



# A Ground between Beaux-Arts, Modernism, and Chineseness: Tracing Modernities in China's Architectural Education and Practice, 1919-1949

Chin-Wei Chang.

*University College London.*

**ABSTRACT** Architecture, as a body of knowledge embodied in education and profession, is a transplanted discipline in China, a country possessed millennia of building history without so-called architects until the turn of last century. It was during the first four decades of the twentieth century that the Chinese inaugurated formal training and associated partnerships with 'home-grown' architects, whose first generation consisted of young professionals returned to their motherland from formal training in foreign institutions. Inevitably, multiple approaches and distinctive trajectories were introduced in accordance with educators' overseas backgrounds, meaning that Euro-American and Japanese paradigms or methods influenced China's architectural pedagogy. This essay focuses on a nebulous middle ground amid Beaux-Arts, Modernism and 'Chineseness' between 1919 and 1949. It was during this seminal epoch that architectural teaching became established in China. Taken together, this work aims at exploring the intellectual and pedagogic intersections through a trilogy of themes: practice, pedagogy, and discourse. In addition to constructing an overview of the territory underpinned by these three domains, the essay concentrates primarily on the pedagogical and institutional context that collectively characterised China's architectural heterogeneity before 1949.

**KEYWORDS** Chineseness, Beaux, Modern, Education, Practice

*All knowledge of cultural reality, as may be seen, is always knowledge from particular points of view.<sup>1</sup>*

## A Critical Framework

What counts as architecture depends on who counts as architects. Despite possessing four millennia of building traditions, the first Chinese architects - formally trained in the established institutes of architecture - appeared only a century ago. Prior the twentieth century, neither engineering nor architecture were lines of professional pursuit in traditional Chinese culture. Up to 1905, and for centuries prior, young men (and it was always men) vied for good jobs and social standing by scoring well in civil service examinations based on the Confucian classics. The sea change in learning, from Confucian metaphysics to mastery of the nuts and bolts of technologizing nature, is central to the question of how to define, for lack of a better term, Chinese modernity.<sup>2</sup> On Chinese modernity, a key problem in conceptualisation of past and present deeply imbedded in Chinese historical consciousness toward the end of 1919's May Fourth Movement.<sup>3</sup> The task of writing any history of Chinese architectural modernity is de facto hounded by the tension between the modern architectural profession or discipline on the one hand, and the long-enduring building tradition on the other. As Edward Denison states in his article 'Chinese Whispers' for *AA Files*: 'Making sense of China's architectural experiences is nothing if not a daunting task, which goes most of the way to explaining why an objective and comprehensive history of modern architecture in China does not exist.'<sup>4</sup> Not unlike Max Weber's profound remark quoted above, accordingly, this might lead us to argue that it is usually, if not always, more a matter of *when* is modern, modernist, or modernistic than *what*. What is deemed as *modern* depends above all on the available options at the precise moment a question was prompted.

Traditionalism versus modernism, undoubtedly one the most difficult topics to write about in relation to Chinese architecture, can be traced from the Self-strengthening Movement of the mid-nineteenth century, 1917's New Culture Movement, and the most importantly the May Fourth Movement in 1919—in which all China's first fifty years of attempts at modernisation culminated in the bold

statement 'one cannot halfway Westernize.'<sup>5</sup> All these incessant efforts entered a waning period almost immediately after 1<sup>st</sup> October 1949, as Soviet influence dominated building practice and teaching curriculum throughout Mao Zedong's militaristic China. This article, however, lays its groundwork during this seminal epoch, as it is in these three decades that a long-standing curiosity about the roles of tradition and modernity in shaping modern Chinese architecture—significantly in terms of architecture as a discipline, then a profession—can be embryonically addressed in a scholarly manner.

It was not until the 1920s that the Chinese commenced the formal training of 'home-grown' architects. The first generation of Chinese educators and practitioners were young professionals who had returned home from training in foreign institutions. Exploring their work both at school and in practice - but focusing mainly on education - this research is concerned with the different approaches and multiple trajectories in Chinese architectural pedagogy influenced by Western paradigms or methods. It investigates how these ventures were institutionalised in the academy and expanded onto urban planning and landscape schemes.

