

# **Research on the Construction of Urban Market Space Order**

Thesis Submitted to

**Politecnico di Milano**

in partial fulfillment of the requirement

for the degree of

**Master of Science**

in

**Interior Design**

by

**Liang Yingyu**

Thesis Supervisor: Professor Luca Guerrini

**July, 2016**

## Abstract

The purchasing needs of citizen explaining the rationality of urban market independently existence, but except this urban market didn't provide things as much as public's imagination, because the feeling of people to urban market mostly from childhood memories, as regards the satisfaction of mental or spiritual are literature wishful thinking only. Simplex using function and single space type doesn't bring clearly route and definitely order, in contrast enclosure space that separated from city packaged up their chaos and crowds, so self-development and self-contained existence way appear to be very different from open city concept. This kind of contrast comes from maltreatment that formed urban market space to profound social nature.

A real sense of urban market didn't came into being in Chinese Mainland, because nowadays urban market are not the outcome of urbanization but the result of village fair and traditional market street influences, and the contradiction between country roots and urban background hinder its conventional development in city. The rapid development of city further intensified this conflict, and it brings about a tendency to polarization. Some policies making requests of space governance and upgrade, but with no premise of theoretical foundation and cases supporting, construction working mainly relies on learning from supermarket. However the space order of supermarket were formed from pursuing efficiency, so simple form copying makes learning be shallow, long time run-in space order shaped a very stable space structure. Space order based on the research of space environment, and the analysis of space user, for example their way of thinking and behavior, through carding the complex relationship from environment, people, society, then establish a system that could make judgments and respond to problems from now and future.

Space order is a integration and reproduction way to show the complex relationship in space, so this paper attempt to construct a new urban market space form which can be cognitive, participate in and control by user. Through the research and summary of the way of local people living, obtaining information and resources, further rethink the gains and losses in traditional urban market design, in order to establish the foundation of a new relationship in urban market space.

Stable space order decided the form of space, but elements changing will have impact on original system, so there have no choice but to change the form for the new environment. Market in urbanization process means space order connecting with city, from the perspective of city analysis, special business model, spatial relations, using needs, visual forms will forming new order according to city background, then becoming new space form, and finally complete changing from inner to outer. This text that integrate all kinds of possible external factors, in the process of absorbing and learning different design concept from designer, history, area, aimed at finding multiple possibilities of urban market space order construction.

**Key words:** urban market; space order; construction logic

## Table of Contents

<b>Chapter 1 Tend to Decline and Demise of The Traditional Market Space .....</b>	<b>1</b>
1.1 Constantly Intensify of Internal Contradictions .....	1
1.1.1 Contrast Bring Psychological Discrepancy .....	1
1.1.2 The Generation and Development of Problems .....	3
1.2 The Needs of Citizen for Market .....	4
1.2.1 The background of Topic .....	4
1.2.2 The Existence and Continue to Develop of Urban Markets .....	5
1.3 Space Order Intervention in Urban Market.....	7
1.3.1 The Concept of Order Introduction .....	7
1.3.2 Research Objective and Significance .....	9
1.3.3 Research Methods of Topic .....	11
<b>Chapter 2 A Variety of Incentives To The Space Order of Market .....</b>	<b>13</b>
2.1 The Important Role of Politics and Economy .....	13
2.2 Unscramble Based On Humanistic View .....	14
2.2.1 Artistic Description.....	14
2.2.2 Memory of Living .....	15
2.2.3 Ideology .....	15
2.3 Triggered Thinking by Internal Order of Traditional Marketplace.....	16
2.4 Four Cases.....	19
2.4.1 Santa Caterina Market .....	19
2.4.2 Markthal Rotterdam.....	21
2.4.3 Beijing Sanyuanli Market and Beijing Shengfu Xiaoguan Market.....	23
<b>Chapter 3 The Construction Logic Behind Spatial Order .....</b>	<b>26</b>
3.1 Control——The Order Needs to Strengthen .....	26
3.2 Two Different Results by Freely Growth.....	29
3.2.1 Slump and Broken After Overgrowth.....	29
3.2.2 Weekly Intervention of Human Guidance and Development Strategy.....	30
3.3 Operation Mode——The Ultimate Goal of Space Order .....	34
3.3.1 Diversity of Business Format .....	35

3.3.2 New Consumption Model.....	39
3.4 Hidden Elastic in Space Order .....	40
3.4.1 A Variety of Features in Same Space .....	40
3.4.2 The Order by Periodic Use .....	42
3.4.3 Discussion on the Possibility In The Future .....	47
<b>Chapter 4 Space Consist of Movement and Events .....</b>	<b>49</b>
4.1 Mental Activity Implied In Spatial Order .....	49
4.1.1 Dynamic Intention in Spatial Order .....	49
4.1.2 Stimulating Effect on Consumer Psychology .....	53
4.2 Space Movement That Can Create Space Order.....	56
4.2.1 Form of Movement.....	56
4.2.2 Three Main Ways of Market.....	60
4.2.3 Motion Node.....	61
4.3 The Space Constitute Formed by Events .....	66
4.3.1 Space Event Triggered a Chain Reaction .....	66
4.3.2 Inevitable and Accidental Events .....	72
4.3.3 Open and Divergent Thinking to Deal With Events .....	75
<b>Chapter 5 Different parts of Space Order .....</b>	<b>78</b>
5.1 Different Levels of Spatial Order in Market .....	78
5.1.1 Space Order Expound From Environmental View .....	78
5.1.2 From The Unit to The Whole .....	82
5.1.3 The Smallest Unit of Spatial Composition .....	83
5.2 From Space Order to Space Form.....	84
5.3 Double Acceptance by Society and City.....	87
5.3.1 Dialogue with the City.....	87
5.3.2 Expectation of Citizen .....	89
5.3.3 Space Fantasy .....	92
<b>Chapter 6 Space Needs Create Beauty of Space Order .....</b>	<b>95</b>
6.1 The Expressive of Space Structure .....	95
6.1.1 The Combination of Reason and Sensibility .....	95
6.1.2 The Connection of Skeleton and Node.....	97
6.2 Mood under Category Rendering.....	100

Table of Contents

---

6.2.1 Spatial Differences in the Formation of Different Classifications .....	100
6.2.2 Inner Connection in Cargo Display .....	110
6.3 Get Rid of the Predicament of Regional Culture Formalism .....	113
6.3.1 Forming Reasons behind Expression Forms .....	113
6.3.2 Space Needs Create Cultural Patterns .....	115
<b>Chapter 7 Conclusion .....</b>	<b>118</b>
<b>Bibliography.....</b>	<b>121</b>
<b>Acknowledgements .....</b>	<b>123</b>
<b>Statement .....</b>	<b>125</b>
<b>Appendix .....</b>	<b>126</b>
<b>Personal Resume / Published Academic Papers .....</b>	<b>129</b>

# **Chapter 1 Tend to Decline and Demise of The Traditional Market Space**

## **1.1 Constantly Intensify of Internal Contradictions**

### **1.1.1 Contrast Bring Psychological Discrepancy**

The words dirty, crowded, dilapidated outlined an urban market, but it can send out a strong smack of everyday life, because authenticity has given a very deep impression to the minds of their citizen. High frequency trading activities has covered the shortcomings of it, and if we contrast with other business forms, like shopping malls, supermarkets, shops, so it more likely has social attributes in addition to the commercial property. In Chinese market, the food market exposed to more negative effects, in contrast, and foreign markets revealed a warm and cordial feeling in a clean and orderly environment in the city,.

Behind the long history and food culture of St. Lawrence Market, the operating rationality of the space give a smooth experience to the users and construct a visual and psychological comfort sensation. In 120 booths in St. Lawrence, all kinds of farmers, artists, entertainers add beautiful visual enjoyment for the market which with rich flavor of life. In the region of Borough Market, it was famous for the farmer's market in 13th century, and the narrow streets outside provide rich pleasant shopping experience to the crowded population and variety of dishes, so superior quality of food market space enhance the dishes selling process of the user experience indirectly. In addition to the goods sales mode that one to one, Provence Market has region for French cooking, arts and crafts production, and make this area tend to a perfect place for people relaxation, so the shoppers no longer stay in here for simply purpose to buy food only. Marcat de la Boqueria was changed from a pig selling market in the 13th century, and in addition to vegetables it has a large area of snack here and there, for example colorful and soft sweets, fresh fruit juice, flavor and fragrant chocolate, steaming hot muffin. all kinds of products in an orderly arrangement, color interspersed with scattered, partition properly, very tempting, here not only citizens enjoy lunch hour in the city of the living room, and residents every day will come to the place, is also a tourist experience in the

way. In the central of Östermalms saluhall in Stockholm, there has cleaning and comfortable bar for citizen. When they finish shopping, they could come here to eat a light meal or drink a cup of small wine, with quiet and beautiful mind, and also they cannot see a trace of dirty and messy environment sign.



Figure1-1 St Lawrence Market



Figure1-2 Mercat de la Boqueria



Figure1-3 Östermalms Saluhall

In foreign cities, urban market has become a synonymous for people's life, and it is completely beyond the traditional food market concept, otherwise the regional cuisine, ethnic crafts and customs make it with an ability of cultural meanings. Therefore, space is no longer a place for the simple trade function, and the new function of providing the living and leisure space for the citizen, so providing place for tourists to feel local characteristics will become a new space mission of urban market in new era



background.

### **1.1.2 The Generation and Development of Problems**

In China, the real food market produced in modern society, because in the traditional Chinese society markets always connecting with street closely, so streets become an important place for people to buy vegetables and food, and the sales model of agricultural products gathering rally in the countryside has been used until now. From the beginning of last century, since the birth of market, it became a place where city residents could buy food and living things, instead of the traditional street market. But from the beginning of urban market, the space and business model has not been changed with the development so far. The contradiction between urban markets and the city development of the times becoming more and more obvious gradually, ancient space form and business philosophy has become obsolete in the continuous optimization of the social economic and political system. New demands of the society should promote the positive development of urban market, but when the city focusing on investment in large commercial center, high-rise residential and entertainment space construction in massive build projects, at the same time food market has been in neglected state. The contradiction between the existing way of life and the old management space has gradually evolved into a conflict, which makes the public lose confidence in the traditional market.

The access threshold of traditional food market is low and the management level is uneven, market order becoming vulnerable in the context of lax management, so that confusion turned into the theme of urban markets. Under the guise of a chaotic order, the traders, the public will be relaxed, wanton use of space, coupled with the interests of the traders to occupy space, so unreasonable use of space efficiency is low. Space environment in the use of blind rough slowly deteriorated, blurring the lines between different commodities, open space pattern make between different dishes unique smell mixed group, hard to distinguish you and I to disappear, so the markets sanitary conditions and potential safety hazard to people's desire to buy bring confusion and anxiety.



Figure1-4 Qianbajia Residential Area Market



Figure1-5 Photos of The Market

In the background of the current city, along with the urban development of the new order of cities and urban fabric, market space and urban environment showed a very unkind relationship of faults and isolate, but a new order in the markets has encounter obstacles here, and the new things even has been destroyed here. Conservative and blocking the food market and the open cities, no single business format and the surrounding environment intersection, supermarket the greengrocer's substitution effect make people declining demand for the vegetable market, vegetable market need from the inside out to make a change to cater to the new opportunity for development, and through the construction of order implementation and the city again in line.

## 1.2 The Needs of Citizen for Market

### 1.2.1 The background of Topic

Although the food market place always given an impression of dirty, chaotic, and poor in the minds of citizen, but the city residents still cannot get rid of the dependence on the markets because of the demand for basic living supplies. The author thought that people put the hatred attributed of environment and order deterioration to markets itself, but for the food market the evaluation is unfair. Some ideas of people even believe that the emergence of supermarkets denied the existence necessity of food market, but the author has the opposite attitude. Food market is the most wonderful place with breath of life in the city, because its richness and diversity showed that its space characteristics is distinct from other space of city, and the spirit of place imperceptibly affect the lifestyle of urban residents, therefore urban construction cannot be in the way of completely eliminating urban markets.

Nowadays, there are a lot of urban markets that have been in existence for decades or even a hundred centuries were removed, such as Bell tower market been shut down, Chongwenmen market were removed, and disguised the demolition is just a continuation of a name only, single food market in Dongdan, Xinfadi market. These had been affectionately called urban "vegetable basket", for the public to provide services at the same time also left a beautiful memory in life, and now the public can only to the image data recorded in these cities in interesting places. In view of this phenomenon, members of the public through various channels to start discussion, put forward the proposal, they think markets of the demolition of urban living leave blank, not only brings the limitation to the public life, so simple and crude demolition work to a certain extent cut down the urban context.



Figure1-6 Bell Tower Market was Closed



Figure1-7 Chongwenmen Market Closed

In the development process of urban market, due to the slow development of theory research of space design and environmental planning, and the shortage funds of the construction, so lead to builders ignored on the construction of the market space of the food quality and powerless. In lack of good examples and theoretical construction under the guidance, urban vegetable market environment construction can only follow the beaten track, urban development to bring the population surge, and civic life and consumption level of rapid growth for the development of urban markets have brought tremendous pressure, if cannot solve this conflict, urban markets will not escape fate of being eliminated. Therefore, to avoid the food market has been put into the museum to become a permanent memory and cultural heritage of the city, the space must be changed to adapt to the new environment, then it can continue to serve the public rather than being abandoned by the times of city development.

### 1.2.2 The Existence and Continue to Develop of Urban Markets

According to a report published on the website of Ministry of Commerce of the

people's Republic: "to solve the" vegetable circulation last mile 'problem, at present, Beijing gradually formed a standardized community food market, community food stores, supermarkets as an important supplement, network marketing for the new strength, a variety of formats coexist, complement each other, common development pattern, community markets become old people buy food in the first place. "<sup>①</sup> In the future urban development, markets will become the mainly urban community food supply place, and community food stores, supermarkets and the emerging network sales will become urban markets as an important complement to the strength. In Beijing, for example, now there are about 500 large markets and farmers market, in addition to a large number of supermarkets and community the greengrocer, if the vegetable market is the ban will be to the public and catering industry brings the serious problem of life. Lu Yancen, the director of Beijing development and Reform Commission, said that food market is foundation of public life, according to existing problems of urban food market should be by changing and realize the upgrade of urban markets, in my opinion we cannot moving market to another place to build a clean and tidy place, in that way it will only sacrifice the interests of the people, so there will be a huge losses if we talking about it from a long-term perspective analysis.

There is a very interesting phenomenon produced by the new urban vegetable market space design, that the management and operation mode of urban market were tend to supermarket, but in supermarket the agricultural products, for example the fruits, vegetables and grain, has a very different business model and space requirements with food market. Supermarket management mode just for the self-service purchase, the new mode of the retail business in the first began in the thirties of the twentieth century in USA, and then spread to other countries, due to its sales model is adapted to the fast pace of urban life, so spread rapidly. Supermarket within the implementation of quantitative packaging, plain code marks a price, after a detailed classification of open display, self-selection by customers and in supporting service facilities with shopping box or trolley for customers to use. The pursuit of the efficiency of management model and vegetable market to stall -- customer business form bright contrast, except for differences in price and purchase, vegetable market also has supermarkets do not have human features, namely "popularity". Therefore, grafting supermarket space model is tantamount to buildings bring results, for urban markets development in a disguised

---

<sup>①</sup> Ministry of Commerce of the People's Republic of China. <http://www.mofcom.gov.cn>

form of painting ending, so urban market space only based on the self-structure development and improvement can keep the original intention of the food market.

### 1.3 Space Order Intervention in Urban Market

#### 1.3.1 The Concept of Order Introduction

Order in generally meaning can explain as things with organized and without confusion, and it will conform to the social norms of the state, in Chinese "*Dictionary*" it can be understand as two meaning, first one is sequence, another one is "position where the person or thing stay in, and it has the meaning of all the things in neat and rules".<sup>①</sup>From a broad perspective can also account for the relations between the various elements of the system in time or space, things early to adapt to the development needs of the, will be a basic system and gradually improve the internal mechanism, to deal with the complex social problems of breeding. Space order is a space framework that has been constructed through the thinking process of space logical relationship according to designers way, and it will combine abstract ideas and concrete results through order framework, the cured spatial order will become a design criteria and an evaluation basis, from a typological perspective of space that different types of architecture will form different space order.

Many new things were produced by idea grafting to have a newly and amazing results, but the concept of space order in space design has not caused widespread concern, by contraries the concept of spatial order has been in the field of the edge of space design. Spatial order is within specific regions with spatial system of social organization and cultural characteristics of the local people's construction, from the construction angle analysis and spatial order reflects the relationship between the element spaces; from a cultural perspective observation order performance for human behavior style and value concept differences. Spatial order describing the cultural form and social organization of specific geographical area and historical range, and its evolution was along with the diversification of social ideology, so space order of the times must be reflected by creating and newly buildings.

From the Farnsworth house to Illinois Institute of Technology, then to the Berlin New National Gallery, Ludwig Mies Vander Rohe pursued a strict uniformity and aim at

---

① Editorial Committee of *Ci Hai*. *Ci Hai*. Shanghai: Shanghai Lexicographical Publishing House. 2010.

the disappearance of boundary, in his architecture function give place to clear spatial order. Louis Isadore Kahn, in the latter part of his career, tend his main attention on the differences between objects and space separated between different functions, for example The Salk Institute, Kimbell Art Museum, National Assembly Building of Bangladesh, are his model works of space order construction. Order is a strict logic behind the space formal language, and the copy of symbolic form reflecting the cultural ignorance and the thinking immature, if we put aside the construction of space to focus on forms research only, so the acquisition will be very pale. In Tadao Ando's cold concrete walls you will fell the mysterious space order and the success of Rem Koolhaas's based on the reflection of sociology, Frank Gehry bored will space disintegration and reconstruction, liquidity and transparency become Zaha Hadid permanent symbol. The order of the architect's unique space is constructed with obvious personal ideology, and the process of the construction of space is the implantation of personal views in the works.

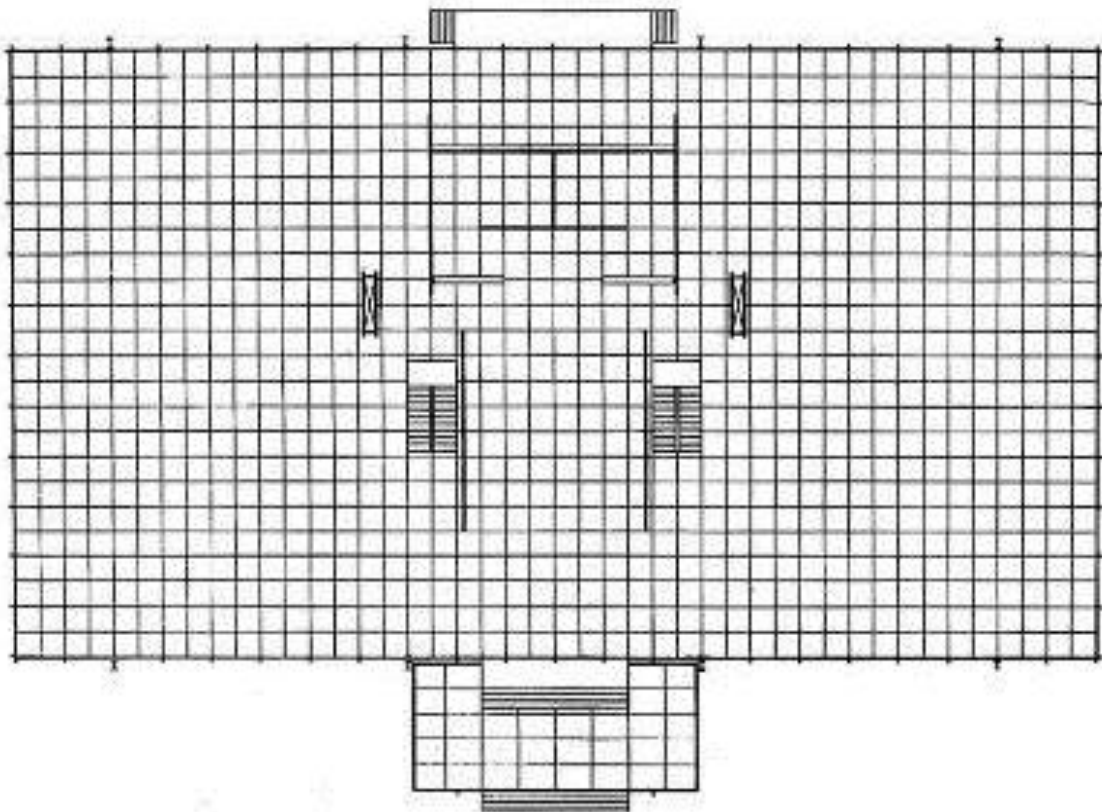


Figure1-8 Crown Hall, Illinois Institute of Technology

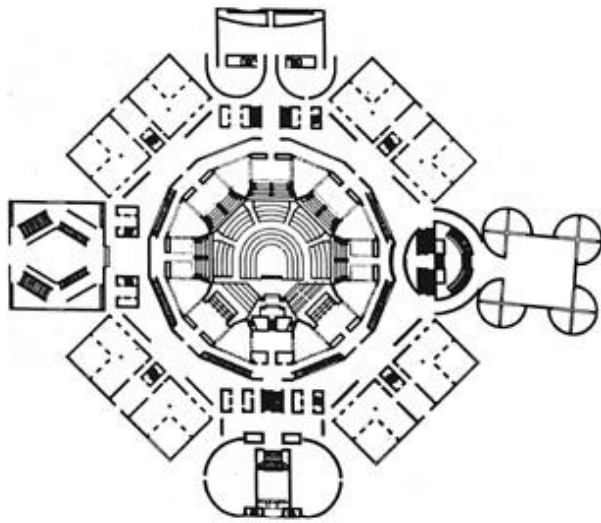


Figure1-9 National Assembly Building of Bangladesh

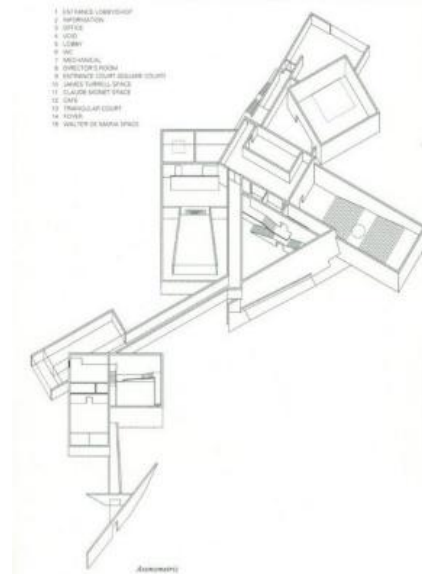


Figure1-10 Chi Chu Art Museum

Modernism, Post Modernism and Deconstructionism want to build a theory about the construction of new space, Modernism architecture established an mechanized way of construction logic by using the thinking of function first, the symbol and metaphor of Post Modernism inevitably give people an experience of only surface construction method, Finally the Deconstructionism of thoroughly traitorous implies the collapse of the traditional construction of evaluation criteria. They are trying to prove their correctness, but to backfire, people seems to understand this little, they tend to existing results: their opinions and pursuit, as the logic behind the form, has put modern urban space order toward a difficult situation. Therefore, based on the study of the complex relationship between the market spaces of the city, the author constructs the system of the spatial order through the relationship theory, which is formed by the space system.

Therefore, urban market, as a place with large flow of people and logistics, the order of space is particularly important to the space build. In the complex scenes, this kind of relationship between environment, buildings, people, goods, are arranged in a crossing pattern, disorderly space will only increase of space dirty and messy, space order help all city markets to eliminate internal and external complex overlapping relationship structure to cope with unexpected problems and events.

### 1.3.2 Research Objective and Significance

This topic was been selected because of the experimental, and the purpose is not to do a once work for all, also not to obtain a relatively definite answer, because the

establishment of a new standard specification is contrast with the purpose my topic. The topic research process will provide a new way of thinking and divergent thinking, the diversified development of space order with respect to legalistic is more important. The purpose of the paper is to explore a new space construction, through the construction of the system of space order natural generation space form, make the clear and orderly based on the setting order, and also according to the mode of thinking and behavior of people to build the platform of order construction.

The theoretical writings of urban market space design is still very scarce in Chinese society, the theoretical significance of this research is aim at putting the things that historical and cultural heritage of urban markets and the related factors in the process of construction in different periods, through actual investigation and case analysis, the formation of the theoretical system of open, add new ideas and new methods for urban markets space research. Vegetable market space construction related factors are complex and diverse, urban vegetable market space order to cities, neighborhoods, streets, goods, traders and customers as the space construction of the foundation, to form a new order in Chengdu city vegetable market space in the exploration of the complex relationships. In addition, the economic level, the development policy, the behavior habit, the cultural attribute always have the sensitive function to the urban market construction, all of this factors will be brought into the construction of the theory system of space order.

Now the construction development of existing urban market is slowly forward to the future in city's development, the vicious circle of space construction in causes the space environment stagnation, deterioration, and up to now we cannot exactly know what if the dirty and messy environment of market leads to people don't want to go to the building, or reluctance to construction mentality due to enable the market to become dirty and messy. Topic although no solution, the real problem is getting more and more serious, this paper on the basis of theoretical research, through actual case validate the design theory is correct, also for vegetable market space design provide reference case, in the combination of theory and practice, research highlights the necessity.

In the process of writing this thesis, the author is rarely involved in the aspect of spatial form. Because the designer can construct a variety of colorful space form, if only form is concerned, it is inevitable to get into formalism empty reincarnation, space form is the result, the Constructing Logic of the space behind the form -- order is the



fundamental space. Space form can only be a temporary solution, can't solve the fundamental problem, form of space diversity and complexity is only confuse by ignorance tourists, real space development needs from the internal construction of the reform. In order to respond to the proliferation social phenomenon of formalism in space design, the hope is to form a spatial order in the process of design, which is formed by the spatial order, and finally to achieve the spatial renewal from the inner to outer.

### **1.3.3 Research Methods of Topic**

In the research framework, the existing problems were summarized from the case study of contemporary urban market and literature research, through continuous analysis and summary, and learn from foreign outstanding cases, then formed a new way of urban market space construction based on the situation of modern city. Combining theory with practice, taking Wangjing Street comprehensive vegetable market as a practical case, in the design of the test research results, found that deficiencies and to be amended.

For the choice of research methods, the author adopts investigation method, qualitative analysis method and case study method, to find clues from the typical cases, to provide evidence for the theory. Through interdisciplinary research methods, drawing on a wide range of other professionals in the field of advanced ideas and construction method, project smoothly to open the way of thinking, with an open posture recruit wise policy. On the basis of literature analysis, functional analysis and exploratory research methods, this essay will research essay will formed a unique ideas and logic of space construction, to provide new ideas and methods for this kind of research questions.

The lack of academic paper in food market is the biggest bottleneck in the research of the topic, and the case study is one of the most important methods in this research. However, the Chinese food market space is lack of corresponding success stories, so foreign outstanding cases become the main target of the case analysis, due to the strong regional place of urban vegetable market space, in the process of transformation, will study according to the geographical and cultural characteristics and life custom area don't treat, different communities of the same countries in different cities and the same city, vegetable market will form the difference, caused by differences in the results easy to form of misunderstanding, so in the course of the study will be will focus on such

issues.

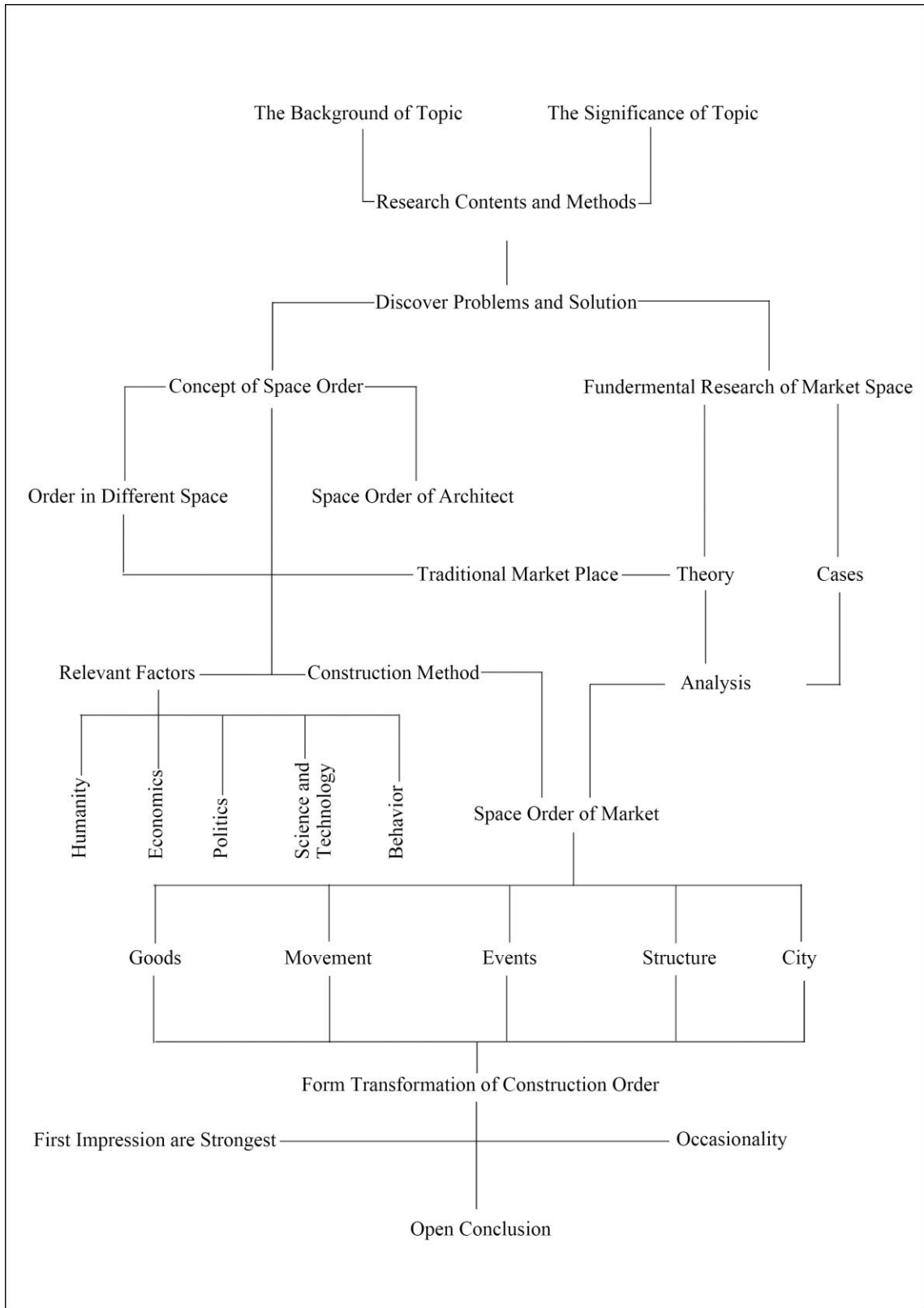


Figure1-11 Research Framework of Topic

## **Chapter 2 A Variety of Incentives To The Space Order of Market**

### **2.1 The Important Role of Politics and Economy**

Politics and economy seem to have no direct relationship with the space design, but in reality it is very important. The main theme of the political decided the direction of space designing, and economic development strength is a powerful guarantee of space construction. In traditional society of China, the hierarchy system strictly regulates the provisions of space color, materials, structure style and production process, owing to the industrial revolution occurred in the liberation of the traditional space construction technology constraints. Space began to become rich and varied. Urban food market is about the national economy and the people's livelihood. It is the foundation and guarantee of the life of urban residents. Therefore, the policy changes and the economic prosperity will affect the pattern and form of the space.

In the era of planned economy after the founding of new China, the freedom of the buyer and the seller is subject to the restriction of the administrative order, and the nature of the vegetable market is distorted by the political control. Especially during the 1950s and 1960s, vegetable market through the history of public-private partnerships, vegetable market gradually realize nationalization, planned on-demand distribution in the progressive development of the city exposed a lot of problems, first of all vendors operating the initiative deprived, secondly, people choose the possibility of dishes being wiped out, the disappearance of market competition resulted in rigid spatial pattern and spatial order of construction by leading to both political and economic. In July 7, 1988, the Ministry of agriculture launched the vegetable basket project, hoping to take measures to develop agriculture, so that the urban residents of the vegetable basket gradually enriched, the market economy has brought the prosperity of the market space.

Under the background of the development of market economy, and some members of the public on urban markets exist the necessity of retention relative fuzzy point of view, the main reason lies in the rise of retail formats and prosperity of e-commerce to the development of the food market to bring the impact of, can replace format make

them for the vegetable market holds no indifferent attitude, but retail business has great restriction to the development, so the majority of people still hope the markets continue to exist. For this problem and related policy introduced gives the firm answers and development strategy, in the urban environment should be formed in the vegetable market, community stores, Retail-outlets, supplemented by the development pattern. People are worried about the market environment of the food market, the need to rely on the order and management of the market to achieve the management of the market.

## **2.2 Unscramble Based On Humanistic View**

### **2.2.1 Artistic Description**

Market space is a place where art can be created. In the food market beauty, "a book, the author describes it as:" that is the most primitive human society was like, all kinds of goods are brought to market, let people have in exchange for other needed, for thousands of years, changes in the food market actually only currencies, and patterns of transactions and interactions, goes on and on. It was an archaeological romance, a living textbook of history." The art of food market inking is reflected in life scenes and rich space.

Also did not enter the food market will be able to smell the green Chinese onion of pungent taste mixed fruit fragrance blowing, this is it is a sign of olfactory symbols, people jostle each other, a bustling scene. With the direction of the stream of people the way constantly surprises, all kinds of fresh and moist plump fruit like elves general flashing light, delicatessen area white steamed dumplings exudes seductive fragrance, just out of the pot of melon seeds and peanuts let hand feels a heat wave. Encounter good luck when there will be discounts tomatoes or clearance sale, we will strive to be the first you picking me, eager to buy a bunch of home, commonplace these days will be carried out around the potatoes. In the vegetable market, everything is real, then there is temptation, between the vendors and the citizens of laughing and conditions of public opinion, the gossip, bargaining atmosphere in space echoed spread, here is full of creative themes, literature, art, poetry, the film seem to for the vegetable market full interest and fantasy, bored with the introduction of new work.

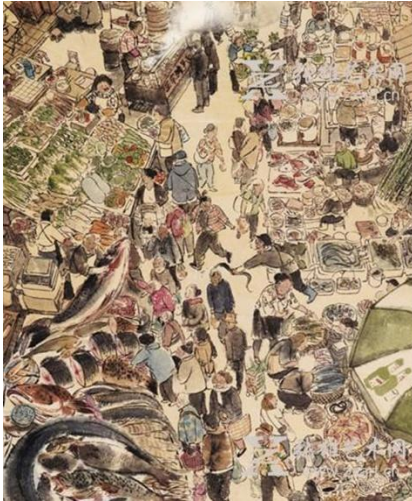


Figure2-1 Paintings by Huang Xiaoxiao



Figure2-2 Paintings by Kanazawa Mariko

### 2.2.2 Memory of Living

Almost all city markets, almost everyone has a vegetable market and non-expected across. Regardless of the elderly or middle-aged, regardless of the child or youth, the vegetable market in their memory is overwhelming and colorful ingredients and a variety of color, texture, smell, shape, sound converging portrayal of the city's most real life state. Here, the sense of sight, hearing, smell, touch, taste and other sensory organs are fully mobilized, even after a few years later and it will recall the scene of the time. Spatial order in memory plays very important role, this memory exists in people's minds, only in special context it can be immediately apparent, the spatial impression will remind people of many stories and scenes, unique experience of space will strengthen the sensory memory.

Urbanization of modern life make vegetable market gradually fade out young people's field of vision, to the city life leave blank memory, in order to inherit the true life, food market space requires not only to renew old memories, but also close to the young people in the pursuit of love, through constant reflection and innovation, leaving new urban memory.

### 2.2.3 Ideology

Urban food market because of its commitment to the role of the city to provide information on the role of life, it is different from the high-grade and lower levels of the concept of the existence of the market space atmosphere more civilians and have affinity. Space without special shape and decoration, no bright lights and equipment, existing

only cheap goods and simple dishes people, where the public down daily work seriously and down various social title, regardless of you and I enjoy the fun of this bargain, in the real life become space theme.

Food market as a place is focusing on selling vegetables, meats and other non-staple food, all kinds of people walking in and out from the space in the city and society. The old people regard food market as a social place for their leisure space, and housewives considered it as a family kitchen where they can enjoy shopping, but the child was been brought here by their parents to appreciating the rich variety of goods in market. In the eyes of children, here is full of infinite amazed and temptation. Work family and youth generation of markets exist alternative views, entertaining and interesting become the dominant factor in their choice of space, so markets its richness is interesting development to prepare a very good basic conditions. The space order which is constructed under the mixture of different kinds of meaning will reflect the neutral color, the self-concept of the space is weakened, and the function of the opposite person is enlarged.

### 2.3 Triggered Thinking by Internal Order of Traditional Marketplace

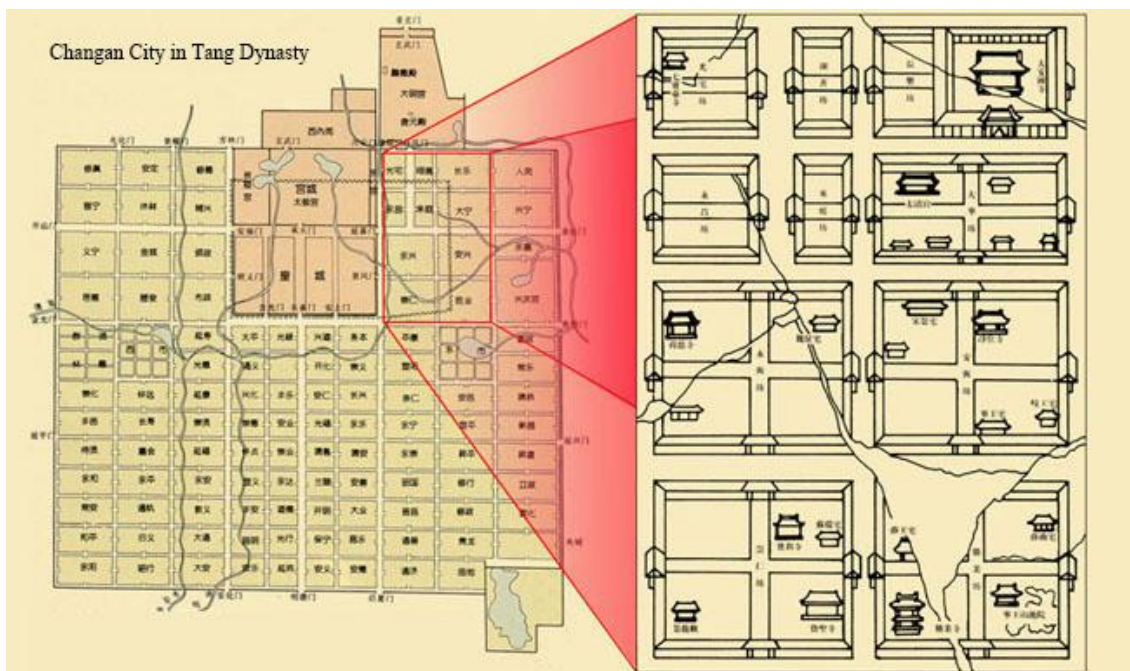


Figure2-3 The Urban Pattern Produced by Chinese Ancient Fangshi System

“As you can see, there is the brothel painting Pavilion, bead embroidered

households. Ornate cars competing parked on the street, valuable and vigorous BMW indulge Mercedes Benz in the imperial street, inlaid with gold Pinnacle dazzle the eyes, beautiful clothing float send aromatic. Song melody of beauty and the laughter, echoed in the Liu vaginal and street alley; of not sound with strings, playing in teahouse gatherings and restaurant feast. All the counties of the state have come to Kyoto, and the angels of the world and the Song Dynasty. The mobilization of the four treasures goods, to the capital markets to trade. Meta-delicacies, Kyushu, Qi, in the capital of the feast are for them to enjoy. All covered the road, not to block any people every spring; music shocking the sky, and there are several giants are opening banquet. Strange exquisite art performance makes people find everything new and fresh, the luxury of life to make people relax.”<sup>①</sup>This is Meng Yuanlao wrote in his book “*Beautiful Dream to Tokyo*”, and in the preface he described the prosperity and rich life forms of Tokyo city in Bei Song Dynasty.

