The School-building Model of the Church Schools in Nanjing, China before the 20th Century——Taking the Huiwen Academy as an Example

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Abstract. Church school is a special type of school in old China. After the first Opium War, Western churches have come to China to preach. Missionaries open churches, schools, and hospitals in China. This paper selects the largest church school in Nanjing in the late Qing Dynasty (before 1911) as an example. Based on the historical data of archival materials and the research methods of on-site mapping, the initial campus construction model of Nanjing Church School is summarized. The article first introduces the background of the school in China, the reasons for the establishment of the school, the history of the school; then analyzes the location, construction process, campus planning and architectural characteristics of the school; further analyzes the reasons why the western church replicates the western campus construction model; Finally, through the development of
educational buildings, the contributions of church schools in the history of modern education in China are summarized. The article shows the development of large-scale educational buildings that are rare in the history of modern Chinese education. It not only clearly clarifies the history of the development of church schools in China, but also has important guiding significance for the heritage protection of today's historical buildings. At the same time, it also has important reference value for the protection of educational building heritage and campus construction in China and even in the world.

1. School history
The site of Huiwen Academy (now Jinling Middle School) is located at No. 169 Zhongshan Road, Gulou District, Nanjing. It was founded in 1888 by the US Christian missionary Fowler (C.H.Fowler) on the Ganhe River in Nanjing. The English name is “The Nanking University” and the American missionary Ferguson (J.C.Ferguson) is the first dean[1] (Figure 1). It was first higher education institution established by Western missionaries in Nanjing[2]. This group of buildings was built in one time at the end of the 19th century. It is the largest church school in Nanjing before the 20th century. The school is grand in scale, elegant in architecture, and has high artistic value. It has witnessed the development of Nanjing Mission School. Its Bell tower is the first three-storey building in Nanjing in the past 100 years(Figure 2). It is still in use today and is the symbol of Nanjing education.

![Figure 1. J.C. Ferguson.](source: Yale University Library, USA)
2. School construction

2.1 Site selection and construction process

The Huiwen Academy was located in the middle of the Nanjing (Figure 3), and its location was related to the scope of the missionary's activities at the time. The original missionaries preached in the four poles (now Mochou Road) and the Drum Tower along the riverside. They built churches, opened hospitals, and set up schools. The centralized setting of church buildings was conducive to the formation of a religious cultural circle.

The campus planning and architectural design of the Huiwen Academy was
completed by an American architect and Chen Mingji was constructed\(^1\).

2.2 Campus planning
At the end of the 19th century, the American church hired American architects to complete the campus planning and design of the Huiwen Academy (Figure 4). In the decades after the school construction, the planning layout of the Huiwen Academy was not changed. In 1910, Hongyu Academy was merged into the Huiwen Academy, and the merged group was built into Ginling University. The school purchased 156 Hectare of land as the new campus of Ginling University. The Huiwen Academy was the affiliated middle school of Ginling University and renamed Jinling Middle School. Therefore, in the overall campus planning of Ginling University, only the Huiwen Academy as the middle school of Ginling University, the environment and roads were partially adjusted and improved. The original campus planning of the Huiwen Academy was not adjusted. (Figure 5, 6)

\(^1\)Chen Mingji Construction Factory is the first Chinese factory in Nanjing. It was established in 1888.
Now let's analyze the campus planning and design of Huiwen Academy. Because campus planning and construction of Huiwen Academy were completed at the end of the 19th century and later only part of the roads and environment was adjusted that was not implemented, the original campus planning was used as an example for analysis (Figure 4). In 1911, the Architect & Surveyor Design Company in New York, USA, mapped out the survey of the Huiwen Academy.

**Figure 5** Plan of the United States, New York architect Cody X. Crecey (drawn in 1913)

**Figure 6** Planning of Jinling Middle School by Perkins, Fellows & Hamilton Architects (drawn in 1914)

Figure 4,5,6 source: Wisconsin Historical Society, USA
This is the original campus planning of Huiwen Academy (Figure 4). It is learned from the mapping that the campus planning of the Huiwen Academy directly transplants the layout pattern of the “central garden style” of the North American campus. The main buildings are enclosed in the center playground and the green space is concentrated, forming two sets of “central garden style” layout. Form: Bell tower, Chapel, East Building and single teacher residence, Y. M.C. A three-sided enclosure playground; West Building, Collins dormitory, and Y. M.C. A and another single teacher residence on three sides central green space. The main buildings are arranged in a straight line along the main campus road. The Bell tower is the highest point of the campus building. The Bell tower is the center. Chapel is located next to the Bell tower. The East Building, West Building and Collins dormitory are located on both sides of the Bell tower. On the campus, there are two playgrounds in the north and south (Figure 4).

