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URBAN COMPLEX VALUE STUDY BASED ON MANAGEMENT PRACTICE OF CHINA CENTRAL PLACE

FANG CHAO

SINGAPORE MANAGEMENT UNIVERSITY 2019

Urban Complex Value Study Based on Management Practice of China Central Place

FANG Chao

Submitted to Lee Kong Chian School of Business in partial fulfillment of the Requirements for the Degree of Doctor of Business Administration

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SINGAPORE MANAGEMENT UNIVERSITY

2019

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Declaration

I hereby declare that this dissertation is my original work and it has been written by me in its entirety.

I have duly acknowledged all the sources of information which have been used in this dissertation.

This dissertation has also not been submitted for any degree in any university previously.

Signature:

FANG Chao

9 December 2019

Urban Complex Value Study

Based on Management Practice of China Central Place

FANG Chao

ABSTRACT

In recent years in China, with the rapid development of China's economy, the acceleration of urbanization, the extension of city size and the rapid growth of urban population, living conditions, traffic and environment in the cities are getting worse and worse. Under this background, urban complex integrating a series of functions like "living, business, office, tourism, culture and entertainment etc" has become popular with the urban administrators and developers in many cities. Generally, no matter how the urban complex develops, it will greatly affect the market, urban development and social development.

In less than 30 years, there have been many enterprise giants with an annual sales volume of more than 100 billion. However, it is difficult for these enterprises to go further if they still follow the traditional mode - progressive development. Especially for those giants who majorly depend on land banking, they are being trapped by the business development modes. Under this background, they are keeping a close eye on the great profits provided by

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superior urban complex.

In some cities in Mainland China, urban complex is facing severe

problems - the development speed and quality. Of course, superior urban

complexes can play a role as an engine to drive the urban development but

there are still urban complexes which fail their functions. Therefore, it is quite

necessary for us to re-tease the value or urban complex and figure out the key

factors affecting urban value, try to get urban complex developed rationally.

In this paper, the management and practice of China Central Place -one

of the largest urban complexes, which is responsible for its own planning,

development, construction, management and operation, is used as an example,

this paper teases the true value of urban complexes by using principles related

to urban planning, architectural design, management, economics and

sociology. Also, this paper teases the key factors determining the urban

complex value, by which logic and mechanism used by urban complex are

figured out. What is studied in this paper helps to widen new eyesight for the

academicians, real estate developers and urban administrators, and then they

can better know about and master the development laws of urban complex.

Accordingly, urban complex in China can be developed in a healthy and

high-quality way.

Key words: Urban Complex, Value, Sustainable Development Capacity

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Acknowledgement

At the time when my paper is almost done, I looked back to the past two years when I was full of concerns and anxieties, worries and happiness, business and helplessness, I got a complicated feeling. By now, I've engaged in this field for more than 30 years and I have formed a systematic opinion to urban complex, these are what I have obtained, which would always help me to make my dream come true. Here, I would like to share all what I had with you, hoping that I can provide you with useful and beneficiary experiences. However, I once stopped by my busy work and great concern of my theories and knowledge. But today, I made it. So I really appreciate my study experience in Singapore Management University and Cheung Kong Graduate School of Business.

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During the time when I studied in Cheung Kong Graduate School of Business, I was benefited a lot by exchanging with my classmates. I broadened my horizon and it helped me find good methods and materials for my study. During the time I was working on this paper, employees from Operation Department (both administrators and ordinary employees) provided large amounts of data and information, helped me with the spot inspection. My own employees also found large amounts of materials for my study. Anyway, they all helped me a lot, thank you so much!

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Chapter 1 Preface

1. Purpose and Meaning

1.1 Problems

Urban complex has been developed since 1990s when real estate development was started. Under the background that urbanization in China is being developed rapidly, urban complex is being used as a key measure by urban administrators for urban development and industrial upgrading because urban complex owns some unique advantages. What's more, urban complex is quite popular with the developers. Currently, urban complex is experiencing a development boom.

It is known that each urban complex has the common features like super-big size, locating at the downtown, superior traffic resources and large amounts of investment. Generally, no matter how the urban complex develops, it will greatly affect the market, urban development and social development.

The most direct presentational feature of urban complex is that whether it can well play its urban value. The fact is that the understanding and study done by industrial peers and academic circle to urban complex is still experiencing the stage of exploration. This is because there are some historical reasons and realistic reasons, the theoretical research in China is being left behind by other countries. As a result, understanding on essential features of urban complex, especially the value system of urban complex, is

not systematic and deep enough. It is difficult to well master the inner mechanism affecting the value system of urban complex. So it severely affects the healthy development of urban complex and its development quality.

Being as one of the earliest practitioners engaging in real estate industry, I am also one of the earliest representatives following and exploring urban complex. In fact, at the beginning of 1990s, I once joined Xidan International Building in Beijing, which is a kind of multi-functional building. At that time, I followed and studied a lot of urban complexes in the world. In 2002, I joined China Central Place, which is a super-size urban complex earliest developed by Chinese funds. Both its development and achievements have typical meanings in Mainland China and in the whole world. So, it can say that I am not only the witness experiencing the development of urban complex in Mainland China but also one of the practitioners.

Based on a long-term observation and research, I think that urban complex value is the fundamental need of its generation and development. It is really quite important to figure out the connotation, the mechanism and laws of urban complex value if we want to further develop urban complex (including enlightening the management and operation of over 2000 urban complexes in China) and to further study the development of modernized city.

1.2 Study background

Urban complex is a measure to maximize the urban efficiency

Nowadays, development of central city is facing two major difficulties:

one is the traffic jam the other is the shortage of land. For urban development and urban construction, urban complex, definitely, is a measure for well solving both of these two difficulties and minimizing the urban efficiency.

Normally, urban complex is built near the bus stop or a railway station, which integrates different functions - office, business, living, hotel and conference. There will be comfortable walk streets, working areas and living areas, which will provide residents with one-stop urban life. In a central city, the urban complex integrates different functions (including office, living, business, consumption, leisure, body-building, medical care, education and training etc.), which can save the time to go to different places, infrastructure, public facilities and road facilities in a city. That is a compact-type city is set up.

In order to make more economic benefits, urban complex will require to pay more attention to internal coordination and functional complementation, which can easily realize the needs of urban administrators in terms of "shrewd development, shrewd management". This provides the urban government with a control which is shrewder and more accurate. Therefore, central city will develop in the direction "higher density and more functional".

Currently in China, the planning of all cities is being restricted by the national policy "control the boundary of big cities" and urban complex becomes a measure of urban administrators to solve these problems "space is in short, traffic jam happens frequently". The reason is that urban complex can

greatly increase the plot ratio and building area can be increased via the limited area of a land. Depending on the feature "highly intensive, highly compound and highly efficient", urban complex can help the city to develop in an economical and sustainable way.

Urban complex has become a consensus for urban development

According to large amounts of market cases, the successful urban complex shall have a building area of almost 1 million m2, while its floor area is about 0.5 million m2, whose road and greening area shall be more than 40% of the total. That is on a land with a limited area, the plot ratio shall be about 5-7, and otherwise, the investment and profits cannot be balanced. Actually, by now, urban complex, a development mode which is highly intensive, multi-functional and compound, is a major mode for the development of a city downtown.

In accordance with the function requirements set to Beijing CBD, the ratio of office, business, hotel and residence (apartment) shall be 3:2:2:3. Assume that an urban complex has a building area of 1 million m2, whose office area shall be 0.3 million m2, business area shall be 0.2 million m2, hotel area shall be 0.15 million ~ 0.2 million m2, residence + apartment area shall be 0.3 million m2. The population which can be held by the urban complex can be: average area for office shall be 10 m2 for each; there will be about 3000 households, about 10000 people; there will be about 10000 business people; there will be about 30000 hotel personnel and other

personnel, the hotels can be available for 0.08 million ~ 0.1 million people.

From the figures, we can see that population density held by urban complex is quite high and the living comfort is not so superior, but it maximizes the use efficiency of urban resources, where urban residents can spend more time with their family or on entertainment, education, body building, cultural cultivation etc. Instead, there is no need for them to spend time on traffic jam.

As a result, urban complex is a superior choice for urban administrators, which is being accepted and beloved by more and more people.

Urban complex becomes the battle field and weapon for transformation of real estate

The development of urbanization greatly benefits the real estate industry. In 30 years, there have been many enterprise giants whose annual sales volume is more than 100 billion Yuan. However, it is difficult for these enterprises to go further if they still follow the traditional mode - progressive development. Especially for those giants who majorly depend on land banking, they are being trapped by the business development modes.

Under this background, urban complex with good performance and good ability of sustainable development is being cared about and studied by most of the powerful real estate enterprises. Today in China, listed real estate enterprises ranking Top 20 have invested more on urban complexes, whose self-sustained properties are increasing continuously.

According to an incomplete statistic, in Suzhou, there have been 25 urban complexes (including the ones being planned, the ones being constructed and the ones which have been completed). In Hangzhou, it is planned to build 100 urban complexes of different sizes. In Shanghai, it is said that from 2011 to 2013, over 50 urban complexes would be newly built up. In recent years in Shenzhen, there has been 16 urban complexes are being constructed or primarily constructed. By 2015, there have been over 2000 urban complexes in 50 major cities (including the ones being constructed, the ones which are to be constructed and which have been constructed) (China Market Survey Online: Current Situation Survey and Future Trend Analysis Report of Urban Complex in China (2017-2020), Sept. 2017).

Self-reflection is required for the development of urban complex

In recent years, with the rapid development of economy in China, as well as the rapid growth of urbanization, city size has been enlarged a lot and the population in the city has greatly increased. In order to ease the current problems related to urban living, traffic and environment, urban complex with different functions (including residence, business, office, hotel, culture and entertainment etc.) is becoming more and more popular to urban administrators and developers, especially since 2008.

Though urban complex is being developed rapidly, there are many problems in terms of its quantity and quality. And risks are being formed. "Being as an operation mode of urban value system, resource configuration of

large-sized urban complex is quite complicated in technique and investment decision-making, much more complicated than real estate development. This means that development of urban complex shall undertake great risks. Regional economic environment is not well mastered, market environment of real estate changes a lot, the project planning and positioning are not done correctly, capital chain is broken, operation ability of the developers is not capable enough, the post operation is not well done ... all these factors result in failures of urban complex in different cities." (Ma, 2011)

Of course, superior urban complex is just like an engine which will push forward the development of a city. But there are still many complexes which fail to be made good use of though they have big sizes. From the development trend of urban complex in Mainland China, we can see that the total benefit is not favorable enough. Or even we can say that there are only few urban complexes that have good performance and which are able to well reflect the urban value. So, it is quite necessary to do a further study and reflection.

Understanding and research on urban complex is still weak

By looking up, collecting and sorting out documents and articles about the study of urban complex development in China and foreign countries, we can find that the former studies were mainly done by scholars engaging in planning, design work, sociology and economics, as well as researchers engaging in market development and from operation consulting organizations. Contrarily, urban administrators and media experts seldom took part in the planning, development, construction, investment, operation control and operation management, especially the operators experienced in theories and practices and senior operators and managers. Therefore, these documents and files are mainly about the researches and analyses about urban planning, urban design, urban positioning and functional space etc. These researches and analyses mainly focused on architecture and urban planning. Because operation management data are in great short (part of the data is a kind of business secrets), or the eyesight is not broad enough, the research and analysis were not deep enough, which failed to study the operation quality of urban complex; and there were few researches studying the inner development mechanism and laws of urban complex. In order to be successful, urban complex shall not only focus on inner planning, design and construction but also those complicated systems related to economics, management, sociology, enterprise operation and capital operation etc. From these researches, the unbalanced development or urban complex in Mainland China was reflected; especially that researches and discussions about theories and practices were in great short.

1.3 Study purpose and meaning

1.3.1 Study purpose

Depending on the practice data about operation management of China Central Place, lessons and experience obtained from urban complexes in China and foreign countries, research theories and research achievements are

sorted out, based on which the key factors affecting the sustainable development or urban complexes are analyzed. According to the analysis results, urban complex value mechanisms are figured out and operation management modes are provided for the peers for their references.

1.3.2 Study meaning

1.3.2.1Practical significance and reference value to industrial development in China

In China, there are only few excellent large-sized urban complexes, operation talents and operation teams are in great short, operation experience is not fully available. Today, the research on urban complex value mainly focuses on the planning functions; or makes pre-judgment and put forward investment suggestions for the operation of urban complexes by referring to other similar projects (Chen, 2014), that is it is hard to get deep surveys about operation management of urban complex. Analyses on successful urban complexes and failed urban complexes are in great short, so that there are only few suggestions on the healthy development of urban complexes in Mainland China.

So currently, it is really quite important to study and discuss the value system, operation management level, operation management effect of urban complex.

Being as the creator, planner, designer, operation leader and management leader of China Central Place, I will try my best to fill the research blanks

existed in this industry by the practice data about operation management of China Central Place, lessons and experience obtained from urban complexes in China and foreign countries. Sort out research theories and research achievements, based on which urban complex value system and relevant reasons are re-sorted out, the key factors affecting the sustainable development or urban complexes are analyzed. These studies and analyses provide references for selecting the development route of real estate, operating and managing urban complexes; meanwhile, references for urban administrators when they input the decisions.

1.3.2.2 Unique Chinese cases are provided for the development of international urban complex

China, a development country being developed rapidly, has large amounts of population while resources are in great short. Because of its rapid development of urbanization, urban complexes brought in from foreign countries were driven and developed in China in a different way. No matter what, the development speed or the development scale, urban complex is totally different from others, which cannot be seen ever before. Besides, urban complex in China has formed its own features which are different from the ones in western countries and in other regions, helping to enrich the formations and modes of urban development in the world. Now, urban complex in China is playing an irreplaceable role in urban development in the world.

From the investment to the current operation, it has been about 10 years. In such a short time, its economic benefits and social benefits have been ranked top in the world. It filled the blanks by studying and exploring the management practices, which reflects the current development of urban complex in China.

1.4 Study methods

Urban complex is a kind of senior form of the development of a city, which is also a kind of architectural form whose relationships are the most complicated. In order to figure out the successful operation mechanism, it is mandatory to collect large amounts of survey documents. Besides, it is mandatory to have comprehensive knowledge. Therefore, in the daily work, relevant files, data, documents, observation and surveys obtained by a field survey shall be collected, cases in China and foreign countries shall be collected as well. Then compare and analyze these cases. In this paper, I mainly use the following methods:

(1) Literature review. Look up, collect and sort out magazines and books about urban complex development in China and foreign countries; read large amounts articles and theses, get to know about relevant ideas and theories; keep verifying the problems encountered by running and managing China Central Place.

Investigation method (questionnaire and interview are combined).

Depending on the work, parties involved into the sub-functions of China

Central Place, including the renters, clients, owners and business partners, are provided with questionnaires and interviewed. Meanwhile, a famous international consulting organization engaging in business real estate is entrusted to collect the operation state and operation indexes of urban complexes in the world. Then based on the questionnaire result and interview result, the relationship between sub-functions will be reflected, as well as their contribution to the sustainable development of urban complex.

Quantitative and qualitative analysis method. On the basis of investigation, the samples and data which have been collected, quantitative and qualitative analysis shall be done, by which the foundations affecting the successful operation and sustainable development of urban complex will be figured out.

Comparative analysis method. By comparing the operation of urban complexes in China and foreign countries, lessons and experience are obtained, which will provide references for the healthy development of urban complex in Mainland China.

Instance analysis method. By taking advantage of my own work, surveys to large amounts of urban complexes are done. By making good use of the internet, horizontal and vertical analysis, this paper discusses and analyzes the key factors affecting the success of an urban complex.

Chapter 2 Domestic and Overseas Studies

In the book Cheng Shang by Mr. Zhang Quan, it is pointed out that "in Song Dynasty and Qing Dynasty, modern city in a western sense was once sprouted. However, the concept of city in China is different from that of the west. Normally, in China, city is not something radiated from churches or squares and public opinion "square-type city" is not accepted in China; instead, in China, city started from defensive walls - no matter when, selecting the location for a city or distribute the layout of a city, cozy for living is not something to be considered first. Contrarily, it is mandatory to think about that how would the power be reflected, and make sure that the city is good for military defense and social management. Therefore, most of the time, once there were many defensive walls around a city or a town, it meant that it was accepted as a city. It is known that defensive walls separated landscapes from life. For example, there was a peach garden on one side of the defensive wall while the world with feudal ethics code and complicated relationships was on the other side." (Zhang, 2012)

From the whole history, we can see that the logic of urban development in China is different from that of western. At the time of modern society, most of the cities which were so famous in the world have become weak, which were unable to compete with those cities developed after the Industrial Revolution. So for the development of modern city, China was lagged behind by the countries and regions in Europe and America. For the research and

practice of urban planning and design, European and American countries were more developed than China. Urban complex, being as a measure and formation of modern city brought in from foreign countries, must be deeply understood by knowing about the research achievements made both in China and foreign countries.

