladjusted, and who do not possess the virtues of

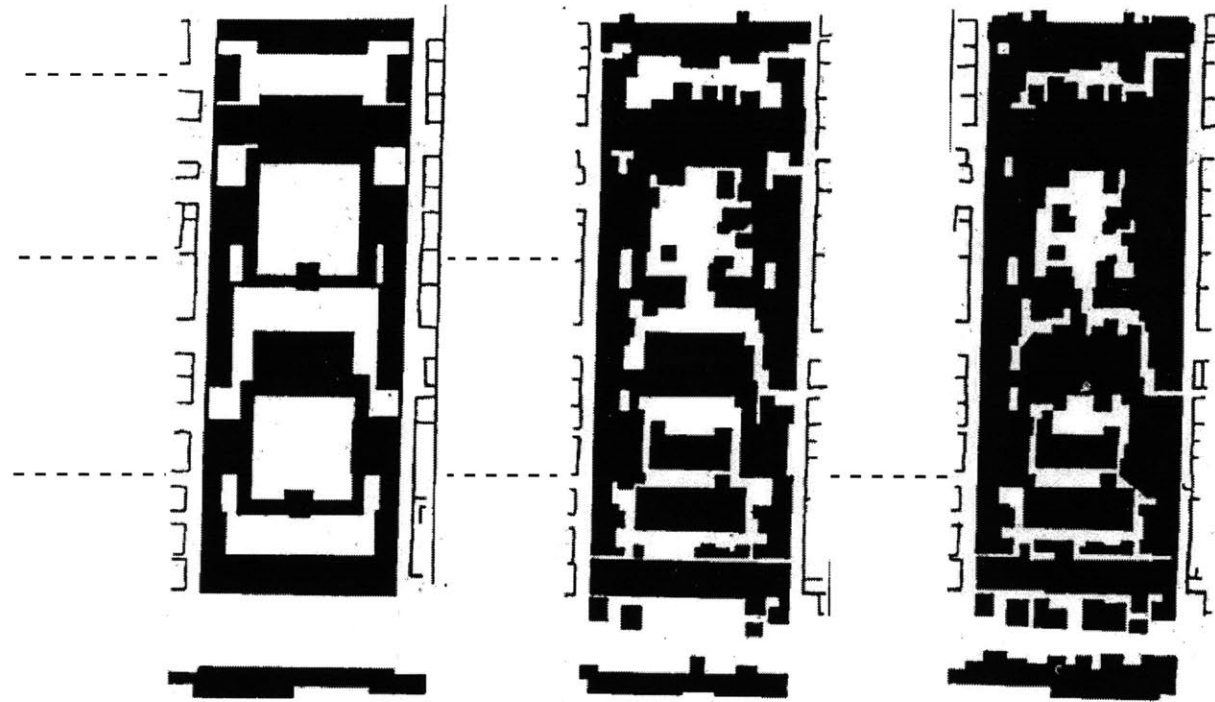
Fig 4-1. Models of Family Size.

1. Croll, Elisabeth, China's One-Child Family Policy.

Early 1950s: floor space 2440.5
a courtyard complex

Early 1970s: floor space 3196.5
a courtyard complex 131% of
that in early 1950s, a multi-
household compound.

Early 1987: floor space 3786.5
a courtyard complex 155% of
that in early 1950s, a
courtyardless compound.

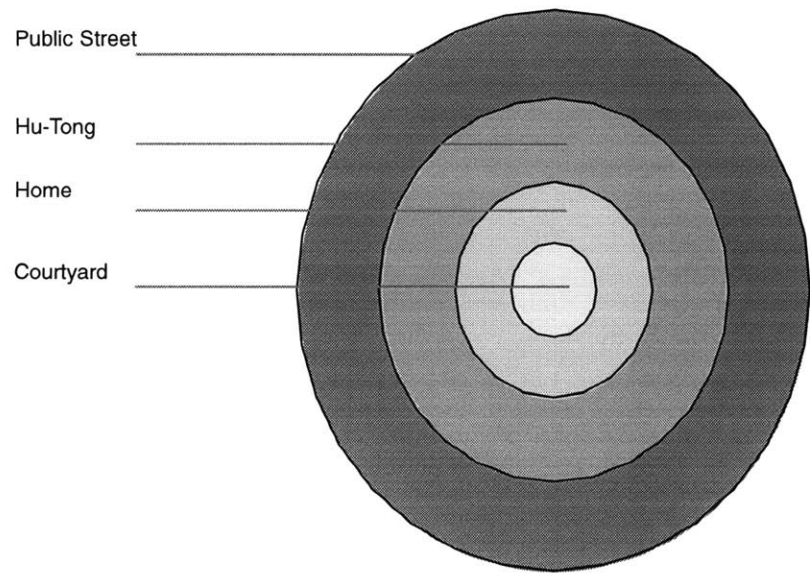


the Chinese tradition and culture. In December, 1987, for example, a *time* magazin writer in Beijing reported that there “may be hundereds of thousands, perhaps millins, of ...(thses little emperors) throughfouth China, (and) the reason (is) Beijing’s stringent one-child family policy ... (today, these millions of little emperors in China) have been swaddled in the love of their parents and grandparents; as a result many Chinese fear they are growing up spoiled, selfish and lazy”¹. Indeed, despite the policy’s marked demographic and family planning successes, its so-called negative effectxs in the children have been widely reported in both China and the West.

The different personalities of single children and siblinged children are clearly reflects what most Chinese have beblieved “children’s traits develp from interactions with other children”. Single children are not able to benefit from interactions with other children, and also lost some valuable intangibles such as status in the community, emotional satisfaction, closeness with peers, and

Fig 4-2. A courtyard complex in 1950s, 1970s, and late 1980s.

1. Chua-Eoan, *Time*, Dec, 1987, p38.



long-term relationship within a big family.

Restrictions for Children

However, the interactions in the urban city today become difficult for children. Children get around on their own far less than their parents, and even more their grandparents when they were children, and spend far more of their time under adult surveillance. Playing outside and getting about in their local neighbourhood - a traditional locus for children's social and recreational activities and experiences - are more often than not forbidden to them.

Freedom of Movement is crucial for children to play outdoors. The characteristics of the home do have an apparent influence on children's mobility, but the presence of a separate playroom in

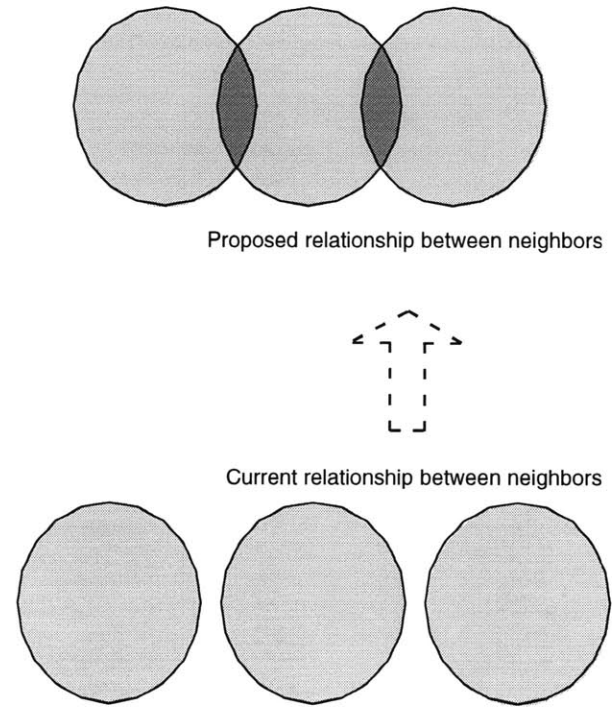
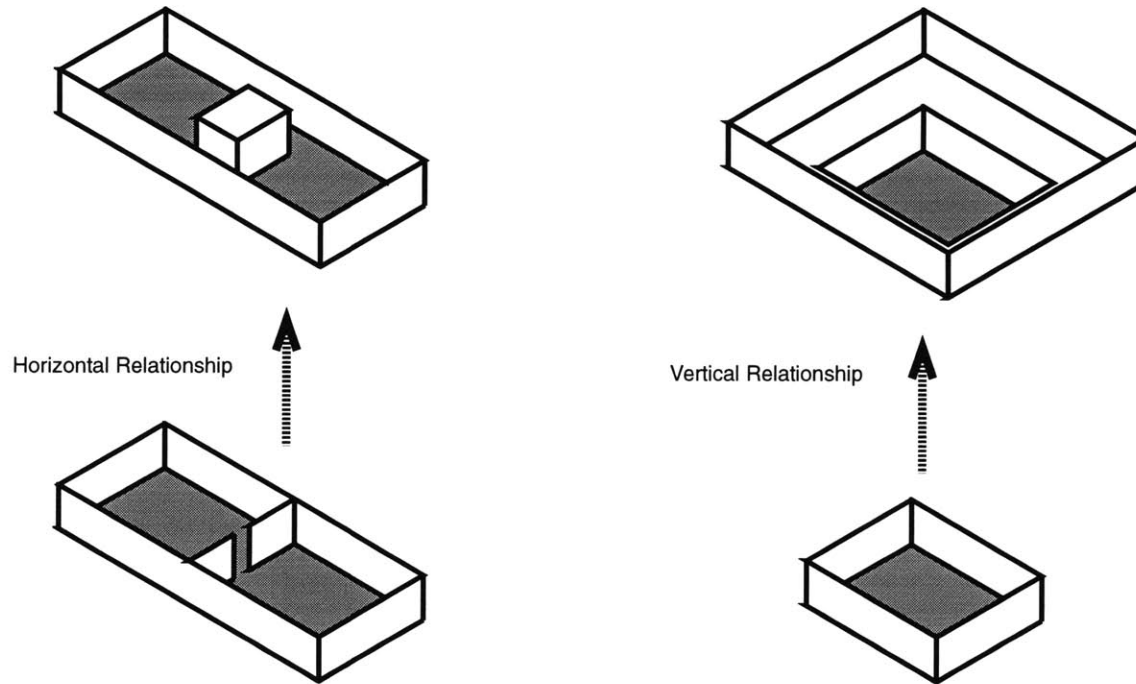


Fig 4-2. Circulation from public street to courtyard.

Fig 4-3. Transformation of the relationships between neighbors.



the house is not a reason for children to play outdoors less; they actually play outside even more. Children's playing behaviour is determined less by the characteristics of the house than by that of the residential *Place*.

The fact that child mobility has changed can also be explained from a different perspective. Formerly, children's lives were more integrated with those of adults. Especially 30 years ago, the adult world was smaller than today. Home and work were nearby, their radius of action was also much smaller. Therefore, the children's world was similar to that of a grownups. As there were fewer playgrounds with special facilities, children just played out in the street, on the pavement, and anywhere interesting.

Fig 4-4. Transformation of the traditional courtyard.

Children's preferences

Good setting should clearly define where to interact and with whom. The different spaces and places also convey specific cultural messages about how to act and how to interpret the interaction. Children's interaction as an active process, both individual and collective: individual in the way that the child has to make a personal involvement in, and attribute meaning to, the cultural traditions that she or he is exposed to; and collective because these traditions were made by earlier generations and are mediated by significant 'others', and they are communicated and transformed in interactions with other children.

So at least three different spaces are preferred, a private room, a sharing space for personal interactions, and an open space for collective interactions. These spaces in and around home are naturally important for the security and local ties of these children. To have one's own room, where one can close the door and be alone without being observed and supervised by parents is also taken for granted by most children today. The sharing space functions between the private room and the outside open space. It is only allowed two to three neighbour children to get together for personal activities indoors. This is a place children can get away both from other children and from adults. Of particular importance, the third space, outside open space, can be called social and spatial free zones. The spirit of community and time together with other children have high priority. It is characterized by three things. First, there is no adult supervision and control. Second, there is no purpose or goal for anything they do. They are places for explicit *do nothing* culture, but where the unexpected suddenly could happen. Third, the free zones are characterized by emancipatory patterns of action: that is, the actions occurring there are not interpreted or acted out in advance. Preferably all actions are unique.



The new family type needs a new correspondent housing type with characteristics above. The "new" does not mean the one separate from the tradition, instead, it represents both the present and the past. The traditional joint family structure disappears, but the community spirit should continue. Single children must be happy to enjoy the interactions with others as their elder generations had before.



New urban house

The Site and Urban Context

The site is right at the edge of the old city. Two sides of the site are old and other two are new. The urban contradiction is clear: the old single story courtyard houses to the new multistory bar buildings, low density to high density.

Far from the south to the site is the forbiddent city; most buildings between are traditional residential courtyard houses. On the north side, the new developed high-rise modern buildings dominate the area right beyund the river; on the west side, the single storey courtyard houses occupy a large residential district; the Lama Temple is right on its east side, a palace tyle group of court-

Fig 4-5. Location of the site.

