



WHAT IF? WHAT NEXT?

# **SPECULATIONS ON HISTORY'S FUTURES**

## **SESSION 3A**

### **COUNTERING THE CANON/S**

**Living Cultures: Recovering Indigenous  
Narratives in Architectural History**

TO CITE THIS PAPER | **Kai Wang**. "Localizing a Concept: The History of the Term 'Architecture' (Jianzhu) in China." In *Proceedings of the Society of Architectural Historians Australia and New Zealand: 37, What If? What Next? Speculations on History's Futures*, edited by Kate Hislop and Hannah Lewi, 427-434. Perth: SAHANZ, 2021. Accepted for publication December 11, 2020.

**PROCEEDINGS OF THE SOCIETY OF ARCHITECTURAL  
HISTORIANS AUSTRALIA AND NEW ZEALAND (SAHANZ)  
VOLUME 37**

Convened by The University of Western Australia School of Design,  
Perth, 18-25 November, 2020

Edited by Kate Hislop and Hannah Lewi

Published in Perth, Western Australia, by SAHANZ, 2021

ISBN: 978-0-646-83725-3

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# **LOCALIZING A CONCEPT: THE HISTORY OF THE TERM “ARCHITECTURE” (JIANZHU) IN CHINA**

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*Due to its historical and cultural uniqueness before the nineteenth century, East Asia has long been seen as an integrated whole. But because of the different trajectories of its encounter with modernity and different paths of modernisation in the twentieth century, it is often considered to belong to two distinct worlds. This paper tries to return to the symbolic beginning of the historical division, focusing on the translation of the basic concept of “architecture” (jianshu) and summarises how this term developed through a complex process of language exchange. It tells the biographical story of the acceptance of the concept in China, from a new word to the name of a discipline and eventually a widely recognized concept, and reflects on some common characteristics of integrated East Asia in the face of the western culture, or modernity.*

## Introduction

If we review the history of architecture (as a modern discipline) in China or East Asia generally, it is clear that including its terminology and subject matter, it was transplanted from the West. Tracing this historical process of transplantation will help us to define the cultural uniqueness in the past and the future of architectural knowledge production in China generally. In this sense, the story of the word “architecture”, or more precisely its Chinese translation “*jianzhu*”, a concept that cannot be more fundamental in the discipline, provided a compelling case.

Since the mid-19<sup>th</sup> century, when the external shocks and challenges in the late Qing Dynasty triggered the crisis of Confucianism, the elites began to study “artifacts” such as fortifications and artillery, machinery, manufacturing, sciences and engineering, trying to save Confucianism from within. Then after the failure of the “Westernization movement”, the imperial examination system was abolished. After the establishment of the Republic of China, a new system of culture and education was established. Engineering and technology became vital pillars of the “Saving the nation by industrialization” project. Overseas students in engineering and architecture returned from abroad, and discussion of architecture and engineering acquired further social space and received general recognition. At the same time, the emergence of magazines and newspapers in the closing years of Qing Dynasty provided a platform for the development of architectural discourse. During the early years of the twentieth century, the public media gradually transformed itself into a platform through the participation of Chinese scholars, mapping the shift in mainstream social thinking, including the popularisation of architectural concepts. After 1911, the foundation of different professional journals in engineering and architecture led to the rapid popularisation and promotion of professionalism.

This paper tries to re-establish the setting of the historical moment when the new concept emerged at the end of the nineteenth century, and pursues a kind of understanding of such question: the uniqueness of East Asian culture as an integrated whole in the face of western architecture, as well as its complicated internal communications.

### The Re-importation of Japanized Chinese: “*Jianzhu*” as a New Word

According to the Chinese scholar Wang Lumin (1955 -), “In ancient China, there was no concept of architecture as such, but only concepts such as palaces, temples, altars, houses, gardens, cities, etc.”<sup>1</sup> When and how did the word “*jianzhu*” emerge in the Chinese language? Most Chinese historians accept that the Chinese term “*jianzhu*” emerged as a translation for the Western term “architecture” at the beginning of the twentieth century, and “*The Appointed University Charter*” (钦定学堂章程), promulgated in 1902, marked the first official occurrence of the term “*jianzhu*” in Chinese. Although that may be true, “*jianzhu*” entered general speech in China decades earlier.