A nebulous middle-ground between various paradigms such as Beaux-Arts, Modernism and, crucially, varied forms of Chinese identity inevitably emerged, into which aspects of Chinese building traditions and working methods were also incorporated into professional teaching between 1919 and 1949. Taken together, the research work is tentatively framed within these three decades bound by the May Fourth Movement and the Maoist Era because it was in this period that architectural teaching became established in China by the returning professional architects.

Seen in this light, this article seeks to explore architectural institutions through a trilogy of interlinked themes (see figure 1): practice (engineer, architect, planner), pedagogy (professor, researcher, writer), and discourse (publication, exhibition, catalogue). As the author, I straddle the intermediary of three domains of intellectual production and interrogate a pressing question of the time—how to incorporate modern programs and newly-learned technology into the long-established Chinese building traditions and

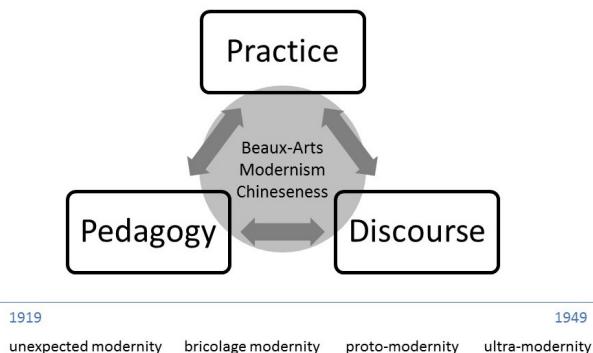


Figure 1: Diagram of conceptual framework (Author)

form a modern professional architectural knowledge? This question is explored within the social and historical context of the Chinese pedagogue's intellectual labour and institutional endeavour, as well as the many challenges they encountered between 1919 and 1949. The formative years of architectural education of this study were tumultuous ones for China; to be more specific, the Republican Period in China, during which the new Chinese nation had gone through multiple warfare like foreign Japanese invasion and domestic Civic War.<sup>6</sup>

### Alternative Writing

The Chinese architecture students attending foreign universities were part of a much larger vanguard of an ambitious young generation dedicated themselves to learning from the Western scientific invention and opportunistic capitalism as a means of modernising and reforming China. Given the context, this essay addresses the following questions:

- In a broad sense, what role did architectural knowledge in academies play during China's tumultuous Republican period?
- Who were the bearers of such knowledge, what were their national and transnational paths and how did these trajectories intersect in particular institutional contexts?
- What were the relationships of these architectural institutions to building practice and discourse and how were these articulated through pedagogy?
- How did the convergence of the two leading pedagogical systems—Beaux-Arts and Modernism—impact on those Chinese Students and their overseas sojourn during the 1920s and 1930s in the United States (US) and

Europe, as well as lead to influence in China upon their return to practice, teach, and experiment with traditional forms and transplanted styles on their motherland?

Whilst adopting a loose chronological approach, I propose a thematic narrative based on four different experiences of modernity unique to China. The discursive episodes include unexpected, bricolage, proto- and ultra-modernities, which overlap and co-exist but are nevertheless distinct. In reading the rest of my article, it is noticeable that the most weight is on the last two forms of modernities, since they - individually and collectively - represent the tendencies in pedagogic terrain to a greater extent. Given the simultaneity of different paradigms according to initial results of research in relation to what follows, my writing strategy is that, following an analysis of current literature, the main text intends to be as much thematically-organised as possible, leading to a nascent conclusion along with suggestion regarding future study.