2.1 Overseas studies

2.1.1Study on urban planning and introduction of theoretical development

For the study about western cities, there is no concept of urban complex which can be used by the cities in China. Studies about urban complex in foreign countries mainly focused on urban design, urban planning, structure of urban regions and commercial spaces, which studied the development mode of cities, regional level of cities and relationship between the commodities and services, as well as the relationship among urban population, city size and business.

In a broad sense, the urban market squares (like AGORA in ancient Greek), great bath (like the Roman Caracalla Baths), abbeys in the Middle Ages, commercial buildings along the streets, Paris apartment in 1800s and shopping gallery in the streets, were a form of the building complex.

However, with the occurrence of Industrial Reform, this form was broken down. Because of the Industrial Revolution, the handicraft industry was eliminated and replaced by machines. The workshops in the city attracted

large amounts of people and they rushed into the city. Since then, people were surrounded by industrial gas and waste water. Workshops required to be expanded and they were dismantled and built over again and again. It was totally in a mess, which broke the city texture and urban order. As a result, it was difficult to continue with the urban development mode at that time. A series of social problems, like the city was quite crowded, contamination was severe, many people were poor, alcoholism, crime and infectious diseases happened, which pushed forward the reform of social ideological trend. Then here came the Utopian socialism. At the beginning of 1800, Utopian socialists, like Saint-Simon, Owen and Fourier made laws and rules for their Utopian society, and planned the construction. According to their opinions the lands which haven't been used shall be used to start the city construction so that the current chaos can be avoided; quantity of residential areas and size of communities must be strictly controlled; in the cities to be constructed, different functions shall be separated from each other so that social problems could be decreased. Actually, their opinions were the rudiment of modern cities, which greatly affected CIAM functionalism. According to the Utopian logic, there was no excuse for building complex to exist in the cities.

In 1898, Ebenezer Howard, a social activist from England, inherited the concepts held by Owen, put forward "Garden City" in his book Tomorrow, a Peaceful Path to Real Reform. "Garden City" is a kind of city plan scheme based on the Utopian society, which combined the advantages of cities and

countryside. The green lands consists of commercial center, cultural center and agriculture were separated from the industrial area, residential area and schools. Normally, the city size shall be not more than 6000 acres, with a population of less than 30000. (See Fig. 2-1)

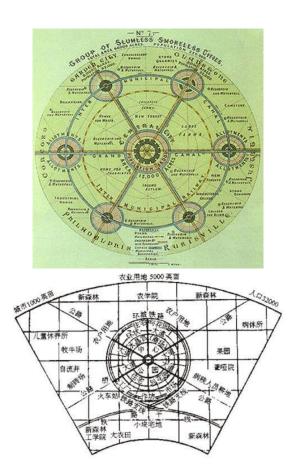


Fig. 2-1 Garden City by Howard

The concept that solve the problems encountered by urban development by new city construction abandoned the updating of new city, which abandoned the energetic social life and traditions owned by old city. Therefore, urban complex was not involved in it.

Radicals of modern architectural movement and Le Corbusier, an

architect master from France, published a book called The City of Tomorrow in 1992, in which modern city plans were put forward. In 1933, another book The Radiant City was published, which put forward the theory "the radiant city". The theory "the radiant city" held the idea that the city shall be modified by fully new planning thoughts. It had a hypothesis that in a city, there were high-rise buildings, modern traffic network and large amounts of green lands, where people can enjoy cozy and modern life. This was an ideal hypothesis, not a solution but provides architectures and planning with ideal values. In our real life, it was almost impossible to have the social structure imaged by Corbusier.

In Aug. 1933, CIAM held the fourth conference in Athens, in which an outline document about urban planning was issued, which was called "Urban Planning Outline". According to the Outline, city has four functions - living, working, leisure and traffic; the four functions should be independent from each other. In 1943, on the basis of the achievements made by this conference, Le Corbusier published Athens Charter, which covered the basic understanding and thoughts held by modern architectural movement to modern urban planning. In the later 10 years since then, urban planning and design were also affected. Being affected by this hypothesis, building complex was not covered in the urban planning. This was the reason why building complex was not developed well.

After that, the research and exploration work were not stopped. In 1925,

Nestor Burgess, a socialist in America, came up with concentric zone model for the urban special structure by taking Chicago as an example (see Fig. 2-2). He divided urban lands into five different circles, whose center was the central business area. Then other areas were extended from the inside to the outside. He thought that the development of a city always expanded along with the already-constructed area. CBD, located in the center of a city, is a center integrating with business, economy, society, urban life and political life. The heart of CBD included the retail area, office buildings, clubs, banks, hotels, cinemas and museums. Though concentric zone model ignored the influence of urban traffic, social culture and location preference, we could still see the land in the city center undertook several functions. Actually, this is the environment in which urban complex was started.

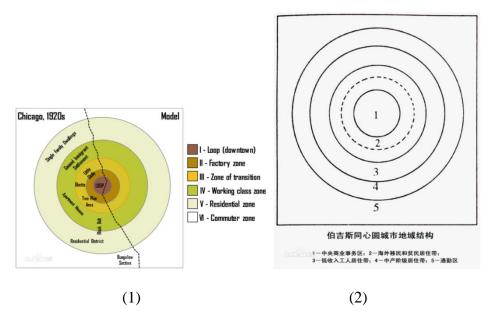


Fig. 2-2 Concentric Zone Model by Burgess

In 1930, Rockefeller Center was built up, which stood for that the

practical efforts to explore the direction of city development were not stopped by the influence of Athens Charter. Besides, the success of Rockefeller Center criticized the one-sideness of urban planning theory covered in Athens Charter. Facts were used to show that it was possible for modern cities to develop urban complexes.

In 1939, Hoyt, an American scholar, analyzed the structure of renal fee and living land in cities in America, as well as their changes. Then according to the analysis results, he put forward the scallop structure of urban space. For this theory, the core was that urban lands would follow the direction where traffic routes and natural barriers were the fewest, then went forward to the downtown. At last, a scallop was formed. From this theory, we could see that the model cared about the new elements affecting urban space - land price and rental fee, major traffic routes in a city.

Concentric zone theory and scallop theory had their own restrictions that both they thought that a city only had one core and the land used in a city would always focus on the central business district. But they also pointed out that in young cities and at the beginning of CBD, city center would form a space state that office buildings would in the shape of high-rise and they would cluster with each other. From the view of urban functions, city center was the region integrating economy, society, culture and activity. Therefore, multiple-function requirements were set to the lands used in the center, which became the source of urban complex and growing environment theory of

urban complex. Of course, the requirement was one of the motivations for the generation of urban complex.

In Jan. 1954, the preparation meeting of the 10th Conference of CIAM set up "Team 10". On the basis of defects of modernism function division, "Team 10" advocated the ideology "people oriented" for the urban design. That is it was thought that architectures and urban design should focus on the behaviors done by residents, urban structure should take into account of the life structure of the reality. Therefore, it is necessary to get multiple-functional buildings shall be involved into our life.

Brother Collier (Leon Collier and Robert Collier), two representatives of new rationalism from Luxembourg, directly criticized the thoughts of modernism city planning, who re-accepted the history and traditions denied by modernists. He came up with the theory "City Mall" - the development of a city is a process of reproducing; it is impossible and unnecessary for a city to keep expanding all the time. Instead, when a city is developed to a certain degree, it is necessary for the city to stabilize its size and scale, stop to "reproduce" a new area. Normally, a city is restructured from its own urban areas. No matter what size the city is, it consists of different urban areas. In each area, it has its own center, boundary and limits and each area shall be a sub-city in the city. All our daily life (including living, working and resting) shall happen in the "city mall". Actually, this area vividly described the operation mode of modern urban complex.

Based on the humanism, Jane Jacobs and Kevin Lynch etc pointed out that city shall be diversified and intentional. What they held pushed forward the development of urban design theories and showed us the eyesight and routes for studying and analyzing the urban complex.

In 1976, Urban Land Institute in America published the first book about mixed use -Mixed-use Development: New Ways of Land Use. In this book, the concept of "mixed-use" was first introduced. Later that year, Dinitri Procos wrote a book called Mixed Land Use, in which the historical development of mixed use was studied in terms of urban planning; meanwhile, this book discussed the features of mixed use via the relationship among social economics, movement, time and space, as well as the tendency of urban structure, by which the relationship between laws, rules and mixed land use was reflected; then at last, this book made a prospect of the mixed land use. In 2003, Urban Land Institute published Mixed-use Development Handbook (2nd edition), which provided a detailed introduction about mixed use development. This book selected some newest cases occurred in the world to make presentations.

In 1977, CIAM published Charter of Machu Picchu by inheriting and criticizing Athens Charter, in which it stated that each parts of the city should not be independent from each other. Instead, all the parts should work together to create a comprehensive and multi-functional environment. The spirits held in Athens Charter broaden the eyesight for the development of modern city,

which also provided new thoughts for developing urban complexes.

There are still some books studying building complexes from the view of urban historic context, like Multi-use Architecture in the Urban Context by Eberhard H. Zeidler (published in 1985). In this book, it reviewed the history of building complex and the introduced large amounts of cases related to building complexes constructed in 1950s -1980s in America. From the view of historical background, internal and external affecting the building complex, spiritual requirements of building complex, this book discussed that how building complex should combine with urban context.

From the end of 1980s to the beginning of 21st century, the economy has developed rapidly. Since land suitable for living and planning has become less and less, it is mandatory to maximize the current lands and this is the reason why urban complex in Japan has experienced a boom. As time went by, these urban complexes have been completed and expanded. And finally, there were many excellent urban complexes like Roppongi Hills. Meanwhile, studies about urban complex and urban complex theories also well developed. Those important architectural magazines in Japan collected the cases and data of urban complexes, which provided solid and abundant materials for the study about urban complex. Moreover, architects in Japan have made great achievements in space making and space technique, for example, the cluster size theory by Tange Kenzo, "symbiosis concept theory by kisho kurokawa" (Zheng, 1997), all these theories greatly affected the urban complex.

In June 1999, Beijing Charter was passed on the 20th Conference of CIAM. Depending on dialectical system thinking, it only affirmed the function of analysis but also emphasized the scientific value of organic integration. It pointed out that "eternal change" is a consensus, 'integration is a new theme being raised in the new century", advocating "absorbing anything and everything", "harmony in diversity" and "technique combining with humanity". Spirits covered in Beijing provided a broader space for the development of urban complex.

2.1.2Introduction of commercial space theory

For the study on commercial space, a series of theories have been formed in western countries, which can be used as the theoretical references for urban planning and urban design.

Reily retail gravitation rules. In 1929, Professor W-J-REILY (from America) made a survey to the metropolitan area and then came up with "retail gravitation rules" based on the Newton's theory of gravity. He thought that: population and distance (two variables) must be taken into account of when defining the urban metropolitan area. Normally, the scale of urban metropolitan area is different because the population around and the distance to the downtown are different. The more the urban population is, the more developed the city will be, which will be more attractive to the clients around. If a city is far away from the areas around, clients will spend more time getting to the city, it will be less attractive to the clients. The retail gravitation

rules played an important role in studying the urban metropolitan areas in the future.

Huff rules. In 1963, Huff came up with the probabilistic model, which is also named business area model. Huff thought that when all business areas cluster together, which business cluster is to be used by the residents is determined by the cluster area size and the distance from the resident to the cluster area. Huff model has been widely used for surveys to figure out the influences to compete the business centers by the already-constructed business centers or business centers being constructed.

Retail saturation theory. It was come up with by HBS (Harvard Business School) in 1980s, which defines the quantity of retail stores in an area by calculating the retail saturation indexes at an area. Then according to the result, make a decision that whether it is suitable to open a store.

Reily retail gravitation rules, Huff rules and retail saturation theory provided basic theories and ideologies for planning and positioning the business retails existed in urban complexes.

Currently, information about urban complex study is hard to be found in theses and magazines published in America and Europe. The publications mainly collected the design of urban complex. The study on urban complex also mainly focused on protection of old cities, modification of historical buildings, as well as city size, macro-scale and micro-scale of architectures etc.

2.2 Current study in China

In Mainland China, the study on urban complex was started in the 20th century when urban complex was just developed. By now, it has been only over 20 years. So we could say that the study on urban complex in Mainland China was just at the stage of exploration. Most of the studies analyzed the development trend based on the theories and cases in foreign countries. Or by bringing in overseas theories, planning, positioning and design of some projects in China were analyzed and studied. Therefore, systematic study is in short and theoretical innovations are weak.

2.2.1 Systematic study

From the current study in China, we have made systematic achievements in studying urban complexes. Here below are the typical books.

Holistic Design on Urban Architecture (Han & Feng, 1999), a book about the urban-rural planning and architectural design in the new century in China, was published in July 1999. This book expanded the environment of architectural design and introduced the motivation, concept and basic features of holistic design of urban architecture. From the view of functional organization, special composition and hierarchy type, this book analyzed and described the design principles and design methods. It pointed out that city and architecture shall be dimensional so that the urban space can get a systematic development. This book is considered as a framework for studying the holistic design of urban architecture. "The core thoughts covered in this

book greatly affect the masters' theses about urban complex written after 2000." (Liu Qin,2014)

20th Century Japan's Tallest Buildings by Professor Tan Li from Shenzhen University was published in 2005. This book made a comprehensive introduction to the tallest buildings in Japan and analyzed the experience, advanced technique and theories in developing and constructing tallest buildings in Japan in the 20th century. Also, this book introduced some cases about urban complex.

In May 2005, The Research and Practice of Urban Complex Development (1st edition) was published by Long Guxin, which is a book about urban complex studied based on the experience obtained by running their own urban complexes (Long, 2005). This book is the first book which systematically analyzes and studies the urban complex from the view of practices in China. In Jan. 2011, Mr. Long Guxin optimized relevant documents and data and republished the book The Research and Practice of Urban Complex Development (2nd edition). In this book, theories about urban planning, urban spacial structure theories and retail theories were sorted out. By combining with some typical cases in China and foreign countries, this book made a systematic summary and abstract on the practical experience and lessons linking with urban complex planning, positioning, development, management and financing; besides, this book recommended the direction on how to manage the business real estate development, planning and design.

The concept of urban complex in this book almost became the model used by media report.

Based on the study achievements which have made ever before, Study on Contemporary Urban Complex (Wang, 2010) studied the coincide relationship among building complex, historical development of urban complex and urban development, the relationship among internal elements and external elements of urban complex, development method and process of contemporary building complex, prospect suitable for the development of China's urban complex. The study in this book is quite comprehensive, which is also academic. It has greatly affects the study done by college students.

Urban Planning and Urban Development (Zhao, 2011) made a wide and deep discussion on the generation, development and future development trend of theories related to contemporary urban planning. From the view of development of urban form and spacial structure, updating of urban centers, construction of urban road system, organization of urban landscape sequence etc., this book made a detailed introduction about the urban development. This book pointed out some basic countermeasures for the urban development of urbanization in 21st century.

2.2.2 General study

Since 2000, documents studying urban complex in China have become more and more. Large amounts of scholars engaging in urban planning and architecture design, governmental departments, research institutes and real estate participators started to study the urban complex in different aspects.

Here below are the typical study achievements and opinions:

Zhao Guannan made a detailed presentation about the development headstream of urban complex both in China and foreign countries. (Zhao, 2007)

Ma Zongguo introduced the different categories of urban complex, who also proposed the routes for developing urban complex. (Ma, 2007)

From the view of physical urban design, Dong Hexuan and Lu Taowei made an analysis in three aspects - concept of urban complex, three essential properties of urban complex and design practice of urban complex. It is thought that urban complex is one of the forms of highly intensive city. Urbanism, dimensional difference between functional areas and stereoscopics of morphological structure are the basic elements for urban complex to take effect. In fact, proper development of urban complex is one of the effective paths to construct saving-type, intensive and harmonious city. (Dong & Lu, 2009)

By introducing the whole development process of urban complex, Zeng Yue made a conclusion on the development trend of urban complex. (Zeng, 2010)

Cao Jianning and Liu Guiwen analyzed the major factors affecting the development and combination of urban complex, the analysis mainly included the correlation between elements of urban complex. Elements: urban

development level, cultural atmosphere of a city, consumption ability of a city, operation ideology of developers and capital strength etc. (Cao & Liu, 2010)

Wang Lei studied the urban complex in terms of its functional positioning and organization, who also analyzed the mode of functional positioning, selection method and optimization method; he also studied the organization of functional system and the adaptable organization of sub-system. (Wang, 2010)

Based on his own practice and experience from taking part in the development and construction of the urban complex in Shuncheng Yunnan, Zhao Boran made theoretical study in different fields - business operation and architecture. According to his study, he presented and analyzed the node problems encountered by the development of urban complex. Then he also studied how to avoid these problems in future operation; he also discussed the combination between business and real estate. So what he studied was quite innovative and creative. (Zhao, 2010)

Apart from the studies mentioned above, some graduate students also did some research about urban complex. At the beginning (before 2008), full-time graduate students do not have enough practices and experience, so their theses mainly analyzed and introduced the urban complex in terms of its space, function, commercial activity and landscape etc. Their theses were quite academic but not persuasive enough, therefore, they lacked instructional significance to urban complex in terms of development, construction and

operation.

