Research Paper

Impacts of ideological trends of renaissance architecture on royal garden design of Qing Dynasty, China: a Lowland and Wetland case of the Old Summer Palace (Yuan Ming Yuan)

X.M. Zhao ¹, Y. Lu ², J.R. Shi ³, H. Liu ⁴, Y. Chen⁵, Z. Wang ⁶ and K. Hokao ⁷

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ABSTRACT

Planning and design methodology of residential areas in ancient time is a comprehensive transition of technology and aesthetics, where imperial palatial projects play an exemplary role. Through the process of the Age of Discovery, European culture infiltrated into China's architectures, especially the royal gardens and palaces in Qing Dynasty. Ideological trends of Renaissance architecture present a diverse phenomenon into Chinese palace design of Yuan Ming Yuan. The Old Summer Palace buildings were analyzed in terms of their components such as column, dome, sculpture and decoration, door and wall, the proportion of elements, etc. The results prove that the cultural phenomenon is a convergence of and technology and aesthetics between European and Chinese.

1. Introduction

Chinese architectures and western architectures develop respectively, according to their own aesthetics ideology during historical and cultural transformation. The evolving trend of architectures during and after the Renaissance suggests a divergent contention. This contention has transferred to China during the Age of Discovery. Qing Dynasty was under a historic upheavals of world marine enterprise. Though the government implemented numerous marine restrictions and adhered to the traditional "laying stress on the land but

underestimating the sea" ideology (Ancient Chinese people believe that land transport is more important than the sea.), the global sailing wave made those nearly ineffective. The global wave was not so much a western technique one as the rehearsal of cultural colonization.

Qing Dynasty was the the most brilliant period of royal garden architectures and an unprecedented prosperous time of garden art, with a large number of private and royal gardens. The Old Summer Palace, which took 150-year relentless effort of emperors of Qing Dynasty, is well known for its monolithic scale, exquisite art, splendid complex and abundant art collections, just as the poem

¹ Professor, Dept. of Environmental Design, Zhejiang Gongshang University, Hangzhou 310018, CHINA.

² Ph.D. Candidate, Dept. of Chinese Art, Zhejiang University, Hangzhou 310058, CHINA.

³ Corresponding author, Associate Professor, Dept. of Urban & Rural Planning, Zhejiang Gongshang University, Hangzhou 310018, CHINA, jrshi2002@163.com.

⁴ Associate Professor, Dept. of Environmental Design, Zhejiang Gongshang University, Hangzhou 310018, CHINA.

⁵ Post Graduate, Dept. of Urban & Rural Planning, Zhejiang Gongshang University, Hangzhou 310018, CHINA.

⁶ IALT member, Professor, Dept. of Architecture, Zhejiang University, Hangzhou 310058, CHINA.

⁷ IALT member, Professor, Dept. of Civil Engineering, Saga University, Saga 8408502, JAPAN. *Note:* Discussion on this paper is open until December 2017

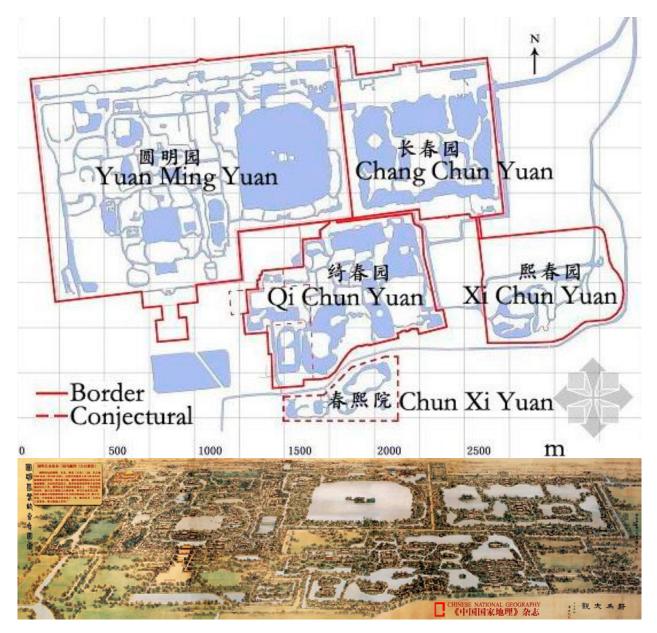


Fig. 1. General site planning of the wetland palaces of Qing Dynasty and its air view.

