

The Research Agenda of Zhu Qiqian: A Reframing of Traditional Chinese Craftsmanship

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Abstract: As a researcher, Zhu Qiqian 朱啓鈞 (1872-1964) is commonly known as the founding father of Chinese architectural history. Consequently, his work has been analyzed predominantly by architectural historians and in the context of architectural history. However, this lopsided perception distorts and obscures Zhu's comprehensive research objectives and his contribution to a variety of fields, in particular his attempt to reframe and thoroughly investigate the history of Chinese traditional crafts. In order to reveal the intended scope and the unique approach of Zhu's studies, this article analyzes the motivations behind Zhu Qiqian's engagement with traditional craftsmanship, the far-reaching program of the research group he established, and one of his main research projects, the *Zhejianglu* 哲匠錄 (*Collected Biographies of Master Craftsmen*).

The introduction of Western knowledge throughout the late nineteenth and early twentieth centuries led to a crisis in traditional Chinese scholarship, and left a void to be filled with a new educational and scientific agenda. Chinese intellectuals intensely debated the readjustment of knowledge standards, and searched for a fair balance between the preservation of Chinese cultural identity and the adoption of Western and Japanese scientific methods. One significant example of this conversion process is Zhu Qiqian's 朱啓鈞 (1872-1964) effort to reconfigure traditional Chinese craftsmanship. Zhu Qiqian's large-scale research projects aimed toward a historiographic methodology that met international standards of research;

Figure 1. Zhu Qiqian, in or before 1925



SOURCE: *Who's Who in China, Third Edition*, Shanghai: The China Weekly Review, 1925, p. 217.

at the same time, he strove to emphasize the significant accomplishments of traditional craftsmen. His project thus mirrored the contemporary agenda of nation-building and the attempt to redefine China's role in global history.

Zhu Qiqian was a man of many roles. During the late imperial and early Republican period he rose to the highest political echelons, played an important role in the design of modern Beijing 北京, was an eminent art collector, and recompiled several pre-modern treatises on Chinese arts and crafts. With regard to his scholarly achievements, Zhu is often

characterized as the founding father of the Chinese history of architecture.¹ This honorific title is certainly justifiable given the impetus he provided to research on Chinese architecture, as well as the structures he established for its promotion. However, it reflects a view of Zhu that is shaped by contemporary disciplinary boundaries. He and his work have been analyzed predominantly through the lens of architectural history. This narrow focus risks diminishing Zhu's research aims and accomplishments, in particular his work towards a comprehensive history of Chinese traditional crafts, and the ambitious projects that he attempted. Therefore, by considering Zhu's research agenda and projects, this article aims to reveal the methods and scope of his investigations into the history of Chinese crafts.

In order to reveal the motivations behind Zhu Qiqian's engagement with traditional craftsmanship, this paper first sketches his progression from a first-rank politician during the early Republican era, to a researcher and founder of a professional research group. Considering administrative records and autobiographical accounts by Zhu, this section demonstrates the diversity of his fields of activity, and his enthusiasm for historical research, but also his awareness of the limits of what he could achieve single-handed. In what follows, this article examines the extensive research program behind Zhu's establishment of a large research group, the *Zhongguo yingzao xueshe* 中國營造學社, to which he gave the English name "Society for the [sic] Research in Chinese Architecture" (henceforth: Society). When the Society was officially founded in 1930, Zhu delineated his methodological approach for the study of Chinese craftsmanship traditions, and formulated an outline for future research in this field. This article therefore analyzes the research guidelines upon which Zhu established the Society, how he demarcated various fields of interest, and how he scheduled the group's working processes. It becomes clear from this account that Zhu's interests extended far beyond the bounds of architecture; rather, he aimed for an encyclopedic compilation that includes terminologies, standards, and methods of any craft that was at all related to building and construction. Finally, this article analyzes how Zhu applied this broad scope of research by examining the compilation process of the *Zhejianglu* 哲匠錄 (*Collected Biographies of Master Craftsmen*). This biographical collection exemplifies the scope of Zhu's interests, and was also one of the few projects of the Society with which Zhu personally engaged. Zhu's aim here was to provide a comprehensive overview of the major historical

¹ One characteristic example is the title of the article "'Zhongguo gu jianzhu xue zhi fu' Zhu Qiqian" 《中國古建築學之父》朱啓鈴 (Zhu Qiqian—The Father of Research on Ancient Chinese Architecture). See Chai (2012). Another example is the position of the entry on Zhu Qiqian at the very beginning of a chronologically arranged biographical collection of eminent Chinese architectural historians. See Yang and Wang (eds.) (2006), pp. 1-7.

representatives of various traditional Chinese crafts. He introduced a unique set of specializations for the categorization of craftsmen, for which he collected and compiled historical biographical materials from a large variety of written sources. The project attempted to reposition extracts from traditional historiography in order to move exceptional skills and often neglected 'minor' practitioners to the foreground of historical research.

From Politician to Researcher of Chinese Traditional Crafts

Zhu Qiqian launched the Republican era's most comprehensive research projects on traditional Chinese crafts. Despite his unusual inclination towards crafts, however, Zhu lacked professional training in any of the fields with which he engaged. This was a common phenomenon during late imperial and early Republican times, as many intellectuals took up stimuli from the West and attempted to relate them to Chinese cultural traditions, amateurishly pioneering new fields of knowledge in the process.

Zhu Qiqian's Early Years in Beijing

Zhu Qiqian grew up amid an atmosphere of imminent political and cultural transition, marked by intense disputes over reform and modernization, cultural values and Chinese nationhood. Through his familial relationships, Zhu became directly linked to the epicenter of these disputes. He hailed from a literati family from Guizhou 貴州. His father, Zhu Qingyong 朱慶壟 (1843-1875), married Fu Mengqiong 傅夢瓊 (1834-1900), daughter of the eminent scholar and official Fu Shoutong 傅壽彤 (1818-1887). This marriage represented substantial social advancement for the Zhu family, a trend continued as the two younger sisters of Fu Mengqiong were wed to men who enjoyed extraordinary success in their careers as officials.²

After his father, Zhu Qiqiong, died in 1875 at the young age of 31, Zhu Qiqian was raised by the family of his mother's father. If we believe the accounts of his youth, he received a broad education through which he was trained in administrative skills, introduced to traditional Chinese craftsmanship, and became acquainted with Western political thought.³ From 1891 on, Zhu accompanied his uncle Qu Hongji 瞿鴻禛 (1850-1918) on the appointments that Qu accepted in various locations. Under his uncle's patronage, he entered the bureaucracy, and was assigned a minor post in which he could gain administrative experience. The year 1900 marked a

² See Pang (2006), pp. 217-218. For a detailed, but at times laudatory and romantic account of Zhu Qiqian's life, see Zhu (ed.) (2015) pp. 6-79.

³ See Pang (2006), p. 218.

major leap in Qu Hongji's career, one that made him one of the most influential political figures of the Chinese empire during the late years of the Qing dynasty. He ascended to a position in the most important decision-making organ of the administration, the Grand Council (*Junjichu* 軍機處), which provided direct advice to the empress dowager Cixi 慈禧 (1835-1908). In the wake of his uncle's rise to power at the imperial court, Zhu was also promoted to the capital, Beijing, where he soon became acquainted with several eminent political figures. Most notably, he encountered the influential politician and leader of the Beiyang 北洋 Army, Yuan Shikai 袁世凱 (1859-1916), who soon brought him into his service.⁴ However, his position under Yuan Shikai eventually put him in a delicate situation: in late 1906 his uncle and long-time mentor Qu Hongji sparked a power struggle with Yuan Shikai, which eventually led to Qu's dismissal from all offices in June 1907.⁵ When his uncle was expelled from court, Zhu also briefly withdrew from the political arena. However, he returned to Beijing only a few months later to accept an appointment from Yuan Shikai's protégé Xu Shichang 徐世昌 (1858-1939), thus apparently shifting sides and allying with his uncle's opponents.⁶ In the eyes of some observers, this change of loyalties earned Zhu the reputation of a turncoat,⁷ but his political career strongly benefited from the support of his new patrons Yuan Shikai and Xu Shichang.

When Zhu later recalled this period, he credited his governmental positions for his interest in Chinese traditional crafts. A position he particularly valued in this regard was that of Bureau Chief of the Beijing Police Department (*Neiwaicheng xunjing ting tingcheng* 內外城巡警廳廳丞), which he had taken up in 1906. This post afforded him unlimited access to the traditional buildings and cultural relics of the imperial capital that were inaccessible to the public. In the course of his duties, Zhu did not confine

⁴ See Cao and Meng (1991), p. 4.

⁵ Qu openly opposed Yuan's ambition to expand his control of decision-making at court. He initially curtailed Yuan Shikai's political influence, but after a few months, he lost the all-important support of the empress dowager, and he was eventually impeached for divulging internal court information to an English newspaper as well as conspiring with supporters of the Hundred Days' Reform. For details on the struggle at court between Qu Hongji and Yuan Shikai, see MacKinnon (1980), pp. 77-89; Zhang (2008), pp. 148-151, 175-176.

⁶ See Cao and Meng (1991), p. 4; Pang (2006), pp. 220-221.

⁷ Lin Zhu defends Zhu Qiqian for siding with his uncle's opponents, arguing that Qu Hongji and Zhu Qiqian were never close, and that Qu only placed his nephew in minor posts, wasting much of his potential. See Lin (1995), pp. 4-5. Liu Zonghan also defends Zhu's behavior, suggesting that even though he accepted appointments by Yuan Shikai and Xu Shichang, he kept his distance from them. See Liu (1991), pp. 64-68.

himself merely to the maintenance of properties; rather, in an attempt to understand the particularities of traditional craftsmanship, he consulted residents and local craftsmen about the specifics of the buildings. Through contact with these specialists, he accumulated a knowledge of building and construction that, he supposed, was unavailable in written sources.⁸ This focus on the knowledge of practitioners was vital for his later research approach.

Construction Work and Cultural Heritage Preservation as Minister under Yuan Shikai

The political events in the wake of the fall of the Qing dynasty and the proclamation of the Republic of China provided further support to Zhu Qiqian's career. The newly-founded Republican government lacked military power and was in dire need of loyal troops to assert its authority over China. Consequently, Yuan Shikai was able to leverage his power base, the Beiyang Army, to become the first official president in 1913. Under Yuan's presidency, Zhu skyrocketed to the highest strata of political power: he was promoted to Minister of Transportation and Communications, Minister of the Interior, and even, for a few days, Acting Premier. In addition, as Head of the Municipal Council of Beijing (*Jingdu shizheng gongsuo* 京都市政公所) he was in charge of city planning, a task that required him to become involved with construction and engineering projects.

Zhu had gained some experience with modern engineering when he supervised the construction of the railway line between Tianjin 天津 and Jinan 濟南 from 1910 to 1912.⁹ Now, as a minister, he had the opportunity to carry out an even more prestigious project: the reconstruction and modernization of the cityscape of central Beijing. Among various other measures, Zhu advocated the restoration of altars, palaces, and other traditional buildings in Beijing, and insisted that they be accessible to the common people.¹⁰ One major step in this direction was the establishment

⁸ See Zhu Qiqian (1930a), p. 2; Cao and Meng (1991), p. 4.

