Architectural Models and Their Contexts in China's 20th-Century Architectural Heritage: An Overview*

Qing Chang

College of Architecture and Urban Planning, Tongji University, Shanghai, China Email: changqinqtj@vip.sina.com

ABSTRACT The article explores the morphological evolution of China's 20th-century architecture chronologically. Chinese Neoclassicism has played a major role in forming the 20th-century heritage buildings surviving today. The phenomenon of Neoclassicism emerged because of the late arrival of China's modernisation and industrialisation process compared with the West. In turn, in accepting and contesting Western culture, the Chinese elite have consciously relied upon architecture as a vehicle to uphold visible symbols of national Chinese identity and traditional Chinese culture. Meanwhile, in the foreign settlements of the treaty ports such as Shanghai, the Western Neoclassical style, along with other imported construction trends, also forms part of China's 20th-century architectural heritage. Western Neoclassicism's influence on China's new architecture became even more evident in the mid-20th century, with the modern architectural heritage in Tiananmen Square as its exemplar. Nevertheless, the impact of Western modernist architecture on China's architecture was minimal. It was not until the 1980s, as China reopened to the world, that various schools of thought from the post-industrial West flowed into China, which significantly enriched the types and sources of China's 20th-century architectural heritage. Modern Classicism, late Modernism and Post-modernism all found their way into China's contemporary architecture.

KEYWORDS China's 20th-century architectural heritage, model, pseudo-classic, classical Chinese style, national style, neo-Chinese style, diversification

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Sources of China's Architectural Heritage in the 19th Century

Following the Opium Wars and the opening of the five treaty ports, elements of Western industrial civilisation were gradually implanted into China, which was then largely a farming society. These elements included modern Western buildings, such as civil infrastructure and industrial buildings. Public buildings for religious, educational, commercial and entertainment functions were also introduced into China. However, the rural and urban spaces in China mostly maintained the same general layout and scale from the end of Qing Dynasty to 1980s. The level of urbanisation level remained low and the distinction between cities and countries was characteristically clear. Chinese cities were almost surrounded by villages, with farmland and

villages extending as close as the immediate vicinity of the

city walls. According to existing research, the urbanisation rate during the Republic of China period (1912–1949) was

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course, as if modernity in China could only stagger forward

approximately 10% (Gao 2014), which only increased by approximately 7% to 17% from the beginning of the People's Republic of China (PRC) to before the Great Opening Up of China to the world. Except for a few urban buildings that demonstrated elementary industrial characteristics, the majority of urban and rural architecture styles retained the traditional forms passed down over centuries. The 'palacestyle' (gongdian-shi), the 'classical Chinese style' (Zhongguo guyou-shi) or the 'national style' (minzu-xingshi), which carried the historical identity of China, became the mainstream styles used in the construction of official and municipal public buildings. Instead of being merely an appeal to the idea of 'retro culture', these architectural styles were also regarded as examples of a 'political inheritance' dis-

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Figure 1 The Schereschewsky Hall of Shanghai St. John's University, 1895, with its façade featured as a wester style verandah capped with a Chinese overhanging roof (Source: Chen 1988, 107).

Figure 2 Peking Union Hospital, designed by the Canadian architect Harry Hussey and the American architect Conrad W. Anner, 1921 (Source: CRC, ASC, and CSCR-C20C 2016, 173).

Figure 3 Beiping Library, designed by the American architect Henry K. Murphy, 1931 (Source: BIAD and CSCRC20C 2019, 165).

Figure 4 Tao Fung Shan Monastery Buildings in Sha Tin District, New Territories, Hong Kong (Source: Yingchun Li).

in a Chinese way.