### Leaky Habitats

This is to situate the essay within a field of research focusing on a few vital pieces of work by other scholars, yet the goal is to point out what had been missed, for which this essay deserves space of writing. To begin with *Modernism in China* offers a comprehensive survey, in which Denison and Guang - starting from the Opium War in 1840, and continuous political upheaval, civil unrest, national and international wars - offer a well-rounded view of the building industry during China's period of modernisation from the perspective of both Chinese and Western architectural design, and urban planning.<sup>7</sup> In his doctoral thesis, Denison aptly grafted the idea of 'multiple modernities' of Shmuel Eisenstadt on to a Chinese history of modern architecture. The concept of multiple modernities radically broadens our notion of the twentieth-century modernity per se, especially bringing within its fold and emphasising the varied and complex forms of modernities in numerous non-Western cultures across the globe, which did not necessarily follow merely Western paradigms. Based on both works, I try to address the varied types of modernities, especially those manifested via institutional pedagogy in Chinese architecture. At the same time, I also look at how these developments in the pedagogic sphere drew from and fed into practice and discourse.

My work is also well informed by the seminal book *Chinese Architecture and Beaux-Arts* co-edited by Jeffrey Cody, Nancy Steinhardt, Tony Atkin. Originating from an international conference ‘The Beaux-Arts, Paul P. Cret and 20th-century Architecture in China’ held at the University of Pennsylvania’s School of Design in 2003, this book records not only attainments amassed by early Chinese architecture students, but also the diverse cultural and political influences affecting their practice in China. Part Three of the book, the *Influence to Paradigm*, is particularly useful in understanding the careers of the Beaux-Arts-inspired architects—Lu Yanzhi, Yang Tingbao, Dong Dayou, Liang Sicheng—in a still-modernising China. However, these richly-informative and well-illustrated essays are relatively silent on their deeds in urban planning, in which Beaux-Arts-driven pedagogical tools contributed significantly during the period of relative prosperity—albeit chaotic—of the 1920s that lasted until land-hungry invasion of the Japanese Empire, beginning in 1931.

Peter Rowe and Seng Kuan’s *Architectural Encounters with Essence and Form in Modern China* serves as another capstone, which traces the development of Chinese architecture from the late nineteenth century to nowadays.<sup>8</sup> What distinguishes *Architectural Encounters* from the studies above is the exploration of ideological conflicts and radical debates posed by the building philosophies, techniques, and materials of North America and Europe for a five-thousand-year-old civilisation and its architecture. Whilst the book ends with a remarkable appendix of biographies of Chinese architects and schools whose impact on architecture are elucidated throughout the text, nevertheless, their historical and socio-political background deserves more explication in order to realise that building a modern China, an odyssey as intense as a battlefield struggle in actualities, by trying to find what I call ‘a ground,’ which was elusive, contradictory, and unpredictable.

This work searches for clarity from a disparate combination of non-Chinese and Chinese sources. Two Chinese scholars Daqing Gu and Delin Lai both published widely, in Chinese and English, for these academic enquiries. Gu works mainly on the Beaux-Arts education in China, from the 1920s to 1980s, and especially on those of Southeast and Tongji Universities

as revealed in his article titled *An Outline of Beaux-Arts Education in China*. Yet it is his summary comment ‘the recent passion for “space and tectonics” may signal an ending of the Beaux-Arts tradition in China, but in fact that tradition may actually be ingrained in the thinking of architects in subtle ways’<sup>9</sup> that sheds more light on the period of question herewith as ‘it can be argued that their Beaux-Arts training equipped them well for this [to-be-modern] task.’<sup>10</sup> Delin Lai is another worldwide-accredited scholar in Chinese architectural history. Just as his project-focused articles on the designs of Sun Yat-sen Mausoleum and National Capital Museum, both located in Nanjing, respectively included discussion about national identity, officialdom and statehood, so did he set the construction of the Sun Yat-sen Memorial Auditorium in Guangzhou within historical and political contexts in his article in *Chinese Architecture and the Beaux-Arts*.<sup>11</sup> Jianfei Zhu, Xing Ruan, Shiqiao Li, Wei-Cheng Lin and Vimalin Rujivacharakul are all very crucial contributors in this regard.<sup>12</sup>

Based on a comprehensive study of this growing body of literature on Chinese modern architecture, I have identified an area of research that has remained comparatively overlooked. Whilst Gu draws largely on educational institutes and Lai focuses mainly on project studies, Cody on specific figures such as Henry Murphy<sup>13</sup> and Denison on the broad overview as well as in depth on Luke Him Sau,<sup>14</sup> there is a paucity of research on the pedagogic landscape in Chinese architectural institutions between 1919 and 1949. I have purposefully selected these dates to frame this essay because 1919 is the year of the May Fourth Movement which marked beginning of the institutionalisation of Western ideologies in architecture, and 1949 is the year the Communist commandos came to power and fundamentally altered the system of professional teaching and architectural practice in China.

