Characteristics and Transformations of Private Gardens of Nanjing in Modern Chinese History

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Abstract: - Researches on modern private gardens of Nanjing, based on different historical stages, could be divided into two parts, the one focusing on gardens during the late Qing Dynasty and the other focusing on gardens in the Republic of China period. This paper first elaborates on Xuyuan Garden and Zhanyuan Garden, two most representative gardens during the late Qing Dynasty and gives a brief introduction of another three "home gardens" built during the period of The Taiping Heavenly Kingdom. Afterwards, by probing into the former residence of distinguished figures, the author tries to summarize the landscape design techniques and styles of private gardens during the era of the Republic of China. Despite all these efforts, the research itself is still in infancy with vast potential for further study. It is expected that this research could fill a vacancy in the study in this field.

Key-Words: - landscape architecture; private gardens; the late Qing Dynasty; the Republic of China; construction technique; changes of architectural style.

I. INTRODUCTION

Modern Chinese history, during which traditional concepts were challenged and transformed, is a crucial turning point in the course of Chinese history. It is this specific period marked by social and cultural changes that create the condition for the building of private gardens. Based on the unique historical background of Nanjing in modern history, this paper introduces and illustrates the architectural style and overall changes of private gardens in Nanjing by analyzing several private gardens bearing the hallmarks of the era. Construction techniques and elements of landscape design are classified so as to establish an integral system of knowledge on private gardens which is expected to facilitate related study in the field.

II. DEFINING THE SPAN AND DIVIDING OF MODERN CHINESE HISTORY

In 1954, Hu Shen published his work, on Dividing the Modern Chinese History, at Historical Research, triggering a massive discussion about the dividing of modern Chinese history^[1]. Thanks to this discussion, consensus was made on the dividing standards which take both the social economy (mode of production) and the features of class conflict into consideration. The First Opium War in 1840, since which China descended to a semi-feudal & semi-colonial state, marked the beginning of the modern Chinese history. The Xinhai Revolution in 1911 overthrew China's last imperial dynasty, the Qing Dynasty but failed to change the semi-feudal & semi-

colonial feature of Chinese society. It was not until 1949 when the People's Republic of China was founded that the semi-feudal and semi-colonial era came to an end, a victory of New Democratic Revolution ^[2]. Based on the information mentioned above, the author adopts the conventional view that modern Chinese history spans from 1840 to 1949. And this era could be further divided into two periods: The late Qing Dynasty (1840-1912) and China's Republican Period (1912-1949) for the considerations that the Republic of China was established in 1912 which ended the rule of the Qing Dynasty. Besides, the architectural style of private gardens during the Republican Era differs from traditional gardens, which resonate with the historical features of this specific period.

III. PRIVATE GARDENS IN NANJING

According to A Record of Gardens of Nanjing by Chen Yifu, there were 114 gardens in Nanjing, most of which were built during the Qing Dynasty and only a few were built in the Republican Era^[3].

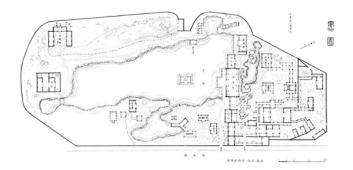
During the twilight of the Qing Dynasty, the Late Qing Dynasty, China was awash with and deeply influenced by western culture. At the end of the 19th century, fueled by the domestic craze for western culture, architectural syncretism in the West prevailed in Nanjing^[4]. For example, the Catholic Church at Shigu Road, completed in 1870, was built in the style of Romanesque church in France. The Bell Tower of the Nanking University, erected in 1888, echoed the architectural style of the Colonial Period of America. And the main building of the Jiangsu Provincial Assembly was established in 1909 reminiscent of the construction style of France in the Renaissance. During the Republican Era, Nanjing was dotted with private gardens boasting distinct styles, thus being acclaimed as "the Kingdom of ARC (architecture of the Republic of China)".

IV. ARCHITECTURAL CHARACTERISTICS AND TRANSFORMATIONS OF PRIVATE GARDENS IN NANJING IN THE LATE QING DYNASTY

A. Overview

Society of Nanjing in the Late Qing Dynasty was mainly composed of wealthy merchants and bureaucrats. Only a small number of private gardens were newly built due to wars and turmoils and most gardens were renovated based on original designs. Generally, there

were two forms of private gardens in Nanjing during this period: "the pleasure garden" and "the home garden". The pleasure garden is built independent from residence ^[5], of which natural scenes constitute a large part while home garden is built around the residence ^[5], of which natural landscape accounts for a smaller part.