Pre-1949 Early-modern Architectural Heritage: A 'Pseudo-classic'

From the late 19th century to the early 20th century, missionaries, scholars and architects from Europe and the United States had been exploring ways of 'acculturing Chinese' in constructing buildings to which Chinese people could relate. A model of these architectural forms could be observed in the Imperial Palaces of the Ming and Qing dynasties in Beijing, which were 'pseudo-classics' that could be used as a shell for new Chinese architecture. Indeed, this pseudo-classic style is a Chinese counterpart of the revivalist approach from the École des Beaux-Arts or chinoiserie returning home. Schereschewsky Hall (1895) at Shanghai St. John's University is the earliest example of this kind (Figure 1). The president of the University at the time, Francis Lister Hawks Pott, had specified the style for this project. He wanted to preserve the curvaceous beauty of the Chinese traditional extensive roofs (Pott 1925). Cardinal Celso Benigno Luigi Costantini (1979), who was sent to China by the Holy See, praised the Sino-Classical Style adopted in the Peking Fu Jen University and considered it as being both a symbol of the revival of Chinese culture and an adaptation to meet the needs of the times.

However, some of the notable buildings designed by foreign architects during the Republic era, such as the Peking Union Hospital designed by the Canadian architect Harry Hussey and the American architect Conrad W. Anner, are exemplars of early Chinese Neoclassical architecture (Figure 2), which refers to a much simplified and modernised reinterpretation of classical Chinese architectural principles, and less mimicry in the building details than Western architectural styles. The American architect, Henry K. Murphy, made a significant contribution to the formation of Chinese Neoclassical architecture. Murphy's handiwork includes the Tsinghua University campus in 1916, the Yenching University campus in 1921 and the capital city of Nanjing in 1928. In addition, he designed

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Figure 5 The HSBC Building in Shanghai, designed by Palmer & Turner Architects and Surveyors, 1923 (Source: Zhong Tang). Figure 6a The façade along the Bund of Sassoon House (the present North Building of the Peace Hotel), designed by Palmer & Turner Architects and Surveyors, 1929 (Source: Zhong Tang). Figure 6b The main entrance along the Bund of Sassoon House (Source: Zhong Tang). Figure 7 Shanghai Park Hotel, designed by the Hungarian Slovakian architect L. E. Hudec, 1934 (Source: CRC, ASC, and CRC20 2016, 142)







the Beiping Library in 1930 (Figure 3) and the National Revolutionary Army Memorial Cemetery in Nanjing in 1931, which are among representative cases of Chinese Neoclassical architecture during the Republic era. In early 1930, the Danish architect Johannes Prip-Møller designed the Tao Fong Shan Monastery in Sha Tin in the New Territory of Hong Kong as a Christian complex with a traditional Chinese style (Figure 4). However, Prip-Møller was not as masterly as the aforementioned North American architects.

Moreover, Western architects at the time designed many European Neoclassical, Romantic and Art Deco buildings in China. As a decorative style that features historical motifs and forms in patterned and geometric designs, Art Deco not only adapted to the modern lifestyle of developed industrial and commercial cities, but also especially accommodated the shifting aesthetic tastes of the urban population. Examples of Art Deco buildings in Shanghai include the HSBC Building on the Bund (1923, Neoclassical) and the Sassoon House (1929, Art Deco), which were designed by Palmer & Turner Architects and Surveyors, the Sincere Department Store (1915, Neoclassical) designed by Lester, Johnson & Morris, the Moore Memorial Church (1930, neo-Gothic), the Zhenguang Building (1930, transitioning from neo-Gothic to Art Deco style) and the Park Hotel (1934, Art Deco) designed by the Hungarian Slovakian architect L. E. Hudec (Figures 5–8) (Chang 2009). The architectural heritage from this period had already adopted the world's most advanced construction techniques at the time, such as full cast-in-situ

steel-framed (-boned) concrete structures, steel structures, composite piles and Frankie steel pipe cast-in-place piles. Many high-rise buildings were installed with Otis elevators. Lalique opalescent glass, one of the most fashionable lighting materials at the time was also introduced into architectural lighting facilities (Chang 2011).