said, "having all the landscapes-heaven and earth-in people's heart". The Old Summer Palace reconstruction started after 1980, the hot debate caused by the reconstruction issue in Heng-Dian in 2006, and the recover work on the relics, not only amazed people by the garden art of this "Garden of gardens", but also attached their attention to the integration of garden aesthetics and sino-western culture. **Figure 1** illustrates the general site planning of the wetland palace of Qing Dynasty and its air view.

2. The Renaissance architectural trends

The Renaissance is a thought and artistic movement in modern Europe history started in 14th century in Italy.

The word "Renaissance" means rebirth. On the one hand, humanists at that time wanted to gain human civilization from the canon classic culture. On the other hand, it was ethnically an early sign of capitalism. The culture in the Renaissance derived from the Ancient Greek Civilization, but not a simple replication. The age shows individual differences among the era commonness (Gao, 2005). The most noticeable trait of Renaissance architecture is that it abandons Gothic style in the Middle Ages and applies column style composition elements from ancient secular Greek and Rome religious and architectures(Tan,2009). Those buildings don't take the god as yardstick but human body. To some degree, it highlights the stigma of the capitalists' freedom, equality and diversity.

2.1 Architectural style and characteristics in Renaissance and Post-Renaissance period

Most architectures in Renaissance took architecture themes from ancient Greek and ancient Rome, thus from religion to human life, from monastery to palace (Lu, 2013). The overall architectural style respects harmony and stability, and strives to form symmetry, building its aesthetic effect on the basis of Maths and Perspective. Also it applies the basic geometry shapes to create ideal scale (such as the golden ratio) and stresses orderliness and organization in architecture contour, which is different from the former Gothic architecture. Renaissance architecture phenomenon complicated, wielding together thought, cultural, economic and political conflicts. It is impossible for the designers to stay in an ivory tower and design (Song, 2004).

Fillipo Brunelleschi, a pioneer architect, was the first to innovate the the dome of Florence Cathedral. Architects in the 15th century searched inspiration from the relics of classic architectures and works of Marcus Vitruvius Pollio. To the prospering period in 16th century, architects arrived at a tremendous level of applying classic architectural language, and they created architectures and construction methods with classic charm, such as the big dome with stiffened double-shells, the church of the round temple of Greek style with a big dome, the "Palladian motif" 1, the "window group" in Venice, the building facades of pillars plaza, the use of rough stone. Masterpieces such as dome of Brunelleschi's Florence Cathedral, L.B. Alberti's design of mansion and facade, Donato Bramante's Tempietto, Michelangelo's Church of St. Petersburg, Andrea Palladio's Villa Rotonda were all designed by talented architects in Renaissance who wanted to exceed predecessors. As for proportion and harmony, architectures in Renaissance respected basic geometry shapes, like squares, triangles, cubes, balls, etc., and created the ideal proportion by increasing or decreasing the multiple relationship between the shapes (Wang, 2006). In column theory, five classical types of column constructs a clear and complete system for the first time under the background that Renaissance is the full restoration and development of classical architectures. And Alberti made supplement in his book In De re aedificatoria. It further became a system of principles and

methods that architects can use due to the explanation and illustration of Giacomo Vignola and Palladio (Chen,2006). The five columns Alberti had concluded aere Tuscan Order, Doric Order, Ionic Order, Corinthian Order and Composite Order, as we can see in **Fig. 2** from left to right.



Fig. 2. Five columns summarized by Alberti, and the columns in the old Summer Palace.

in late 16th century, the main feature of which was to seek strange and unusual effect, saying it represented space in deformation and incompatibility, and represented character in exaggerated slenderness ratio. In the following 17-18th centuries, classical architectural style came to France. Those architectures had strict shapes with commonly used classical columns outside and unconventional decorations inside. The representatives are the east facade of the Louvre, Versailles and Church of the Invalides, etc. The French palaces and gardens of the royal family and ministers were constantly imitated by people in other European countries. At the same time, Baroque style sprung from Italian Renaissance architectures. It's featured by free contour, dynamic line and bright color. Baroque style favored splendid decoration and carving and usually interspersed with oval-shaped surface and space.

