Understanding Chinese Research Work on Architectural History

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Chinese architectural history rests on eight fundamental understandings—of China, of history, and of architecture.

The first is that architectural studies as an academic discipline focuses on both engineering technology and societal issues. Because architecture has a social content, cultural traditions and artistic criteria play leading roles in the field, and architectural history matters as an important subdiscipline of architectural studies. In China, the “study of architecture” involves buildings, gardens, and urban planning, to paraphrase the entry under that rubric in the Encyclopaedia Sinica. Architectural history explores the development and evolution of architecture as an academic pursuit and as evidenced in the construction of buildings. It draws useful lessons from the historical experiences of Chinese people that may be relevant to architecture. Research in architectural history has expanded what is known of the achievements and developmental patterns of traditional building technology and architectural art and can yield the information needed to write a guidebook to designs prevalent in past centuries.

Second, architectural historians investigate the structures and remains of the past to answer two questions: What kind of buildings, and why were they built? To answer the first requires collecting data, and to answer the second entails searching for patterns of development and analyzing them in hopes of proposing a theory. Architectural historians need accurate, comprehensive information about buildings and documentation of their structure. With such materials they can lay the groundwork for analyzing the conditions that fostered and shaped the development of architecture. Finally, they should look for patterns of development that might enable them to draw lessons from the past. This process, from information gathering to summarizing the meaning of their research, answers the question of why traditional architecture takes the forms it does.

Third, research in China’s architectural history ranges broadly to include cities and villages as well as gardens, and it embraces regional planning projects with a wide array of buildings as well as more focused designs for specific buildings or clustered structures, including palaces, ritual architecture, government offices, tombs, gardens, religious architecture, residential architecture, and commercial buildings. The field of architectural studies today explores all these topics in terms of their planning, layout, design methods, and construction technology. The publication of the findings of such research, in illustrated textual accounts and analyses, can bolster the protection of historical culture by providing data for preservationists to consult and cite.

Fourth, China owes its architectural richness to its long history as a multi-ethnic country in which both Chinese and non-Chinese peoples have established dynasties. Because of cross-cultural exchange, buildings styles of different ethnicities have mixed, merged, and mutually reinforced one another in China’s impressive body of traditional architecture. To understand the formation and evolution of traditional architecture, one must study the architectural history of each of the country’s ethnicities and its interplay and intermingling with that of other ethnicities.

Fifth, the vastness of China’s territory and its diverse natural and geographic conditions have led to regional variations in style, architectural preferences, building materials, and methods. Some geographic regions have developed distinct architectural systems. Chinese architectural historians identify how such local building cultures have influenced, or themselves changed in response to the official-style buildings of China’s urban centers.

Sixth, patterns of architectural development in China often correspond to the rise and fall of a dynasty and the unification or division of an empire. Chinese architectural historians investigate the rhythms of isolation and exchange that
change according to the stasis and dynamism of a historical period and link those rhythms to the architecture of that time.

Seventh, Chinese architectural historians have examined the relationship of ancient philosophical writings, ethical beliefs, ritual, ceremonies, customs, folk beliefs, and folk superstitions to the formation and evolution of architecture and aesthetic taste. These factors, whether they have influenced or restricted architectural development, may explain how such development is grounded in sociocultural traditions. Architectural historians can write comprehensive architectural history only if they understand the integration of ritual, philosophy, and folk ideas.

Eighth, because foreign buildings exert an influence on buildings in China, exchanges between indigenous and foreign architecture are an important issue in Chinese architecture. Sometimes the study of architectural achievements outside China can elucidate Chinese architectural history. For example, Japan represents an extremely important source of information about Chinese architecture, especially from the seventh through the ninth century. Buildings in Japan from that period help fill gaps in what is known of the time in China from which little wooden architecture survives. What is learned about the history of architecture in this respect can inspire and serve as a reference for absorbing outstanding foreign architectural achievements today.

Eighty Years of Architectural History Research in China

The modern study of Chinese architectural history began in the 1930s, when Liang Sicheng and Liu Dunzhen established the Society for Research in Chinese Architecture. In the eighty years since, Chinese scholars have undertaken large-scale surveys and research in every part of China. Taking that work into account, the past eight decades of architectural history may be divided into three stages.

1930s and 1940s

The Society for Research in Chinese Architecture focused on gathering historical data by surveying a large number of important structures of various types. The society collected and studied the rich body of historical texts and clarified the development of post-Tang Chinese architecture, its design methods, and its regulations, publishing numerous survey reports and research papers. The results of the society’s two decades of effort are set forth in Liang Sicheng’s work Zhongguo jianzhu shi (Chinese architectural history) of the mid-1940s and his research on the design methods and standards of “Qingshi” (Qing-style) architecture, based on the architectural treatise *Yingzao fashi* (Building standards), and of “Songshi” (Song-style) architecture, as described in *Gongbu gongcheng zuofa zeli* (Engineering manual for the Board of Works).