⁹ See Cao and Meng (1991), p. 5. The sparse accounts of Zhu's engagement with this project depict him as exceptionally eager to gain first-hand knowledge of the concrete working methods of Western experts who were working on this railway line. In one instance, it is reported that he lowered himself into the stuffy caisson foundation of a bridge pier in order to personally inspect the conditions on the ground—an exceptional deed for a man of Zhu's status, granting a glimpse into the daredevil side of his character. See Zhu and Zhu (1991), p. 51.

¹⁰ See Zhu Qiqian ([1914] 1968). Various additional administrative documents that bear witness to Zhu's different activities in this regard are collected in Zhu Qiqian ([1936] 1968), pp. 131-222. These sources also provide information on one of Zhu's other modernization efforts, which is perhaps particularly notable from

of Central Park (*Zhongyang gongyuan* 中央公園, later renamed as Zhongshan Park 中山公園) in 1914, which was situated close to the Forbidden City, and used as a public recreation area – the first park of this kind in China.¹¹ Furthermore, in collaboration with the German architect Curt Rothkegel (1876-1946), Zhu led the redesign and renovation of Zhengyang Gate 正陽門 south of the Tiananmen Square, and the destruction of a section of the old city wall. This reconstruction largely eased traffic in this previously congested central area of Beijing, and at the same time preserved the main buildings of the gate, albeit with some modernistic, Western-style modifications.¹²

Through his engagement in construction work and urban planning Zhu acquired an outstanding reputation as an expert in architecture. Harry Hussey, a Canadian architect who worked for a long period in China during the early Republican era, praised Zhu's profound knowledge of architectural drawings and use of building materials.¹³ Hussey, although aware of Zhu's lay background, referred to him as "the greatest living authority on Chinese architecture,"¹⁴ demonstrating the exceptional reputation that Zhu had achieved among contemporary experts.

However, Zhu himself stressed that his interests were never limited simply to this particular field. He aimed instead to preserve historical objects, and to achieve a more comprehensive study of craftsmanship techniques.¹⁵ Indeed, his role in the protection of cultural assets after the collapse of imperial rule should not be underestimated. Zhu led the establishment of a museum for precious objects from the imperial collection, the Institute for Exhibiting Antiquities (*Guwu chenlie suo* 古物陳列所), which was set up in the outer court of the Forbidden City. He ordered that more than 200,000 items be moved from the imperial palaces in Chengde 承德 and Shenyang 瀋陽 to Beijing where, together with objects from the imperial palaces in the capital, they were safeguarded for the museum. He thus prevented the theft or sale of the imperial collection's assets by the abdicated imperial family, who still officially owned the collection. When the museum opened its doors in 1914, however, its educational impact was limited; displays were insufficiently labeled and crammed into exhibition halls, and entry was expensive and selective. Still,

today's perspective: the establishment of a hospital for infectious diseases in Beijing.

¹¹ See Zhu Qiqian ([1925] 1991); Zhu and Zhu (1991), pp. 51-52; Gao and Woudstra (2011), pp. 244-245.

¹² See Zhu Qiqian ([1915] 1968); ([1916] 1968); Zhu and Zhu (1991), pp. 52; Shi (1998), pp. 69-72.

¹³ See Hussey (1968), pp. 229-230, 237-238.

¹⁴ See *ibid.*, p. 211.

¹⁵ See Zhu Qiqian (1930a), pp. 2-3.

this institution was the first state-run museum in China, and was an important step toward raising public awareness of cultural relics and their preservation by the Republican government.¹⁶

Zhu's successful management of these different tasks during the turbulent political period between 1913 and 1916 speaks to his administrative and organizational skills. Yet, his consistent appointment to high office also reveals the strong backing he received from Yuan Shikai. In turn, Zhu remained loyal to Yuan when, in December 1915, the latter proclaimed a new self-established dynasty—a political maneuver that led many of his former followers, including Xu Shichang, to turn against him.¹⁷ Yuan faced strong opposition from all camps for his attempt to revive monarchism. Consequently, his political power declined rapidly, taking with it that of Zhu Qiqian. Yuan soon resigned the monarchy and died shortly after, during the summer of 1916, and Zhu lost his governmental position.

Despite his disreputable engagement with monarchism, Zhu had built up a tight social and political network. As he withdrew from government, many of his former colleagues continued their political careers; most notably, his intimate friend Xu Shichang had, in 1918, become President of the Republic of China, a position he would hold until 1922. Thus, despite not holding ministerial office, Zhu remained a prominent figure on the political stage. This prominence proved essential to his scholarly endeavors in the years that followed. The scope of his projects and the execution of his research were largely facilitated by his numerous contacts who, be it through political influence or financial backing, supported his quest to explore the history of Chinese crafts.

Zhu's Engagement with *Yingzao fashi* and Other Treatises on Traditional Craftsmanship

A major step in Zhu Qiqian's research endeavors was directly, although incidentally, linked to one of his occasional returns to politics. In 1918, he headed a delegation of the northern government to Shanghai 上海, tasked

¹⁶ For details on the establishment of the museum, see Doar (2005); Lai (2016), pp. 68-70. Jeannette Shambaugh Elliott and David Shambaugh propose that setting up such a museum was part of Yuan Shikai's long-term strategy to re-establish a monarchy, as controlling the assets of the Qing imperial family was "a trump card for his plan to found a new dynasty." See Elliott and Shambaugh (2005), p. 58. However, interpreting the museum's establishment only in terms of later political events does not do justice to Zhu Qiqian's strong personal interest in the preservation of cultural relics.

¹⁷ See Li (1956), pp. 332-334. Zhu Qiqian even designed the new robes for the emperor and other high officials. See Hussey (1968), p. 207; Wong (2018), pp. 69-74.

with negotiating with the southern warlords.¹⁸ During this trip, Zhu found time to visit the Jiangnan 江南 Library in Nanjing 南京, where he discovered a manuscript edition of the construction manual *Yingzao fashi* 營造法式 ([State] Building Standards), compiled by the Song dynasty (960-1279) official Li Jie 李誡 (1035?-1110) in the year 1100. This treatise, printed for the first time in 1103 and reprinted in a new edition in 1145, was employed in the construction of palace buildings up to the Ming period (1368-1644), but subsequently fell out of use, surviving only in book collections.¹⁹ Zhu realized the significance of this book for contemporary studies on the history of building and construction in pre-modern China.²⁰ He quickly compiled a preface to the Jiangnan Library version of the text—a transcription based on the edition of 1145—and had it printed as a photolithographic edition in a smaller size in 1919, followed by a facsimile edition by the Commercial Press in 1920.²¹

Zhu was fascinated by *Yingzao fashi* because it provided long sought-after insights into the practices and regulations of construction in pre-modern China. It offered detailed information on standards for materials, on sizes and measurements, on the regulations for the various work specializations, and on financial and labor requirements. It appeared, therefore, to bridge the gap between the knowledge Zhu had garnered in his various posts as a government official, and over a millennium of tradition in Chinese building and construction. Zhu argued that *Yingzao fashi* had been compiled temporally close to the Tang dynasty (618-906), which in his eyes represented “the Golden Age of Chinese culture.”²² The traditions of the Tang dynasty, Zhu assumed, were still common in Li Jie’s time, and thus *Yingzao fashi* allowed access to the methods of building and construction employed in the heyday of Chinese culture. *Yingzao fashi* was thus a nexus from which developments in architecture could be traced through history, from as far back as the Han dynasty (206 BC-220 AD) to the present day.²³

In addition to its importance as a temporal link, *Yingzao fashi*, in Zhu’s view, granted access to the knowledge of craftsmen themselves. He was convinced that, by pre-imperial times, a split had occurred between the theoretical knowledge of scholars and the practical knowledge of

¹⁸ See Cao and Meng (1991), p. 6.

¹⁹ For a detailed account on the compilation of *Yingzao fashi* and the transmission of the various manuscript versions, see Glahn (1975).

²⁰ See Zhu Qiqian ([1919] 1991).

²¹ See Li (2003), pp. 474-476.

²² See Zhu Qiqian (1930a), p. 4.

²³ See *ibid.*, pp. 4-5.

craftsmen.²⁴ This development of separate spheres of knowledge had had a negative impact on the comprehensibility of craftsmen's techniques and traditions, as scholars did not normally address these issues in their literary works. Accordingly, he wrote, "the distance between written sources and practical knowledge is so great that the extremities can hardly touch. Those who know the technique probably do not know its origins, those who know the words, probably do not recognize the thing described."²⁵ In his eyes, Li Jie was unique as, although he was a man of literary learning, he had familiarized himself with the skills and practices of craftsmen, and based his writing on what he had learned directly from workers, thus bridging the gap between theoretical and practical knowledge. Although recent scholarship suggests that the spheres of knowledge belonging to craftsmen and scholars may not have been as separate as Zhu supposed²⁶, Zhu was certainly correct to identify *Yingzao fashi* as an exceptional historical source. Although Li Jie's work received positive recognition in his lifetime—he was promoted to Director of Palace Buildings by emperor Huizong 徽宗 (r. 1100-1126)—there are no similar works known to us today. Another important historical source on building and construction, the Qing dynasty *Zeli* 則例 (*Official Regulations*), for example, provides ample information on materials and prices, but lacks the detail about actual building methods that Zhu so cherished in *Yingzao fashi*.²⁷

Yingzao fashi, moreover, gave Zhu confidence in his research method, as it bore out the approach he had employed for several years: inspecting sites in order to gather knowledge on traditional working methods, and including interviews with master craftsmen alongside studies of literary sources. Hence, *Yingzao fashi* became the benchmark for his research, and the paradigm for his attempt to find "a middle road which links the extremes"²⁸ on which the hitherto separated spheres of knowledge could stimulate and complement one other.

²⁴ See Zhu Qiqian ([1925] 1995), p. 1a. Even though Zhu argued that this split occurred more than 2000 years ago, his criticism mainly targeted the Qing scholars' focus on purely textual studies, which, in his view, led to alienation from practical issues. See Liu (1999), p. 17.

²⁵ See Zhu Qiqian (1930a), p. 4.

²⁶ Feng Jiren argues that, at least during the tenth to twelfth centuries, craftsmen and scholars alike used flower and tree metaphors to refer to bracket sets, the essential part of traditional Chinese architecture. See Feng (2007).

²⁷ For an introduction to the various Chinese sources on building and construction, see Ruitenbeek (1993), pp. 24-45. A closer description of the characteristics of the *Zeli* can be found in Song and Moll-Murata (2002). For the regulations specifically on construction, see the landmark study by Liang Sicheng (2006).

²⁸ See Zhu Qiqian (1930a), p. 4.