Picture 1:Ichnography of Yuyuan Garden

Source: History of Southern Gardens in China



Picture 2: Air View map of Yuyuan Garden

Source: Poetry Anthology of Yuyuan Garden

1). Yuyuan Garden

Yuyuan Garden covered an area around 15,500m² with a span of 205m from north to south and 89m from east to west. Yuhu Lake occupied an area of about 4100 square meters, including 180m of water space at the inner garden (see in Pitcture 1,2). Yuyuan Garden was made up of the residence area which was located at the northeast of the garden and the garden area. The garden area was divided into inner garden and outer garden and the outer garden in the south was connected to the residence area by the inner garden. There were two entrances to the residence area crossed by two lanes with one of them leading to a secluded courtyard in the north. At the inner garden, architectures were arranged around Chunhui Hall, the center of landscape design and rockeries and ponds, the center of the view, with zig-zag galleries connecting different buildings and landscape walls dividing the garden into different sections. At the outer garden, buildings were placed surround Yuhu Lake, the center of the landscape. There were plentiful trees and flowers at the garden ^[6]. (See in Picture 3.4)



Picture3:Lakeside Stones and rockeries at Yuyuan Garden in Nanjing

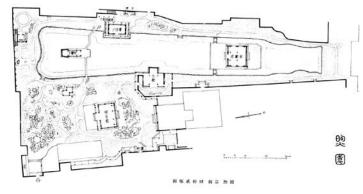
Source: History of Southern Gardens in China



Picture 4: Landscape walls at Yuyuan Garden

Source: History of Southern Gardens in China.

Yuyuan garden, built in the Late Qing Dynasty, with its diversity in spatial changes and landscape elements, retained the features of traditional private gardens and inherited the conventional construction techniques. It could be seen from above that despite the fact that many Chinese cities were eroded and shaped by western culture, Yuyuan garden in Nanjing, although having been open to the public for some time, was unaffected, keeping the traditional architectural style.

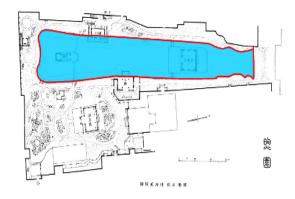


Picture 5: Ichnography of Xuyuan Garden

Source: History of Southern Gardens in China

2). Xuyuan Garden

Xuyuan Garden alone covered an area around 20 hectares and an overall area of 46.5 hectares when residence sections in the east and north were included. With water as the central element (see in Picture 5. 6), Xuyuan Garden was featured by its waterscape. Waterside willows were planted randomly among which halls and pavilions were built in picturesque disorder(see in Picture 7). At the entrance of the garden was a dragon arch near which bamboos were planted, veiling a fishshaped rockery. Entering the garden, visitors were first presented with the Wang Pavilion which was composed of two layers, the lower one being hidden behind artificial mountains and rocks. Standing at the pavilion, one could overlook the landscape of the garden. At the foot of the pavilion lied the South Rockery twisting and turning like mazes. To the north of the rockery located Tong Yin Guan (Paulownia Melody House) with an inscribed board by Lin Sanzhi (a distinguished contemporary calligrapher) hanging over the entrance. Behind Tong Yin Guan was the North Rockery [6]. At the garden, parts of the ground were covered by pebbles in traditional design of Chinese style (see in Picture 8).



Picture 6:Ichnography of vase-shaped pond at Xuyuan Garden

Source: Drawn by the Author



Picture 7: Wang Pavilion at the western garden of Royal Residence of Taiping Heavenly Kingdom

Source: Royal Residence of Taiping Heavenly Kingdom



Picture 8: Xuyun Garden (covered by pebbles)

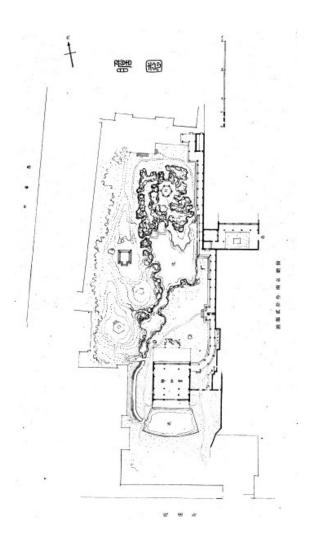
Source: History of Southern Gardens in China



Picture9: Formal Composition of Xuyuan Garden

Source: History of Southern Gardens in China

Based on the introduction above, it could be seen that the layout of Xuyuan Garden had been impacted by western formal style in the late Qing Dynasty, with some parts being designed in completely symmetric order, which indicated the influence of European garden design on the construction style of Chinese private gardens (see in Picture 9).