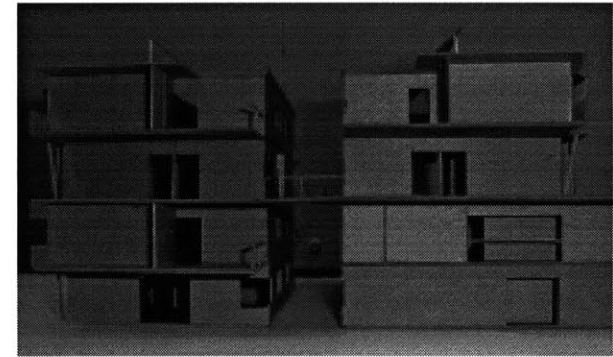
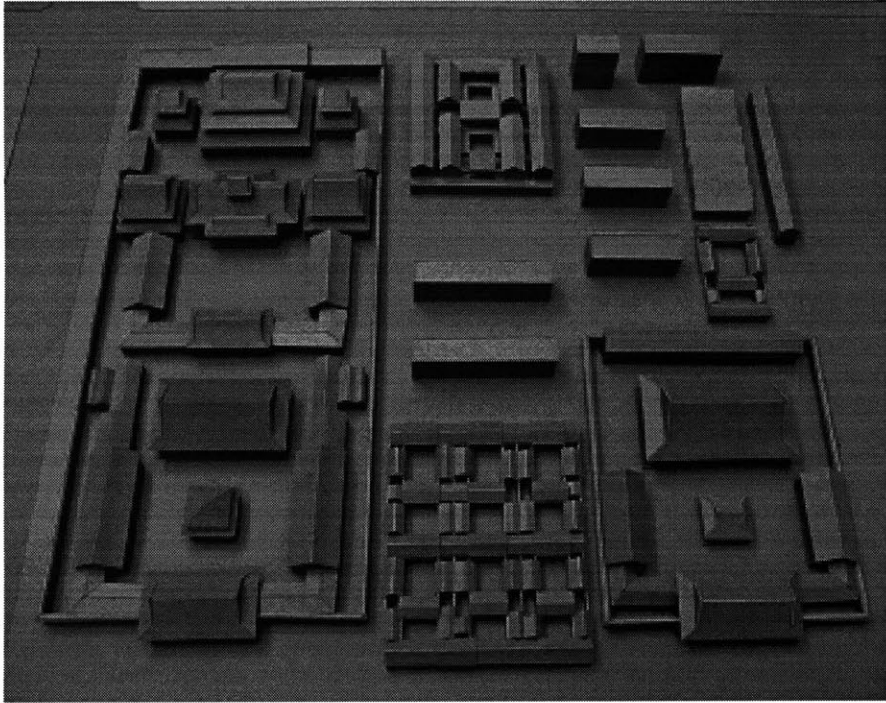


Fig 4-6 . The edge of the old and the new.

Fig 4-7 . The east side of the site.

yard spaces; and the modern multistory residential bar buildings stand on the east side (figure 4-5, 6, 7).

The urban context shapes the general layout of the site. As the most building in the urban city, the proposed building wholly occupies the site, 240 feet wide and 280 feet long. Generally, the west part of the building is lower than the east in order to give respect to the traditional Lama Temple. It is higher on the east to set the edge of the building to the modern box building; and the south parts are lower than the north sides, where building rise as high as twelve story. So more sunlight can be introduced to the inner courtyards and the bulding. Two in-ward courtyards are transformed horizontally and vertically from the traditional courtyard house (figure4-4). They are enclosed on the ground level and open to outside on the uper level.



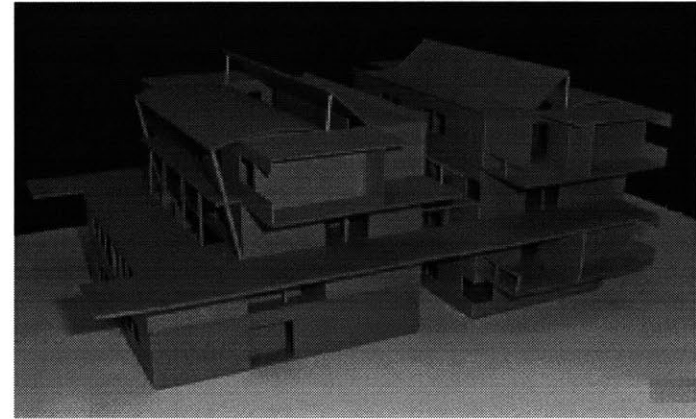
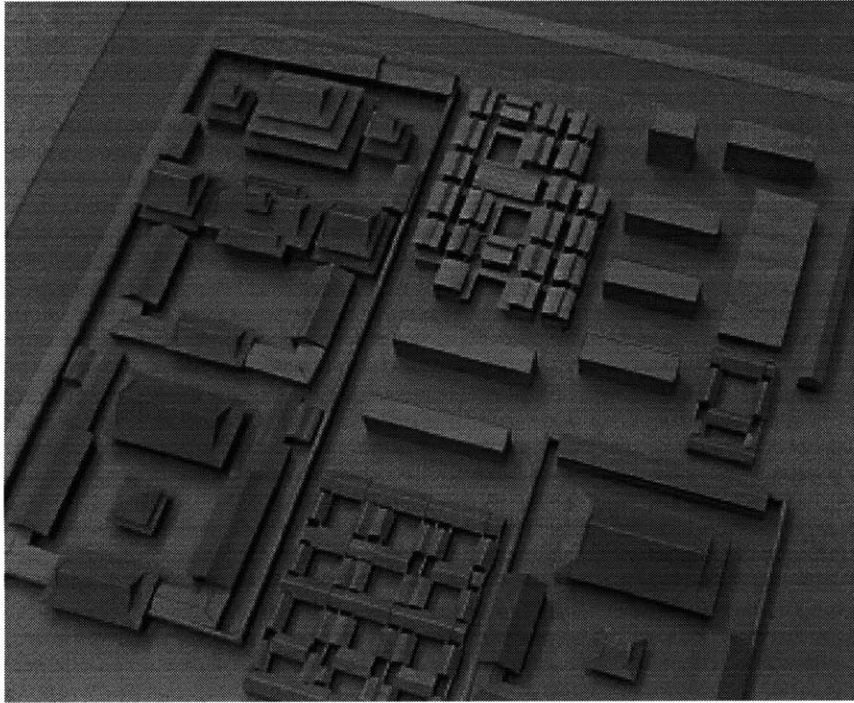
The Building Complex

Density and Sunlight

Density and sunlight in the urban area is always an important issue for housing design. To accommodate more families, the building is arranged on the south-north orientation and faces east and west. Each unit can get enough time of direct sunlight in either mornings or afternoons. For those on the edge of the site, the sunlight comes from the street around, and for those in the inner part of the complex, sunlight comes from the courtyards. This arrangement avoids the minimum ratio requirement of the distance of buildings to the building height for those siting south-north, and solve the contradiction between the density and sunlight, “the higher the density,

Fig4-8. Option 1: the building complex on the site.

Fig4-9. Section model of the building.



the poor the light condition”.

Circulation and Community Interaction

Circulation spaces, streets, sidewalks, hu-tong, corridors inside and outside the buildings, the doorways, and courtyards are free for children to use with a certain freedom. There are a lot of interesting things are goig on there, people come and go, and the scope of life spreads out. That is where the children were spending their time most.

The circulation also implies the gradual discovery of the architectural complex. This complex is not designed to be grasped at first glance but only through an approach in space and time, like a piece of music or a scroll painting. To get private room from public street, people have to move through *street, Hu-tong, Courtyard*, and finally get home. The interaction among people are

Fig 4-10. Option 2, the building complex on the site.

Fig 4-11. Study model of building and circulation.

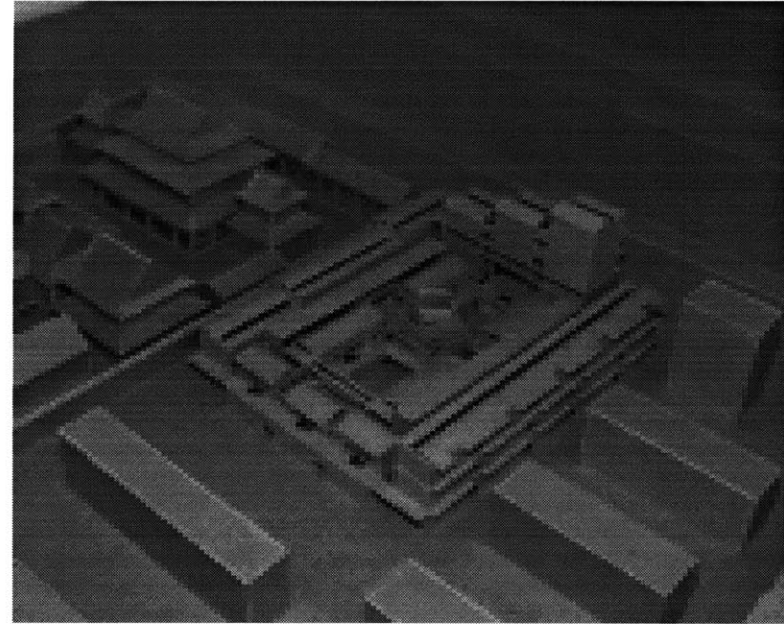
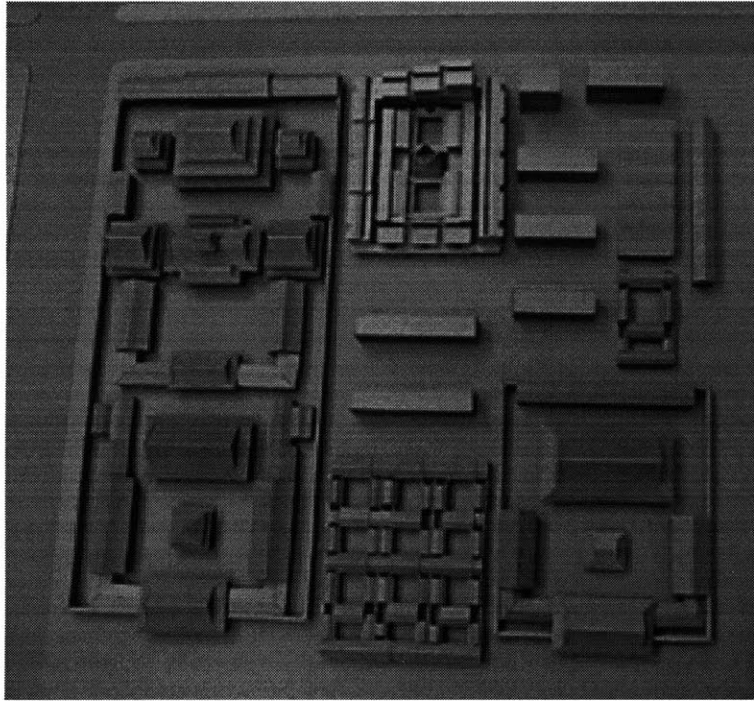
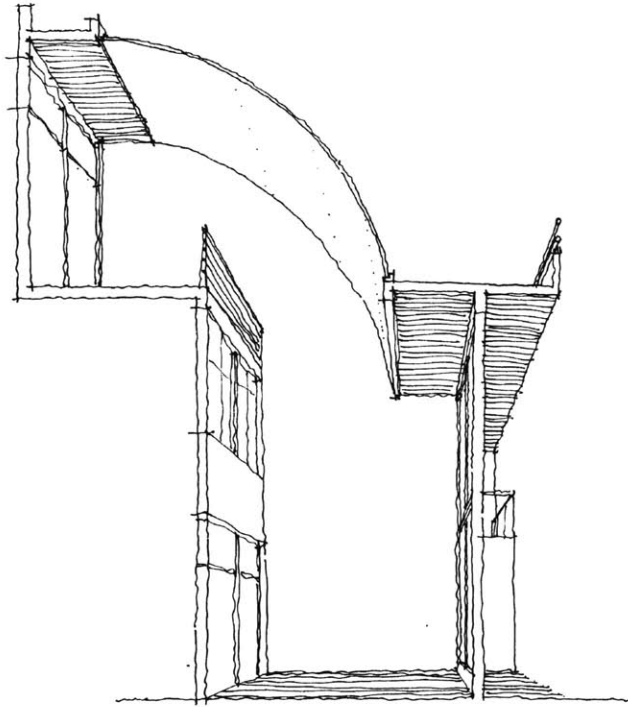


Fig 4-12. The building complex on the site.

involved from the beginning to the end during the entire process.

Shared Space and Facility

As discussed before, of three preferred spaces for children, two are the shared. Courtyard and Hu-tong are the main exterior common spaces. Two courtyards are created in the center of the complex. Each extends from the ground level to the third, like a bigger one over the other. They are connected by kindergarten on the ground level and library on the third level. The shared courtyards and public facility are closely connected with all units in the complex by the circulation space, which is integrated into the whole complex both horizontally and vertically. Especially, the second courtyard on the third level offers a sharp awareness of visible activity: seeing people moving back and forth inside the complex, pedestrian and traffic outside, and river and high-rise urban landscape far beyond.



The Unit

Following the same principle, the complex grows from the urban context, and the buildings are shaped by the complex, and the unit design comes from the complex. To meet the various family types' needs, units in the complex are classified into three-bedroom, two-bedroom, one-bed room apartments, and studio. The size of apartment are ranged from 900 sqft to 1000 sqft. Except the one-bedroom apartment and studio, typical uints are duplex, living, dinning and kichen are on the entry level, and the bedrooms on the above.