2.2.3 Study on urban complex value

Since 2008, more and more urban complexes in China have been developed in China and researches have been accumulated. Theses written by graduate students and researches done by industrial insiders, experts and scholars started to access to different fields of urban complex. Here below are the typical studies about value of urban complex.

Shang Jiayu made a systematic study to the concept, features, development process and theories of the urban complex; also, analyzed the coordination between thoughts and urban complex development. In accordance with the current situation and problems of urban complex development and construction, she studied the coordination work between main bodies of urban complex development and construction, as well as the function scale, space and traffic organization and value chain. What's more, she made an empirical analysis to Shanghai Taipingqiao Urban Complex. (Shang, 2008)

Zhu Wenjun described the historical background and development process of urban complex, who sorted out and introduced relevant concepts by typological method; by using different cases, functions and features of urban complex sub-systems were analyzed; by comparative analysis method, a summary was made to the social value, economic value and cultural value of urban complex; successful experience and elements related to the urban

complex development were concluded. (Zhu, 2008)

By taking urban complexes in Beijing as examples, Liang Tianyi analyzed the functions and features of each sub-system used by urban complex in terms of its business, office, hotel, residence, cultural entertainment, exhibition and traffic. According to the function distribution of each urban complex in Beijing, the urban complexes are divided into different parts - balance-developed urban complex, office-driven urban complex and residence-driven urban complex etc. By comparative analysis method, this paper summed up and concluded the social value, economic value and cultural value of urban complex in Beijing. (Liang, 2011)

Under the direction of market acceptance and successful operation, Chen Ying analyzed and concluded the functional mode of urban complex, by which she proposed the six functions owned by urban complex. Then from the view of general regional development and on the basis of some typical urban complexes in China, she analyzed the business value and cultural value of urban complexes by quantitative and qualitative analysis method. Then methods and indexes used for selecting location and defining indexes are formed. By the positioning principle, a method based on the value link between sub-functions of urban complexes, what she studied can provide references for planning and positioning similar urban complexes. (Chen,2014)

Depending on the principal line that enhance urban humanity value, urban image value, urban distribution value and urban governance value etc.,

Cui Fengsheng, Wang Fuxin discussed the time value of construction and development of urban complex by using the auxiliary line that improve urban residents' consumption environment, living conditions and work style by developing real estates. (Cui & Wang, 2015)

In 2015, Jin Wei and Liu Rongkun published the article Study on Commercial Mode and Urban Value of Urban Complex, in which they analyzed the rapid development of urban complex in China. They pointed out that the active role played by urban complex in pushing forward the city development is getting more and more obvious, but there are still many failed urban complexes adversely affecting the city development because their commercial mode. They thought that only commercial mode which can make profits is used can the enterprise value be reflected, then the urban complex will play an active role in pushing forward the city development. (Jin & Liu, 2015)

Conclusion: For all the studies about urban complexes in the world, they mainly studied the urban design, urban planning, urban regional structure and commercial location, these studies also analyzed the development mode, relationship among urban area level, commodities and services, as well as the relationship among urban population, urban size and business. For basic study, the studies made in Europe, America and Japan are broader and deeper, which are much more advanced than that in China.

For the studies about western cities, there is no concept of urban complex

which can be directly used and duplicated in China. That is the urban complex mode in foreign countries cannot be duplicated directly in China because the background in China is rather complicated. Therefore, mature theoretical systems related to the value and mechanism of urban complex is not available for analyzing and guiding the development of urban complex.

In China, relevant studies are just started, which studied different aspects of the urban complex and achievements have been made. However, the depth of study is not distributed evenly. Systematic researches are in short and theoretical breakthroughs have not been made. Academic study about planning and design are not practical enough; instead, study on the operation, management and practice are in great short.

For the analysis and discussion about urban complex value system, universal opinions and conclusions haven't been formed and achieved. So it quite possible to adversely affect the accurate judgement made to the features and connotations of urban complex. Thus, it is really difficult to push forward the healthy development of urban complex.

Chapter 3 New Dimensions for Identifying Urban Complex

With the rapid development of urbanization in China, the concept of "urban complex" has become quite popular in different fields, including the real estate development, urban management and economic research.

From a broad concept, the description and introduction made by Mr. Zhao Guannan was quite persuasive, that is urban complex is a kind of urban organization form in which the ruling class or the ordinary citizens mix use or distribute the urban functions which have inner link with each other, normally, the urban functions are the specified functions in a city, individual buildings or building groups. As time goes by and with the development of a city, the mixed functions and mixed method of the complexes have been changing all the time. It is known that "contemporary urban complex" is a kind of urban complex depended on contemporary urban economy and society. In fact, urban complex is a type of urban complex existed in a special time during the whole development history of a city. (Zhao, 2011)

For actual application, the concept of urban complex is quite complicated. If the basic concept of urban complex is not clarified, it will be quite difficult to analyze the essential features and value systems. Under this background, it is quite necessary to sort out and clearly define the basic concept of urban complex.

3.1Existing concepts of urban complex are quite complicated and

miscellaneous

No matter where, the concepts of urban complex are miscellaneous. For example, the concept used for business positioning, design, application, media advertising and academic theses are always different from each other. For example, urban complex is always called as "urban complex", 'city complex", "building complex", "urban building complex", "business complex" and "contemporary urban complex" etc. Even sometimes, the concept of "urban complex" is mixed with the concept of CBD. For some academic discussions about the rudiment and source flow of urban complex existed in the urban development history, Uxmal, the holy land at the ancient Greek period, Acropolis in Athens, Caracalla Baths in Ancient Roman, abbeys at the mid-century etc, are all considered as urban complexes from the broad view (Long, 2005; Zhao, 2011). Therefore, the public is easy to be confused about the concepts used by some reports.

Such a phenomenon is resulted in the special development reality in the cities in Mainland China. With the development of urbanization in China, urban complex has also developed a lot, or even, there is a development boom of urban complex. But the fact in Mainland China is that its urban planning, design theory and practice experience are not as advanced as that in America and Europe. So, we can say that the unclear concept reflects the understanding differences in different regions, which is a truth that Mainland China is still exploring and trying on the way to develop urban complexes.

Today, there are several concepts of urban complex popular in Mainland China. Here below are the details.

(1) Building complex

For the media reports and academic activities in China, building complex is always mixed with the concept of urban complex.

Actually, in the world, there is no concept is directly for urban concept. For English concept, there are some similar ones, like complex, urban complex, city complex, building complex and multiuse building.

For the broad concept of building concept, the one which is most accepted by the public is the one covered in the dictionaries. In Encyclopedia of China, the definition of building complex is "a building consists of spaces with different functions. One is an individual building, that is there is only one building; the other is a group of buildings, there are several buildings." The definition set in U.S.A. Architectural Encyclopedia is "building complex is an individual building or a group of buildings set up on one location".

On Wikipedia, we can see that building complex is defined as "a group of inter-related buildings".

In 1985, Eberhard H. Zeidler published the book "Multi-use Architecture in The Urban Contex", in which building complex is defined as "building complex has two or more major functions required by human life." (Eberhard, 1985)

For the urban planning and design field in the west, mixed-use or

multi-use is used more for its definition.

In the world, urban complex is not used by urban planning and urban design. For urban functions (Jacobs, 2006), from Canada pointed out that in order to get the city diversified, it is better to get two or more functions can be available from one common facility at the same time, so that different purposes can be realized. This is also considered by some Chinese scholars as a description of building complex or urban complex.

For the detailed concept of building concept, opinions proposed by Wang Jianguo and Long Guxin are typical and representative.

In Urban Design, Professor Wang Jianguo from Southeast University thought: "building complex consists of social and living spaces with different properties and purposes, like spaces for living, office, travel, shopping, cultural entertainment, social life and leisure etc." (Wang, 2011) In his book, building complex is the urban complex.

Mr. Long Guxin, who is considered to make great achievements in studying urban complex, described the concept of building complex in 2015 "building complex is to organic combine spaces with different functional spaces (spaces for business, office, travel, exhibition, catering, conference and cultural entertainment), all the functions are realized by one group of buildings, which shall well coordinate with the urban traffic. At the same time, an active relation "spatial dependence and value complement" can be set up between different functions, by which a multi-functional, high efficient,

complicated and universal complex can be formed. The comprehensiveness of a complex does not get all functions and spaces accumulated but realize a perfect combination among different functions, which will overcome the restrictions of an individual function. During the interaction, broader and better overall functions will be formed." (Long, 2005) This description becomes the concept which is used the most widely by academic circle and media in Mainland China.

He also pointed out that according to the research made by State Council Research Center and other institutions to 100 new building complexes (including the ones which have been completed and the ones which are being constructed), building complex has four basic and major functions - hotel, office, apartment and business (65% businesses are reflected by hotel, office, apartment and business). This clearly proves that the building has compound functions. However, Mr. Long Guxin thought that the concept of building complex is different from the concept of urban complex. (Long, 2005)

(2) Urban complex

From what is mentioned above, we can see that similar concepts can be found in English theses and articles for the concept of complex. But urban complex is a native concept, whose connotation is from foreign countries. Though urban complex correctly expresses the features or urban organization, no common concept has been achieved in China.

In China, the real estate industry has an conventional concept to urban

complex -combine at least 3 functions (business, office, living, hotel, exhibition, conference, cultural entertainment and traffic etc.) of an urban living space, then set up an active relationship among these functions, make them dependent on each other and beneficiary to each other. In this case, an urban organization which is multi-functional and highly efficient will be formed.

In the book Research and Practice on Urban Complex Development, Mr. Long Guxin thought that urban complex is updated from building complex, which is a continuation of the urban space. He defined that: "city complex is a high extensive group of buildings, whose functions (living, office, business, travel, shopping, cultural entertainment, social life and leisure etc.) are combined with each other, these functions will complementary to each other and then finally, form a value chain. It includes different urban functions like commercial office, living, hotel, business, leisure, entertainment, traffic and parking system, or even exhibition and so on. City complex has all the block features available, which generates from the building complex via mega-development of a city and intensive development of urban functions and compounded-development of urban value; depending on the blocks, city complex is able to organically combine with external urban spaces, have an effective link with traffic system. As a result, it becomes the mixed-use center or urban functions and extends the urban space value." (Long, 2005)

"Apart from all the compound functions and formations owned by

building complex, there are clusters whose scale is more intensive and larger; actually, clusters have a closer link with the external world more than building complex. Or even they are restricted more by the external environment like traffic. Therefore, city complex is a social multi-ecological concept. That is city complex is not a concept adding up all the buildings, building types and functions." (Long, 2005)

This is a definition which is being widely used by media reports and academic discussions.

(3) HOPSCA

HOPSCA is a concept directly used to describe the urban complex, which is quite commonly seen in China.

"HOPSCA" is an abbreviation from Hotel, Office, Park, Shopping Mall, Convention and Apartment. Each urban complex has at least 3 functions mentioned above; each part of the urban complex will be dependent on each other and mutually benefits each other. Normally, the urban complex has a major function while several auxiliary functions. The urban complex has many highly efficient building clusters. Urban complex is also named "city mall". This definition is widely used by professional real estate media, which can be frequently seen in academic theses. (Cui & Wang, 2015; Yang, Zhang & Mu, 2011; Chen, 2014)

According to 6368 articles about urban complex searched from CNKI (from 1995 to 2018), 2184 of which called urban complex as HOPSCA.

In fact, HOPSCA is a name used to call urban complex, which is widely used by the real estate industry in China. By searching HOPSCA in Wikipedia in English, there is no direct page explaining urban complex. For the four entries, 3 entries explain the real estate projects in Mainland China while the other one explains the real estate project in Southeast Asia. In some dictionaries Oxford Dictionary and Longman Dictionary, HOPSCA can't be found. The abbreviation of HOPSCA is different from other English abbreviation though they are similar. For example, CBD is an abbreviation of Central Business District, whose full name is a phrase used to describe something.

According to the analysis covered in different documents, HOPSCA is originated in Mainland China, which was named by some real estate developer. After surveying and analyzing functions owned by La Defense New City (in France), its own projects learned from it when designing and developing. By manifesting the concept and functions of its own project, the promotion will be done better. This is the reason why this definition can only be seen in advertisements in China after looking up it in the English Internet.

La Defense in Paris was constructed in 1950s, which includes different areas (2.47 million m² for office, 2 million m² for business and 15600 residential apartments). It has the largest business center in Europe and the largest bus transfer center in Europe. Besides, it has 67 hectares walk system and 26000 parking lots. In the place where the traffic is completed, there is a

park with an area of 25 hectares. In the park, there are more than 400 plants and there is an open-air museum. In La Defense Hotel and other hotels, service facilities are fully available, traffic (railways and roads) is quite convenient, especially the subway system. The subway system has three floors above the ground and three floors under the ground, which can directly access to the hotel and office buildings. Large amounts of resources, which can well supplement and benefit each other. This is the reason why La Defense can own complete urban functions (for business, residence and office etc.), where people can be provided with one-stop living scheme. Therefore, La Defense becomes the most attractive sub-center in Paris, which is considered as the best model of urban complex. (See Fig. 3-1)

From the view of the scale and the functions, La Defense is not an urban complex but a typical CBD. According to the Penguin Geography Dictionary published by Penguin Group, CBD is the heart of a city, which highly gathers the finance, professional service organization, business, service and traffic routes; the land is used in high density and the land is set at the highest price; the most outstanding feature is that there are many tallest buildings. In the daytime, there are large amounts of population and traffic tools. From its historical development, HOPSCA has a close link with the large-scaled building clusters. In western countries, HOPSCA principle was put forward at the time of studying the development of urban business streets, whose core was that urban business street was not only a shopping place but also a living

space integrating other functions like shopping, entertainment, catering, leisure and living. (Wang, 2002)



Fig. 3-1 La Defense in Paris

From the realities, we can see that HOPSCA is a commonly mode for developing urban complex, but it is not proper to replace the concept of urban complex.

3.2 Discriminate and define the concept of urban complex

3.2.1Discriminate the concept of urban complex

The description to urban complex made by Mr. Long Guxin greatly and widely affected relevant academic researches and media reports. (Long, 2005)

He thought that urban complex is an updating of building complex and a continuation of urban space. By comparing his description to building complex and city complex (Note: in his book, city complex is used), there is no essential difference between them. Instead, both they gather different

functions (business, office, living, hotel, exhibition, catering, conference, cultural entertainment), different spaces are dependent on each other, whose values mutually complement to each other. These functions are well coordinated with the traffic. The only difference is that urban complex is an updating of urban complex and a continuation of urban space.

If the updating is not specified or the continuation standard is not defined, it is really difficult to discriminate what is building complex and what is urban complex.

For the cases used by him, Rockefeller Center in New York is considered as a building complex while Dongguan 1st International Project, Shenzhen Huarun Center becomes a typical case of urban complex, which is almost the same important as La Defense and Roppingi Hills. (Long, 2005)

Perhaps, being affected by Mr. Long Guxin, some scholars thought that La Defense was constructed earlier than Rockefeller Center. (Cui & Wang, 2015)

This is not consistent with the true history of urban complex development. It is known that Rockefeller Center was constructed in 1931, whose living function was completed after WWII. La Defense was planned in 1958, whose construction was approved in 1964. And it was completed in the 1980s.

At the early development, Rockefeller Center (see Fig. 3-1) lacked two basic functions of being as a complex - living and hotel, so it was difficult to

get all functions well coordinate with each other. In later time, the developer realized that if the functions couldn't well coordinate with each other, it would not be good for profit-making and convenient use. So in 1963, Hilton Hotel with 2153 rooms was constructed outside Rockefeller Center, which made Rockefeller Center energetic. It is widely thought that Rockefeller Center is the first mature example of modern urban complex, whose construction stood for that urban complex has become the direction of urban buildings developed in a high intensive way. Its great success reflected that hotel, office, landscape, shopping, exhibition and living are the key basic functions consisting of modern urban complex, the good combination between buildings and urban environment are the pre-conditions for the development or urban development and existence of buildings. Experience: office, hotel, shopping, living and entertainment are the key functions of a building complex, which are the basic elements to form a good coordination between functions; landscape and environment are the pre-conditions for making profits. The practice of Rockefeller Center proved that complex would be one of the directions of urban development.

The fact is that when designing La Defense, the mode used by Rockefeller Center was learned. By combining with regional environment, French culture and function elimination and re-combination, an urban complex mode with six major functions was formed and developed.