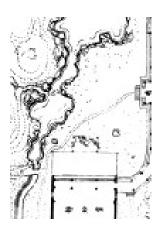
Picture 10: Ichnography of Zhanyuan Garden in the late Qing Dynasty

Source: History of Southern Gardens in China

3). Zhanyuan Garden

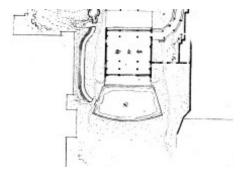
Features of Zhanyuan Garden in the Late Qing Dynasty : The garden, long in the north-south direction but narrow in the east-west direction, is mainly composed of rockeries and supplemented by waterscapes. Water courses that wind through rockeries connect the main scenes and the Jing Miao Hall, the major building of the garden. To the north and south of the Jing Miao Hall are sightseeing platforms and the northern one, which covers a larger space, is the main view point for visitors. During this period, requirement for public landscape space had been incorporated in garden design. A spacious lawn (see in Picture 10, 11) is situated between the northern platform and artificial hills and a fan-shaped regular pond is located to the south of the Hall^[6] (see in Picture12). These landscaping elements, different from traditional ones, indicate the role of western landscape gardening in

the composition and layout of Zhanyuan Garden. At the northern section of the garden, pavilions and galleries scatter over the undulated mini-landscape and artificial hills, forming the asymmetric style of traditional private gardens. Therefore, Zhanyuan Garden in the late Qing Dynasty blended Chinese and western features of garden planning. However, the design was still in its infancy with mechanic copying and imitation, a far cry from a harmonious integration.



Picture11: the lawn in front of the main building at Zhanyuan Garden

Source: History of Southern Gardens in China



Picture 12: Formally-designed pond of Zhanyuan

Garden

Source: History of Southern Gardens in China

Based on the analysis above, it could be seen that in terms of landscape composition, Xuyuan Garden in the Late Qing Dynasty began to follow the trend of formal garden style and traditional Chinese style. However, this shift of architectural style was too unnatural to achieve a mature mastery of western garden design.



Picture 13:One of the former residence of Jiang Baiwan

Photographed by the Author

C. A Case Study of Home Gardens

1). Former Residence of Jiang Baiwan(a wealthy and influential merchant in Qing Dynasty)

Located at No. 18, 20, Lane Santiaoying, Southern city, Nanjing, the former residence of Jiang Shoushan which was built in the late Qing Dynasty, covers a building area of 4500m^[7]. Surrounded by towering horsehead walls, one of the most popular elements of architecture during that period, the residence mirrors the typical architectural style of the Qing Dynasty. The residence, with seven entrances and multiple exits, is divided by different hallways, which is similar to the layout of folk residence in Suzhou. The courtyards are wide and spacious, covering an area of around 4000 square meters with all gardens added [7]. During its construction, the east wall was purposely built concave to bypass the official ditch in the proximity of it. Thanks to this concaved design, stela used to build the ditch were inserted into the wall when the whole residence was completed. The lofty walls, having survived hundreds of years, bear an eloquent testimony to the former glory of the residence (see in Picture 13).



Picture 14: Courtyard of the former residence of Yang Guangsheng

Source: Architecture of Nanjing in Ming and Qing Dynasty

2). Courtyard of the former residence of Yang Guangsheng

Completed in late Qing Dynasty and the early years of the Republic of China, residence of Yang Guangsheng is a private garden blending architectural style of the East and the West. Traditional layout, shop-front-residential design was adopted, with shops built along the street while residential areas built behind the doorway. Roadside shops are built with wooden beams, gray bricks and tiles, reflecting a typical Chinese style(see in picture 14). Walking through the doorway, one could step to the residential section where a two-story building stands with five separated rooms. The building, on the whole, is established in traditional Chinese style but some parts are built in western techniques and materials, for example, the ground of the first floor is covered by red-and-white terrazzo and railings at the second floor is made of iron^[7]. Ground at the courtyard is decorated with city-wall bricks in an odor of antiquity, resonating with historical solemnity [7].