Shared Space

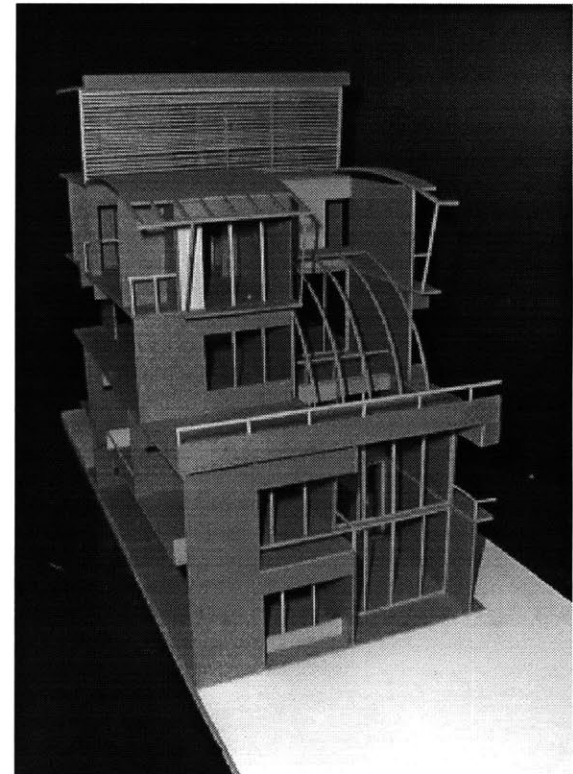
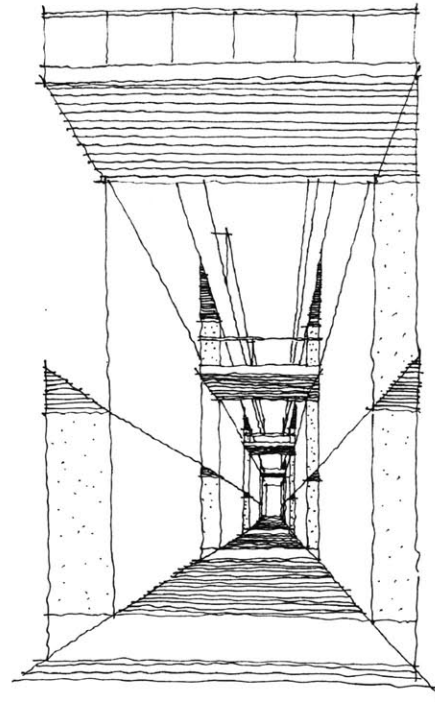
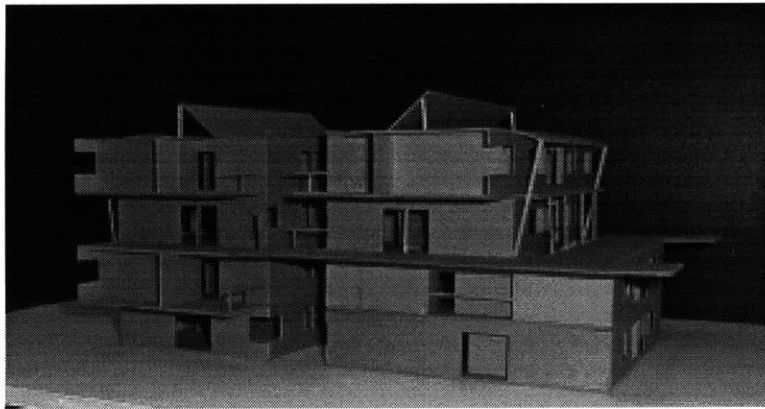


Fig 4-13. View of the shared space on first and third levels.

Fig 4-14. Extiror of the shared space.



Two neighbour units shared one common interior space for children on the entry level, and two exterior spaces on the upper level shared with both neighbors on both the right and left sides. The common space is two story high, so children can play anyway they want. For those apartments facing the courtyards, the common space on the ground level connected with the one on the third level right above it. Children from four neighbors can interact together in this vertical spaces, two spaces are independent, but also closely connected together as one space.

Flexibility

Sharing cannot replace flexibility, especially for one child family. As more and more parents have to live with their son or daughter somehow. When they become older, they have to live together to take care of each other. One child family apartment have to have the flexibility to accommo-

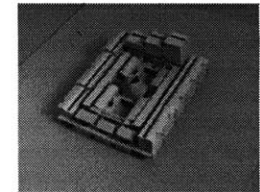
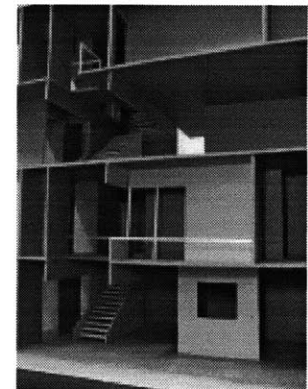
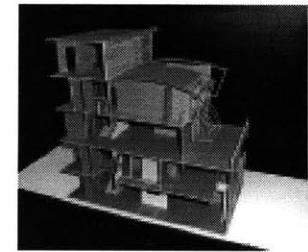
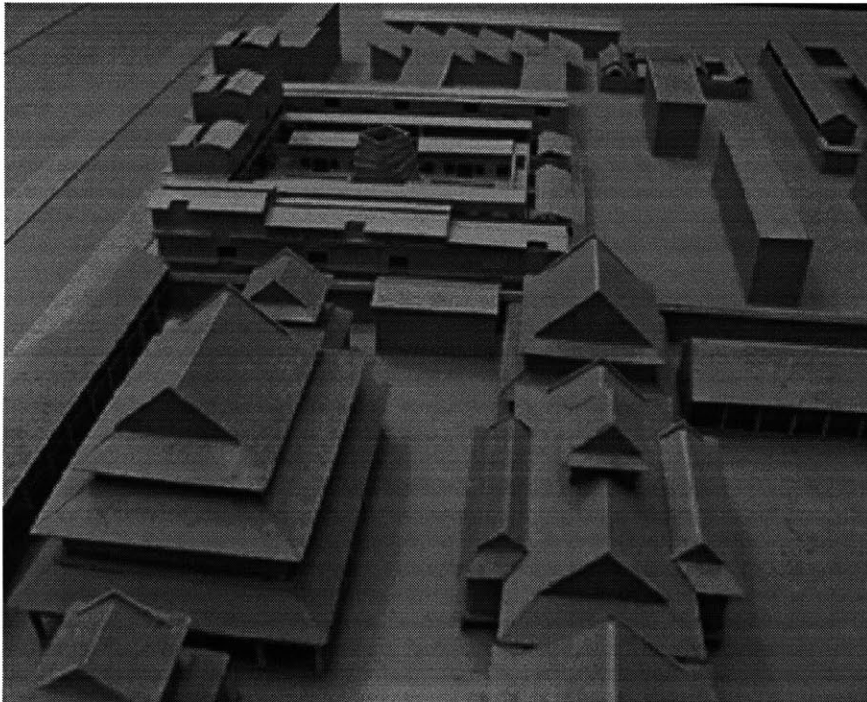


Fig 4-15. Study section model.

Fig 4-16. View of the Hutong space.



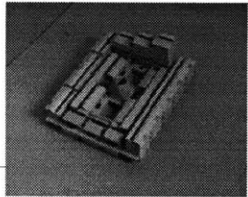
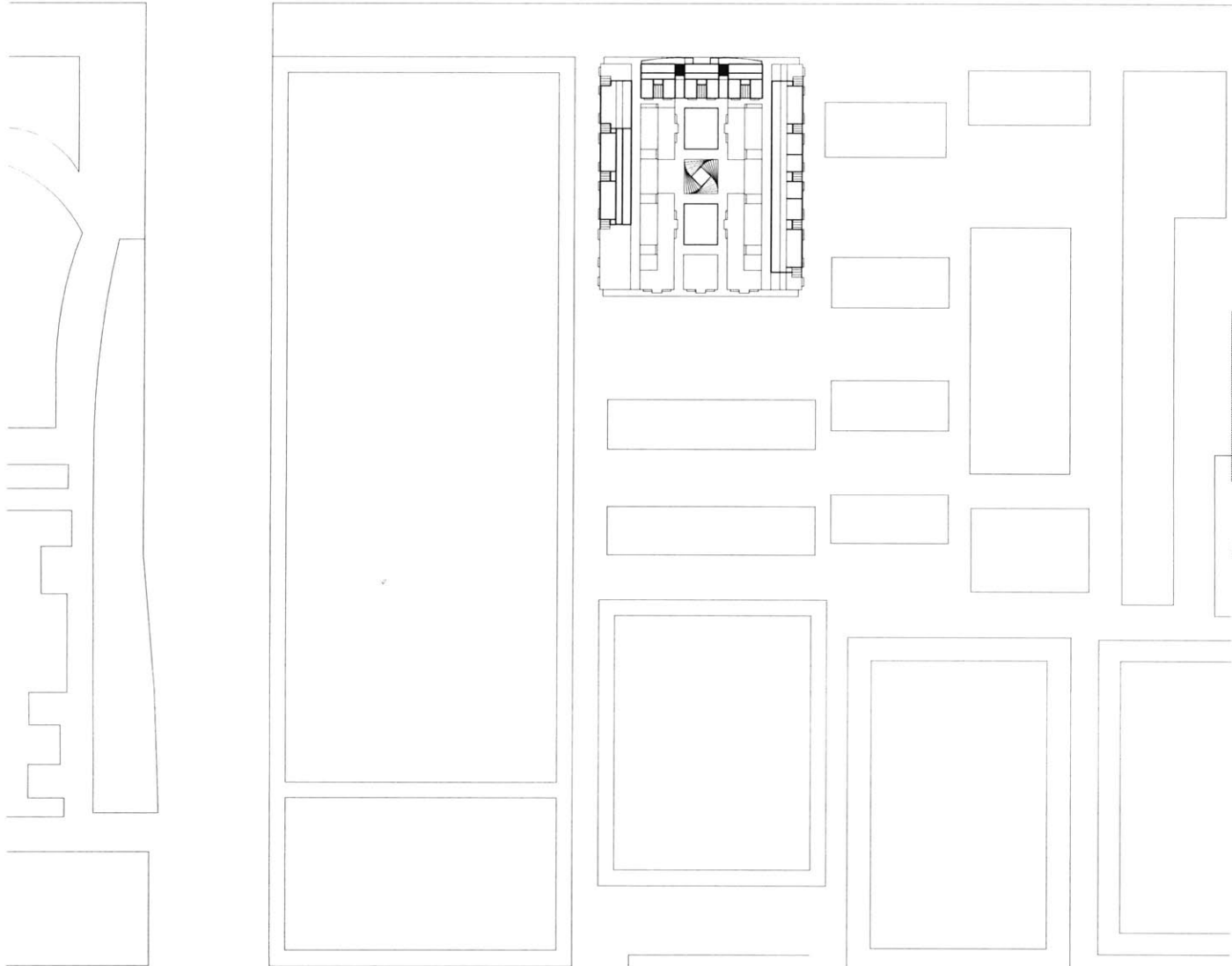
date more people in some ways.

One possibility is that two adjacent units serve one family. The walls between the two units are removable on both entry and upper levels: the wall separates two kitchens, and the other between the two stair cases. When these two walls are moved, each unit is independent from the other, and at the same time, they are not separated. People can move freely from one unit to the other.

In summer, the consideration for the one family urban housing started with site layout in the urban context, it must root in the specific urban city. The building grows from the site, it must correspond to both the specific site and its urban context. Finally, the unit inside the building follows have to meet the requirements of both physical house and the one child family.