Meanwhile, Chinese architects who returned to China after studying abroad on the Boxer Indemnity Scholarship, such as Lü Yanzhi, Zhuang Jun, Robert Fan Wenzhao, Zhao Shen, Yang Tingbao, Tong Jun, Chen Zhi, and Dong Dayou, continued the exploration of Western architects and internalised it into their Chinese experience and creativity in their designs. Their designs of Chinese Neoclassical and Neo-eclectic architecture, such as the Sun Yat-sen Mausoleum in Nanjing, the Nanjing Museum, the Sun Yat-sen Memorial Hall in Guangzhou, the new Shanghai City Hall, the museum and the library for the Greater Shanghai Plan, are true manifestations of the nativisation of Western styles. These architects 'sinicised' the Art Deco style, which could be seen in the exploration of Chinese Art Deco at the West Lake Expo by Liu Jipiao (1929), the decorative patterns of Chinese palaces adopted

on the YWCA Headquarter Buildings in Shanghai by Lee Gum Poy, and the Chinese traditional floral motifs on the Bank of China Building by Luke Himsau. In addition, the State Council Building of Manchukuo (now the Bethune Basic Medical College Building of Jilin University), designed by Japanese architect Tatsuro Ishii and completed in 1936, is based on the internationally prevailing square cone-top Mausolus Tomb in Solas at that time and dubbed the Chinese classical double-eave pyramidal (*cuanjian*) roof covered with blue glazed tiles, being one of the classic buildings of the sinicised Art Deco style (Figures 9–10).

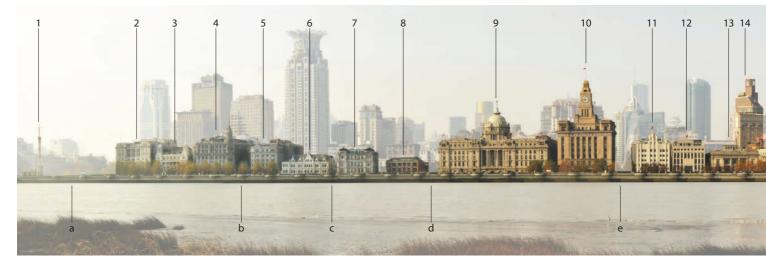
Post-1949 Chinese Modern Architecture: Form Follows Politics

By 1949, when the People's Republic of China (PRC) was founded, Chinese modern architecture, while pushing forward the industrialisation of construction in China, was influenced primarily by the cultural policy of 'national style, socialist content' from the Stalin period of the Soviet Union, and was distanced from the Western Modern Movement. As a key academic in the discipline of

Figure 8 Panorama of the historic buildings along the Shanghai Bund, taken in 2019 (Source: Zhong Tang).

- 1. The former Gutzlaff Signal Tower built in 1907
- 2. The former McBain Building, 1913–1916 (No. 1 Zhongshan Dong Yi Road)
- The former Shanghai Club, 1909–1910 (No. 2 Zhongshan Dong Yi Road)
- 4. The former Union Building, 1913–1916 (No. 3 Zhongshan Dong Yi Road)
- 5. The former Nishin Navigation Building, 1921–1925 (No. 5 Zhongshan Dong Yi Road)
- The former Commercial Bank of China Building, 1921–1925 (No. 6 Zhongshan Dong Yi Road)
- 7. The former Great Northern Telegraph Building, 1906–1907 (No. 7 Zhongshan Dong Yi Road)
- 8. The China Merchants Steam Navigation Company Building built in 1901, (No. 9 Zhongshan Dong Yi Road)

- 9. The former HSBC Building, 1921–1923 (No. 10–12 Zhongshan Dong Yi Road)
- 10. The Custom House, 1925–1927 (No. 13 Zhongshan Dong Yi Road)
- 11. The former China Bank of Communication Building, 1921–1923 (No. 14 Zhongshan Dong Yi Road)
- 12. Shanghai Public Service Centre (new building)¹
- 13. The former Russo-Chinese Bank Building, 1921–1923 (No. 15 Zhongshan Dong Yi Road)
- 14. East China Electric Building, completed in 1988
- 15. The former Bank of Taiwan, 1924–1927 (No. 16 Zhongshan Dong Yi Road)
- 16. The former North China Daily News Building, 1921–1924 (No. 17 Zhongshan Dong Yi Road)
- 17. The former Chartered Bank Building, 1922–1923 (No. 18 Zhongshan Dong Yi Road)