D. Features and Transformations

1). Dealing with Water

The planning of Yuyuan Garden demonstrates that directed by traditional design concept, ponds and lakes during that period were still arranged in naturalistic form with varied sizes. This natural waterscape, combined with waterside buildings, created multiple visual spaces. In striking contrast to Yuyuan Garden, water at Xuyuan Garden was arranged in formal style, a breakthrough in garden planning. As for Zhanyuan Garden, the design of formal-style ponds obviously reflects the landscape gardening concept in the West.

2). Plants at Private Gardens

Trees and flowers at classical Chinese gardens, mostly planted unevenly and randomly with full respect to their original shape are supposed to structure and form the scene, to veil buildings and to guide visitors. Different from previous designs, there was a vast waterside lawn in front of the main building at Zhanyuan Garden in the late Qing Dynasty, indicating a major shift in the concept of landscape design.

3). Design of Private Gardens

Symmetric composition is seldom applied to the layout of private gardens. The design of Yuyuan Garden conformed to naturalistic style while Xuyuan Garden was designed in a symmetric manner. The long axis of the pond was also the axis of symmetry at which "unmoored boat" and "Yi Lan Pavilion" were located. The completely symmetrical small square and the footpath at the southern garden were suited in harmony with the symmetrical axis of the pond.

4). Architectures of Private Gardens

Built based on certain and stable patterns, architecture of Chinese private gardens generally follow an unified style. Architectural style in the late Qing Dynasty, on the whole, inherited traditional elements while glasshouse and Lingnan Pavilion at Xuyuan Garden injected fresh idea into architectural design of traditional private gardens [8].

V. ARCHITECTURAL STYLE AND TRANSFORMATION OF PRIVATE GARDENS IN NANJING DURING THE REPUBLIC OF CHINA PERIOD(1912-1949)

A. A Brief Review

During the Republic of China period, private gardens were transformed to make them more livable. Gardens in this era were characterized by larger building areas and higher green coverage rate. For example, villas of the former legation area at Yihe Road in Nanjing enjoyed an average building area of 400 square meters and a green coverage rate as high as 64.8%; dwarfing other detached garden houses like the residence of Yangseng(a famous warlord and general during the Republic of China) which only covered a area of 410 square meters^[9]. According to statistics, as many as 1700 villas were built with a total building area of 690000 square meters, each occupying an area of 400m on average. The green coverage rate at the area amounted to 65%, much higher than the building density which was only 20%. Of the private gardens sprung up during the period, the bulk was designed with architecture being arranged at the central position. Other areas were divided into various sections based on requirements, different from traditional design that was "ritualized" and "hierarchical". Besides, openness and spaciousness were considered when building courtyards.

B. Case Study of Private Gardens in the Republican Era

1). Meiling Palace(villas built as a weekend retreat for Chiang Kai-shek (Jiang Jieshi) and his wife Song Meiling)



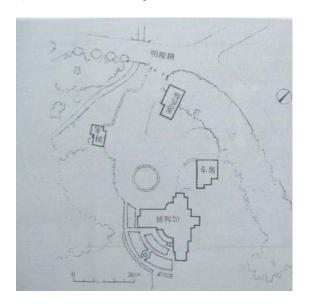
Picture 15: Ichnography of Meiling Palace

Source: Google Earth

Situated at the Zhongshan Mountain Scenic Area, one of the most attractive tourist destination, Meiling Palace is blessed with an elevated position affording a good view and charming natural setting with a stream winding down the valley to the south of the mountain, which is an ideal place for living and leisure.

Seen from the picture above, main buildings of Meiling Palace which resembles a jade necklace, are located at the top of the Little Red Mountain as the center of the layout (see in Picture 15). This highly symbolic design is rarely adopted in traditional garden planning. This necklace-shaped layout and the enclosures made of classical white marble with carved phoenixes eloquently imply the nobility the villa's owner^[7].

2). Former Residence of Sun Ke



Picture 16: Ichnography of the former residence of Sun Ke

Source: Collection of Architectural Designs of Yang Tingbao



Picture 17: Southern entrance of the residence and the pond

Source: Collection of Architectural Designs of Yang Tingbao

The residence was built in the western modern methods of construction This geometric design, along with the curved balcony and pergola, creates a special feeling. Thanks to the water reservoir on the roof of the bedroom for heat insulation, the house is warm in winter and cool in summer despite the disagreeable climate of Nanjing^[11].