Obviously, the concept of building complex and urban complex do not

have any essential differences.



Fig. 3-1 Rockefeller Center

3.2.2Define urban complex

In accordance with the development need and development features of urbanization in China, urban complex shall be a developed and open concept, which shall include the features of building complex in the aspect of architectural form while it shall have the connotation of HOPSCA in the aspect of urban formation and urban function (the connotation here is that the urban complex shall have at least 3 functions of the six major functions). But the fact is that urban complex is not clearly different from complex.

The development history of Rockefeller Center well told us this connotation. At the early development, two major functions (living and hotel) of complex were lacked, it was difficult for Rockefeller Center to get all functions well coordinate with each other. Once the developers realized that if coordination couldn't be well coordinated with each other, the market would

not be energetic and the use would not be convenient. In 1963, Hilton Hotel with 2153 rooms was constructed next to it, which brought great energy and opportunities to it. Because of this, Rockefeller Center was changed into a typical modern urban complex.

The essence of urban complex generation greatly enhances the space efficiency and space value by compounding and clustering (Ma, 2011). If building complex cannot achieve an active relationship in which spaces are dependent each other and values complement to each other, the essence of "complex" is not achieved. Then it can only be named as building cluster. So, the study in this paper will become useless.

Today, the urbanization in China is quite rapid. No matter where, in the first-tier cities, second-tier cities or three-tier and fourth-tier cities, in order to get the city developed in a highly efficient, highly intensive, energy-saving and sustainable development, the approval and positioning of an urban complex shall not abandon its successful experience. Meanwhile, an urban complex shall not be done when it is finally completed; instead, it is mandatory to take advantage of different forces to push forward all its functions well interacted with each other, try to maximize its economic benefits and social benefits. What urban complex must do is to become the engine leading the regional development and urban development. Therefore, under the current background in China, building complex and urban complex is being highly overlapped with each other.

In other words, 3 or more functions of "Hotel, Office, Park, Shopping Mall, Convention and Apartment" shall be gathered and achieved by a building complex, each function shall be dependent on each other and complementary to each other. Under the development ideology, the building complex will be managed and operated by a universal operator in order to have a sustainable development. If so, it can be called as an urban complex.

In this paper, the urban complex follows the definition mentioned above, which is the urban complex developed under the urbanization in China.

3.3 Identify new dimension of urban complex

From the view of regional economy, we can make a conclusion that urban complex is an essential need of the development of modern cities. By making good use of compounding, intensiveness and openness of architectural space, inner logic between urban functions and urban development are organically linked with the urban spaces via the urban buildings, which can satisfy different urban functions (including business, office, living, travel, exhibition, catering, conference and cultural entertainment etc). These architectural spaces will be dependent on each other and beneficiary to each other. In this case, an urban organization form and economic form which are multi-functional and highly efficient will be formed.

3.3.1Understanding to urban complex features

According to the academic discussion result and large amounts articles and media reports published in Mainland China, features of urban complex in

Mainland China shall include six items listed here below:

(1) Super-size

Being as a "city mall", it shall not only have some core functions but also provide one-stop proposals for urban residents' life. Normally, urban complex consists of super-sized buildings and different living spaces, which has a close link with the main roads and traffic routes in the city. In first-tier city, the building area of an urban complex shall be about 1 million m2 while the urban complex in second-tier city shall be about 0.5million/m².

(2) Highly efficient and three-dimensional traffic system

Inner spaces are dependent on each other and their values are complementary to each other, and these spaces highly depend on the horizontal and vertical traffic system. For those excellent urban complexes, fine passenger elevators, freight elevators, escalators, stairs and some other inner vertical traffic system, as well as over-ground or underground traffic (like the underground floors, underground interlayer, ground and platform bridge), and public spaces; in the meantime, the urban complex is also linked with the urban streets, subways, public traffic, by which an "access tree" which is high efficient and three-dimensional is formed.

(3) Reflect the modern urban design

Adapt to the development demands of modern city and inherit and keep the urban context of a city, make sure that the urban complex can well blend with the environment and culture in the city; depending on modern urban design, environment and behavior theories, urban complex requires to well designing the landscape and environment. "break through the traditional building concepts by a deep and broad presentation of building clusters, form abundant landscapes and cozy environment by making some logos, essays, street furniture, plants, decoration and lighting. The building clusters are the major part of the landscapes, which can also undertake the responsibility of spreading urban civilization and pushing forward urban development."

(4) Rich in high-tech integrated facilities

Being as the superior form of modern urban development, urban complex will absorb the most advanced technology and ideology. Currently, high technologies and AI technologies are being widely sued by urban complex. For example, high-speed and cozy intelligent elevator (vertical elevator), auto intelligent escalator (vertical traffic system), highly efficient auto communication system, auto firefighting system, auto security system, auto building control system etc., all these systems are almost at the highest level of the city.

(5) Create multiple values

For the developers, they can enhance the property value gradually by developing and selling part of the properties and make profits from renting out the properties and well operating the property brand. Once the property goes into the capital market, its value will get a geometric growth. For urban administrators, urban complex will get the land where the urban complex is

located increased, as well as the value and price of lands, buildings, industries around the urban complex. Then, the value of real estate in the whole city will be increased. In this case, industrial updating will be sped up. What's more, social value and historical value attached to the project will become an indispensable treasure of the city.

(6) Make urban landmark and nameplate

Due to the super-sized buildings, superior location and position, advanced design ideology and design level, most of the urban complex will become a landmark of a city after it is completed. For example, the tallest hotel or high-rise towers, or large-scaled building clusters, they will become the symbolic landscape of a city. Once good economic benefit and social benefit are made after being put into operation, the urban complex will become a nameplate of a city.

3.3.2 Identify new dimension of urban complex

From the development history of urban complex and the current development of cities in Mainland China, the concepts and essences of urban complex are impossible to be figured out because of the old research habits and review angle. Under the background that China's urbanization is being developed rapidly, urban complex is not only a project only existed in the mind of designer but also a weapon favorable for the development and transformation of real estate enterprises. So urban complex is an important measure taken by urban administrators to run and develop the city, which is

also the mode and study object popular to the regional economic. Moreover, urban complex is also a city mall greatly accepted by urban residents.

Though the six features can be considered as hardware index or physical indexes, they are not only the features owned by urban complex.

I think in order to define the connotation of modern urban complex, it is mandatory to take into account of the new dimensions. Only in this way can the concept and connotation of urban complex be correctly defined. When identifying the features of urban complex, four other indexes from a new dimension shall be focused on, that is subject of property right, management subject, functional coordination, advancement and sustainability. By now, scholars have only paid little attention to these indexes when they studying the type and feature of urban complex. But from my over 20 years' experience in taking part in urban complex in terms of the positioning, planning, design, development, construction, investment, operation management, I have realized that these indexes are key for judging that whether a group of buildings or clusters can become an urban complex.

(1) Concept of property right subject

For property right, whether there is a subject (the owner or owner team) who can highly accept the development ideology. This must be considered as a key index of the urban complex. No matter whom the subject is, an individual enterprise legal person or several legal persons or natural persons, only the subject can truly understand the positioning and planning of the

complex can the subject accept the sustainable development mode for a long time. Then the subject can put the set functions into use and keep them well played. In reality, there are many cases can be used to prove this in two sides.

Being as one of the models of urban complex in the world, Roppingi Hills (see Fig. 3-1) was jointly developed by TV Asahi and Mori Building Corporation after Tokyo Government started the "Induce Re-development Area" Plan in 1986. By 15 years' efforts, over 400 land owners were persuaded to take part in the plan. Then in 1998, Ropping Hills Re-development Association was set up, which got all land owners as the association members. After that, all members joined this project and the plan was put into operation. In 2000, the land ownership change plan was approved by Tokyo Government and the construction was started. In 2003, the project was completed. (Fujimaki, 2007)



Fig. 3-1 Ropping Hills

In the world, there are many excellent urban complexes, like Rockefeller Center in New York, Suntec City in Singapore, International Finance Center in Hong Kong, Beijing International Trade Center, China Central Place, Shanghai IFC Mall, Shenzhen MIXC etc., which belong to the financial groups or owner groups caring about long-term development and long-term interests.

Contrarily, some urban complexes developed by domestic developers, including SOHO New Town in Beijing and Wande Plaza paid great attention to the coordination and interaction among sub-systems in terms of the positioning, planning, design, construction, ideology and design. However, the development mode of residential buildings was used; the business buildings, offices, hotels and apartments were sold to different owners at a high price, so it was quite difficult to do the management work. As a result, the urban complex was failed after being delivered for us. They couldn't work as the city mall and undertake the responsibilities of being as a city mall. Instead, they can be named as building clusters.

(2) Management and operation subject

Having a universal management and operation subject is the foundation and guarantee to define that whether the urban complex can reflect its value. Normally, successful urban complexes are under universal management and operation. For the management subject, it shall well contact with the municipal department, traffic department and public management department;

furthermore, coordinate with the marketing activities by well managing the public areas and facilities; the subject shall also well manage the operation of shopping mall, hotel management, office building and apartment property.

Being as an organic system, urban complex is a kind of real estate development project based on several professional platforms, which strictly follows the principle of VCM (Value Chain Management) in terms of its development, construction, investment and operation.

Value chain is a process from processing the raw materials to forming final products and getting the products used by the users, including a series of activities in the process "all steps for value adding". The target of value chain management is to make a value chain strategy. This strategy is to satisfy and excess clients' demands and desires, get all chain members integrated in a seamless way.

In accordance with the principle of value chain management, it is necessary to take into account of the development enterprise in terms of its production, marketing, finance and human resource when positioning the urban complex, make sure that these aspects are a complete system. Therefore, well control each step (planning, coordinating, supervising and controlling, well organize each step of real estate development according to the chain features. Each step shall be mutually linked with each other, which can independently dispose the cash flow, logistics, information flow; then in this way, a global optimum can be achieved, taking the place of partial optimum.

The value chain management shall cover the development, construction and investment.

In order to guarantee and push forward the collaborative development of each function of the urban complex, to get an effect 1+1>2, a powerful and universal management team and backstage with great executive force is necessary. "For the whole urban complex, the early management mode was that the project was divided into different and independent parts, which has been taken place by a more intensive management mode." (Wang, 2007) For all the excellent urban complexes in the world, there is always an excellent management team. Excellent urban complexes include Rockefeller Center in New York, Sony Center at Potsdamer Platz (see Fig. 2-2), Roppongi Hills in Tokyo, Peabody Place in Memphis, Beijing International Trade Center, China Central Place, Shanghai IFC Mall and Shenzhen MIXC.



Fig. 2-2 Sony Center at Potsdamer Platz

In Sanlitun Beijing, there are two urban complexes - Taikoo Li Sanlitun

and SOHO Sanlitun, which are the live cases, can be studied by the researchers and observers. For Taikoo Li Sanlitun, the real estates are not sold but rented, which are under universal management and operation; currently, Taikoo Li Sanlitun is one of the most popular places with young consumers in Beijing; SOHO Sanlitun can be sold individually, which are operated independently. SOHO Sanlitun was almost opened at the same time as Taikoo Li Sanlitun, whose building appearance and shopping environment are better; however, the management and operation are in a mess, only few merchants have settled down and only few clients are available; compared with Taikoo Li Sanlitun, it is totally different.

Currently, it is much more difficult to deal with the management and operation for the urban complex than the work at the early stage (including planning, development and construction). For planning and design, there are large amounts of documents about the theoretical researches, practice and experience. In China, construction techniques and fund strength can be solved easily; contrarily, because of some historical reasons, teams and talents experienced in management and operation of urban complex in Mainland China are in great short; especially for the business, it will not take effect unless a long time is spent on it. But it is almost impossible to cultivate and output large amounts of management teams and talents in a short time. This is also the reason why urban complex in China suffers a boom development but only few of them can be made good use of.

(3) Function coordination

Able to have 3 or more of the six major functions (Hotel, Office, Park, Shopping mall, Convention and Apartment), each function will be dependent on each other and value of each function will be complementary to others. These are the hardware conditions for becoming an urban complex. However, the coordination among different functions is not something obtained at the time of birth, which must be obtained by adjusting the operation and improving the functions partially, by making a sacrifice or compromise. Then at last, the functions can well coordinate with each other.

In order to get all functions coordinate with each other, it is mandatory to have a scientific positioning and organization; meanwhile, management and improvement are also required. Only the positioning and organizing work are scientifically done can the management and improvement be handled progressively. That is the concept of property right subject can be universalized, the management and operation subject can be universalized. The casual relationship of them has been described in the preceding part of this paper, so it is omitted here.

(4) Advancement and sustainability

Urban complex is the superior form of urban development, which represents the advanced concept and advanced level of urban planning and design; it also represents the scientific level of technologies in different time; for the buildings involved into an urban complex, large amounts of advanced

technologies and materials are used. So we can see how advanced it is.

At the same time, urban functions owned by an urban complex shall also have the ability to achieve a sustainable development. Otherwise, it cannot become a true urban complex. It is really difficult for us to image that how a product whose development and disappearance happen so suddenly can well undertake its responsibility and become an urban core.

In the preceding part, the failed urban complexes have told us that once the operation encounters difficulties, each function will be not energetic as before and the ability for sustainable development will be totally lost. If an urban complex cannot make profits for the property owner and cannot make contributions to the city and the society, the urban complex is just a place with a group of buildings. The reason why some urban complexes in the world can be so excellent is that they are capable of sustainable development.

Conclusion: if the city value cannot be reflected, an urban complex is not a true urban complex though its planning and design are well done. So when discussing the concept of urban complex, if we only focus on the quantity of functional elements but ignore the key factors affecting these functional elements, especially those hidden elements, it will be too one-sided. This is the reason why so many people cannot well differentiate the building cluster from the urban complex or building complex. It is a key factor adversely affecting the understanding to the healthy development essence of the urban complex.

3.4 Urban complex type

In order to better describe the urban complex, this paper lists out different types of urban complexes in China.

Urban complex is generated with the development of city development.

According to the location and function of a city, urban complex can be divided into four categories: city complex, CBD extensional complex, sub-center complex and transportation junction complex.

The development of urban complex is to satisfy the high intensive use of urban land resources. Normally, urban complexes are different from each other because they are developed differently according to the district where they are. If a different view is held, the conclusions will be different accordingly. Some experts divide urban complexes according to the regional location, development mode, property type and function-driving, also, according to the different development stages experienced by urban complexes in the last 20-30 years in Mainland China, there are 1st generation urban complex, 2nd generation urban complex and 3rd generation urban complex (Sina, 2011). In this paper, the category and division of urban complex are not emphasized. For me, I am open to the essence of urban complex and I hope the category of urban complex can as simple as possible.

According to the functional property and development positioning, urban complex can be divided into three categories:

(1) CBD complex

CBD complex not only includes the urban complex generated by updating the old city but also includes the urban complex developed at the new city, such as Rockefeller Center in New York, La Defensense in Paris, Suntec City in Singapore, Roppongi Hills and Marunouti Center in Japan, Beijing International Trade Center and China Central Place.

(2) Transportation junction urban complex

In Japan, Hong Kong and Taiwan, due to the features of urban development and population density, there are many excellent transportation junction urban complexes. For example, Kyoto Train Station is considered as a hub connecting Kyoto-Osaka-Kobe District with the passenger center of traveling to Kyoto, which has several functions like railway station, department store, hotel, cinema, exhibition center and governmental office etc.; it is also a large-sized open stage in which tourists can have the best sightseeing in Kyoto. Apart from Kyoto railway station, Kowloon Metro Station and Taipei train station also have such functions.

(3) Suburban area urban complex

In the mature and developed cities, land resources in the downtown are getting fewer and fewer and it is difficult to have a block with an area of more than 10000m². therefore, urban complex is inclined to locate at suburban area and satellite towns. As a result, a new kind of urban complex is being formed.

Chapter 4 Urban Complex Value Analysis

For the value of urban complex, different value systems can be concluded from different angles. For example, due to their different footholds, the governmental department, development enterprise, operation management team, the urban citizens will have different understandings on the concept and content of urban complex value. In the field of academic research, the value of urban complex is always defined differently. Some scholars think that the urban complex value shall include carrier value, economic value, social value and software environment value (Chen, 2014); some think that there are compound function value, regional value and own value (Chen, 2012), some think that there are only commercial value and social value ("Affordable housing",2011), some even think that HOPSCA (Hotel, Office, Parking, Shopping mall, Convention and Apartment) of the urban complex is the most valuable core of a city. (Fan, 2010)

For me, in accordance with the historical development of urban complex in China and in other countries, as well as the special position held by urban complex in the city development in China, value of urban complex shall not only focus on a certain aspect because the conclusion we made will be too restricted.

In the preceding part, it is said that for a city, urban complex is not only a group of buildings and a project, it is an enriched and complicated economic carrier and movement unit, moreover, it is a city mall changing the urban life.