The earliest exposition of this question comes from an article by Lu Bingjie (1935 -) “An Etymology Research of Architecture” (1991)<sup>2</sup>, which examines how the concept “architecture” moved from Dutch, to Japanese, to Chinese. According to Lu, part of Japan’s efforts to learn from the West involved the translation of Dutch scholarly texts into Japanese. In the Dutch-Japanese Dictionary (1830), the Dutch words “*bouwen*” and “*metzelen*” were translated as “筑ヤ建ル”、“筑建ル” and “筑建”. In other words, the two independent verbs “*zhu*” and “*jian*” were combined into a new compound verb “*zhujian*”, meaning “to build”. When the Japanese began studying British and French scholarship in the nineteenth century, they started to compile English-Japanese dictionaries based on Dutch-English dictionaries. Since the English word “architecture” in Dutch is “*bouwkunde*”, people think that the Dutch word was related to the Dutch word “*bouwen*”, and as “*bouwen*” has been translated into “*zhujian*”, “*bouwkunde*” was translated by reversing the word order of the term “*zhujian*” to form the new term “*jianzhu*”, which became the Japanese translation of “architecture”.

Until 1866 in an English-Chinese dictionary, "architecture" was translated in Chinese as "works of artisan, building a palace," in which word "jianzhu" has not yet appeared.<sup>3</sup> At the beginning of the twentieth century, after being defeated by Japan in the Sino-Japanese War of 1894-95, the Qing government finally began to realise that it was necessary to learn from Japan's experience of modernisation. When the first modern institute of higher education, "the Imperial University of Peking" (京师大学堂) was planned, everything was modelled after its Japanese counterparts. The names of the disciplines taken without change from their equivalents in Japanese universities, including civil engineering, mechanical engineering and, of course, architecture.

Another two scholars also made significant contributions. In an article "Architecture and Construction, Building and Fortifying: the Definition of the Architectural Concept in the Early Meiji Period of Japan" (2003)<sup>4</sup> the Japanese scholar Nakatani Norihito (1965 -) quoted the study of Japanese linguist Matsui Toshihiko, pointing out more precisely that the term "jianzhu" in Japanese was, in fact, an outcome of so-called "Japanized-Chinese", a process whereby Chinese words are selected to make new Japanese words. As Xu Subin's (1960 -) article<sup>5</sup> (2005) showed, by using computer-aided retrieval of the *Siku Quanshu* (the Complete Collection of the Four Treasures), she proved that "jian" and "zhu" were used separately in the literature at least as early as the Song Dynasty.

In sum, the combination "jianzhu" was neither a well-established Japanese or Chinese idiom. According to Nakatani, the term "jianzhu" in Japanese was derived from the combination of "jian" and "zhu" as a verb in ancient Chinese books, and was "Japanized" by the Japanese in the early eighteenth century and then re-imported back to China in the nineteenth century.

#### **A Category of Knowledge Classification: "Jianzhu" as a New Discipline**

Nonetheless, the appearance of the term "jianzhu" in *The Appointed University Charter* (1902) and in the revised version *The Approved University Charter* (奏定学堂章程, 1904), although the department was not actually set up until the 1920s, marked a significant moment in the history of Chinese thought, for it symbolized the fact that "architecture" as a category of knowledge classification was officially recognized for the first time in China.

Before the idea of modern academic disciplines from the West was introduced in the late Qing dynasty, China had a specific system of university branches classifications. Unlike the discipline in the modern Western sense that based on common objects and areas of research, the ancient Chinese classified knowledge by research subjects, producing knowledge around different scholars and schools. In this case, since architecture had always been deemed as a craft rather than a scholarly product, architecture never appear as an independent knowledge category but was usually regarded merely as a useful tool for preserving ritual and social order.