1950s and 1960s

The beginning of the second stage of Chinese architectural history was marked by the founding of the People’s Republic in 1949 and its end, by the early years of the Cultural Revolution (1966–76). This stage can itself be subdivided into two distinct phases.

Soon after the founding of the People’s Republic, as early as 1952, Liu Dunzhen established the Chinese Architecture Research Center at the Department of Architecture, Nanjing Institute of Technology. The Department of Architecture at Tsinghua (Qinghua) University also launched research on architectural history and set up an Architectural History Compilation Committee, headed by Liang Sicheng. The nationwide inventory of cultural relics and the salvage excavations that accompanied the tremendous building activity of this period uncovered many significant traditional buildings and complete architectural ensembles of vernacular dwellings in historic villages. Additionally, it brought to light many historically famous capitals and important architectural ruins. At the same time, with the boom in large-scale construction, questions of monument preservation arose: How could China best preserve buildings from the past in the midst of the new built environment?

Architectural historians addressed this question in the 1950s by expanding the scope of their research and surveys to South China. Investigators, under the guidance of Liu Dunzhen, unearthed several important buildings from the Song and Yuan dynasties located south of the Yangzi River. Liu and his colleagues also discovered residential architecture in South China that filled in one of the remaining gaps in architectural history. They studied Ming vernacular architecture in the Huizhou region of Anhui province and in Yongding county of Fujian province. On the basis of their findings, Liu Dunzhen in 1957 compiled *Zhongguo zhu zhai gaishuo* (A brief introduction to Chinese residential architecture). Meanwhile, in the North four professors from the Department of Architecture at Tsinghua University—Liang Sicheng, Liu Zhiping, Zhao Zhengzhi, and Mo Zongjiang—were engaged in writing and editing material on the history of Chinese traditional architecture. They made notable strides in research on village planning, residential buildings, gardens, decoration, and the architecture of China’s ethnic populations, thus expanding the scope of Chinese architectural history.

The second phase of these decades of architectural history research in China began in 1958 with the founding of the Chinese Architectural History and Theory Research
Center. The Chinese Academy of Building Research, formerly attached to the Ministry of Construction, set up this research center, with Liang Sicheng and Liu Dunzhen as directors. This was the second time that the two founders of the discipline codirected a national center that specialized in research on architectural history. They gathered more than a hundred professional staff members, and, together with specialists in the architecture departments of such institutions of higher learning as Nanjing Institute of Technology (now Southeast University), Tongji University in Shanghai, Tianjin University, Southern China Institute of Technology (now South China University of Technology) in Guangzhou (Canton), and Chongqing College (now Chongqing University of Architecture), they set up a nationwide collaboration to undertake research in architectural history.

In 1958, an editorial team chaired by Professor Liu Dunzhen was formed in collaboration with colleges and universities, construction units, and cultural relics departments across the country to compile and publish university-level textbooks. In the first year, the team published two such books: Zhongguo gudai jianzhu jianshi (A concise history of Chinese traditional architecture) and Zhongguo jindai jianzhu jianshi (A concise history of Chinese modern architecture). In addition, to celebrate the tenth anniversary of the founding of the People’s Republic, they published the large illustrated album Xin Zhongguo jianzhu shibian (Ten years of architecture in new China). Next, Liu Dunzhen organized a team to undertake the writing of a new version of the general history of Chinese architecture. The manuscript was completed in early 1966. Titled Zhongguo gudai jianzhu zhubu (History of Chinese traditional architecture), it covered the historical data on, and development of, the main buildings known to Chinese architectural historians before and after the founding of the People’s Republic and the essential research related to them. After discussion and debate by a board of experts formed for the purpose, Liu Dunzhen revised it once again. Thus Zhongguo gudai jianzhu zhubu is the result of the more than thirty years of collaborative work by China’s leading architectural historians that began when architectural history was established as a formal academic discipline. The book’s intent was to present the Chinese architectural canon and indicate what should be said about it. Meanwhile, Liang Sicheng was finishing the monograph Yingzao fashi zhubu (Annotation of Yingzao fashi), and Liu Dunzhen had completed his book Suzhou gudian yuanlin (Suzhou classical gardens). The civil engineer Chen Mingda published the earliest monograph in architectural history, Yingxian muta (Yingxian Timber Pagoda). These books represent the range of research and the standards that governed the first thirty years of architectural history in China.