architecture, Liang Sicheng proposed the guiding principles of neo-Classicism in the 1950s and claimed that Chinese ancient timber buildings were parallel to the modern steel-framed concrete structures in their structural 'grammar'. Following Liang, renowned Chinese architects such as Yang Tingbao, Zhang Bo, and Zhang Kaiji combined Chinese classical compositions and elements with contemporary functions, structures and materials in their designs. The most representative examples of the national style from this period include the Sibuyiwei Office Complex in Beijing's Sanlihe district, the Beijing Friendship Hotel, as well as the Great Hall of the People in Chongqing, and the Donghu Hotel in Wuhan. However, this Neoclassical architectural trend did not last long. The style slavishly followed Classical dimensions, profiles and decorations, which required extensive investments with low efficiency, and because of the negative opinions from the high-ranking Chinese leaders¹ and the power shift of the Soviet Union after Stalin's death, it gradually declined during the Stateinitiated campaign 'Anti-Liang Movement' in 1955.

No sooner than that, the State promoted the concept of 'let one hundred flowers bloom, let new things emerge from the old'2. Architecture design was then diverted towards eclecticism between ancient and contemporary styles, and the hybrid Chinese and foreign influences. To a certain extent, architectural designs did not necessarily exclude adopting Western Neoclassical styles. The Ten Great Buildings in Beijing, which were designed to commemorate the tenth anniversary of the founding of the PRC in 1959, are vivid demonstrations of the value preferences of the time. Among these iconic buildings, two are Western Neoclassical styles (i.e., the Great Hall of the People and the National History Museum), four are Chinese Neoclassical styles (i.e., the National Hotel, the Agricultural Exhibition Centre, the Beijing Railway Station, and the Cultural Palace of Nationalities), and three are modern eclectic styles (i.e., the Military Museum of the Chinese People's Revolution, the Prime Hotel and the Worker's Stadium), while only one was designed in a pure 'palace style' (i.e., the Diaoyutai State Guesthouse)³. Along with the Ten Great Buildings, the subsequently built large public buildings, such as the National Art Museum of China (1962, Chinese Neoclassical), the Capital Indoor Stadium (1968, Modern Eclectic) and the new wing of the Beijing Hotel

- 18. The former Palace Hotel, 1906–1908 (No. 19 Zhongshan Dong Yi Road)
- 19. The former Sassoon House, 1926–1929 (No. 20 Zhongshan Dong Yi Road)
- 20. The Bank of China Building, 1936–1937 (No. 23 Zhongshan Dong Yi Road)
- 21. The former Yokohama Specie Bank Building, 1923–1924 (No. 24 Zhongshan Dong Yi Road)
- 22. The former Yangtze Insurance Building, 1918–1920 (No. 26 Zhongshan Dong Yi Road)
- 23. The former Jardine Matheson Building, 1920–1922 (No. 27 Zhongshan Dong Yi Road)
- 24. The former Glen Line Building, 1920–1922 (No. 28 Zhongshan

- Dong Yi Road)
- 25.The former Banque de l'Indochine Building, 1910–1911 (No. 29 Zhongshan Dong Yi Road)
- 26. The Peninsula Hotel (new building)
- 27.The British Consulate General, 1872–1873 (No. 33 Zhongshan Dong Yi Road)
- 28. The former residence of the British Consulate General, 1882
- 29. The former Garden Bridge (now Waibaidu Bridge)
- 30. The former Broadway Mansions, 1934, (No. 20 North Suzhou Road)
- a. East Yan'an Road
- b. Guangdong Road
- c. Yuanfanglong (Alley)
- d. Fuzhou Road e. Hankou Road
- f. Jiujiang Road
- g. Nanjing Road
- h. Dianchi Road
- i. East Beijing Road
- j. South Suzhou Road