2.3 Single building of school
There are seven buildings in Huiwen Academy. They are Bell tower, Chapel, West Building, East Building, Collins dormitory, Y. M.C. A and gymnasium. (Figure 7). Except that the gymnasium was built in 1934, other buildings were built in one time in the late Qing Dynasty (before 1911).

![Image of building plans](image-url)

**Figure 7.** The building of the school
source: Nanjing Jinling Middle School History Museum
The architectural form of all buildings is western architectural form, the external walls are built with blue bricks, and the building structure is made of brick and wood. It's a pity that six of the seven buildings in Huiwen Academy were demolished before 2000. At present, there is only one building - Bell tower.

2.4 Existing building: Bell tower

In 1888, the Bell tower was built. It is the earliest existing building in the Nanjing Church School building. It is now used as an administrative office building and was renovated in 2012. The main body of the building was originally three floors. After the top fire broke out in September 1917, it was repaired by the American Church. The main part was changed to the second floor. The original third floor was changed to the attic, with a tiger window and the original two-slope roof. Changed to a four-slope roof with a cemented diamond tile. The Bell tower was originally five floors, and later changed to four floors. The top bell pavilion has a large clock built in. (Figure 8)

The building's plane is approximately square, 18.2 meters long, 12.4 meters wide and 16.1 meters high. The first floor has a height of 3.9 meters, the second floor has a height of 3.3 meters, the third floor is a loft, and the highest point is 3.2 meters. A tiger window is opened on the sloped roof. The exterior wall of the building is decorated with blue brick feet, the building structure is brick and wood, the brick wall is loaded, and the floor, stairs and roof are all wooden[3]. (Figure 9)

![Figure 8 Bell tower (1890), Bell tower (1918), Figure 9: The drawing of Bell tower (source: Yale University Library, USA) source: Southeast University, China](image)

3. Reasons for transplanting the Western campus construction model

The relationship between the Christian Church and the school has always been...
very close. The modern university originated from the medieval university in Europe\(^2\). Many primary and secondary schools and universities in the American colonial period were founded by the church. The church has rich experience in school construction. So how do you build a campus in Nanjing, China? Western missionaries adopted a campus construction method that directly transplanted the home country of the church, copying the western campus planning and architectural forms.

There are two reasons for this situation: First, after the Opium War, in the face of serious imbalances between Chinese and Western cultures, Western politicians and businessmen have been able to introduce various architectural forms into China without any scruples. They generally have a sense of superiority in Western culture. Second, the Western church schools were arranged in the pattern of traditional Chinese academies. The missionaries did not think that they were particularly suitable. Even if they were adopted, they were the last resort. Chinese classical architecture is a rectangular plane with an aspect ratio of nearly 3:2\(^3\). The main entrance is located in the middle of the long side of the building. The door is the main activity space of the building. The functional type of the single building is only different with the furnishings. Change is a form of architecture that is constantly changing, and there is no classification concept by type of function. Western architecture has had a single functional type since ancient Greece. It has developed into modern times and the school's functional configuration is complete. Therefore, while introducing the Western education system and teaching content, the church also directly transplants the campus construction model that is suitable for it.

### 4 Conclusions

At the end of the 19th century, the Huiwen Academy was the largest church school in Nanjing's modern history. While introducing American educational content, the American Church also introduced the American campus construction model. This campus construction model is completely different from the local architecture of Nanjing at that time, providing a model for the

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\(^2\) Feng Gang, Lu Bo. Chinese modern university campus under the integration of Chinese and Western cultures [M]. Beijing: Tsinghua University Press: 2016. Page 26

\(^3\) Dong Li. Research on Architectural History of Modern Chinese Christian Universities [M]. Beijing: Science Press, 2010.
construction of schools in Nanjing, which greatly affected the development of modern educational buildings in Nanjing. By clearly combing the development history of church schools in China, this paper has important guiding significance for the heritage protection of today's historical buildings. It also has important reference value for the protection of educational building heritage and campus construction in China and even in the world.

5. References
   [1] Zhang Xianwen, 2002. History of the University of Nanking. Nanjing, Nanjing University press.
   [2] Yang Zhuwen, 1998. Nanjing Jinling Middle School, Beijing People's Education Press.
   [3] Liu Xianjue, Zhang Fuhe, Shin Muramatsu, George Terahara, 1992. China Modern Architecture Overview - Nanjing. Beijing, China Building Industry Press.