Before the industrial revolution, the Age of Discovery came along with the establishment of New Channel. During the Ming dynasty, western missionaries brought western philosophy, science, culture and arts into China. As a result, western architectural aesthetics in that period came to China, imposing a certain degree of influence on Chinese garden architecture. Evidences can be found in royal gardens of Qing Dynasty.

As the methodology of exploring the historic buildings, a study framework is illustrated as **Fig. 3.** To analyze the architectural style, five aspects of information can be retrieved, e.g. text document, photos, engineering drawings, art paintings, and archaeological evidence. From those files, the derivation and evolution of the damaged buildings can be dissected in terms of their original appearance, components and ethnic styles. Guo (2006) explains that the protection of cultural relics and

¹ Palladian motif is a popular form of the Italian Renaissance marked with the window shape, the central arches have wide openings supported by columns, the both sides of the opening are narrower. Bramante had adopted this motif, Vasari also used it in a loggia of the Uffizi facing the Arno River. Se Liao put this motif into the fourth book of his architectural works in a woodcut form, so it is also known as "Se Liao motif".

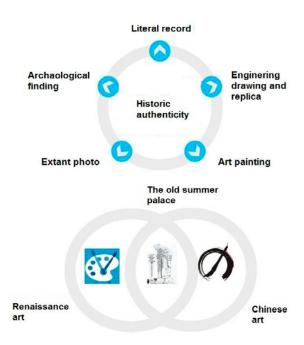


Fig. 3. Research framework of analyzing historic buildings.



Fig. 4. Combination of eastern and western columns.

heritage should follow the principle of authenticity. The original documents are regarded as the authentic materials for examining the OSP.

2.2 The Old Summer Palace absorbs Renaissance architectural trends

In 1861, the French writer Victor Hugo wrote the following sentences in his letter, "II y avait, dans un coin du monde, une merveille du monde, cette merveille s'appelait le Palais d'été." The Old Summer Palace had been a private garden in the Ming Dynasty and administrated by Imperial House in early Qing Dynasty. In the 48th year in Emperor Kangxi's reign (A.D. 1709), he endowed it to his fourth son as residence. Its Chinese name "Yuanming Yuan" was taken from two characters in

a poem. In 1722, the son rose to power and made a rather big reform to the garden to make it a royal garden. During Emperor Qianlong's reign, the garden was expanded again to connect the 3 gardens into one:Yuan Ming Yuan, Chang Chun Yuan and Wan Chun Yuan, thus forming the 40 scenic spots of the Old Summer Palace. After sequel expansion in Jiaqing and Daoguang and a total duration of 150 years, the garden was changed into a royal garden with a total area of 3,500,000 square kilometers and a perimeter of over 10 kilometers. It contains over 140 palaces and pavilions and over 100 scenic spots, thus bringing it the name "Garden of Gardens" (Nie,2008). The three gardens which were large in scale and few in natural geography were built on scratch, could better show designer's intention, ideal pattern and techniques (Zhang, 2004). This paper tries to demonstrate a combination of Chinese and Western elements that the Old Summer Palace not only inherited Chinese classical garden making, but also absorbed western Renaissance architectural trends.

2.2.1 Column style

Column theory had been modified and improved in Renaissance. The column became the mainstream style and essence of western architectural theory from the then on to the 19th century. We can find the design idea of western columns in the relics of the Old Summer Palace. The column head of Corinthian Order in Roman Times looked like an inverted clock and had decorative sawtooth leaves around it, whose proportion of downdiameter to column height is 1/10. It is the column order with the richest details, most magnificent decoration and lightweight proportion(Wang,2001).