Ancient Chinese people mostly commercial activities in the streets and on both sides of the street shops complete, fruits and vegetables, clothes, cloth, calligraphy and painting books, snacks juggling, and asks the pharmacist fortune telling, pub and teahouse in a linear way lined on both sides of the street, behind the store is residential tenants of the courtyard, the shape of this function, that was connected by the houses and shops, has showed a fuzzy state. Shop is fall into the hospital also served as trading function, which is the prominent features of Chinese traditional market space and the strict system of the city square is the product of political management, space order by political constraints hinder the prosperity of a variety of formats. Song Dynasty to cancel the workshop city limits and open a curfew, boundaries and the opening hours of the extended to the business brought more degrees of freedom and promote the prosperity and development of all kinds of Commerce, city life becomes rich and in Song Dynasty painting "along the river during the Qingming Festival" in, reflects the traditional market prosperity formats from the Bian River and Hong Bridge dense colorful characters. The traditional downtown is reflected in paintings of Song Dynasty and the scene more dependent on expression of traditional festivals, meetings, activities and folk stories, in addition to the crowded scenes, street and building space itself and not too much change. Because of the existence of the feudal ideology, the constraints of the managers, the traditional market in the ancient city of the construction of a

---

<sup>①</sup> (Song Dynasty) Meng Yuanlao. *The Dream of Tokyo*. Zhengzhou: Zhongzhou Ancient Books Press, 2010

continuation of the regular grid forms, in order to facilitate the control of. Centralized management of the fixed line of ideology makes that the spatial pattern of Street itself after experiencing chiliad without formation of revolutionary change.



Figure2-4 Along The River During Ching Ming Festival (Portion)



Figure2-5 Analysis of Spatial Emptiness and Truth Relationship

In the Song Dynasty, markets, for example, the bustling streets and buildings and bustling trading scene is the concentrated reflection of the city commercial and civic life custom, the richness and variety of the sale of goods for the space complements the full content, public activities enable static space with dynamic attributes. But in the space shape and urban pattern, traditional market space reflects the composition of a single, which is mainly due to the influence of political control. But in the pattern of a single urban texture, city square, the streets due to shop "invasion of street" and the merchant and the behavior of the street facade presents the non-homogeneity of the state, to make up for the urban pattern of the shapes of the monotone. Rich street space and functional organizations provide places for the public to carry out activities, the traditional market prosperity behind the implicit logic of the construction of a comprehensive set of elements in the building of the space order.

"Invasion of street" phenomenon mentioned above and building behavior reflected in the city and the other in a complex space is more prominent: civic space. Unlike traditional street space, street space no fixed order in space and construction, it reflects a more complex and free space combination. It features reflected in the small region focused on the variety of entertainment, sale, cultivation and residence use function, because of the special geographic conditions, and oppression of economy and the



demand of the users and builders, "invasion of street and self-behavior become ordinary residents to expand the area of upset. In the process of self, they are subject to the interests of the driven attempt to maximize extend their field and scope of use, thus formed the marketplace space channel narrow and rugged pattern, and produce many interesting corner and the courtyard space.



Figure2-6 Guangdong (1)      Figure2-7 Guangdong (2)      Figure2-8 Guangdong (3)

The laziness of the regional management and control of the space to grasp the initiative in the part of the development of freedom and nonlinear broken build the marketplace space presents a rich complex, because of this, the marketplace space exists not only in the long river of history, even in modern cities also showed vigorous development trend. Residents around the marketplace space of living functions, extended out of clothes, chess, food storage a series of assisted living space; owner around the commercial function, trying to expand their scope of operation, the signboards of suspension and customer tables and chairs, services and facilities, such as items slowly invaded the streets, all can use the space eventually full of goods. People living condition in unconscious construction and use process is revealed without involuntary discharge of urine, marketplace space the chance to develop and use not predict formed a rich spatial order and construction of the form.

## 2.4 Four Cases

### 2.4.1 Santa Caterina Market

The pattern of Barcelona city is divided into two areas, the old city and the new city, no matter from the road order or architectural form can significantly reflect the differences in this region. Benedetta – Tagliabue caught it and its infinite zoom, forming

a re interpretation of the texture of the old city, through the ups and downs of the roof and color texture will originally fixed city relationships break down, in the continuation of the old city of texture based on innovation in order and space form. Designers to take advantage of the frame structure of the roof light prop up, floating at the top and stocky old town building form a strong contrast, dull city streets to add elements of dynamism and vitality. From the top of the wait-and-see, color tile constitutes a pixelated fruit texture and shape and the old city of intensive building blocks together, form a unified order, but the order only in special perspective to found.



Figure2-9 Area plane

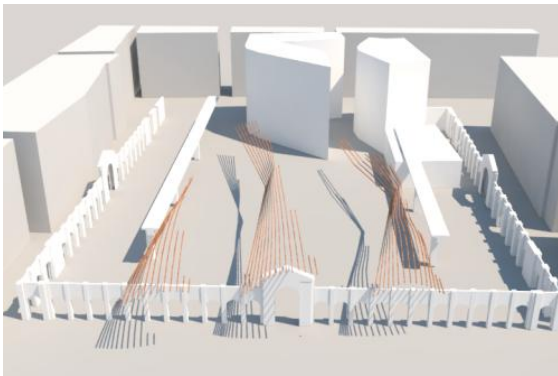


Figure2-10 Spatial Structure System (1)

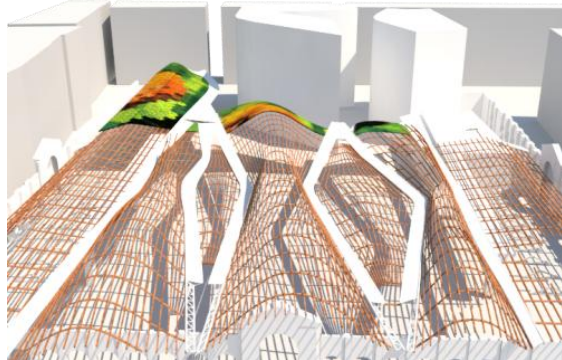


Figure2-11 Spatial Structure System (2)



Figure2-12 Aerial View of Architectur

Figure 2-13 Details

In addition, construction of the internal order of the space, designer to adjust the internal functions to meet modern people's living needs, in the booth layout and goods display mode in pursuit of the beauty of the rational order, and in space and set the bar and restaurant to selling vegetables in the event becomes a fashionable, elegant, free wireless networks follow the pace of the times, from the point of view of activities and events has enriched the form a single sale mode of spatial order.

#### 2.4.2 Markthal Rotterdam



Figure2-14 Area Plane

The rapid development of urban areas in the commercial and office buildings, the building space is always willing to get rid of the shackles of the old form, the relationship between the single body is simple and rough, the region's peace is the result of a rich test. After World War II, Rotterdam gradually loss the attractiveness advantage that as a port city, because the reconstruction of it was built under the guidance of the principles of modern architecture. Rotterdam, in the development process of high density urban state, started to find the original nature of city characteristics from downtown area.

Cities around the world seem to have this phenomenon, that is, the food will be gathered together, and the formation of a unique food culture, in order to attract the majority of tourists to participate. In Rotterdam, the construction of the market is similar to the Chinese market, most of the temporary building, but due to the short operating time of the market, so people have to go to the supermarket to buy the ingredients. New

markets in an unprecedented period of the apartment and markets combined together, and using huge living vaults enclosure the markets. The one side of this flat facing to the city, and the other side facing the market, so that tenants living and watching the bustling market life. Arno Coenen and Iris Roskam complete the fruits and vegetables mural called "horn of plenty" in vault panels together, and it becomes a landscape of unique symbol of the markets, not only reduced the market noise, and showed a strong spatial richness and flavor of life, simultaneously has brought the vaguely feminine colors for the construction.

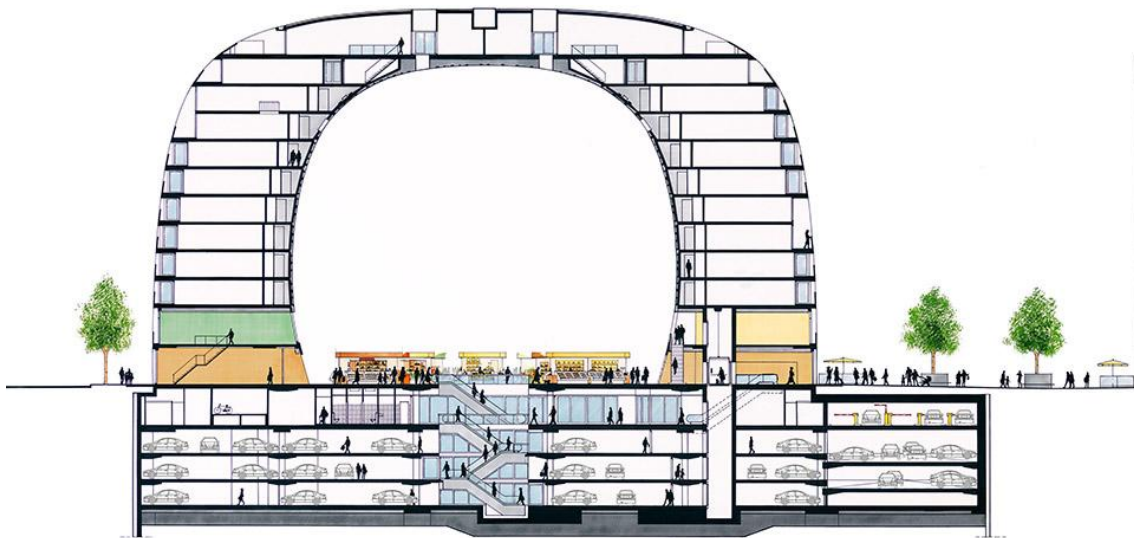


Figure2-15 Section

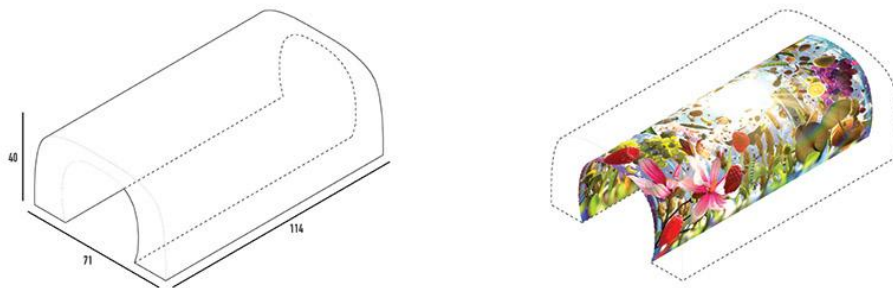


Figure2-16 The Structure of Horn of Plenty

In addition, its space order of construction unique shaped its unique shape, vegetable market after adding new elements became the new space order, with renewed vigor. Underground parking space connecting with urban road system solved the basic problem of parking cargo, residential, office and merchants of the combined to provide more possibilities for the development of vegetable market space. Food market to get

rid of the era of separate operation, and office, living, parks, sports venues, entertainment places, and even with the hotel, the collision produced a new order and form.

### 2.4.3 Beijing Sanyuanli Market and Beijing Shengfu Xiaoguan Market

Compared with foreign urban markets, the domestic market is far too conservative. Although regional differences caused by many different lives, but I think it can only become the city vegetable market development lags behind subterfuge. Article Select Sanyuanli markets and Sunflower little off as a typical case of domestic market research study, Both are traditional urban markets, they have retained the traditional vendors have business models, which is away from the modern subject in the research process Cause supermarket lies.

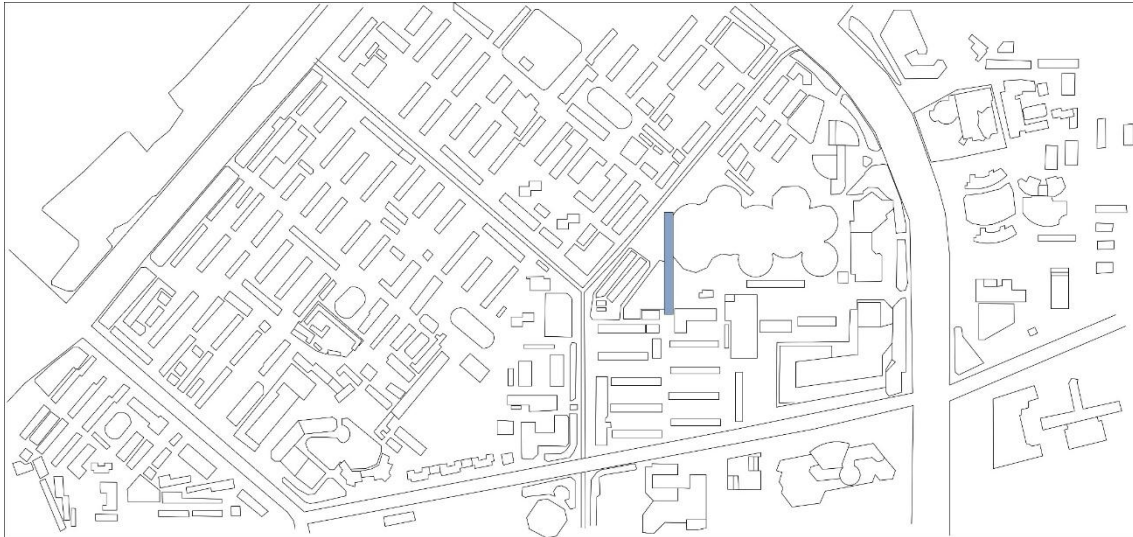


Figure2-17 Area plane



Figure2-18 Interior of Sanyuanli Market



Figure2-19 Entrance of Sanyuanli Market

Three sources in the vegetable market of linear spatial order, entrance and exit points of the space formed in two-way cycle path of movement, the space thus formed has the characteristics of the construction on the figure-ground relationship cater to community building fabric. Due to the length of the internal space in the human walking psychological acceptance range, ease of use has not been seriously affected. Booth space in accordance with the internal unity modulus split side of the channel, orderly, in contrast to many other markets after determining it is a relatively clean environment, a high public evaluation of traditional markets.

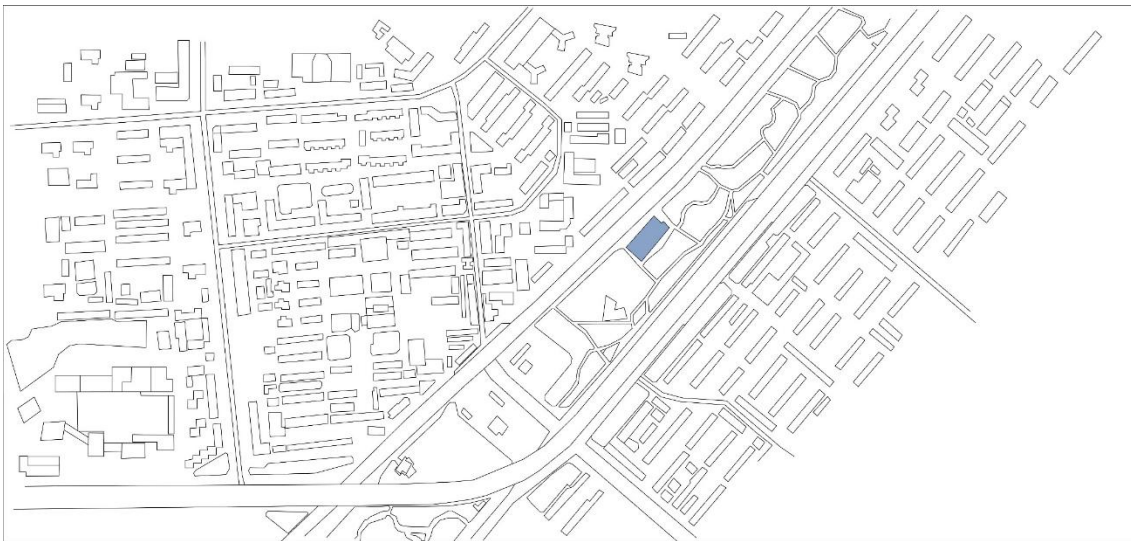


Figure2-20 Area plane



Figure2-21 Entrance of the Market



Figure2-22 Interior of the Market

The Sunflower little off the market particularity lies in its geographical location, it Expressway east, west across the city roads and residential communities across the narrow road in a green belt of parks and streets. Special geographical location and

superior surroundings did not bring the space forms of innovation, the traditional gray brick building closed markets will be isolated from the parks and cities, where urban order appears broken. In the interior space, according to the traditional stalls arranged annular array, this pattern has formed a large open space, but the lack of lighting leading to the top of the dim room light, and the inconvenience to the user space experience a sense of loss. Indoor use flow stalls confusion, garbage piled up everywhere, dishes disordered arrangement caused a messy space, therefore, can only feel sorry for the waste of resources inherent advantage.

## **Chapter 3 The Construction Logic Behind Spatial Order**

### **3.1 Control——The Order Needs to Strengthen**

Space environment is a complex whole, and the establishment of local space order depends on the study and extension of the whole spatial order. In order to control the space, management established a set of perfect space order, in order to make the whole and the part between the orderly operation in constantly in the process of development, managers and administrators have experienced a adapt to order to order are familiar with the process. With the development of time, the spatial order will gradually break away from the original environment, there are defects, and the changes of related factors will make people try to break through and challenge the weakness and vulnerability of the spatial order. Spatial order in the steady erosion of people and the environment, become chaotic, space environment because of the loss of order and lead to chaos, filth and order on the regulation and control role gradually disappear, space order eventually to the collapse, the disintegration of the space order will eventually declared space's demise.

"Control" is through top-down management behavior, the establishment of the space environment operation and development oriented relationship, this relationship is based on the establishment of spatial order. For managers, control is the development and limitation of the control, relative to the user, the control is the psychological and visual comfort. The construction of space order need to comprehensive all the related factors of economic, political, cultural, life and society. We can find a compromise and balance state in the complex relationships and interests, so that building the whole framework from the inside to outside, and formed the formation of spatial imagery from the content to layout. To external surroundings, space order need to handle the related factors, such as environment, historical context and the development of this era, but to the inner space it needs to divided and refinement space in which way of recursively, and filling space details in accordance with the specific content and the special requirements, in order to achieve the unity of the whole in inside space and the differences between partial space in outside space. Internal space is based on external space, and external space was enriched by internal space, they were mutual coordination



between the two different parts. When there of the space has been encounter the special needs, the space order needs to make concessions in order to achieve the overall harmony.



Figure3-1 Master Plan of Pruitt-Igoe

When outside space out of control in the normal monitoring, will form a spatial blind area, these blind spots is breed a variety of problems are the most serious areas. Architectural event known as a famous event, Yamasaki has designed 33 buildings that each one has 14 layers in the 1950s and it is a modern cheap housing construction group called St. Lewis Pruitt - Igor, finally it was been blow up in March 15, 1972. On the one hand, he successfully solved the problem of bottom people's living space and on the other hand the building became a notorious crime breeding ground. Because the

building using the neat and tidy order, and between building and building, households and households, there isn't any differ, with the poor spatial recognition, people often get lost in space order without difference. The negative space corner made the space of stairwell and garage out of sight line from the monitoring range, the loss of control lead to the space become the crime zone of high frequency. It crashing collapsed with a declared modernist architecture death, on the other hand corroboration of the space in order, also was beaten by the order.



Figure3-2 Interior of Pruitt-Igoe



Figure3-3 Aerial View of Pruitt-Igoe

Cause of space and environment of urban vegetable market dirty, chaotic, and poor in disorder and lack of, nature is weakening control, power control does not explicitly make space cannot according to a determined order and purpose of the operation, executive order policy, regional organizations, enterprise management, traders food agricultural in the space of control will play a role. But the class mutual prevarication and lack of communication and has not formed a fixed can clearly depends on the operation mechanism, the fragmentation phenomenon exists generally, loose control and spatial order vague form obstacle space markets tight statements. Timely garbage clean-up, dishes placed orderly, clear organization of circulation does not exist explicitly define and guide, spatial cognition and use with people's wishes, in no order of the environment, space and ultimately to the disorder results. Therefore, governance and improve the urban vegetable market space environment depends on the spatial order in the formation and reinforcement, on the one hand, management form a clear relation between the control, on the other hand for the public and vendors to provide according to the behavior.

## 3.2 Two Different Results by Freely Growth

### 3.2.1 Slump and Broken After Overgrowth

Free space growth implies the future unpredictable, sometimes space unexpected chance than rational analysis results are more valuable and interesting, no after careful arrangement of the space, to users bring fun and interpretation of an exploration of the impulse. In contrast to the control, without any involvement in planning and design, the natural growth space fun is the result of chance, strict control will spaces obliterated the ego and personality, and completely free of growth also has its drawbacks.

The risk is never to do long-term planning, like seed never provisions of their future growth space completely according to the moment of self-wishes, for future emergencies space can only take soldiers to be blocked, in the way to deal with spatial order only at a meet the current use of the demand, treat the long-term development but to no avail, dilapidated and depressed become crazy growth after the risks.



Figure3-4 The desire to expand of the building



Figure3-5 Self-Build Without Planning

Urban vegetable market space free growth reflected in the activities of street vendors to self, special geographical location, inhabitants constitute a specific, special needs of life will spontaneous aggregation vendors stationed, space construction in the beginning of time. Traders is space builders is also the space of users and self-behavior constraints traders usually limit and economic conditions, but for personal interests, pursuit to maximize the effectiveness of desire so that they often walk in the edge of the management regulations, thus resulting in a space of growth with narrow independence. Traders between competition, coexistence and win-win the subtle relationship between different formation constitutes a special space, space order in this task is complete monomer construction of local features and internal operation, in order to form an

independent individual space. Between monomer and monomer of outer space exist independently, external spatial order of the special relationship between them, because the individual traders concerned is how to use the space for better achieve profit objective, so the space from the construction point of view, outer space is almost self-behavior of traders complete sacrifice.

Temptation to make its growth presents the crazy situation, can imagine, with the increase in the number of, the natural growth of the space be added new elements and structure, the growth space of uncertainty, on the one hand brought complex space form, on the other hand, the growth of the disordered crazy like weeds flooded, resulting in space cannot control and cannot move the deadlock. Because free growth of disorderly development process lack of necessary development plan as a guide, so that it cannot cope with the complex emergency and long-term development bring new demand, when the possibility of growing space was developed to the extreme, it will go to its opposite, confusion, if not to control, finally only to abandoned Road.

### **3.2.2 Weekly Intervention of Human Guidance and Development Strategy**

There is another kind of rational development path, which is different from the crazy growth. It introduces a slight control factor. Modernism architecture with a strong authoritarian collapse of purpose, which is of strong resistance of political centralization, power delegated to break the old spatial order and new space order in an attempt to show that a break with the traditional faith and space form began to become free, rich. But the construction of the space order still exist strong control factors, but the control power of the master in the hands of the designer, the so-called free growth but become the excuse of designers about the scheme, most of the design scheme of almost all control results.

The free growth of guidance and strategy is to avoid the serious consequences caused by the disorderly growth of the disorder, and to provide unlimited possibilities for the rigid pattern under the control. Produced by the interaction of free growth and weak control of spatial order has a strong regional characteristics, regional relations of production, behavior activities, cultural and historical characteristics in the process of self-construction is subtly revealed to space, space form for this complex social activities and relationships provide support and participate in the design and guide for long-term development put forward the guiding opinions. Japan Shibuya District Street

facade and path in the twists and turns in has no intention to extend the walking path, and breaking free construction in urban planning of correction to keep the street facade in rich and varied state, so architectural style of the different periods of the accidental combination of increased migration in the rich experience. Space is bound to make more changes in space, and indirectly bring more communication and interaction with people.

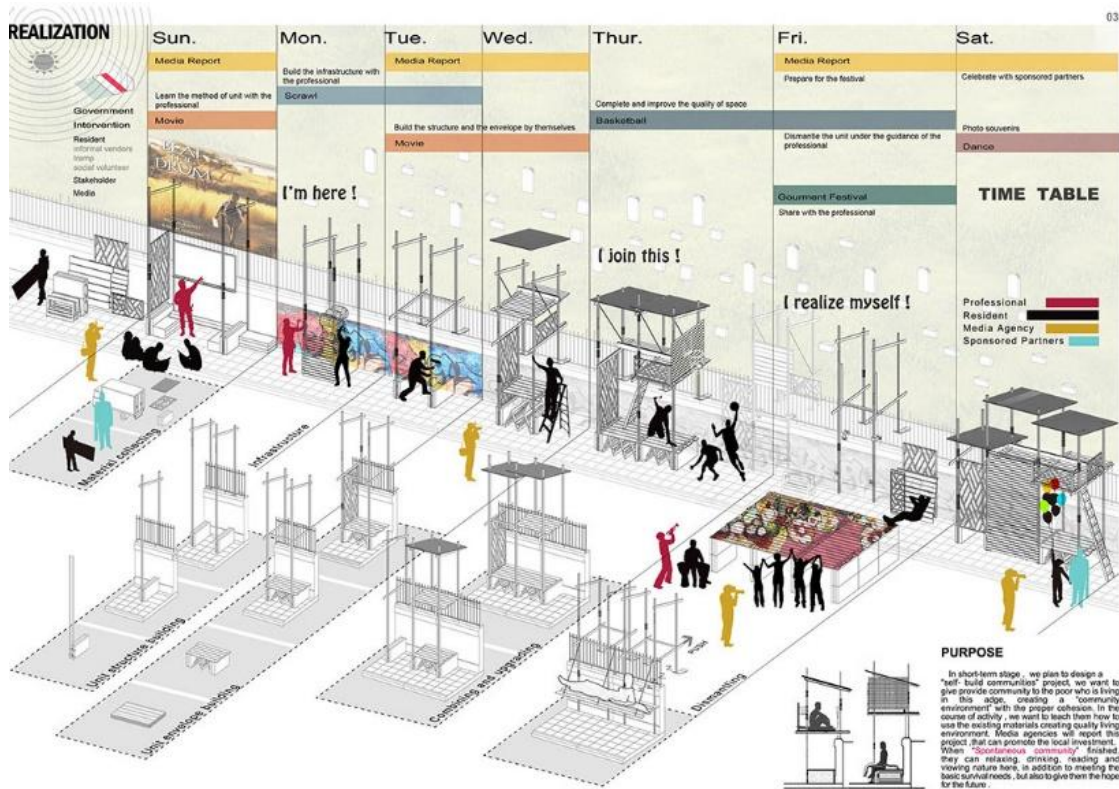


Figure3-6 Building Activity

In 2014 the 25th session of the International Association of architects in college competition scheme from Xi'an University of architecture and technology and Columbia University students to the concept of "community" to develop a strategy, through the appropriate guidance and free growth development scheme. Preliminary plan, through their conscious building activities to solve the urgent problem of perplexing the development of regional, in addressing basic needs while evoking the spirit of place and strengthen a sense of community, causing the active participation of the local people, after the formation of the embryonic form of the space through the design in guarantee space function relatively complete. Design process and the growth of free dominant, space order is established on the basis of the will of the people, design in the auxiliary and perfect effect, the construction of the space points into the surface, in the construction of foundation of the fragmentation of, continuous collection into a whole

body, space order reflects fragmented collage, and control design of participation and leading to ensure the fragmentation of spatial integrity.

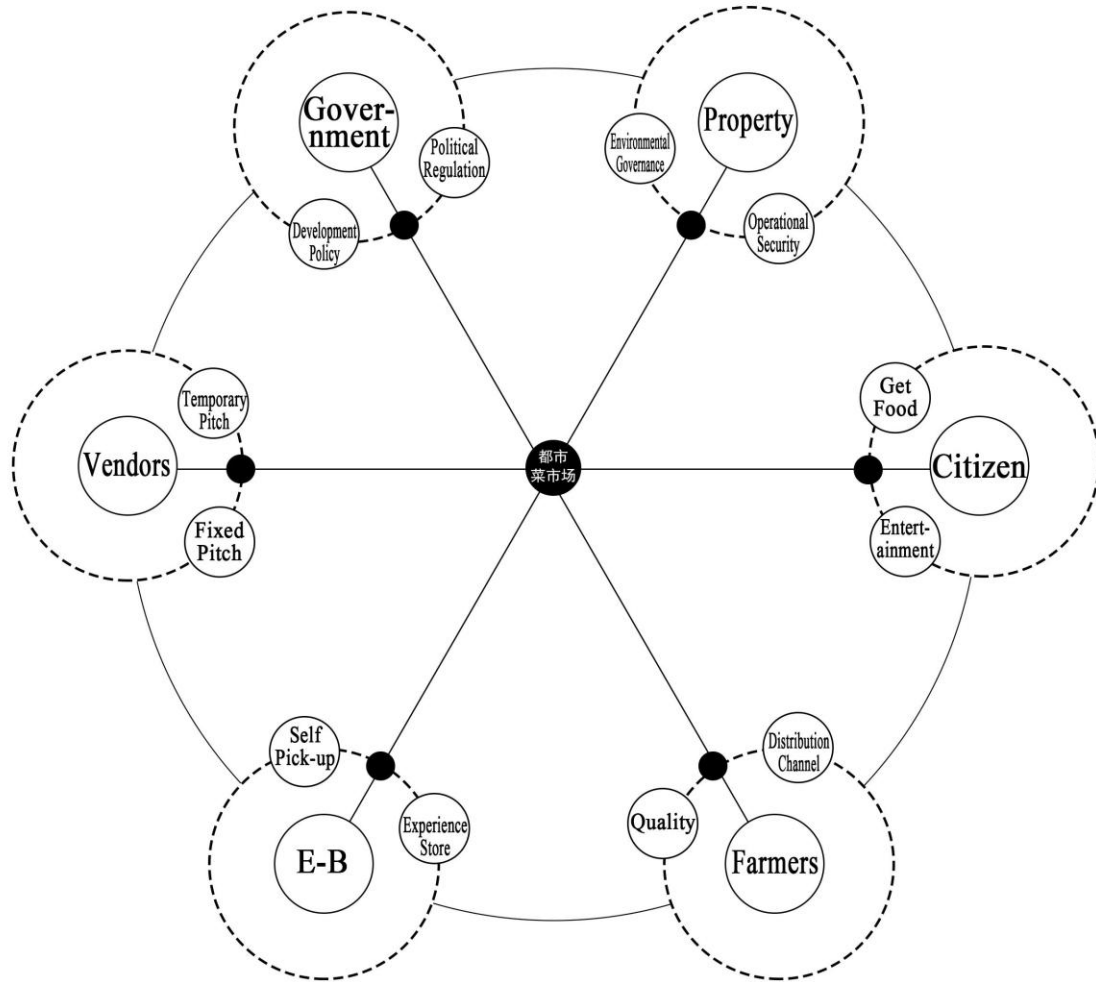


Figure3-7 Related Factors in Market Business

Different from the commercial area of food and beverage and specialty stores, and the living community is the best breeding ground for the free development of the urban food market, so on the basis of the spontaneous and free growth of space, regional lax environmental regulation and the cheap rent for wanton expansion of traders to create the conditions. After beginning to take shape, management and control began to intervene, the delineation of the scope of space, the construction of space order, and the introduction of business operators, even the process of free growth began to be outside interference. Except under the strict control of urban vegetable market space and free

growth management participation is also a formation of city square, and two results were the same. Existing to participate in and guide seems to enable the development of markets is more formal, some means and methods are a bit stiff and rough, invisible in the markets the original advantages of a one-time eradication, people's active participation and traders of the passive control and occupy the space theme.

Under the condition without intervention of external factors, Wangjing Street market is initially in the city to be built green, overgrown with weeds formed the harsh environment of the city lost in space. The demand of purchasing food in residential community caused many small business hawkers gathered here, when the Hongtai market and Laiguangying market move to another place, then it has produced many vendors nowhere to run, and it also increased the tendency to aggregate. Due to the lack of effective control and guidance in the process of spontaneous generation, so the space environment has further deteriorated on the basis of the original state, and it has brought many hidden dangers to the food safety of the public.



Figure3-8 Photos of Wangjing Street Market

Therefore, to solve Sports Park ceremony surrounding 10 community residents purchase food and consumer demand, coordinated by the office of the streets, in 2010 the establishment of Wangjing Street markets, it in the management and supervision of the government implementation is operated in the mode of enterprise investment. The

management of the involvement of the space to form the beginning of the freely state completely disappeared, complete control of the formation of a rigid pattern, the space is no chance to speak of. Design scheme, the author under the control of the spatial order introduced free growth factors, through modular combination structure, in the disassembly and assembly manufacturing space accidental changes, the possibility of itinerant traders and other forms of activities to provide more space for development.

### 3.3 Operation Mode——The Ultimate Goal of Space Order

Mostly, government and enterprises participate in traditional urban food markets construction and management. They introduce the fixed business after complete the construction of the overall space and then realize the business model of one-on-one free trading .Under the oppression of the internal market competition environment, variation in the price of individual traders are more flexible and mode of operation and stall characteristics become more independent. So, free operation is the advantage of urban vegetable market. Outside the context of fixed traders in the market, there is also a form of business that is liquidity traders who do not have fixed business location and decide whether they to set the table according to the time, weather, festivals and other factors. The itinerant types of traders can classified into two types. One is a simple stalls which offered by the market itself, and the stalls setting are main cement, brick and other strong durable materials and then traders just transfer something to sell from one place to here.



Figure3-9 Fixed Pitch (1)



Figure3-10 Fixed Pitch (2)

Another type of hawker is a completely free mobile vendor and it is also calling for tour operators. The vendors who are through on the street and in the back alley street are typical representative. Their stalls for sale are also their transport tools that they are



refitted by trolley, tricycles and other light vehicles. At times vendors use blankets, series woven mat to build stalls which they can move them according to need to keep. The requirement of space in fixed pitch is relatively fixed, so the construction ideas of spatial order are more clearly. While parasitic and operation mode of flow traders are cannot use fixed structure to deal with the sale mode of uncertainty in construct the spatial order because of the activities are relatively free. Therefore, the food market space which in Wangjing street, only to have enough open space.



Figure3-11 Street Vendor



Figure3-12 Flowing Pitch

### 3.3.1 Diversity of Business Format

The continuous development of the city led to the constantly updated of public life and consumption concept. So the contradiction between the emerging way of life, consumption concept, business model and the old city vegetable market space environment or equipment is increasingly intensified then the city food market space and urban development appear disjointed phenomenon. Modern urban residents were more likely to choose the Composite consumption and nepotism service. One-time consumption has become the new trend and single commodity management has seemed incompatible with modern people's demand. So, the urban living, consumption and conception change proposes new requirements for space. Such as Tsukiji market in Tokyo is popular for seafood. This market is divide into two trading market that inside and outside. The restaurants which faces ordinary tourists and consumers fossicks for clients with attractive space and product over-the-count market and plays publicity and induced people to participate role. While the core of the market is floor trading. Interestingly, the new Morning fish auction determines the price of the day. Therefore, a single exchange operation of the traditional urban vegetable markets must be added to the new stimulus elements in order to arouse public attention.

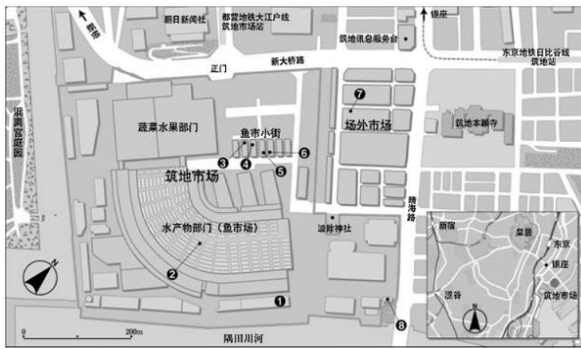


Figure3-13 Function of Tsukiji Market

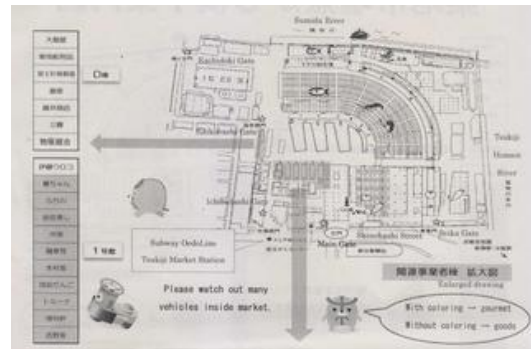


Figure3-14 Plan of Tsukiji Market

Shanghai Eslite Bookstore’s business model can be used as a typical. It is no longer the concept of simple bookstore in nature. Bookstores are only a represent of the consumer groups with the same temperament and form the pattern of joint ventures with corresponding brand settled in, and then it make the space eventually develop into a complex business model. Commercial, cultural, artistic marriage for the consumer to create a false impression of civilization, and Consumer goods improve their status with the concept of the culture .This will form a new consumption trend that they can provide the ideas of development and opportunities for business. Urban markets act as the life place of people get the most basic needs have a great potential for development. There are some direct or indirect relations between urban markets and catering, leisure, communication, living. While design need to find the relation of market and urban life and in a specific environment and enlarge it that it will form a new pattern of consumption and living space. In Hong Kong, Kowloon market transformation lies in the transformation of the management right. From government management to the bottom of the market, free enterprise will introduce in the e-commerce management system that it form meticulous division of goods and services. The most important point here is leisure plaza, catering entertainment, community hotels and other different functions are mixed cross stack the cross flow together to form now prosperity.

Although the market is huge, but it waste of space because of the utilization was insufficient and there are some disadvantages of the format confusion and space rigidity at the space management and operation mode in Wangjing street. In design practice, on the basis of the surrounding environment comprehensive food market analysis in Wangjing street, the author make the traditional downtown and park concept introduce design that increase a variety formats of food processing , cooking teaching, and leisure

catering in addition to the single format. In this way, the residents who are shopping at the same time could enjoy more services to response the higher vegetable market space's requirements of the community residents. Abundant business activities increase the activities that it is triggered by place and it will motivate greater vitality ultimately in the space. The space and the incident's parts of the article will be described in detail on this point.