Zhu found additional inspiration for historical research during an extended journey abroad in 1921. Entrusted by Xu Shichang with a special mission, he was sent to Paris, ostensibly in order to accept an honorary doctorate on behalf of Xu from the University of Paris. However, the hidden purpose of this mission was more likely to explore the possibility of a three million franc loan from France to Xu's government.²⁹ In his later writings Zhu did not mention the political implications of his mission to France—as was the case with all of his controversial political actions—but again stressed the impact of this journey on his research approach.³⁰ He took advantage of the mission to travel to several other European countries, the United States, and Japan. From his travels, Zhu developed the impression that there existed some basic similarities between the cultures of China and the West. Much of what he saw during this journey, he explained, appeared familiar to him as it bore resemblance to what he had read about in classical Chinese texts.³¹ This vague impression of interconnection and common ground between East and West spurred Zhu's ambition to redefine the role of Chinese culture in global history. For him, such basic and long-standing commonalities between cultures suggested that they should be treated on equal terms. Thus, in order to confirm his hunch, Zhu called for the combined efforts of international scholars first and foremost to classify and systematize the hitherto scattered and unsorted Chinese sources.³² Yet, he observed a fundamental difference between China and the West with regard to the documentation of craftsmen's accomplishments: the West seemed to have developed a

²⁹ A report about these secret negotiations appeared in a French newspaper, evoking fierce opposition, in particular from Chinese students in France who perceived such a deal as a betrayal of Chinese interests for the sake of the military consolidation of Xu Shichang's faction in the ongoing internal struggles in China. Not least due to pressure from the Chinese student movement, the loan negotiations eventually failed. See Levine (1993), pp. 115-121; Shi (2003), pp. 30-34.

³⁰ Zhu Qiqian's role in these negotiations and his relationship towards the Chinese students in France is disputed. Levine and Shi paint a very negative picture of Zhu, pointing out that he was regarded as a traitor by the Chinese students, and suggesting that he would have pocketed a large sum of the loan for himself. See Levine (1993), p. 118; Shi (2003), p. 31. This view, however, seems to conflict with the fact that Zhu and Zhou Enlai 周恩來 (1898-1976), a leading figure of the student movement in France opposing the loan negotiations, maintained friendly contact many years later when Zhou was Prime Minister of the People's Republic of China. See Zhu (1996); Qin (1996); and Wang (2010), p. 127. Zhu Haibei even argues that Zhu was not involved in the loan negotiations at all, and points out that he unselfishly donated a large amount of money to support the Chinese students. See Zhu (1991), p. 44f.

³¹ See Zhu Qiqian (1930a), p. 6.

³² See *ibid.*

distinct awareness of the traditions of its various arts and crafts, as they were all meticulously recorded.³³

Zhu's recognition of the need for the compilation and reorganization of knowledge on Chinese crafts, as he later explained, was a major impetus behind his engagement with historical research.³⁴ On returning from his journey abroad, he applied himself with renewed vigor to the study of *Yingzao fashi*, and, realistic about the limitations of his knowledge, sought out specialists to assist him. For instance, he entrusted the chief-editorship of the revised edition to the experienced book restorer Tao Xiang 陶湘 (1870-1940), and in order to provide explanations for the technical terminology used by Li Jie, he brought together Chinese specialists of history and literature with craftsmen who retained mastery of traditional skills.³⁵ Together, this group of experts with very different educational backgrounds and specializations edited and annotated *Yingzao fashi*, closely comparing various versions of the text and adding new illustrations.³⁶ When the revised edition was finally printed in 1925, it received much attention, and Zhu consequently achieved renown as a historian, even beyond China.³⁷ Further, the creation of this edition solidified the direction that Zhu's research practices would take in the years to come, because for him this work revealed the effectiveness of cooperation among experts. In order to reinforce such cooperation, in 1925 he established the "Association for Research on Architecture" (*Yingzao xuehui* 營造學會), a precursor to the Society.³⁸

In addition to his engagement with *Yingzao fashi*, Zhu Qiqian engaged in a variety of other research activities related to material culture and traditional craftsmanship. He was a keen antiquarian and accumulated a considerable collection of antiques, most notably textiles, but also bronze vessels, jades, and lacquer ware.³⁹ Yet, separating him from most

³³ See Zhu Qiqian ([1925] 1995), p. 1a.

³⁴ See Zhu Qiqian (1930a), p. 6.

³⁵ For a list of the persons involved in the work see Wang (2010), p. 129.

³⁶ Zhu admitted that even with the help of these experts, ten to twenty percent of the technical terms still remained incomprehensible. See Zhu Qiqian (1930a), pp. 3-4. Else Glahn provides a thorough description of this new edition's textual basis and shortcomings. See Glahn (1975), pp. 255-261. For Zhu's interest in *Yingzao fashi* and the process of re-editing the text under his auspices, see Li (2003).

³⁷ In the West, Paul Demiéville compiled an extensive review article on *Yingzao fashi* based on the photolithographic edition issued by Zhu Qiqian. See Demiéville (1925). The most detailed reviews of the new edition of *Yingzao fashi* were written by W. Perceval Yetts. See Yetts (1927a); (1927b). Both articles were reprinted together with translations into Chinese in the first issue of the *Bulletin*.

³⁸ See Cao and Meng (1991), p. 6.

³⁹ For a complete list of Zhu's collection of antiques, see Ye (1991).

connoisseurs of previous generations, he also studied the traditions and production of these precious items, as well as sharing his knowledge in a number of publications. Zhu compiled several treatises on traditional silk manufacture and embroidery, inspired by his mother's passion for traditional Chinese garments.⁴⁰ Most notable was a work on outstanding Chinese persons in the fields of weaving, stitching, and embroidery, published under the title *Nügong zhuan zhenglüe* 女紅傳徵略 (*Survey on Biographies on Women's Work*) in 1923.⁴¹ This collection of short biographies was the first step in the *Zhejianglu* project, a compilation of records on eminent Chinese craftsmen. Zhu also recompiled works on other crafts, which, like *Yingzao fashi*, had long fallen into oblivion. He obtained from Japan a manuscript edition of *Xiushilu* 髹飾錄 (*Records of Lacquering*), written by the Ming dynasty scholar and lacquer master Huang Cheng 黃成 (sixteenth century), which he recompiled and published in 1927. Five years later, he also published a recompiled and edited version of *Yuanye* 園冶 (*The Garden Smith*), a Ming dynasty work by Ji Cheng 計成 (1582-?) that primarily covers the design of pavilions, fences, and ornamental pavements.⁴² In addition to these publications, Zhu attempted to foster public interest in the history of Chinese crafts. Thus, in 1928, he curated an exhibition in the Central Park of Beijing on traditional architecture, which displayed many of the texts, models, and other materials from his private collection.⁴³

Zhu's various occupational activities and encounters with craftsmen thus allowed him to engage with a wide range of topics. At the same time, he lacked professional training in any specific field. Yet, we may credit precisely this lack of restriction to a single area of research for the far-reaching objective of Zhu's Society: to reconsider the history of Chinese crafts.

The Foundation of the Society for the Research in Chinese Architecture

Zhu Qiqian devoted much time and energy to his research on traditional Chinese crafts, but for him this research was an avocation rather than a profession. After he resigned from government, he accepted various other jobs, such as the urban planning of the seaside resort Beidaihe 北戴河 and

⁴⁰ See Zhu Qiqian ([1928] 1991), p. 25.

⁴¹ On the social and economic relevance of "women's work," see Bray (1997), pp. 173-272; Fong (2004), pp. 5-13.

⁴² See Ruitenbeek (1993), pp. 30-31.

⁴³ See Zhu Qiqian (1930b), p. 5.

management in the coal mining industry.⁴⁴ These occupations limited the time he had available for research. Moreover, as he realized during the process of re-editing *Yingzao fashi*, his own expertise was limited and he required assistance from specialists. Therefore, in 1929, Zhu brought together several like-minded persons, and in the following year formally established the “Society for the Research in Chinese Architecture.”⁴⁵ He set up the organizational framework for this research group and acted as its formal leader, but he was aware that his aim of conducting a comprehensive investigation of Chinese craft traditions required the collaborative work of various researchers. This focus on organizing research structures and bringing together persons with different skills set Zhu apart from many other Republican era enthusiasts of Chinese technological traditions, who largely pursued their studies as individual projects; one such example being the pioneer in the history of mechanical engineering, Liu Xianzhou 劉仙洲 (1890-1975).⁴⁶ Turning his research objectives into a group endeavor allowed Zhu to sketch out a multifaceted research program of exceptional scope.

⁴⁴ As manager of the Zhongxing Coal Enterprise (*Zhongxing meikuang gongsi* 中興煤礦公司), Zhu strove for the acquisition and utilization of technical knowledge from the West, placing much emphasis on the qualification of his staff through direct contact with foreign experts. He sponsored trips abroad for several executive employees so that they could learn advanced methods and apply their knowledge upon their return to China. Moreover, he hired foreign specialists in order to exploit their technical expertise for the development of the Chinese mining industry. See Wang and Chang (1991), pp. 151-156; Luo (2003), pp. 85-86.

⁴⁵ The establishment of such a research society followed the model set by various other scholars of that time. Already in the late imperial period, influential scholars such as Liang Qichao 梁啟超 (1873-1929) and Tan Sitong 譚嗣同 (1865-1898) promoted the collaboration of experts on specific fields of research, believing that these groups could make a significant contribution to the modernization of China. See Liang (1989), pp. 31-34; Tan (1981). In fact, from the 1890s through the Republican period, multiple research societies were set up, some rather short-lived, others carrying out research that shaped their field for decades to come. The rise and conceptual context of “study societies” (*xuehui* 學會) in this period is outlined in Vogelsang (2012), esp. pp. 169-171. During the late 1920s and early 1930s, several research groups dealing with architecture were founded and issued publications. In contrast to Zhu’s Society, however, they focused on research in contemporary architecture. See Cui (2005).

⁴⁶ For an outline of the research accomplishments of Liu Xianzhou, see Yan *et al.* (2007). For surveys of other Republican era pioneers in the history of science and technology and their approaches, see Lin (1996), pp. 200-202; Amelung (2014).

Zhu's Outline of the Society's Research Program

Even before he officially established the Society, Zhu had delineated its main tasks, methods, and timeline in "Zhongguo yingzao xueshe yuanqi" 中國營造學社緣起 (Foundation Charter of the Society for the Research in Chinese Architecture). This charter was printed at the beginning of the first issue of the Society's quarterly journal, *Zhongguo yingzao xueshe huikan* 中國營造學社彙刊 (*Bulletin of the Society for the Research in Chinese Architecture*; henceforth: *Bulletin*), complemented by Zhu's "Inaugural Address" in both Chinese and English.⁴⁷ Together, these texts stipulated Zhu's agenda for the work of the Society.