The Architectural History Research Center of the Chinese Academy of Building Research and its Nanjing branch, at Nanjing Institute of Technology, undertook substantial surveys and broad-based research at the same time. That work included the following: architecture of ethnic minorities such as the Uighurs in Xinjiang, Tibetan architecture, and architecture in Inner Mongolia; studies of such regional-style buildings as Beijing sibeyuan (courtyard-style housing) and vernacular dwellings in Zhejiang and Fujian; research on urban planning in the Southern Song capital Lin’an (today Hangzhou); studies of architectural decoration, including the carvings on buildings in the Jiangnan area in the Southeast and the imitations of official-style polychrome painted decoration in Ming architecture in Beijing and Huizhou; work on garden and landscape architecture in Guilin, in Suzhou, and in Beihai Park in Beijing; the architecture of mosques in China and a survey of the buildings of Guangsheng Monastery in Shanxi; and finally, projects dealing with modern architecture, including the investigation of nearly one hundred years of construction in Qingdao, a study of residential neighborhoods in Shanghai and Tianjin, and the compilation of a reference catalogue of the past nearly one hundred years of Chinese architecture. In addition, students were trained in methods of researching architectural history.

The years from 1952 to 1965 were a period of flourishing development, in large part owing to national cooperation. During this period, as in the 1930s, historical materials were gathered, surveys completed, research for specialized histories pursued, and a new version of China’s general architectural history published, all with considerable success. Then in 1966 the Cultural Revolution brought research on architectural history to a halt nationwide. Even the founders of the discipline, Liang Sicheng, Liu Dunzhen, and some of their supporters, were publicly and unjustly criticized.

1973 to the Present

In 1973 the National Construction Committee of the Chinese Academy of Building Research resumed work on architectural history. Shortly afterward, the relevant institutions of higher learning and the study of cultural relics reopened one by one. At that time, during the last stage of the Cultural Revolution, after Liang Sicheng and Liu Dunzhen had passed away, their first- and second-generation disciples continued their work. Liu Zhiping, of the Chinese Academy of Building Research, supplemented his monograph Zhongguo Yishulianzhuan jianzhu (Chinese Islamic architecture), and Chen Mingda wrote Yingzao fashi damuzuo zhida yanjiu (Research on the regulations of the Yingzao fashi). Both had limited circulation. Some works from the time before the Cultural Revolution were republished.
Revolution were cleaned up and reissued, including the textbook *Zhongguo gudai jianzhushi* and the monograph *Jiangze minzhu* (Vernacular dwellings of Jiangsu and Zhejiang), both published by the Architectural History Research Center of the Chinese Academy of Building Research; Liu Dunzhen’s book on Suzhou gardens, *Suzhou gudian yuanshi*, published by the Department of Architecture at Nanjing Institute of Technology; and Liang Sicheng’s *Yingzao fasbi zhushi*, mentioned above, which was published posthumously by the Department of Architecture at Tsinghua University. The accomplishments of this period included specialized surveys and research based on new material, supplements to the work of previous years, and the completion of unfinished work. During this period it became apparent how greatly the volume of historical data had increased.

From about 1980 to 1995, four major reference works were compiled: (1) *Zhongguo gudai jianzhushi* (History of Chinese traditional building technology); (2) the volume on cities, architecture, and landscape architecture in *Zhongguo dabeike quanshu* (China universal encyclopedia); (3) the multi-volume edition of *Zhongguo gudai jianzhushi* (History of Chinese traditional architecture); and (4) *Zhongguo jianzhu yishushi* (History of Chinese architectural art). Zhang Yuhuan, from the Center for the History of Natural Sciences at the Chinese Academy of Social Sciences, and Guo Husheng, from the Department of Architecture at Nanjing Institute of Technology, were in charge of writing the *Zhongguo gudai jianzhushi*, and Liu Zhiping, from the Architectural History Research Center of the Chinese Academy of Building Research, was consultant and supervisor. This work provided a much-needed addendum to building technology.

Liu Zhiping and Cheng Mingda were editors of the volume on cities, architecture, and landscape of the encyclopedia *Zhongguo dabeike quanshu*. They invited experts engaged in research on architectural history and teachers from all over the country to participate in discussions and define a framework. The experts also wrote entries for the encyclopedia, summarizing research and exploring problems. This work played an important role in the later development of architectural history as a formal academic discipline.

In 1986, the eighth version of *Zhongguo gudai jianzhushi* was limited to 114,000 characters, thus curtailing the amount of historical data selected and the length of theoretical analysis. The cuts were not what Liu Dunzhen had intended. Pan Guxi, of the Department of Architecture at Southeast University in Nanjing, proposed yet another version of China’s architectural history, and the National Chinese Natural Science Foundation and the Department of Science and Technology of the Ministry of Construction supported it. The new edition—consisting of five volumes, each with about one million characters—was to be a joint venture of the architecture departments of Southeast University, Tsinghua University, and the Architectural History Research Center of the Chinese Academy of Building Research. In 2003 the last of the five volumes was published. In the writing process, the volumes were greatly expanded and the contents greatly enriched by newfound historical data. A one-volume companion to the larger work, prepared jointly by all five authors, was also published.