The modern categorization of academic disciplines, including the disciplines of social science and natural science, was introduced by the foreign missionaries, who founded numerous church schools in China. The pioneer in this respect was the celebrated Robert Morrison (1782-1834), who founded the Morrison School in 1839, where the new concept of modern western sub-discipline system began to become familiar to Chinese people. Then, a variety of new schools were founded after Morrison's model, including the Peking School of Combined Learning (同文馆) in 1862, Fujian Shipping School (福建船政学堂) in 1867, Tianjin Martial Arts School (天津武备学堂) in 1885, Canton Navy and Army Schools (水陆师学堂) in 1887, especially Christian College in China (格致书院) in 1874 and Chinese and Western school (中西学堂) in 1895, a lots of new discipline were introduced, hence the system was then adopted into practice.<sup>6</sup>

After the reform movement of 1898 was terminated, and the Boxer Rebellion in 1900 brought domestic troubles and foreign invasions, the Qing government finally enacted thoroughgoing political, economic and military reforms, under a so-called "new deal" (清末新政). The abolition of the imperial examination system, the establishment of the Imperial University of Peking and

the encouragement of studying abroad formed essential and seminal parts of these reforms. In 1901 Zhang Zhidong (张之洞, 1837–1909) and his colleagues, after studying the university systems of Britain, France and Germany, proposed a new system of categorizing the various university disciplines. Based on the "six-discipline-system" modelled from Japan, the new plan divided the university into "seven branches": Confucianism, history, sociology, political science, military science, agriculture and engineering. Although the last six branches were categories of Western learning, a nod to traditional Chinese thought was made by giving priority to Confucianism. Zhang had foreshadowed this emphasis in his work "On Learning" (劝学篇), which argued for the principle of "Chinese essence and Western utility" (中体西用).<sup>7</sup>

When the Qing government officially decided to reform the traditional educational system in 1902, the education minister Zhang Baixi (张百熙, 1847-1907) was appointed to design charters from the Imperial University downwards, through the levels of high school, middle school, primary school and elementary school (Table 1). In the charters, Zhang proposed a very different seven division scheme. Drawing on the Japanese university system, he categorized the various university disciplines as follows: politics, literature, agriculture, science, technology, commerce and medicine. For the first time in China's history, "architecture" was classified as a subject under the discipline of "technology".

Type/level	discipline	courses
High School	Politics/Social Science	Ethics; Confucianism; Foreign philosophy; Rhetoric; Maths; Chinese and Foreign Historiography; Chinese and Foreign Geography; Foreign Languages; Physics; Logic; Law; Economics ; Gymnastics
	Arts / Technology	Ethics; Chinese and Foreign historiography; Foreign Literature; Maths; Physics; Chemistry; Zoology and Botany; Geology and Mineralogy; Drawing; Gymnastics
Pre-college	Politics/Social Science	Ethics; Confucianism; Zhuzi; Rhetoric; Maths; Chinese and Foreign historiography; Chinese and Foreign Geography; Foreign Languages; Physics; Logic; Law; Economics; Gymnastics
	Arts / Technology	Ethics; Chinese and foreign historiography; Foreign Literature; Maths; Physics; Chemistry; Zoology and Botany; Geology and Mineralogy; Drawing; Gymnastics
College	Politics/Social Science	Politics; Laws
	Literature	Confucianism; Historiography; Philosophy; Zhuzi; Anecdotes; Rhetorics; Foreign Languages
	Sciences	Astronomy; Geology; Advanced Computing; Chemistry; Physics; Zoology and Botany
	Agriculture	Agronomy; Chemistry; Forestry; Veterinary Medicine
	Technology	Civil Engineering; Machine Engineering; Ship Building Science; Weaponry; Electrical Engineering; Architecture; Applied Chemistry; Mining & Metallurgy
	Commerce	Bookkeeping; industry manufacturing; commercial language; commercial law; commercial history; commercial geography
	Medicine	Medicine; Pharmacy

**Table 1.** Zhang Baixi's plan as proposed in the "Imperial University Charter" and "High School Charter".

In 1903, Zhang Baixi, Rong Qing and Zhang Zhidong were ordered to revise the charters into a so-called “*Approved University Charter*” which was promulgated and implemented throughout China. This charter was also known as the “Gui Mao School System” (癸卯学制). As China’s first modern educational system in history that was officially promulgated and commonly used throughout China, it laid the foundation of modern Chinese new educational system, as well as the modern academic discipline system. The “*Approved University Charter*” provided a more detailed description of civil engineering and architecture than its predecessor. The specific provisions of the architecture subject were:

Core subject: mathematics, applied mechanics, thermal technology, geology, application of building materials, building construction, architectural design and application of mechanical drawing, surveying practice, drawing, design and drawing, hydraulic engineering, hygienic engineering, construction, field exercise, metallurgy system. Subsidized courses: architectural history, scenery and decoration, freehand drawing, aesthetics, decoration, and seismology. Third years before graduation, a graduate project and thesis. Since the most important courses for Architecture are design and drawing, so they need more hours.<sup>8</sup>