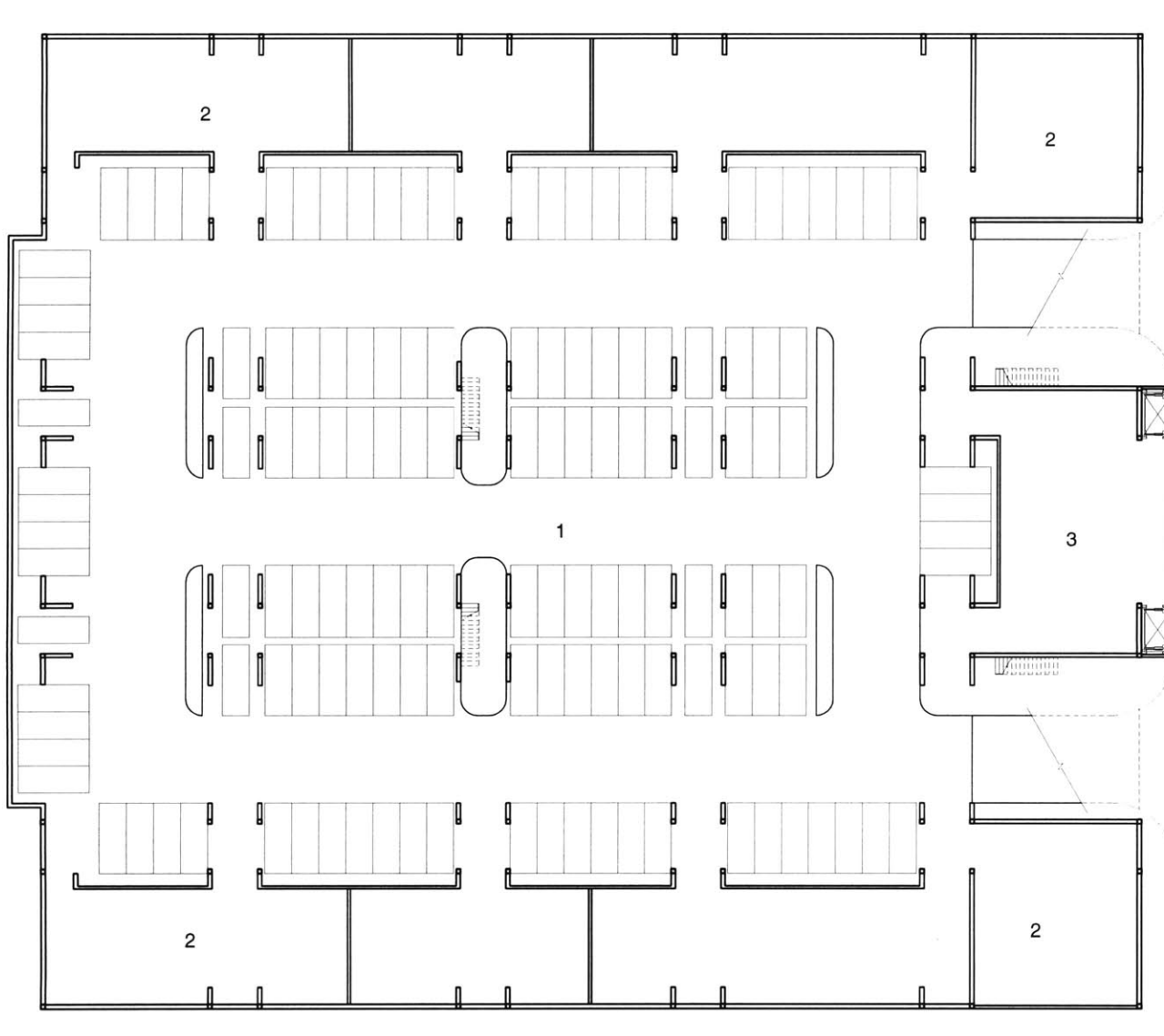
Fig 4-17. View from the Lama Temple.

Fig 4-18. Section model and detail.



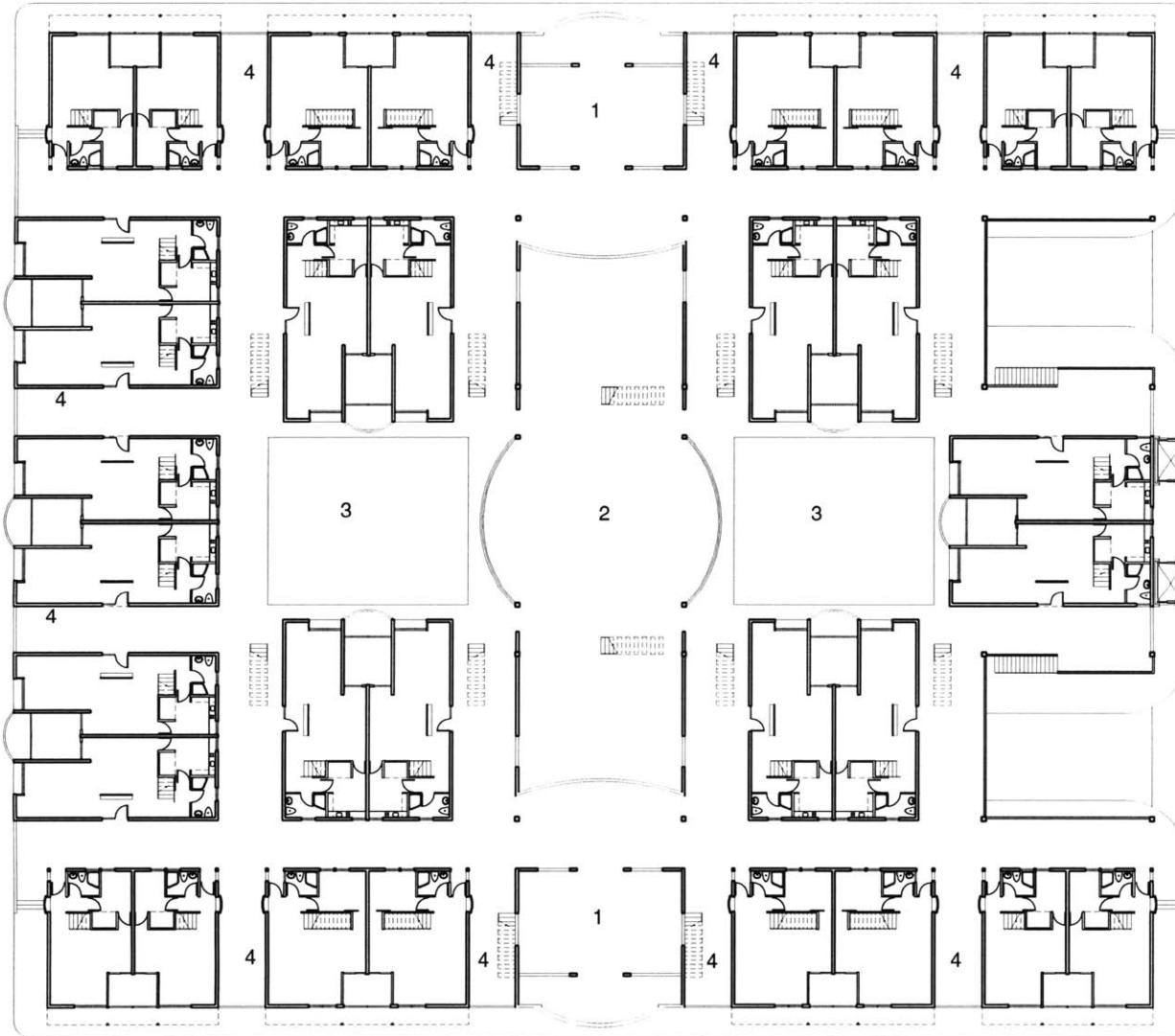
Site Plan

1/200"=1'



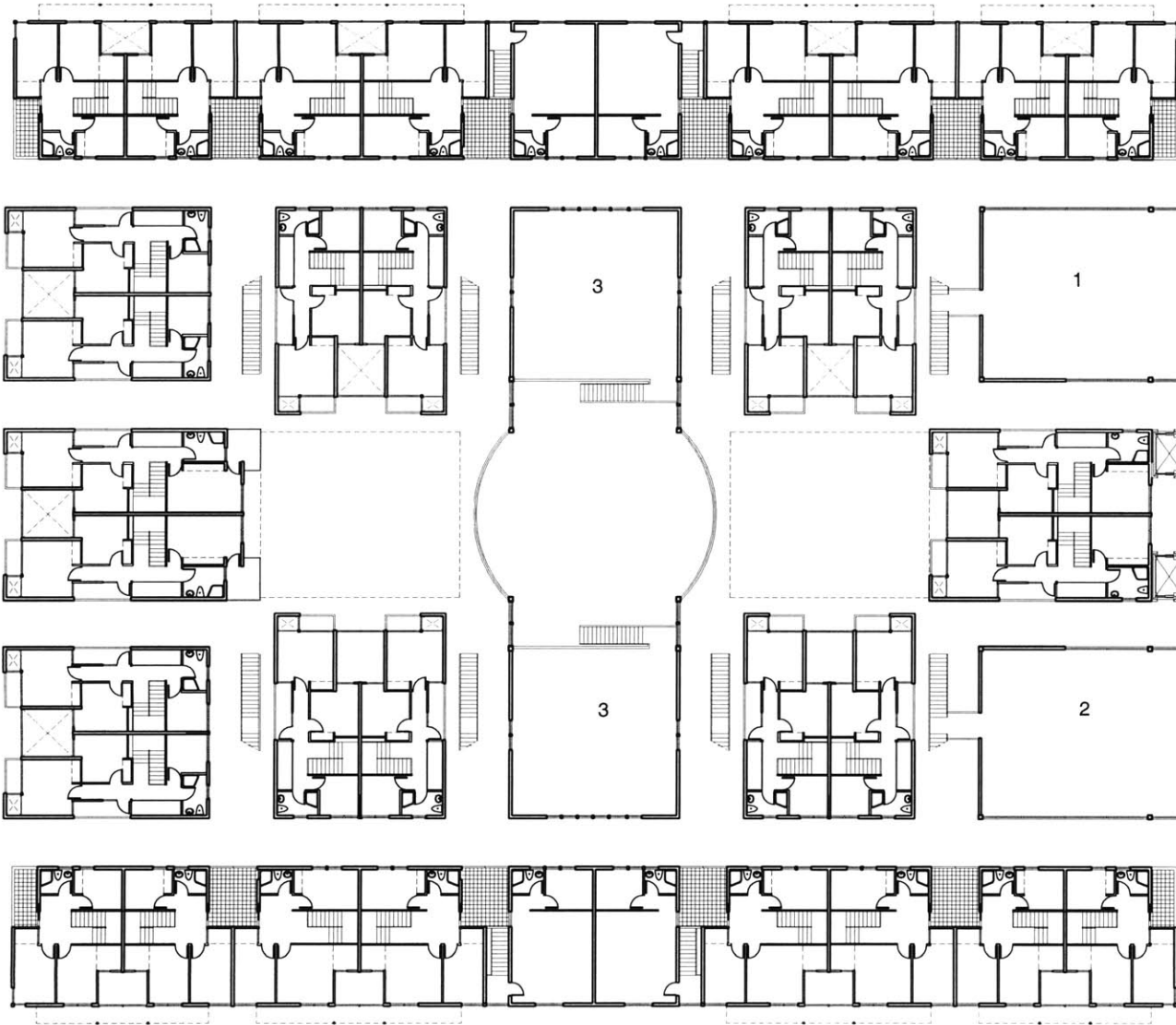
Basement Floor Plan
1/42"=1'

- 1. Parking Space
- 2. Mechanical Space
- 3. Laundry



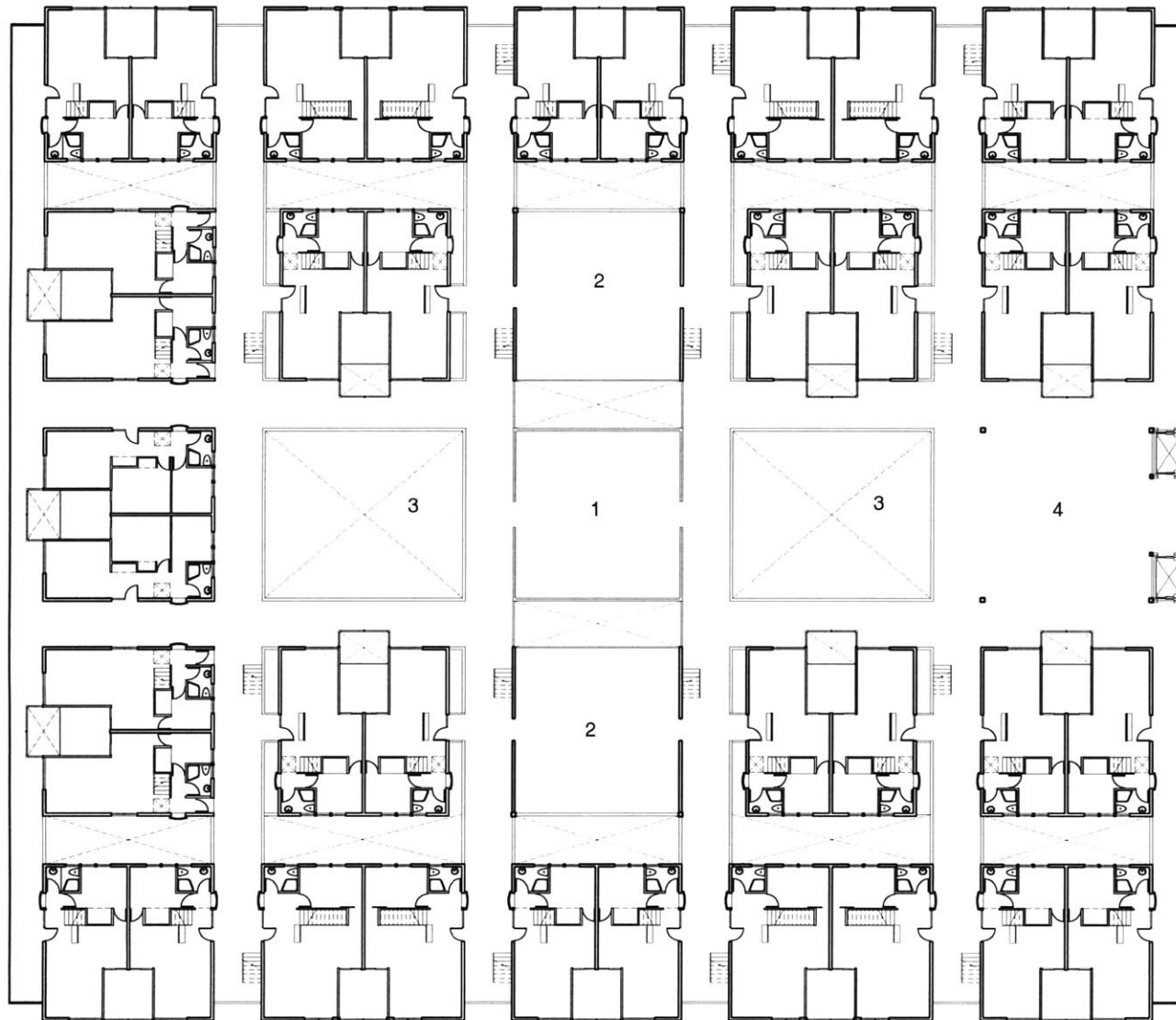
First Floor Plan 1/42"=1'