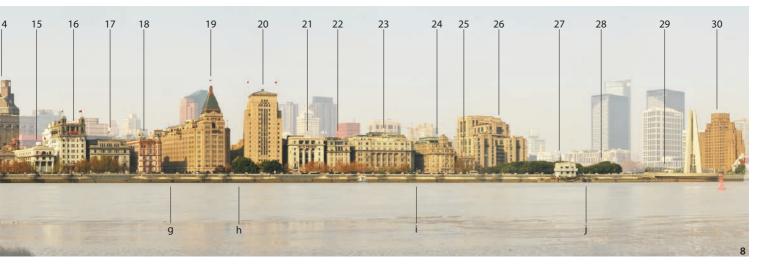






Figure 9 Shanghai City Hall for the Greater Shanghai Plan, designed by Dong Dayou, 1933 (Source: https://zh.wikipedia.org/wiki/%E5%A4%A7%E4%B8%8A%E6%B5%B7%E8%AE%A1%E5%88%92).

Figure 10 Bethune Basic Medical College Building of Jilin University, Changchun (the former State Council Building of Manchukuo), 1936 (Source: J. Zhang 2018, 299).

(1974, Modern Eclectic), significantly contributed to the new urban layout, the spatial nodes and the cityscape silhouette of the ancient capital. These iconic buildings also demonstrated China's highest level of modern construction technology at the time, such as the 35 m \times 35 m hyperbolic paraboloid shell structure of the Central Hall of Beijing Railway Station, the 94 m-diameter wheel-shaped cable structure of the Worker's Stadium, the 60 m span of the steel structure roof and the 7 m-high truss of the Great Hall of the People (Figures 11–13) (BJADI 1959). From then on, the Neoclassical model became a hybrid of Chinese and foreign architectural styles.

Due to the PRC's unique political system of centralisation of authority with 'centralised democracy' and a coordination mechanism which 'manages all the activities of the nation like pieces in a chess game, the State-funded large projects could achieve astounding construction quality and efficiency. For example, Tiananmen Square in Beijing covers an area of 44 hm², which is among the world's largest and most important political plazas. This grand scale requires a monumental volume for the surrounding buildings to balance its spatial composition. The construction area of the Great Hall of the People is over 170,000 m², which is 20,000 m² larger than the total construction area of the Forbidden City. The highest central point of the Great Hall boasts a height of 46.5 m, while the colonnade of the east façade has twelve 25-metre-high columns, each with a 2-m diameter. The magnificent scales of these monolithic structures caused contests between the architects of the time⁴. In 1977, the Chairman Mao Memorial Hall was built on the former site of the Zhonghua Gate to the south of Tiananmen Square (Figure 14). In principle, its design is not far from the Western Neoclassical style adopted by the Great Hall of the People on the east side of the Square and the National History Museum on the west side of the Square. These three buildings were constructed over a period of 18 years. Together with the Tiananmen Square and the Forbidden City's façade on the northern side of the square, these buildings form an intriguing and magnificent spatio-temporal, cross-cultural cityscape. Each of these three buildings was designed and completed within a year, which was unprecedented in the modern architectural history of China and the world.

In conclusion, the first 30 years of PRC's architecture can be considered as a prime period of Chinese Neoclassicism guided by political ideology, depending upon the building industry's level of modernisation, which eclectically recycled historical styles as formal inspirations. This mainstream orientation of architectural styles is manifested in the official and public buildings. Influenced by the Ten Great Buildings, many Neoclassical buildings including the basic three segments—a flat roof with thin overhanging eaves, monumental colonnade and steps—but at a smaller scale, were built all over China in a 'Revolutionary Modern style'. These buildings can be considered as secondary replicas or simplified versions of the Ten Great Buildings. Thus, did the Western Modern Movement influence the architecture of New China? The answer is overall negative, with a few exceptions depending on the architectural style's susceptibility to the influence of ideology. For example, the St. John's University Architecture Department founded in Shanghai in 1946,







Figure 12 The Cultural Palace of Nationalities, Beijing, 1959 (Source: Lei Liu).

Figure 13 Military Museum of the Chinese People's Revolution, Beijing, 1959 (Source: Lei Liu). Figure 14 Chairman Mao Memorial Hall, 1977 (Source: Lei Liu).