American architectural historians have published remarkable books in this scope: Gwendolyn Wright’s *The History of History in American Schools of Architecture, 1865-1975* in 1990, Joan Ockman’s *Architecture School: Three Centuries of Educating Architects in North America* in 2012. These works are conducive to my understanding of America’s leading architectural schools, as Atkin points

out, 'including MIT, Columbia, Cornell, Michigan, and the University of Pennsylvania',<sup>15</sup> where most early Chinese architects featuring in this essay were schooled during the first three decades of the twentieth century, but our own version qua this orbit remains yet unwritten.

After about fifteen years from the University of Pennsylvania conference mentioned earlier, another international symposium *Conceiving Our Modernity: Perspectives of Study on Chinese Modern Architectural History* took place at Tongji University - where British-trained architect Huang Jorsen, a figurehead in the phase of 'ultra-modernity' described below, established the first China's Bauhaus-modelled architectural program in 1942 - in Shanghai by 2015. Leading Chinese scholars were joined here by Hilde Heynen (KU Leuven), Mary McLeod (Columbia) and Arindam Dutta (MIT) in raising the question: is there a specific modernity that is uniquely Chinese? And if so, how should we conceive it in the history of the twentieth-century Chinese architecture - an initiative this essay sets out to trigger - in terms of pedagogical and institutional modernities, as well as of its inevitable encounters with practice and discourse in tandem with China's calls on the verge of being modern.

### Unexpected Modernity (1919-27)

The architectural profession arrived in China in the mid-nineteenth century following Britain's invasion that forced the opening of treaty ports along China's coast and, later, inland along its rivers.<sup>16</sup> Many studies of this period emphasise that engineers, more than architects, played a vital role in the early transformation of Chinese cities before the early 20<sup>th</sup> century. Those known as professionals were all foreigners, none of them were Chinese.

Given the situation, I use the term 'unexpected modernity' to address the Chinese foreign encounters between 1919 and 1927 ensuring from the *comprador*<sup>17</sup> who was the middleman between foreign engineer-architects and Chinese craftsman-builders. This quintessentially modern figure was an unexpected but inevitable outcome of foreign engagement and the consequent encounter with new materials and technologies and new

building types, such as factories, warehouses, hospitals, jails, and schools.<sup>18</sup>

In the decades leading up to the May Fourth Movement in 1919, China's industrialisation had been a major force in modern architectural language manipulated mostly by engineers' 'stripped-down functionalist perspectives.'<sup>19</sup> The first Chinese-founded architectural program in 1923, albeit not at university level, was also established by engineer-architects Liu Shiying and Liu Dunzhen, who both graduated from the Tokyo Higher Technical School, at Suzhou Industrial Specialised School. The double agency between engineers and architects can be seen not only in the earliest formal training in China, but can also be read in publications. In the light of Cody's article *American Planning in Republican China, 1911-1937* in *Planning Perspectives*: 'towards the end of 1920s, planning publications became more available as the recently founded Chinese engineering and architecture affiliations established new journals,'<sup>20</sup> for which he offered examples as of *The Good Roads Monthly, Engineering, and Municipal Commentary*.

In addition, I would like to point out *The Far Eastern Review*.<sup>21</sup> In its August 1919 edition, a very early foreign-trained Chinese architect William Chaund at Chicago's Armour Institute of Technology (part of today's Illinois Institute of Technology) contributed one of the earliest commentaries - *Architectural Effort and Chinese Nationalism* - about 'how architecture in China should relate to the broader cultural discourse, particularly to the ideology of the May Fourth Movement.....[for] China had for too long overlooked architecture as a progressive discipline,' according to Rowe and Kuan.<sup>22</sup> Despite being an engineering-, finance-, and commerce-targeted publication, it owned such 'a fascinating manifesto,' in Cody's word, 'about architecture, modernism, and nationalism.'<sup>23</sup>

