

From Yenching University to Peking University – The Spatial Inheritance and Architectural Evolution of Yan Garden [†]

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Abstract: Taking Yan Garden as the research object, this paper mainly looks at the evolution process of its campus planning during the past century. In the early stage, many aspects, such as orientation and cultural symbol, show that Yan Garden greatly reflects the personal will of the architect. With the move of Peking University, teachers and students started to express their spatial demands actively, thus Yan Garden generated new spatial axes and dynamic areas, finally achieved harmonious coexistence between people and the campus. The increase in autonomy among users in campus planning enhances the interaction between people, places, and information, to build a rich, dynamic, and humanized harmonious campus environment. This entire process reflects the importance of humanism in campus planning and design.

Keywords: Yan Garden; campus planning; requirements of users; human-oriented idea

1. Introduction

Yan Garden was originally built by the calligrapher Mi Wanzhong (米万钟, 1570–1631 CE) of the Ming Dynasty, named Shao Garden (勺园) based on the meaning of “the source of water in Haidian is only a spoonful” [1]. During Qianlong years, Shao Garden was renamed Shuchun Garden (淑春园) and became the property of He Shen (和珅, 1750–1799 CE). During the reign of Emperor Jiaqing, Shuchun Garden was divided into two parts: Minghe Garden (鸣鹤园) and Jingchun Garden (镜春园). During the reign of Emperor Guangxu, the Minghe Garden was divided into two parts, the whole garden consisted of new Minghe Garden, Langrun Garden (朗润园) and Jingchun Garden. Afterwards, due to the change of government and the decline of the early royal family, Yan Garden gradually became abandoned.

After the great geographical discoveries of the 16th century, China's natural environment, local customs, and ethnic culture aroused infinite longing among Westerners, and triggered widespread aggression. At the same time, Western missionaries also keep coming, and military conquest gradually evolved into cultural conquest, while mission schools became the carrier for inheriting Western ideas and spirit in the process of cultural conquest.

In the early 20th century, during the surge of Western missionaries running schools in China, Mr. Stuart Leiden, a Chinese American, founded Yenching University and set the campus in Yan Garden, gradually restoring its vitality. The campus planning of Yenching University was led by American architect Henry K. Murphy, who had previously completed various planning plans for Tsinghua University, Hujiang University, and Jinling Women's University. Yenching University is also an important case study on its exploration of adaptive architecture. The planning of Yan Garden can be divided into three stages: early, mid-term, and present condition. Comparing the three stages, it can be found that campus planning has shifted from architect-led to users' requirements.

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Research has shown that the concept of humanism plays an important role in campus planning and design that cannot be ignored.

2. Results

2.1. Early Campus Planning of Yanjing University

2.1.1. Orientation and Axis

Mr. Murphy [2] mentioned in his 1920 exploration report that the entire site contains artificial hills, waterways, and islands, with streams flowing from the west, with the same source as Yuquan Mountain (玉泉山) and the Summer Palace (颐和园). Then he decided to use Yuquan Mountain as the terminus of the east-west axis of sight, and determined the main axis of the campus. This determined that Yan Garden faced west, with the west gate as the main entrance of the campus. This layout subverts the traditional Chinese architectures that faced south. It can be regarded as an adaptive adjustment made by architects to the terrain characteristics.

The east-west axis started from the west gate, passes through the library, auditorium, central lake, and playground, and directly pointed to the top of Yuquan Mountain. The hills in the middle of the east-west axis divide the teaching area in the front and the scenic area surrounding the lake in the rear. The north-south axis starts from the water tower, crosses men's dormitories and women's college, and reserves expansion space on the south side. The two axes intersect at the central chapel, which also serves as the visual center of the entire campus.

2.1.2. Space organization

Under the control of the axes, the overall campus has formed three functional areas: teaching area, office area, and living area. Each area also has multiple organized groups of courtyard buildings, which is an attempt made by architects based on the Western Academism. In addition, there are no walls around the campus, expressing the architect's vision of connecting and interacting with nature and the city in the campus space. It also reflects the concept of universities being open to society, which was widely spread in the West in the 19th to 20th centuries [3].