Zhu's ambitious ultimate goal was to arrive at "a view of the history of Chinese culture in general."⁴⁸ Architecture, though it played a crucial role, was only one part of this endeavor. Although the English translation of the Society's name appears to suggest otherwise, Zhu deliberately avoided the modern Chinese term for architecture, *jianzhu* 建築, and instead chose *yingzao* 營造. He explained: "We feared that if we called ourselves a Society for the study of Architecture [sic] we would too strictly limit the scope of our work and thus be unable to carry on the investigations we plan into related fields."⁴⁹ Architecture was at the core of the proposed work, but in order to gain knowledge of its role in Chinese cultural history, Zhu hoped to cross disciplinary borders and incorporate studies on various types of crafts into the Society's work. Consequently, Zhu chose the term *yingzao* for the name of the Society because it was not only reminiscent of his much admired *Yingzao fashi*, but also because it was best suited to convey the broad scope of his research interests.⁵⁰

Zhu's research outline for official standards and regulations further exemplifies the range of crafts he hoped that the Society could explore. Although he recognized considerable changes in the appearance and workmanship of the artifacts over time, influenced by his previous study of *Yingzao fashi*, he assumed that each craft possessed a distinct set of standards and regulations that were adhered to by the respective craftsmen. Therefore, he laid great emphasis on regulations and standards as a means of explaining the abundance of forms and styles. To understand these guidelines, he believed, would provide a foundation for all further research. He thus proposed that the Society examine the official standards and regulations for all crafts related to building and construction. Again inspired by *Yingzao fashi*, Zhu adjusted and expanded Li Jie's list of thirteen

⁴⁷ The English and the Chinese version of the "Inaugural Address" differ in some details.

⁴⁸ See Zhu Qiqian (1930a), p. 5.

⁴⁹ See *ibid.*, p. 9.

⁵⁰ See *ibid.*, pp. 9-10; and Zhu Qiqian (1930b), pp. 8-9.

types of work.⁵¹ He proposed to examine major carpentry (with an appendix on bracketing), minor carpentry (with an appendix on inside and outside architectural decoration), carving (with an appendix on turner work and on sawing), stone work, tile making, clay work, oil application, color painting, lacquer application, sculpture (with an appendix on Buddhist and Daoist portraits and coloration), brick making (with an appendix on pit making), color glazed pottery, scaffold building, coppersmithing, blacksmithing, and mounting. In addition, he intended to analyze the use of labor and material, as well as the prices of the materials used.⁵²

Zhu also sought to base the Society's research on a broad range of source materials. He dictated that the Society should locate and collect not only texts, but also relics, inscriptions, sketches, models, blueprints, photographs, and films. Although he far from abandoned studies of written records, he challenged the traditional primacy of the book.⁵³ Thus, like many other historians of this period, he proposed a shift in the methods of historical research that considered hitherto neglected sources of information.⁵⁴ The introduction of new objects of investigation required different analytical practices and a broad range of expertise. Accordingly, the research of the Society did not rest solely upon persons trained in Chinese history and literature, but integrated those with different educational backgrounds and specializations. Zhu considered Li Jie a shining exemplar for present-day researchers. Accordingly, members of the Society were to follow the precedent set by *Yingzao fashi*, and thereby to overcome the schism between craftsmen and academics.⁵⁵ This issue was pressing to Zhu both for methodological reasons and for the preservation of China's cultural heritage. Given that he lived in a time when the social values and institutions of late imperial times were in gradual decline, Zhu feared that China's efforts towards modernization might lead to the irreversible destruction of cultural assets and a loss of expertise in traditional crafts.⁵⁶ On the knowledge of the craftsmen he wrote:

⁵¹ For the contents and structure of *Yingzao fashi*, see Feng (2012), pp. 107-110.

⁵² See Zhu Qiqian (1930c), p. 5.

⁵³ See *ibid.*, pp. 1-2, 4. Wilma Fairbank describes Zhu's approach as "strictly literary," largely giving credit for the introduction of new methods to Western-trained members of the Society. See Fairbank (1994), p. 51. In fact, Zhu's actual research practice was text-focused. See Wang (2010), pp. 145-146. Yet, the outline of the work of the Society clearly shows that Zhu from the outset intended to go beyond his personal competencies and do more than just literary studies.

⁵⁴ The discourse among historians on the integration of different types of sources for historical research is outlined in Wang (2001), pp. 103-130.

⁵⁵ See Zhu Qiqian (1930c), p. 1.

⁵⁶ See Zhu Qiqian (1930a), p. 4; (1930c), p. 2.

Originally, the practices were passed down from generation to generation. But of those who are known as experts, only some are still alive today. ... We will not be able to analyze the technical terms and phrases, the material objects and the constructions, if we do not personally learn them from these men.⁵⁷

The primary tasks of the Society were, therefore, to compile a reference work of ancient technical terminology in close collaboration with traditionally trained craftsmen, and to prepare an inventory of relics, both of which would serve as a foundation for further research.⁵⁸

Beyond Chinese culture, Zhu's aim was "to make a contribution to the world."⁵⁹ Thus, it was crucial for him to conduct this research according to international standards. He believed that following the models of Western scholars was essential for gaining recognition outside of China, a notion that was common among intellectuals of his time.⁶⁰ He claimed that "if we fail to do systematic research using scientific methods, then we will be unable to discuss with renowned international scholars on the same level."⁶¹ Furthermore, he believed, in order to overcome the isolation of Chinese scholarship, the Society should consider non-Chinese sources and foreign influences, for he was convinced that in "the study of cultural evolution there is no place for nationalistic distinctions."⁶² However, he by no means intended to discard traditional Chinese scholarship and call for a complete Western overhaul. Again in line with many other Republican era intellectuals, Zhu saw no contradiction between traditional philological work and Western scientific models.⁶³ In his eyes, a combined approach would allow for Chinese traditions to be integrated into a broader context, and would eventually demonstrate the significance of China's role in global history.⁶⁴ Thus, to this end, he suggested various practical measures. First, he proposed methods of documentation and presentation that broke with traditional historiography and that were orientated towards international standards, such as an emphasis on illustrating texts with sketches, drawings, and photographs in order to make the research more

⁵⁷ See Zhu Qiqian (1930c), p. 3. For similar statements, see Zhu Qiqian (1930b), p. 1.

⁵⁸ See Zhu Qiqian, (1930c), p. 3.

⁵⁹ See *ibid.*, p. 2.

⁶⁰ See Wang (2001).

⁶¹ See *ibid.*, p. 1.

⁶² See Zhu Qiqian (1930a), p. 5. For similar statements, see also p. 9.

⁶³ For the debate on the relation of philology and science in the 1920s, see Luo (2015), pp. 247-251.

⁶⁴ See Zhu Qiqian (1930a), p. 4; (1930c), p. 3.

intelligible to a non-specialist readership.⁶⁵ Second, he sought to familiarize Chinese researchers with the theories and findings of their Western colleagues, and hoped to make the results of the Society's research accessible to a Western readership. In order to bridge the language gap, he highlighted the need for translations of ancient and contemporary source materials.⁶⁶ Finally, in hopes of gaining inspiration for his project from foreign experts, he called for international collaboration with the Society.⁶⁷

The timeframe Zhu proposed for the work of the Society was extremely ambitious. He initially expected to complete the Society's extensive work program within only five years, with concrete steps to be completed each year. The first year was mainly dedicated to the selection of materials, the second to the examination of the terminology, the third was to be used to draw sketches and write explanations, the fourth to compile the findings, and the fifth to summarize the results, compile prefaces and prepare publications. Alongside this work, Zhu planned to arrange public exhibitions.⁶⁸ His plan to conduct a research project of such an encyclopedic scope within such a short amount of time reflects his optimism—or perhaps naïveté—in thinking that the basic principles of all types of crafts could be easily identified, and would allow for efficient analysis and classification.⁶⁹

New Members, New Directions

In order to cover the expenses of his newly established Society, Zhu had to arrange for funding. Up to this point, he had financed his research through his personal savings and the contributions of private sponsors, but to bankroll a long-term project involving numerous researchers was beyond the means of even a relatively wealthy man such as Zhu. To overcome this problem, he took advantage of his network of connections dating to his time as a politician. Some acquaintances in politics and financial management provided him with generous donations.⁷⁰ One such contact was the

⁶⁵ See *ibid.* Zhu's emphasis on sketches and photographs may reveal an influence by the studies of Western scholars such as Ernst Boerschmann (1873-1949), whose books on Chinese architecture were richly illustrated. See for example Boerschmann (1923).

⁶⁶ See Zhu Qiqian (1930a), p. 7; (1930c), p. 3.

⁶⁷ See Zhu Qiqian (1930c), p. 6.

⁶⁸ See *ibid.*, p. 5.

⁶⁹ Zhu soon revised this schedule. When he applied for financial support from the Sino-British Boxer Indemnity Funds in 1931, he proposed to continue the work for at least ten more years. See *Sheshi jiyao* (1931), p. 21.

⁷⁰ See Lin (1995), p. 3, 37. Some of the donors later became members of the Society.

board of the China Foundation for the Promotion of Education and Culture (*Zhongguo jiaoyu wenhua jijinhui* 中國教育文化基金會). This board allocated funds from the Boxer Rebellion reparations paid by China to the United States, which were in turn used to support scientific and cultural projects in China. As early as 1929, the China Foundation made a major financial contribution to the nascent Society by granting annual payments of 15 000 yuan.⁷¹ The equivalent board administering the Sino-British Boxer Indemnity Funds (*Zhongying gengkuan* 中英庚款) supported the Society with additional payments of a similar amount from 1934 onward.⁷² Such ample financial means allowed Zhu to ensure a sound financial basis for long-term research and to attract new members.

In 1930, when the Society began work under Zhu's direction, only about ten persons, mainly experts of literature and history, were actively engaged in research.⁷³ Most of them were Zhu's family members or longstanding collaborators. But Zhu soon took steps to enlarge the group in terms of size and research competencies. He convinced a number of acquaintances, and individuals with a general interest in the research subject, to become members and donors of the Society.⁷⁴ Toward his goal to make the Society's work more international, he invited expert research collaborators from the West and even from Japan, despite political tensions at the time.⁷⁵ Moreover, the first issues of *Bulletin* in particular included reprints of articles in English and French that had originally been published in Western academic journals; some with the original alongside a Chinese

⁷¹ Zhu's long-standing acquaintance Zhou Yichun 周貽春 (1883-1953) was a board member of the China Foundation at this time, and actively supported Zhu's application. Zhou also became member of the Society as soon as it was founded. See Lin (1995), p. 37; Lin (2002), p. 44.

⁷² Ye Gongchuo 葉恭綽 (1881-1968), a personal friend of Zhu Qiqian and member of the Society, was member of the board of the Sino-British Boxer Indemnity Funds, and actively lobbied in favor of Zhu's funding application. See Lin (2002), p. 141. For details on the financing of the Society, see *ibid.*, pp. 37-39; and Zhu (1999), pp. 12-13.

⁷³ See Liu, Wang, and Chen (2006), p. 156.

⁷⁴ The number of active researchers grew constantly over the following years. See Zhu (1999), pp. 10-11. Detailed lists of the Society's members and their biographies are given in Lin (1995), pp. 19-36, 129-145.