Figure3-17 painting by Maio Hiko

Figure3-18 painting by Zhang Zeduan

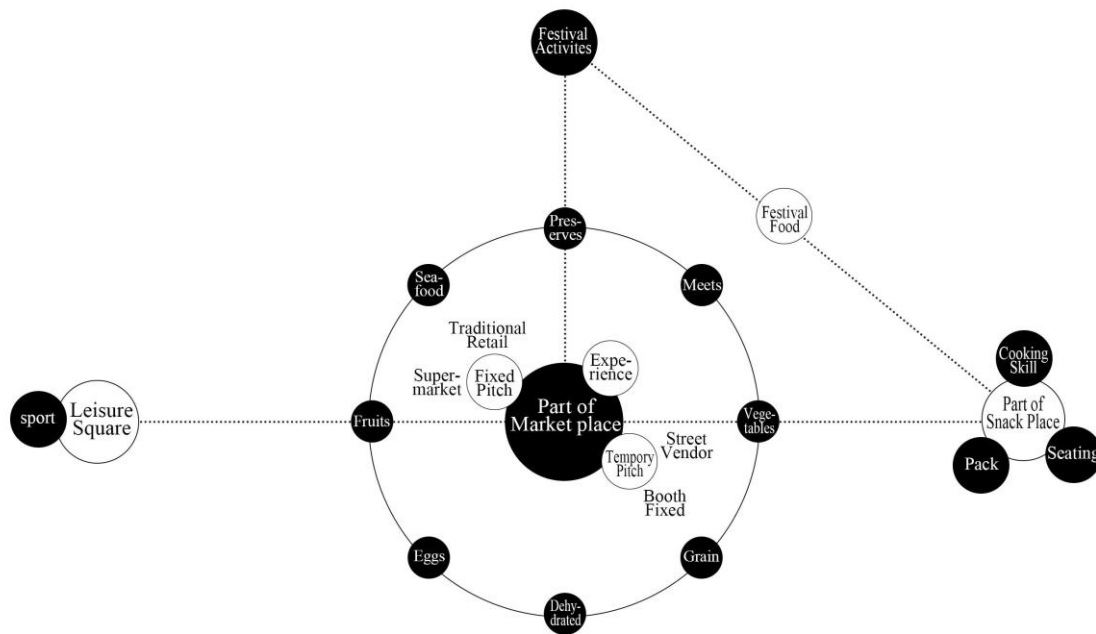


Figure3-19 The Movement In Market



Figure3-15 Courtyard of Wangjing Street Market



Figure3-16 Surrounding Format of Wangjing Street Market

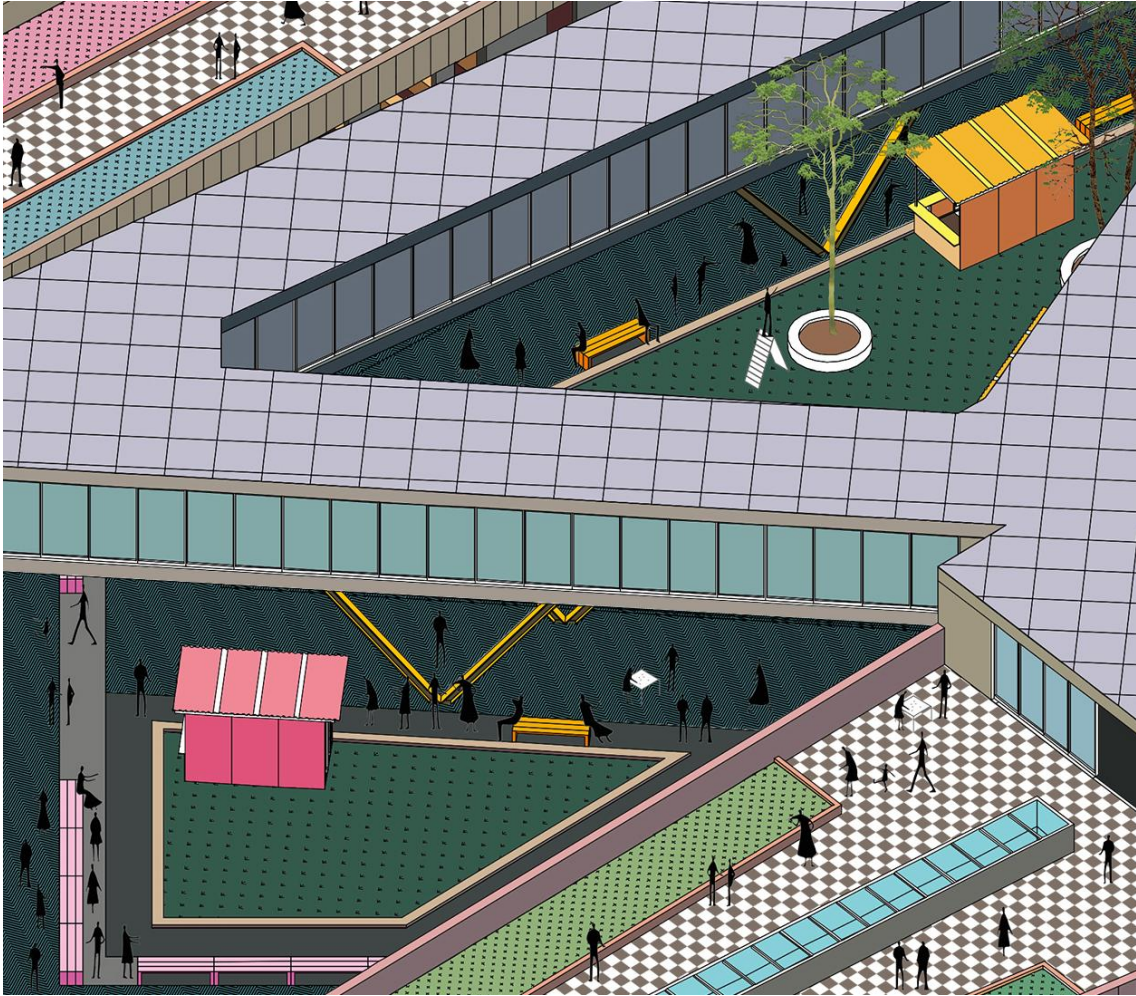


Figure3-20 Aerial View of Courtyard in Wangjing Street Markt

### 3.3.2 New Consumption Model

The emergence of E-commerce has prompted the patterns of entity consumption. For the online shopping and O2O play essential role in the youth, they are independent with traditional consumption and the convenient delivery saves much time. Traditional mode of retail be shocked, fortunately, the successful transition of Japanese department store indicates that traditional retail business has gradually fall behind this era, meanwhile, the E-commerce has influenced the vegetable market. However, it is believed that the traditional pattern may not disappear in China completely. The disadvantage of E-commerce should not be neglected, for example, lacking of consumer's experience, then consumer experience mode become a supplementary trend. The experience museums have come into being with the advanced experience of goods or services, this new tendency also brings competition stimulates consumption in a

sense as well as profits for businessman.



Figure3-21 Electronic Commerce      Figure3-22 Experience Store      Figure3-23 Exhibition

With the start of experience center of food, fruit and vegetable fair will take and inherit function of the traditional market in some extent. For the fair, all the people such as host and vender come here in certain time and season. In addition, grocer in community meets citizens partial needs, the vegetable vendors arise in the city, these small scale new industry have an impact on market.in a word, it is necessary to take new economy pattern into account and do response in the process of space construction of market, especially, online marketing channel do not demand large scale display, on the contrary, experience form focus on space quality.

Now, existing Wangjing Street market seems to avoid seeing some emerging things, and the traditional operation mode of and old space pattern can't meet the demand of the times. Therefore, in the process of the deliberate scheme, the author will purpose new consumption patterns into the space and to find a breakthrough in formed by the traditional business model in spatial order. But during the formed in space, the channels of food sale in network hasn't functioned construction to stimulate for spatial order. While the requirements of experience, exhibition sales and the service self-help combine with stalls for sale that it improve the space utilization rate, meanwhile it form the unique form of space.

### 3.4 Hidden Elastic in Space Order

#### 3.4.1 A Variety of Features in Same Space

First make a hypothesis, when we put the traditional market space in the stalls, goods, signs, people and other elements removed, leaving only space, we can also call it the market? Or we can only say that it was the food market, the space itself has not changed, the change is the content of space. Therefore, "living space", "dining space", "shopping space" is simply a simple positioning of the content of the space, or a fuzzy

definition of the main use function. We can't entirely accurate of to a space defined, a fixed classroom and has the function of office meetings,, even has the potential of collective activities organized. Therefore the spatial in the use of the process will present a variety of features. Temporary changes in the placement of tables and chairs, the combination of moving partition, covering the original material of the facade, will form a line of space experience, space flexibility on the existence of a temporary change in space.

In foreign countries, the urban markets mostly from the abandoned warehouse, station, church space evolution and, the accidental changes to markets with cultural and historical memory, and the original church, station of space form for shopping brought special feeling of space. In traditional Chinese architecture does not exist independent of the vegetable market space, market space of Chinese contemporary urban food draw most of Western shape, and has been in use so far, to cover the roof space form at the top of the open space become most people the impression that markets should be the prototype and space use of the flexibility and variety of faces is assumed fixed.



Figure3-24 Painting of Ming Dynasty In Nanjing

So in order to break through the traditional concept and the formation of urban vegetable market space limitations, in the design practice, leisure, experience and catering functions introduced in, to purchase food space do not do too much space limit, space and the space between the mutual penetration, vegetable market is city park, and a center of activity or catering establishments. In the design, infinite amplification of the space flexibility for the use of the function to add fun, while improving the utilization of space.



Figure3-25 The Combination of Landscape and Selling Space

### 3.4.2 The Order by Periodic Use

Spatial flexibility is also reflected in the use of functional diversity in the cycle. On the axis of time, human's social attribute that does not reside permanently or use a space, so the space of periodic law, work, study, life implied schedule is form the main cause of the formation of the cycle. In the process of space construction, the flexibility of the cycle is used to provide a short space, which is not only a clear space for the use of nodes, but also can bring more possibilities for space. A typical example that farmers' market and its cyclical nature is people in accordance with the Convention of the date, the goods in the agreed location trading, but it in time by the influence of season,



weather and other factors, in space, by the size and distance of the interference is more serious.

The normal supply and demand in the market of the urban markets makes the periodic pattern of this kind of market exist no longer, however, it can change the way of the periodic law by increasing the activity of the market. In the space of time, this dimension is introduced. From the perspective of the place itself, the space has a historical process, and the different factors have different effects on the space. Different period of time to bring the different use of the crowd to produce special needs and space order, the different stages of the use of the state of the population showing the difference between the space intention.

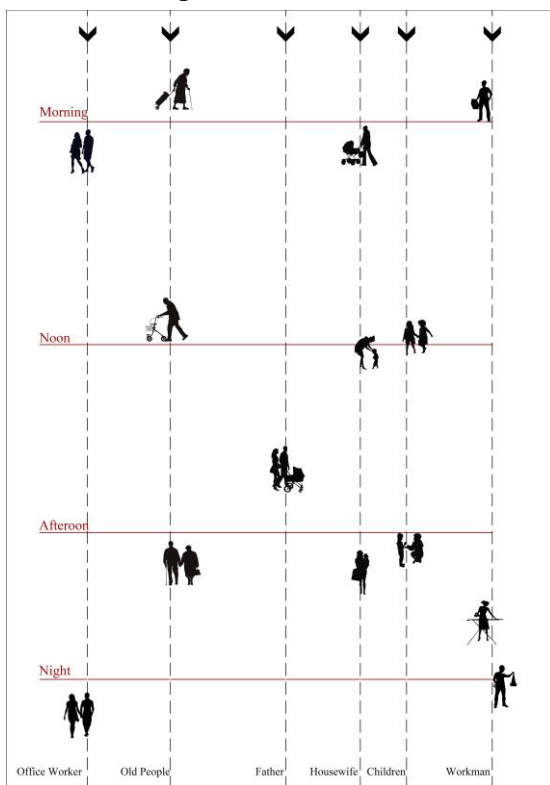


Figure3-26 Time Variation In Market



Figure3-27 Morning/Afternoon/Night

Cycle is reflected in the spatial elasticity can be a year, quarter, month, week to calculate, this long cycle mainly depends on the performance space using the elastic of festivals, events and rallies, role in the construction of the spatial order is relatively less, and the ratio of day of cycle produced using an elastic is more important. Today as a unit measure urban vegetable market space implied in time order, use the period of high frequency is undoubtedly from morning to evening, which to morning, noon and night markets for most.

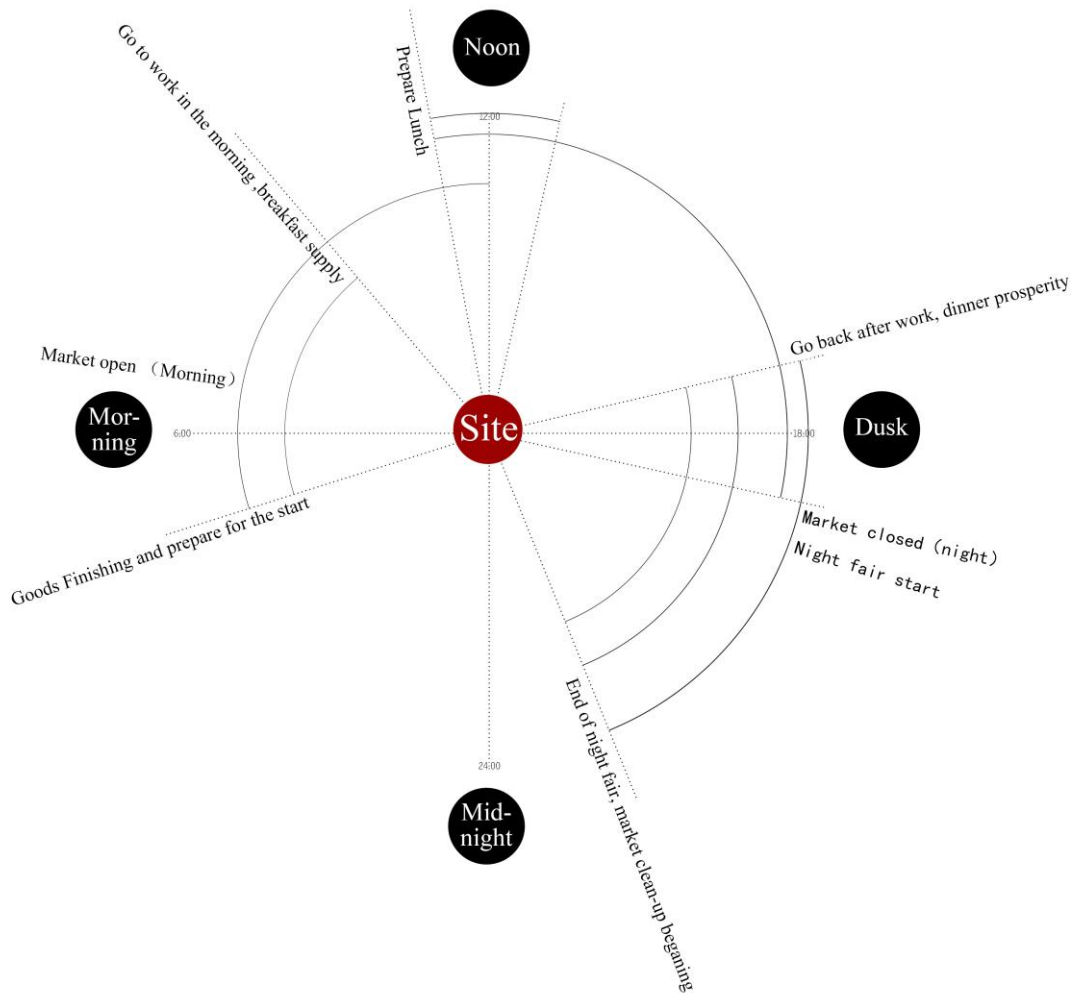


Figure3-28 The Use of Market In A Day

The special meaning of morning and evening in times, and it reflected that the schedule of residents having dinner at the time and the supply of goods in the market. As the beginning and the ending time of a new day of food market, the morning advantage in freshness and richness of the dishes, it cannot be compared with other times, most people catch the objective in the morning. As the ending of urban market, it can provide the provision of cheap ingredients for the people who was working in a day to prepare there dinner. Therefore, my wife this time traffic is relatively large. In

addition to fixed vendors selling activities, the liquidity traders often in high frequent of two time periods to sale, and selling space to maximize the use of this limit. Instead, in the morning or afternoon relatively complete time period, people's time was occupied with other things, only a few housewives and elderly customers to patronize the food market, vegetable market space limits the use of reach minimum space utilization rate is relatively low. Due to the different people in different region's work habits and life style, so at noon demand for food and dishes with great flexibility, space at the time showed the rate of extreme instability, which is one of the spatial features of urban vegetable market implied, in the construction process of space order processing the contradiction between use and time has become a key link.

Evening, markets closed, for the public it is almost dormant state, for the vegetable market itself is not the case, because the cargo handling and garbage clean-up work is carried out in this period, the space of the protagonist from the customer change for traders, cleaners, porters, and managers. So the stalls in this period became the final destination of the cargo handling, shopping path may temporarily change the shipping channel, operation can produce a day of garbage also at this time is quietly shipped out of the space and the hidden is daytime users do not know, and to the day a cut back to business as usual.

In addition, there is a special period of time, is commonly known as the night market, the time is generally maintained at six to eleven points after the evening before, however, the market is not the inevitable result of the market. By comparing the difference between cooked food and snacks, you can find the purpose of the night market is more leisure and entertainment, is the market outside of the normal operation of the market for the public welfare". Markets as the beginning of the resident's dinner ended a day of business, some even before dinner off in advance, in the night market active period of vegetable market is in the dressing, and vegetable market and night market in the dimension of time was intersection in time for dinner. In the urban special rhythm of life with indirect way undoubtedly for the public to provide more humanized service to extend the vegetable market in the use of time, because of the needs of the work, entertainment and leisure, night market in urban prevalence rich city life, on the other hand for citizens and tourists enjoy snacks with local characteristics provides a convenient. The prosperity and development of Shihlin Night Market in Taiwan proved that it is necessary to enrich people's nightlife.



Figure3-29 Using Elastic Analysis of Wangjing Street Market

In design practice of Wangjing Street markets, due to special order of cities and space, space is effect of Sports Square and transport hub station, in the morning and evening appeared to work peak flow, traffic station and square to bring people and markets of morning and night markets produce a variety of interactive contact, the contact in addition to the purchase of food, more affected by food and snacks, and

cooked food can only meet the basic needs of daily life, the snack flourishing in order to make the night market. Therefore, in the program to I increase the night fair and snacks, and to add the fun of living environment.

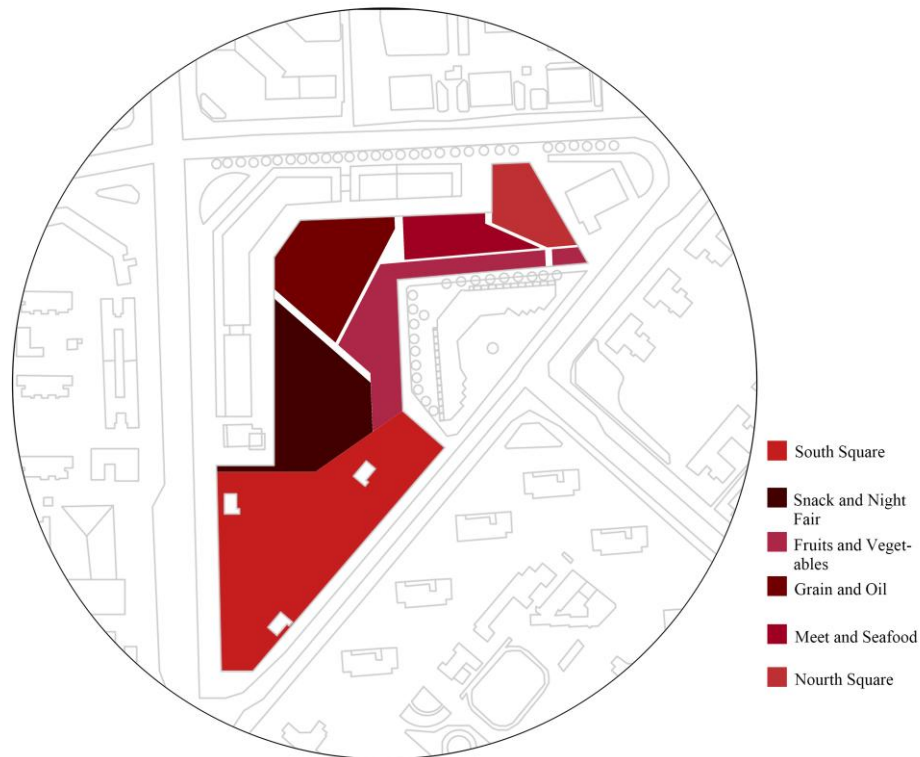


Figure3-30 Time frequency

### 3.4.3 Discussion on the Possibility In The Future

Space for development with characteristics of unforeseen, adding uncertain factors must break the original development, this kind of chance and change the order cannot be in accordance with the original is expected to continue to play a role, the possibility of further development of space become the focus of thinking of development in response to. New York Manhattan's Union Square farmers market, from a dilapidated rampant crime of regional development, now it is not only fresh product purchase places and famous cooking show, and surrounding the school organizes the child cognitive vegetables and healthy food to provide support. The transformation of this kind of space depends on the elasticity of space development, and the flexibility of space development can be realized through the material, the space form and the use method.

When the construction of the space order strictly to the minutiae of the extent and in a certain extent will become an obstacle to the development of space elastic, and affect the spatial form of new generation and reuse, so in the construction of traditional urban vegetable market space order for the development and change of leeway is particularly important. City in the continuous development and environment in the constantly changing, space construction is not a once and for all the results, but on the basis of the existing conditions of the form an open order, and through continuous change brings a new form of space and environmental experience, to meet the development needs.

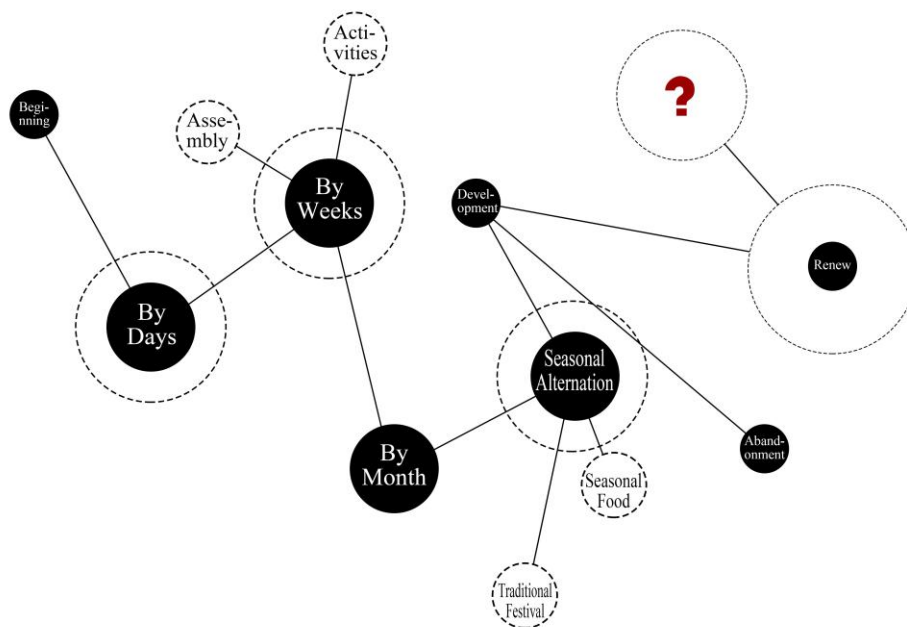


Figure3-31 Periodic Order and Future Development

## Chapter 4 Space Consist of Movement and Events

### 4.1 Mental Activity Implied In Spatial Order

#### 4.1.1 Dynamic Intention in Spatial Order

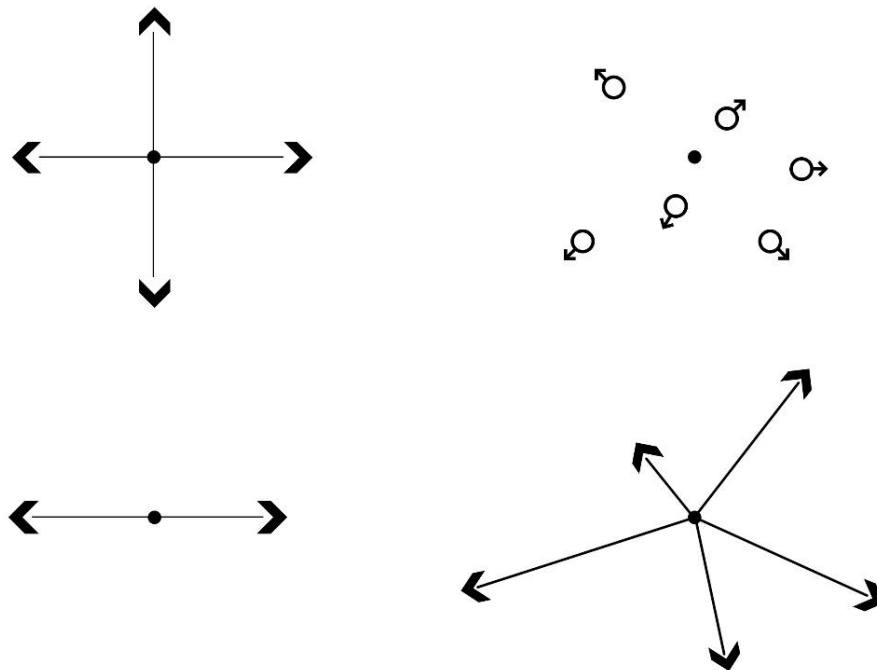


Figure 4-1 Dynamic intention of point

According to the way of Binary Opposition, the space users can be divided into two kinds, one is familiar with the environment, and other is completely strange to the space. People who familiar the environment can easily describe the overall environment, and the way of their understanding space are based on the existing experience in the understanding of space order. This kind of known path and booth location make them easily to enter the food market, and went straight to the theme, breezily to find the items they need. Users who know nothing about space will be helpless and loneliness after they initial entry the space, which prompted them as soon as possible to find clues to the spatial cognition. In this case, with no guidance of space, it is very important that space

guidance for strangers to flexibly use space. Whether if they are familiar with the environment or complete strangers to the space, the way of users to cognize and use space is the process of them understanding the space order, Space order make them obtain a variety of information of space, like spatial morphology, path, way of movement, specific location and so on. The extent of the information about space that they get determined the degrees of freedom they using space, the diversity of information provide more possibilities for their choice of dynamic intention.



Figure 4-2 Dynamic intention induced by spatial selection of Wangjing Street Market



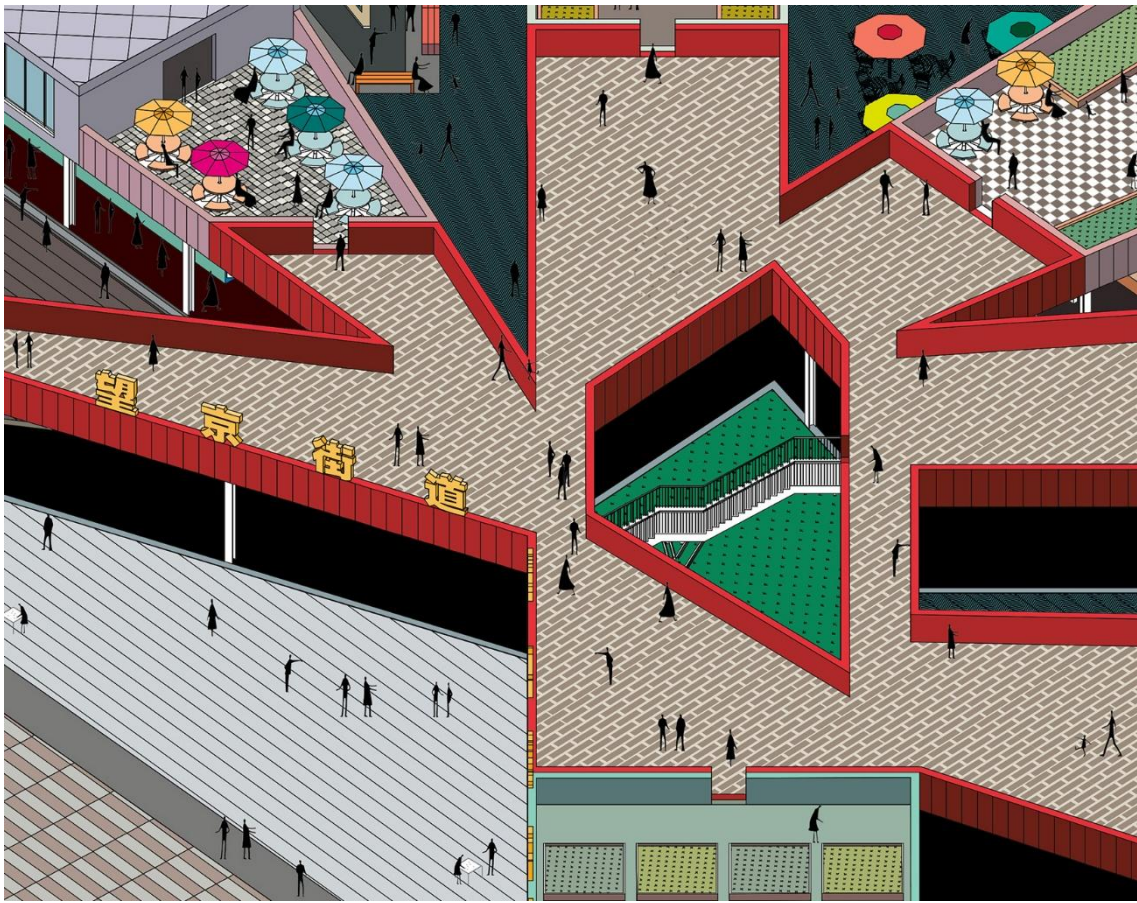


Figure 4-3 Axonometric of first spatial selection of Wangjing Street Market



Figure 4-4 Effect drawing of first spatial selection one of Wangjing Street Market

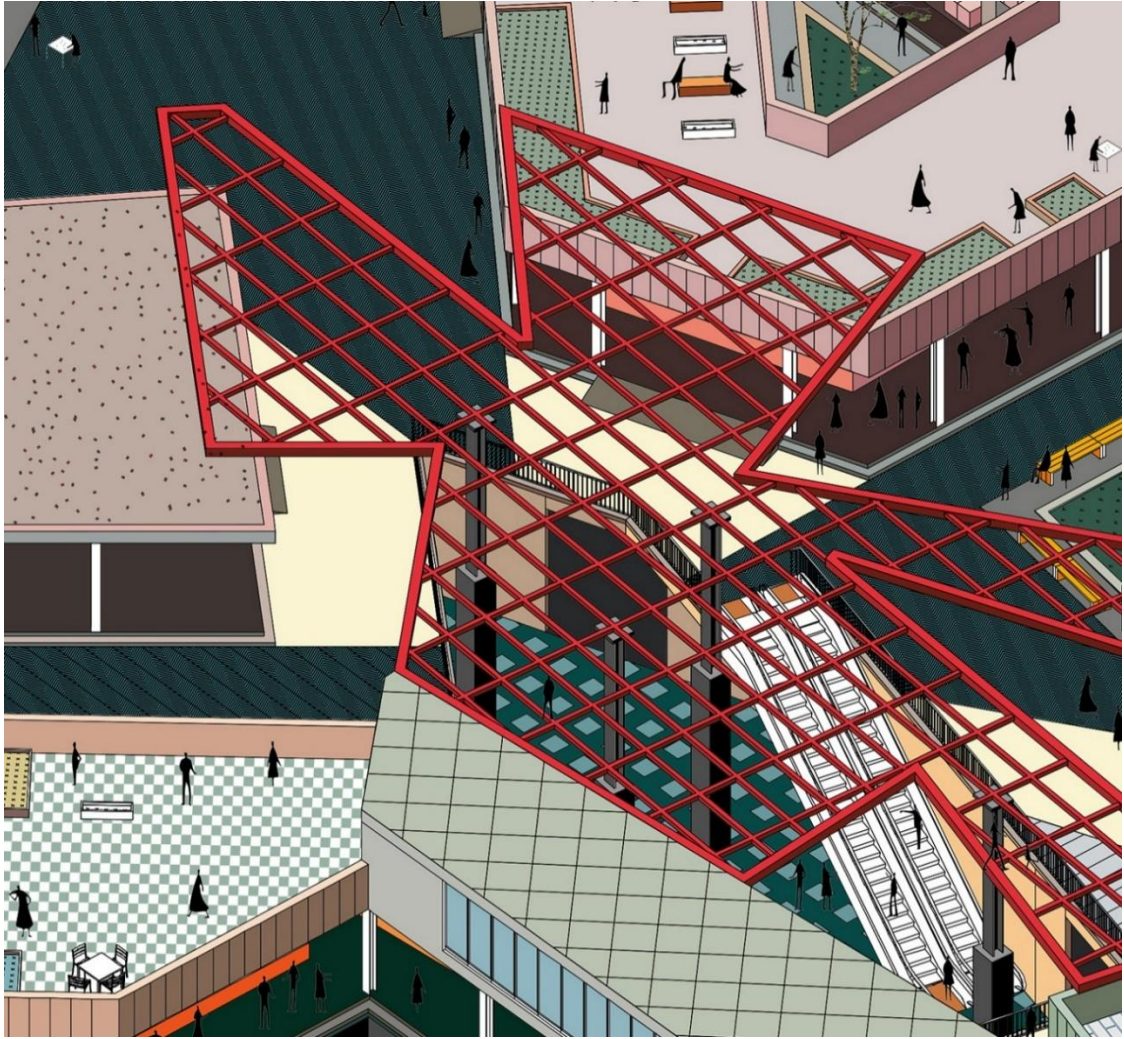


Figure 4-5 Axonometric of second spatial selection of Wangjing Street Market



Figure 4-6 Effect drawing of second spatial selection of Wangjing Street Market

### 4.1.2 Stimulating Effect on Consumer Psychology

The rigid demand of consumer is the main causes of buying activities been happened in food market, it is a special trading in order to solve the problems existing in the real life, therefore it was not restricted by economic, cultural, geographical factors, but personal experience and taste of consumers would able to control the final choice for the food. In addition, in the context of the new city life, there is a part of buying desire that produced by the driven people's eye. Actually, the impact of external factors will change people's consumption concept, and stimulate the occurrence of unexpected consumption. Dishes of color, feeling, shapes, as well as their space of goods will lead the consumers having different feeling, association, and artistic conception in different degrees, and let them determines the consumer's willingness to spend money on the food.



Figure 4-7 Salamanca Market (1)



Figure 4-8 Salamanca Market (2)

Traditional urban markets only in the rigid demand meet the public's desire, and space simple transaction will not enable buyers have the desire to stay, not opposed body outside the potential consumer appeal. Because the formation of a single act of space cannot provide a variety of features and services, for merchandise display mode and spatial atmosphere ignoring degree affect the consumer's shopping experience quality, space order virtually lost effect on activation of consumer psychology. However, demand for the purchase of a different way to produce the space design is concerned with the problems were incorporated into the will makes space to make changes in form, color and artistic conception, Lenovo and other human emotions, by accident or high-quality space feelings lead to people's desire for consumption. Museum experience is the best case, regardless of its own mode of operation, both goods display and

lighting to create atmosphere, have become stimulated the consumer psychology and triggered an important external factor of consumer behavior. The consumption behavior caused by this way has become a new trend of urban life and consumption, which will eventually lead to the formation of the new normal urban consumption patterns.

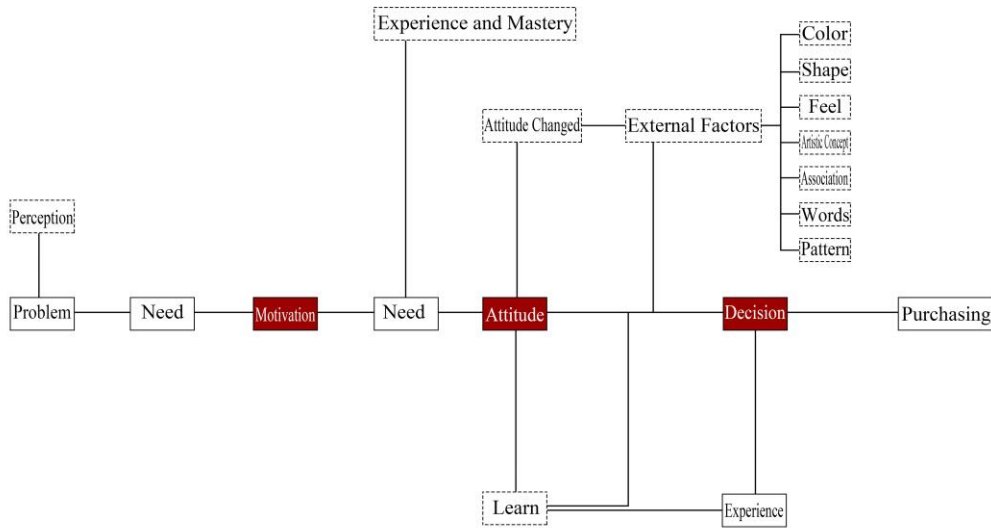


Figure 4-9 Psychology analysis of Consumer

In addition to experience occasional consumption, modern society there is an interesting phenomenon, namely the high development of science and technology in life is convenient at the same time seems to become more and more lonely, e-commerce, self-service shopping while saving the shopper's time, for the purchase of the activities to provide convenient, but people face to face contacts, but less and less. In commercial activities, only the participation of people to produce business, holiday sales promotion, business exhibition and sales are attract a crowd in and stimulate consumption, and commercial space gradually changed as a platform for the exchanges between the city, however, commercial space if only isolated commercial thinking of space effect, the result will only form a transaction of the machine space. The participation of people is the ultimate goal of space construction, John - O - PS in the landscape design school, "a book for" social city "concept depicts a visions of the city, city as the most advanced

development platform for society, it contains the complex social relations, new space order and spatial form will promote the innovation of people's communication patterns and psychological feelings.

Urban vegetable market space contains rich psychological activity, the aim of constructing the spatial order is through a simplified means of reviewing this complexity, using spatial qualities to stimulate the consumer's psychological activity, and analysis of the psychological activities based on the backward reasoning space order in the study, spatial order more in line with the psychological demands of modern people.