The residence covers an area of above 40 hectares with a building area of 1000 square meters [11]. To the southeast there is a large space of lawn where trees are planted, beside it lies a natural pond which, along with the lawn, creates a tranquil and picturesque setting. Viewing at the lawn, one could see the curved terrace of the house.(see in Picture 16.17)



Picture 18: Main building of the residence of Yang Tingbao and its porch at the exit

Source: Collection of Architectural Designs of Yang Tingbao

3). Former residence of Yang Tingbao

The whole residential area, as large as 1000 square meters, is well-wooded with large amounts of pine trees, Chinese toons and loquats. Apart from the towering trees, vegetable plots are cultivated nearby as a symbol of vigour and vitality. At the side of the plot is a well used to water the plants. To the north is a small-sized flower house and a bush of bamboos. The courtyard, which front and back doors are arranged at opposite directions, is located westward upon the street. At the southwest corner of the yard are two vacant houses which were gatehouses in the past. Walking northward along the holly-lined road, one could see the former residence built at the northeast of the yard only a few steps ahead (see in Picture18)^[11].

C. Characteristics and Transformations

1). Location of Private Gardens

In terms of location, the traditional concept of building gardens in harmony with their surroundings was inherited during the Republic of China period. A representative example is the former residence of Sun Ke. The building, situated at the top of the mountain, enjoys a broad visual field and ample sunlight all year around. Thanks to this carefully-selected location, privacy of the dwellers, the priority factor of garden design to senior officials, is well secured. Generally, there is a positive co-relation between the owner's status and wealth and his consideration about the location of the garden^[12].

2). Characteristics of Garden Design

"Home garden" in Nanjing during the Republic of China period mirrored the mixed concepts of design from both the East and the West, which echoed naturalistic idea of classical Chinese gardens but were decorated and polished in western style. Blending eastern and western planning and landscape-designing elements, architectures of private gardens in Nanjing were mostly built in western style. These exotically-designed and big-sized building generally dominate the overall layout, in harmony with which are former courtyards of western style. All these are different from the design of Chinese private gardens that advocate forming inner space by enclosing. Architects not only adopted traditional techniques to create poetic and picturesque settings but also arranged vast areas of lawns for outdoor activities and leisure. Besides, formal gardens of western style, fountains and sculptures, which were placed in orderly ways at axis, were integrated into the whole setting [13].

3). Architectural Style during the Republic of China Period (1912-1949)

Architectural style during this period undergone dramatic changes: It is this coexistence of various styles, whether foreign style, traditional Chinese style or a combination of the two, that shaped and developed the uniqueness of Nanjing, an open and inclusive city. Courtyards, instead of being secluded and private, were

built with more openness and were equipped with multiple functions to make living convenient and comfortable. Besides, appearance of courtyards became more individualized with a wide range of styles.

VI. A SUMMARIZATION OF CHARACTERISTICS AND TRANSFORMATIONS OF PRIVATE GARDENS BUILT IN MODERN CHINESE HISTORY IN NANJING

A. Rockery Design

Rockeries of private gardens in Nanjing in the late Qing Dynasty were made in traditional techniques while during the Republic of China period, artificial mountains were rarely seen at private gardens due to the shrinking area of courtyards. Only small-sized rockeries were retained for appreciation.

B. Dealing with Water

During the late Qing Dynasty, water management techniques were evolving from mere imitation of natural waterscape to artificial design. Two natural-style ponds respectively placed at the bigger and smaller garden of Yuyuan Garden were designed by traditional methods, especially the one at the smaller garden which highlight the natural beauty complemented by the rockeries. In contrast, the vase-shaped pond at Xuyuan Garden was designed in a way obviously different from traditional nature-oriented approach. For example, the bank revetment was piled up by gray bricks instead of traditionally used natural stones. As for the fan-shaped pond at Zhanyuan Garden, it could be easily spotted that the design had been profoundly westernized.

C. Plant Arrangement

Traditional concept of garden design runs through the history of Chinese private gardens, which explains the reason that trees and flowers at gardens are arranged in natural style. In modern era, impacted by western landscape architectural style, foreign elements were added to the plant arrangement, for example, large space of lawns, even some geometric lawns akin to squares, were placed in front of buildings. During the Republic of China period, formal lawns ahead of buildings had become a common scene.