In 1913, Cai Yuanpei (蔡元培, 1868–1940), the head of the Republic of China’s Ministry of Education, issued the “Order of the University” and “University Regulations”. These regulations removed the subject of Confucianism, and divided university disciplines into seven branches: arts, science, law, business, medicine, agriculture and engineering. This plan followed Zhang Zhidong’s “eight divisions” of literature, science, business, medicine, science, engineering and agriculture, but the specific content of each branch had developed considerably since his time. The branch of engineering contained twelve separate subjects, some of which had only a tenuous connection with the concept of engineering as commonly understood in the West: civil engineering, mechanical engineering, marine science, shipbuilding, military science, electrical engineering, architecture, applied chemistry, pharmacology, mining, and metallurgy. The provisions of the subject “architecture” also became more detailed:

Mathematics, mechanics, applied mechanics, hydraulics mechanics, geology and mapping exercises, engine controller, metallurgical methods, surveying and practice, building materials, Chinese construction methods, architectural design, architectural history, building construction, reinforced concrete techniques, scenery design, decoration, aesthetics, construction methods, hygienic engineering, building regulations, industrial economics, freehand drawing, decorative painting, planning and drawing, drawing practice and field practice.<sup>9</sup>

In short, with China’s transition from traditional Confucian academic categories to modern disciplines in the late Qing Dynasty, civil engineering and architecture gradually gained the status of independent discipline knowledge categories, and became essential components of the general organisation of knowledge for the next twenty years and beyond.

### **The Acceptance of the Term “*Jianzhu*” in the Public Media (1900-1937)**

Another transitional moment in the late Qing dynasty was the emergence of the public media. Public magazines and newspapers, initially founded by missionaries in the early nineteenth century, began to develop rapidly in the second half of the century, both in terms of professional journalism and scope of dissemination. The emergence of magazines and newspapers substantially changed the way information was spread in China.

According to word-frequency analyses of these newspapers,<sup>10</sup> the term “*jianzhu*” began to appear regularly in 1905, and reached its peak in the early 1930s, on the eve of the Japanese invasion of China in 1937 disrupted publishing patterns. During these four decades, it is safe to conclude that “*jianzhu*” became a term widely known and a concept widely accepted by the public. (Fig. 1)