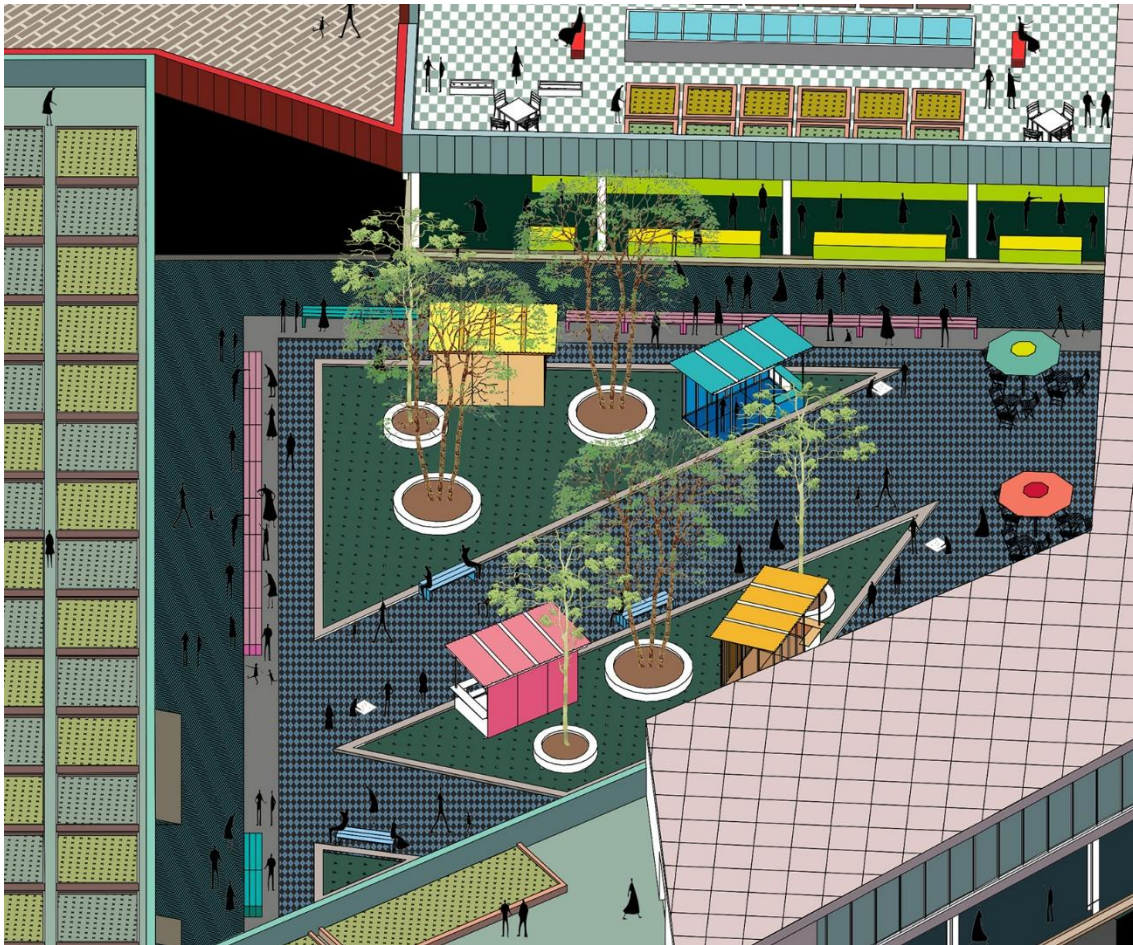


Figure 4-10 Axonometric of courtyard of Wangjing Street Market

Since the Wangjing street markets integrated special geographical location, sports park and subway hub as it brings a wide range of flow-based, permanent residents of the surrounding residential communities become the main consumer, the design of the space programs need to be resolved is how markets by stimulating mental activity to identify potential customers and therefore in the construction of spatial order process,

the parks, plazas and transportation hub of the concepts introduced therein. Eliminated from the concept of psychological feelings of pure consumption, and the introduction of the park from the perspective of spatial form, square more natural, organic forms of space, with the traditional markets of the city closed contrast, creating open outdoor shopping experience, rich psychological feelings improve spatial quality.

## 4.2 Space Movement That Can Create Space Order

### 4.2.1 Form of Movement

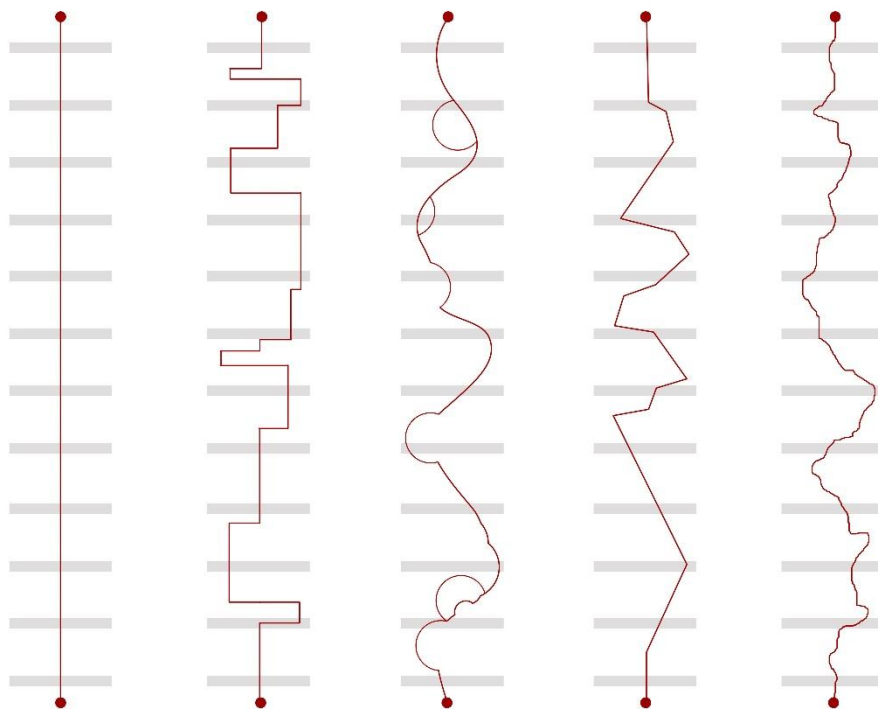


Figure 4-11 Path analysis of Space movement

The dynamic or static of space is judging and distinguishing by the movement essence of people. Just for human space are stationary, but for space the human are constantly changing, so space movement mainly refers to the position changing of people or things. The emergence of movement is marked by the change of the displacement, and the process of displacement forms the movement path, in this process there is another important factor been changed, which is times. Time is another way to describe the movement in the space, because numerous time points and the

corresponding points has formed the spatiotemporal cues, and it could be a space motion path when they was connected with each other. Because the happening of time has internal order in presence, so the path configuration and space node that published by time also has the unique path, so this way constitute the order of space in the movement. Because of the limitation of time and space, the space movement of people in space always exists in the form of point and line, and they will constantly interwoven by the development of time, finally forming a social network. Space could not clearly defined the form of the network, but through the space channel and path, even the set of relative position of the various elements, and then provide a broad development platform for the movement, however this platform is built based in the relationship between human motion pattern and space order.

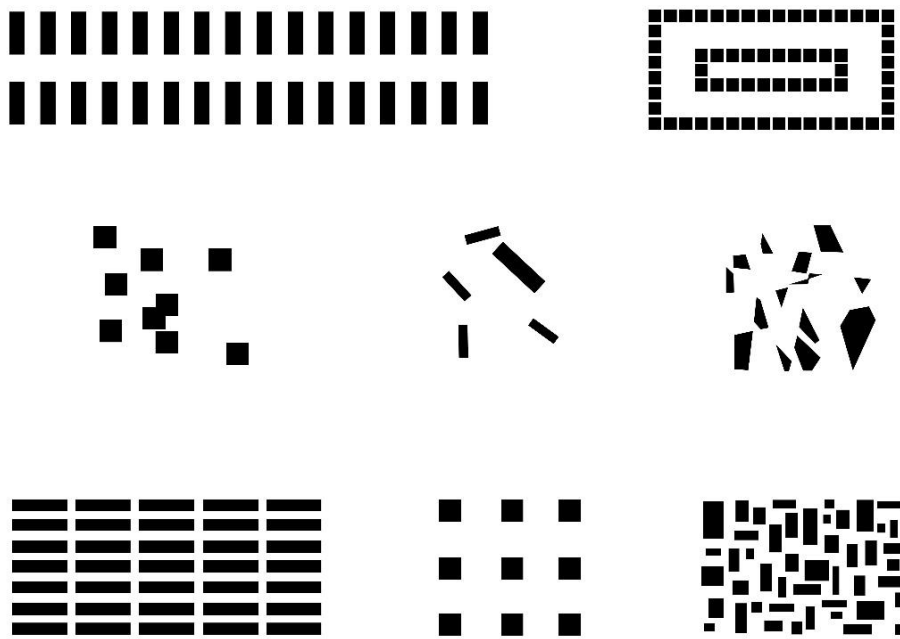


Figure 4-12 The way of movement shaped the Pitch distribution

In traditional markets in spatial order, there are two main types of motion path, a is scattered booth layout form of open path, a is linear array form a single path, almost all markets the motion path is in two ways combined supplements are based on the development. Existing large supermarket goods placed and main line arranged mostly followed the open path, booth in accordance with the lattice approach spread in space,

short of a tiling path in space to form grid path, from point to point and the distance between them is close, thus forming a shopper route choice is more flexible. Linear path from the form can be divided into straight line, curve, line, form, analysis from the angle of the movement of the linear path includes two forms, one is the circular motion, namely import and export in the same position, a space is formed a closed loop, its characteristics lies in the integrity of the space motion; another is fore and aft in the different locations of the open loop manner, it has a distinct characteristic is the space motion of mandatory, and for into the separation of indirect stretched the walking distance. In the linear form of space movement, the customer can only follow the established space path to find the goods, if the road after a long will bring repeated reentry. Construction order of space, open path formed open space layout, linear motion produces the spatial pattern of the channel, the combination of the two produces path and order seems to be more common.

In actual space construction, the situation may be more complex. Because in addition to the movement of the market and the formation of order outside the market, but also with the external environment to produce a certain existence. Site entry and exit restrictions, as well as the city road, the surrounding format, so that the movement of space is more complex, in order to ensure the convenience of the road and access, so the choice of the space path is more comprehensive. On the basis of the comprehensive existing cases, the author summarizes the existence of three different markets and the city path. The first is the market is located in the street side of the street, this relationship is relatively simple, because the internal and external movement of the connection exists in the street side, so in the construction of spatial order need to refer to the relative factors. The second market in the cross zone of urban road and intersection path brings complex spatial motion, therefore, internal and external motion how flexible to deal with the complexity of the flow of people need according to the coordination of the internal order and external order to achieve a win-win situation. Finally a more special and vegetable market is at the end of the road under, this kind of situation is very rare, it is three kinds of relations in the most simple one, because in this case, both inside and outside the movement of intersection only has the location of a point. Although the movement order determination greatly limits the people walking routes, but human motion intention will guide users to choose the best route, which is life experience brings us a skill and it is public in a fast way to find the target to provide



convenient.

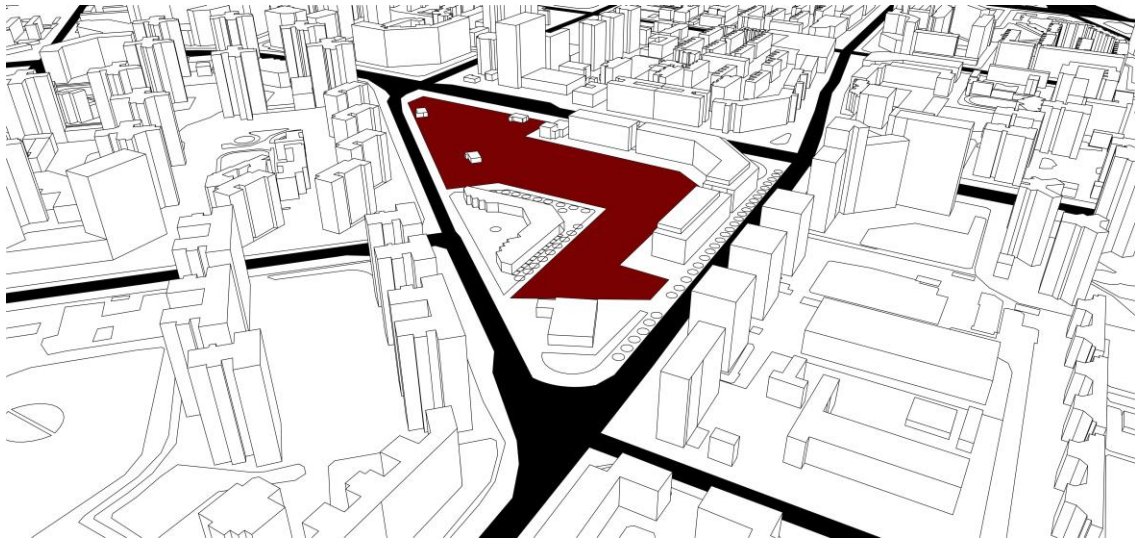


Figure 4-13 Site condition of Wangjing street market

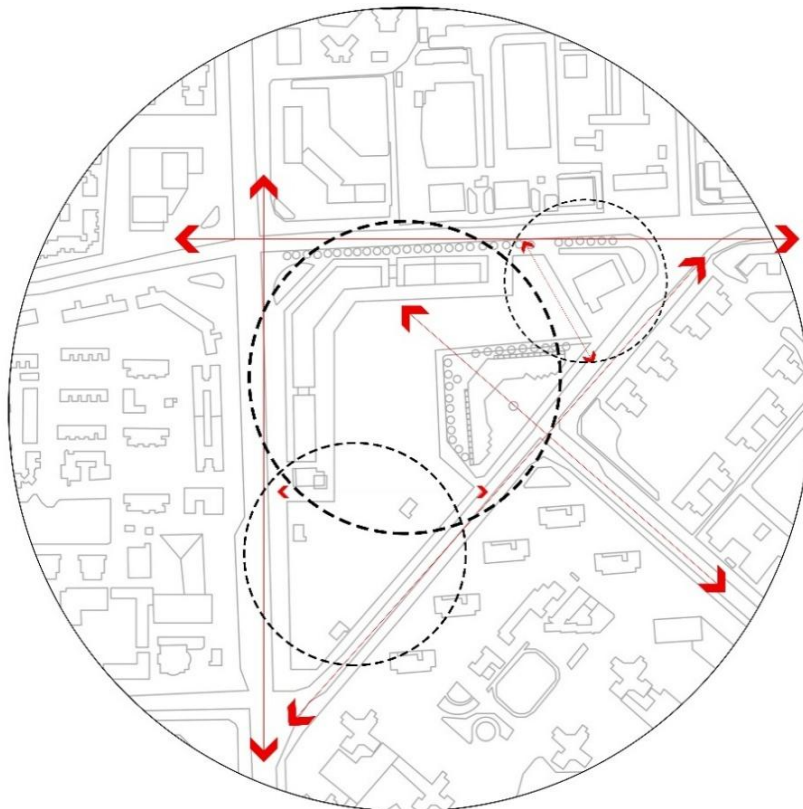


Figure 4-14 Axis analysis of Wangjing street market

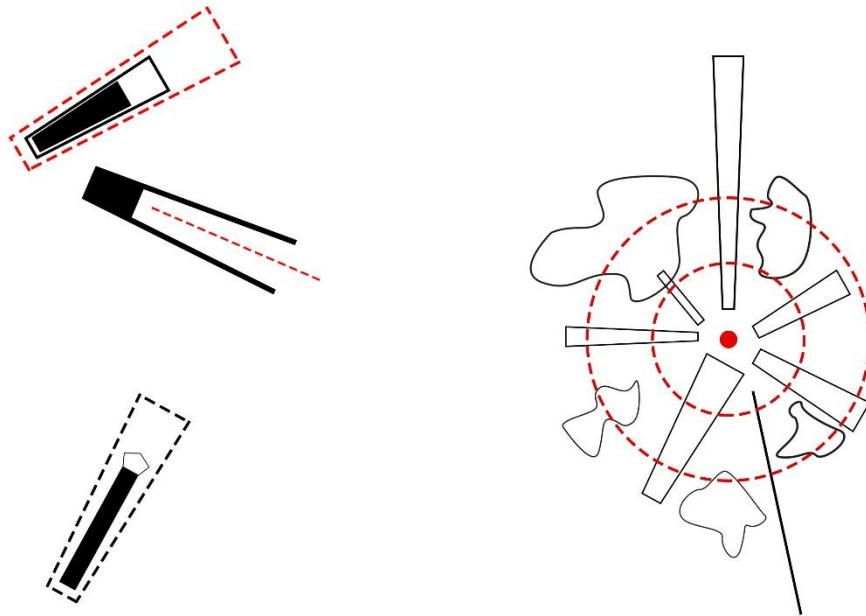


Figure 4-15 path choice of Wangjing street market

### 4.2.2 Three Main Ways of Market

Due to the different identity of space user, so the space movement will be different according to different people. The movement can be divided into three different kinds of movement in urban market space, named customer's path, the goods transportation path and the management path. Because the shopping movement is relatively flexible, so it has the greatest impact on the space order, in the construction of order to be put into more attention. From the perspective of shoppers on path spaces of desire, different ages, different identity, different classes will produce different shopping needs, commuters emphasis on convenience, elderly people pay attention to hang out, young people pursuit of taste and fashion, according to diverse demand, shopping path not can fully take care of the needs of all people, only in the coordination find compromise solution.

As the foundation of the space construction, the transportation and management of goods is relatively stable, so the spatial order is relatively fixed. Transportation route and the shopping route is not easy to have too much intersection, because on the one hand, it will affect the use function of the shopping route, resulting in a chaotic situation,

on the other hand, from the visual impact of the shopper's space experience. Dishes into the dish market space will usually set up a dedicated lines, the use of bulk transport and mechanical equipment of channel dimensions have special requirements, transport process inevitably bump phenomenon, so the cargo handling including transportation of garbage, not suitable in the shopping space. To clean urban vegetable market traders and the public consciously maintain and other aspects need cleaning workers cleared up, their flexibility and not shopping path produced much interference, so it can be mixed with other path. Traders and managers are regarded as static objects in the space movement and their path only plays a role in special position and special time, so it can also be mixed with shopping and transportation path.

### 4.2.3 Motion Node

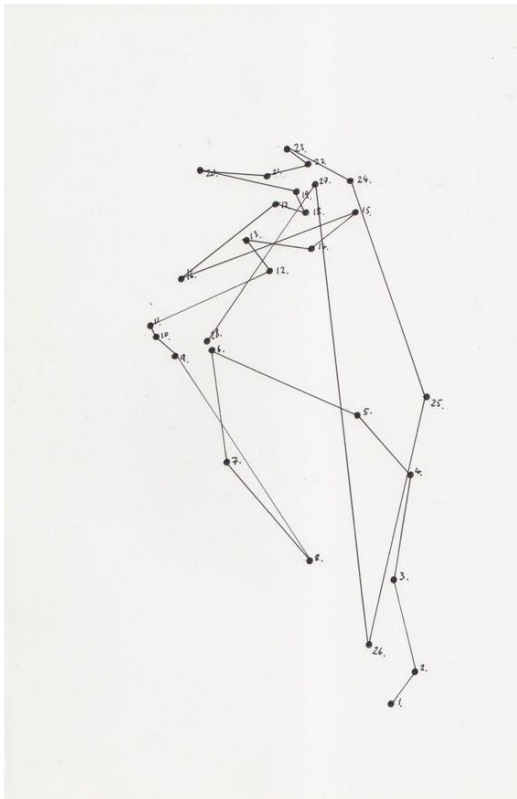


Figure 4-16 The Relation between motion node and path

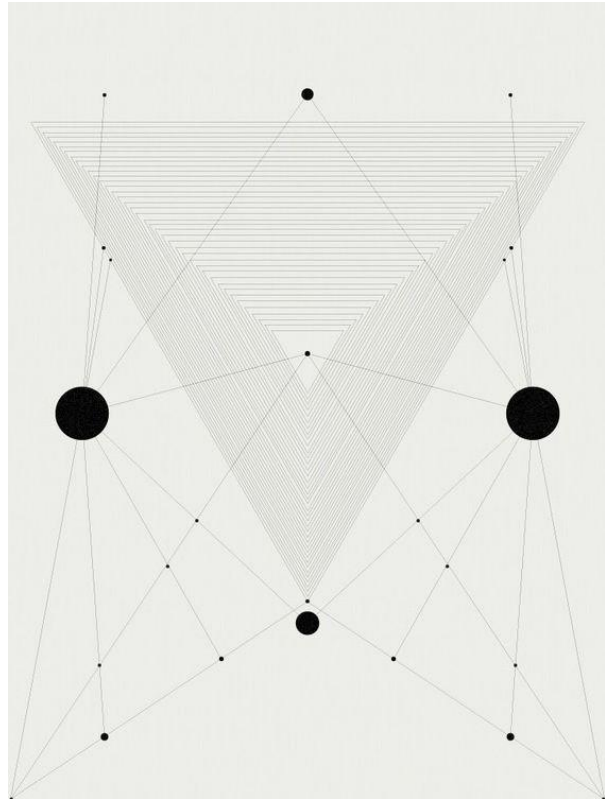


Figure 4-17 analysis of Motion

The walking line and path produced by space motion is not an unlimited extension line, the motion path that was formed by people's arbitrary action must be complicated and changeable. So in the process it exists many movements turning point, motion path

is decomposed into numerous segments. The intersection between the line and the line in space become the turning point of the path, brought about by the movement of a single linear space order and more monotonous, only through modeling of the facade to be rich in content space, and node space layout enable space order gradually complicated, but too much space nodes may lead to extreme confusion. In addition to the simple turning function, there is a node, that is, the functional space in the motion path, it not only exists in the turning point or intersection point of the path, but also in the course of the path. The emergence of this space node marks the use of functional changes, from the abstract point of view, the emergence of this node implies that the space event is about to occur. The reasonable application of the motion node not only enriches the spatial order, but also provides a variety of spatial experience for the space users to provide a variety of changes in the course of the road.

People are very disgusted with the monotonous walk and tend to the path of richness. However, traditional markets by management factors influence, born hard cohesive relations in the node layout, form a right angle straightforward docking the rigid spatial pattern of add the inflexible space feelings. Unified space form the natural transition relations to produce and direct conflict against formation of the spatial form of opposition, the two are in different order of space to provide different spatial experience, but no matter what kind of environment, turning point in the relationship between the established requirements space order node is inserted in the appropriate position.

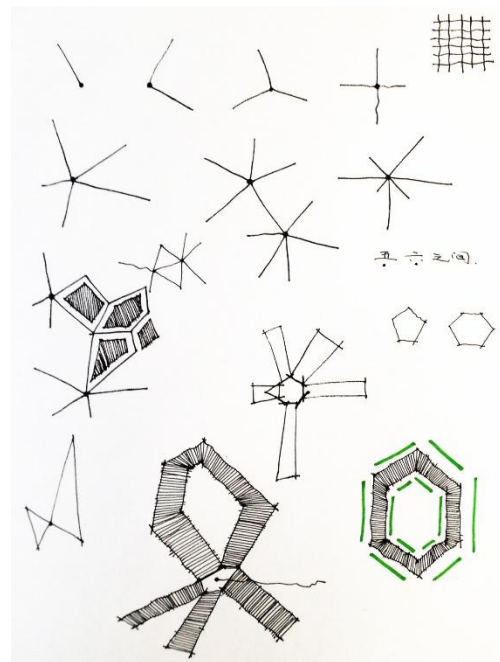
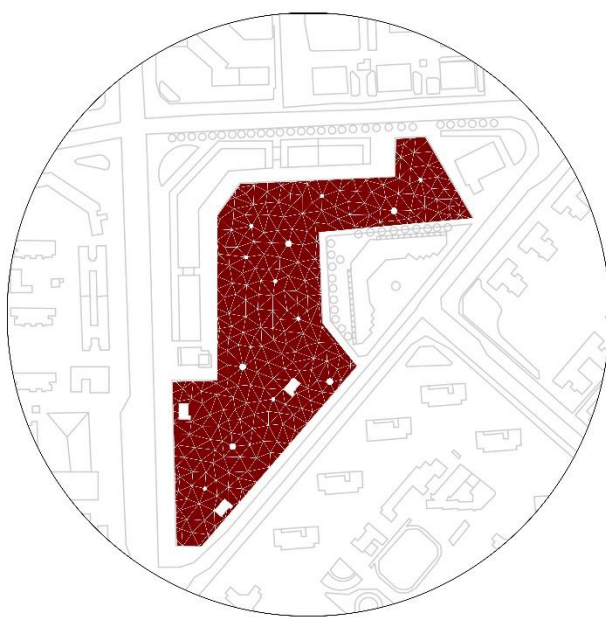


Figure 4-19 Conceptual path  
Wangjing street Market

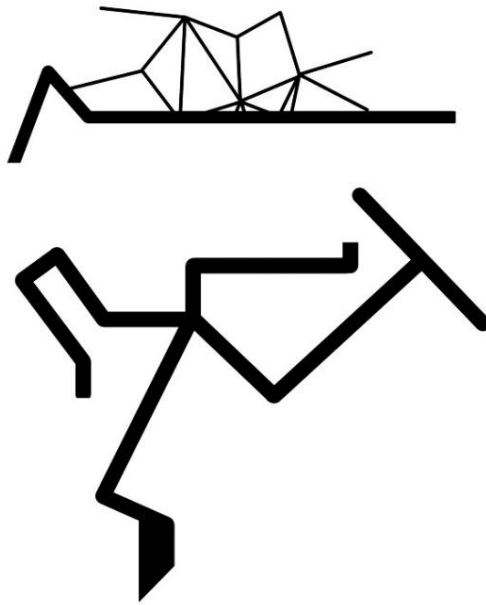


Figure 4-20 path analysis of

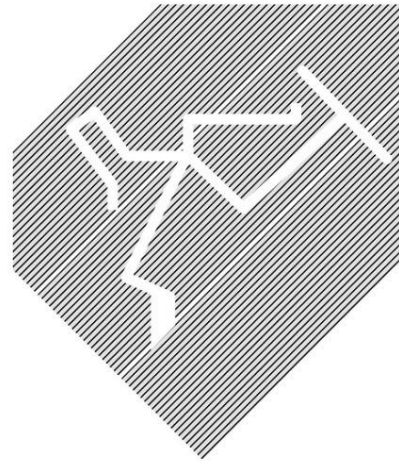


Figure 4-18 Space intersection and path of Wangjing street Market

In Wangjing street food market in the process of design, path arrangement reflects obvious duality, simple path guarantee shopping convenience, for the customer to save travel time, complex and tortuous path create rich space motion and full of walking experience. At the same time for customers to choose the node space into two paths of mid and divergent thinking rich path at the same time play customers to choose the power. This approach leads to another advantage, that is, to solve the partitions caused to walk the line is too long, want to in a short period of time also buy meat, vegetables, fruits, spices, customer convenience. They don't have to be in after the arrival of each partition to complete the purchase of the purpose, only in the selection area covering the range can be completed within the shopping needs of a variety of categories. The spatial movement of the spatial order of Wangjing Street integrated vegetable market is in the premise of not only ensuring the path of the partition, but also can achieve the convenient shopping, and provide a rich space experience.

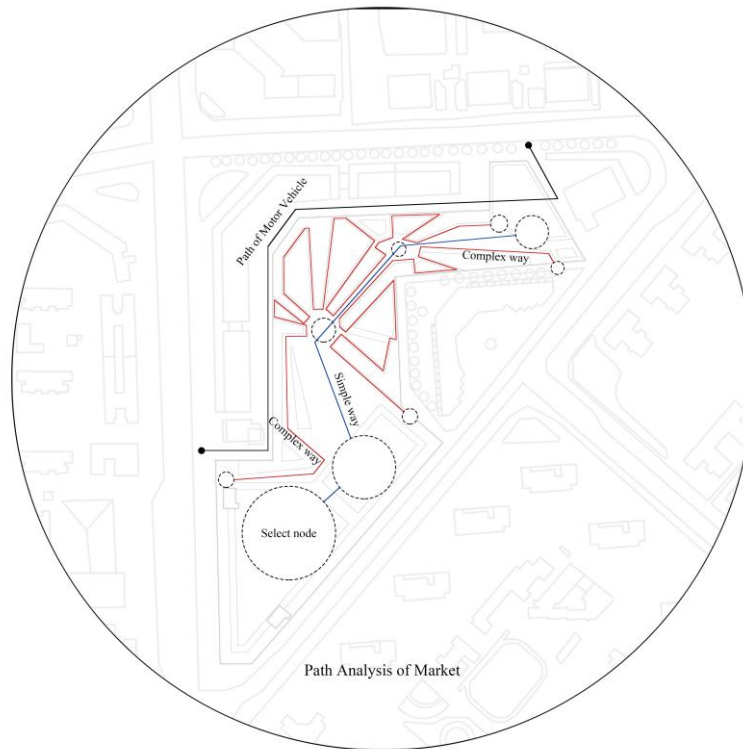


Figure 4-21 path analysis of Wangjing street Market-1

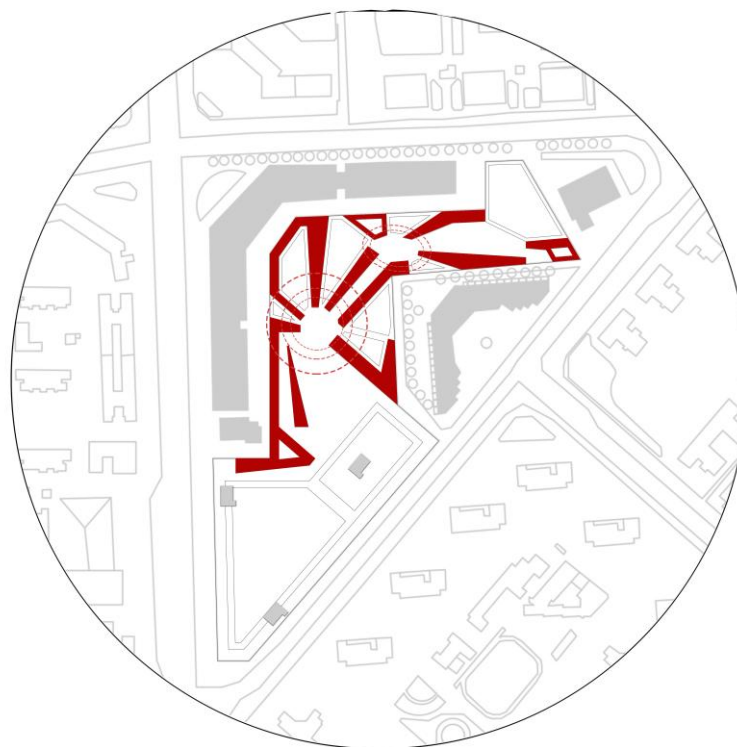


Figure 4-22 path analysis of Wangjing street Market-2

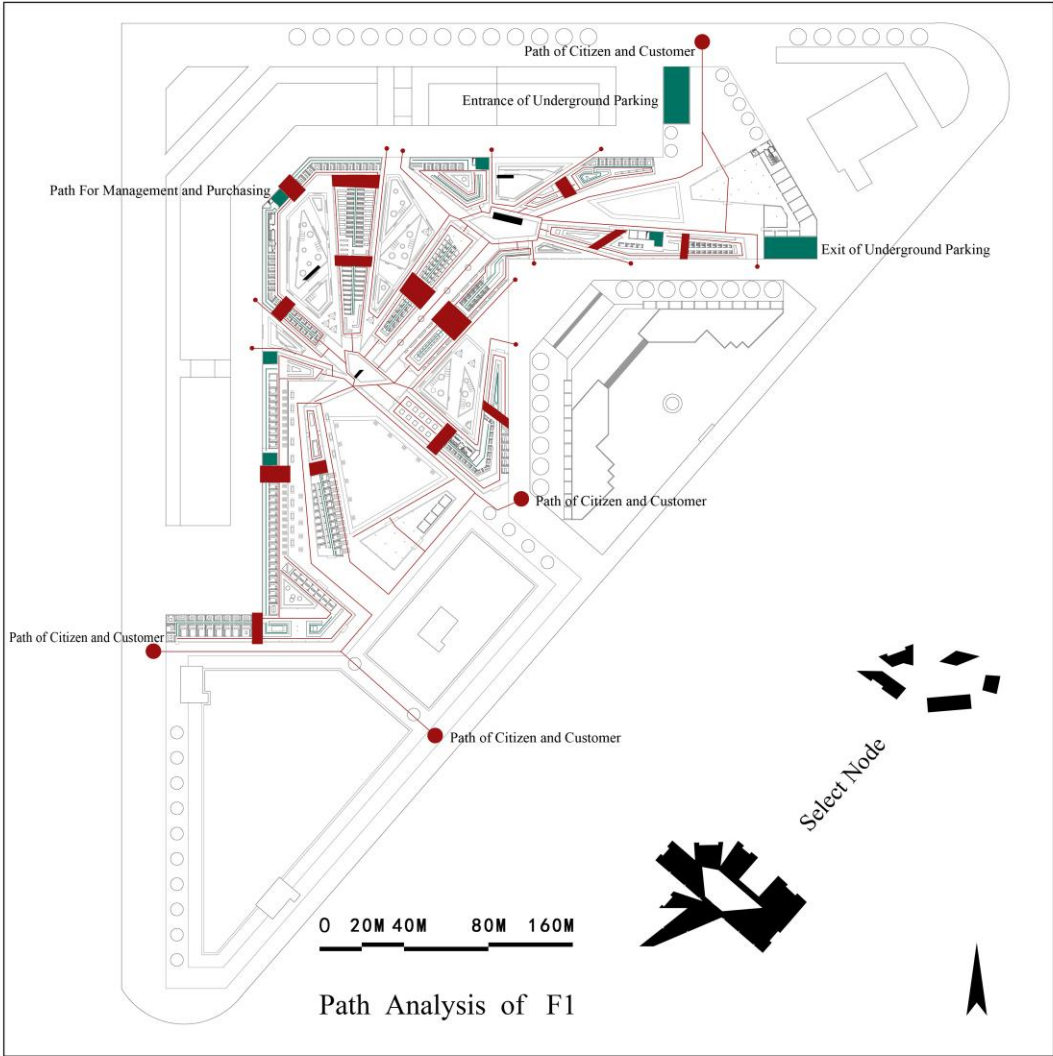


Figure 4-23 path analysis first floor

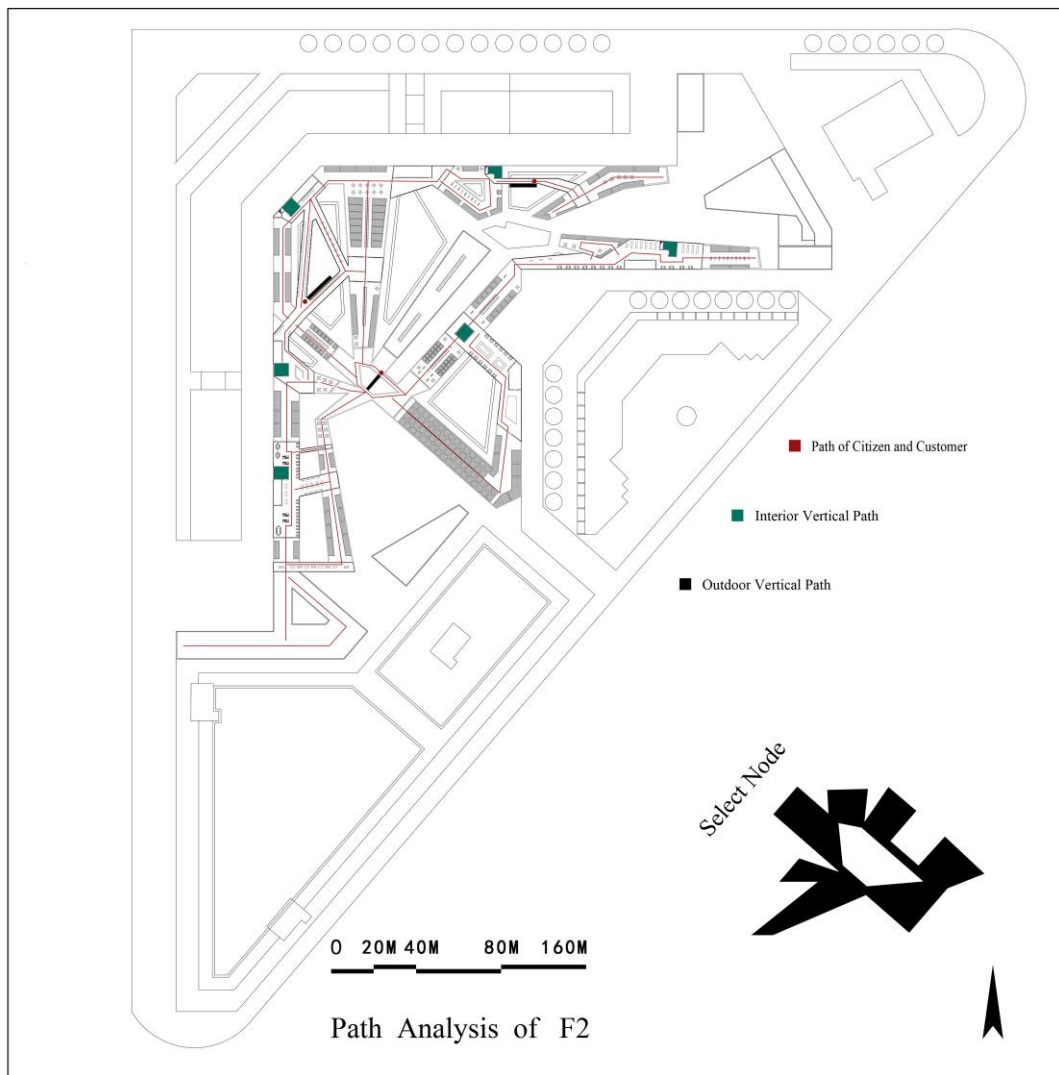


Figure 4-24 path analysis second floor

### 4.3 The Space Constitute Formed by Events

#### 4.3.1 Space Event Triggered a Chain Reaction

The physical form of the environment determines the pattern of human behavior, and the variability of the behavior pattern brings about the change of the space, which is a two-way process. Social environment and ideology complexity stress space order to complex, vague expression, single function space no longer implies a single nature of the incident occurred, the office can hold the reception activities, apartment can also



organize classroom teaching, in the same warehouse can of artistic creation, simple space is no longer suitable for the diversified social needs, between the function and the function of combined to become the development trend. Suzhou Eslite life flagship model, far beyond the concept of a bookstore, by the real play kitchen, laboratory of visual, literary reception and micro classroom constitutes its main activities. This case shows that the traditional single functional sites, if not necessarily linked to the life of the public, may be replaced by other functional areas.



Figure 4-25 public space of Suzhou Eslite



Figure 4-26 Compound operation of Suzhou Eslite

Contemporary people's shopping idea has been developed from a single purpose to a variety of select, that is in a space could completed all shopping needs, and a variety of changes in people's needs provides a new direction for space synthesis, so Neopotism produced a chain reaction for commercial clear method update. Complex operation model conform to the needs of the times and produced, it will be different kinds of shops together, forming joint operation of complex spatial pattern. Relatively single commodity business space, comprehensive model of Commodity services to produce a wide variety of buying behavior, and the construction of spatial order is therefore more full and comprehensive.

In traditional urban market, shopping is the main events in space, and under the background of new era, but this event is relatively thin relative to other integrated services, and a place for an event service easily lead to waste of space. Above mentioned in the Netherlands the Markthal Rotterdam for us provides excellent reference case, new features into the vegetable market, equal to create more space and spatial order of occurrence of various events is more complex. In the complex relation of space, the meaning of the space is gradually clear up, and space order and spatial

form formed by complex spatial, always with unexpected results.