⁷⁵ On Zhu Qiqian's invitation, the German historians Gustav Ecke (1896-1971) and Ernst Boerschmann became corresponding members of the Society. For details on Boerschmann's relations to the Society, see Kögel (2015), pp. 556-557. Following the Mukden Incident in 1931, political frictions affected the collaboration of Chinese and Japanese members, and the Japanese researchers eventually left the Society. For the Society's relations with Japanese scholars, see Xu (2000).

translation, others in just one language.⁷⁶ To make the Society's projects at least partly accessible to an international readership, *Bulletin* also occasionally included texts in English, such as Zhu's "Inaugural Address," short summaries of research articles, reports on the Society's activities, and the tables of contents.⁷⁷

The most important impetus behind the Society's work, however, came not from international researchers but from young Chinese scholars. Zhu sought out the membership of young Chinese who had studied at universities abroad in order to further strengthen the group's technical expertise. Shortly after the Society's foundation, two foreign trained architecture specialists, Liang Sicheng 梁思成 (1901-1972), son of Liang Qichao, and Liu Dunzhen 劉敦楨 (1897-1968), entered the research group.⁷⁸ Zhu soon split the research into two working groups and delegated their direction to the young men; Liang became head of the Society's "technical studies" (*fashi* 法式) branch, and Liu head of the "documentary studies" (*wenxian* 文獻) branch.⁷⁹ Liang and Liu raised the Society's standards of documentation, measurement, and analysis of construction. Moreover, field research to observe extant ancient buildings became an important component of the

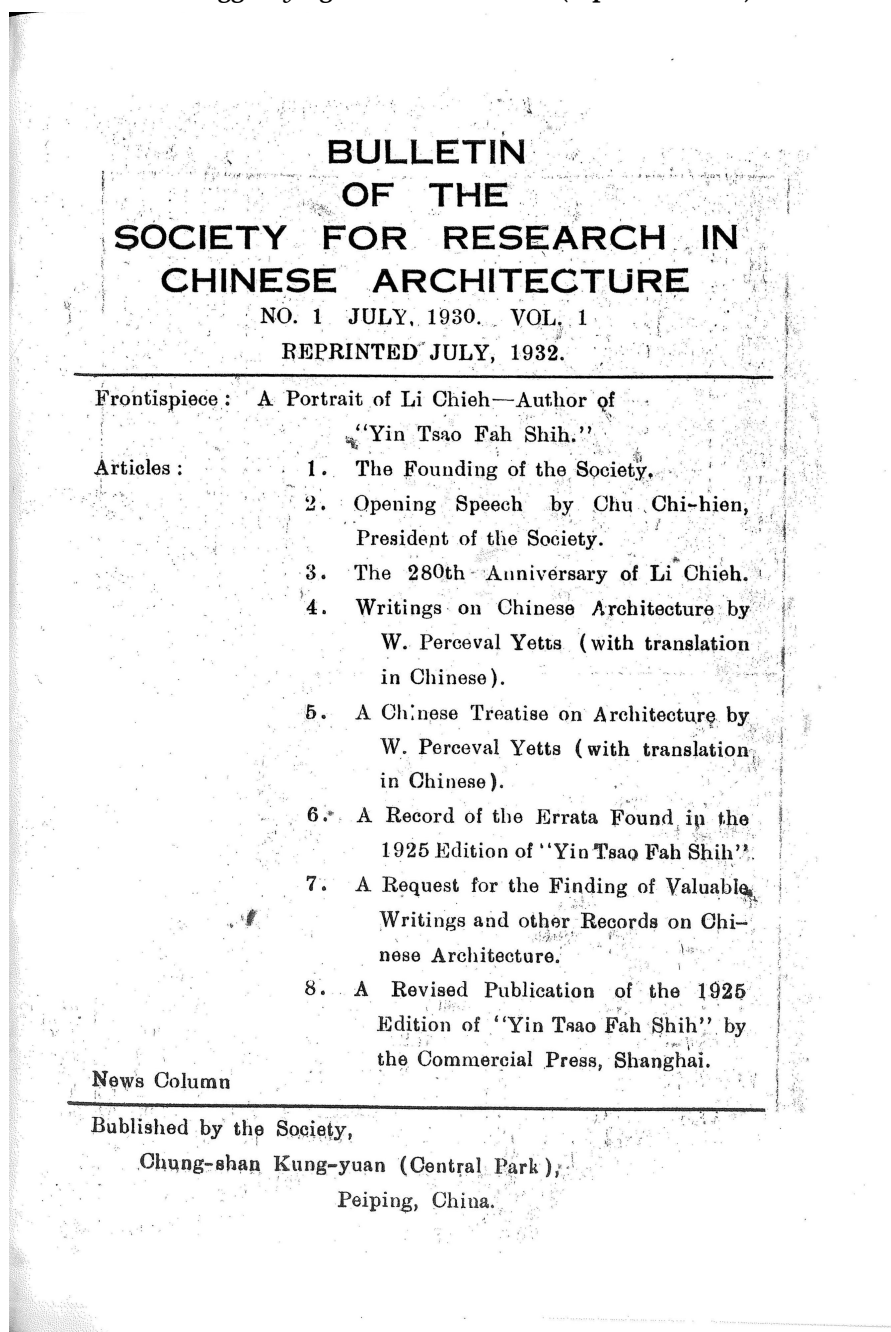
⁷⁶ The authors include eminent Western art historians and orientalist such as W. Perceval Yetts, Ananda K. Coomaraswamy, Paul Demiéville, and Joseph Edkins. A number of the reprinted articles deal with *Yingzao fashi*. Otherwise, they comprise of a random collection of research topics only loosely related to the Society's objectives.

⁷⁷ The *Bulletin* soon became internationally noticed. The first issue was reviewed by Arnold Silcock. See Silcock (1930).

⁷⁸ According to Liang Sicheng's second wife, Lin Zhu, Liang was originally reluctant to become a member of the newly founded Society because he objected to Zhu Qiqian's actions in government under Yuan Shikai. See Lin (2002), p. 44. Liang Sicheng's family, however, had close relations with Zhu and a favorable attitude towards his research projects long before the Society was established. His father, Liang Qichao, knew Zhu well from their contacts on the political stage. Following the publication of the 1925 edition of *Yingzao fashi*, Liang Qichao immediately sent a copy to Liang Sicheng, who was at that time studying in the United States. For Liang Qichao's views on architectural history and his influence on Liang Sicheng, see Li (2002). Moreover, Liang Sicheng's uncle, Liang Qixiong 梁啓雄 (1900-1965), had been Zhu Qiqian's companion in the study of Chinese traditional crafts for several years already.

⁷⁹ At that time, few Chinese had studied architecture abroad. However, foreign-trained experts such as Liang and Liu became very influential when they returned to China, and played a key role in the establishment of architecture as an academic discipline during the 1920s and 1930s. See Ruan (2002), pp. 30-32.

Figure 2. English language back page of the first issue of the *Zhongguo yingzao xueshe huikan* (reprint of 1932)



group's work.⁸⁰ Zhu continued to raise money, and through his political connections ensured the security of the researchers during their field studies.⁸¹ Moreover, occasionally he contributed articles to *Bulletin* on a variety of themes, including a bibliographical survey of water engineering, and a reprint of fragments from *Ziren yizhi* 梓人遺制 (*Traditions of the Joiners' Craft*).⁸² As he had done in previous projects, Zhu established and maintained the research framework, but he entrusted those whose research skills he valued to take responsibility for the research, thus allowing for these experts to develop his original ideas. However, this increase in expertise came at a price. The focus of the Society's work under the leadership of Liang and Liu gradually shifted, as determined by their field of specialization and the research methods acquired abroad, and projects began to take on a more narrow definition of architectural history. The broad scope of research that Zhu had envisioned was thus limited to one major project: the *Zhejianglu*.

The Zhejianglu Project

For Zhu Qiqian, the search for outstanding personalities among the different traditional Chinese crafts was of particular significance. He began to compile the *Zhejianglu* long before he established the Society, and only advanced age would eventually bring an end to his work. He attempted to reframe Chinese material culture traditions, and redirect focus to the producer rather than the product. His aim was a compilation of craftsmen's biographies in which each tradition was traced by a chronology of its eminent personalities.

A New Classification of Traditional Craftsmanship

Extensive biographical compilations were a common feature of traditional Chinese historiography. However, these accounts were normally divided into specific subcategories, and listed eminent political figures, persons with outstanding literary skills, or individuals of exceptional moral

⁸⁰ Due to the unstable political situation within China during the 1930s, members of the Society had to rely on Zhu Qiqian's widespread network of connections with local holders of power for conducting field research. Zhu took care to ensure that politicians and warlords would guarantee the safety of the researchers so that they were able to travel and survey the ancient buildings. See Lin (1995), p. 21.

⁸¹ For the influence of Liang Sicheng and Liu Dunzhen on the activities of the Society, see Fairbank (1994), esp. pp. 49-59; Hu (2004).

⁸² For a short description of the *Ziren yizhi*, see Ruitenbeek (1993), pp. 31-32.

behavior. Craftsmen were generally not assigned their own section in biographical collections, and therefore information on their lives was scarce and scattered across various categories and textual genres. Only a small number of works, such as *Zhurenlu* 竹人錄 (*Record on Bamboo Cutters*) by Jin Yuanyu 金元鈺 (?-1831), provided biographical information about craftsmen specializing in a particular craft, but these works mostly focused on a specific period and region. In the early twentieth century, there was a marked increase of interest in the history of science and technology, and Chinese journals and magazines thus frequently informed their readers about these topics by way of short biographical accounts on renowned scientists, engineers, and technicians. Yet, because these publications focused on developments in the West, the biographies were all devoted to Western or occasionally Japanese personalities, bypassing Chinese traditions of craftsmanship.⁸³ Still, there were two comprehensive biographical compilations—one from the late imperial period, and one from the Republican period—which provided an initial textual basis for Zhu's *Zhejianglu* project.⁸⁴ Under the category 'Kaogong dian' 考工典 (Industries and Manufactures Canon), the Qing dynasty encyclopedia *Qinding gujin tushu jicheng* 欽定古今圖書集成 (*Imperially Approved Synthesis of Illustrations and Books of Past and Present*, 1726) included a rubric containing biographies of famous personalities in the field of crafts and skills (*gongqiao* 工巧). This section comprises 82 short entries on exceptional figures of different crafts from antiquity to the Ming dynasty.⁸⁵ The second, and even more important source for Zhu, was Li Fang's 李放 (1884-1926) *Zhongguo yishujia zhenglüe* 中國藝術家徵略 (*Brief Account on Chinese Artisans*), first published in 1914. The work's title and subtitle, *Zhongguo meishushi* 中國美術史 (*A History of Chinese Art*), suggest a focus on fine arts. However, Li Fang's compilation contains thematically arranged biographies of Chinese craftsmen, and covers a relatively broad scope of crafts. It can thus be considered a precursor to Zhu's *Zhejianglu*.⁸⁶

Zhu began to collect biographical materials while researching "women's work," and eventually integrated accounts of eminent representatives of Chinese textile production into *Nügong zhuan zhenglüe*. From 1925 onward, he enlarged the scope of his research to other traditional crafts, hoping to achieve a comprehensive account of eminent Chinese craftsmen.⁸⁷ In retrospect, Zhu described his work as arduous:

⁸³ See Amelung (2014), p. 41.