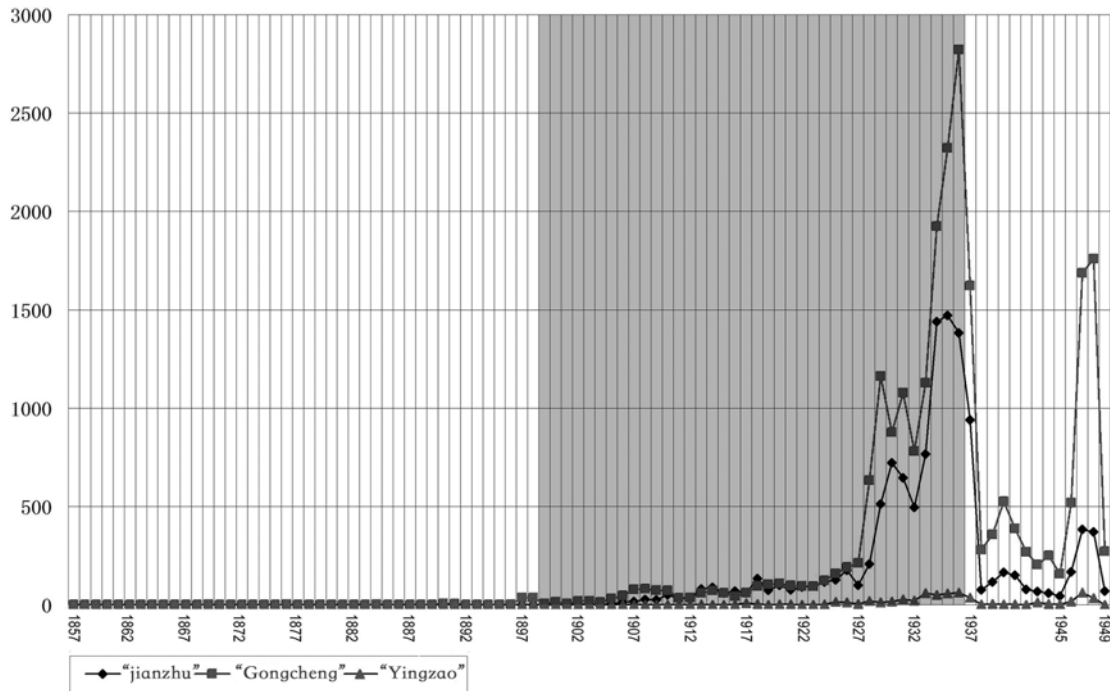


Figure 1. The statistics of frequency of using the word “jianzhu” in the modern newspapers, in comparison with similar words “gongcheng” (engineering) and “yingzao” (construction).

During these four decades, the number of discussions on architecture changed dramatically, as well as the way “jianzhu” was discussed and understood, related topics and discourses being expanding and deepening profoundly.<sup>11</sup> The following three paragraphs are instructive:

... The glass giant room, native people called it the Crystal Palace, twenty-five miles to the south of London, easily accessible by car. Situated on high land, it looks like a hill from afar. The building is a great hall, occupying vast and meandering long, it is so high that windows are surrounded and covered by misty fog and clouds..... inside the hall there are lifted pavilions, gardens and pools, flowers and grass, all kinds of animals, birds and insects..... besides, on display are all kinds of performances, hitting with a rope, eating knife and spitting fire, dancing on the ladder, so fantastic, so lustrous and dazzling, thrilling the audience.....<sup>12</sup>

– Wang Tao: "Traveling Notes" (Vol. 2: glass giant room), 1890

In the beginning, people lived in nests and caves, then came huts and houses. Most recently, buildings of timber and bricks are changing into steel and iron. The houses in America are so high and are always in danger of catching fire. So recently buildings no longer rely on timber structure, but all buildings are built with copper and iron, not only to prevent fires but also to become stronger and, at the same time, cheaper. This is also one of the major improvements in architecture.<sup>13</sup>

– Lin Lezhi, Fan Yi: "Progress of Architecture", *International Bulletin* (Shanghai), 1905

..... We have an answer to the very complicated question, our idea of architecture as art. We think that fashion is not important. Successful architectural works, first, cannot be apart from the need or usage; second, we must not leave the context of times unattended; third, we cannot leave the principles of art behind; fourth, we cannot leave the spirit of a culture.... Under these four principles, we should strive to create a new style, as our contribution to the culture of our times.<sup>14</sup>

– Lu Qian, Wu Jingqi: our opinion, *Chinese Architects*, 26, 1936

These three quotations are spread over a period of four decades, and are quoted in the important public mass media. That is a very short moment in history, but it is clear that in this short period a profound change had taken place.

In the first section of the citation (1890), we see a very literal description of a famous example of Western architecture, namely London's Crystal Palace. The building may be regarded as a kind of unusual spectacle, but the phraseology used in its description is typical of traditional literati writing. The building was seen as a background rather than an object. In the second paragraph (1905), the building is now discussed as an object that needs to be taken seriously. In this paragraph, we can discern an underlying concept of historical progress. More importantly, architecture has begun to be understood as a technological means. In fact, with the development of public media in the late nineteenth and early twentieth centuries, we can recognise the gradual popularisation process of architecture as a technology concept. In the third paragraph of Citation (1936), architecture is no longer regarded merely as a technical problem, but is explicitly discussed as a style problem that contains multiple meanings of use, art, zeitgeist and culture. Apparently, in addition to the technical problems, the architecture also increases the rich connotation of art and culture.

### Epilogue: The Making of a Concept

The emergence of "*jianzhu*" as a concept in modern public discourse was a somewhat incidental (as a word) yet very significant historical event (as a discipline and concept). In the concluding paragraphs, I would like to go beyond narrating the history and ask the following question. What was the social and historical circumstance that enabled this historic development?

One answer, of course, lies in the profound transformation of Chinese society. In short, the emergence of "*jianzhu*" as both a novel term and a novel concept reflected a wider social and cultural transformation. With the joint efforts of the emerging public media and engineering/architecture professionals, from a new word to discipline, it eventually appears in the public discourse. It is on this basis and starting point that the whole twentieth century development of modern Chinese architecture has been started.