The details of Corinthian Order is decorated by Ranunculus leaves, and the column had 24 strixes, making the column delicate and magnificent. According to the pictures of the relics of the Old Summer Palace, we can obviously see the heavy and beautiful plant leaves and curling branched and leaves. And the head to column was covered by carved curvilinear decoration, which shared common features of Corinthian Order. The column of western columns always carried vertical lines with many bump effects and sculpture decoration while the column in the relics had Chinese ancient construction element "Diao Liang Hua Dong"1. As we can see in Fig. 4, the left-up is the head of Corinthian Order, and the leftdown is the pilaster pattern of architraves in Roman Times, both of which were classical column elements that Renaissance revived. The picture in the middle shows the classical column in the Hall of Prayer in the Temple of

¹ It refers to gorgeous painted decoration, often used to describe the magnificent building, also refers to the very ornate houses of painted decoration.

Heaven¹, with magnificent sculpture flower, which was typical to Chinese column. As the column designs of the two were combined with western heads of columns, decorative design and ancient Chinese column designs, the columns in Old Summer Palace came into being. Therefore, the column design of the Palace inherited traditional Chinese column design, as well as imported classical beauty of western architectures.



Fig.5. The dome shape of a garden building.

2.2.2 Dome

Dome, one important symbol for ancient European architectures, is a most typical architectural style of ancient European architectures, also a most admirable style by ancient European (Wang, 2011). From simple innovation of the construction of dome, through form language organization fitting dome, to the entire spacial design centered with dome, all of which demonstrates people's fascination and improvement towards dome and their consistant deepening understanding of design (Fang, 2011). In the early Renaissance, master Brunelleschi took the lead in reforming the dome of Florence Cathedral instead of hemispherical dome of ancient Roman style and pointed arch, becoming the first spring thunder. Other typical dome construction cases were Donato Bramante's Tempietto, Saint Peter's Basilica.

Chinese classical architectures represented by the picture left-down adopted pyramidal roof for apex. And the restoration picture of the Old Summer Palace had depicted dome structure with obvious combining feature of both Chinese and western architectures, as we can see in the right picture in **Fig. 5.** The dome of pavilions in the Old Summer Palace had 6 ribbed arches as support to present a full curved edge, taking on a typical feature of Renaissance architecture. Linking the tip of ribbed arches, a Hexagon occurred. Six wing angles with

¹ The Temple of Heaven was included in the World Heritage List in November, 1998.

Chinese classical architectural features standed respectively on the six tips.

2.2.3 Sculpture decoration

The sculpture in the Old Summer Palace architectures combine the line style and decoration characteristics of Baroque style in post Renaissance, western buildings in particular. The European landscape are, from west to east: Xie Qi Qu, Guanque Long, the Garden Gate, the Maze, Fangwai Guan, the Bamboo Pavilion, Haiyan Tang, the Water spray timer, Yuanying Guan, Xian Fa Mountain, Xian Fa Wall.

The then royal artists Lang Shining, Jiang Youren, an Italian missionary and a French missionary respectively, were in charge of the main design and supervised work. The Baroque style were prevailing from 17-19th century, from architectural design in Italy to interior decoration in France. They can be featured by heavy and magnificent decoration, streamlined shape, and narrative themes of myths of human and animals, and region heightened by plant grain(Yu,2011). As we can see in **Fig. 5**, the picture of partial Da Shui Fa (a kind of water spray timer) (left), many acanthus leaves grains can be noticed, as well as big wave curves and whirlpool shapes everywhere (right). All of these were absorbed from Renaissance and post-Renaissance architectural trends, Baroque style in particular.

As for the garden decoration, the characteristic fountain architectures are worth mentioning most. In Fig. 7, the upper picture is the restored map (partial) "Qun Quan Zhu Lu"2 right in front of Yuanying Guan, the down picture is the restored map (partial). The name "Haiyan Tang" was taken from a poem with the meaning of peace and harmony. It was designed by Lang Shining. In the picture, the copper statues of the Zodiac were dressed in robes and set according to the clock. Once the clock was struck, the corresponding statue would spurt. The amazing technique had shocked the world. That the fountain took Zodiac instead of human body to be statue represented oriental folk culture. Western fountain, plus Chinese characteristic culture of demonstrates the general trend of integration.