- 1. Entrance Hall and Mailbox
- 2. Kindergarten
- 3. Courtyard
- 4. Bike Parking



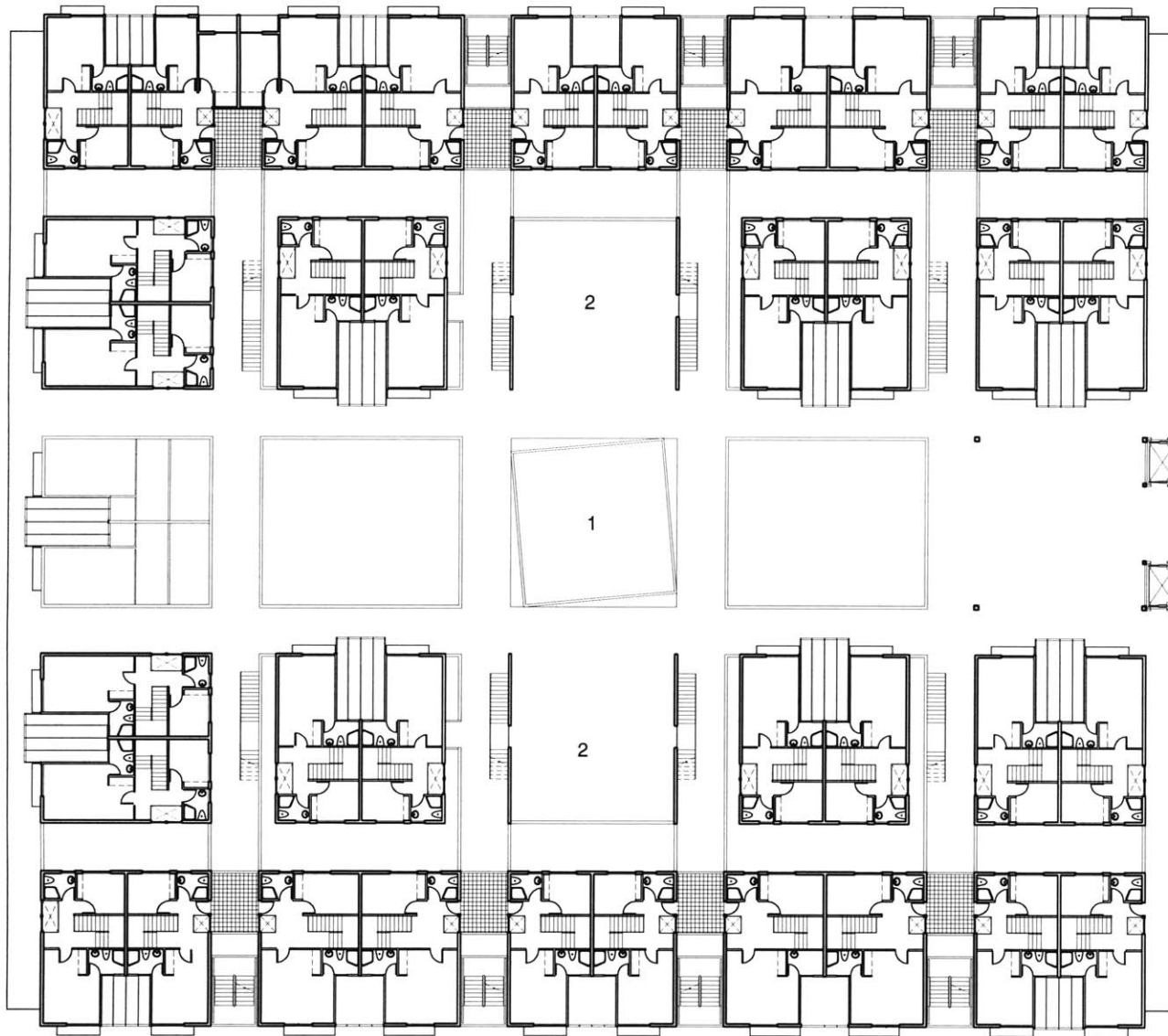
Second Floor Plan
1/42"=1'

- 1. Administration Office
- 2. Property Management
- 3. Kingergarten



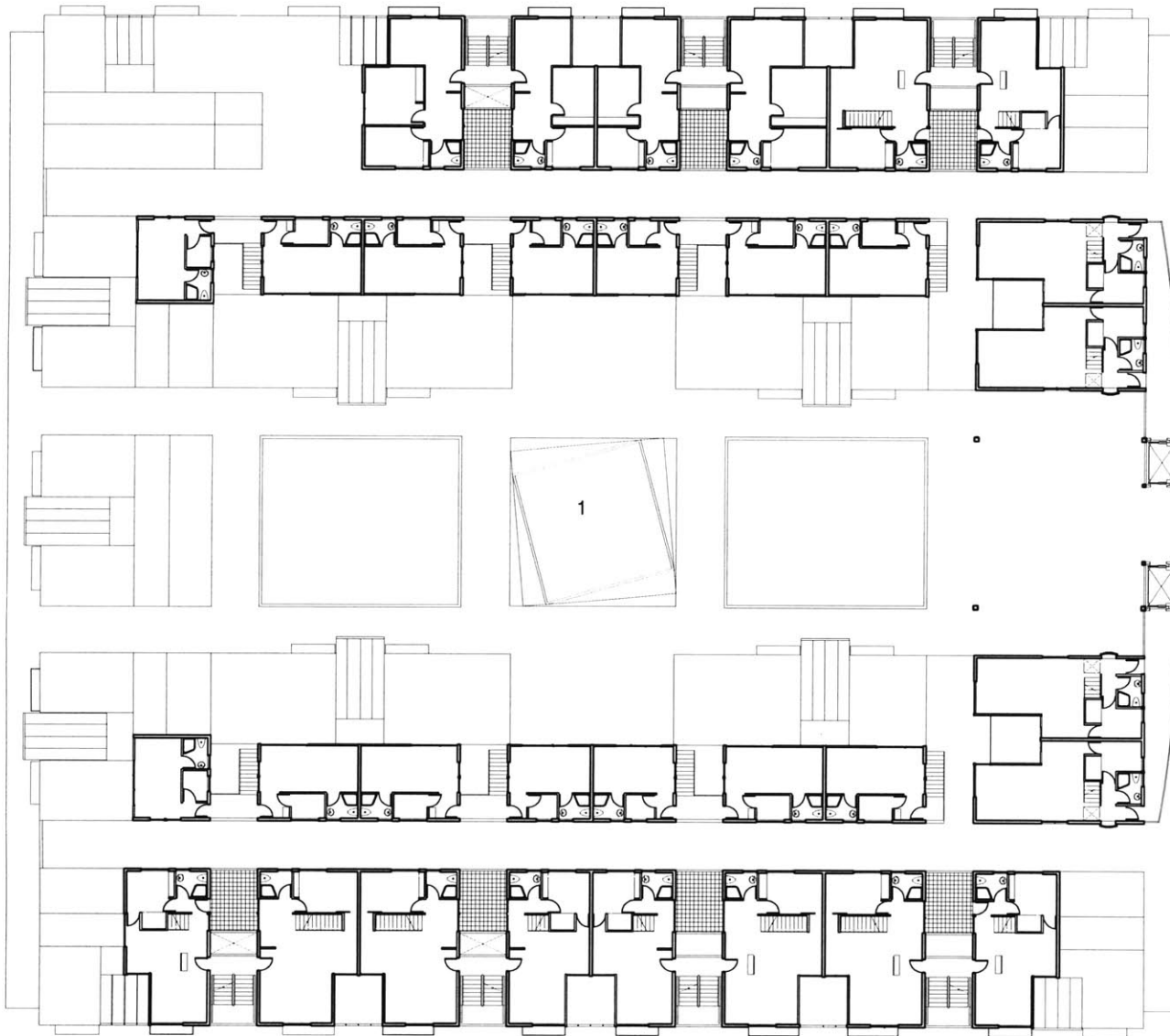
Third Floor Plan 1/42"=1'

- 1. Library
- 2. Courtyard
- 3. Open to Below
- 4. Terrace



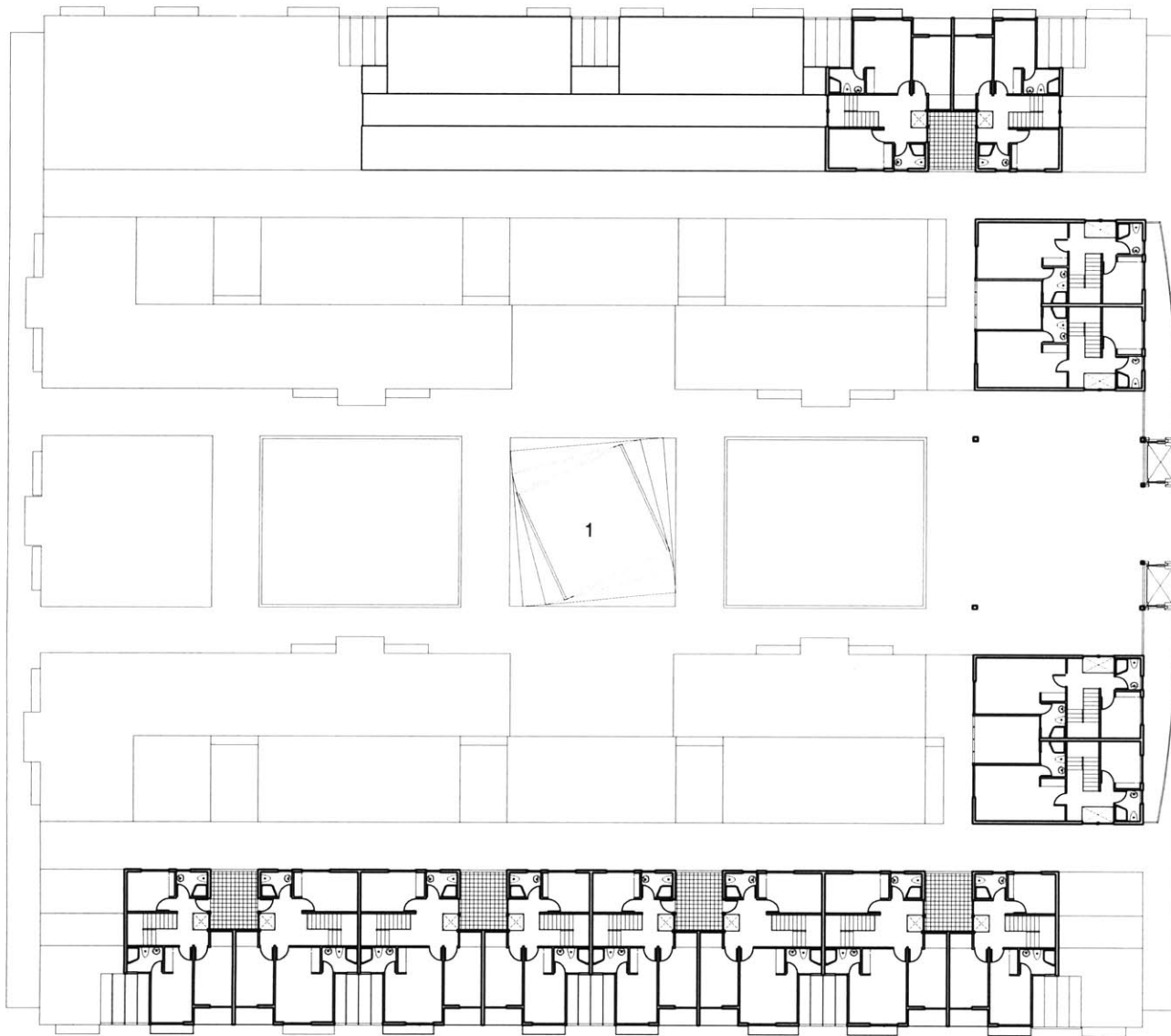
Forth Floor Plan 1/42"=1'