⁸⁴ See Zhu Qiqian and Kan Duo (1929), *xuli* 敘例 (preface).

⁸⁵ See *Qinding gujin tushu jicheng*, vol. 97, chap. 781, pp. 22a-29a (pp. 43-57).

⁸⁶ For a detailed analysis of Li Fang's work, see Liu (2010), pp. 143-207.

⁸⁷ See Cao and Meng (1991), p. 6.

For several years I have aspired to collect facts on outstanding craftsmen. By the light of a candle, I have read books and forthwith taken numerous notes. Time and again friends and like-minded people all put forth what they knew, and lost no time in passing on information. I have collected a great deal so it occasionally has happened that I forgot about the source [of details].⁸⁸

For fear he would lose track of the materials he had collected, Zhu entrusted Liang Qixiong 梁启雄 (1900-1965) with the task of organizing and supplementing the materials, according to the rules that he set for the compilation.⁸⁹ In addition, Kan Duo 闕鐸 (1875-1934), with whom Zhu had collaborated ever since the recompilation of the *Yingzao fashi* in the early 1920s, participated in the project.⁹⁰ By 1929, this team had assembled a draft of the *Zhejianglu*, comprising of more than 1000 outstanding craftsmen throughout Chinese history, arranged chronologically, and separated into 14 main categories and many subcategories of traditional Chinese crafts. Although this draft includes a short preface, it apparently served only as an outline for the project. Thus, it was never published and has survived only in manuscript.

Because the *Zhejianglu* project was never completed, this draft provides crucial information. The preface of 1929 in some respects expands the preface eventually published in *Bulletin* in 1932, and therefore elucidates the methodology behind the compilation. Moreover, the handwritten draft reveals Zhu's classifications, and lists the names of the craftsmen to be included in each category. Thus, although the number of persons changed in the process of the *Zhejianglu*'s compilation, the draft gives an impression of the quantity of craftsmen identified for each category, the proportion of the categories in relation to one another, and of the subcategories which further specify the main categories.⁹¹

For the compilation of the *Zhejianglu*, Zhu and his team drew much material from *Qinding gujin tushu jicheng* and Li Fang's *Zhongguo yishujia zhenglüe*. Yet, the scope and organization of Zhu's *Zhejianglu* differs markedly from Li Fang's compilation. Whereas the latter concentrated mainly on biographies from the Song dynasty (960-1279) to his own time, Zhu intended to compile an exhaustive chronological account of Chinese craftsmen, covering all periods of Chinese history. He thus surveyed both

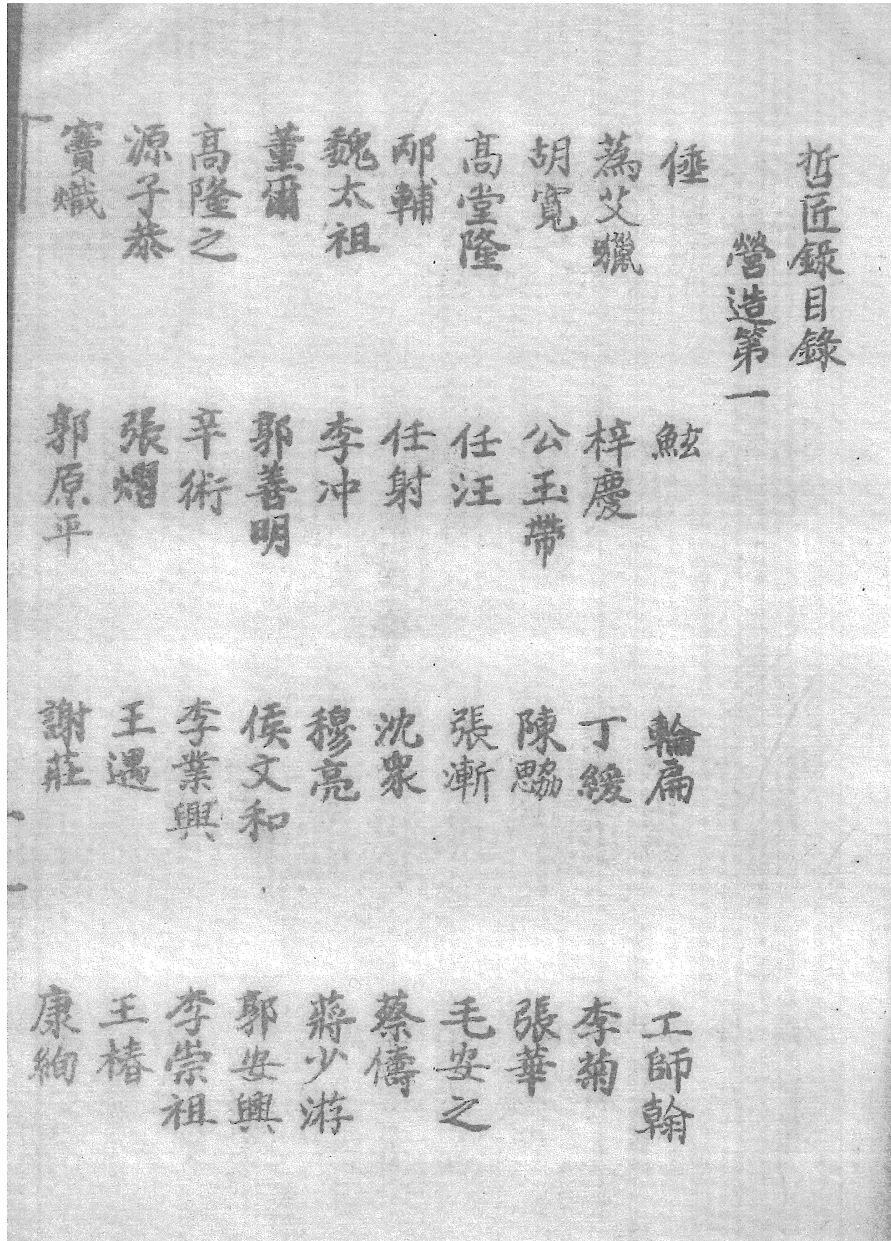
⁸⁸ Zhu Qiqian (1932), p. 124.

⁸⁹ See *ibid.*

⁹⁰ For Kan Duo's collaboration with Zhu and his contribution to the Society, see Wang (2010), pp. 136-138; Fu, Li, and Duan (2014).

⁹¹ See Zhu Qiqian and Kan Duo (1929).

Figure 3. Page of the Zhejianglu draft of 1929



SOURCE: unpublished manuscript, National Library of China, Beijing.

early and recent historical records, thereby expanding the time-frame of *Zhongguo yishujia zhenglüe*. Even more significantly, he changed the compilation's overall structure and classificatory system.

The main corpus of Li Fang's book groups craftsmen into a series of mixed categories. The six short sections at the beginning included craftsmen with various skills, ordered either by time period or region. In the following 15 main categories, Li adopted the traditional concept of *ba yin* 八音 (eight sounds), which distinguish eight kinds of musical sounds on the basis of the materials with which instruments were made, i.e. metal, stone, silk, bamboo, calabash, earth, hide, and wood. Since these eight categories did not sufficiently cover all types of crafts, he supplemented seven additional categories, namely (unorthodox) painting and calligraphy, astronomical instruments, mechanical devices, mounting, carving, lacquer ware, and various skills.⁹² Within these 15 categories, he listed craftsmen chronologically.⁹³ The implementation of the *ba yin* concept as an organizational structure led to an imbalance in the size of the sections. For instance, Li placed only four biographies in the "calabash" category, whereas he assigned almost one hundred persons to the category "bamboo." Moreover, the combination of working materials and specializations as classification criteria resulted in ambiguity and an overlap of categories. Persons such as the two Ming dynasty (1368-1644) craftsmen, Wang Shuyuan 王叔遠 (probably early seventeenth century), who was primarily known for carving miniatures from peach kernels, and Zhao Dexiu 趙得秀 (sixteenth century), famous for his construction of palaces and bridges, were both assigned to the category "wood," even though their skills differed considerably.⁹⁴ In contrast, the late Qing scholar-artist Guo Fuheng 郭福衡 (fl. 1872), whom Li Fang also noted for his skills in the carving of kernels, was listed under the category "carving."⁹⁵

Zhu Qiqian apparently regarded Li Fang's arrangement as too inconsistent or old-fashioned, and organized the biographies of the craftsmen in the *Zhejianglu* exclusively according to their specialization; in six cases he employed subcategories in order to further differentiate

⁹² For a short description of the content of each of Li Fang's 15 categories, see Liu (2010), pp. 153-163.

⁹³ While some editions of Li Fang's work comprise only five *juan*, others include a sixth *juan* with an appendix. According to his preface, Li Fang intended to collect biographical accounts that seemed doubtful to him in the appendix. See *Zhongguo yishujia zhenglüe*, editorial principles, pp. 1a-b. Yet, it seems likely that the additional *juan* 6 was not compiled by Li Fang but only added later. See Liu (2010), pp. 190-193.

⁹⁴ See *Zhongguo yishujia zhenglüe*, chap. 3, p. 20a-b; chap. 3, p. 21b-23a.

⁹⁵ See *ibid.*, chap. 5, p. 9b.

Table 1. Categorization of eminent craftsmen according to the Zhejianglu draft of 1929

Main categories (number of persons listed)	Subcategories (number of persons listed)
1. Building and construction 營造 (133)	None
2. Landscape gardening 壘山 (45)	None
3. Metal work 鍛冶 (116)	None
4. Pottery 陶瓷 (89)	None
5. Lacquer ware 髹飾 (102)	None
6. Sculpture 雕塑 (72)	Sculpture 雕塑 (59) Clay figurine making 泥人 (3) Portrait carving 刻像 (10)
7. Astronomical instruments 儀象 (102)	None
8. Arms manufacture 攻具 (15)	None
9. Peculiar contraptions 機巧 (37)	None
10. Jade and stone work 攻玉石 (160)	Jade and stone carving 瑠玉及刻石 (99) Ink stone carving 琢硯 (36) Seal knob making 製印紐 (13) Rhinoceros horn and ivory handling 治犀角象牙 (8) Chess piece making 製奕 (2) Decorative lantern making 製料絲燈 (2)
11. Wood work 攻木 (36)	Printing block engraving 鋟版 (9) Kernel cutting 鐫核 (10) Wood work 攻木 (17)
12. Bamboo carving 刻竹 (125)	Bamboo carving 刻竹 (106) Fan making 製扇 (13) Calabash production 治匏 (6)
13. Miniature painting and special skill painting 細書畫異畫 (36)	Miniature painting 細書畫 (22) Special skill painting 異畫 (14)
14. Women's work 女紅 (130)	Weaving 織作 (13) Embroidery 刺繡 (93) Stitching 鍼工 (17) Various techniques 雜作 (7)
Total: 1198	

particular crafts. He set aside the traditional Chinese *ba yin* concept that Li Fang used to distinguish craftsmen, and introduced new categories such as “sculpture” or “landscape gardening.” These new categories, of course, did not entirely solve the problem of adequate classification, and we also find inconsistencies in Zhu’s system. Zhang Lifu 張立夫 (nineteenth century), for example, was known for his carving of wood, stone, and bamboo, and therefore Li Fang recorded him under “carving” rather than under a single material with which he worked.⁹⁶ As Zhu did not use “engraving” as a general category, he put Zhang Lifu into the subcategory of “print block engraving” although this was just one of the skills in which Zhang excelled. Another carver, Bao Tiancheng 鮑天成, from the late Ming dynasty, was known mainly for his work with rhinoceros horn, but was also skilled in carving sandalwood. In this case, Zhu listed him under two subcategories: “rhinoceros horn and ivory handling” and “wood work.”