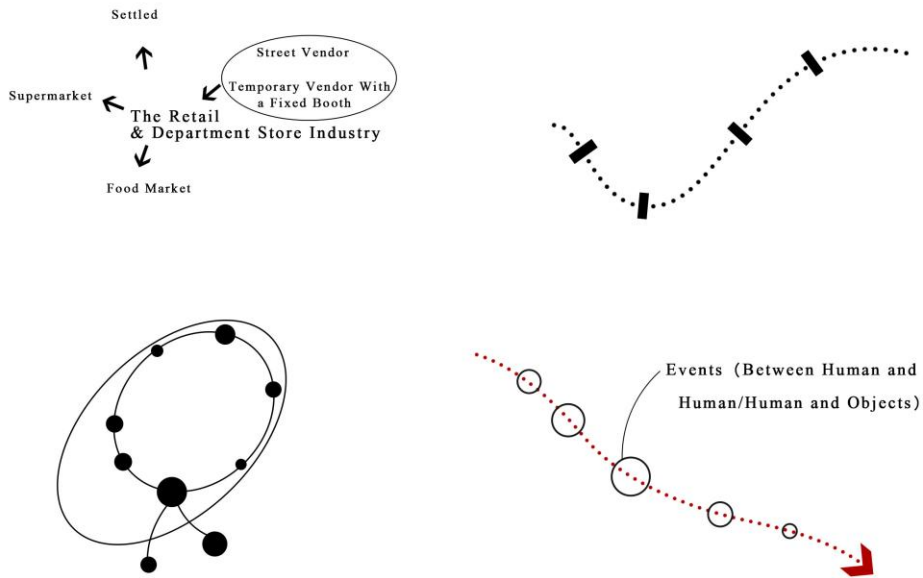


Figure 4-27 The relationship between spatial events and spatial movement of urban market

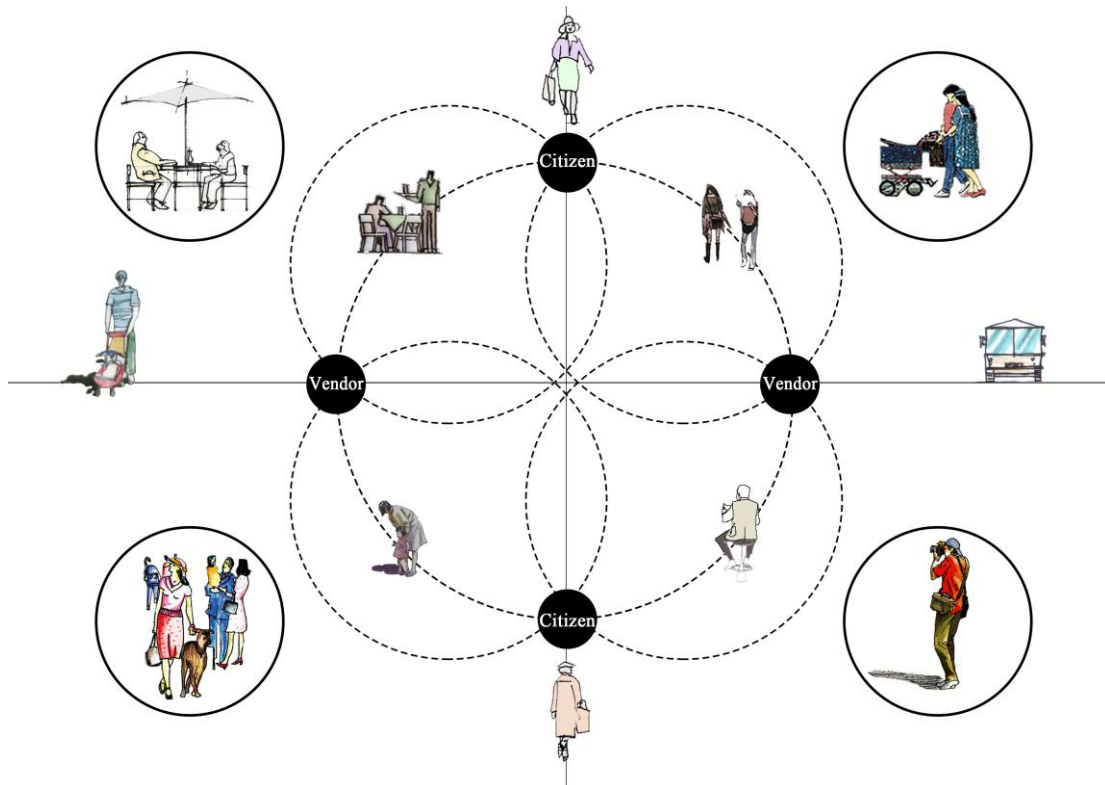


Figure 4-28 spatial event analysis of Urban food market

The existing Wangjing street market is mainly divided into two kinds of events, selling and eating, but in the process of actual research, residents in the vicinity of the purchase process often encounter acquaintances, so chat space demand make the space appears to be powerless. The so-called food process, it is only in the chaotic and crowded environment finish carelessly, so the pleasure of dining is not fully released. Therefore, when the space will be the main function of the other possible after killing, and it means that the monotonous space environment will hang around this non-essential important event to be excluded, the wealth of unknown events brought about by the wandering will disappear.

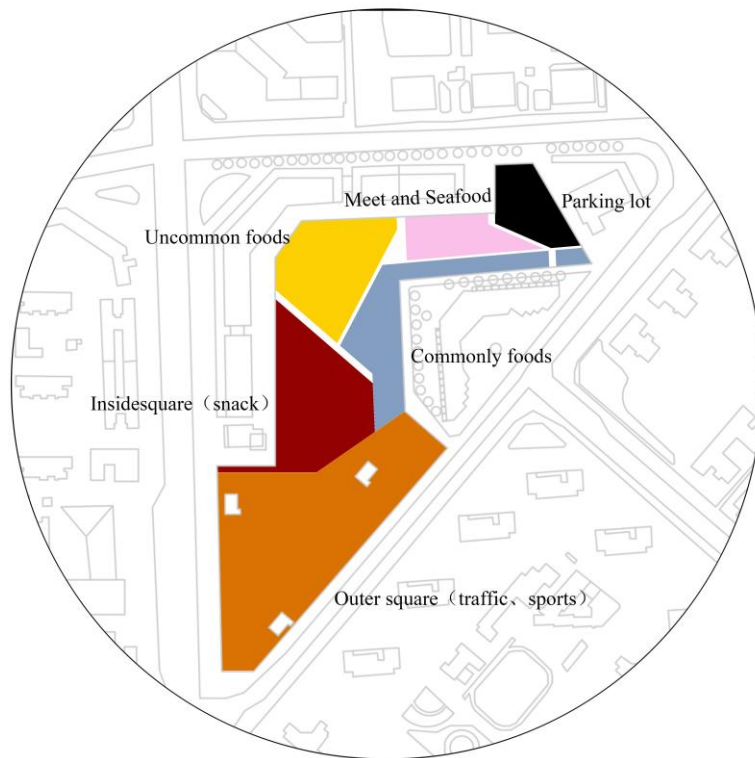


Figure 4-29 Function partition of Wangjing street market

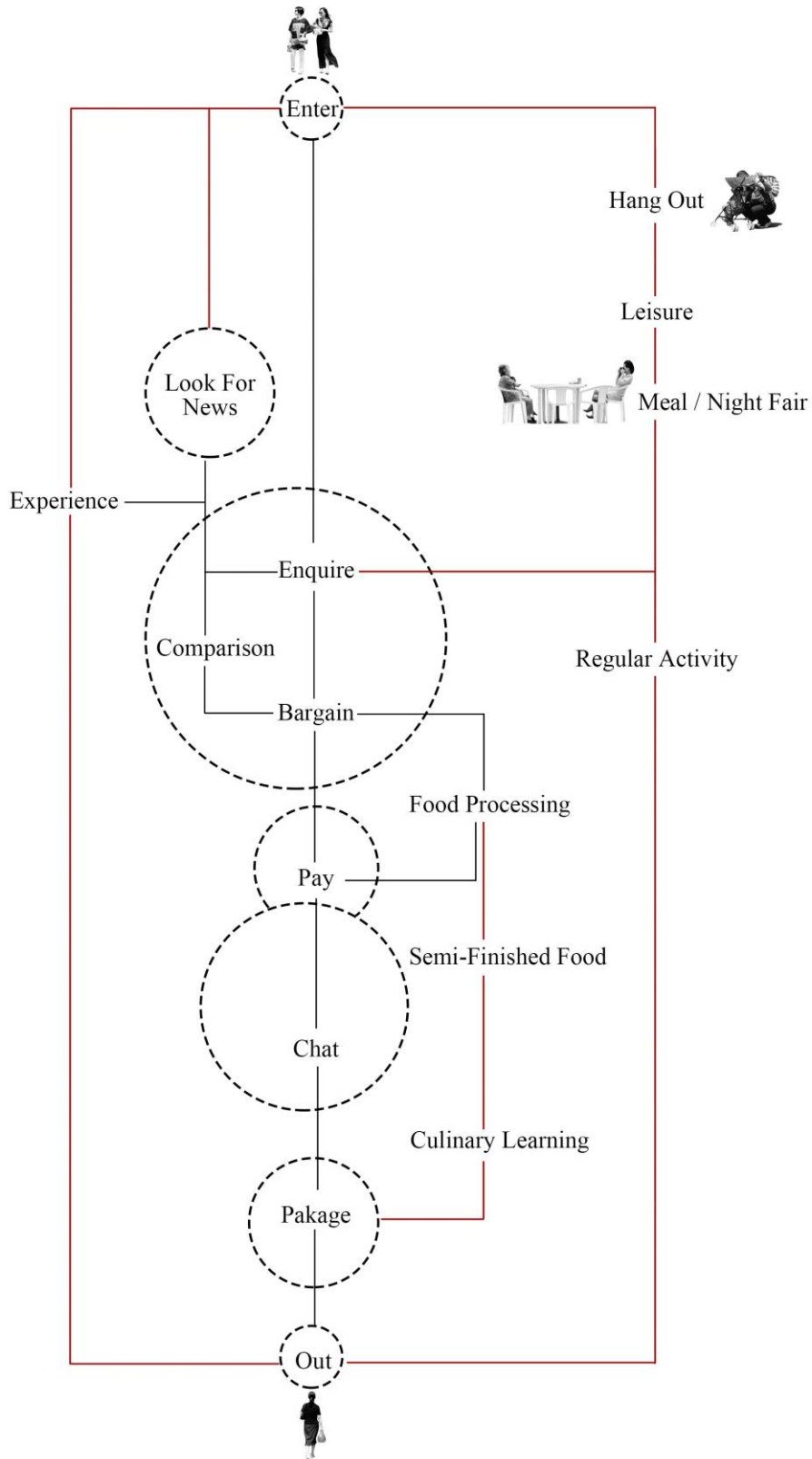


Figure 4-30 Contrast between the new and the old

Therefore, in the design process of Wangjing Street market, the author once wrote

that to add the traditional downtown and park, square, catering and other factors in this new market space. These function adding initiating the eating, party, leisure, communication, play, experience, learning, entertainment and other abundant rich event space, they correspond with each other, complement each other, realize the function of the chain organization are closely linked to each other. Therefore space not only to meet the shopping needs of markets, but also care leisure, entertainment, catering to the function and space form, so the formation of the complex spatial order. Order as a result to produce complex organic space form.

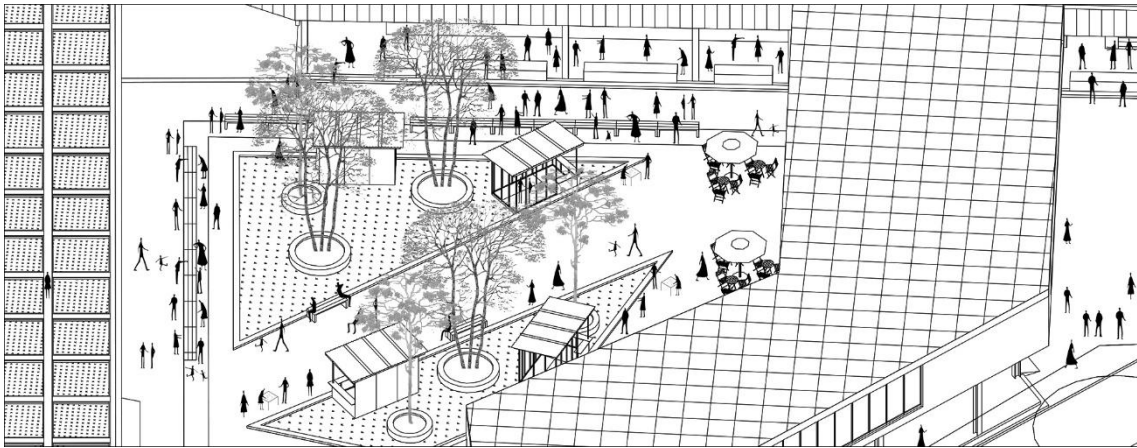


Figure 4-31 Entertainment and leisure space of Wangjing street market-1

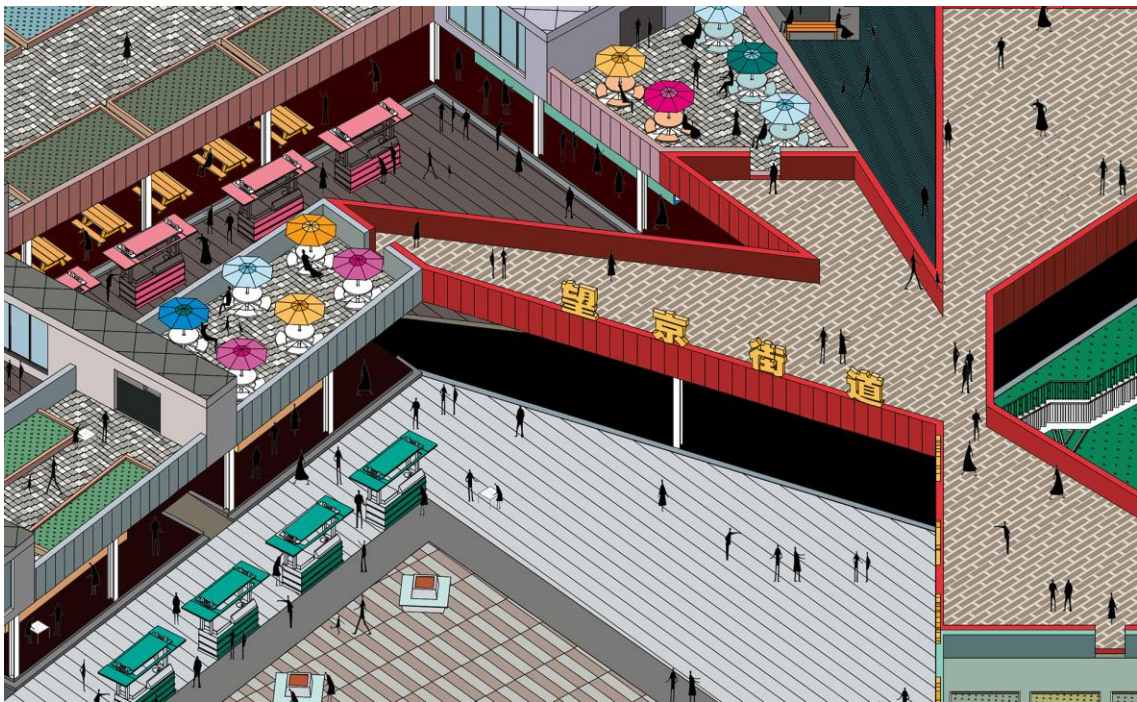


Figure 4-32 Entertainment and leisure space of Wangjing street market-2

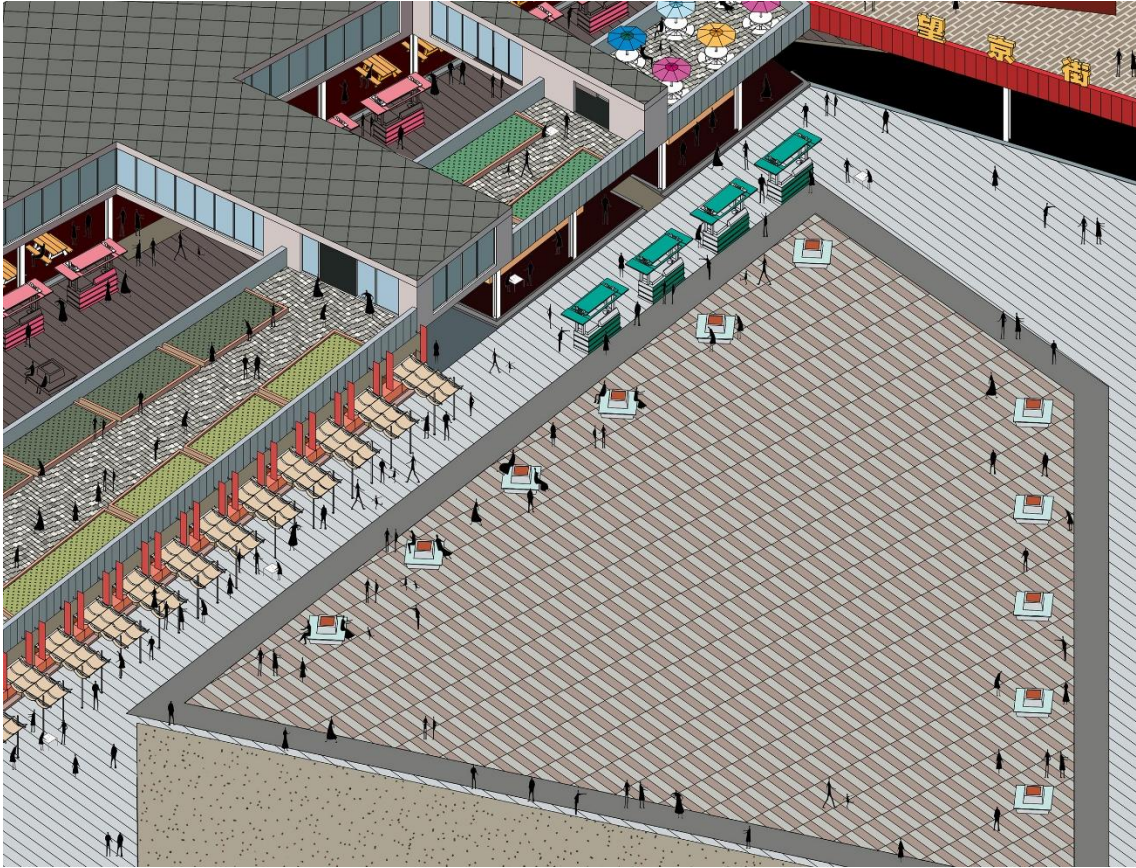


Figure 4-33 Snacks and Square Place of Wangjing Street Market

### 4.3.2 Inevitable and Accidental Events

Event is the specific results of the use of the function, and it is divided into inevitable and accidental events. The actions and activities that are bound to occur and are repeated in the space of a certain event, and incidental events refer to the emergent behaviors and activities that are influenced by their own or external factors. For consumers and traders, the sale of goods is the only purpose of the traditional market, so in a single function of the occurrence of the event has a simple purpose. In addition, for the management, delivery of goods and rubbish, and market management as a vegetable market inevitable events mostly hidden in the shadows, but in the construction process of space order it is an integral part of the whole, and this kind of event requires spatial organization that can convenient to reach.

In addition to the above market inevitable events outside the market, and there are also a variety of accidental events. Simple existence food market is not ideal, in real life, people will spontaneously produce many kinds of purchase behavior accident, selling, bargaining, chat, choose, try to eat is true to the vegetable market space. Around the

main purpose of the trading behavior, the other accidental events of the market and the supermarket to form a distinctive difference, this difference is the main factor in the emergence of individual traders in space.

There is a special event in the market of the city, which is situated between chance and necessity, that is, the trading activities brought by the flowing traders. Because in the modern city, and mobile vendors are banned in some markets, but some food market is the initiative to provide space for this operation. Peddlers in addition can increase the event space and their special mode of operation performance for the space occupied by the flow. This phenomenon formation process has become a vegetable market space order in the construction of the special events. Itinerant traders due to operating time and stalls for sale relatively free, so there is no fixed the exact location, but in order to facilitate the management of the market, determine the region was clearly delineated, range defined in the management, and mobile vendors can play the characteristics of the event of its randomness, to freely space construction.



Figure 4-34 market in Festivals



Figure 4-35 market in celebration activities

Market fairs and festival celebrations bring about a distinction between contingency and necessity, from the angle of analysis, which is an inevitable event. And from space using point of view, they also called for the space of the incident. This kind of event has a clear periodic law, so citizens in accordance with the agreed time at a fixed place for trading activities, urban commercial development to make the needs of people's lives can be very easily satisfied, so cycle rally in city life is not obvious. But urban markets, supermarkets, food stores in the Chinese traditional festivals and special celebrations, overwhelming the coupons and commercial marketing create rich and festive atmosphere to attract a wider range of people, become a disguised form of accident. In the construction of the space order, the periodic law causes the occurrence

of an event, such as a tidal wave, so the space must be flexible enough to cope with the special needs of different periods of the event to the space.

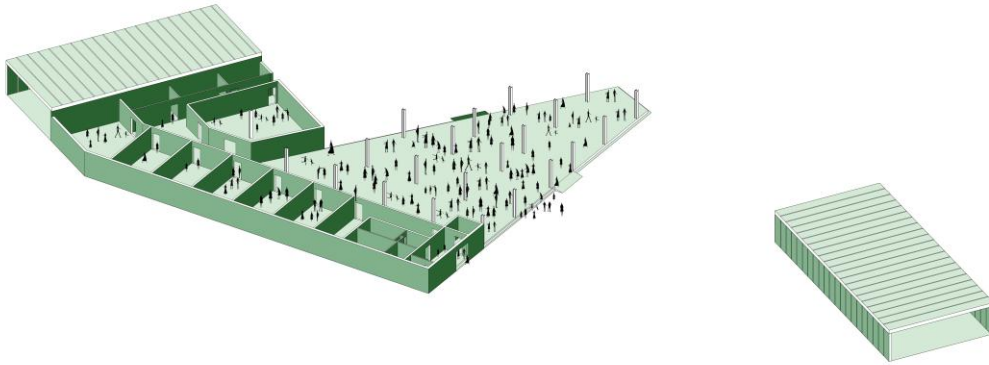


Figure 4-36 Axonometric of self-built area in the North

According to the above analysis, in the entrance square area of Wangjing Street market, the author set the north and south two spaces, and on the basis of the continuation of the basic space order, the internal maintenance "empty" state, to itinerant traders of free space. In addition, integration of markets, parks, squares, streets concept will bring the occurrence of fairs, festivals, community activities and other events. Therefore, the vegetable market between the different dishes to partition provides enough flexibility, the normal use state it as the city landscape for the market to provide a good shopping environment, when there is a special event space, it can immediately change space function, and become a place for temporary use and meet the demand of special function.



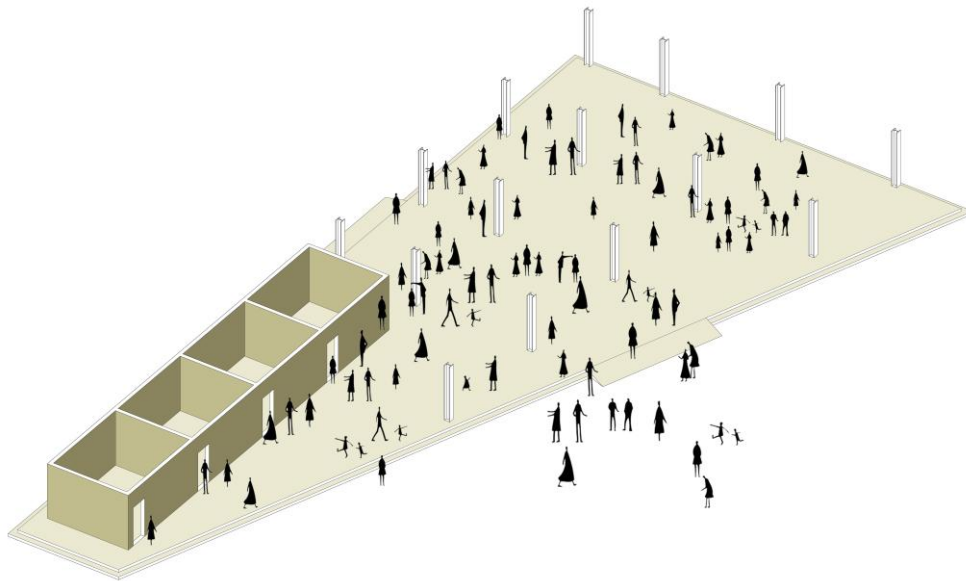


Figure 4-37 Axonometric of self-built area in the South

### 4.3.3 Open and Divergent Thinking to Deal With Events

In the process of urbanization markets cannot be complacent, in the updating of the spatial order, and space events also need to follow the pace of development, with an open attitude to meet emerging events to join, and a divergent thinking to treat potential events that may occur.

Opening and combination of dishes management is a new trend of the development of the market space of the urban vegetable, to extend the industrial chain is a common practice. People in the purchase of food after, can directly provide processing services, side dishes, choice of materials, processing, production in a space completed, the dishes of food making process more transparent, for the public to save cooking time compared to the traditional markets in this way. By this process can lead to the development of many related events, the cooking classroom and workshop forms of gourmet gatherings will put people into space, in dishes also granted to production methods, food making process to produce the demand to sell different kinds of dishes sold mobilized to form a network, the income of joint action, on the one hand, increase the number of traders, on the other hand is simply buying and selling activities provide a variety of space

activities. Food preparation and dining link triggered events are more abundant, to take this opportunity, in the vegetable market depending on snacks and night market, so that the public residence time in the vegetable market space are not intended to be extended, chatting, communication, experience and entertainment with the aggregation of human development and the gradual, can not only enrich the forms of life and for customers to enjoy food and snacks provide a platform.

Experience consumption in the rise of the electronic commerce rapid development, so under line experience become the store business model of emerging events, experience is feel the merchandise of the advantages and disadvantages, help customer online purchase to make judgments, and therefore experience will influence peddlers selling quantity. In addition to the quality of the goods themselves, space to experience the event should give a perfect response, because space environment on customer consumption psychology is an important influence, display items, light intensity, as well as color and experience should be based on the specific consumer varieties and set the space atmosphere, to mobilize the desire of shoppers to buy.

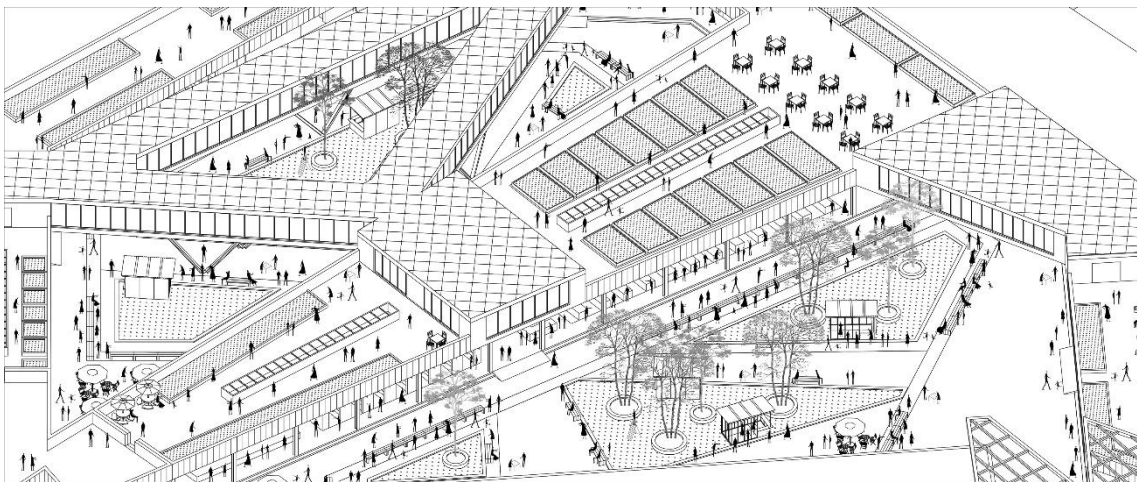


Figure 4-38 Planting experience and leisure activities on the second floor

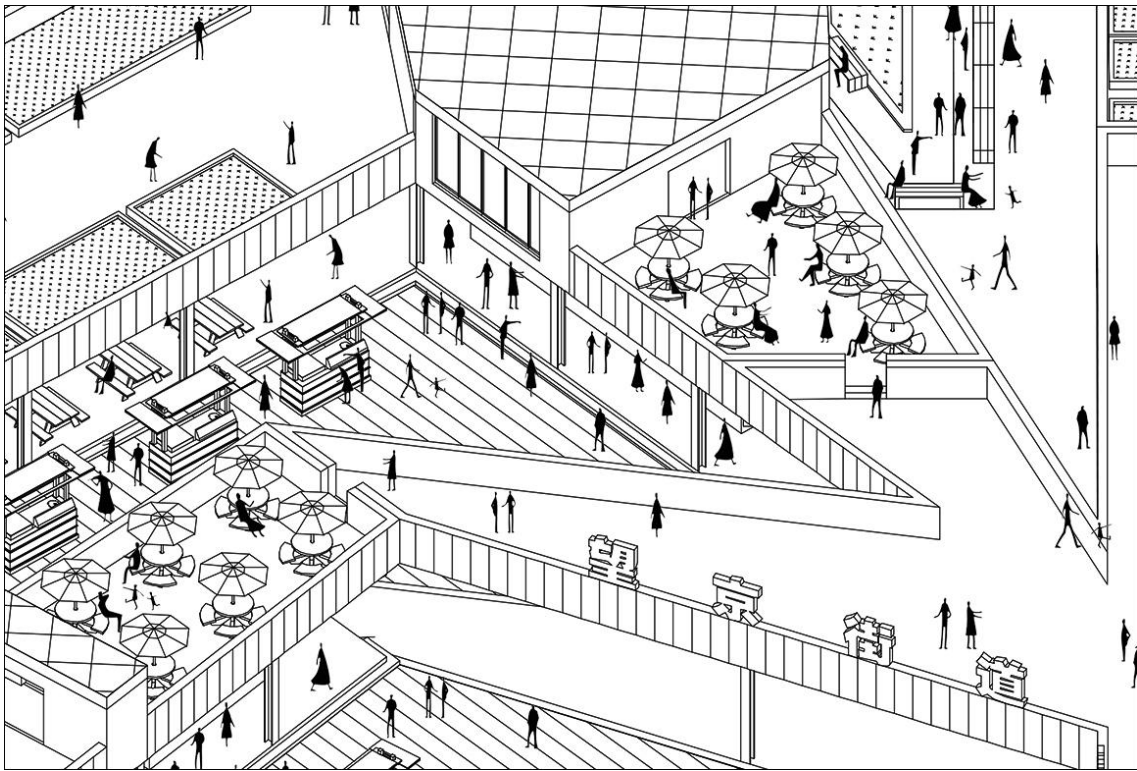


Figure 4.39 Leisure and catering, communication space on the second floor

## **Chapter 5 Different parts of Space Order**

### **5.1 Different Levels of Spatial Order in Market**

The diversity of objects constitutes the rich and varied space existing, and the richness of space was based on the levels of complexity of space, but an excessive abundance space level will lead space to extremely complicated. In the process space order construction, it is very helpful, that to clear and carding the different level of complex degree in overall control and comb, to the construction of the space hierarchy. The chaos or distinct of space levels is not lies in the combination between space unit, if the space as the relationship between mother and daughter, sub space through the continuous and repetitive, structured organization are maternal space an important factor in the formation. Presence in space order in the construction of the level of overall can be divided into three types, space and urban fabric, and the surrounding environment, between the relations between the whole and each portion of space, and space and internal items. Each tier in the same space order all throughout a kind of social ideology, because under the control of the same order, consciousness the contradiction generated will lead to mutual criticism, so that the space break.

#### **5.1.1 Space Order Expound From Environmental View**

In terms of environment, the “Anchorage” by Stephen Hall have the contrast of architecture and art works, and it expounded the space is limited by the fixed region, and always been entangled together with the environment and residents, eventually forming a devotion to the whole order, so the place was becoming the memories of city, and city as a place to provide support. From the point of view of urban context analysis, different regions because of the presence of people and endow the site spirit of the special places and the organizational form of the spatial order and the establishment of spatial relations, in essence, reflects the social attribute of the local residents. Any space with the special environment and the specific background, so the construction of space itself in order must with the environment produced a connection, such as geography, climate, hydrology, population, customs, food, behavior, psychology and so on. Space order and space form has the particularity of reflect the special relationship between architecture and environment, residents, so that the building space finally combine with

the environment, forming a unique spatial sequence, the difference between different countries, different regions building is the.

When the traditional markets and urban has intersection, facing the problem of region boundary, the traditional markets always take a conservative stance, only the simple timing switch is connected with the city and the space is created. Urban market of sunrise and sunset and the operating time of interest make it at night completely closed, citizens are unable to intervene in the space, and the new period community open runs counter to the concept. The prosperity of commercial activities can promote the development of the city, so closed means fragmented with the city, and the integrity of the city was destroyed.



Figure 5-1 Regional analysis of wangjing street market

The surrounding buildings of Wangjing Street integrated vegetable market show a remarkable form of group, the level of regional road shows the convenience of political management, the plot of the plot revealed a weak ideology. The organization mode of the modern community inherits the spatial structure of China's traditional square, which is originated from the deep system and management purpose, and the construction, landscape and interior space are also affected by it. Venues surrounding residential and commercial, office, transportation hub mixed state space bring the complex flow, residential area to its peace and urban spatial demarcation of the border, in a closed community in retail stores and the greengrocer to spread in the form of scattered in the corner, but the basic needs of life for this can only satisfy the area residents, the types of dishes and retail prices and markets differ very much. From urban activity state analysis,

the region only Eastern Wangjing SOHO and southern Cade mall commercial and office activities for sloppy calm area brings the city vitality.



Figure 5-2 Land Character of this area in wangjing

Therefore, in this design practice, the author hopes to break the boundaries of the restrictions, with an open attitude into the city life, so that the market in any period of time is in a state of non-full closure. Traditional closed type large space booth order is no longer suited to the "open" the city development concept and business model, the opportunity for the development of the night market, snacks, and park space, the traditional concept of market introduced space design, to achieve open block spatial order of project construction.

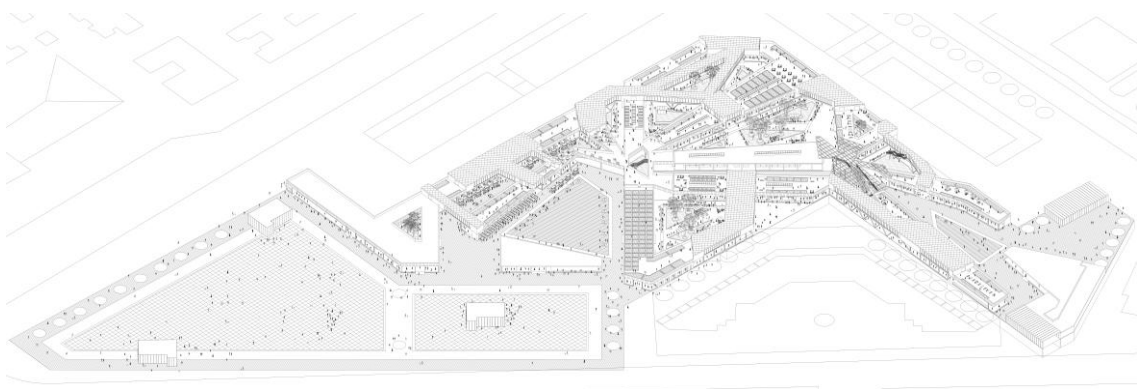


Figure 5-3 Aerial view of wangjing street market

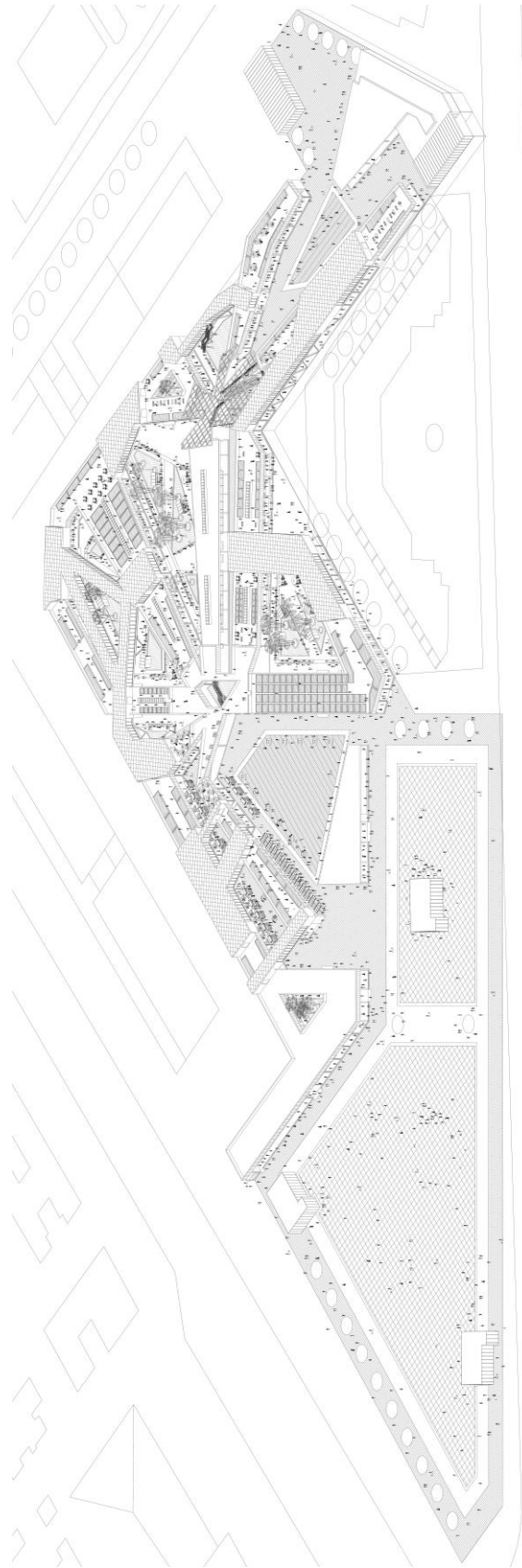


Figure 5-3 Aerial view of wangjing street market

### 5.1.2 From The Unit to The Whole

Although space construction is based on the environment, it is still able to peel off the clear individual order and the construction context from the complex relationship. Each independent space environment is composed of one or more sub space in combination with each other to form the whole space, these subspaces constitute the whole unit, from the level of the design space analysis, modern architects seem to be working in pursuit of no distinction between open space, to meet the needs of the transformation between the different functions. The spatial order and brings a serious consequences, space personality lost, neat and uniform spatial patterns and spatial form of the building hard to distinguish you and I. Architectural space depend on unit between the organic combination form a whole space system, to meet the original intention of the space construction, so construction space of different needs make space unit according to the specific size, proportion and sequence followed by the distribution, form a unique space order, many kinds of combinations between the unit and the unit for space form bring infinite possibilities.

Space unit of the urban market have different functional requirements and regional division, such as selling vegetables space, storage space, space infrastructure, freight space and so on, between the various parts of the combination to form a whole food market space. Vegetable market space covers the subspace should have its clear division of labor, differences between monomers based on differences in the function of space, so space order based on mutual coordination between the units. On the contrary, space order of construction in find mutual relationship between unit and be expressed. Traditional markets open space simplifies the combination relationship between unit and sale of food space occupied the leading position, the rest of the auxiliary space become space; and the spatial combination way the internal motion of space mixed with each other, interleaving, resulting in confusion. However, space between different types of dishes with wet and dry, the smell of the different populations with differences between shopping, management, sale, so spatial order also have different combinations of units, which will be based on the special needs of different markets and. Such as the design of this project, the different partitions of the commodity form independent unit of space, and presents the form of space radiation distribution in space, the unit combination of this pattern constitutes the overall spatial form, was derived from the spatial order of spatial motion and spatial events as well as the use of flexible



comprehensive consideration.