2.1.3. Cultural symbol

The water tower at the north end of the north-south axis is in a prominent position in the entire campus planning, and is an element that has not appeared in previous campuses. Western universities originated in the Middle Ages and established close connections with the religion at that time. The campus was initially modeled after a church, so the iconic element of the bell tower is also reflected in the campus. In the subsequent diffusing process of the educational thoughts in universities, the bell tower gradually transcended religious significance and became a campus landmark and symbol of campus culture [4] (pp. 198–199). The water tower, as a campus' cultural symbol, reflects the strong personal will of architects.

The preliminary plan from 1922 to 1926 (Fig.1) was also modified multiple times based on the school management's suggestions. Changes such as maintaining the original state of the lake, canceling the geometric road network, and moving the position of the water tower all made the campus of Yenching University more traditional Chinese garden style. Overall, Yan Garden showcased the characteristics of Western ideology and culture in many aspects, indicating that the personal will of architects played a decisive role in the campus planning during this period.

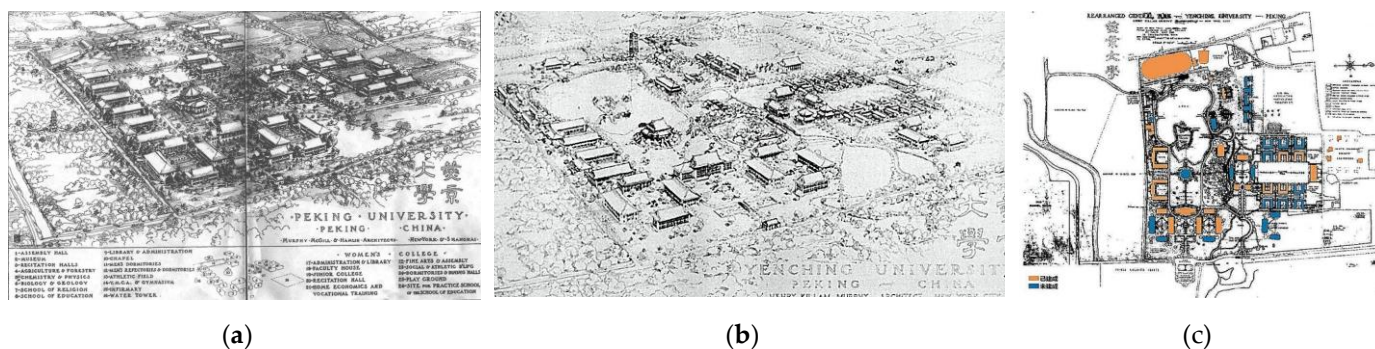


Figure 1. Aerial view of early campus planning of Yenching University. Comparing the layout in (a) 1922 and (b) 1926, we can find some adjustments. (c) The buildings painted in yellow have been built in the early planning, the blue ones haven't.

2.2. Mid-term Campus Planning of Peking University

After the founding of New China in 1949, China carried out a nationwide adjustment of university departments. As a result, Yenching University was abolished and its campus was taken over by Peking University. The relocation of Peking University began in January 1952, with the establishment of the "Tsinghua University, Peking University, and Yenching Three Schools Adjustment Architectural Design Committee" (hereinafter referred to as the "Three Schools Construction Committee"), with all designers from Peking University and Tsinghua University. Due to the increase in the number of teachers and students and the diversification of user groups, the campus has gradually expanded to the east and south, and new east and south gates have been established. The functional layout of the entire campus has also undergone significant adjustments, with the eastern part being the science teaching area, the central part being the humanities teaching area, the old buildings of Yenching University in the north being designated as research units and administrative office areas, and the western part being dormitories for foreign students and experts [5] (pp. 191–192). By 1965, the construction of multiple student dormitories and Langrun Garden apartments was completed, and the southern teaching and living area gradually took shape.

After the preliminary planning of the Three Schools Construction Committee, the southern district has become an emerging and dynamic area on the campus. From the south gate to the north, a spontaneous entry and exit axis has formed, connecting teaching and living area (Fig.2). Unlike the old Yan Garden, the planning team based on the actual lives of teachers and students, clearly divided the functions of life, entertainment, and teaching and office, laying the main structure for future development.