- 1. Library
- 2. Courtyard



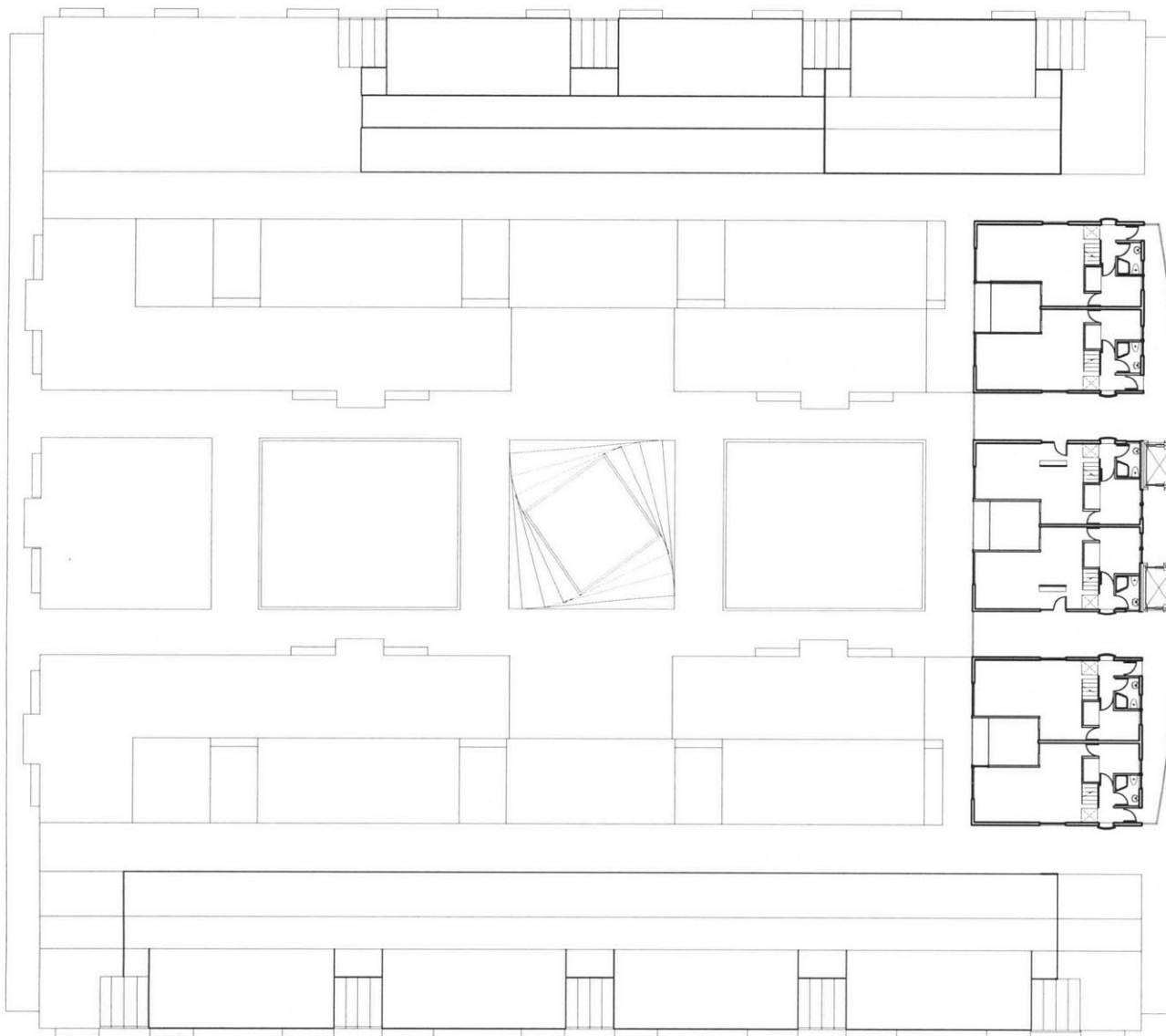
5th Floor Plan 1/42"=1'

1. Sculpture



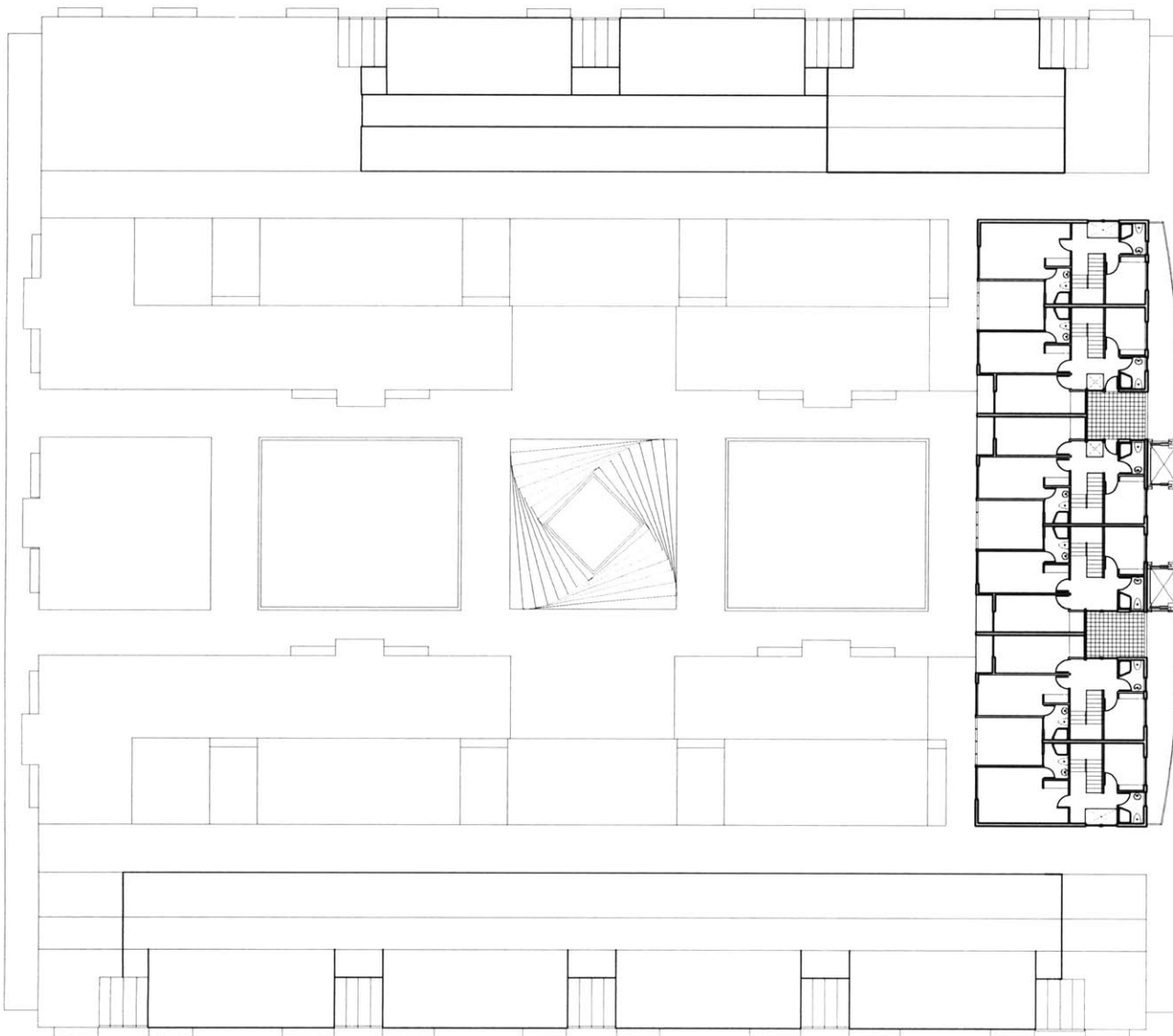
6th Floor Plan 1/42"=1'

- 1. Sculpture
- 2. Courtyard

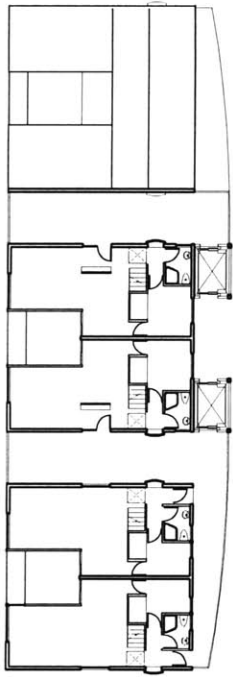


7th Floor Plan

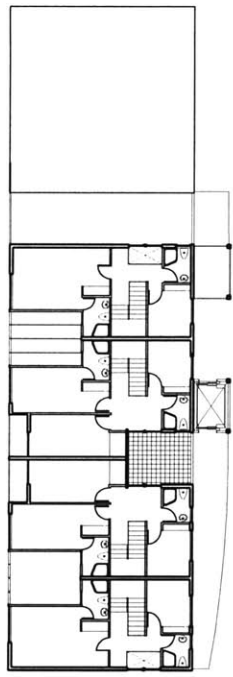
1/42"=1'



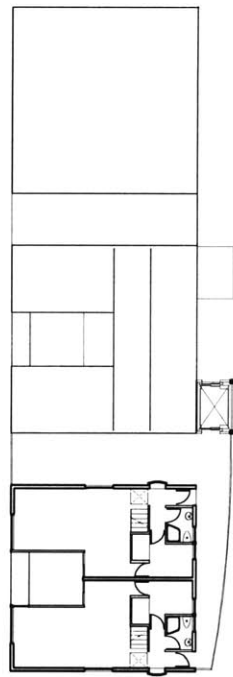
8th Floor Plan 1/42"=1'



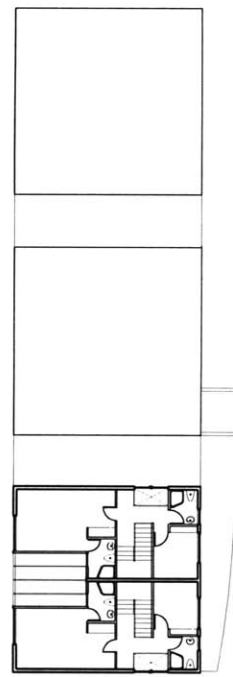
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2