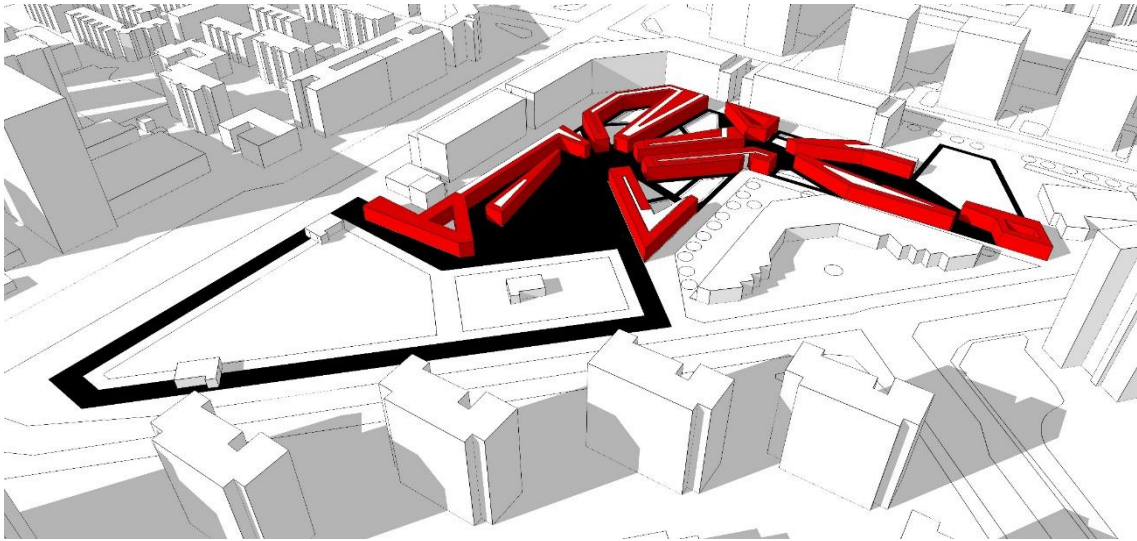


Figure 5-4 Space unit combination-1

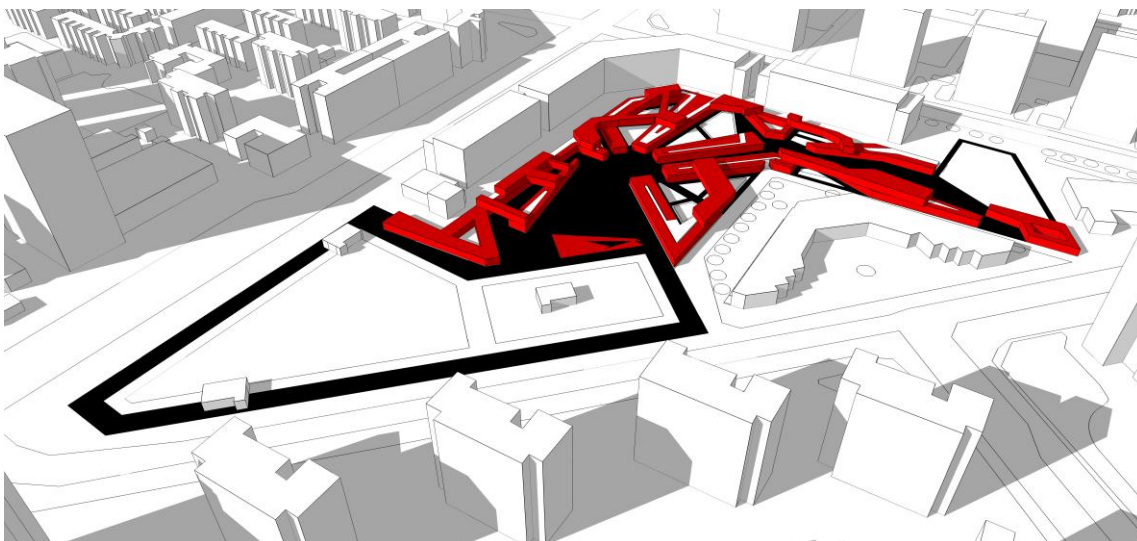


Figure 5-5 Space unit combination-2

### 5.1.3 The Smallest Unit of Spatial Composition

At this level, the spatial order is focused on the interior of the space unit, the display mode of furniture, the final display status of the object is the final result, and this is the most closely related to the user. The final level of space depends on the form and quantity of the interior space of the space, namely the form and quantity of the smallest individual. The concise, simple content space, users can easily understand and use of space; and confusion brought about by the increase in the number of items and

complex forms for spatial cognition and use to create obstacles, disordered stacking placed show the user the helpless. So the purpose of space design is to find out the mutual relations among the smallest individuals, so as to form a clear basis for the formation of order, to provide users with the logic of action.



Figure 5-6 Compound store “BEAUTY LIBRARY” by Nendo      Figure 5-7 “BEAUTY LIBRARY” by Nendo

In the urban vegetable market space, the arrangement of each sale of commodity and presentation also reflect the corresponding relationship with the order of integral space. Dishes placed, display a space booth, booth arrangement formation region and to delineate individual space, interior space according to the use of the unit's function is divided, according to the single space to more deeply work, and the dishes filled not only enrich the content space, and make the space more fully. The difference in the relationship between dishes and external space, make the space form a clear recognition feature, and become the visual symbol of the space function of the public judgment vegetable market. But in order to avoid the public to enter the space unit after selection of doubt, relationship between the construction of order goods to the public to provide clear cognitive way, they can in the logic behind the commodity arrangement sequentially spatial cognition and selection of goods, and in the order of goods in the space experience, feel the beauty of space order.

## 5.2 From Space Order to Space Form

Above the construction ideas, operation modes and paths, events, psychological and the following will discuss the structure, goods and hell culture is before the advent of the space form of order construction and combing process, the complete order form system unknowingly has formed the embryonic form of the space form, spontaneous

and non-deliberate of spatial form based in real objective confirmation. The specific movement order indicates the scale and form of the future channel. The management of the intervention provides the open degree of the spatial boundary, and the specific event occurs as a special requirement for the spatial form. Spatial order is defined on the dual latitude and temporal axis of vertical and horizontal. On the basis of the space form of order, it could avoid a waste of space, and space to be the same of outside and inside, authentic and credible.

Japanese architect Luranraison of space formation had an interesting idea, if space covering from established internal space moved to the outer, inner and outer space will reverse phenomenon, the author thinks that this is due to the general construction order of the space is changed, change of internal and external space form, so the cognitive also follow the space change. We can find that the order space to space form of the transformation process is from abstract logic to 3D shape of concrete results, the order in the form of space construction process on the role interesting fantasy architect. The difference of the space order will bring about the difference of the space form, and the shape of the space is in the opposite of the space idea.

Distinguish typology in the spatial patterns in the application of different forms and kinds of division in people of the juxtaposition of spatial order rational analysis and memory experience. Even if there is no specific description language, we can also imagine the approximate form of space from the name of the space type. Different types of spaces, the openings way, material selection requirements, color collocation, structure construction method also exists many differences, in addition, aesthetic, lighting, ventilation, the use of functional requirements to make the space type clear. All elements that constitute the space are in the right position according to a certain rule, and then constitute the space form, so this rule is the space order.

Because the urban food market provides most basic materials of food guarantee for the public life, so to some extent it belongs to the basic space construction of the city, and it is a special kind of space in the city environment. Its spatial order is decided by the special operation booth and the shopping way, but the special space order forms the unique shape characteristic of the vegetable market. Ease of use requirements food market space along the horizontal development, cargo handling and garbage clean-up the extension of vertical space is restricted, so the market is mostly on the ground floor, two floors above the ground floor of the building space. Economic conditions are in a

great extent restricted food market to the development of high-rise buildings, land rent and lower profits to vegetable market builders flinch in the face of high-rise buildings, space form with simple framework and simple board room. Therefore, the urban food market is only combined with other forms of architectural space, which is conducive to the realization of the spatial order and form of the update.

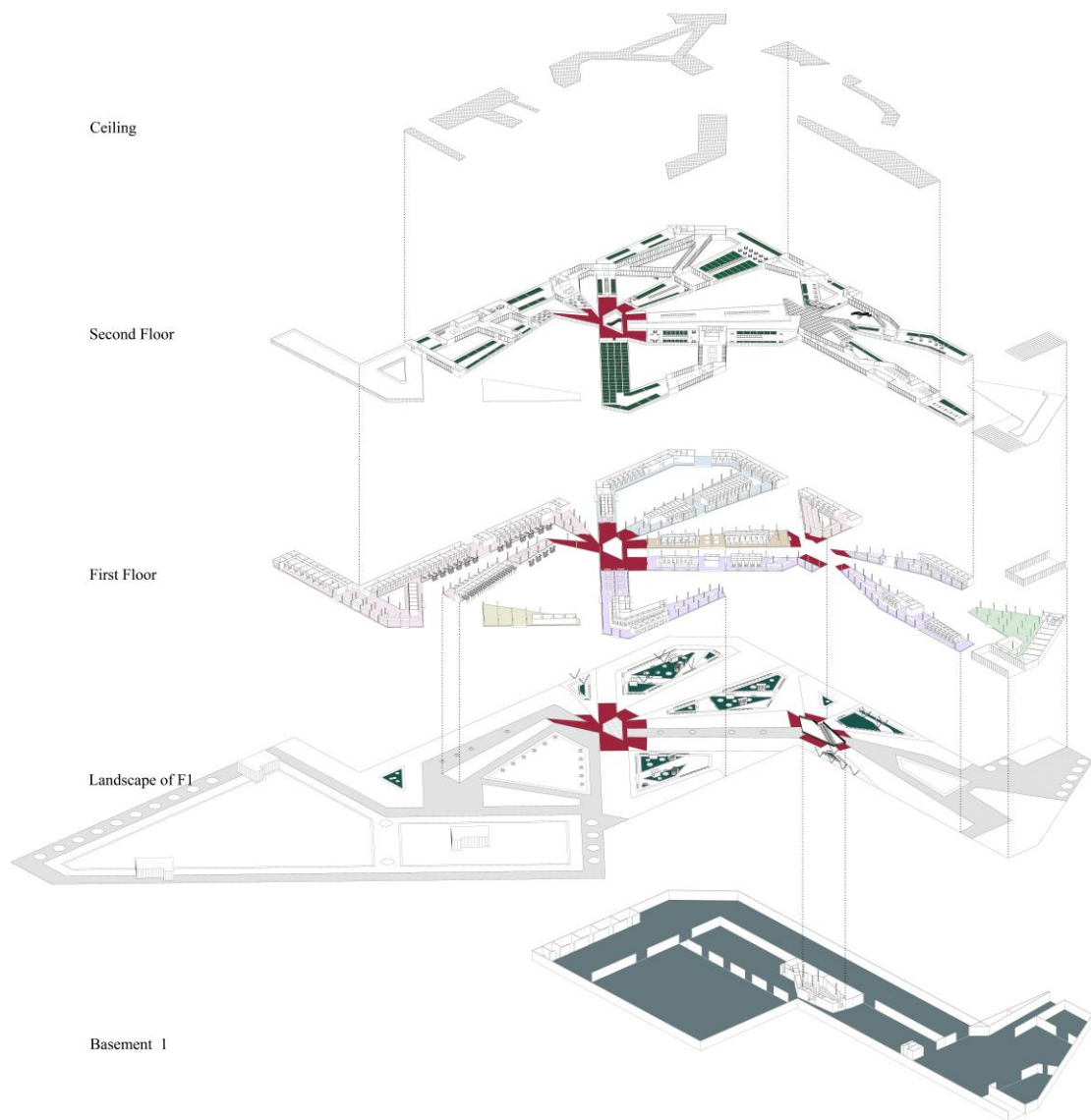


Figure 5-8 Axonometric Analysis

Psychological effect makes people think high-rise building is a symbol of the city, the existence of high-rise building is to increase the rate of land using, and in some degree the ambitions of the city and the developers, as they show off the capital. However, the author believes that the top of urbanization is not a performance, in Milan, although not too many high-rise buildings, but there is no denying the fact that it as an international city, the importance of, the urbanization of their way of life is the essence of public benefit. So urban market space order of construction does not depend on high spatial form to display results of their city of urbanization, space operation and use of the process is the core problem of the food market space, space form is spatial order in the process of solving the core problem of figurative expression.

### **5.3 Double Acceptance by Society and City**

#### **5.3.1 Dialogue with the City**

The widespread development of modern architecture in China has brought about an interesting phenomenon, on the basis of Chinese traditional space, the development of the city, the construction of the fragmentation based on the continuity of the play, the space of the state of alienation. Urban space is no longer a clear context of historical development, the rest of the only scattered in the corner of the city of historical fragment memory, this feature in other Asian cities are also widespread, but in addition to the city of fragmentation pattern formation. It has advantage of the formation of rich and complex spatial order and form of, the success of Shibuya has demonstrated that the surprising effect of the fragments of history to mix and match. In contrast, European cities in the spatial order showed obvious structural logic and time continuity, in the eyes of most Chinese people, the city streets of Milan, Venice full without direction of chaos cross, road and the intersection of a plurality of fork bring cognitive vision loss, selection of diversity easy to cause errors in judgment and decision making, but in well versed in urban spatial order of Europeans in the eyes of the focus of the loss is still building, space between the differences resolve, become clearly discernible. Therefore, the way in which space is used to generate dialogue with the city depends on the overall development of the region, the space and the street, for example the surrounding buildings and the impact of the association, all these reshape the image of the city.

Urban markets as a part of urban public space, in the form of space and other urban

images have differences, and all kinds of various images mixed with each other, or isolated, or continuous. It appears chaos, interrupt, ambiguous, and lack of communication difficulties associated in the process of dialogue, also causing confusion and disagreement of people's thinking. While the excessive obedience to the city texture of the construction of the integrity of the characteristics of the performance, but the convenience of the fuzzy, the same lack of space and its own characteristics of the space. With the continuous development of the city, the food market space gradually update, space has no obligation to fully in accordance with the original urban texture construction. The fragmentation of the free combination of the environmental space and produce contradiction, contrast and conflict, and separates the exist in the system of citizen's mind, accidental discovery is an unexpected result of the city's image, explore and discover the fun for the city added a romantic color.

In order to clearly show the spatial relationship and organizational form, it is needed to analyze the relationship between the urban texture, the spatial pattern, the road shape and the actual situation. In Wangjing, the urban texture shows a complex combination of relationships, which can be found in the spatial order of the three distinct types of muscle from the seemingly chaotic map of the graph. First of all, the regular pattern of the building makes the space clear and clear, but it is the same. Secondly, the combination of organic forms to make the spatial layout flexible, forming a rich visual hierarchy and spatial relationship. Finally, in the new area, such as Wangjing SOHO, the space texture is affected by the impact of new buildings and become elusive, so they try to break the original order, to achieve the purpose of urban renewal. In addition and some space at the bottom of the figure relationship showed fragmented state, disorderly texture regional shows the confusion and doubt. When designing the city texture, the project does not attempt to fully extend the old city relationship, but want to find a compromise in order of different texture methods, construction of new urban texture and space order by its own order.

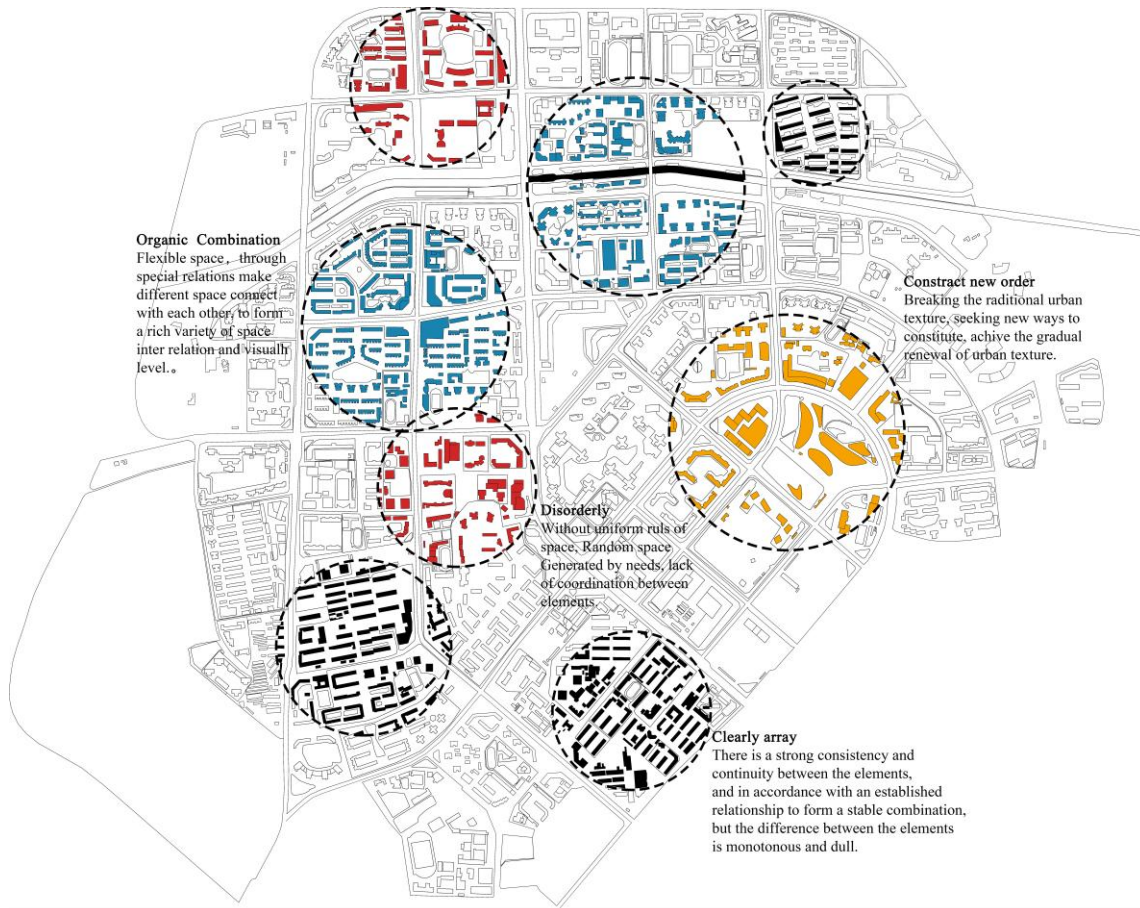


Figure 5-9 Figure-ground

### 5.3.2 Expectation of Citizen

People's expectations for the food market space is different from the working space or commercial street, because of the difference in consumption level, the capital accumulation and commercial value of the vegetable market is far lower than that of the flourishing commercial center and the office building. Vulnerable does not mean that the quality of space to accommodate economic strength. The relationship between the markets and the public should not only stay in the completed transactions and access to the level of the elements of life, in the public's concept here contains the infinite pleasures of life and social attitudes. But the spatial variety is not equal to the disorganized, frequent trading activity and the intensity of the flow space make the space more "popularity" and at the same time the environment has become crowded. When markets overwhelmed became dilapidated. The original fun into as soon as possible to complete the shopping needs, the deterioration of the environment lead to reduce the passenger flow, and dirty environment of food security risks. Emerging

markets in spatial pattern of supermarket based learning to make the space to avoid the formation of the above problems, but it formed the streamline single rigid pattern in market space. The pleasures of shopping and the richness of the spatial experience have been sealed up in a rigid pattern, and space experience lost subsequently.

In the eyes of the citizen, food market has gone beyond the simple place of transaction concept, and people want to in shopping process experiencing the rich commodity and space population with much color brings pleasure. From the traditional market space that this food market space, people to "stroll" market showed high interest, because in the process of moving the continuous transformation of food to the eyes bring sufficient stimulation, psychological adjustment avoids the body tired. Therefore, considerable, can travel, can enjoy the food market space has become the main demands of the public.

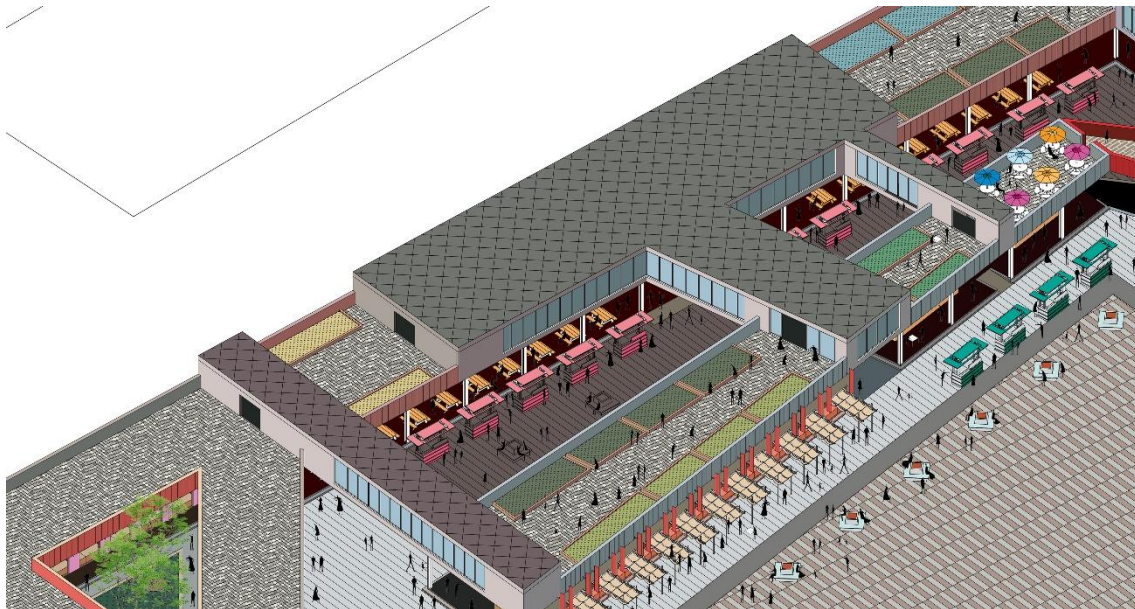


Figure 5-10 food street in wangjing street market/Night fair

Because the coverage area and service range of urban markets is very big, so the area is limited to the public in the space often produce and acquaintances encounter, and communication between each other also inevitably occur. But traditional urban food market in space order did not possibility to social communication, for the hidden in the space of the accident, space to respond, to satisfy the demand for exchange function. In addition, urban markets can learn from the organization of rural rallies and the traditional downtown, regularly carry out about the diet culture leisure entertainment activities and festivals, to promote commercial development of culture, and enrich the



space activities by means of divergence, to provide rich urban life for the surrounding residents.

Although the building density of Wangjing Street market surroundings is very low, but most of them are high-rise residential buildings and commercial space, office space, so regional population base is large, small community food stores and supermarkets unable to meet needs of people's life, so the markets must ensure enough booths to full wishes of the community. In addition, vegetable market coverage is not within the scope of the existing for public entertainment public space, street south of the mall but is for the public provides indoor shopping space. From the perspective of urban development and the livelihood of the people, there is a need for a public space for people's social activities and leisure entertainment to provide support for them.



Figure 5-11 Coverage area of wangjing street market

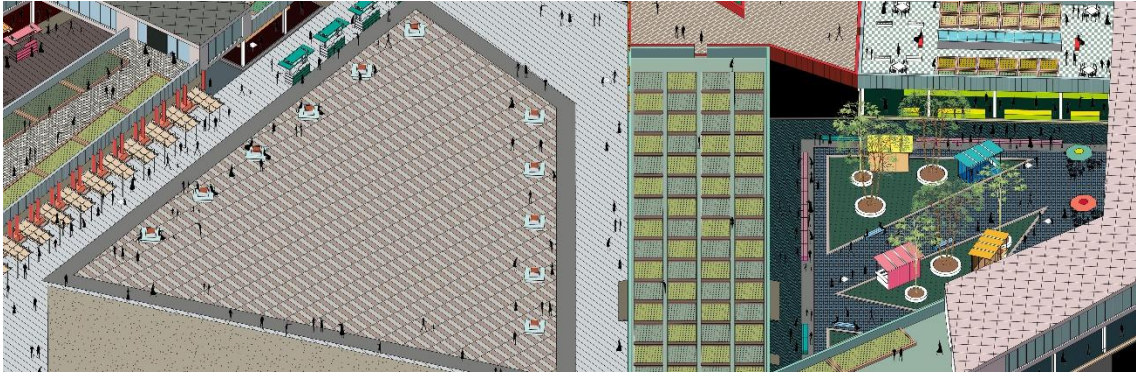


Figure 5.12 Combination of park, square and market

### 5.3.3 Space Fantasy

In the sixties of the last century in Italy, the establishment of group Archizoom is very radically contemporary in that period. In their work "No-Stop City", city is divided into unified modular grid, development space in accordance with the system in the horizontal direction unlimited extension, urban center were canceled, space does not exist in the distinction between inside and outside, the homogenization of the spatial pattern of the infinite space expressed their worries and prospects of the 20th century western city. They through the spatial difference of infinite reproduction, the differences in the unit of the individual's own completely obliterated, to realize spatial expression of the form of digestion. Pierre • Vittorio Fiore of Italian praised the works that live coverage of urbanization in an exaggerated way.

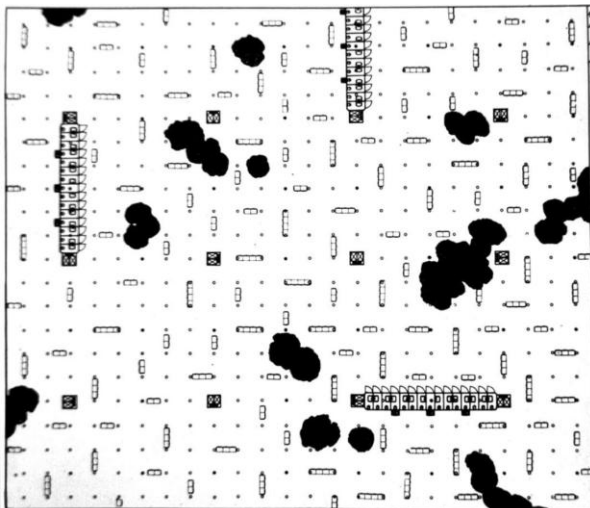


Figure 5-13 No-stop City-1

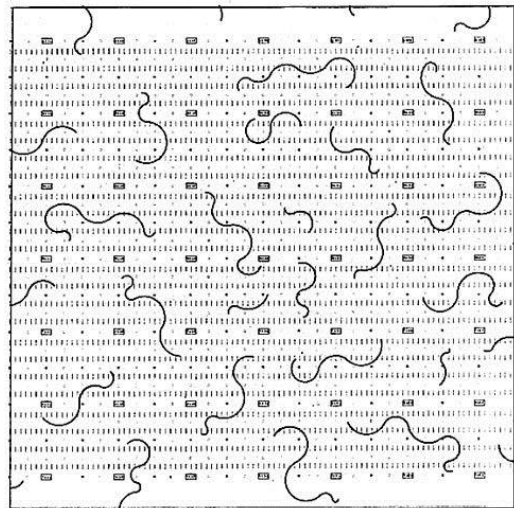


Figure 5-14 No-stop City-2

In Cook's "into the city" idea, the city as a mechanical device, and urban space unit

in a modular form of insert structure, with a change in the time axis, insert module position can be changed freely, the combination of the space form order is prohibited outside the free development. The essential purpose of the author is that variability in fixed and service facilities.



Figure 5-15 "Plug-in-City"

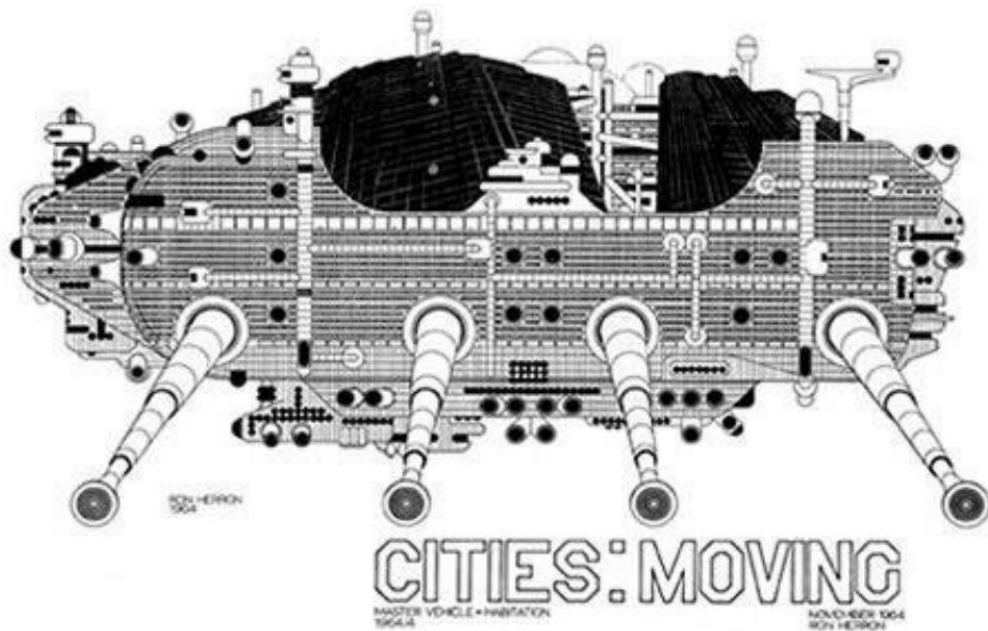


Figure 5.16 "moving city"

In Heron (Ron Herron) "walking city" crazy ideas, the city has become a huge metal building. Simulation of morphological and ecological "mechanical" city in the

space of mobile roaming, between different cities can be connected to form a super city through free. However, all of his movements are for the purpose of saving resources and searching for the suitable living environment. This new technology and the combination of the nomadic spirit have formed a new idea of urban space construction.

The subversion of the city space fantasy, although in the current seemingly unrealistic, but the order of the urban space to provide an unprecedented open ideas. On this opportunity, on the basis of satisfying the actual conditions, the author hopes to try to construct the urban vegetable market full of romantic color in the graduation design, breaking the traditional market in the thinking of the people in the concept of. The New Wangjing street market space through the analysis and study of space order, developed a distorted spatial form, and get rid of the bondage of traditional interior and exterior space concept to the space construction in the mixed space, so achieved an opening and integration of space.

## **Chapter 6 Space Needs Create Beauty of Space Order**

### **6.1 The Expressive of Space Structure**

#### **6.1.1 The Combination of Reason and Sensibility**

Complete structural system can make the building space to be founded. A single column and a single wall, only when it stayed in a specific position it can play the role of organization, but isolated structure indicates the unstable existence of space. The stable structure must be the result of force balance, and the pursuit of scientific beauty and rational beauty make the space appeared in a structure beauty of space order. Finally, the structure in a visual way let people touch and perception.

From a rational point of view analysis, the space form is based on rigorous construction technology and material performance to achieve a complete visual expression. The expressive force of space contains formed in the structure, form, material and color of the permutations and combinations of spatial order. The combination of different architectural elements is according to certain mechanical formulas or mathematical logic to constitute a neat, undisciplined, or freely space order. The expressive force of space formed by the construction can provide a serious, lively, depressing or exciting space feeling to space users, and the development of technology brings more freedom to the construction of space.

When we viewed from the perspective of aesthetic sensibility, the structure is the abstract geometric, such as the point, line, surface, and body is the basic elements of a space. Formal beauty is a final space constructed relation in dealing with the basic structure of the relationship between the elements, and it can be presented as repetition, contrast and conflict of space structure. Most textbooks of arts and design always regards Three Major Constitutions as a basis to explain the subject to the students, like similar, gradual change, combination, repetition, contrast, focus, linear array, and a combination of the garden. All these words are the text representation of relationship between the elements, but the visual sense of rhythm showed the inner logic of space to the observer, by the way of perception.

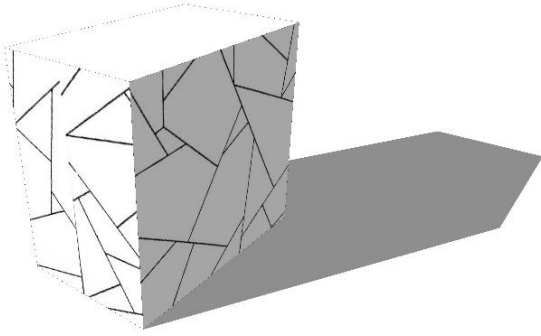


Figure6-1 Structure Form (1)

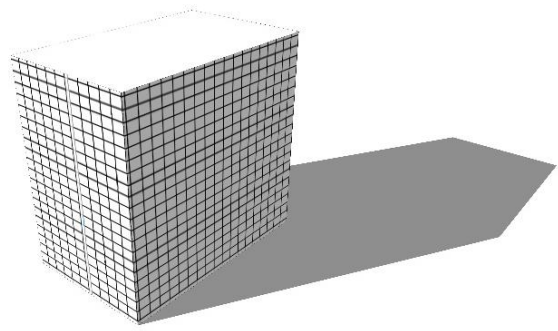


Figure6-2 Structure Form (2)

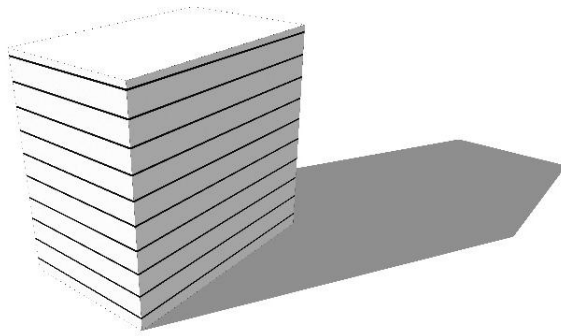


Figure6-3 Structure Form (3)

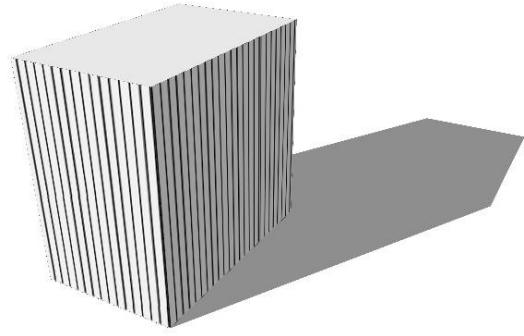


Figure6-4 Structure Form (4)

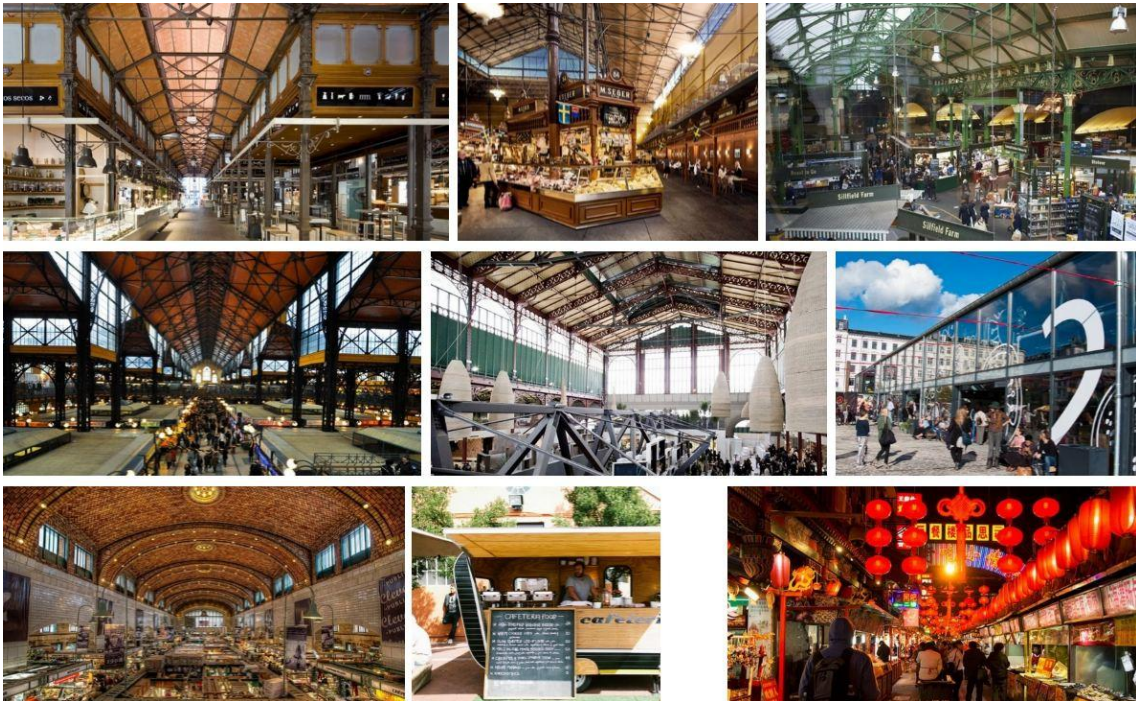


Figure6-5 Structure of traditional vegetable market space

There are many construction of landmark space is based on the perfect

combination of rationality and sensibility, which is closely connected with the combination of space form technology and pattern, and it cannot be divided. The spatial structure of urban market plays a decisive role in the formation of spatial patterns. Compared to the structure of rapid innovation and many tricks of residential space, office and commercial space, the structure of traditional market space has maintained the original attitude. In order to reduce the cost, the markets using steel structure to achieve a large span of the homogeneous space and uniform space, and this kind of order shows a regular pattern of consistency and rigidity. The internal chaos will be covered up from the perspective of the residents by the interface of space, but only a wealth of goods and crowded people to occupy the field of vision.

This form of structure is derived from the study of the large spatial pattern of Western markets. Western market was developing based on the space of church, station, and warehouse, so the structure has inherited the large span system of truss structure. Between the pillars and columns, and between beams and beam, in accordance with the same modulus array arrangement and formed conventional space form, finally it combined with the inter booth to constitute a huge space scene, rational rigorous construction technology turn into freedom of perceptual space experience. This form of structure is fragmented by people's simulation in China. Although the structure is constructed in accordance with the same modulus with western, because there is no grand scene of church, warehouse, and station in Chines history. So the sense of the space is very thin, and the expressive force of space has been reduced gradually. In the rational construction, it is an effective way to solve this problem, so the space order has a dual expression of rationality and sensibility.

### **6.1.2 The Connection of Skeleton and Node**

The role of structure in space such as the skeleton in our body, the decoration and objects inside the space play a role of space contents to fill the space. The space skeleton can be existence independently, if there is no support and definition of the space skeleton and the space will be a place that lacking spirit of cooperation. In the construction of space order in the third level, skeletal relationship of spatial form plays a important role, mimic biological structure, parametric structure, Chinese traditional wood structure, Western stone structure in space with different skeletal relationships. In Pier Luigi Nervi's building space, the skeleton of the building is transformed into a

visual formulae, the space order is full of digital mystery. The laziness of the designer's will and the lack of the digital sensitivity will become a disaster of structural design, the neglect of the structure can only be supplemented by additional decoration, and the uniformity of the spatial order will be weakened.

The existence of the structure skeleton does not lie in the difficulty of the challenge, but lies in the ingenious idea to transmit the space expression. The structure and order of the skeleton in the market space can make the system have the ability to resist the disintegration. Under the guidance of the space skeleton, the existence of differences in the various booths become orderly, so the overall performance of the space has been improved. Whether the space skeleton relationship is correct or wrong, on the one hand depends on whether the space function can operate normally, on the other hand that it can meet the visual perception of rationality.