2.2.4 Door wall form

The door design in the Old Summer Palace (OSP for short) architectures gathered architectural styles in post-Renaissance, especially Baroque style and Neoclassicism. Baroque style adopts techniques like curved face, curves, break and density, emphasizes the bumps and sense of movement. It pays attention to visionary effect and makes the contour magnificent. In **Figure 8**, the left

² It means a group of dogs chasing a deer.

picture is the front door of Yuanying Guan, the middle picture is the picture of southen part of The Garden Gate(both were from series of valuable pictures relics which were taken by Ernst Olmstead in 1873 and had important meaning towards researches on the Old Summer Palace relics). The right picture is the representative Baroque architecture San Borromeo Church in Rome. We can see dynamic lines, broken pediment and horizontal blending eave on the facade with a big smoothness and strong lights/shadows. Compared to San Carlos Borromeo Church, the Old Summer Palace didn't have as big smoothness and camber, while it still had heavy and dynamic liens, emphasized curved surface and breaks, and strong freedimension and lightness. The curving decoration had obviously represented the unconventional and free spirited attitude in Baroque style.



Fig. 6. Details of the Baroque style.



Fig. 7. Fountains in the old summer palace.

From the middle of 18th century to the early 19th century, Neoclassicism and Romanticism had been popular in western Europe. In the complex practice, those two trends supplemented each other, to become "Romantic Classicism" according to Jansen, who is an American art historian. Neoclassicism had multiple architectural language, while all the designers had a common ideal of permanent, authentic and natural style. Neoclassic architecture had rigorous modeling, stressed

nature and reason, with commonly-used classical columns and lavish interior decoration.



Fig. 8. Walls and doors design and Baroque architecture.



Fig. 9. Xian Fa Ting and the neoclassical building.

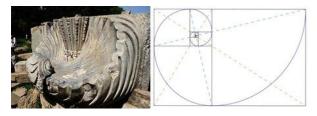


Fig. 10. Spiral sculpture and Golden Rectangle.

Figure 9 shows a set of front door pictures. The left is The Vilnius Cathedral (partial), the right is the restored map of Xian Fa Ting. The entrance designs in the red square had similar points, both of which adopted equilateral triangle and rectangle. So we can see some architectures in the Old Summer Palace had adopted the simple and rigorous style to form a clear contour and tough historical complex.

Westerners take the realm of beauty as number and proportion, emphasizing "beauty is harmony, while harmony means the interior symmetry, balance and order, which can be determined by simple number and geometrical relationship" (Guan, 2006). The Italian Renaissance, however, looked upon the theory of proportions with unbounded reverence, but it considered it, unlike the Middle Ages, no longer as a technical expedient but as the realization of a metaphysical postulate. Human body was regarded as the visual

representation of musical harmony and simplified to universal algebra or geometry principles (golden ratio is 0.618). The theory of human proportions was seen as both a prerequisite of artistic production and an expression of the pre-established harmony between microcosm and macrocosm, and it was seen, moreover, as the rational basis of beauty. The Renaissance fused, we may say, the cosmological interpretation of the theory of proportions, current in Hellenistic times and in the Middle Ages, with the classical notion of "symmetry" as the fundamental principle of aesthetic perfection (Panofsky, 1983).

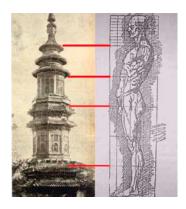


Fig. 11. Contrast between the glazed stupa and body proportion.

Similar to the Forbidden City, the Old Summer Palace also implies the number and proportion that architects pursued in Renaissance. In **Fig. 10** of the relics of the Old Summer Palace, we can see swirling sculpture decorations, which shares some common feature with vortex in golden rectangle.

In **Fig. 11**, the left picture is the only glazed stupa at that time, also the highest stupa in the Old Summer Palace. The proportion of all the parts of the stupa matches that worked out by Da Vinci in Renaissance. The proportion of those parts are considered as of aesthetic sense and giving people much pleasure to eye.

The evolution of garden making of Qing royal garden

Then, we can know that in Age of Discovery, the course of world history and development was influenced by the ocean as the second Lebensraum. The deep impact brought by the idea " laying stress on the land but underestimating the sea " would thus change the fate of a nation and its people (Huang,2011). Chinese royal gardens represented by the Old Summer Palace was to a large degree affected by imported western architectural trends. There are two categories of gardens in the world, oriental garden and western garden. Chinese garden is a good representative of the former, and French garden is

a good representative of the latter. As an art space for amusement, western and oriental gardens have similarities. However, the difference in view of nature and aesthetic orientation lead to the difference in garden making theory, garden landscape and aesthetic interests (Guan, 2006).