Therefore, the value of an urban complex can be observed from four aspects: urban value, economic value, social value and historical value.

4.1 Urban value - improve urban efficiency

Urban value of an urban complex is reflected by different aspects.

First, optimize the layout of urban space structure. Depending on the high intensive and high compound functional planning and design, as well as the application of high technology, the traditional urban streets, buildings, traffics, landscapes and traditional contexts are re-organized and combined in a new way, then a new urban sequence in which the space is diversified and functions are shared is formed. Then urban residents are provided with abundant living and working spaces. The 24h running city shows us the new texture of a city at a new time.

Second, improve the use efficiency of urban lands. Urban complexes have some common features like large scale and large size, the land occupied by the land is "quite economical". That is the land is saved a lot because on a land with a limited area, the functions owned by an urban complex is always much more than the bearing capacity of the land. No matter what the city is, a large-sized city with multiple centers or a middle and small-sized city with a single center, urban complex is able to effectively undertake and transfer part of the core functions of a city. Also, urban complex relieves the pressure of traffic and population. This value is much more outstanding in large cities. For the "urban diseases" resulted in by the highly intensive urban population,

industry and traffic, urban complex is a good treatment.

Second, set up an urban business center. As we all know that economic development depends on the population flow, transactions will only be generated and achieved at the place where the population density is favorable, which will push forward the local economic development. Urban complex is a kind of one-stop service area, which can satisfy the demands of different people and get the people around consume. Second, relying on the one-stop service, urban complex can cultivate new business atmosphere. It cannot only develop its own economy but also enhance the land value, business value and improve itself. In China, most of the urban complexes with good operation benefit the economic development of the places around, and finally, they become the business center of that area, beneficiary for the industrial transformation.

At last, shape a new urban image (spirit). Due to the large-scaled and large-sized buildings and the superior location the urban complex has, the superior traffic, excellent traffic facilities, advanced design ideology and design level, most of the urban complexes will become a landmark of the city. If good economic benefits and social benefits can be made after they are put into operation, it will also become the business center, commercial center and life center of the city. Therefore, its economic energy and the outstanding buildings will become a window showing the modernized development of a city. (See Fig. 4-1, Fig. 4-2 and Fig. 4-3).



Fig. 4-1 Beijing International Trade Center



Fig. 4-2 Shanghai IFC Mall



Fig. 4-3 Shenzhen City Crossing

4.2Economic value - make multiple values

Economic value is the core value of an urban complex, which consists of two parts. One is the economic benefit provided for development enterprise, the other is the economic benefit provided for the region and city.

When developing the urban complex, the development enterprise will sell part of the properties (mainly the residential properties and commercial properties to directly get favorable sales revenue (because of the brand effect and function cluster, the properties attached to the urban complex can be sold at a higher price than the common residential buildings around), by renting out and running some properties, rental income can be obtained for a long term. For example, Beijing Oriental Plaza, with a floor area of 100,000m2 and total building area of 800,000m2, was put into operation in 2004, whose rental

fee was increased year by year, now the rental fee in one year was about 2.8 billion Yuan. (Sohu, 2018) (see Fig. 4-4) China Central Place which was put into operation in 2007 also got a growth in annual rental fee and associated revenue. In 2017, its income was more than 2 billion Yuan. Meanwhile, the good operation and rental revenue will help amplify the property value and capital estimate value. Therefore, it can get more initiative from the capital market.

After being put into operation, urban complex, if its functions can be complementary to each other, each sub-function system can reach an effect of 1+1>1, then great economic benefit will be brought to the city and provide large amounts of taxation for the city; depending on the business development existed in the urban complex, regional economic development will be pushed forward, employment opportunities will be provided as well (Hou & Gao, 2009). Take China Central Place as an example, the sales revenue of SKP in 2017 was more than 12.6 billion Yuan, which provided more than a tax of more than 10 billion Yuan; more than 30000 employment opportunities are provided. From the view of the economic value provided for the city, it was superior to the economic value made by industrial parks in other cities and regions (see Chapter 5).

An excellent urban complex consists of several industries, which forms a systematic entirety and influence the areas around. On the one hand, more excellent brands and enterprises are attracted to settle down in the urban

complex, which will form a good circulation; on the other hand, upstream industrial chain and downstream industrial chain will be positively affected, the consumption level in the area and change residents' lifestyle. In the meantime, the land value will be enhanced, as well as the land price, architectural price and industrial price. Therefore, the value of the real estate in the city will be enhanced.

So once economic value of the urban complex is realized, overlapped and added value will be occurred.



Fig. 4-4 Beijing Oriental Plaza

4.3 Social value - highlight urban civilization

Buildings are used to serve the society; buildings not only link with the users but also with the society. Excellent urban complexes must pay great emphasis to social benefit, which is the social responsibility must be held by developers.

From the development history and current situation in Mainland China, almost each urban complex occupies the rare resources and becomes the landmark of a city. Therefore, it undertakes the mission to improve the city image and culture of a city, which is good for the construction of urban spiritual civilization and promotion of social culture. Business space of the urban complex will penetrate into different social organizations, including governmental department, large-scaled enterprises and NGO, which will help the urban complex to come into play. (Luo & Dong, 2005)

With the development of urban complex, more employment opportunities will be provided so that residents can get better platforms for their employment. This helps to reduce the pressure of employment, which will also help to remain the social stability and harmonious development of the society. (Huang, 2017)

In China, the traditional cities with long history were generated for political demands, which reflected the power and the defense requirements. As time went by, they developed gradually. But in these cities, there was no square showing the citizens' public opinions. The modern urban complexes are the most energetic business center, which can be used as a square. Therefore, their social value was able to be presented.

What's more, there is a gap between the development traditions and logic of modern urban civilization. Currently, modern urban life and urban civilization are at the initial stage, urban complex plays an active role in

enlightening and educating the traditional residents living in the city and the new population coming to the city, or even urban complex plays a significant role in urban planning, urban management and sorting out urban traditions, as well as the value re-creating. Therefore, urban complex is considered as the city mall. It is definitely that in the future, the enlightening role played by urban complex will become more and more important in the future with the development of urbanization.

Cultural value is generated from and reflected by social value, so we can say that cultural value of urban complex is also the social value.

4.4 Historical value - urban development in the past and in these days

Today, historical value of urban complex seems to be easily ignored by people. But the fact is that historical value cannot be ignored at all.

First of all, urban complex is an inevitable product of the development of urban complex. No matter what kind of urban complex it is, the CBD urban complex (modified from old city), urban transportation junction urban complex and suburban area urban complex, it is a termination of the traditional context or the urban functions owned by former block, which is also a new start. No matter whether the project is successful or failed, it will become a nonnegligible part f the city history.

Second, excellent urban complexes always have radiation force, which can change the city layout. For example, CBD in Beijing was developed in 1990s. Perhaps, it is not correct that Beijing International Trade Center was

like a "mother" of CBD. But we have to admit that Beijing International Trade center played a special role in CBD's development or even the history of Beijing. China Central Place directly pushed forward the extension to the east plan of CBD.

Third, urban complexes, especially the large-scaled ones with good performance, they are the engine pushing forward the regional economic development, which will push forward the urban industrial updating. Actually, these urban complexes are creating a new history for the city.

Fourth, the one-stop lifestyle provided by urban complex always greatly impacts the life, consumption and social activities owned by the urban residents and the whole society. It will get people to pursue better life more. In this way, it can push forward the further development of urban civilization.

Conclusion: for the urban complex value system, economic value and social value are the two most basic values. If there is no economic value and social value, or if an urban complex has no such values, other values attached to this urban complex will be like a tree without roots. Actually, other values are generated based on these two values, or they are attached to these two values in order to maximize these two values. Only under the condition that economic value and social value are maximized and achieved, other values of the urban complex can be activated and continued.

4.5 Key factors affecting urban complex value

Generally, no matter when, at the positioning stage, planning stage and

design stage, there are several elements are considered as the pre-requisite conditions for defining the value of urban complex, including the location, regional traffic, urban civilization and urban landscapes. That is to say urban complexes own the rare and non-copy able resources in a city. The ideology and value potential of urban complex are the truth being widely accepted by the widely. But now in Mainland China, there is a phenomenon that great efforts have been done while the gain was not as expected. Projects with great investments failed to achieve the value it should be after being put into operation.

Wanda Plaza and Jindi Center, located between Beijing International Trade Center and China Central Place, have superior locations. They were constructed and put into use at the same time as China Central Place, whose locations are even better than that of China Central Place. But the economic benefit and social benefit made by China Central Place are better than that of Beijing Wande Square and Jindi Center. In China Central Place, its sales volume, rental fee and rental ratio are much higher than that of Wanda Plaza and Jindi Center. In 2017, SKP, the major store in China Central Place made an annual sales revenue of 12.6 billion Yuan, ranking No. 1 of all the shopping malls in China. The sales revenue of Phase I and Phase II was up to 5.6 billion Yuan, ranking Top 10 of all the shopping malls in China. The retail sales made by Wanda Plaza and Jindi Plaza cannot rank Top 20 in North China.

According to the plan and expectation set by the government and the

developer, Xihuan Plaza, located at Xizhimen (the transportation junction at Xicheng District Beijing) was put into use in 2005 should achieve 5 of the following targets at least: a. the transfer shall be fast, high efficient and cozy; b. transportation population shall be turned into commercial population, helping to enhance the commercial value; c. office, entertainment, hotel and other functions shall be complementary to traffic function and business function; d. the building image shall inherit the regional context; e. have economic benefit. However, after the project was completed, the targets were failed. There, the citizens cannot do the transfer in a fast and cozy way, the transportation population failed to become commercial population, functions like office, entertainment and hotel etc. failed to well blend with traffic function and commercial function. So it was considered as a typical case "image is too emphasized while efficiency is too ignored".

In other cities in China, there are some other projects whose advantages in location, traffic, urban context and urban landscapes are almost as superior as those owned by Beijing International Trade Center, China Central Place, Shanghai IFC Mall and Shenzhen City Crossing, they were designed by international masters and policy preferences were provided, while their values were not as what they have been expected.

As their economic benefits are not good enough, their social benefits are also adversely affected by their economic benefits. Once their operation suffers a difficulty and no economic benefit can be made, a systematic

breakdown will be resulted in. If so, merchants will suffer a downturn while enterprises will leave. Then the whole project will suffer great downturn and the developer will be so sorry for it. Finally, it becomes a pain of the city. For example, Dazhongsi Zhongkun Plaza made in 2007 (see Fig. 6-3) was honored as "the last large-scales urban complex in Beijing 3rd Ring", now what we can see is an empty plaza (see Fig. 4-5). Thousands of owners have disputes with the plaza. So definitely, we can't get any social value and history value.



Fig. 4-5 Dazhongsi Zhongkun Plaza

The failure was resulted in by both internal factors and external factors.

Because of the operation failure, there was no endogenous for sustainable development and the value of urban complex cannot come into play.

From the positive and negative cases, we can see that no matter what

kind of value it is, the economic value or the social value, it is greatly relied on the management and operation effect after the urban complex is completed. Since urban complex owns good location and rare urban resources, locates at the transportation junction and provided with policy preferences, the consequences of waste and adverse influences are quite obvious.

Therefore, it has great practical significance to activate the urban complex value by well managing the operation. Now some scholars pointed out that for the development of urban complexes in China, "it is mandatory to study the operation management, to innovate the operation management; only in this way can the level of urban complex be enhanced." (Dong & Lu, 2009)

Conclusion:

The key factors affecting urban complex value is to make scientific planning and design, to improve the operation management continuously.

(1) Scientific planning and design

The planning and design at the early stage are the preconditions determining that whether the project can be successful or not. A tiny mistake or error during the planning and design will be amplified limitless at the stage of operation management, getting half the result with twice the effort, or even it will be quite hard to take remedial measures. So we can say that scientific planning and design are the start point of an urban complex.

(2) Improve operation management continuously

The achievements made by scientific planning and design must be

guaranteed by operation management, otherwise, they cannot be well implemented. However, development of urban complex is dynamic and the key to well operate and manage the urban complex is to well face the change of time and environment, including the change of market and updating of consumption ideology. So though a project has the best design and planning, it is not allowed to keep the operation management measures unchanged. Instead, it is mandatory to improve the operation management continuously in order to get the urban complex keep a pace with the world and able to have a sustainable development.

Chapter 5 Study on Urban Value of China Central Place

5.1 Basic information of China Central Place

China Central Place locates at the northwest corner of the junction between the extension line of East Chang'an Street and East 4th Ring, which is 900m from Beijing International Trade Center. It consists of 3 buildings (super 5A intelligent office building, The Ritz-Carlton Hotel, JW Hotel, SKP Mall (Shin Kong Place, similarly hereinafter), Huamao Shopping Mall, Huamao Business Street, International Apartment and Central Square (see Fig. 5-1). It starts from Xidawang Road in the west, close to East 4th Ring in the East, accesses to Tonghui River in the south and faces to Chaoyang Road in the north. Jingtong Expressway, Line 1, Line 14 and several buses pass through it. It was started in 2003, which was fully completed on Sept. 25, 2007 and put into operation.



Fig. 5-1 Aerial View of China Central Place

5.1.1 Causes of China Central Place

China Central Place is constructed on the block which was once occupied by Beijing 1st Thermal Power Plant (address: Xidawang Road Chaoyang District, Beijing), with a floor area of 15 hectares. In May 1999, all the assets owned by Beijing 1st Thermal Power Plant were transferred to Beijing Guohua Power Co., Ltd by pay. In 2002, the modification on the block occupied by Beijing 1st Thermal Power Plant was started. This block is located at the northwest corner at the junction between extension line of Chang'an Street and East 4th Ring. At the beginning of 21st century, the place where the block was at the suburban area, whose advantages and disadvantages are obvious. For example, its advantage was that it is close to Chang'an Street and it has convenient traffic; the disadvantage is that the place where it is not a mature and busy region.

The project was established at a special historical background.

(1) External causes

The development of real estate industry, the new planning of a city and the rapid development of urban economy provide physical conditions and social foundation for projects similar to China Central Place, which help to form 3 external causes:

First, with almost 10 years' accumulation, real estate development got a rapid development at the beginning of 21st century. Though progressive

development was the major mode used by residential building development, innovations and explorations were never stopped, which provided solid technical and physical foundation for constructing advanced buildings.

Second, a node of new urban planning in Beijing was occurred at the time of starting the project. In 1993, Beijing General Urban Planning approved by the State Council proposed that it was necessary to built up modernized and multi-functional business center (finance, insurance, trade, information, business, cultural entertainment, office and other functions are available). But the execution was not done until Detailed Plan for Controlling Beijing Central Districts in 1998. In this document, CBD scope was defined, starts from Dongdaqiao Road in the west, accesses to Xidawang Road in the east, starts from Tonghuihe in the south and accesses to Chaoyang Road in the north, with an area of 3.99km2 (see Fig. 5-2). Construction of CBD was started comprehensively in 2000.



Fig. 5-2 Original Map of CBD



Fig. 5-3 Location of China Central Place

According to the plan, the place where China Central Place was quite close to the planning line (see Fig. 5-3), its positioning and development are closely influenced by CBD.

Third, the new opportunities provided by the urban development in Beijing. Via the study on urban complexes in foreign countries, when the per capita GDP is about 4000 dollars, urban complex is at the stage of initialization. When per capita is about 5000-8000 dollars, urban complex will have the ability against risks; with the development of a city and new business enriched, urban complex will step to a stage of development. When the per capita GDP is more than 10000 dollars, urban complex will step into the stage of rapid development.

In 2002, per capita GDP in Beijing was only 3713 dollars; since 1990s, per capita GDP was increased by an annual grow ratio of 15% (see Table 5-1). Due to 2008 Beijing Olympic Games, it was quite possible for Beijing to reach the per capita GDP of more than 4500 dollars. In Beijing, the population is quite huge so it seems that the urban complex with an advanced positioning

has market potential and big market capacity.

Per capital GDP in Beijing from 1992 to 2002 (unit: USD)

Year	1992	1993	1994	1995	1996	1997
Per Capita GDP	1171	1389	1188	1520	1714	2005
Year	1998	1999	2000	2001	2002	
Per Capita GDP	2310	2586	2914	3260	3742	

Table 5-1

(2) Internal causes

The internal causes: enterprise mission and sense of responsibility.

When the project was just started, there were only three choices for market positioning: low-end product - economically applied residence; middle-end product - target clients are mainly the white collars; high end products - building complex and commercial real estate.

If low end products were to be made, since it was close to the power plant the market value will be the lowest though living coziness was not so popular at that time. If middle end products were to be made, the project would be not as competitive as other projects nearby (Modern City and Lanbao) though a large-scaled market was available.