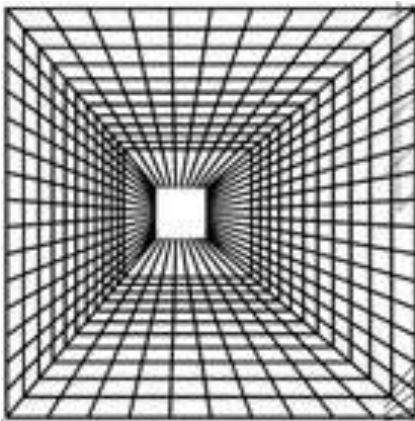


Figure6-6 Modular order in structure

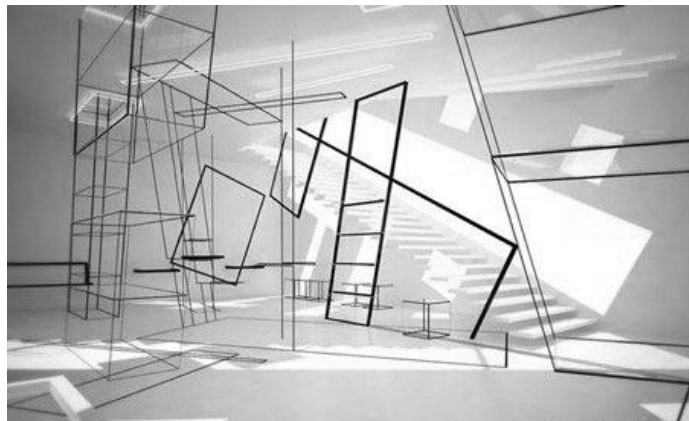


Figure6-7 Composition Relation in Chaos

Space skeleton can be stable presence is according to the reasonable match of the structure of the node connection. Because the node is a turning point in the space and the viewer can directly feel the details of the site, exposed external nodes to show the construction of the space behind the logic. The construction quality of the space depends on the local node's technological level. The viewer can grasp the design direction of the space form and feel the expressive force of the spatial details through the construction of the node's cognitive space. In addition node is constructed with the characteristics of the times, from the big wood mortise and tenon structure arrangement of Mies's compulsive precision docking, structure and time has a close relationship, and continue to develop. The detachment of the internal structure and the external



expression form makes a part of the space no longer have the opportunity to display the node connection, and when the space bring the construction of mystery to the audience, it denied the beauty of the structure contained in the node. Maybe no one pay attention to structure of urban market in the node connection, because this node compared with the dazzling array of foods, are really pales. Therefore, the expressive force of space subject to the neglected the effect of node structure connection.

In process design on the Wangjing Street market structure of bone and joint connection, according to the open and closed, free and regular spatial order demands, two construction methods, a is a uniform grid layout. Another is organic combination of freedom. In different partitions of the space to sell two ways of constructing mixed use in uniform arrangement of booth arrangement, by exploiting the structure of the free combination to create a space of tension and enhance spatial sense and sensibility of the expressive force of the spatial order.

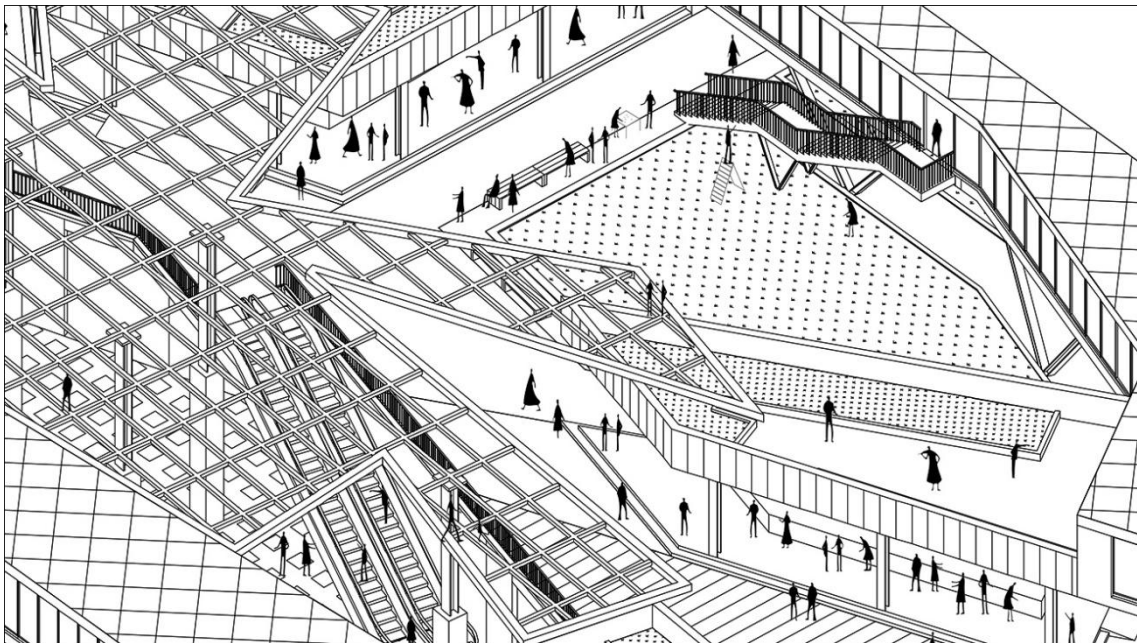


Figure6-8 Structure of Wangjing Street Market

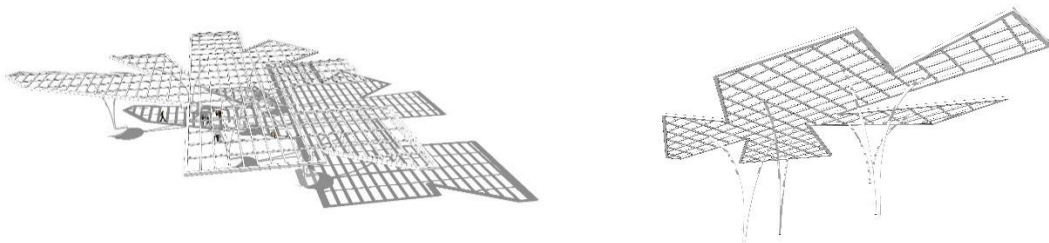


Figure6-9 Construction Test of Wangjing Street Market Square

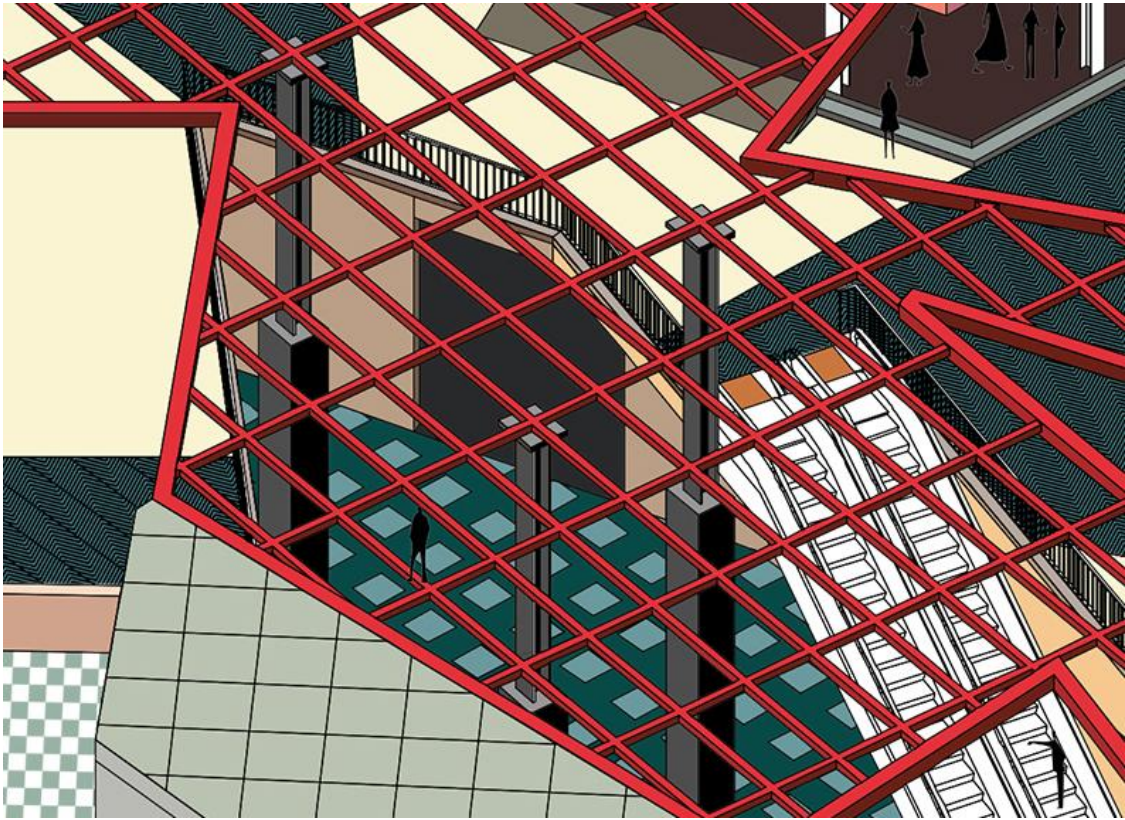


Figure6-10 Structure of Wangjing Street Market

## 6.2 Mood under Category Rendering

### 6.2.1 Spatial Differences in the Formation of Different Classifications

The determination of the space function does not represent the completion of the regional division, and the specific event and the movement orientation under the same function are the essential problems that need to be solved in the space construction. A further division is a limited word for a rough classification, and hierarchical classification makes space more clearly. Such as living space of detailed classification of the elderly living space, children living space, youth living space, dining space, but all of this kind of space can be divided into traditional pasta, barbecue, western style of fast food, these are all for the purpose of living and diet. Space is not a general design of the building space, but the need to find a specific object for the detailed division.

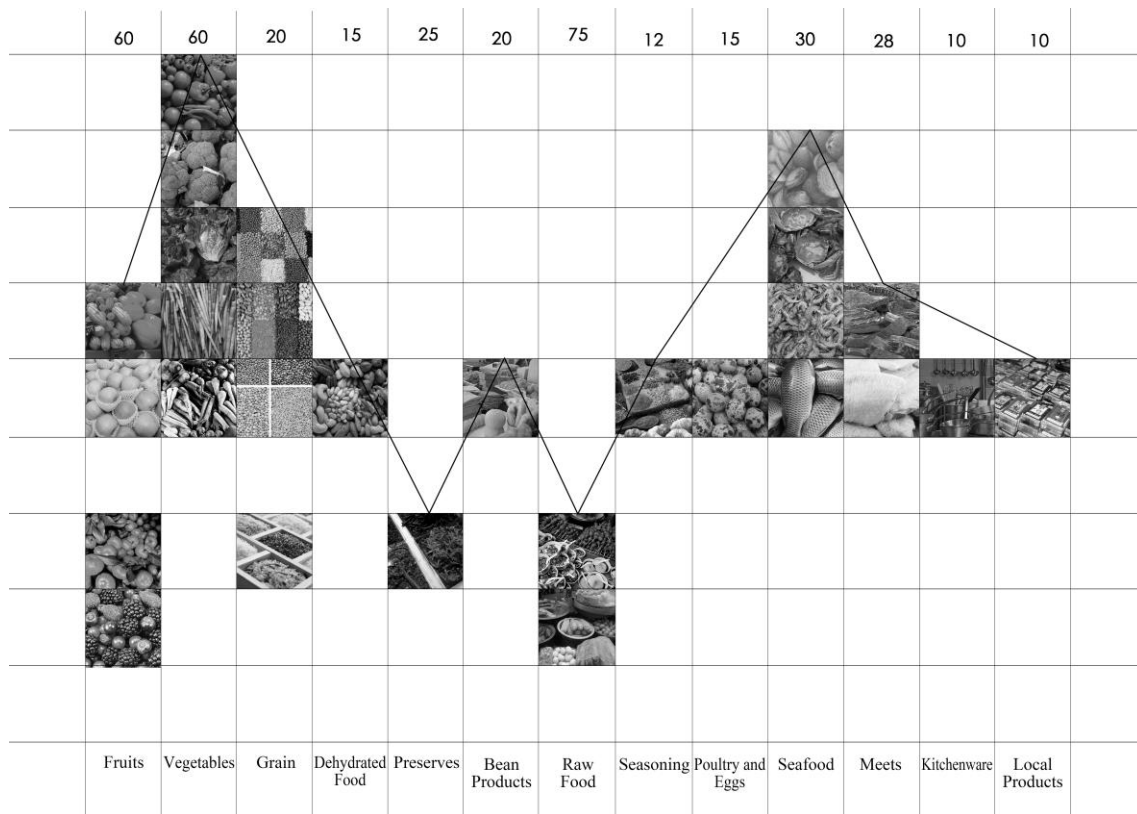


Figure6-11 Classification of dishes and space demand

The main function of the urban market is dishes trading, because there are varied kinds of dishes and under various names, so effective classification and space distinguish can provide help for the shoppers to clearly find item. From the point of view of the food itself, the differences in physical characteristics such as vision, smell, dry and wet and so on, and it have special requirements for the order of space. Different demand of existence space of dishes determined the demand of space amount. So that people make a classification of the goods that selling in food market, for vegetables, fruits, aquatic products, eggs, meat, grain, bean products, spices, cooked food, specialty, pickled, dried food, kitchen utensils, there are a number of other associated with the life of the products. Different types of differences determine the spatial pattern of change, the diversity of space is the result of the difference between different categories. Because the sale of aquatic products and fruit has a great difference, the display of spices and meat is different, so the spatial order of space needs to show different visual forms. In the classification of goods in the process, there are some ambiguous varieties, such as tomatoes can be vegetables, fruit, so spatial order can take "similar" way of dealing with the spatial relationship among different zones, commodity specific

penetrated into two different regions of space.

The traditional urban food market in accordance with the classification of goods, then use of a large open space make all the categories showcase in a same time. Fruit aromas mixed seafood smell fishy, pickles mixed into dry food, a variety of smells in the space of chaos. Everything is full of disorder and chaos, the meaning of food classification becomes blurred. Emerging community food stores and supermarkets will simply dishes with closed plastic wrap up, smell mixed although the problem is solved, the taste and flavor food market also disappear.

Kind.	Number.
Vegetables.	80.
Fruits.	90.
Meat.	30.
Seafood.	30.
Grains.	20.
Dehydrated Food.	15.
Bean Products.	20.
Pickled.	25.
Seasoning.	12.
Local Products.	10.
Others.	15.
Snack.	50.
Fast Food.	25.

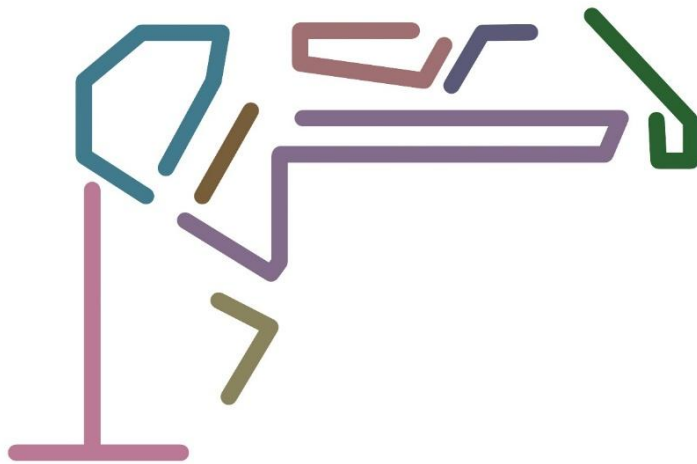


Figure6-12 space demand

Figure6-13 Different Formation in Wangjing street market

Through the analysis of the surrounding residents purchase demand for food, according to the requirements of different dishes classification space formation varies in length of space form, combined with the construction of design in other spatial hierarchy order, will different partition according to the time and the distance and similarity and difference by adjusting the position of the show to design Wangjing street food market space. The space is controlled by clearly partition of order, to eliminate the differences between categories with a state of confusion and the exact appearance.

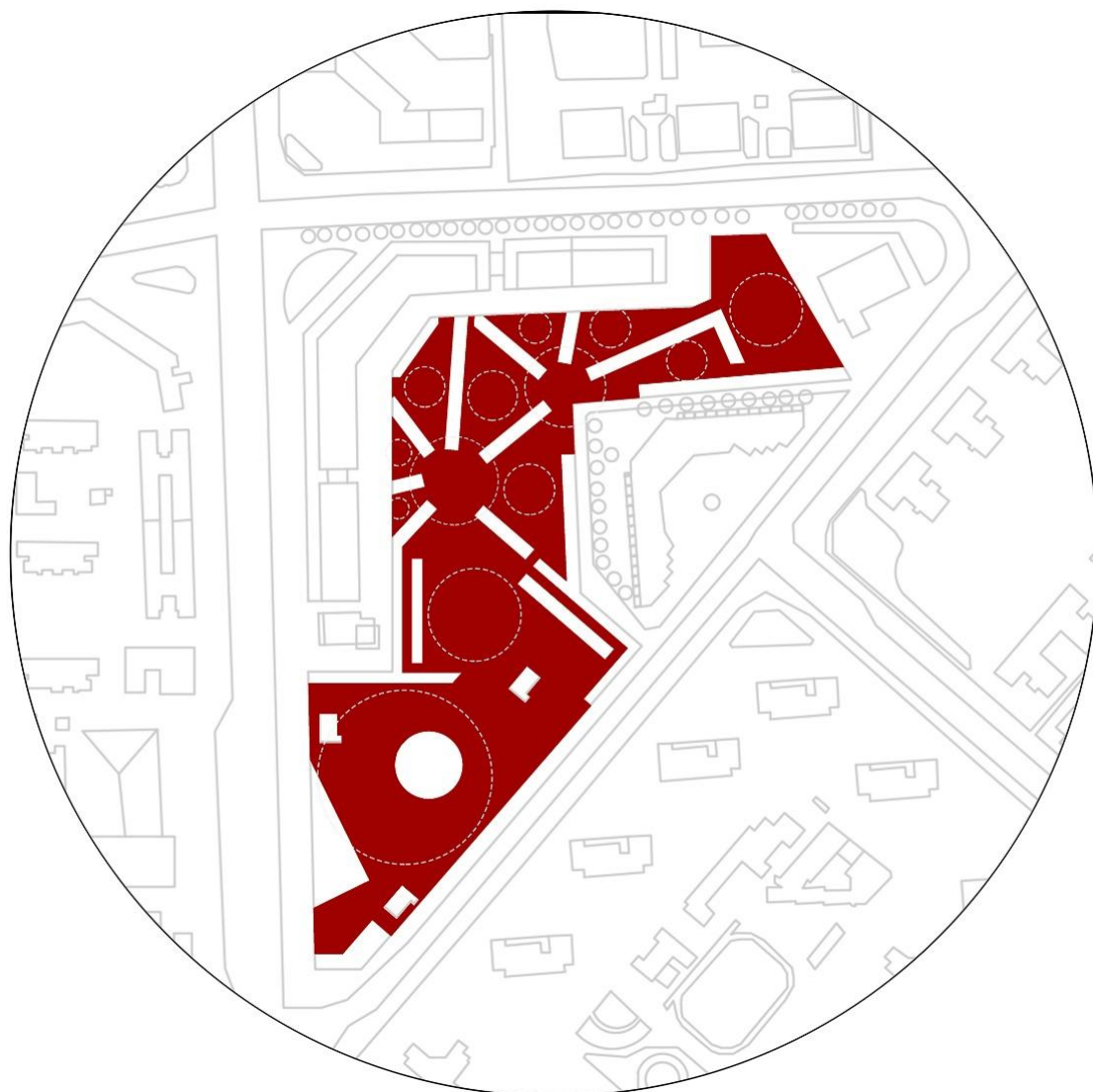


Figure6-14 Classification and Space Combination in Wangjing Street Market

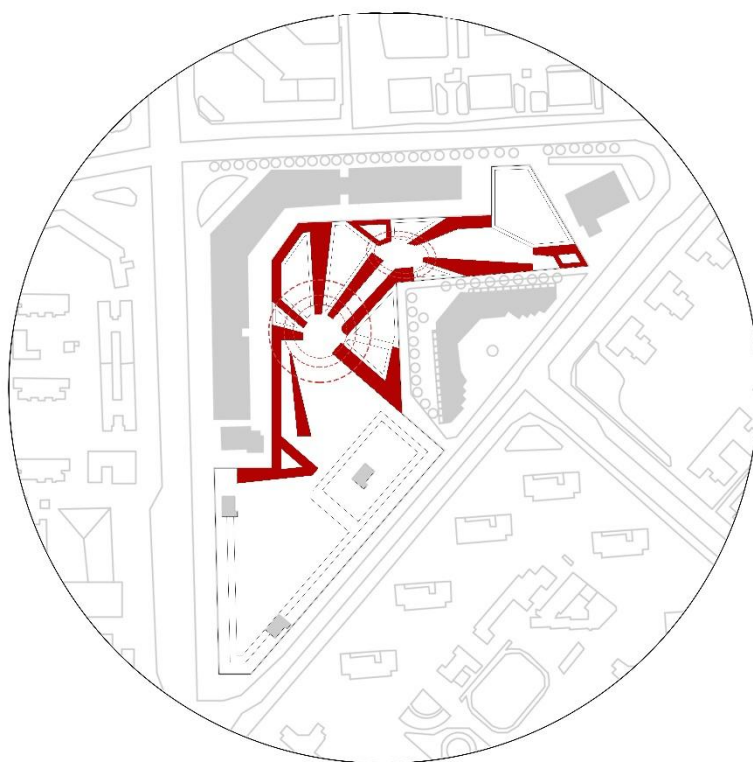


Figure6-15 Space Order Adjustment Forms to the Final Form

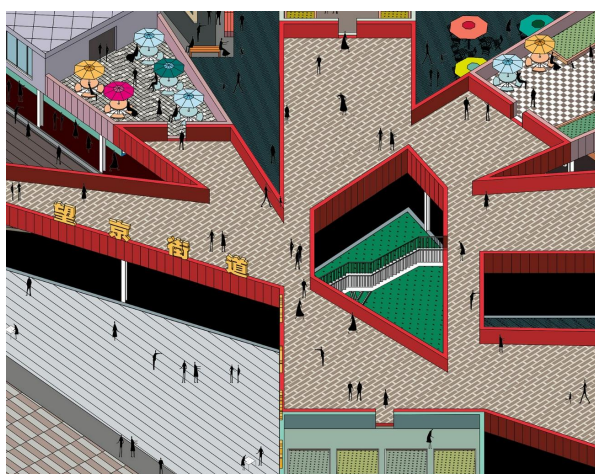


Figure6-16 Select Node 1

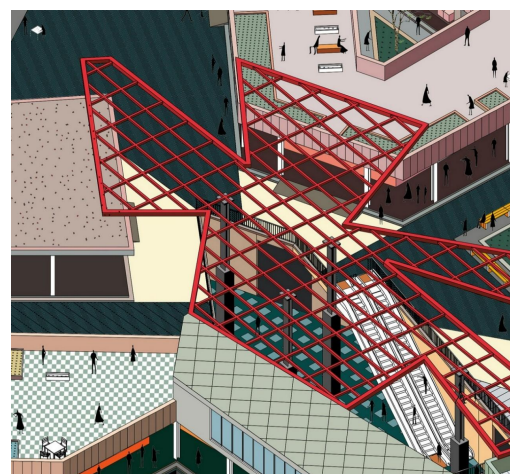


Figure6-17 Select Node 2

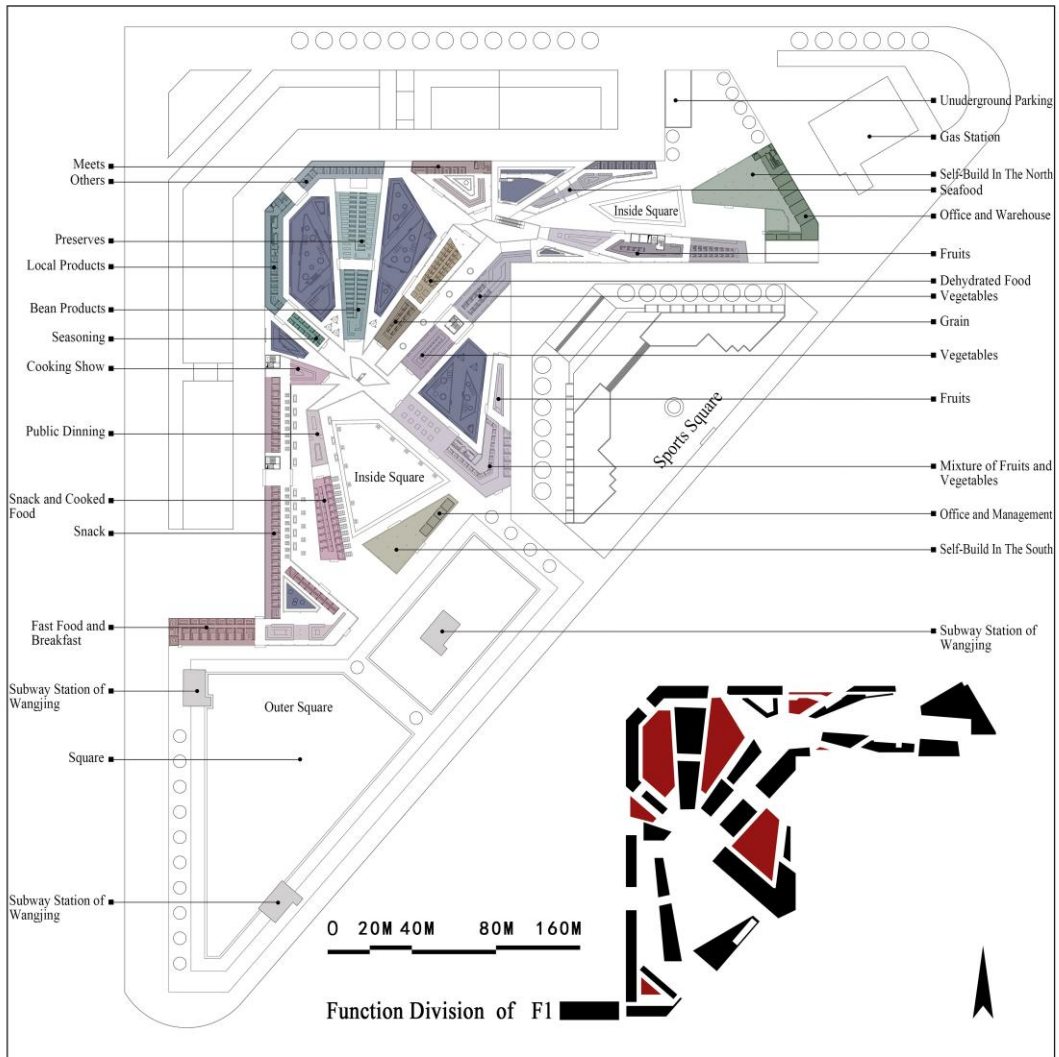


Figure6-18 Function Partition of F1

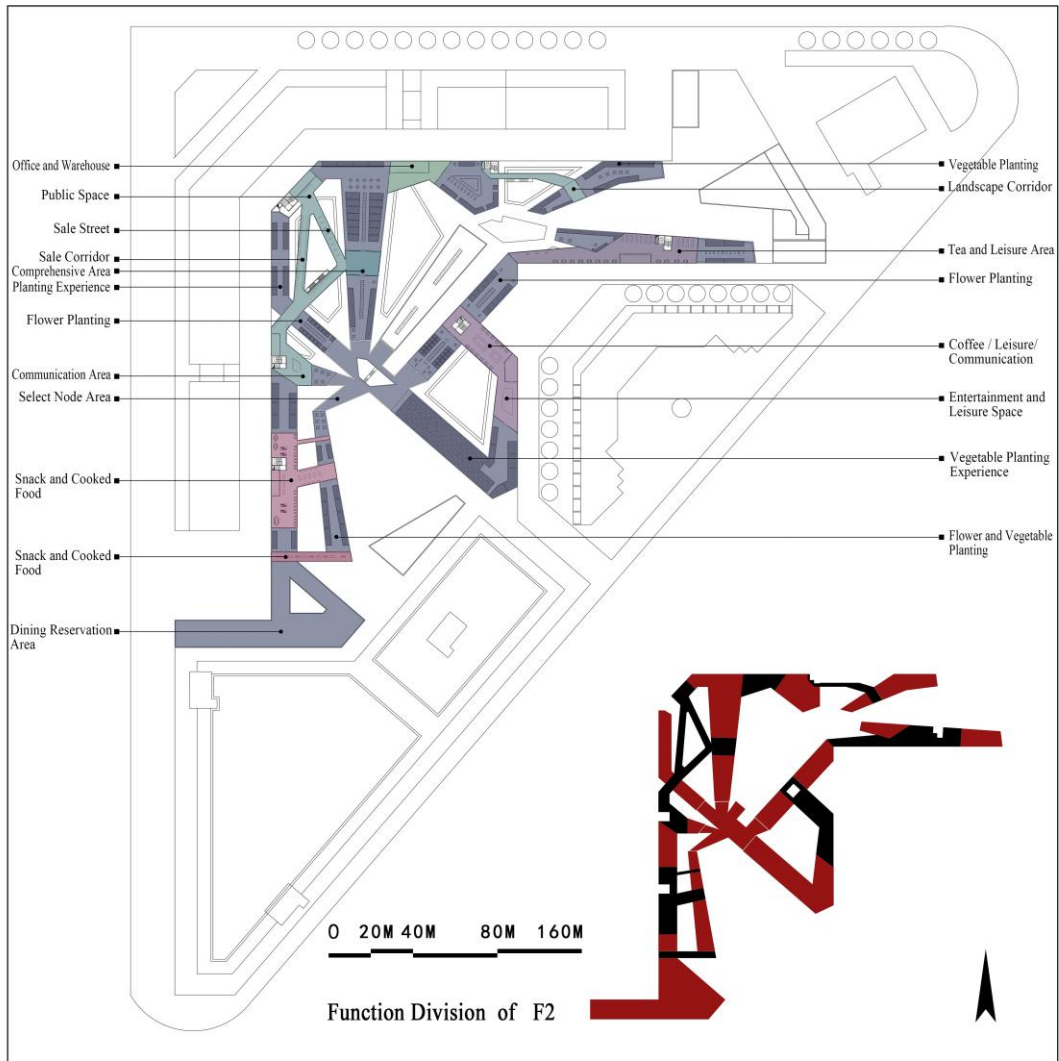


Figure6-19 Function partition of F2



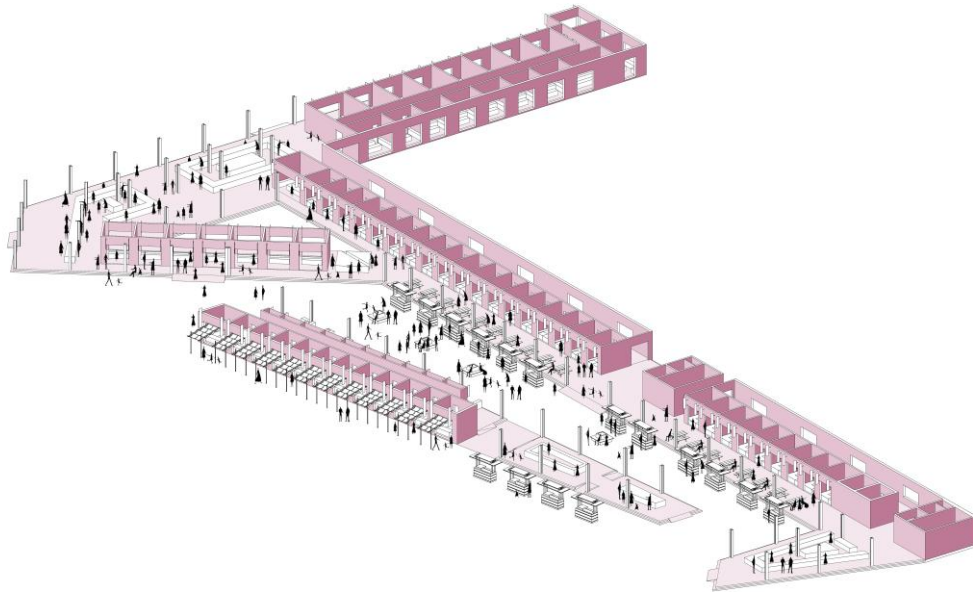


Figure6-20 Cooked Food, Snacks, Fast Food Area

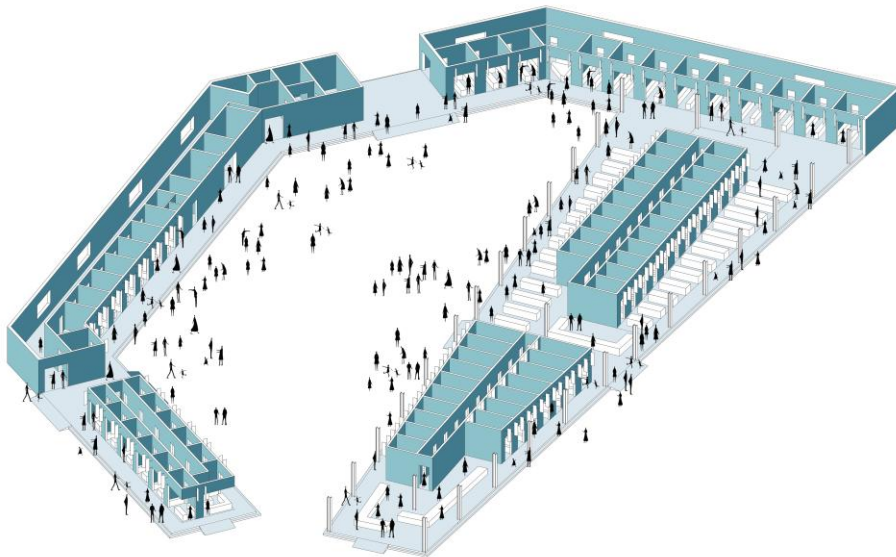


Figure6-21 Spices, Pickled Eggs, and Bean Products Area

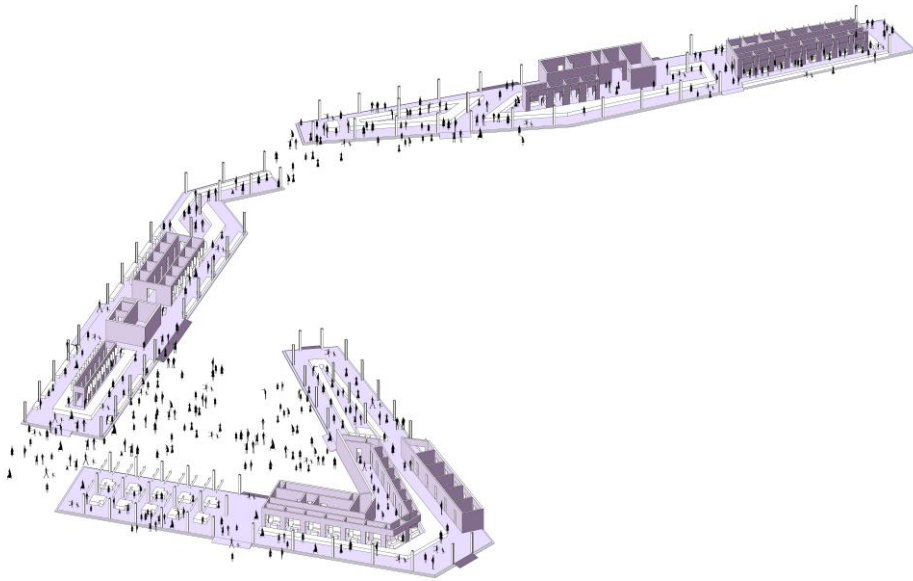


Figure6-22 Vegetable and Fruit Area

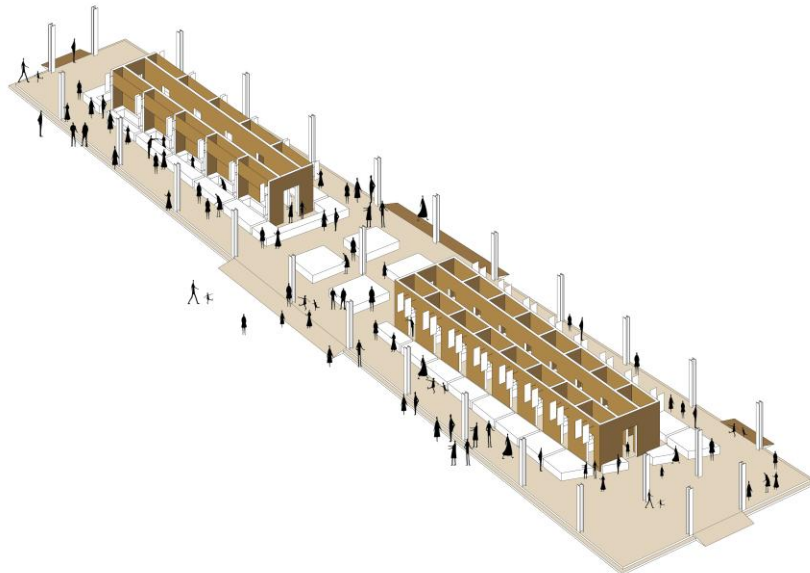


Figure6-23 Grain and Dry Cargo Area

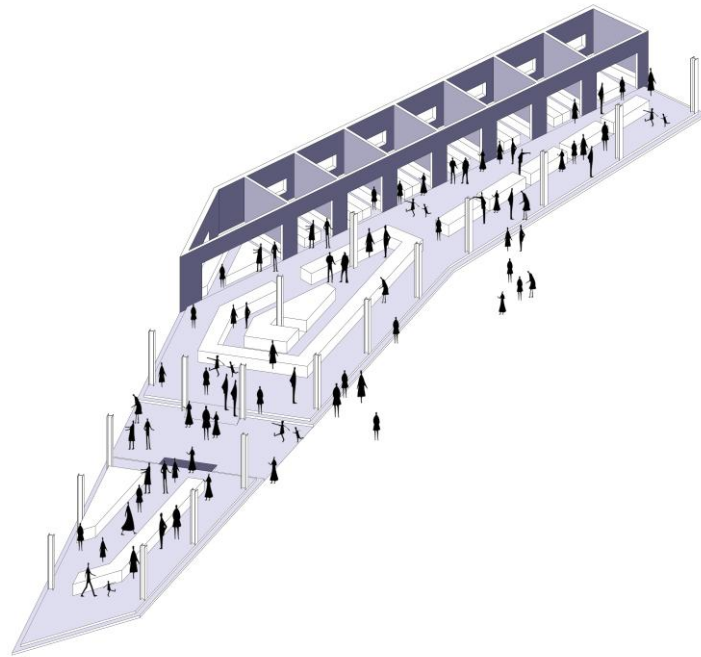


Figure6-24 Seafood Area

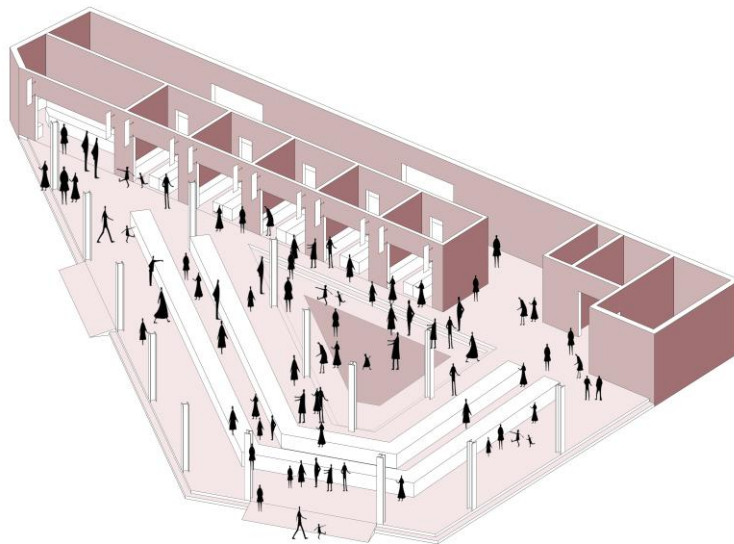


Figure6-25 Meat Area

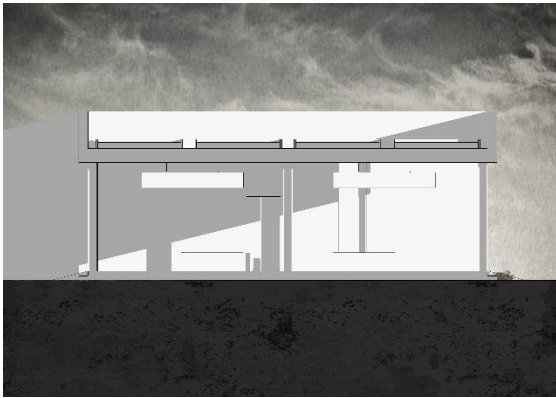


Figure6-26 Section of Fruits and Vegetables Space

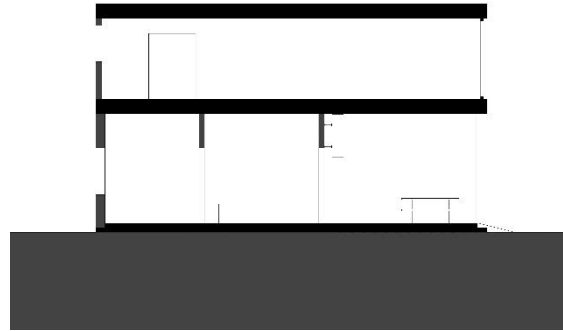


Figure6-27 Section of Snacks Space

### 6.2.2 Inner Connection in Cargo Display

In 2015, Shenzhen and Hong Kong Architecture Biennale, there is a "lost to retrieve" works. Jimenez Lai put a variety of goods he purchase in a certain order scattered in space, forming a contact network. The author tries to find the origin of order in the result of confusion, and explore the story behind the product. Every object in space has its existence rationality, things between different locations and show the way to create some kind of inner link between them, the space of all items are woven into a network of relationships formed space order, space or messy or neat experience sense contained in article formed the spatial order in. The business category of Lancaster Central Market has geographical diversification and clear regional division, and it promote consumer's choice clear and direct, so it provides a very good learning basis for us.