D. Ground Decoration

Ground of private gardens were generally decorated in traditional ways in the late Qing Dynasty, for example, ground at Xuyuan Garden was covered by pebbles. New forms emerged during the early years of the Republican era such as decoration with city-wall bricks at the former residence of Yang Guangsheng. Introduction of fresh cultural concepts and foreign techniques of garden design gave rise to a radical change of decorative style.

E. Architecture

Architecture of gardens during the late Qing Dynasty still followed the traditional style, which is manifested in

the air view map of Yuyuan Garden. The glasshouse and pavilion in southern style of Xuyuan Garden indicated that architecture of private gardens in Nanjing had been influenced by different cultures.

Since the founding of the Republic of China, size of private gardens began to shrink with less variety in architectural forms. Despite the narrowing space and fewer forms, buildings at private gardens were vivid reflection of different exotic styles^[15].

VII. CONCLUSION

As the capital of Taiping Heavenly Kingdom during Taiping Rebellion (a massive civil war in southern China), Nanjing saw a surging number of newly built residences due to a construction boom, injecting an unique style to the design of private gardens. These private gardens were destroyed when Nanjing was retaken by the Qing government and were rebuilt in new styles with new techniques. Most private gardens during the late Qing Dynasty were renovated based on the original design. Nanjing was chosen as the capital when the Republic of China was founded and was revitalized thanks to this favourable political climate. During a period of volatile cultural conflicts and exchanges, emerging Chinese architects seized the chance to absorb different architectural philosophies and styles, forming the unique "Republican style" of buildings in Nanjing.

Private gardens of Nanjing in modern history evolved from traditional courtyard layout to modern architecture-centred layout. A blending of the eastern and western styles was realized by absorbing foreign cultures, borrowing western decorative elements and designs. These private gardens reflect the Sino-western contacts and exchanges of garden design, and record a shift from traditional to modern lifestyles. To some degree, it is private gardens during this era that reshape the landscape of the city. Therefore, protection and preservation of private gardens of Nanjing in modern history should be on the agenda of urban development in the future.

REFERENCES:

- Q. Cai and L. Cai, "Modern Residence of Nanjing in Family Life", Huazhong Architecture, 20005(S1):128-138.
- [2] Q. Cai and T. Yao, "Comment on Modern Urban Residence in Nanjing:1930-1949", South Architecture, Vol.5, 2004, pp.65.
- [3] W. Chen, "The Distribution and Survival of Buildings built in Republic of China Period in Nanjing", South Architecture, Vol.10, 2006, pp. 115-117.
- [4] L. J. Fan. "Basic Clues of Modern Chinese History", SongLiao Journal, Vol.2, 2000, pp. 33-35.
- [5] Y. S. Ju, "Changes and Characteristics of Decorative Style of Landscape Buildings during the Period of Late Qing Dynasty and the Republic of China", Chinese Landscape Architecture.
- [6] P. S. Li, "Discussion on the Dividing and the Basic Clue of Modern Chinese History", Journal of Yantan University, Vol.4, 1997, pp. 81-86.
- [7] H. M. Lu, "Analysis of Buildings in Nanjing during the Republic of China Period", Journal of Shanghai Polytechnical College of Urban Management, Vol.2, 2002, pp. 62.
- [8]. H. Y. Tan, S. Z. Yang and M. C. Song, "History of Architecture in Nanjing" [M]. Nanjing: Fangzhi Press, 1996,4.

- [9] Q. Tong, "History of Southern Gardens in China", Beijing: China Architecture & Building Press, 1963.
- [10] J. Y. Wang, "History of Classical Chinese Gardens", Beijing: Architecture & Building Press, 2006;10.
- [11] T. B. Yang, "Collection of Architectural Designs of Yang Tingbao", Beijing: China Architecture & Building Press.
- [12] X. H. Yang, H. M. Lu, "Architecture of Nanjing in the Ming and Qing Dynasty", Nanjing: Nanjing University Press, 2001.
- [13] Y. Zhang, "An Overview of Architectural Art in Nanjing during the Late Qing Dynasty and the Republic of China Period", Republican Archives, Vol.4, 1999, pp. 95-104.
- [14] W. Q. Zhou, "History of Classical Chinese Garden", Beijing: Tsinghua University Press, 1999.
- [15] J. Zen, "An Analysis of New Materials and Technical Innovation in Modern Lingnan Private Gardens", Chinese Landscape Architecture, Vol.10, 2009, pp. 99-102.

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