The two-positioning mentioned above basically used the development mode for seeking quick success and instant benefits, which was also widely used in the market. At that time, the sales target was easily to be fulfilled and the investment could be returned in a short time. Consulting companies hired by the project was 80% inclined to the positioning that middle end and high-end residential buildings, commercial facilities and schools should be

selected. As a result, the urban complex was become the residential support of CBD, which could not maximize the land value; besides, development enterprise would disappear after tasks were done.

In 2002, I accepted the task to run this project. Then in accordance with my experience in developing commercial real estate obtained in the 1990s, as well as I once participated into the study of international urban complexes like Rockefeller, I made a deep and repetitive study. International companies were hired to do the market analysis and it was concluded that high end product was positioned. Only high-end product could provide a totally new image for this block. On the one hand, this project could escape from homogeneous competition but access to differential competition. Only in this way could the land value be maximized. Then the opportunity provided by its location (non-renewable history of the east line along Chang'an Street).

From the view of regional development, it is not difficult to find out that though the project is out of the CBD boundary limit, this project could compete with CBD if the positioning was set according to CBD planning. If this project was developed just like other residential projects in order to make short-term profits, it would be abandoned as time went by.

After the market positioning was clearly defined, a survey to overseas cities and domestic cities were made, and then I thought that the project should be positioned as a building complex consisting of hotels, office buildings, shopping malls and apartments. Only in this way could the different

functions be complementary to each other and the building complex was able to undertake the core functions of the city; this project should follow the mode that properties must be owned for a long term, which mustn't be sold out, the management and operation must be done in an universal way; otherwise, the execution of this project couldn't be performed and sustainable development couldn't be achieved. At the same time, only urban complex, the highest formation of urban development, is depended on could the project set a solid foundation. And then this project could escape the development route encountered by other real estate projects.

From what is mentioned above, regarding the short-term interest and long-term interest, long-term interest was selected; for economic benefit and social benefit, social benefit was emphasized more. Thus, blue print of China Central Place was produced from at the suburban area and the place out of CBD scope.

5.1.2 Planning and design of China Central Place

Scientific positioning and planning are the preconditions for the success of an urban complex. After market positioning and product positioning were defined, China Central Place was started based on the standard that the buildings should be always popular at any time. The planning and design were charged by KPF Architectural Design Firm (an American company), which was directly responsible for the design of office buildings. Landscape design was charged by EDAW (an American company), commercial design was done

by BENOY (a British company), hotel building design was done by WATG, MVA was employed to design the internal traffic and external traffic, who once worked as the traffic planning consultant of CBD.

(1) Functional positioning shall be done with an internationalized, differentiated and prospective view

According to CBD control rules, within 4km2, office building should be 50% of all the buildings, apartment should be 25% and the other 25% should be for business, service, entertainment and cultural facilities.

If China Central Place wanted to undertake the urban functions and inherit CBD's core functions, the first thing was to take into account of the control rule mentioned above. After studying those typical cases in the world (including Rockefeller, Roppongi Hills and La Defense etc., it finally defined that China Central Place should include several functions - office, business hotel and apartment, after considering the actual situation in China and the radial scopes (Jing-jin-ji and North China). Actually, these functions are the basic ones owned by city mall. It also defined that the project should be still popular after hundreds of years. So, its planning positioning and design must be prospective enough.

Office function, normally, urban complexes can provide offices for enterprises or be used as the head office for enterprises, including offices, conference rooms and commercial center etc; being used as offices or head offices of an enterprise can support other functions (hotel or business), achieving the market collaboration. Under the purpose of differentiated positioning and competition, China Central Place positioned its offices as 5A Grade I offices customized for transnational enterprises by regarding the situation that offices owned by CBD were not available enough for the international enterprises. Then it was totally different from the office buildings of other similar projects nearby.

B. Hotel, one of the most commonly-seen core functions of urban complex, can provide floating "residents" and movable client flow for the urban complex. Meanwhile, in the hotel, catering facilities, entertainment facilities and services are available, if the urban complex has no conference function and exhibition function, the hotel could be the provider of conference function and exhibition function. Hotel is also the window by which service quality of an urban complex could be reflected, which is a platform linking with the city, the country and the world. According to the actual situation at that time that international hotel brands were not in large amounts in Beijing, the hotels were positioned at high-end brands. At the stage of project planning, two luxury hotels - Ritz-Carlton and JW were settled down, which made a record that two super-luxury hotels settled down at one urban complex at the same time. This also filled the blank in Beijing that high end hotel brands were in short. The hotel positioning and the execution of the hotel function reflected the international image stood for by China Central Place, which strengthened the influence of the project and benefits the office lease and

business investment.

C. Business function is the most energetic and starting function of urban complex. Integrating several functions - shopping, leisure, entertainment and social, the business in the urban complex can attract large amounts of clients and population flow, which becomes the engine of an urban business center. Meanwhile, the business can support other functions (office, hotel and apartment), helping to make a busy and flourishing urban blocks. Although Saite Mall and International Trade Mall were in the east of Jianguomen, whose scale and positioning still had a gap with other advanced department stores and shopping malls in the world. Compared with those department stores and shopping malls in Shanghai, they were still lagged behind for ten years. If China Central Place wanted to become a landmark business and had great influence and radial force, it was mandatory to be high-end and its scale must achieve a certain size. Therefore, it was planned that an individual shopping mall, the largest one in Asia, with a building area of 180000m2 was planned. Also, a shopping mall and a business street with an area of 34000m2 were planned, trying to build up a business center of Beijing or North China.

D. Living function is a relatively private part of all the functions owned by an urban complex, which is good for solving the phenomenon "traffic jam in daytime, empty in night". It is also an effective measure to ease the traffic pressure at the rush hour and the energy waste resulted in by too much privately-owned cars. Living conditions cannot only be provided for the white collars and golden collars working in the enterprises settled down in the urban complex but also provide stable clients for the merchants in the urban complex. When developing urban complex, the developer always has a big pressure of funds. So, they can get back some funds by selling the apartments and residential buildings, then the funds can be used for further construction. The positioning and ratio of apartment defined by China Central Place was just for this. Actually, the apartments were the only item sold to the public, which played an important role in easing the pressure of funds. The living is quite private and relatively independent, the selling didn't affect the positioning and execution of the whole project.

According to the market survey and professional comments given by overseas and domestic consulting companies, as well as fully considering the development potential of future market, the ratio among office, business, hotel and living was defined as 30:25:16:25 (see Fig. 5-2).

Ratio of Different Functions in China Central Place

Functions	Area (s.q. m)	Ratio	Remark
Office	300,000	30	
Business (department store, shopping mall and business street)	250,000	25	
Hotel	160,000	16	
Residence (apartment)	250,000	25	
Total building area	About 1000,000		The rest is the underground area

Fig. 5-2

(2) Planning and design must be systematical and professional

Urban complex is a complicated system consisting of different units and spaces with different natures. It is not a system getting all spaces added up but linked and complemented to each other, only in this way can the effect 1+1>2 be achieved. Operators and administrators of each function are the ones from different fields for different interest subjects. Thus, it is required that the planning and designing of each function must be complicated generally. When working on the planning and design, it is mandatory to have an integrated analysis on the open space, greening system and cultural inheritance, and systematic architectural design must be used. Only in this way can a highly efficient and intensive urban complex be made.

Under the ideology "architecture combines with urban humanity, architecture jointly develops with environment", KPF got all functions of China Central Place have good adaptability and self-regulation ability by systematical design method, each function could come into good play and give out powerful strength for regional economic development. The planning and design made by KPF for China Central Place also used the principle "multiplying effect", that is by overlaying a series of functions in a limited space, large amounts of functional spaces can be produced. The generation and existence of urban space had a necessary link with the environment around: three office buildings, two hotels, business center and apartment area well linked with each other. The urban design linked the west with the east, from the south to the north, businesses were in the sequence "from dense to

dilute", with a natural transition. The whole design paid great attention to solving the relationship between road traffic system and public space, by which a rare second humanistic space was made in Beijing. (See Fig. 5-4)

At the beginning when the project was started, hotel operators have been defined. The professional work done at an early time provided unique advantages for the planning and design of China Central Place. The hotel design was done by WATG, a designer team used by JW. According to the standards of Ritz-Carlton and JW, pure blood products were designed. Regarding the long-term operation, a common backstage was designed (including the unloading, underground parking, entrance and exit etc), which not only saved space but also enhanced the operation efficiency. Banquet halls of the two hotels accessed to each other, which was convenient for those international conferences and exhibitions.

The business operation was much more complicated than other functions because special requirements were set to the spatial layout, dynamic planning and backstage support etc. In China, many shopping malls followed the principle "construction done first, investment followed". As a result, modifications were required a lot after merchants settled down in the urban complex, or even subversive modifications were required. This is a kind of waste and it adversely affects the working period and updating work. But for China Central Place, the operators and administrators were finalized before the construction was totally done, SKP was invited to join the design and

improvement, which provided favorable conditions for the operation and continuous improvement in the later time. At the stage of decoration, the administrators brought in many well-known brands to take part in the decoration design, by which intensive brand effect was formed. Therefore, at the time of opening, it was a big success and profit was made in the first operation year.

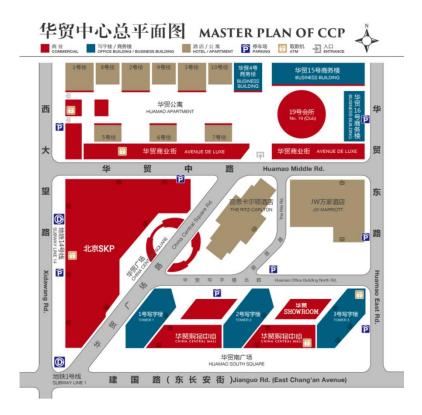


Fig. 5-4 China Central Place Layout

(3) Urban design ideology and regional environment must be well combined

The combination of urban complex, areas and environments around gets a close link with the uniformity of the city. Urban design is a good measure for breaking the isolation between the urban complex and the areas around,

which can help the urban complex to well blend with the areas around. By using different measures, elements of urban complex could break through the architectural scope and change its urban functions. Then finally, the boundary between the areas and environment around and the urban complex will become unclear, by which a harmony can be achieved. The smooth docking between transitional space of hardware and the regional traffic system is the carrier for realizing the combination with regional environment.

Under the core ideology "extension, planning and design are based on the square", China Central Place is quite open, all details took into account of the affinity required by openness. All buildings stepped backward 40m within the red boundary line; the south even stepped backward 80m from the arterial traffic on Chang'an Street, so that sufficient transitional space was reserved.

Centering the central square, the 45° axis stretching out from southwest to northeast (see Fig. 5-4 Huamao Square Road) evenly separated the business buildings, office buildings and hotels, which got the yards belonging to the international apartments and Chang'an Street in the southeast into the sightseeing, by which the buildings and the city could have an exchange directly. The three office buildings close to Chang'an Street in the south have three floors (Floor 28, Floor 32 and Floor 36) which drew a soft stair and rigid skyline. Every week, the gap between the buildings provides a space for the vehicles and walkers for their exchange and imagination.

内部道路系统



Fig. 5-5 Traffic Layout in China Central Place

For the internal and external traffic, great emphasis was paid to perfecting internal micro-circulation, which smoothly linked with the regional traffic circulation system. For internal, China Central Place was divided into different parts - dynamic area and static area, underground vehicle area and ground walker's area, making the areas in China Central Place simple and clearly-seen. For vehicle system, the underground parking at different functional areas are linked with each other, especially the link between the underground parking of the office building and underground parking of the shopping mall, then these two sub-functions can share the advantages of alternating rush hours and ease the parking difficulties at the busy area. According to the demands of different functional areas, entrances and exits are rationally set so that people can come in and go out in four different

directions (east, west, south and north). Along with the 45°axis, walking system was designed, which rationally planned the spaces and clearly identified the sign-guiding system. In this case, people can go through the whole center without getting lost. (see Fig. 5-5)

For external traffic, Line 1 and an overpass were constructed at China Central Place, which got the areas around linked with China Central Place. At the auxiliary road in the north of Chang'an Street, an entrance and exit for motor vehicles accessing to Huamao East Road were set, which formed a ring road together with Huamao Business Street and Xidawang Road. Auxiliary roads were set in the south of office building so that vehicle bypass can be done, which helps to ease the pressure of main road. Traffic lights were set at the T-junction linking Xidawang Road and Huamao Business Street, traffic lights were also set at the exist in the west of underground parking of Huamao Apartment, which control the traffic flow and form a traffic circulation.

5.1.3 Operation management mode of China Central Place

All different properties in the urban complex have their own characters so the operation management should be different each other, mainly including operation management of retail business, operation management of hotels, operation management of office buildings, property management for apartments.

Now, there are three operation management modes for the urban complex:

A. Self-management by developers

The management is directly charged by the development enterprise or the owner, only part of the functions is managed by itself, like the apartment, office and retail business, some special functions are contracted to professional companies or brand management companies. The professional company or the brand company shall do a universal property management for the whole urban complex. Normally, the urban complex which is privately owned or the property right subject is clear uses this mode (the urban complex is not public-owned). Several projects in the world use this mode, like Sony Center in Potsdamer Platz, Peabody Plaza in Memphis, Beijing International Trade Center and City Crossing in Shenzhen etc.

China Central Place also uses this management mode.

B. Joint management by professional management organization

The development enterprise will bring in an external management organization to join the management, including that part of the functions is contracted or entrusted to overseas management organization. For example, Raffles City in Beijing is under this mode.

C. Market management by professional property management company

The business management is done via lease mode, that is rental is the management. The renter shall come up with proposals and funds while property management company will coordinate with the developer to do a world-universal decoration. The professional management company will not

directly involve into the business operation but be responsible for the planning and management, including rental management, marketing management, service management and property management. Beijing Oriental Plaza is under this mode.

Different management modes have different advantages. There is one thing which cannot be denied that universal management is a standard rule for all the excellent urban complexes.

operation management of urban complex includes investment (rental) management, marketing management, service management and property management. In an urban complex, the closeness, dependence, penetration degree and refection degree of each function are different (Zhou, 2013), so high-level and professional management is required by each sub-system, all functions shall be generally controlled and coordinated.

From the view of management subject, the most significant operation management of an urban complex is to provide multi-functional services, to coordinate the balance between the affinity and refection of different functions. The principle "seek common points while reserve differences" shall be followed in order to get all different functions can get a collaborative development and sustainable development. Therefore, good economic benefit and social benefit will be made, which highly reflects the urban value of the urban complex.

The reason why China Central Place could play a leading role in urban

value is that it well controls the operation management and provides a good atmosphere for collaborative development and sustainable development.

5.1.4Current operation of China Central Place

From 2003 when China Central Place was started to 2007 when it was completed and put into operation, China Central Place used four years to create a business property legend: two five-star hotels (Ritz-Carlton and JW) were introduced before the construction; investment was fully done before SKP was completed; Deutsche Bank (China) head office and Varig Brazilian Airlines signed for the settlement when the office buildings were still being decorated.

From 2011, sales volume of SKP was increased continuously, who ranked No. 1 in seven consecutive years among all the department stores in Mainland China; in 2017, SKP made a sales volume of 12.6 billion Yuan, becoming the second largest individual department store in the world, only ranking second to Harrods Store.

Being as an international business center and a government-designated cluster gathering international financial brands, settlement ratio of Huamao's office building was always 99%, of which 42% were financial enterprises. According to the report issued by Office Top 100, China Central Place Ranked No. 2 among the entire Grade A office buildings in terms of its hardware facility, office environment, business facilities, considerate service, low-carbon development and sustainable development etc.

The two five-star hotels (Ritz-Carlton and JW) became the model of JW Group in China after they were put into operation, which was the first choice for world key politicians and international celebrities. Also, it was an ideal place for important business activities, which greatly enhanced the business reception level in Beijing. Therefore, it became an excellent platform for transnational enterprises settling down in office buildings and CBD area to hold brand and new product press, industrial summits and annual conferences.

It is a business center where there are many international financial brands, which is considered as the fashion center without any time lag between Paris and New York. China Central Place is also a famous food court in Beijing. (See Table 5-3 and Table 5-4.)

Benchmark Index and Hard Power Index of China Central Place

Function	Location	Market performance		
Office	Huamao office building	The cluster gathering international financial brands, the place where the head office owned by foreign cooperate banking is located, rank No. 2 among Top 100 office buildings.		
Shopping mall	Beijing SKP	Annual sales volume was more than 10 billion Yuan, ranking No. 1 in China and No. 2 in the world.		
Hotel	Beijing Ritz-Carlton and JW	Five-star + brand		
Apartment	Huamao apartment	CBD international apartment model, benchmark of harmonious community		
Landscape	Landscape and greening area	The landscape and greening area is 50000 m2. Roof greening area is 28000m2, about 1/10 of all the roof greening in Beijing		

Table 5-3 **Soft power index**

Type	Scale
Settle-down enterprises	More than 500 enterprises settled down, over 200 transnational enterprises; over 50 enterprises are Top 500 and industrial leaders, over 42% are financial enterprises
Entering brand	Over 1200 entering brands, over 100 concept stores and flagship stores of first well-known brands
Hotel facilities	Two super-luxury hotels, with 893 rooms (suites), 3 banquet halls with a capacity of more than 1000 guests; a unique wedding hall and open garden in Beijing.
Catering facility	108 western and Chinese restaurants, 26 coffee shops
Parking lot	5400 parking lots, and almost 200 charging piles.