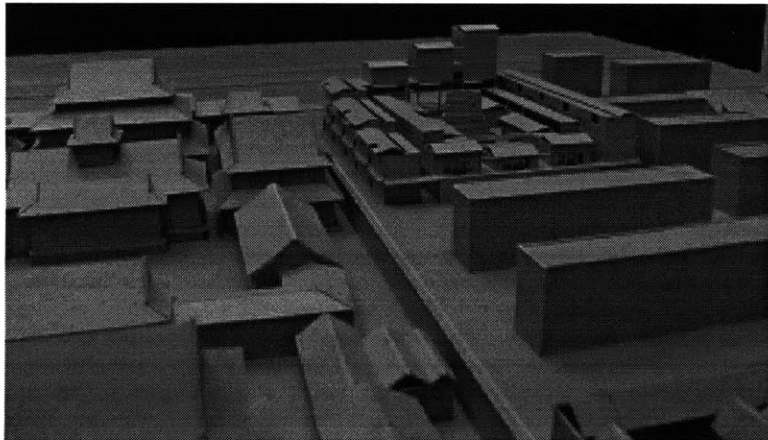
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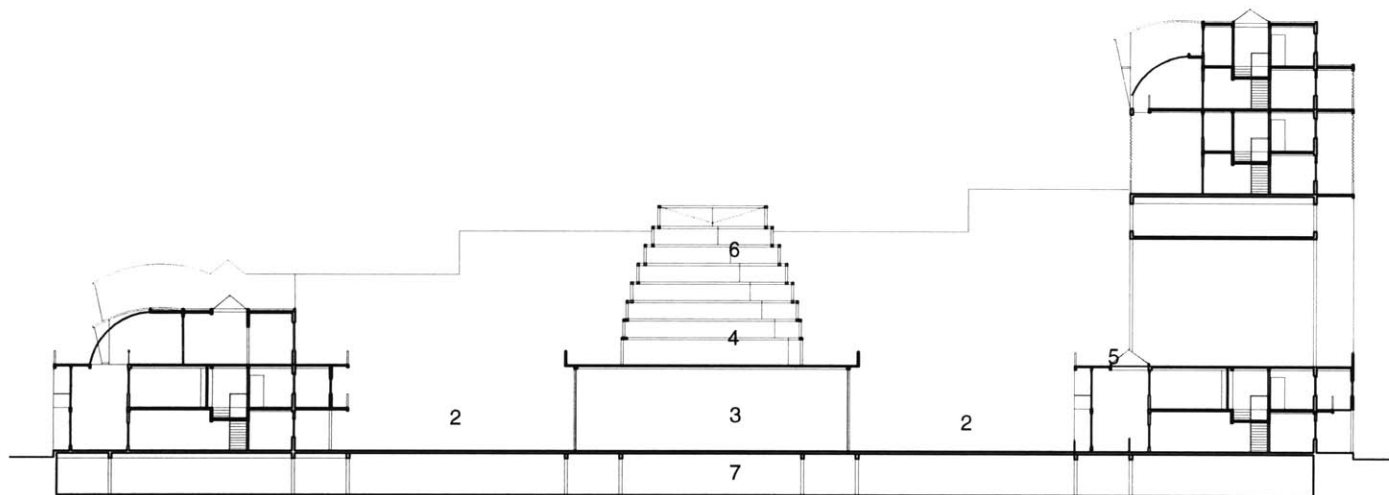
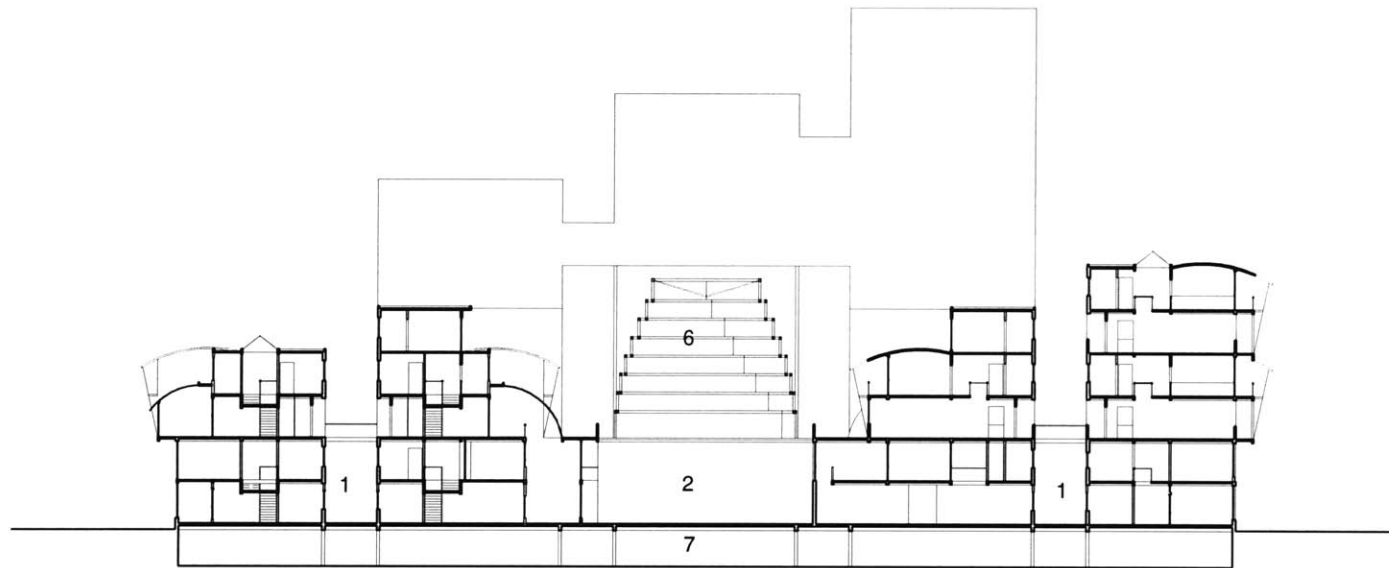
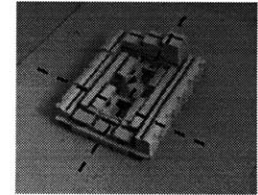


4

9-12 Floor Plans 1/42"=1'

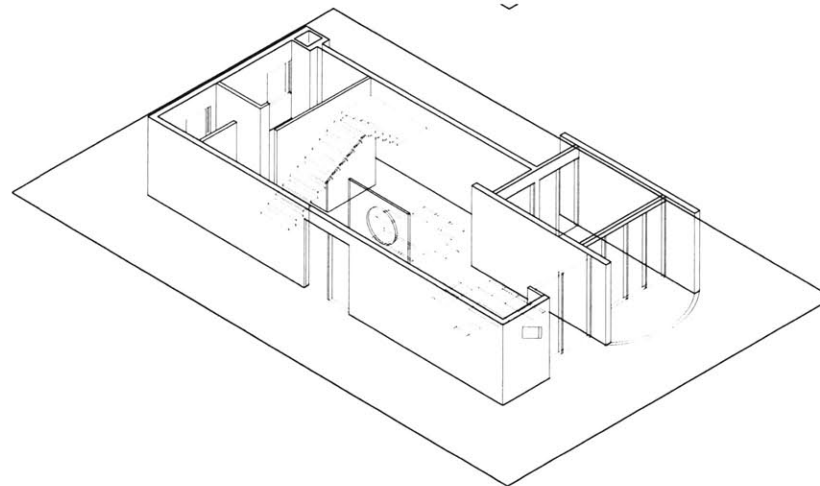
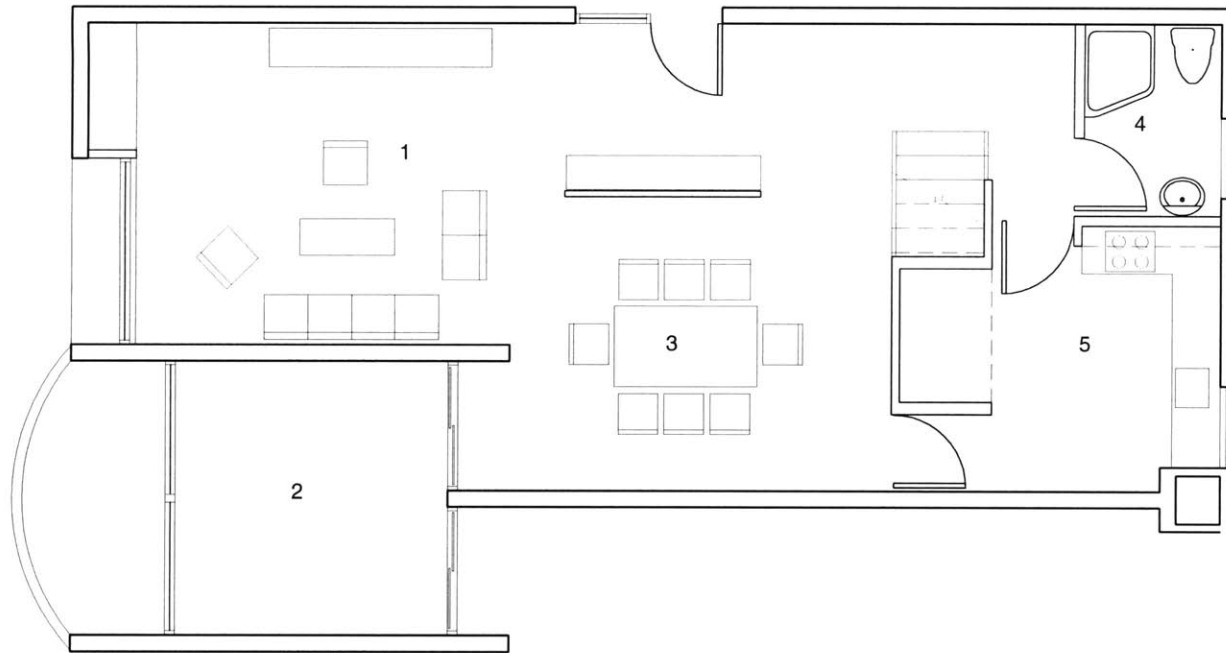
- 1. 9th Floor Plan
- 2. 10th Floor Plan
- 3. 11th Floor Plan
- 4. 12th Floor Plan





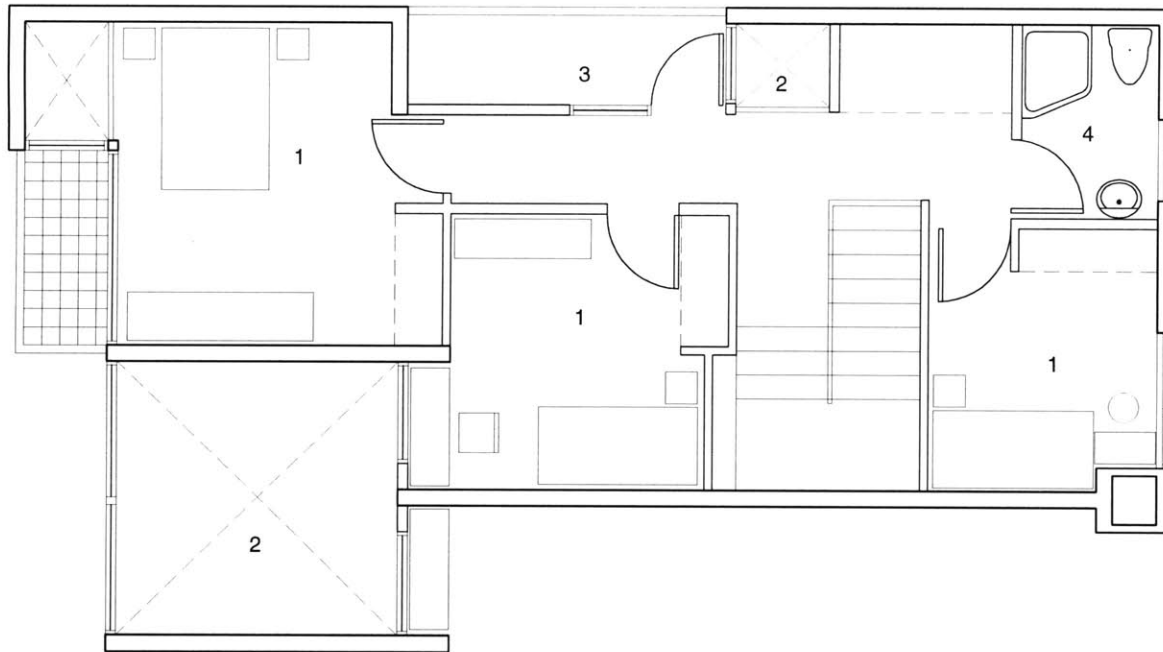
Cross Sections 1/42"=1'

- 1. Hu-tong
- 2. Courtyard
- 3. Kinggarten
- 4. Library
- 5. Tarrace
- 6. Sculpture
- 7. Parking



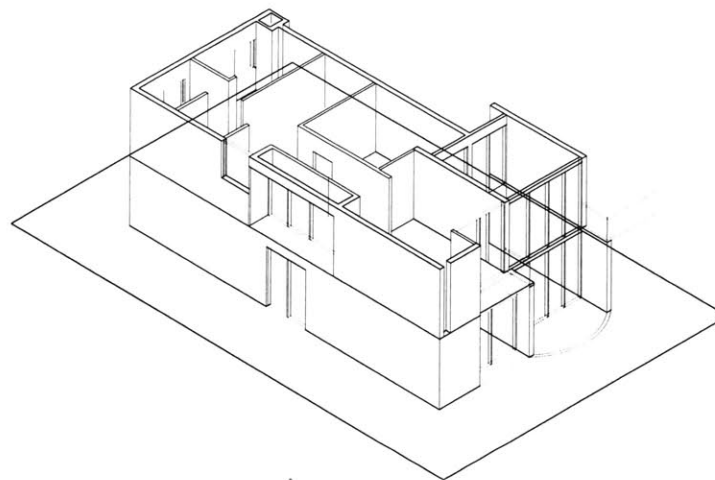
First Floor Plan 1/8"=1'

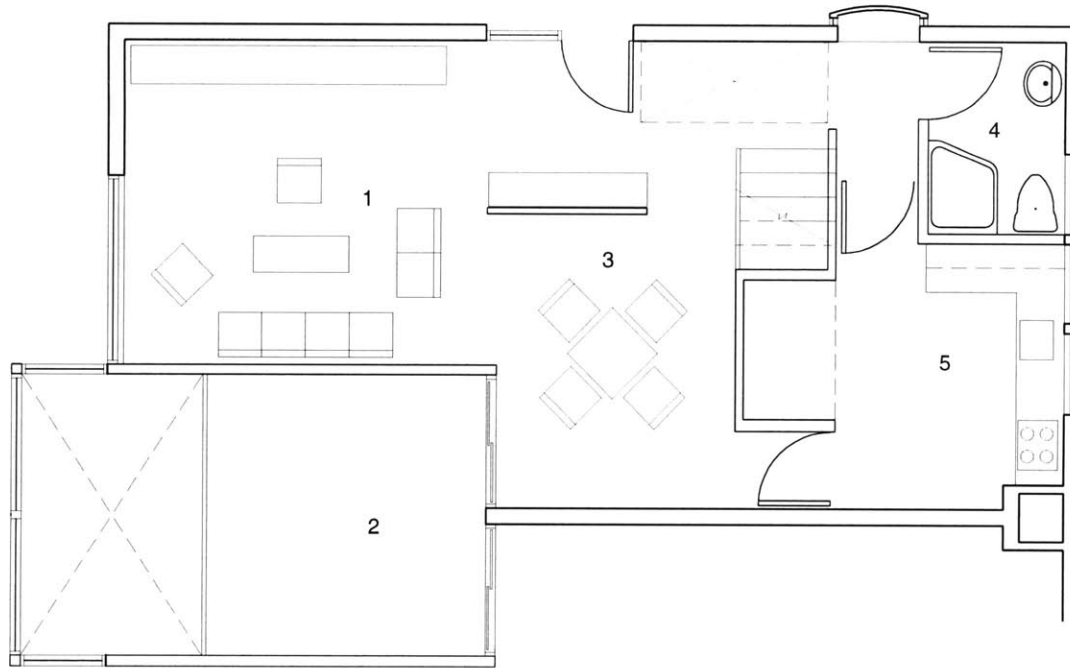
- 1. Living Room
- 2. Sharing Space
- 3. Dinning Room
- 4. Both Room
- 5. Kichen
- 6. Sculpture
- 7. Parking