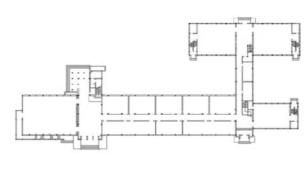


was the only architecture department within China's higher education system that incorporated the education concepts and methodologies from the Bauhaus School. In 1952, this department was merged into Tongji University. Completed in 1954, the Wenyuan Building, which is home to this architectural school, demonstrates a Chinese interpretation of a Bauhaus Dessau building in its simplistic profile and form, efficient division of functions and circulation, with only a few Chinese-style decorative elements, such as the lattice windows added on the outer walls. Nowadays, some of the exemplars of the architecture from

this period are included in the Chinese 20th-century architectural heritage list (S. Zhang 2018) (Figure 15)⁵.

Considering the Greater China cultural architectural styles shared across the Taiwan Strait, from 1949, when the Chinese Nationalist Party retreated to Taiwan, until the 1970s and 1980s, the official architectural style in Taiwan clung to the classical Chinese style in its forms and styles. For example, the collage of ancient and modern styles in the National Sun Yat-sen Memorial Hall in Taipei (1961), the Chiang Kai-shek Memorial Hall (1980), which combined the styles of Nanjing's Sun Yat-sen Mausoleum





15b





Figure 15a Wenyuan Building at Tongji University (Source: Zhong Tang).

Figure 15b The ground floor plan of Wenyuan Building (Source: Feng Qian).

Figure 16a Tiananment Square in Beijing (Source: http://k.sina.com.cn/article_6775659473_193dc5bd100100lz1p.html?from=travel)

Figure 16b The square in front of the National Theatre and Concert Hall in Taipei (Source: https://zh.wikipedia.org/wiki/%E4%B8%AD %E6%AD%A3%E7%B4%80%E5%BF%B5%E5%A0%82#/media/File:CKS_Panorama.jpg)

and Guangzhou's Sun Yat-sen Memorial Hall, and Taipei's National Theatre and Concert Hall (1987), which is a replica of the Beijing Imperial Palace, all followed the typical 'palace style' (Figure 17). In contrast, the Luce Memorial Chapel (1963) at Tunghai University is an iconic achievement of Chinese Modernist architecture, as its hyperbolic thin-shell roof is associated with the pre-history tent—one of the possible prototypes of Chinese traditional recurving roof (Figures 16–18)⁶.

Diversity after 1978: Towards the Contemporary Architectural Heritage?

After the late 1970s when the Chinese economic reform initiated a 'new period' in China, Chinese architectural professionals began to reconsider the international architectural trends led by the West and moved towards

exploring the diversification of architectural forms and aesthetic preferences in China. In particular, the exceptionally talented American Chinese architect I. M. Pei designed the Fragrant Hill Hotel in Beijing using his deep understanding of Chinese classical culture to create an influential masterpiece in Chinese architectural history by combining the charm of Chinese classical gardens and the geometric order of modern architectural styles (Figure 19). In this milieu, some of the best Chinese modern architecture emerged in the 1980s (Xiao 1990). Most of the architects of these buildings considered the preservation of architectural vernacular, inherited traditions, and transforming these local traditions as their mission to pursue architecture designs that are modern, Chinese and local.

Considering the continuation in spirit and innovative transformation of traditional architecture, the most







Figure 17 Sun Yat Sen Memorial Hall in Taipei, 1972 (Source: https://museums.moc.gov.tw/MusData/Detail?museumsId=01cb6413-a591-4613-802b-5e3d-898250cd).

Figure 18a and 18b Luce Memorial Chapel in Tunghai University, 1963 (Source: Qing Chang).