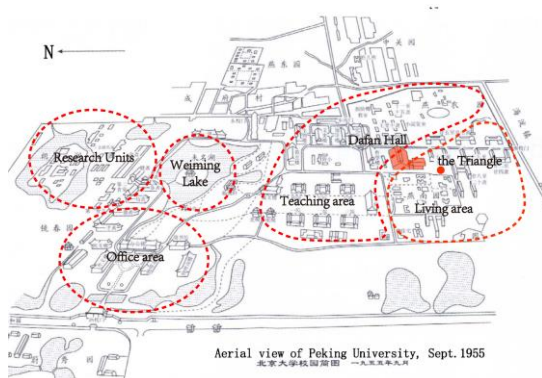


Figure 2. Aerial view of Peking University in 1955.

2.3. Present condition in Yan Garden

After the reform and opening-up, it was the peak of campus renovation and construction, with the expansion of science teaching buildings, student dormitories in the east and west, and residential areas in the west. The southwest of Yan Garden is now a student dormitory and living area, the southeast of Weiming Lake(未名湖) is a teaching area, the northwest of Weiming Lake is an office area, and the northernmost areas of Langrun Garden and Jingchun Garden on the campus are research units. From the 1980s to early 2000, the campus has reorganized the teaching area according to the requirements of interdisciplinary development and integration, forming new internal axes and order (Fig.3a and 3b). Comparing Fig.2 and 3a, we can see that the functional area division of the two is generally consistent, the changes mainly occur within the teaching area. Starting from enhancing the spatial connection between disciplines, teaching and research, new architectural layout methods will be generated. However, there is a huge contrast between the newly built teaching buildings' group and the old campus in terms of scale, and from the perspective of the experience of the campus spatial environment, the variability of the spirit of the place and the texture of the campus will appear even stronger [13] (pp. 211), it can be seen from the current relationship between the campus map and the background as well (Fig.3c). These recent interventions and new buildings by design team haven't maintain the original attractiveness of the Yan Garden.

In terms of architecture and square, Peking University Hall built in 1998 is located on the original site of Dafan Hall (大饭厅) which was the most popular canteen in the mid-term of the campus planning and served as a cultural center for students to perform and watching movies during leisure time. It was the core place for public life and information dissemination. At the beginning of the architectural design, consideration was given to commemorating history and encouraging students' individual development. Combining the usage needs of the user group, Peking University Hall retained the core function of information exchange and received positive responses from students. It is still the cultural and artistic center of the entire campus nowadays.

The Triangle, next to Dafan Hall, which posted with various big-character posters(大字报) was the core venue for teacher-student dialogue and discussion, and was the "bulletin board" in the campus. In November 2007, the decision of the Ministry of Education to demolish the Triangle due to considerations of campus appearance caused stern opposition and protest. The school ultimately decided to keep it. The triangular area on campus still plays an important role in information dissemination.