3.1 Garden aesthetics introduction before Qing Dynasty

First, let us make a brief review about garden aesthetics. According to the characteristics of each stage, there are three historical stages in total: 1. Before Qin and Han Dynasty; 2. From Wei Dynasty to Tang Dynasty; 3. Song, Yuan, Ming, Qing Dynasty (Jin, 2005).

Before Qin and Han Dynasty, classical garden making began from "You" and "Yuan" (animal farm). They not only had economic and material value, but so showed the freedom of spiritual life. From then on, it was reorganized as the term for royal garden in history. Emperor Wudi¹ of Han Dynasty built the typical garden "Shang Lin Yuan"² at that time. Sima Xiang-ru³ had made vivid praise in his poem "Shang Lin poem".

"From Late Han Dynasty, through Wei Dynasty, Jin Dynasty, to the Six Dynasties, China had been in a time of political chaos and miserable society. However, it was also the time of freedom and liberation, as well as wisdom and passion. Therefore, it was the most artistic creative time." (Zong,1981) Landscape art in Wei and Jin Dynasty had a great degree of development and extension. Hidden Poem and poetry about immortals in that time expressed a new cultural trend and aesthetic mental set. The hermit idea means the birth of new type of natural landscape garden. This was depended upon the life ideal of poetic imagination and academic circumstances that man of letters had dreamed of. To Tang Dynasty, many famous gardens were possessed by man of letters, the term "garden" had denotative meaning of private gardens. Bai Juyi's Lushan cottage was the inheritance of hermit ideology in garden aesthetics.

Gardens in Song, Yuan, Ming and Qing Dynasty had more artificial artistic treatment of subjective interests. Techniques improved a lot to from cities of gardens like Suzhou and Hangzhou. Classical gardens in that time reached the climax of maturity and prosperity. Ming and

¹ The Han Emperor Liu Che (156BC-87BC), the seventh emperor of Han Dynasty, the great statesman, strategist, a national hero.

 $^{^2}$ This palace is an expansion made in the Qin Dynasty Old Court site, with a grand scale and a variety of functions. There is no deposit today.

 $^{^3}$ Sima Xiang-ru (about 179BC-127BC), is one of the most famous writers in Han.

⁴ Bai Juyi (772-846) is China's great Tang Dynasty poet of realism, a prestigious, far-reaching port and writer in the history of Chinese literature.

Qing Dynasty witnessed an unprecedented growth in royal gardens and private gardens. In late Ming Dynasty, with the expansion of western colonial forces, many foreign missionaries came to China to do missionary work. They brought in western scientific and cultural knowledge together with them. This led to the peak of communication between Chinese culture and English culture in ancient China.

Until Qing Dynasty, Chinese classical gardens had been quite prosperous. Royal gardens, one important branch of garden making history, became a guide of aesthetic trend in that time. Just because of the artificialization, it is necessary to integrate contents in line with their own ideals, thus making royal gardens an important carrier of emperors' Utopia (Fang,2009). The construction of royal gardens have aesthetic pursuit of immortal state. The restoration of the Old Summer Palace had presented the ideal state and aesthetic representation in the design of Peng Dao Yao Tai and Fang Hu Sheng Jing, shown in **Fig. 12**.

These two groups of buildings are the peaks of architectural art in Qing Dynasty. They combines the styles and quintessential components of Renaissance and Chinese art. Contemporary essayists pay high approbation to the cultural fusion.