Table 5-4

5.2 Analysis of value system of China Central Place

(1) Urban value - create highly intensive and high efficient urban space

High efficiency. On the land with an area of 166000m², focusing on the square core and concept, under the principle "multiply effect", 1 million m² building area was planned and designed by overlaying the spatial functions. Then according to Beijing CBD functional standards, a shopping mall with an area of 0.25 million m² shopping mall, 5A intelligent office building, two super-luxury hotels with an area of 0.16 million m², residential and office buildings with an area of 0.25 million m², central square and a series of underground supporting facilities; in China Central Place, a series of urban functions like living, business, office, conference, entertainment and leisure are available. Then finally, a highly intensive, highly efficient, cozy and

typical urban space representing the superior form of a city was formed.

Modernization. The whole project used a simple but slashing style, large amounts of advanced and mature materials and technologies were used, which created office and business spaces with great convenience, high efficiency, coziness and comfort. This reflects that urban complex represents the modernization of most advanced architectural technology and material. Actually, modernization is the basic feature of internationalization, which is the basic condition considered by transnational enterprises when selecting the address. So China Central Place was able to attract some transnational enterprises (like Deutsche Bank (China) head office and Varig Brazilian Airlines) to sign the settlement when the office buildings were being decorated.

Affinity. Concentrating on the core ideology followed by the extension work, planning work and design work, the target was to get China Central Place naturally open. It is required that all details should pay great attention to the affinity required by the openness. All buildings stepped backward 40m within the red boundary line; the south even stepped backward 80m from the arterial traffic on Chang'an Street, so that sufficient transitional space was reserved. In-and-out passageways are designed in four directions (east, west, south and north), an axis from southwest to northeast goes through the whole center, which ensures a smooth communication with Chang'an Stree and the city in terms of transportation and sightseeing. There are many clearly-seen signs on

the ground and under the ground, which were readable so that people will not get lost. The readability of signs is a demand of the city, which will give out a feeling of affinity so that different residents and guests here can feel casual. This is also the reason why an urban complex positioned to be high end was considered by the urban residents to be their own urban living room.

Inheritance. Being as a project emerged in the east of Chang'an Street, the design of China Central Place paid great attention to the harmony with the city. The project used several measures, like axial symmetric, division in the south and surrounded by yards etc, reflected Chinese architectural traditions were inherited; it well blended with the urban context. Moreover, this project expressed its respect to the urban context by using abundant architectural language (see Fig. 5-6).



Fig. 5-6 Office building facing Chang'an Street uses glossy stone color to show respect to traditions

Landmark. There are three Huamao office buildings along Chang'an Street,

which are over 100m long. They used simple by slashing surfaces to figure out a refining skyline, which helped Huamao become a landmark. After the project was put into operation, CBD's flourishing was pushed east, so east extension was achieved by CBD. In the meantime, China Central Place became the new business landmark and fashion landmark in Beijing. Because of this, it attracted large amounts of overseas experts, scholars, urban administrators and real estate peers and it became the first choice for consumers preferring fashion and leisure life.

(2) Economic value -multiple overlaying effect

Since its development, the economic value of Huamao was honored as a legend, whose economic value mainly includes the following three aspects:

Scale. After the project was put into operation in 2007, performance of business, office building and hotel was better and better, developed quite stably year after year. Beijing SKP ranked No. 1 by its sales volume in seven consecutive years among all the individual department stores in China, with a big gap between the one ranking No. 2. In 2017, the sales volume of SKP was 12.6 billion Yuan. The rental revenue and joint operation income were more than 1.3 billion Yuan, which provided reliable and stable cash flow for the stable development. Though when going to the capital market was not on China Central Place's schedule, investors have realized its huge value.

For urban administrators, economic value of China Central Place was much

more than the expected. Currently, on the land with an area of 15 hectares,

over 240 transnational enterprises like Deutsche Bank, Bank of Montreal, Australia & New Zealand banking, JNJ (Johnson and Johnson), Varig Brazilian Airlines and TESLA etc, as well as more than 1000 fashion brands like CHANEL, CUCCI, PRADA and LV; 108 restaurants with their own special foods. Because of these enterprises' settle-down, more than 30000 employment opportunities were provided and taxation about 10 billion Yuan was paid for the government. From these figures, we can see that its economic benefit and social benefit are much better than other industrial parks. (See Fig. 5-7, Fig. 5-8 and Fig. 5-9)

Sustainability. Since the functions are collaborative with each other and the advantages are complementary to each other, since 2007 when this project was put into operation, operation revenue and rental revenue got by the development enterprise, the performance of entering enterprises have got a good development year after year no matter how the international market and domestic market have changed. (See Table 5-5, Table 5-6 and Table 5-7)



Fig. 5-7 Beijing SPK

Year	2012	2013	2014	2015	2016	2017
Annual turnover (unit: 100 million Yuan)	72	75	75	78	96	125
Tuan)						

Table 5-5 Turnover of Beijing SKP

Sociality. From the view of economic benefit (including social retail sales volume, taxation resources and employment opportunities) given back to the society or from the view of its social influence, it showed us that the social benefit made by China Central Place was much higher than its economic benefit and China Central Place achieved the overlaying effect. This was really seldom achieved by other urban complexes in China. Because of this, China Central Place was provided with a rare environment for its sustainable development. By now, I have accompanied decades of leaders from other cities in China to have a visit and make a survey, who hoped that China Central Place could settle down in their cities. Currently, China Central Place was introduced to Suzhou, Nanjing and Huizhou etc.



Fig. 5-8 Huamao Office Building

Year	2010	2011	2012	2013	2014	2015	2016	2017
Rental	51593	47685	53286	66390	78984	80360	81187	81715
revenue								

Table 5-6 Annual Rental Revenue of Huamao Office Building



Fig. 5-9 Beijing Ritz-Carlton (Left) and JW (Right)

Year	2009	2010	2011	2012	2013	2014	2015	2016
Inco	31225	42419	52735	54312	51718	49336	49272	48591
me								
(unit:								
1000								
Yuan								
)								
1								

Table 5-7 Annual Income of China Central Place Hotel

(3) Social value - push forward the regional development and lead an urban lifestyle

Push forward the regional economic development. Apart from large amounts of tax, a regional redial force will be formed because of the brand effect made by the successful operation. Then a new business circle was formed in Beijing, which could benefit the industrial updating and regional

economic development.

Ease urban disease. After China Central Place pushed forward new business centers formed around, we can say that it played the role of being as an urban core. It helped to share the population and traffic etc. pressure suffered by Wangfujin, Xidan and International Trade Center.

At the same time, in order to integrate regional traffic resources, some measures were taken in order to optimize the internal and external traffic systems, like overpass above Chang'an Street, entrance and exit of Line 1. This helped to ease the regional traffic pressure and its social benefit could be learned by other urban complexes in other cities.

Enlighten new urban lifestyle. All the international brands clustering in China Central Place are superior to the urban complexes and business centers in other cities in terms of its quality and quantity. Due to such an abundant brand culture, the urban lifestyle would gradually affect the life, office, consumption and tourism here.

Innovate the community management mode. In China Central Place, each functions are dependent on each other and complementary to each other. Due to the good property operation, a harmonious living atmosphere and working atmosphere are created. The residents living in the apartments and the employees working in the entering enterprises become good neighbors, which breaks through the "familiar strangers" existed in cities. So, China Central Place community got all the awards issued by Beijing government and

Chaoyang district government for community construction. China Central Place community also provided models and ideologies for other community administrators. Under this background, the sociological research of China Central Place will be more meaningful.

(4) Historical value - a milestone consisting of urban context development Modify the urban regional functions. The block where China Central Place is located is the thermal power plant, whose function in the 20th century was to provide basic service for the city. For a long time, it well guaranteed the development of Beijing. The development of China Central Place terminated its original mission undertaken by this block. Then the auxiliary function played by this block was changed into a compound core function (see Fig. 5-10-1 and 5-10-2).

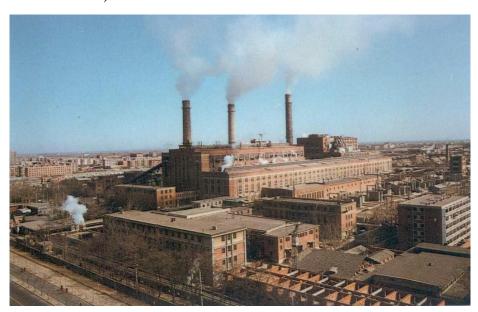


Fig. 5-10-1 Beijing 1st Thermal Plant - Former China Central Place



Fig. 5-10-2 Construction Site of China Central Place in May 2003

Helper of CBD's east extension. At the beginning of the project planning and construction, it was not covered by CBD scope. If a residential project was to be developed, this block might stop the east extension of Beijing CBD. Because of China Central Place, the flourishing area in Beijing was able to go east then east extension of CBD was on the schedule. Therefore, the historical direction of this area was totally changed.

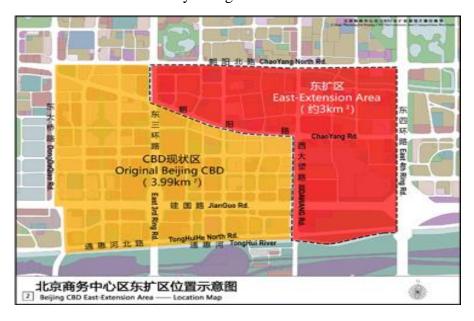


Fig 5-11

New start of business development. The sales volume made by SKP ranked in 7 consecutive years among all the individual department stores (shopping malls). In 2017, its sales volume ranked No. 2 in the world, only ranking second to Harrods Store. Both its operation performance and operation mode have became an important milestone existed in the business industry and service industry in Beijing or even in China.

New pattern of urban complex development. For the business development in Mainland China, China Central Place was the first urban complex which was fully invested and constructed by domestic funds. Due to the mode "real estate is possessed for a long term" and integrated arrangement of openness, construction, investment and operation, China Central Place became a legend because of its continuous innovation and improvement. It provided excellent models for developing and operating urban complex, which showed the whole world an excellent case in China.

5.3 Analysis on sustainability development ability of urban complex

In China Central Place, the urban value system covers several aspects while economic value should be the most important one because other values fully depends on economic value. The continuous economic value is totally depended on the operation management in the future. Whether the urban complex is able to get sustainable development reflect the management ability and management level.

By sum-up and analysis, the sustainable development ability of China

Central Place was determined by three aspects listed here below. The three elements also reflected the management features and competitiveness of China Central Place.

(1) Collaborative functions is the foundation of urban complex

The collaborative function in China Central Place is not only depended on the scientific planning and design, but also guaranteed by the property right subject under universal operation.

A. Collaborative function can produce direct benefits

From the concept, we can see that "collaborative interaction and joint consumption) was the earliest mission when the urban complex was planned, designed and constructed. When operating and managing the urban complex, some functions and businesses were mutually depended and on each other, some are against with each other. Only the target clients of each function are the same, can their consumption be linked with each other and functions be interacted with each other. In this case, the effect 1-1>2 can be achieved. If different functions have different target clients, the urban complex will lose the foundation for urban complex's stable development.

In China Central Place, the major four functions (business, office, hotel and residence) are being developed well, which reflects a good collaboration between each other.

In 2017, SKP made a sales volume of 12.6 billion Yuan, who has ranked No. 1 in seven consecutive years among all the individual department stores in

China. The gap with the department store ranking No. 2 is getting bigger and bigger. The rental fee of office buildings is almost the same as that of CBD. From 2010, the occupancy ratio and lodging ratio have been high than 95%, which is a government-accepted cluster for international financial brands. For the two hotels in China Central Place, their operation performance was superior to other high-end hotels in Beijing. Since 2005, satisfaction of residents living in Huamao apartments has been higher than 96%. Huamao apartment is a community gathering groups of CBD golden collars and white collars.

The excellent operation was due to the good collaboration and complementary between different functions.

According to the data provided by seniors engaging in SKP's operation and management, we can know that the contribution made by Huamao business to the annual sales revenue was more than 16. Based on the situation that in 2017, the sales revenue made by China Central Place was 12.6 billion Yuan, then sales volume made by clients and affiliated clients of Huamao business was about 2 billion Yuan.

In China Central Place, each function greatly supports other functions in terms of their sales revenue (including the sales revenue made by the shopping mall, Huamao Square and business street). (see Fig. 5-8)

The hotel function, which seems to be independent from other functions, is also benefited by other functions (see Fig. 5-9). These figures were

provided by the statistics made by Huamao Business Management Co., Ltd. and Huamao Hotel Management Co., Ltd. according to the actual operation.

Contribution made by Huamao Business

Catering	70%
Service	70%
Luxury products	10%
Retail sales	30%

Table 5-8

Contribution percentages

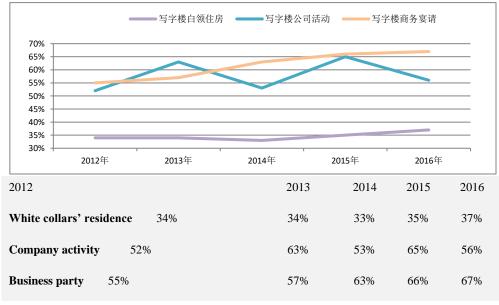


Table 5-9

Though the general benefit of Huamao was at a high cardinality, the link and complement of each function still achieves a favorable percentage. This reflected that the functional positioning, client positioning and service quality were quite collaborative with each other. According to a questionnaire done by 40 clients settled down in the office building, 40 young residents living and

renting in the apartment, it is known that if possible 80% of them would like to invite their relatives, friends, clients and partners to come to Huamao for shopping, office, leisure and living in the hotel. This reflected a high client conformity in China Central Place.

B. Collaboration must be guaranteed by general control and management

The largest challenge faced by urban complex's operation is the conflict between long-term interest and short-term interest. If world-universal management is not done, or the management subject does not have a long-term development ideology, the project positioning will be failed halfway. At the stage of positioning and design, target of Huamao office building is to be customized for transnational enterprises and become an office platform for international financial brands. Under the precondition that hardware conditions are set, the external environment is difficult to be predicted. In 2008, rental work was started for Huamao office building while global financial crisis occurred. The market suffered a downturn, many transnational enterprises and excellent financial organizations stopped their business development and rental plan. Therefore, the rental work of Huamao office building encountered great difficulties. If the office buildings are not rented out, a large economic loss would be resulted in every day. The hardware and services of Huamao office building are much better than others, so many intermediary companies and non-target positioned enterprises would like to enter China Central Place by paying a rental fee higher than the one set

by Party A. In order to ensure the entering clients' quality, Investment-attraction Department refused these companies. Though the rental ratio was only 50%, Investment-attract Department didn't lower the standards for entering clients, trying to attract more excellent clients by improving services. Then in 2009, a good return was obtained. The entering clients were the ones satisfying the positioning requirements set to high end enterprises, enterprises playing leading roles in the world entered China Central Place one by one. Although rental fee was increased, the occupancy ratio was increased to over 90%. Every year, more and more financial brands settled down. Currently, 53% or more are financial enterprises, making China Central Place as one of the three financial brand clusters that are accepted by Beijing.

The privacy of Ritz-Carlton and JW is ranked second to the residential area, which is exclusive to other functions. Being supported by the property management, they are involved into the ecological development together with other functions by their own functional advantages. The banquet halls which link with each other provide a platform for Huamao office building, SKP and clients entering Huamao for their conference, PR and marketing activity, which help the two hotels make stable revenues. The irregularly-held food festivals and art salons helped to strengthen the interaction among different functions. The international brands and superior service of the two hotels help to attract more clients and set up a good reputation.

Apart from SKP, there are some other businesses in China Central Place,

including Huamao Shopping Mall, Huamao Square and Business Street, which are competitive with each other. By repetitive coordination and improve by Operation Management Department, or even compromise and sacrifice were made, customized business and flagship providing better experience were input, which are totally differentiated from SKP. Then finally, collaborative development was achieved.

By the high-quality coordination between different functions, a solid foundation was provided for the stable development after China Central Place was put into operation, which was quite different from other urban complexes. There is an urban complex only hundreds of meters away from China Central Place, which was positioned as a Grade A urban complex. There, Sofitel Hotel and Wal-Mart have settled down, so obviously, the business clients are unable to be integrated with the clients of other sub-systems. In recent three years, the average rental fee of the office building was less than 70% of the rental fee made by China Central Place, while the entering ratio was less than 70%.