### Endnotes

<sup>1</sup> Wang Lumin, *Zhongguo gudai jianzhu sixiang shigang* [An Outline History of Ancient Chinese Architectural Thought] (Wuhan: Hubei jianyu chubanshe, 2002).

<sup>2</sup> Lu Bingjie. "Jianzhu kaobian" [An etymology research of architecture], *Shidai jianzhu* [Time+Architecture], no. 4 (1991): 27-30.

<sup>3</sup> In 1897, the Japanese Institute of Japanese architecture changed its name to the Japanese architecture society, and the following year, the University of Tokyo has renamed the architecture discipline as "*jianzhu*" branch.

<sup>4</sup> Nakatani Norihito, "Jianzhu yu zhujian, Zaijia yu zaohua: guanyu Riben Mingzhi chuqi jianzhu gianian zhi dingyi" [Architecture and Construction, Building and Fortifying: the Definition of the Architectural Concept in the Early Meiji Period of Japan], in *Zhongguo jindai jianzhu xueshu sixiang yanjiu* [Studies on the Academic Thoughts of Modern Chinese Architecture], ed. Zhao Chen and Wu Jiang (Beijing: Zhongguo jianzhu gongye chubanshe, 2003): 65.

<sup>5</sup> Xu Subin, "Zhongguo jianzhu guilei de wenhua yanjiu: gudai dui 'jianzhu' de renshi" [A Study on the Cultural Categorization of Architecture: The Understanding of Architecture in Ancient China], *Chengshi huanjing sheji* [UED], no. 1 (2005): 80-84.

<sup>6</sup> See Zuo Yuhe, *Cong si bu dao qi ke: xueshu fenke yu jindai Zhongguo zhishi xitong zhi chuangujian* [From Four Parts to Seven Branches: Academic Divisions and the foundation of Modern Chinese Knowledge System] (Shanghai: Shanghai shudian chubanshe, 2004).



<sup>7</sup> Ibid.

<sup>8</sup> See Shu Xincheng. *Zhongguo jindai jianyu shiliao* [Historical Compilation of Modern Chinese Education] (Beijing: Renmin jiaoyu chubanshe, 1980): 615-616.

<sup>9</sup> See Shu, *Zhongguo jindai jianyu shiliao*, 647.

<sup>10</sup> In order to get an impression of the variation of architecture discussions, the author tried to do some statistics on the number of articles as well as frequency of keywords. Since there is no way to do a thorough full text search, the author decided to use *the Index of Nationwide Periodicals* (<http://www.cnbkxy.com>) by the Shanghai library as approximate database to generate the current diagram.

<sup>11</sup> According to the statistics by the author, the topics prevailed in these decades varied around certain themes: before 1900s: Fengshui, hygiene, novel/spectacle; 1900s: technology, materials, progress, projects; 1910s: housing industry, urban planning, constructions, technology; 1920s: architects; architecture as art, architectural history, Chinese architecture; 1930s: architecture (as discipline), nationalism, science, art, modern.

<sup>12</sup> The original texts: .....玻璃巨室，土人呼为水晶宫，在伦敦之南二十有五里，乘轮车顷刻可至。地势高峻，望之巍然若冈阜，广厦崇旃建于其上，逶迤联署，雾阁云窗，缥缈天外.....其中抬观亭榭，园囿池沼，花卉草木，鸟兽禽虫，无不毕备.....鱼龙曼衍，百戏并作，凡一切缘绳击撞、吞刀吐火、舞盘穿梯、搬演变化，光怪陆离，奇幻不测，能令观者目眩神迷。.....

<sup>13</sup> The original texts: 上古土穴桧巢之制，一变而为栋宇，至最近则又以钢铁易木石矣。美国房屋甚为高大，易兆焚如之灾。故近日几不再用木料，即一切门户皆以铜铁为之，非但避火，且坚固而省费焉。此亦建筑上之一大进步也。

<sup>14</sup> The original texts: .....我们对于建筑艺术的主张，一个很复杂的问题，得到一种答案了。我们以为派别是无关重要的。一件成功的建筑作品，第一，不能离开使用的需要；第二，不能离开时代的背景；第三，不能离开美术的原理；第四，不能离开文化的精神。.....所以在这四种原则之下，我们就应该努力创造一个新的风格出来，作为我们这一个时代文化的贡献。