Remarkably, Zhu used the term “*yingzao*” as the first of his 14 categories. Most of the persons recorded under “*yingzao*” made a major contribution to or played a leading role in the construction of palaces, temples, or bridges. However, particularly in records of the early dynasties, Zhu’s compilation included under this category craftsmen whose particular skills were rather diverse. It recorded, for example, the wheelwright Bian (Lun Bian 輪扁), who, according to an anecdote in the *Zhuangzi* 莊子, argued that the skillful execution of his craft required a knack which could not be taught to anyone.⁹⁷ Such entries suggest that Zhu operated with a wide definition of *yingzao*, under which he included some very fundamental knowledge or skills. It did not include all the crafts that he listed in the *Foundation Charter*, but it certainly went beyond “architecture” in a modern sense.

It remains unclear whether or to what extent Zhu’s division of the project into these fourteen crafts was inspired by Western ideas of technology, but his arrangement of the biographies is clearly not a fully Westernized approach.⁹⁸ He chose crafts that he believed played a major role in Chinese culture even though they had little or no relevance in the West, such as jade carving or bamboo cutting. Instead of rewriting the history of Chinese craftsmanship by adopting an entirely Western

⁹⁶ See *ibid.*, chap. 5, pp. 7a-b.

⁹⁷ See *Zhuangzi jishi*, chap. 5B, pp. 490-492.

⁹⁸ At about the same time as Zhu Qiqian, scholars in the West pursued similar projects, compiling collections of biographies of eminent figures of science and technology. See, for example, Matschoss (1925); Lenard (1929). Yet, there is no clear indication that Zhu knew of these works, or of the *locus classicus* of Western biographical writing on artists, Giorgio Vasari’s (1511-1574) *Lives of the Most Excellent Painters, Sculptors, and Architects* (*Le vite de’ più eccellenti pittori, scultori e architettori*).

classification system, Zhu attempted to preserve the particularities of Chinese culture within a universally applicable organizational framework.

The implementation of this classification system allowed Zhu to cover a broad range of traditional crafts. Still, he was not striving for an exhaustive survey of notable personalities in all specializations. Following the example of Li Fang's *Zhongguo yishujia zhenglüe*, he explicitly excluded (orthodox) painting, seal cutting, musical instrument making, and ink production, because previous scholars had already described the important figures of these crafts in some detail. However, he also set aside various other crafts without further explanation. He may not have found sufficient information in traditional sources on the producers of various day-to-day goods or the different crafts he mentioned in *Foundation Charter*. However, it is striking that he did not assign distinct categories to the production of refined items such as glassware or jewelry, or the construction of furniture, chariots or ships, even though the long traditions and outstanding examples of all these crafts would warrant a study of their own. Instead, Zhu paid particular attention to crafts with which he had long engaged as an official or an art collector, such as building and construction, lacquerware, or women's work.⁹⁹ Additionally, he included some very specific categories such as "miniature painting and special skill painting" and "peculiar contraptions." His survey of eminent craftsmen thus contained persons that were known for painting by taking ink into their mouth and spitting on the paper, or persons who constructed faithful reproductions of animals, such as wooden dogs that were able to bark and bite. This comprehensive amalgamation of skills made the *Zhejianglu* an innovative project, yet the omission of certain types of crafts appears to mirror Zhu's individual predilections, and betrays a preference for artistic rather than purely technological achievements.

Identifying Outstanding Craftsmen

The prefaces of 1929 and 1932 also provide us with clues as to how Zhu and his collaborators conceptualized the "craftsman," as well as whom they regarded as "outstanding" and thus worthy of inclusion in their compilation. Since traditional sources did not feature biographies of craftsmen as a defined class, and references to practical skills and accomplishments were scattered through biographies of various groups, Zhu was required to

⁹⁹ Zhu did concern himself with furniture, but it was only in 1934, some years after outlining the *Zhejianglu* project, that he published a recompilation of three texts on traditional Chinese table arrangement under the title *Cunsutang jiaoxie jipu sanzong* 存素堂校寫几譜三種 (*Three Revised Albums on Small Tables from the Hall of Persistent Simplesness*).

define his object of investigation. He applied a rather broad definition for his project, stating:

What this compilation records are the various craftsmen, beginning from antiquity through to the present—no matter whether the persons were sagely or ordinary, whether they invented or only transmitted, whether they belonged to the upper social strata such as nobles or high-ranking officials, or whether they belonged to the lower social strata such as carpenters and carriage-wrights—so long as they have written about one matter, propagated one skill, displayed one technique, or added one idea to the discourse in the field of craftsmanship which made a contribution to human culture.¹⁰⁰

By including all persons who, whether by skill, idea, or even by writing, had contributed to the development of a specific craft, Zhu avoided a strict differentiation between practical, administrative, and theoretical skills.¹⁰¹ Most of the persons listed in Zhu's category "architecture," for example, were probably supervising officials rather than workers. Those included in this category required knowledge about the administration of construction projects, but their training focused on literary and administrative capabilities, and did not include any practical training in artisanal labor. Further, for most of them the supervision of construction processes was only a temporary occupation.

The ambiguity of Zhu's definition may be, at least in part, explained by the scarcity of information on many types of artisanal labor in historical records. In many cases, it is impossible to know whether someone made their living from their artisanal skills, or if they only occasionally engaged in a craft. Moreover, although literati clearly distinguished themselves from ordinary workers, they claimed to have important shares in many construction projects. Right at the beginning of his treatise *The Garden Smith*, Ji Cheng proposed that construction was only 30 percent dependent on the workers and 70 percent on the work's patron; a garden, he claimed, depended 90 percent on the patron.¹⁰² Such a statement reveals the presumption that literati possessed aesthetic taste, whereas workers merely executed the labor. However, it also demonstrates that a patron who wished to set up a garden had to have some knowledge about the

¹⁰⁰ See Zhu Qiqian (1932), p. 123.

¹⁰¹ In the preface of 1932, Zhu stated that "all categories are further divided into subcategories." See *ibid.* However, it is unclear in which ways he had refined his categorization of 1929 or which subcategories he invented. No additional fragmentation is introduced in the publications of separate parts of the *Zhejianglu* in the *Society's Bulletin*.

¹⁰² See *Yuanye*, chap. 1, pp. 1a-b (p. 28).

processes of construction, and that he was held responsible for the result. It is difficult to assess what share the literati really had in construction, and how much of the process relied on their knowledge. Nevertheless, Zhu and his colleagues decided to credit some of the literati who engaged in exceptional construction projects, including them in his collection of outstanding craftsmen. Using the term craftsman in a such wide sense thus allowed Zhu to incorporate individuals regardless of their actual occupation and social status, and thus to subsume, for example, emperors, high officials, or monks who somehow engaged in a specific craft into their respective category in the *Zhejianglu*. Like many historians in the Republican period, Zhu emphasized the importance of verifiable sources.¹⁰³ Still, he considered even mythological figures, such as the legendary sage kings Shun 舜 and Yu 禹, as progenitors of specific crafts. Zhu thus did not take into account Gu Jiegang's 顧頡剛 (1893-1980) famous and influential questioning of the historicity of China's high antiquity, which Gu had published in 1926.¹⁰⁴ Nevertheless, Zhu's approach broke new ground. By regrouping biographical information solely to reflect an individual's contributions to a specific craft, Zhu dismantled the hierarchies of traditional historiography and gave equal credit to famous personalities and marginal figures. This reappraisal was intended to elevate the status of persons who hitherto had not received appropriate attention—not least Li Jie, who, as Zhu noted disapprovingly, had not been honored with a biographical entry in the official *Songshi* 宋史 (*History of the Song*).¹⁰⁵

The claims to exceptional greatness ascribed to individual craftsmen proved to be another major problem in maintaining coherence of the compilation. Zhu explained, "the character 'master' (*zhe* 哲) is used to raise their reputation."¹⁰⁶ Likewise, the title *Zhejianglu*, i.e. *Collected Biographies of Master Craftsmen*, was intended to suggest that the persons listed were in some regard outstanding. Zhu and his team clearly used different measures to judge who deserved inclusion in the collection than Li Fang, as about half of the craftsmen listed in the latter's *Zhongguo yishujia zhenglüe* were left out of the *Zhejianglu*. However, the concrete standards that Zhu and his colleagues used to distinguish between ordinary and outstanding craftsmen remain opaque. In the preface to the 1929 draft, they explicitly excluded from the volume those who were famous but whose skills were

¹⁰³ See Zhu Qiqian (1932), p. 123. Zhu adopted Li Fang's principle of relegating doubtful accounts to an appendix. See *ibid.*, p. 124. Yet, this appendix is no longer extant.

¹⁰⁴ See Gu ([1926] 1992). For the context and significance of Gu Jiegang's challenge of traditional historiography on high antiquity, see Wang (2001), esp. pp. 63-67.

¹⁰⁵ See *Sheshi jiyao* (1930), p. 4.

¹⁰⁶ See Zhu Qiqian (1932), p. 123.

unclear. Consequently, they omitted people such as the dyer Wang Shenhuan 王神歡 of the Northern Qi dynasty (550-577), who achieved fame by bribing himself into a high office, as well as the Northern Song dynasty (960-1127) silversmith Li Pu 李浦, who mainly become known as father of the eminent official Li Bangyan 李邦彥 (?-1130).¹⁰⁷ Despite this restriction, the scope of who qualified as an exceptional craftsman remains broad. In part, this can be explained by the ambiguity of historical records, which left judgement on such achievements difficult. Jin Yuanyu, for example, in *Zhurenlu*, provided the following explanation for his selection of personalities:

There are two schools of bamboo cutting. One began with Pu Zhongqian 濮仲謙 from Jinling 金陵, the other one with Zhu Songlin 朱松鄰 from my native place [Jiading 嘉定]. The school of Pu [Zhongjian] is vulgar and shallow, and by far not equal to Zhu [Songlin's school]. [Thus,] this compilation for the most part does not record persons who are not from my city.¹⁰⁸

Jin Yuanyu's unspecified claim that the competing school from Jinling did not match the bamboo cutters of his native area may be regarded as an example of patriotic bias, and is not a reputable source of whether or not they really were more excellent.