Fig. 12. 3D recovery of Peng Dao Yao Tai and Hai Yan Tang

3.2 Aesthetic ideal of royal gardens in Qing Dynasty

As for the application of art, ancient people comprehensively displayed life and nature, by means of extracting and purifying architectural components and concentrating on the ideal beauty more typically and generally. Aesthetics conception of Garden artistic integrated objective natural scenery and subjective life sentiment to pursuit beauty. Chinese gardens are mostly beyond the flow of rationale, namely epitome of metaphysics. Once the artistic conception was set, architects would design and make landscape according to local conditions of culture, topography and vegetation. They considered the specific theme for each spot, titled as the form of poem, and contrived the layout of each specific spot, such as hills and water, pavilions and plants. That was "the construction of garden and represented designer's flow of ideas (Cao, 2005), as Chen Jiru1 said. Here, the flow of ideas is the artistic conception that garden aesthetics pursued. Wang Fuzhi also discussed about artistic conception in Jiang Zhai Shi Hua, "ideas are like chief commander, without which all the soldiers are just a disorderly crowd". The artistic conception in gardens is different from that of poetry and painting. The conception of poetry and painting is shown by means of language, lines or color, while that of gardens is from material objects (Ye, 2010). Chinese gardens seek a mood outside the scenery itself, to reach aesthetic perception of "beyond images", especially for the royal gardens in Qing Dynasty. Chinese classical gardens, especially gardens of scholars, aspire artistic conception. Therefore, they manifest the principle that "the division derives from a psychological source" in garden making (Wen, 2009). Royal gardens, as the carriers of high status, poetic life and ideal state of royal families, have majestic or idyllic charm and unique refined softness. Its unique artistic aim and conception can be concluded as the following presentations.

First, it has grander themes and collection of scenic spots. Royal gardens in Qing Dynasty were possessed by royal families, such as the Old Summer Palace, Garden of Clear Ripples (predecessor of The Summer Palace) and Chengde mountain resort. In the full support of power, it had adequate human, material and financial resources, as well as vast place for construction and advanced design techniques. Fig. 13 shows the panorama of the Old Summer Palace. These garden arts have arrived at the state that "having all the landscapesheaven and earth-in people's heart". The three gardens of OSP obviously shows the graceful temper of royal families. It founds emperors' ideal of Utopia and

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 $^{^{\}mathrm{1}}$ Chen Jiru (1558-1639) is the writer, painter and calligrapher in Ming Dynasty .



Fig. 13. Panorama of the old Summer Palace

integrates "poetic" "pictorial" conception with artistic conception of moon and water, which is full of rhythm and interests. All of these amazed the world.

Secondly, it is a combination of static and dynamic, virtual and real. It emphasizes the constructional objects as well as timid scene like lights, shadows, sounds and flavors. It was embodied by aspects like the application of seasonal plants, strength and tenderness of water and construction materials. In the stored map of the OSP, we can see Mu Dan Tai (plants landscape), Da Shui Fa (water landscape), Fang Hu Sheng Jing (color landscape), Yuan Ying Guan (construction), etc. Fang Hu Sheng Jing, which was completed in 1740, was the most beautiful architecture in the garden. The three pavilions with multiple-eaves protrude and form Chinese character "mountain". The nine buildings in the middle-back have reached the art world of the unity of heaven and humanity. There are more than 2000 buddhas and over thirty pagodas, just like a fairyland. It presents timing of growing grass and flying birds, as well as vigorous vitality and energy by means of green eaves, yellow tiles and red columns. (Fig. 14).

All the components are the quintessential products from the convergence of Renaissance and Chinese art. They impose influence on each other and interact into the cultural fusion.



Fig. 14. 3D recovery plan of Fang Hu Sheng Jing

4. Conclusions

It is the 150th anniversary of ruin of the Old Summer Palace on October 18th, 2010. One and a half century have passed in the heat dispute about the reconstruction issue. If we look back on the typical garden architectures in history, we would have wondered the flowing of time. This paper anglicizes and concludes royal garden architectures in Qing Dynasty represented by the OSP from the perspective of garden aesthetics and western and Chinese architecture trends. The purpose of the paper is to face up to the historical phenomenon of the integration between Chinese and western architectural culture and further understand the aesthetic pursuit and aim of garden architecture by a comprehensive review of the history and current situation of the Age of Discovery.

As to the application for future design in local residences and gardens, some research argues that introducing a sustainable rating system is a feasible and workable approach to renewal for the traditional areas. Wang (2015) proposes related criteria from the two rating systems and applies them to the design in a case project. The subsequent results verify the necessity and practicality of this approach.

Therefore, the following study is to build up a framework for the evaluation and design methodology of the aesthetic convergence. The recovery method of classical architecture includes the ways of environment, design, landscape and building design.

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