(2) Harmonious development with the environment is a determining precondition for sustainable development

By rational traffic link, urban complex can get different urban spaces (including business, office and residence) integrated with each other. In order to have an organic combination, be dependent on each other and get a collaborative development, it is mandatory to take into account of the percentage of each function and the collaboration of functions; moreover, it is

mandatory to have a collaborative development with the regional environment. Only at the stage of operation management can it be felt that urban complex is an organic entirety, which not only requires to have an internal collaborative development but also harmonious with external environment. Both of them are important and no one can be ignored. Otherwise, the development will suffer a bottleneck and it is impossible to have a sustainable development.

For the early planning, the place where China Central Place is was out of the boundary limit of CBD east. But in accordance with the development trend of CBD and the development history of Beijing, great potential which cannot be copied is existed. Only the planning follows the business positioning set for CBD can the pace be well kept. Therefore, for the whole building area (about 1 million m²), over 75% was planned for business, office, business affair and hotel etc, while 25% was for living. The government gave a positive feedback to the planning proposal, for example, China Central Place was considered as one of the 60 key projects in Beijing in 2003, which could enjoy all the preferential policies given to CBD. This helped to set a foundation for the harmony between the project and urban environment.

Traffic system can be considered as the meridians of an urban complex, including the smooth docking between internal micro-circulation and external traffic system. At the stage of R&D, traffic was the first element considered by China Central Place. For this project, according to the different requirements to privacy, pedestrian system separating from vehicle system

was first done by CBD for its living area according to the dynamic line features (the structure of underground parking), by which a peace was obtained by the living area at a busy area.

For docking with external public traffic, China Central Place played an active role in coordinating with the municipal work and figured out seven measures for improving the traffic system around China Central Place. For example, the arterial was modified, organically combined the micro-circulation (consisting of the arterial, minor arterial, access road and road in the community) with the external traffic network, by which traffic capability can be improved and pressure of the arterial can be eased.

In order to efficiently use the resources at the public area of China Central Place, the underground parking B2, B3 and B4 are able to access to the underground parking of SKP, Ritz Carlton and JW. For each function, the rush hour of parking is different from each other. For example, parking rush hour of the shopping mall is always on the weekends and holidays, the parking rush hour of office building is at the working hour, so sharing the underground parking can maximize the parking resources and use efficiency can be improved.

Apart from these traffic systems, an overpass on the extension of Chang'an Street was constructed - Huamao Bridge (see Fig. 5-10). Then a new entrance (in the east-west) at the junction of Sihuan Road and Jingtong Road helps to ease the pressure at the north turning at Dawangqiao Road

Intersection. Traffic lights are set at the junction between Huamao Middle Road and Xidawang Road, which well controls the pass-through. Constructed Huamao exit of Line 1, by which the population flow is directly introduced to Huamao office building and the shopping mall. Then, the current situation that the population and the vehicles are too crowded under Dawangqiao can be eased (see Fig. 5-11).

In order to have a good internal traffic circulation, all the roads in China Central Place are planned world-universally. There are four arterial roads in China Central Place, including Huamao East Road, Huamao West Road, Huamao North Road and Humao South Road. Around China Central Place, it is mandatory to set traffic guide signboards according to the actual needs, so that vehicles in-and-out can be well controlled and helped.

In China Central Place, there are more than 6000 parking lots, which is almost one time higher than Roppongi Hills (2762 parking lots), which ensures that clients coming to China Central Place can get their cars parked.

In CBD, only China Central Place organically combined its internal traffic network with the municipal traffic. After China Central Place was put into operation, though traffic and population flows are increased, there has been no severe traffic jam.

Compared with China Central Place, Xihuan Square depending on the traffic hug was not rationally designed. The transfer between Line 2 and Line 13 was so difficult because the passengers have to walk for a long time and

they have to walk outside to pass through narrow spaces. Wudaokou Shopping Mall and Line 13 urban subway station are totally separated from each other.

46 They are not well blended with the regional environment so urban resources are wasted.



Fig. 5-12 Huamao Overpass



Fig. 5-13 Huamao exit of Dawanglu Station of Line 1

Try hard to well manage the public space to get China Central Place opener and more tolerant, therefore, it can be harmonious with the environment. China Central Place has over 10 squares with different sizes, which are really hard to see in other urban complexes. The essence of

Rockefeller Center is the public space of the squares. In China Central Place, people will be fully attracted by the energetic urban spaces. On these squares, there are many facilities for leisure and rest, which can also be used as a platform for fashion show, art exhibition, art shows and new product presses etc. Anyway, these spaces help to expand functional elements.

The harmonious environment gets China Central Place more competitive. According to the reports made by Lease Service Management Department, there were many cases that once entering enterprises moved out of Huamao, lots of employees resigned and re-employed by other enterprises still settle down in China Central Place. The reason is that they do not want to give up the atmosphere and environment provided by China Central Place.

(3) The improving operation is a decisive factor for its success

The urban development keeps changing every minute, as well as the market environment. High-tech progress can be always out of expectation. People's lifestyles are changing and they set new requirements to the service quality. Being as an urban complex operator, it is necessary to keep innovating and improving its hardware and soft environment, try hard to provide clients with excellent experience and multiple services. Only in this way, can clients and brands be attracted and a good development is kept. Then it can well handle the impact resulted in by the market change. From this aspect, we can see that excellent urban complex is just like an organism good at studying so that it can play a leading role in the market.

In accordance with the organic development and sustainable development, it is quite necessary for urban complex to think about the organic development and sustainable development. Only the conflict between the whole and the part, can a more efficient whole be formed and can rationally routes for construction an urban complex with its own characters be figured out.

Being as the first thinker of urban planning who came up with the organic theory, Sir Patric Geddes from Scotland well combined urban planning with biology, sociology and pedagogy, who stuck to the idea "organic link and time-spatial unity". He emphasized that when applying biological theories into urban complex, the city must be treated as a living entirety with living features owned by similar creatures. That is the city should be considered as an organism able to grow up and reproduce. Only in this way can the urban complex get a sustainable development. Sir Partric Geddes thought that the urban change was not reflected by one building but by the sediments of different aspects and large amounts of life changes. Some changes seemed to be simple while some seemed to be complicated, but the changes happened every day. He told us that the city should be considered as a whole and dynamic when studying the city (Zhu, 2008).

The practice and experience of Huamao proved what he said.

For the planning design and construction, Huamao Centher attached great emphasis to the advancement and foresight. Focusing on experience

economy, Huamao business management team always keeps adjusting the combination of entering brands after Huamao was put into operation, tries to modify the spatial functions and optimize shopping routes; meanwhile, personalized international brands and popular brands have been increased, which helped Huamao keep a leading role in China.

From 2009 to now, according to the statistics made by relevant departments, the total investment on the modification and improvement of public facility has been more than 14 million Yuan, modifying and improving over 50 items like landscapes, intelligence, air conditioner, electro-mechanical, guiding signs and lighting etc. Huamao is always working on the improvement in order to achieve a comprehensive improvement and satisfy clients' changing demands. (See Fig. 5-10)

Huamao's Expense on Modifying Public Facilities

Item	Year	Amount
Public facility	Total	14,714,170.00
Public facility	2018	993,724.04
Public facility	2017	119,941.00
Public facility	2016	53,899.00
Public facility	2015	36,800.00
Public facility	2014	
Public facility	2013	
Public facility	2012	10,070,000.00
Public facility	2011	2,280,259.86
Public facility	2010	347,312.10
Public facility	2009	812,234.00

Table 5-10

Under the mechanism "survival of the fittest" used to select the brands, China Central Place never stops. Since the day when SKP opened, all the brands were ranked and the ones failing to perform well will be bottomed out, so that all entering brands will keep enhancing their sense of service and competition. In order to be different from SKP and complementary to SKP, all the brands of a certain floor might be 100% eliminated (see Fig 5-11).

What's more, China Central Place still pays attention to the development of the most advanced technologies, the environmental protection ideology, the consumption ideas, the mode of office, tries to master the market change, and keeps improving hardware and software. In Dec. 2014, the parking of office building and apartments had 94 EV charging piles. At that time, China Central Place was the earliest urban complex who set large amounts of EV charging piles. In Aug. 2016, Tesla's 8 super charging piles were settled down in Huamao and put into use, which increased to 20 in May 2017. Since then, China Central Place has become Tesla's largest super charging pile station in Asia.

Though China Central Place has a good rental ratio, Operation Management never stops exploring. They learned the WeWork mode and introduced Yoke office mode by developing some office areas in Huamao. This new mode is not a major part of Huamao business but it reflected that Operation Department is keeping learning and innovating, trying to keeping

themselves improved continuously.

Eliminated Merchants in China Central Place from 2014 to 2017

	Qty.	Total	Percentage	Area	Total area	Percenta		
		Qty.				ge		
Total	62	85	72.94%	11815.92	21459.87	55.06%		
	Business statistics							
Caterin	Caterin 24		80.00%	5489.32	6596.1	83.22%		
g	27	30	00.0070	5407.52	0370.1	03.2270		
Retail	24	24	100.00%	4199.3	9306.85	45.12%		
Service	14	32	43.75%	2127.3	5556.92	38.28%		
	Statistics on each floor							
B1	27	39	69.23%	3179.72	5542.01	57.37%		
F1	8	10	80.00%	997.97	1293.25	77.17%		
F1、F2	4	10	40.00%	1673.26	6528.48	25.63%		
F2	9	9	100.00%	1382.38	1210.22	114.23%		
F3	12	15	80.00%	1939.86	4243.18	45.72%		
F4	2	2	100.00%	2642.73	2642.73	100.00%		

Table 5-11

Whether an urban complex keeps improving its operation ability continuously is a key to judge that whether the urban complex can form an organic system. In Mainland China, I have visited many urban complexes in different cities, some were almost dead after being used for only 2 or 3 years. The main reason was that they failed to integrate all the functions, so each function was independent from others. Then an organic entirety could not be formed. As a result, there was no force to push the urban complex to keep studying and improving.

5.4 Sub-Conclusion

(1) Scientific planning, positioning and design are the start point of the success for an urban complex. It seems that it is a professional problem, but the success is greatly determined by the development subject that whether the

development subject can well balance short-term interest, long-term interest, economic benefit and social benefit.

- (2) The continuously-improving operation is also a key element make the urban complex value come into play. In Mainland China, the development and construction ability are ranking top in the world, that is a well-known reality. However, we are not experienced in managing the different steps and talents are in great short. This is the bottleneck being encountered by the operation and management of urban complex. Actually, this bottleneck is determined by the history in China. If this bottleneck requires to be broken through, investment and experience are required. If this fact is ignored, the difference between the actual effect and design requirement cannot be well handled after the project is put into operation. Then this will adversely affect the good timing to improve the operation mechanism. If so, good opportunity for further development will be also adversely affected.
- (3) The mode that urban complex should be duplicated and developed quickly is not scientific and it is impossible to achieve a sustainable development. From the cases in China and in foreign countries, all the typical urban complexes are not duplicated. In China, there are many enterprises duplicating and outputting urban complexes, or even some large-scaled enterprises duplicating urban complexes. Such urban complexes can influence the local city, which are hard to be developed as typical ones or cause world influence. For such urban complexes, their planning, development and construction were

well done but the operation and management were failed. Therefore, the value and function of the urban complex couldn't come into use.

(4) The come-into-play of urban complex value is greatly depended on the ability of sustainable development. Value system of an urban complex is set up gradually, which is a dynamic system. Apart from the urban value, its social value and historical value are both depended on the function of economic value. Only economic value is produced continuously can an urban complex have the value of existence. The project shall be under the mode "long-term possession and long-term operation focused", otherwise, it is difficult to achieve the sustainable development. This is the basic logic of mainstream real estate mode.

Chapter 6 Conclusion and Prospect

6.1 Study conclusion

(1) Demonstration conclusion

Being as a product of urbanization, urban complex is not only a measure taken by the real estate developer for its updating and transformation but also a key measure used by urban administrator. Urban complex plays an important role in pushing forward the urban development, which cannot be replaced by anything else.

In China, urban complex was developed in 1990s when the opening and reform was started, which was started later than those developed countries. Under a special background and the situation that development mode and speed of China's urbanization are different from the west, urban complex is being developed rapidly and has its own features. Urban complex in China not only learns from the east but also develops its own special features. In some first-tier cities like Beijing, Shanghai, Shenzhen and Guangzhou, there are some excellent urban complexes which are able to compete with those excellent ones in the world.

Comparatively speaking, the theoretical study and academic discussion about urban complex in China are being lagged behind by the practice, its study experience is not as abundant as that in the west, the analysis and sum-up are not deep enough.

For the concept of urban complex, different fields have different ideas.

This reflects that the development of urban complex in China is changeable and dynamic; the innovation of urban complex also reflects that scholars in China failed to find out the answers directly for China though they learned and studied western theories and experiences. For me, I think the concept of urban complex shall be a one which can satisfy the dynamic reality but also accurately expresses the inner features.

In Mainland China, researchers and teams involved into the urban complex study are being restricted and experienced experts in theory and practice are in great short, which adversely affect the study on essential features and development rules of urban complex. This is the reason why concept of urban complex cannot be unified. In this paper, it is stated that the mode "add property right subject" and "unify management mode" will be good for clarifying the disputes about urban complex concept. Meanwhile, it will be good to further understand the inner and essential features of urban complex.

The urban complex value shall be reviewed and reflected by a new sight, especially from the view of management and practice. Tightly scratching the key points of urban complex development is not only practically meaningful but also forward-looking.

(2) Study conclusion

(1) The mode that urban complex should be duplicated and developed quickly is not scientific and it is impossible to achieve a sustainable development.

From the cases in China and in foreign countries, all the typical urban complexes are not duplicated. In China, there are many enterprises duplicating and outputting urban complexes, or even some large-scaled enterprises duplicating urban complexes. Such urban complexes can influence the local city, which are hard to be developed as typical ones or cause world influence. For such urban complexes, their planning, development and construction were well done but the operation and management were failed. Therefore, the value and function of the urban complex couldn't come into use.

- (2) Scientific planning, positioning, design and continuous improvement of operation are the key factors affecting urban complex value. The former 3 factors are the start point of a successful project while the later one is the guarantee of a successful project.
- (3) The come-into-play of urban complex value is greatly depended on the ability of sustainable development. Value system of an urban complex is set up gradually, which is a dynamic system. Apart from the urban value, its social value and historical value are both depended on the function of economic value. Only economic value is produced continuously can an urban complex has the value of existence. The project shall be under the mode "long-term possession and long-term operation focused", otherwise, it is difficult to achieve the sustainable development. This is the basic logic of mainstream real estate mode.
- (4) Maximizing the urban value (including urban value, economic value,

social value and historical value) is the core demands of urban administrator and development enterprise. Inner essences of an urban complex shall be reviewed from a new dimension in order to figure out the development laws of urban complex. Then scratch the key factors and realize the core demands.

(5) According to the management and practice of China Central Place and the reflection obtained from typical cases, it is known that scientific planning, positioning, design and continuously-improved operation is the key to get the urban value of urban complex come into play, which is also quite significant for urban complexes in China to improve their development quality.

6.2 Innovative conclusion

Being as the only creator who played a leading role in planning, design and operation in China, I once took part in the academic study of urban complex value. Here below are the innovations of my thesis:

(1) Studying and analyzing the urban complex value from the view of actual operation and management for the first time, by which the value system of urban complex is figured out. This paper discusses the inner force of sustainable development of urban complex, which provides valuable operation methods and ideologies for the whole world, which also filled the study blank.

(2) The first administrator fully and completely manage each step of the urban complex in terms of its planning, design, development, construction, investment and operation etc, who once explored and analyzed relevant cases, so the study conclusion has irreplaceable practical value and ideological

value.

(3) When defining the concept of urban complex, an innovation that dimension shall be taken into account of was made. It pointed out that property right subject and management subject should be involved into the elements used to judge an urban complex because they are helpful for clarifying the disputes about urban complex concept. Clearly defining the concept of urban complex is a start point for understanding the urban complex.

6.3 Defects and prospects

Urban complex is complicated and diversified, which is highly linked with dynamic mechanism of urban development. Each step of urban complex shall be systematically and completely studied. This is the correct attitude and method for exploring the laws and rules of urban complex.

Function and value of urban complex is a complicated research topic which covers different aspects, which requires overall and comprehensive surveys and researches, as well as deep analysis on different aspects. Only different aspects are taken into account of can theoretical breakthroughs be made. In this case, good references can be provided for the healthy development of urban complex.

The study in this paper tried to study different aspects. However, being restricted by time and professional knowledge, the study methods and conclusions should be perfected and optimized.

In the past ten years, many aspects of the urban complex haven't been mentioned, including the comprehensiveness, balance and study depth of urban complex, so there is a long way to go for making theoretical breakthroughs and innovations. But I deeply believe that the study and development of urban complex will go further.

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