typical example from the 1980s is the Square-Pagoda Park in Songjiang District, Shanghai, which was designed by a group of architects led by Feng Jizhong. This park incorporates three historical buildings: i.e., the Northern Song Dynasty square pagoda of Xingshengjiao Buddhist Temple, the carved brick screen of the City God Temple from Ming Dynasty, and the main hall of the Heavenly Queen Temple from the Qing Dynasty which was relocated from central Shanghai. These new buildings, which were adjunct to historical elements of their local districts, combined the 'subtle ease' of Chinese garden art and the 'naturalism' of Western landscape design. For example, the main gate of these buildings included a modern planar steel truss system supporting a flat-tiled roof, and the Helou Pavilion contains a bamboo structure that imitates steel-framed trusses to support the thickly thatched slope

roof, which was an exaggeratedly recurving roof form typical of the Songjiang area. The traditional elegance and aesthetic sensibility of architectural forms were integrated with modernist ideas and construction methods to 'recreate the new with the old' (Figure 20) (Feng 1981, 29). Meanwhile, passionate and vibrant designs were constructed across China, such as the neo-traditional style of the Queli Guest House at the Confucius Temple in Qufu, the Shaanxi Provincial History Museum (Figure 21), the neo-Chinese National Library of China in Beijing (Figure 22), the Huanglong Hotel in Hangzhou, the neo-regionalist design of the Wuyi Mountain Villa in Fujian (Figure 23), the typological transformation in the renovation of Ju'er Hutong in Beijing, the extension of Tsinghua University Library, the Sino-Art-Deco Zhou Enlai Memorial Hall in Meiyuan New Village of Nanjing, the Memorial













Figure 19 Fragrant Hill Hotel in Beijing, 1982 (Source: CRC, ASC, and CSCR-C20C 2016, 216).

Figure 20 Helou Pavilion in the Square-Pagoda Garden in Songjiang District, Shanghai, 1986 (Source: Xiao 1990, 132).

Figure 21 Shaanxi History Museum, 1991 (Source: Yao Qi)

Figure 22 The National Library of China, Beijing, 1987 (Source: Xiao 1990, 13)

Figure 23 Wuyi Mountain Villa, Fujian, 1983 (Source: Xiao 1990, 88)

Figure 24 Museum of the Nanyue King of Western Han Dynasty, 1988 (Source: http://www.sohu.com/a/289356405_391262).

Museum of the First Sino-Japanese War, the Museum of the Nanyue King of Western Han Dynasty (Figure 24) and the Shanghai Electric Power Building, which emphasised the formal reconfiguration of the original building (Figure 25), are all representative architectural creations that retain their connection with tradition to some extent and express a variety of contemporary creativity beyond traditional architectural styles (Chang, 2018). Moreover, since the 1980s, foreign architects have also been experimenting a type of 'glocal' architectural orientation in China, such as the Jinmao Tower in Shanghai with a height of 420.5 m,

designed by Skidmore, Owings & Merrill (Figure 26). The Jinmao Tower is an indisputably excellent example in terms of its aesthetics, not only because of its refined structure, materials and form, but also because its Neo-Art Deco horizontal divisions and the cone-shaped atrium space that penetrates through the upper 33-storey hotel refer to two types of Chinese ancient pagodas, i.e., the multi-storey type and the multi-eave type (Chang 2009).

China's 20th-century industrial architectural heritage also demonstrates various unique shapes and spatial forms. From their birth at the end of Qing Dynasty and during the











Electric Power Building along the East Nanjing Road, 1988 (Source: Zhonglong Li and Qing Chang).

Figure 26 Jinmao Tower (Source: Zhong Tang).

Figure 27 The No. 3 furnace of Shougang Group after renovation, the predecessor of Shijingshan Iron and Steel Plant (Source: Qing Chang).

Figure 28 A steel bridge at Yangshupu Gaozhuang Dock after renovation (Source: Ming Zhang).

Figure 25a and 25b Shanghai

Republic era, to the PRC's 156 constructions supported by the Soviet Union, and to the achievements of self-reliance, these industrial architectural creations have become the carriers of indelible history and memories for future generations. Some of these impressive sites were revitalised and reused, such as the former Beijing Capital Steel Factory, which is now the Shijingshan Steel Factory (Figure 27), the former Beijing Electronics Industrial Base, which is now the 798 Art District, the rebirth of the Shanghai Jiangnan Shipyard at the Shanghai Expo and the revitalisation of the Binjiang Industrial 'Rust Band' in Yangshupu (Figure 28).