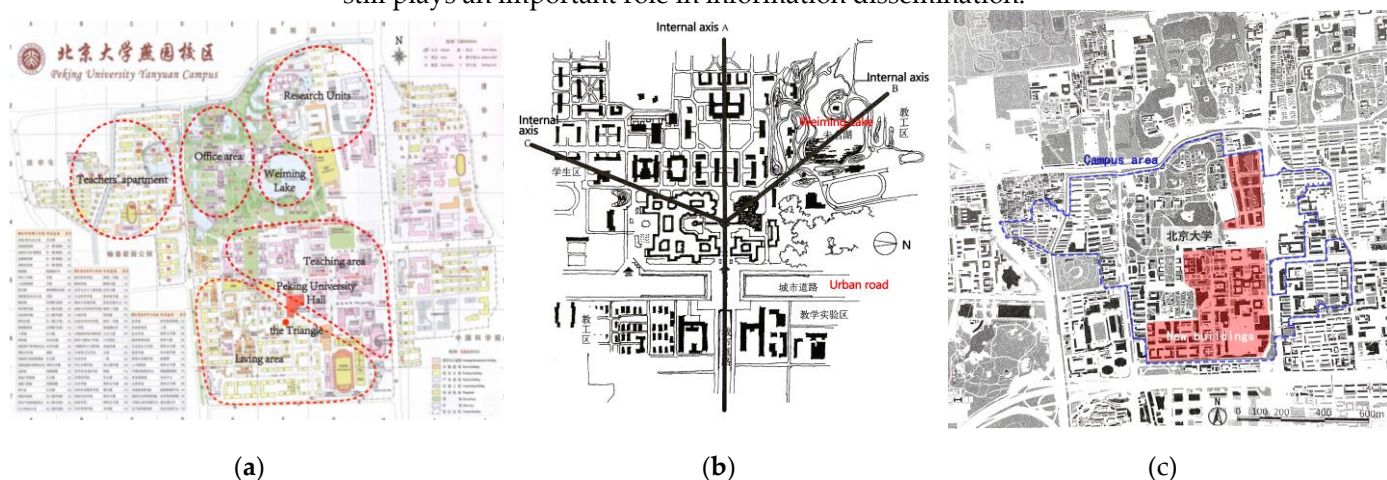


Figure 3. (a)Current layout of Peking University Yanyuan Campus. The dashed areas on the diagram represent different functional areas. The red solid dot represents the position of the triangle, and the irregular shape in red represents the position of Peking University Hall. (b) Overall Planning and Design of the Science Buildings in Teaching Area at Peking University in Early 2000 [12]. (c) The Figure-ground Relation of Peking University at Present [14] (pp. 167). The blue dashed line represents the current land scope of Yanyuan Campus, and the red block represents the newly built buildings since the reform and opening up.

In the above-mentioned small-scale spatial planning, the user's engagement is high, and the results largely reflect the user's needs, and the spatial layout is reasonable and orderly. Compared to teaching area planning mainly controlled by architects, the effectiveness is not satisfactory. Thus the participation of user groups can make the spatial organization of Yan Garden more harmonious and orderly.

In recent years, the school has gradually adjusted and improved *the composition of the campus planning committee*, increased student evaluation representatives, and increased the engagement of relevant experts and teachers and students in campus planning and construction. *The Overall Planning of Peking University Yanyuan Campus (2016-2030)* guide manual developed from this summarizes the experience and lessons of past campus construction, and combines the actual development of the school to seek to establish a new campus spatial order [14] (pp. 170).

3. Discussion

The early campus planning of Yenching University was led by Murphy, reflecting the architect led campus planning concept in multiple aspects such as orientation and axis, space organization, and cultural symbols. The establishment of the Three Schools Construction Committee in the mid-term planning process of Peking University is an important node in the transformation of campus planning concepts. Its members all have practical experience in university life and learning. Therefore, it is inevitable to combine experience with the planning and design process. This means that architects begin to start with the perspective of users' requirements when they design.

The present condition in Yan Garden is based on the mid-term planning, with the functional area division remaining unchanged. The interior of the teaching area has been re planned under the leadership of architects, but there is a huge contrast between the newly built teaching buildings' group and the old campus in terms of scale, and from the perspective of the experience of the campus spatial environment. On the other hand, the spatial transformation based on the needs of the user group has maintained a high level of activity to this day, for example Dafan Hall and the Triangle. In this case, the participation of the user group in the process of campus planning is a crucial step and plays a crucial role in enhancing the attractiveness of the space. *The overall planning for the Yanyuan Campus of Peking University (2016-2030)* fully considers user needs and combines the planning strategy proposed by the architect to carry out adaptive transformation of the Yanyuan campus during the drafting process. *The overall planning* is no longer a mandatory regulation, but a guiding document. Campus planning does not have a fixed period, but gradually, ultimately achieving harmonious coexistence between people and the campus.

The increase in autonomy among users (especially teachers and students) in campus planning enhances the interaction between people, places, and information, to build a rich, dynamic, and humanized harmonious campus environment. The entire process of Yan Garden planning reflects the importance of humanistic concepts in campus planning and design.

4. Materials and Methods

4.1. Selection of research subject

I selected Yan Garden as the research object because its spatial development has continuity. For over a hundred years, the planning and design of Yan Garden has been based on the original site for renovation and expansion. Comparing the spatial characteristics of different stages can accurately understand the spatial changes in the campus. These changes reflect a shift in the mindset of architects and people, with campus planning gradually shifting towards a design orientation based on human needs and a focus on enhancing human well-being.

4.2. Main research methods

This paper is based on historical materials related to campus planning at Yenching University, and conducts research through literature analysis, comparative analysis, and other methods to summarize the process of spatial inheritance and architectural evolution of Yan Garden, and explore beneficial changes in campus planning and design models.

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References and Notes

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