In the early 1990s the Chinese Academy of Literature and Art sponsored the compilation of the *Zhongguo jianzhu yishushi* (History of Chinese architectural art). Xiao Mo and Wang Guixiang were among those who compiled the volume with the goal of focusing on the artistic features of architecture, such as decoration. In addition, Hou Youbin and others published a book titled *Zhongguo jianzhu meixue* (Chinese architectural aesthetics).

**Architectural History in Retrospect and for the Future**

Research in architectural history during the past eighty years has developed cyclically. Each stage began with the collection of data and resulted in the compilation of general and specialized histories. The field has passed through three stages. The next stage will require even more intensive information gathering and the development of new directions of research.

Chinese architectural history comprises a large amount of data. In the future it will be important to view that data in relation to city planning, architecture, and landscape architecture. And it will be equally important to analyze the material from the standpoint of technology. Excavation has been one of the main avenues for putting architecture into a context.

A loftier goal for future research is to find a theory of Chinese architectural history. The field of Chinese architecture needs to move beyond the technical, stylistic, and historical problems of buildings and sites. A theory of the aesthetic of Chinese architecture is likely to be the first result of the expanded emphasis.

The task of Chinese architecture as part of the building and construction industry is to create modern cities and buildings of distinctly Chinese character that will make the nation proud. When formulating such characteristics, architecture might borrow from indigenous Chinese historical traditions in addition to absorbing the advances of global architecture. Yet comparing the past situation in architecture with the current situation reveals the huge gap between
traditional and contemporary architecture; moreover, our
decades-long experience tells us how little success we have
had in continuing building traditions, particularly those con-
cerning architectural form.

Here architectural history can play an important
and practical role in demonstrating how socioeconomic
conditions, ancient philosophy, ethics, cultural traditions,
customs, and religious beliefs shaped Chinese architecture
and made it distinctively Chinese. Knowledge of these build-
ing traditions and the abundant examples still extant can
serve as points of reference and inspire a new Chinese
architecture.

In a Field of Party Walls: Drawing
Shanghai’s Lilong

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The International City

When Deng Xiaoping initiated market reforms
in 1978, reopening the country and inviting
the newest phase of foreign investment in
Chinese cities, the structure and scale of these cities changed
dramatically. Today, the governing process rewards the
official who can most rapidly transform his or her city into
guoji dadushi, a “great international city.” With an unprec-
edented release of capital, China has built more—more
skyscrapers and high-rises, more housing and malls, more
rail systems and highways—than any other country in a
thirty-year period.1

In Shanghai, the traditional lilong (alleyway or lane)
housing compounds are being replaced by new gated commu-
nities of luxury housing towers surrounded by landscaped
parks or paved parking (Figure 1). Widened streets, elevated
highways, and spiraling approach ramps to suspension bridges
impose a new, vehicular, logic on the city (Figure 2). On its
expanding edges, rows upon rows of repetitive housing blocks
are organized by an economic logic of mass reproduction and
the strict daylight standards that govern the spacing of build-
ing to ensure that sunlight penetrates residential spaces.
Along what were once tow roads running beside canals, new
shopping malls have organized their indoor public spaces
according to the logic of retailing rather than that of public
streets.

Developers, to ensure that each project announces itself
as an icon, intentionally dissociate it from its surrounding
context. Each building is a discrete object whose separation
from other buildings is more important than the relation
between them. Spaces between buildings are undefined and
cars dominate public space. Urbanism is fragmented as iden-
tity is transferred from the city to its component parts. The
cacophony of objects that results creates a disorienting urban
experience in Shanghai and makes the city confusing to
navigate.

This essay presents a set of analytic drawings that trace
the formal logic that historically connected the residential
scale to the larger scale of the city and surrounding country-
side. The orientation, dimension, and spacing of the lilong
as part of an urban fabric that took its cue from the canal
network of Shanghai contributed to the legibility of this city.
This essay analyzes this legibility in tracing a history of settle-
ment in Shanghai during two periods of the city’s rapid
growth: in the first, Shanghai was a water city, a major market
town in the region during the early Yuan era (the later thirteenth
century); in the second phase, it was a modern city, beginning
in the 1850s with the period of foreign occupation and con-
tinuing into the 1940s. Because the drawings presented here
reveal relational configurations and continuities beyond those
affecting individual parts, they can help address the question
of how the megablock-size projects found throughout China
can be connected to an evolving heritage.4