Figure6-28 Dishes classification (1)



Figure6-29 Dishes classification (2)



Figure6-30 Dishes classification (3)

The differences in the existence of the goods themselves produce a wide range of diversity. After the overall classification the formation of the results of category in the food market space can still be carefully classify twice, such as vegetables can be divided into root, stem, leaf, flower and fruit, meat can be divided into red and white meat. After the gradual classification, the name of a single dish became the smallest unit of classification. According to this, the author sorted out a set of relative dishes, but due to the difference of regional difference and demand, the classification of dishes can be adjusted according to the practical application. System of commodity classification of enrich the content space, fruit classification of watermelons, apples, bananas, oranges, grapes, plums, mango, pineapple, citrus, persimmons, blueberries, cherries, strawberries, aquatic products in the crab, lobster, carp, scallop, snail, grouper, squid, holothurian, cuttlefish, dry classification of mushroom, agaric, peppers, peanuts, seaweed, red dates, cinnamon, pepper, fennel, pepper, dried longan, dried orange peel, Chinese wolfberry, kelp. Regional characteristics of the diet is divided into Chinese and Western style, in the world there are Holland cheese, Italy ice cream, Japanese sushi, Chinese pasta, etc., In China is divided into East, West, South, north regional food, only Beijing area has a variety of snack food noodles, lib, cake, meat string, bean sauce, fried chop rice cake. The things of every hue, and numerous different things to put in order the same combination and can produce richness, but from the perspective of shoppers and the need for market management, these sorts of goods space need to be integrate placed, in

order to achieve the purpose of easy shopping.

This level of space order construction leads to the problem of the dishes placed in each booth, the space environment of the formation of the goods placing mode has an important influence on the public's shopping psychology. In the traditional market space, the placement of dishes are mostly dependent on the level of awareness of the vendor's own, so different vendors show different display order and sale. Most of the traders because of the lack of general knowledge of aesthetics and classification logic, most of the disorder is reflected in a disorderly stack. The display way of Modern community food stores and supermarkets provide a reference for the new style, they through the object shape, color, size, texture, price and biological characteristics are classified and placed. In accordance with the internal order, the items presented to the public a clear logic, the variety is also included in the booth transparent visible, the public to select the item when the browsing process is more efficient. Because the market space has its own characteristics, so this approach can only be used, cannot be completely copied. Vegetable market items placed in order to form the space of special image, public nostalgia is one of the key factors of vegetable market space. So the image must be the intrinsic relationship between the goods and the masses of people, goods and goods, as well as the public and vendors in order to save the magnified, and forming a rich blend of space imagery.



Figure6-31 Painting by Jingyao Guo (1)



Figure6-32 Painting by Jingyao Guo (2)

The rich variety of goods in the show of differences in the market space can make the market with a lively vitality at the same time. Rich choices make up the dull routine of everyday life, so people seems to be unable to resist the dense array of goods brought about by visual stimulation and psychological shock. In addition to the public demand for shopping, sightseeing, wandering desire can also be for the market to attract the

crowd, bring popularity. Has become the ornamental, play, experience a sense of vegetable market space, in addition to their goods with the temptation, of space atmosphere contrast the expressive force of space have with the supermarket, the greengrocer's different shopping space experience, gorgeously store is the for the purpose of conscious self-grooming. In the vegetable market space, dishes and customer is the relationship between watching and being watched, buy and buy, the commodity in the different space environment and the objective image will also change, good show ways to encourage shoppers to the senses, the impact on the public participation psychology, so the items placed gradually by operator attention. On this point, we can get inspiration from the exhibition in the museum space. Because the purpose for art and complete expression exhibits, the space intention for specific exhibits to create an atmosphere to mobilize the viewer emotion, and by the charm of the lighting and background processing of outstanding items itself, in order to reach an emotional climax.

In this design practice, in the different areas of sale stall, in accordance with the order of the space on the display of different dishes, the author carried out a different dishes place in design. In fish and meat partitions, stalls use open pattern to adapt to the functional requirements of processing, display, transportation, garbage clean-up. In the seasoning, regional specialties, the partition of the kitchen utensils, taking a small space of the interval way, through the full shop shelves will be fully displayed, in order to facilitate the procurement of public. In order to present the fruits and vegetables, and has its own charm to the public and learn from the layout of exhibition space, choose the simple form of stalls and rich fruits and vegetables form contrast. All closed space and open space for a purpose only, and that is a complete and orderly display of the rich variety of dishes themselves, for the density of balanced expression of space rendering.

## **6.3 Get Rid of the Predicament of Regional Culture Formalism**

### **6.3.1 Forming Reasons behind Expression Forms**

Regionalism is not a new vocabulary, this concept proposed mainly for tourists, workers, immigration and other foreign workers, because there are only living background differences can highlight the local characteristics, and the residents in the local environment are influenced by the local culture in the way of silent transforming

influence. Therefore to a certain extent, the residents become part of the regional culture. Many regions in order to reflect the different cultural patterns, began the restoration of the old traditional form, all kinds of traditional elements with overwhelming hit, traditional symbols of replication and the spread of the regional characteristics of real astray, the public is got confused and disoriented. The real regional culture is not the superficial expression of the form, but the comprehensive function of many kinds of natural, social and cultural factors. Including the geographical environment, climate characteristics and geographical patterns, the special way of life and labor of the residents, regional urban morphology and construction of the way, all of the different aspects telling the regional culture.

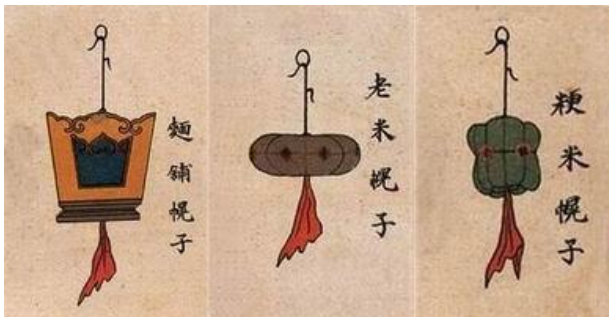


Figure6-33 Chinese Traditional Poster



Figure6-34 Posters in Modern MarketPlace

Urban markets as the city most places of the breath of life, from space to display the advertisement signboard, holidays, social activities, diet culture, street culture, urban memory, types of dishes shows unique geographical and vitality. The numerous signs in Hong Kong, like Sham Shui Po and Garden Street lined with a unique market landscape forming a special scene, this phenomenon can only appear in the land of scarce and expensive in Hong Kong high density residential environment. Feel the direct method of regional culture is observed through the eyes, clothing vendors, architectural form, space mark the viewer react in the first time, and personal experience and knowledge to determine the type of culture, the way of cognition for local formalism flooding provides protection. Participate in local activities, in-depth real life, in the real use of the market space process, the spatial characteristics of the place will naturally reveal, and this is because of the changes in the context of the existing experience to judge the unfamiliar. The local characteristics of the language and words in urban market place could be expressed from the different users of the crowd people, some of the differences in the formation of the text, and maybe only be reflected in different countries or different ethnic groups.





Figure6-35 Sham Shui Po, Hong Kong



Figure6-36 Garden Street, Hong Kong

### 6.3.2 Space Needs Create Cultural Patterns

The integration of the world has ended the history of regional construction, and all over the world began to advance towards the theme of efficiency and economy. Because architecture, clothing, customs, food and create a regional culture is the local residents to meet the needs of the life of the unexpected results. Before the formation of culture, only the natural differences between regions, but the role of people is the final form of regional cultural differences. The special cultural connotation of space exists in the construction of the space, the order and logic, so space construction is based on a true representation of the characteristics of national survival. The spatial construction of formalism is based on the visual angle, and too much emphasis on the form of the regional culture will eventually become futile to hypocrisy.

Vegetable market is the most grounded places in the city. It focuses on local people's interests, habits, customs, and the ways of thinking. Long-term living in the geographical environment in every individual is indirect expression of regional culture, based on the needs of local people to create space forms convey the cultural orientation of the local. Munich grain flower market area into being unique market landscape, local people and the taste of life are inseparable; Budapest central market for demand from tourists from all over the world, the introduction of the ethnic arts and crafts for sale. In the long history of China, information occlusion of traditional society, flags signboards become inevitable, the actual demand is the formation of a "in the water village and mountain wine flag flying" unique traditional Chinese imagery. In contemporary society, the development of information technology the more convenient dissemination of information channels, but some of the space still in use this form, so it appears unavoidably some arty.



Figure6-37 Viktualien Market



Figure6-38 Lszamu Vasarcsarnok

Wangjing street market is in the high latitude of the Northern Hemisphere, in winter it is very cold, and always been covered by snow, and also by the impact of seasonal wind, so keeping warm function become the first problem need to be solved in market space. But in the northwest of the site, the formation of the semi enclosed space in the form of a semi enclosed space for the market to resist strong winds set up a natural barrier for the vegetable market space to keep the heat problem to reduce the pressure. Due to the widespread hot summer phenomenon, the need to solve the problem of heat and ventilation market space. In addition, the monsoon rain, seafood, meat and cooked food production put forward the space requirement for the water intake and the water discharge. In the design process of the program, in order to strengthen the main point of the paper, and make the exposition of the construction of the space order is more clear, so for the rigid norms of space construction and the basic space requirements, and in the case of the need that has mentioned above, the author does not do too much participation and intervention. The main focus is placed on the spatial form of the space order, so as to form the unique spatial culture form.

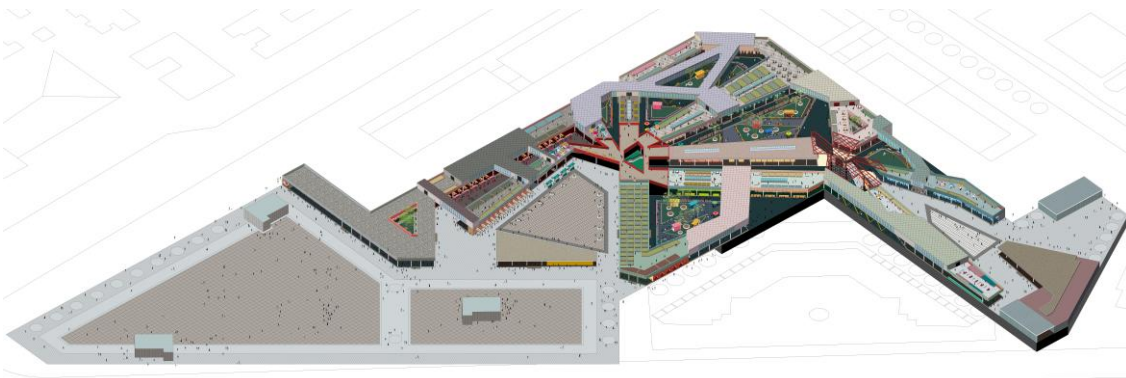


Figure6-39 Final Project

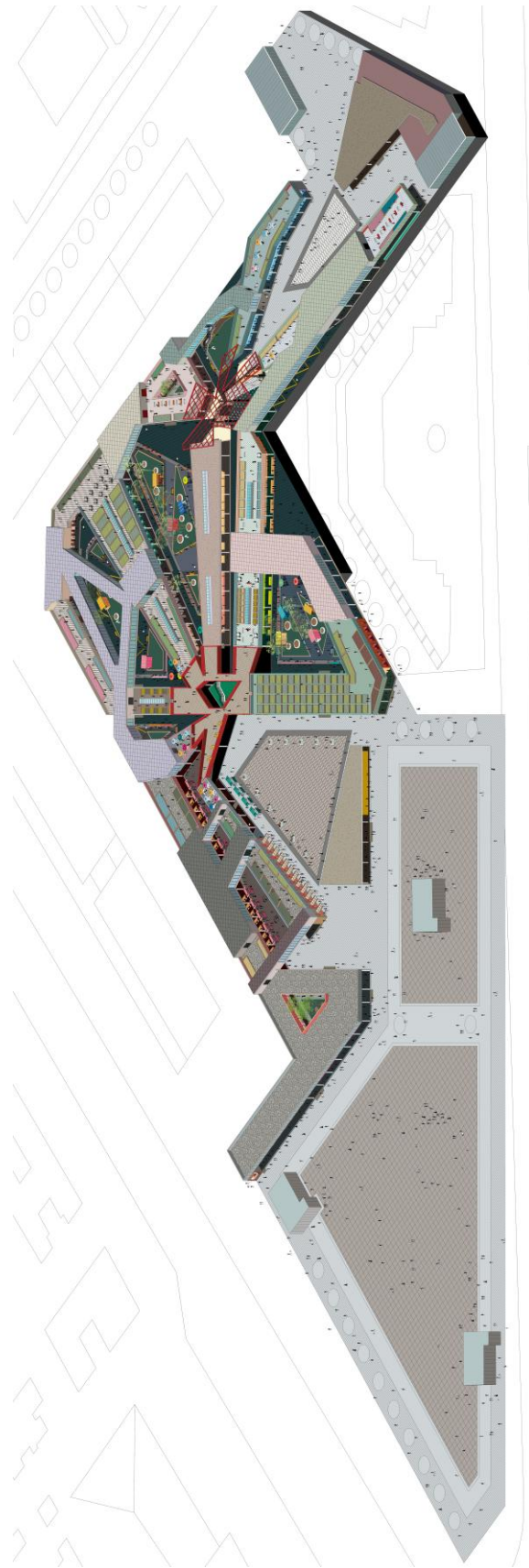


Figure6-39 Final Project

## Chapter 7 Conclusion

"In a time of increasing overflow questions of the form game and a new avant-garde, it would be very helpful to re - examine the architecture as a kind of art that is of great significance." <sup>①</sup>This is Harry Mar Gore Leif's evaluation comments in the book "*construction of cultural studies*".

The essence of space construction is the process of space order establishment. The existing proliferation of formalism phenomenon in Space design, made the space design work simplistic and then using a superficial way of expression showing to the viewers, but the ambiguous context, disorderly content constitution, and random expression of space, bring confused to the space interpretation by human. Modernism, Post Modernism and Deconstructionism are all by means of dismemberment and recombination the spatial relations, in an attempt to breaking the basis of old construction to forming a new space order. The Constructing Logic of the space order avoid the single and formal way in the processing of space design, but through the research and analysis of complicated relationship between psychological needs, social relations, and the path of functions. In this way, according to the conscious integration to constitute a space system, and make the space order come into being, finally through the order generated to create a special form of the space. The Space order construction will be composed by putting every unit, which was consist in the whole, in the proper location of the space according to the inner relations, so it will make the space to stay in the best state. The natural purpose of space order is to deal with the various elements between the different relations in whole space.

The lack of space order make the space difficult to understand and control by users, due to the complicated relationship interwoven into a network without a clue, so the confusion of space order let the urban market to lost ability that refresh vigor and vitality, and it will be the main restriction factor reason that urban market space remain stagnant in space design. The concept of space order intervention has a clear direction in the space construction, so the space will be constructed by the logic from internal to external, in this way the occurrence of formalism can be avoided, and it provide a

---

<sup>①</sup> Chen Zhonggao. *Re-cognition of the Architecture Decoration under Tectonics*. Architecture & Culture, 2015.05

theoretical basis for the development and innovation of space design. The construction of urban market space order can be divided into three steps, and from the third chapter of this thesis that began to discuss the process of space order construction. The third and four chapters are the first step, and it is the most important step in the construction process. The fifth chapter of the article is talking about the construction logic of urban market space order from a perspective of urban relations with the market. Finally, the sixth chapter is writing about the relationship between internal objects in market space, on the one hand it has the most closely relationship between the users and the goods, on the other hand it will be the intuitionistic way to understand the construction process of the space order.

Firstly, the self-construction of space order provides possible to understand the space clearly for the space user, but without instructions and guides in the space environment when someone go through. The space form shaped by space order implied that the way of movement and the method of using by people. The intensity of self-motivated that people to the space was decided by the cognitive ability of people to the space, and disordered space make the cognitive function of people down to lowest level, at the same time chaos environment caused unstable activity of people's psychological. The line of people's sight began to dissociation and attempted to search for the rules of space changing, in order to finding the correct ways of using and walking direction. In urban market space, the things that buying and selling dishes, transporting goods, cleaning and management the space, has become the constraints factors of space order construction, however the space order that strip off with space user will result in a consequences that the process of using ultimately lead to a chaos space.

Secondly, urban market space establish external order based on the complicated relationship between internal and external space, to realize that the space order between urban and city can exchange with each other, and also realize urban market inner space re-docking with city life and city environment. It can establish the three-dimensional contact between urban market and city, so the texture of urban structure will tend to more and more integrity.

Finally, urban market establishing space order by the minimum monomer, which called space content, to achieve the final completion of space order, but the construction of this step is different with the first step. The self-construction of space order aim at

researching of the combination relationship between each space unit, but the construction of internal content order mainly focuses on internal relations between the different goods in the space.

The construction of urban market space order is not only one way, so the purpose of this paper aims at through a wide range of thinking and discussion, trying to change the single business model of markets. In the process it could active the atmosphere of life and humanistic care of urban market. The design work of this author proposed a bold attempt for a new-type trade relations and spatial patterns, through the construction of a new space order make a response to the basic problem of contemporary urban markets questions, like dirty, chaotic, and poor.

The construction of spatial order provides a readable, considerable, and sensible space environment to the people, and in an indirect way to extend the potential of cognitive experience and perceived intensity of human. When the construction of space order were put in a more broad range of discussion, so different space has different construction of mentality and method, for example office space, commercial space, living space, leisure space and so on. According to the different objective population and different usage mode, it will form different construction sequence of space order, thus forming a mix of space forms. In the process of space order construction, clearly thinking and coherent structure makes the space out of the plight of formalism, and it is pay attention to forming space by natural generation from the inside to the outside. In the end of space establishment, it could provide a relatively complete and scientific basic theory for the construction. Different schools of architecture, different designers, and different types of spaces are likely to form their own unique space order construction methodology, so space design cannot to use a unified and fixed standard to measure right and wrong of space order. We also do not need to develop a set of strict rules to guide design works, the construction of space order in specific environment provide a different way of thinking to obtain a reasonable result.

## Bibliography

- [1] Tang Fenglong. *Organic Order and The Nature of Material-Frank Lloyd Wright*. Beijing: China Architecture & Building Press, 2015.06
- [2] Jiang Shan. *Analysis On The Song Marketplace Building and Space From Song Painting*. Huazhong Architecture, 2012.08
- [3] (Song Dynasty) Meng Yuanlao. *The Dream of Tokyo*. Zhengzhou: Zhongzhou Ancient Books Press, 2010
- [4] Tang Fenglong. *Interval Order and Distinction Between Things: Louis Kahn*. Beijing: China Architecture & Building Press, 2014. 06
- [5] Yan He. *Anchoring Point of Architecture-Reading On Steven Holl and His Works*. New Architecture: Review, 2003.08
- [6] Zhao Juan. *Analysis of The Relation Between People's Behavior and Space Order*. Shanxi Architecture, 2007
- [7] Colin Rowe, Translated by Tong Ming. *Collage City*. Beijing: China Architecture & Building Press, 2003
- [8] Francis Dai-Kam Ching. *Architecture: Form, Space, & Order*. Tianjin: Tianjin University Press, 2003
- [9] Jahn Gehl. Translated by He Renke. *Life Between Buildings: Using Public Space*. Beijing: China Architecture & Building Press, 2002
- [10] Matthew Carmona, Steve Tiesdell, Tim Heath, Taner Oc. *Public Place Urban Space-The Dimensions of Urban Design*, Routledge,2010
- [11] Roger Trancik. Translated by Zhu Ziyu. *Finding Lost Space: Theories of Urban Design*. Beijing: China Architecture & Building Press, 2008
- [12] Tang Fenglong. *Homogeneous Structure and Clear Construction: Mies Van Der Rohe*. Beijing: China Architecture & Building Press, 2012
- [13] Victor Papanek. Translated by Zhou Bo. *Design for The Real World*. Beijing: China CITIC Press, 2012
- [14] Cui Tong. *Order Between Space*. Architectural Creation: Architecture Firms Files Portfolios, 2010 (5)
- [15] Huang Jing. *Initial Analysis On The Construction Culture*. Shanxi Architecture, 2009 (4)
- [16] Paul Laseau. Translated by Qiu Xianfeng. *Graphic Thinking for Architects & Designers*. Beijing: China Architecture & Building Press, 2009
- [17] Wang Fangji, Zhang Bing, Shui Yanfei. *Home Above Market*. Shanghai: Tongji University Press, 2014.12
- [18] M.Elen Deming, Simon Swaffield. Translated by Chen Xiaoyu. *Landscape Architecture*

- Research*. Beijing: Electronic Press, 2015
- [19] Kevin Lynch, Gary Hack. Translated by Huang Fuxiang. *Site Planning*. Beijing: China Architecture & Building Press, 2012
- [20] Adrian Franklin. Translated by He Wenyu. *City Life*. Nanjing: Phoenix Publishing & Media Corporation Limited, 2013.
- [21] Xing Cheng. *The Role of Traditional Market in Urban Revitalization* [Master Degree Thesis]. Hefei: Hefei University of Technology, 2012
- [22] Hu Shuangjing. *Research on Public Market in Contemporary Beijing Old City* [Master Degree Thesis]. Beijing: Tsinghua University, 2014.05
- [23] Yuan Huoqin. *The Inspiration of Design From Markets—The Emotional Design Under Experience Economy*. SHEJI: Theory, 2012 (2)
- [24] Zhong Junli, Zeng Yijun. *Healthy Design for Unartificial Aeration of Indoor Food Market*. Chongqing Architecture: Architectural Design, 2014 (1)
- [25] Wei Zhiting. *Structure Performance Research Basesing The Technology Support* [Master Degree Thesis]. Tianjin: Hebei University of Technology, 2007.11
- [26] Yuanhai Beibei, Kong Yuhang. *Tectonic Perspective*. Chinese and Overseas Architecture: Opinion, 2009 (6)
- [27] Chen Wang. *The Image of The City In The Buildings-The Analysis of Rem Koolhaas's Architectural Thought And Works* [Master Degree Thesis]. Tianjin: Tianjin University, 2010.06
- [28] Chen Zhonggao. *Re-cognition of the Architecture Decoration under Tectonics*. Architecture & Culture, 2015.05
- [29] Wang Xinzhi, Ding Xinyu. *The Beauty of Market/SHOPPING*. Taipei: Rover Culture Corporation, 2010
- [30] Editorial Committee of Ci Hai. *Ci Hai*. Shanghai: Shanghai Lexicographical Publishing House. 2010.
- [31] Louis Albrechts, Seymour J.Mandelbaum, *The New Work Society-A New Context for Planning*. Taylor & Francis. 2005



## **Acknowledgements**

In the researching process of my topic, I have encountered a lot of theoretical confused and puzzled. Teacher's carefully guidance and friend's pertinent advices make me benefit a lot, so I sincerely thanks for my professors who give me careful guidance and careful consideration, such as Pro Piccinno Giovanna and Pro Luca. Thanks for all the teachers of the thesis committee during the thesis proposal, the pre defense period and final reply, because on the subject they give me a lot of criticism and suggestions, so the successfully completed of writing and designing practice is inseparable from the teacher's care and help. Moreover, in the process of researching, although there are many difficulties, but during the wide range of discussion and communication with my classmates and friends, I have got a lot advises in a timely manner and it made me recognize and correct the mistakes and shortcomings existing in the process of research. All of this enhanced my confidence to the research results, so I'd like to say thanks and give the best wishes for them who and helped and take care of me.

Because of the master graduates is approaching, when I look back to the postgraduate times of the three years, which is full of infinite regrets, there are both hard and bitter processing, and also happiness and relaxed time. In addition to the gains on academic learning, the deeply friendship that established with my teachers and classmates was equally precious. In this case, thanks for my classmates and friends, such as Xu Sha and so on. Whether in the learning time or living time, they gave me a lot of help and support, so that I can successfully solved the problems that I meet, and tide over the difficulties.

Furthermore, in year of 2014 in Italy, I have got a lot of new friends during the learning semester in Politecnico di Milano, so I would like to say thanks for my landlord and especially for my good friends Claudia Mastrantoni and Elena Besani and so on. Thanks for their help and consideration that it makes me pleasantly finish the learning time in Milan.

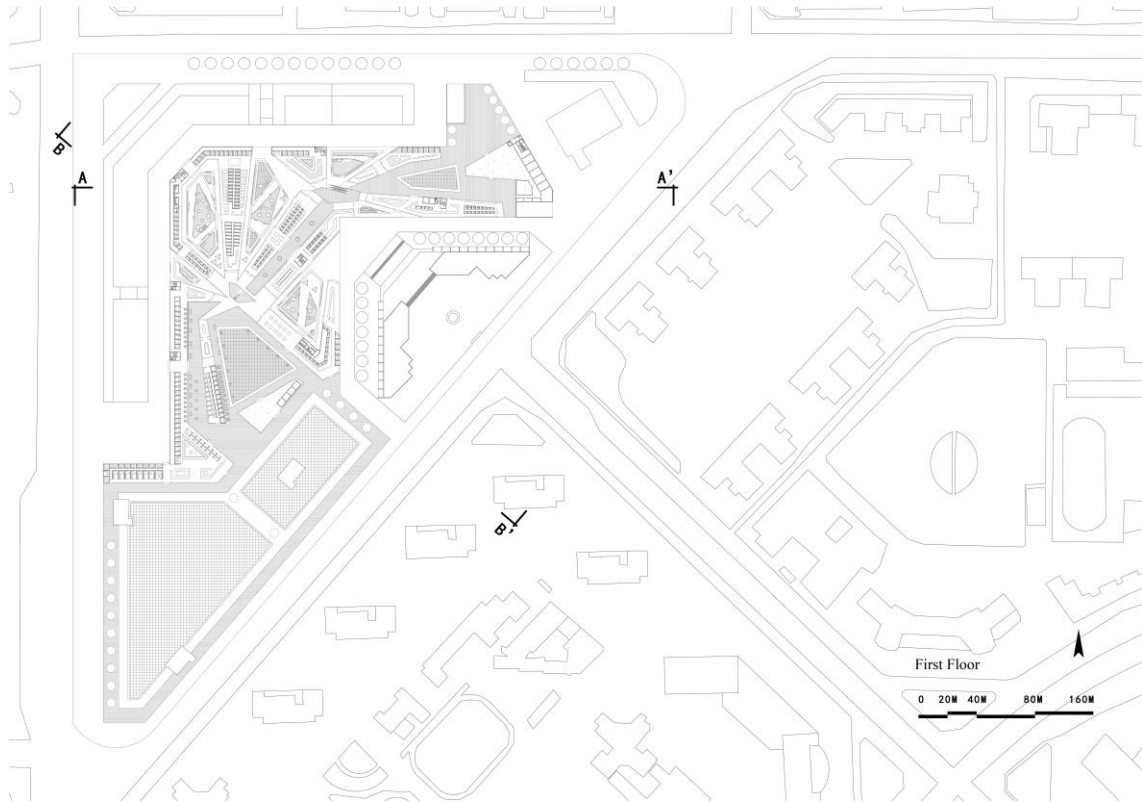
Finally but important, I would like to thanks to my parents and families, because of their hard work and support that I could complete my learning career successfully, so I hope that my parents will be always healthy and happy forever. Thanks for the school, thanks for my friends and relatives, and thanks for all the people who helped me with much kindness. Thanks for the authors who provided the reference materials and works for the graduation design and graduation thesis, I sincerely wish that all of you continue to forge ahead and never scale new heights in the future days.

## Statement

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix



Appendix 1 First floor

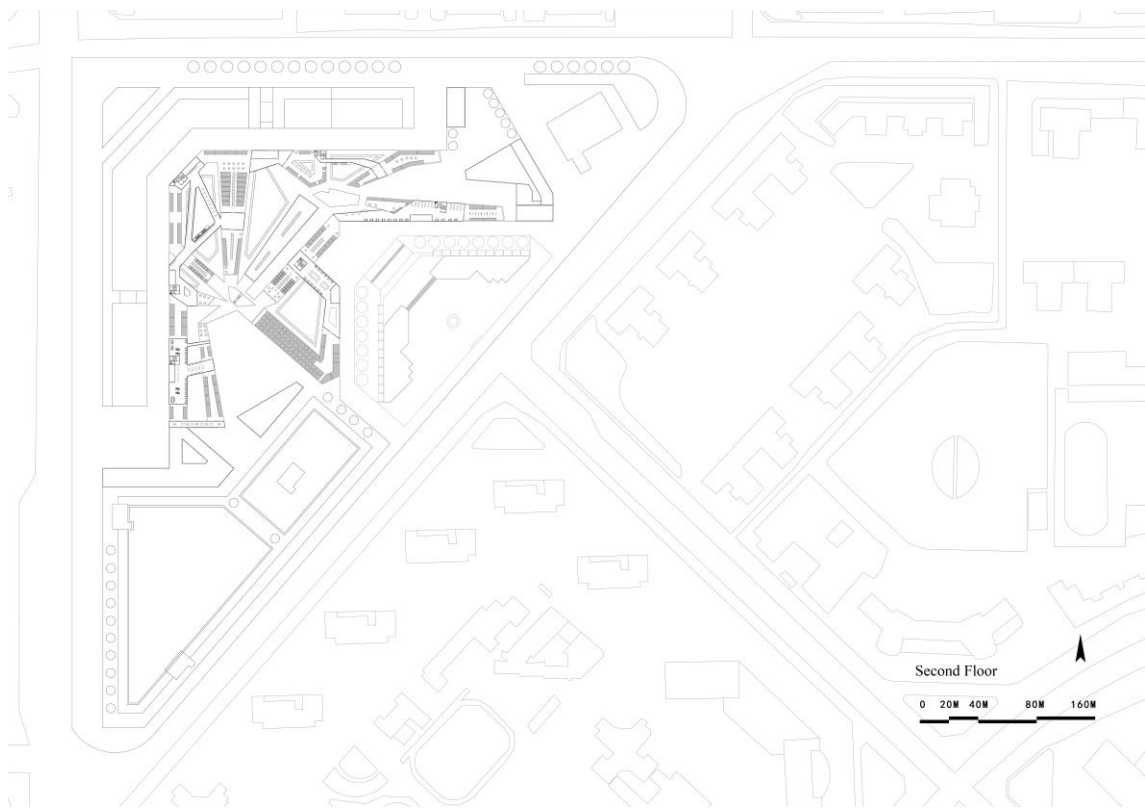


Appendix 2 Section A-A'

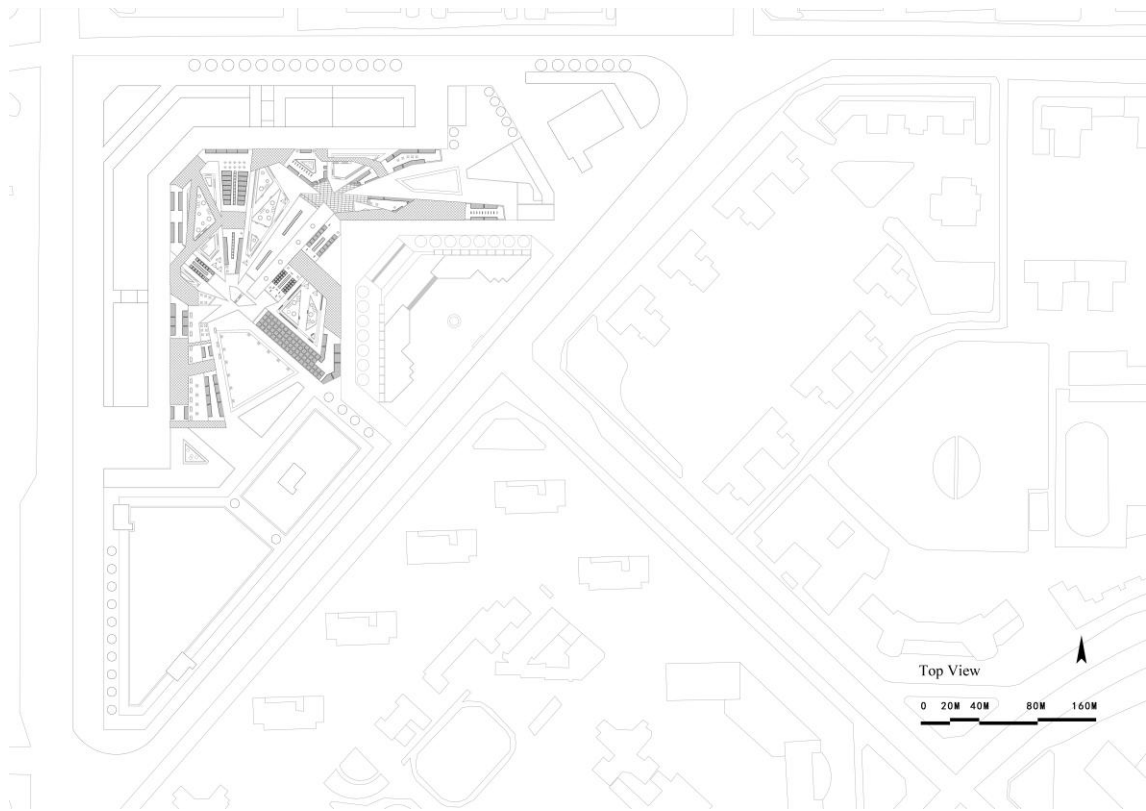
Appendix



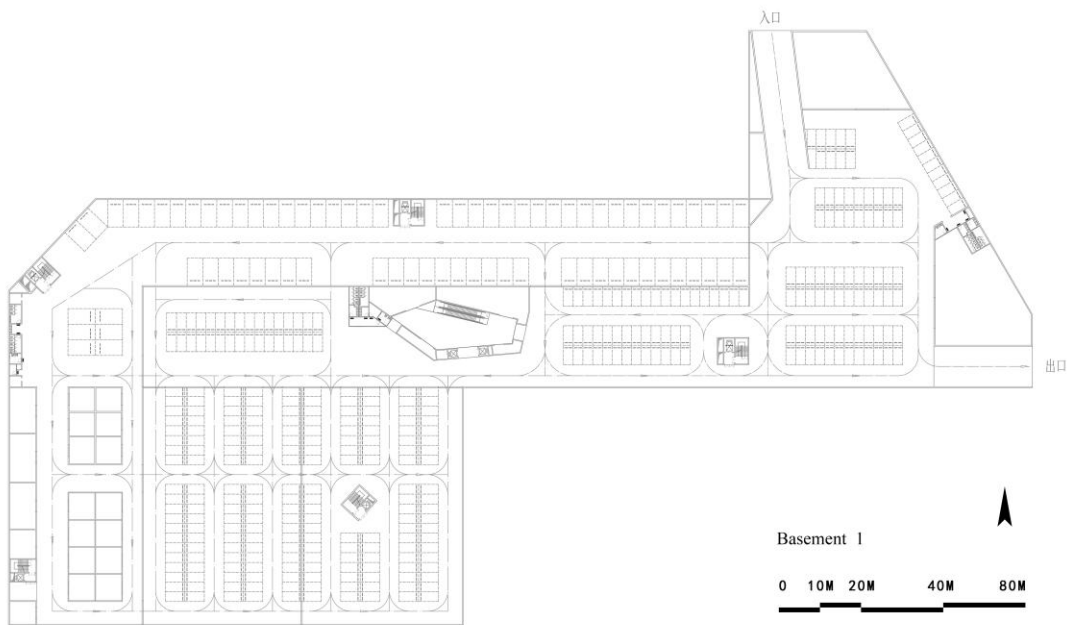
Appendix 3 Section B-B'



Appendix 4 Second floor



Appendix 5 Top view



Appendix 6 Basement one

## **Personal Resume / Published Academic Papers**

### **Personal Resume**

Born in May 06, 1989, Shandong Province, Heze. In September 2009, the author was admitted to, Department of Environment Art Design, Academy of Arts & Design, Tsinghua University, major in interior design, obtained a bachelor's degree in literature in July 2013.

In September 2013, the author got admission to Department of Environmental Art Design, Tsinghua University without examination. In March 2014, the author got opportunity to study in Politecnico di Milano for a Master Degree of Science, major in interior design. In February 2015, the author returned to Tsinghua to continue his study career for his Master Degree of Art.

### **Published Academic Papers**

[1] Liang Yingyu, Liu Beiguang, *Space Order of Construction Logic*, Design Magazine, APR.2016, Already Published. ISSN1003-0069.