Author preference for specific regions result in a sketchy picture of craftsmanship in traditional China. In the case of *Zhurenlu*, Jin Yuanyu's preference for a specific tradition of craftsmen is obvious; other biographical sources on craftsmen are not always so explicit about the motivations behind their selection of materials. Li Fang's *Zhongguo yishujia zhenglüe*, for example, provides biographical accounts of craftsman predominantly from the lower Yangzi region; handicraft production flourished here throughout most of late imperial times, yet it was surely not the only source of outstanding craftsmen. Similarly, in the genre of gazetteers, the reference to an individual craftsman may indicate the eminence of the person mentioned, but it may simply reflect the compilers' attempt to glorify a region, or a particular interest in specific crafts, certain products, or families. A case in point is the biographical account of Hong Xiu 洪髹, in *Jiaxing fuzhi* 嘉興府志 (*Gazetteer of Jiaxing Prefecture*) dating to the year 1600, a man who Zhu Qiqian intended to include in his compilation, according to his draft of 1929. The succinct entry on Hong Xiu simply maintains that he "was

¹⁰⁷ See Zhu Qiqian and Kan Duo, "Zhejianglu," *xuli* (preface). For information on the lives of Wang Shenhuan and Li Pu, see *Suishu*, chap. 56, p. 1383; *Songshi*, chap. 352, p. 11120.

¹⁰⁸ See *Zhurenlu*, p. 175. Jinling is the old name of Nanjing. Jiading today belongs to Shanghai.

excellent in producing lacquer ware; his skillfulness was exceptional and remained uncontested for a long while. For some time, his name dominated the field.”¹⁰⁹ While this sheds some light on the rhetoric that literati employed when they described craftsmen, it gives us only a vague idea of Hong Xiu’s skills or his exceptionality in comparison to craftsmen mentioned in other gazetteers.¹¹⁰

Zhu and his colleagues did not discuss these methodological problems within the biographies, but largely presented concise accounts of individual craftsmen followed by excerpts from the respective sources. The amount of information that they were able to trace differed immensely. In most cases, they cut the biographies short, leaving out anecdotes and information that was not directly related to an individual’s engagement with a craft.¹¹¹ As a result, the collection presented the individuals as mostly one-dimensional, and largely deprived their merits and achievements of socio-historical context. Despite this effort to create coherence, the biographic information and details of each person’s contribution to craft remained diverse, and interrelations between individuals are therefore mostly blurry. As a result, the categories of the *Zhejianglu* do not form coherent genealogies that outline the historical developments of a craft by reference to its outstanding figures; rather, they are a repository of examples of what previous historians regarded as noteworthy skills and accomplishments.

The Gradual Publication of Research Results

After Zhu founded the Society, he integrated the *Zhejianglu* project into the work of the research group, once again entrusting to a small number of skilled experts a considerable part of the actual research. Aside from Liang Qixiong and Zhu himself, Liu Dunzhen and Liu Rulin 劉儒林 (dates unknown) were at least temporarily engaged in the project. Despite the preparatory work undertaken over several years, it was not until 1932 that the first section of biographies was published in *Bulletin*, covering the category “building and construction.” Over the following years, until 1936, Zhu and his team published nine sections of the *Zhejianglu* in *Bulletin*, covering the four categories “building and construction,” “landscape gardening,” “weaponry,” and “sculpture.”¹¹²

¹⁰⁹ See *Jiaying fuzhi*, chap. 17, p. 112b (p. 697).

¹¹⁰ For a closer analysis of the ways in which pre-modern scholars described craftsmen in biographical sections of different text genres, see Hofmann (2011).

¹¹¹ See Zhu Qiqian (1932), p. 123.

¹¹² Liang Qixiong is named as author for six of the nine parts published in *Bulletin*. This indicates that it was he, rather than Zhu Qiqian, who actually compiled large parts of the *Zhejianglu*.

The *Zhejianglu* underwent various changes of structure and content as the work advanced. In 1931, *Bulletin's* news section announced not only an expansion of the category “bamboo carving,” but also the addition of an entirely new category, “ink production” (*zhimo* 制墨), comprising of several hundred persons.¹¹³ In 1936, Liu Dunzhen published a section in *Bulletin* under the title *yingjian* 營建. Like *yingzao*, *yingjian* can be translated as “building and construction,” but was likely chosen to highlight an affinity to “architecture” (*jianzhu*). In his short description of the *Zhejianglu*, Derk Bodde has argued that this was a category in its own right.¹¹⁴ Indeed, if one considers the persons listed in this category, it seems that Liu Dunzhen worked with a slightly narrower definition of “building and construction” than that originally used by Zhu Qiqian. Overall the differences are only minor, however, so Liu’s section can also be understood simply as a supplement to the previously published *yingzao* sections, with a modified title. Such a difference of title is not unusual, as other sections were also renamed when published in *Bulletin*. For instance, Zhu and his team changed the Chinese term *gongju* 攻具 “weaponry” (literally “devices for attack”) used in the draft of 1929 into *gongshouju* 攻守具 (literally “devices for attack and defense”). The section on “sculpture” was also renamed *zaoxiang* 造像, rather than *diaosu* 雕塑, and rearranged accordingly: the original subcategories were completely dropped, and it narrowed its focus to craftsmen who produced statues, excluding persons who were known for subsidiary or loosely related skills such as, for example, the masterful decoration of statues or the creation of lifelike toys. Consequently, about half of the craftsmen listed in the 1929 draft were left out. The total number of persons listed in each of the four categories published in *Bulletin* was also changed. The compilers removed some of the individuals that had been recorded in the draft of 1929 and added others, without any explanation of the reasons behind their selection. The number of biographies provided for the category “building and construction” – including the supplement by Liu Dunzhen – grew from 133 to 231, making it the largest by far.¹¹⁵ The section “arms manufacture” more than doubled, from 15 persons in the draft to 38 by the time it was published. The category “sculpture” grew slightly from 72 to 94, and “landscape gardening” was reduced to just 34 biographies from the original 45.

The outbreak of the Second World War in China in 1937 interrupted work on the *Zhejianglu*. By this time, neither *Nü Gong zhuan zhenglüe* nor any

¹¹³ See *Sheshi jiyao* (1931), p. 10. In 2012, a web auction offered a manuscript of this additional category (<http://www.kongfz.cn/8339104>). Yet, it is unclear if this manuscript is authentic.

¹¹⁴ See Bodde (1991), p. 227.

¹¹⁵ Some biographies refer to more than one person. I have counted only the main entries.

of the other categories originally included in the draft of 1929 had been reprinted in *Bulletin*, and the extent to which Zhu and his team had revised them remains unclear. The researchers of the Society dispersed throughout China. Zhu Qiqian remained in Beijing, whereas Liang Sicheng and Liu Dunzhen fled first to Kunming 昆明, and then on to Lizhuang 李莊 to avoid the invading Japanese forces, where, under poor conditions, they continued the work of the Society, and even published two more issues of *Bulletin*.¹¹⁶ In 1943, however, Liu accepted a professorship in the architecture department at National Central University. In 1946, shortly after the end of the war, Liang Sicheng became professor of architecture at Tsinghua University (*Qinghua daxue* 清華大學). By now in his late seventies and almost deaf, Zhu Qiqian was unable to revive his former projects because he had lost much of his political network, and the Society was thus eventually entirely disbanded. Zhu called upon younger colleagues to continue to work on the compilation of craftsmen biographies, but under the adverse conditions of the time, the project's advance was marginal at best.¹¹⁷ No further sections were published, and thus the *Zhejianglu* remains a fragment.

Conclusion

Zhu Qiqian envisioned that the Society would accomplish an enormous scope of research. He aimed for a comprehensive survey of the multiple crafts related in some way to building and construction, in addition to their social and international contexts. Many of the projects he proposed remained unfinished, or were never even begun. Nevertheless, the output of the Society was immense and has had a lasting impact. Not only did Society members publish their findings in *Bulletin*, their research laid the foundation for various groundbreaking studies; the most prominent of which are perhaps Liang Sicheng's *Tuxiang Zhongguo jianzhu shi* 圖像中國建築史 (*A Pictorial History of Chinese Architecture*) of 1946 and his 1953 *Zhongguo jianzhu shi* 中國建築史 (*Chinese Architectural History*). However, as these book titles exemplify, the Society's research focused largely on architectural history, relegating other crafts to the periphery. This relatively narrow focus was not what Zhu Qiqian had in mind when he established the Society's research agenda. Still, such accomplishments have strongly influenced the perception of the Society and Zhu Qiqian's role in it, both of

¹¹⁶ On the Society's work during the war period, see Li (2006); Fairbank (1994), pp. 89-134.

¹¹⁷ See Liu (1991), p. 73; Luo (2005), p. 9.

which are up to the present day discussed predominantly in the context of architectural history and by architectural historians.

We observe a similar effect in regard to the *Zhejianglu*, despite the fact that this project was from its early stages—maybe even more clearly than the Society—geared to explore a variety of different crafts, only one of which was architecture. However, the various categories established by Zhu have received unequal attention. Over the past two decades, the *Zhejianglu*'s approach has been variously adopted, and several scholars have published new studies that refer directly to Zhu's work, yet with a more limited scope. A Japanese team of researchers led by Tanaka Tan, for example, has compiled a supplement to the *Zhejianglu*, comprising a copious collection of biographies that feature persons affiliated with landscape gardening during the early imperial period from 221 BC to 589 AD.¹¹⁸ Yang Yongsheng 楊永生 published a revised and enlarged version of the original *Zhejianglu* in the form of a book. To the original work he added biographies of comparatively recent personalities only for the field of architecture; furthermore, from the sections originally published in *Bulletin* he included only those most relevant to architecture, i.e. "building and construction" and "landscape gardening."¹¹⁹ Lai Delin's 賴德霖 *Jindai Zhejianglu* 近代哲匠錄 (*Modern Zhejianglu*), which covers the twentieth century, exclusively collects Chinese architects.¹²⁰

Such a heavy focus on Zhu Qiqian's contribution to architectural history creates a lopsided and problematic image of his scholarly ambitions. It has minimized and obscured Zhu's attempt to create a thorough understanding and re-conceptualization of traditional Chinese craftsmanship. Furthermore, it grants Zhu little credit for his attempt to combine traditional scholarship and modern methods, and his ingenuity during a period of intellectual upheaval. Zhu created new categories, novel research methods, and promoted an international perspective, at a time when unique epistemological agendas and ingenious research approaches were as much possible as they were needed.

¹¹⁸ See Tanaka, Sotomura and Fukuda (eds.) (2003).

¹¹⁹ See Yang (ed.) (2005).

¹²⁰ See Lai Delin (ed.) (2006). This narrowing of the title *Zhejianglu* is even more curious as Lai Delin in a more recent publication has stressed that Zhu Qiqian's research focus was much broader than architecture only. See Lai Delin (2016), pp. 12-21. The exclusive focus on the work's relevance for the history of architecture can still be found in recent scholarship on the *Zhejianglu*. See, for example, Xu (2017).

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