Conclusion

In looking back at the evolution of Chinese modern architectural heritage, most of the cases from the early 20th century up until just before the 1980s can be found to follow the themes of Neo-Classicism and Eclecticism. After the opening up of China to the world, the evolution of Western architecture from Neo-Classicism, Art Nouveau, and Art Deco to Modernism and Postmodernism was interpreted locally with a uniquely Chinese understanding and expression. This evolution of architectural styles

demonstrates the persistence of a generation of architects to preserve history and memories, and their creativity and exploration in modernising local traditions.

Today's perspective towards 20th-century architectural heritage is also distinctive since the end of the 20th century as China's architectural community has increasingly realised a shrinking temporal discrepancy between China and the West. If, in essence, Western modernist architecture is a critical transformation of tradition, transcending national boundaries and being 'cosmopolitanism, and today it relies on virtualisation technology and is fond of quaintness and changes, then Chinese modern architecture, in confronting an imposing foreign culture, has passed through the phases of refusal by emphasising tradition, blindly following the West in fear of being left behind, and local explorations based on an international modern generic foundation. It is reasonable to believe that if national identities and cultural differences prevail, the resulting architectural forms will not be able to escape the limitation of cultural diversity and ideology, even in the digital era.

Françoise Choay (2001) observed that:

Contaminated by the logic of the networks, architecture's status and vocation have changed. Individual buildings are increasingly conceived as autonomous technological objects, to be plugged in, grafted onto, or connected to a system of infrastructures and utterly free from the contextual bonds which used to characterise works of 'architecture.' The architect's own body is losing its role as intercessor, and the marvellous invocation addressed to it by Eupalinos henceforth echoes in the void. The engineer tends to replace the architect in the task of elaborating the tri-dimensionality of such objects with the help of all the resources of electronic virtualisation. For his part, the architect tends to become an image maker, a marketing or communications agent who works only in two dimensions. At best, he is reduced to a graphic or plastic activity which breaks with the practical, utilitarian purposes of architecture and which is inscribed in the intellectualist aesthetic of mockery and provocation characteristic of the contemporary plastic arts (168).

Choay's vision is clear, but also rather pessimistic. Heritage value is not a static and objective truth; thus, it is perhaps not in our ability to prejudge with certainty the future heritage values of the productions of our times.

(Translated by Lui Tam, proofread by Yingchun Li)

Notes

- Chairman Mao loathed large traditional Chinese roofs on modern buildings and condemned them as 'hats of Taoist monks, shells of turtles'. He preferred the Western Neoclassical architectural style and advocated the refurbishment of the common old buildings that were not considered as historic monuments (Wang, 2003, 152).
- 2. Translator's note: this slogan was promoted during the Hundred Flowers Campaign in 1956–1957.
- 3. The Prime Minister Zhou Enlai even suggested that 'the ancient or the contemporary, the Chinese or the foreign, we can use all these essences'. For more details, see Dong (1995, 7–10).
- 4. Prof. Tan Yuan from Tongji University, who had a deep understanding of the design principles from the École des Beaux-Arts, considered that overly upscaling the standard architectural dimensions was against the basic principles of architectural compositions (Zhang 2010). In terms of the style chosen for the Ten Great Buildings, Liang Sicheng (1959) insisted that it should be considered a 'New Chinese' style.
- 5. In 2014, the Chinese Society of Cultural Relics's Committee on 20th-Century Architectural Heritage (CSCR-C20C) issued a preliminary draft of the designation criteria for China's 20th-century architectural heritage, where two phases of 20th-century architectural heritage were identified: i.e., Chinese modern architectural heritage (1840-1949) and Chinese contemporary architectural heritage (1949-early-mid-21st century). 396 sites were designated for this list (in four batches) from 2016-2019. Even though this list is not yet legally binding, most of the sites from the first phase and some of the sites in the second phase had already been listed as protected cultural heritage sites of various levels or included in the list of protected historic buildings or are in the process of gaining this legal protection status. The examples mentioned in this article cover some of the most representative sites from both phases. For case studies on some of these sites, please see Lai (2007) and Zou, Dai and Zhang (2010).
- 6. The Luce Memorial Chapel was designed by architects I. M. Pei and Chi-kuan Chen.

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