Second Floor Plan 1/8"=1'

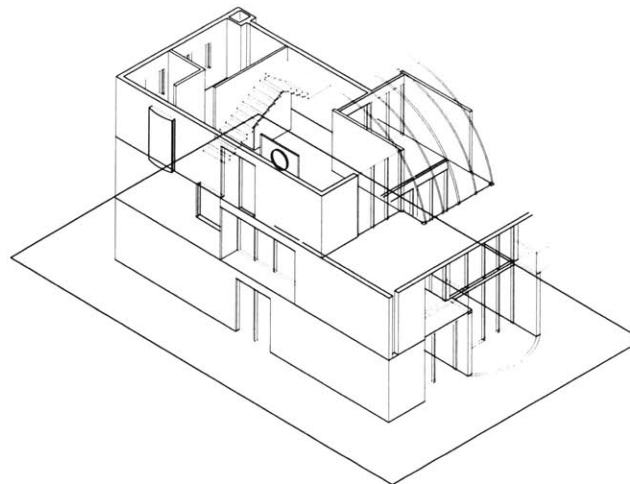
- 1. Bed Room
- 2. Open to Below
- 3. Balcony
- 4. Both Room

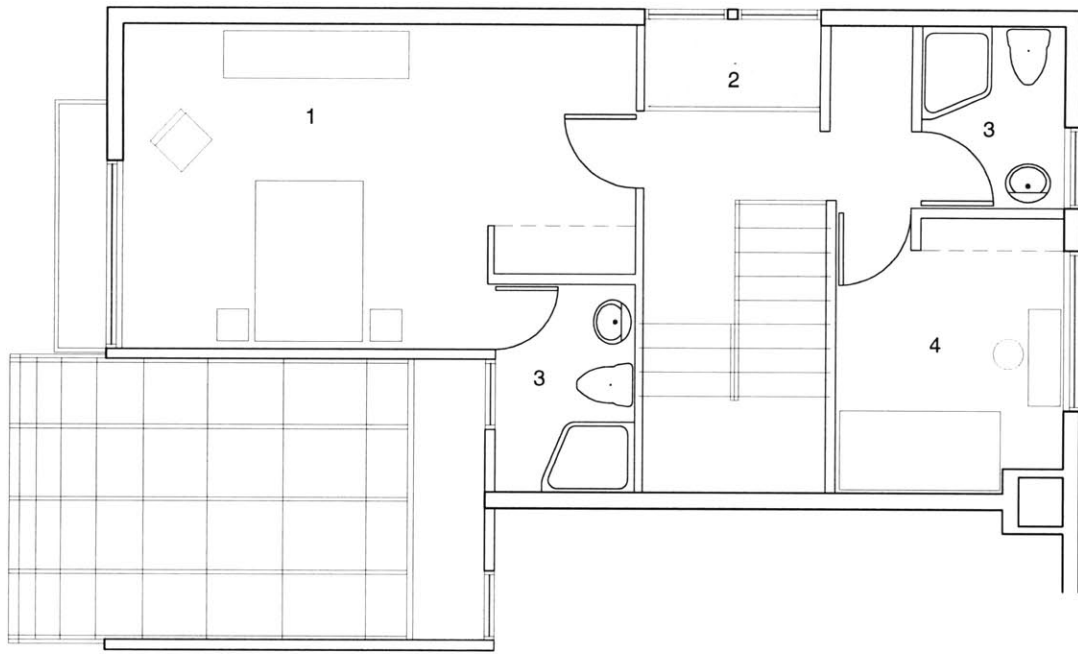




Third Floor Plan 1/8"=1'

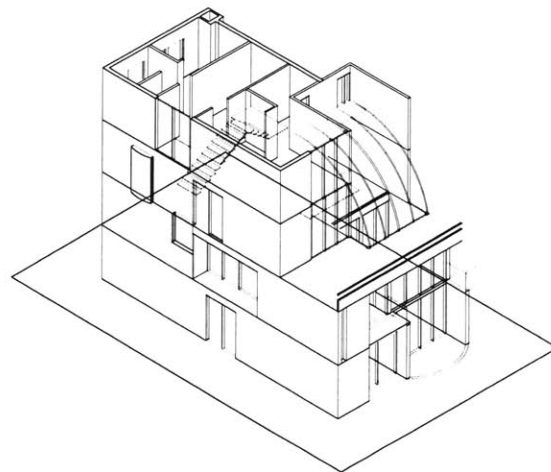
- 1. Living Room
- 2. Sharing Space
- 3. Dining Room
- 4. Both Room
- 5. Kitchen

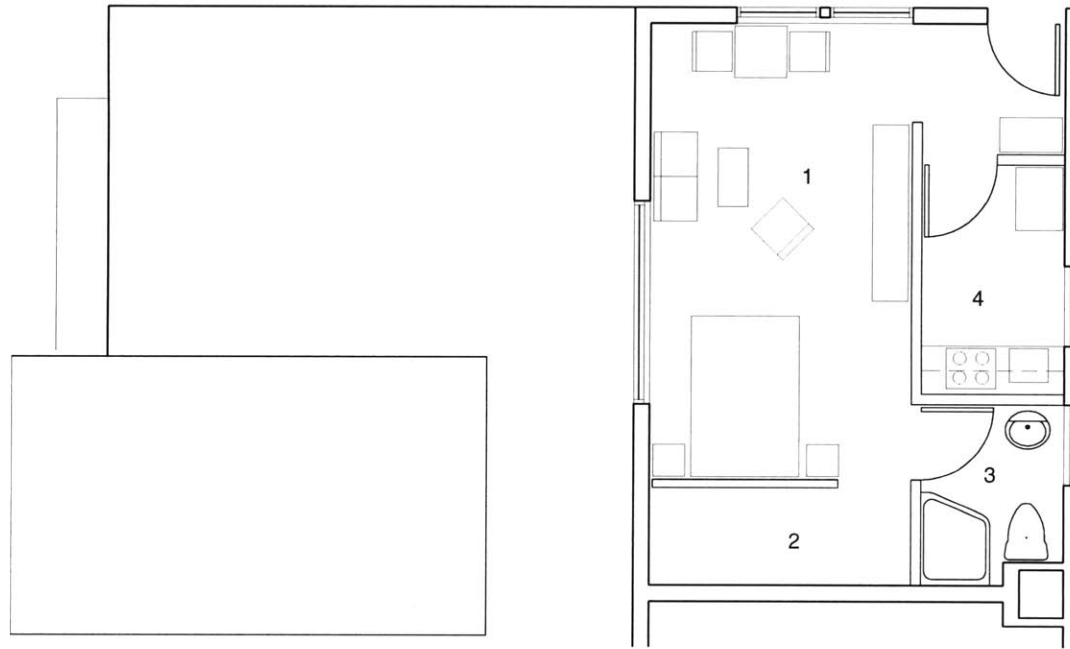




Fourth Floor Plan 1/8"=1'

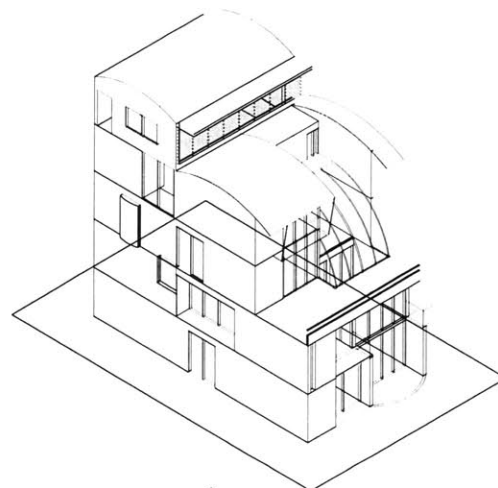
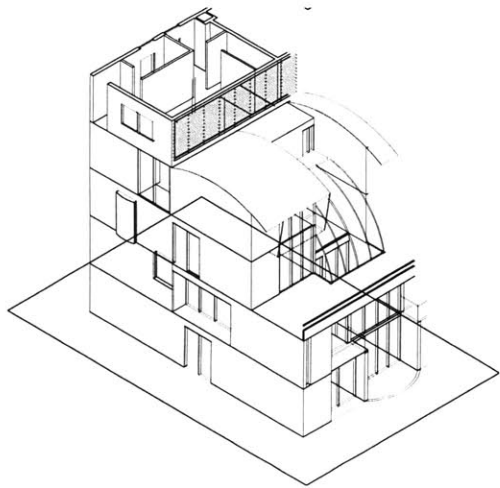
- 1. Bed Room
- 2. Open to Below
- 3. Bath Room
- 4. Kichen

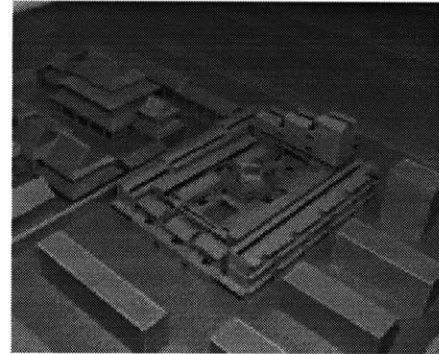
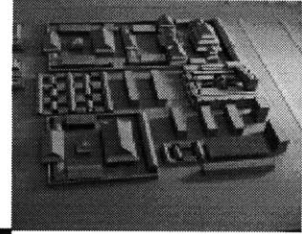




Fifth Floor Plan 1/8"=1'

- 1. Studio Space
- 2. Closet
- 3. Bath Room
- 4. Kitchen



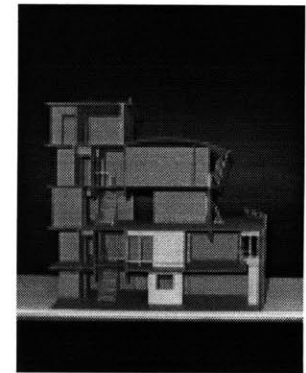
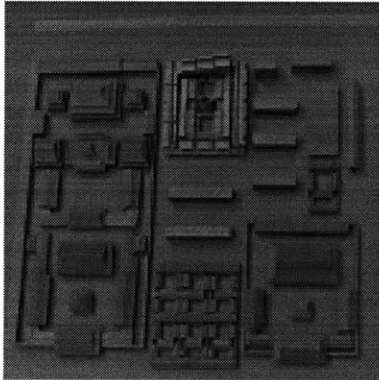


5

Conclusion

Urban housing design corresponding to urban population policy in a traditional urban context need to deal with various issues about socialology, urban planning, urban and architecture design. These issues must be explorded in the process of design. However, children is still the main consideration.

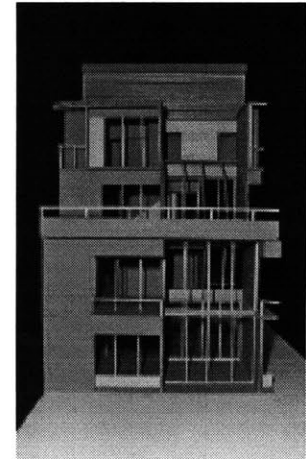
First of all, as the initial step, I have attempted to present a view of children within their relevant context. These contextual aspects are studied from both large and small scales: the social structure and the city, and the traditional three-generation family and a courtyard house. The city and the family is quite similar in terms of its social structure and spatial layout. This similarity comes from the relationships between people. One conclusion can be made is that the space can im-



prove the personal relationship between people, families, neighbourhood and the society. Just as Lynch's said "a place lies in the relationship between the place and the person who uses it".

Secondly, There is increasing concern about the effects of the one-child family policy on children's lives. Of all importance, a child at one family must be lonely, the interaction with others is the most important consideration for urban housing design. Three kinds of spaces are necessary for children's lives. The private room, which is belong to his or her 'world'; a interior space for two or three neighbours to get together to do whatever they like; and the exterior space for a large group of children to play together. In addition, circulation for children has different meaning, streets, hutong, walkway, path, courtyard are all potential places for them to interact with others.

Finally, the public facility, such as kindergarten and library, in the center of this complex could



attract people at any age to go there. People living here have different status, single, couple, young, and old, and live in different apartments, but they share these facility. It gives them a sense of 'home'. The feeling is extended from one apartment outward to the shared library and kingdergarten, and to the whole complex. People's life is not restricted inside of one apartment as most people do today, the sense of community and relationships between people, families and neighbourhoods are enhanced.

It must be emphasized that my thesis is not possible to cover all issues for this topic in the limited thesis semester. The further efforts should be made to study how to improve the quality of the children's spaces, both the interior and the exterior; what they need, and when and how they use them. I hope someday in the future I have opportunity to continue this study.

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All figures by author except noticed otherwise

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