It is a manifesto that hinges the research on tracing the development from the year 1919, in which Chaund proclaimed: '[We must] open our minds, train our hands and look forward into the future of our homes and cities so that whatever may come we shall meet with energy and intelligence. Once more, let us study political science, economics, philosophical culture as well as engineering and science; but let us not neglect the study of architecture in

the varied phases, so as to be capable of laying a substantial and permanent foundation, and giving an appropriate background for our slowly but nevertheless surely, reinvigorating civilization.<sup>24</sup> Both Cody and Denison cited other parts of the same manifesto in leading pages within their books. Seen in tandem, presumably those few Chinese architects did try to understand their own professional development in the context of the May Fourth Movement, or Chinese Enlightenment as Cody called it,<sup>25</sup> which was evolving in their motherland during the 1920s.

Indeed, it was not until the 1930s that Chinese architects switched their pragmatic mode into ‘associated architects’ and began to compete with Western professionals, even hiring them via formalised partnership. The first Chinese architectural practices were organised as ‘Architectural & Engineering Company (Engineering Division),’ such as Liu Shiying’s Huahai in 1922, and before him: Shen Liyuan’s Huaxing in 1915, Kwan Sungsheng’s Jitai in 1920, Lu Yanzhi’s South-Eastern in 1921.

### **Bricolage Modernity (1927-33)**

The second category I propose to call ‘bricolage modernity,’ by which I mean an architectural discourse concerned with meaning, form and volume. This trend was resulted from two time-specific conditions: firstly, the advent of so-called Republican Nanjing Decade of 1927–1937 under the Guomindang (GMD) Nationalist Government; secondly, the returning of first generation of Chinese architects upon completing their overseas training.

Amongst many universities throughout the US and Europe (including UK, France, Germany, Italy), as well as few in Japan like the Tokyo Higher Technical School mentioned earlier, the University of Pennsylvania was one of the most popular destinations at which most of the first generation Chinese architects were educated, because of the US-funded Boxer Indemnity Scholarships. However, their mentors—Paul Cret and John Harbeson—emancipated them from restrictive French tradition, and enabled students—Liang Sichang, Yang Tingbao, Tong Jun, Chen Zhi, Fan Wenzhao—to perform.

Despite the absence of formal modern design training (like the Bauhaus for example), European avant-garde works had been in vogue during their sojourn overseas. It is perhaps for this reason that Yang Tingbao’s studio work was included by John Harbeson in his 1926 *The Study of Architectural Design*, as well as the appropriate reprogramming and necessary revision of formal composition and symmetrical layout he showcased at Shenyang Railway Station (1927) and Dahu Cinema in Nanjing (1935).

Since a one-dimensional image does not do justice to the full range of interests and capabilities amongst first generation Chinese architects, the ‘bricolage modernity’ emphasised here must be broadened. Dong Dayou was trained at University of Minnesota, not Pennsylvania, but he was taught by Frederick Mann (William Ware’s student at Massachusetts Institute of Technology). His work reclaimed the formalistic ideology as of ‘bricolage:’ a metaphor identifying whilst employing Chinese intrinsic style as a national building agenda for government planning and architecture: Civic Centre Plan & Mayor’s Office in Shanghai (1935), he designed houses for himself and others (in Shanghai’s French Concession) approximately at the same time (1936), which suggested familiarity with the work of Le Corbusier and other European modernists.

Based on the architectural program at Suzhou Industrial Specialised School, the first university level architectural division was established at the National Fourth Zhongshan University (today’s Southeast University) in Nanjing in 1927. Nanjing was established as the new capital of China and so there was an advantage in having a national university and in attracting the most well-known architects to teach, especially when the division was upgraded to a department in 1932.

The faculty’s diversity of educational backgrounds inevitably had some influence on the formation of this first professional program. According to Gu Daqing, many Western-trained architects joined the faculty before 1937, amongst them Tan Yuan ‘was responsible for the foundation course in design and was important in transplanting the University of Pennsylvania’s version of the Beaux-Arts program.<sup>26</sup> However, given the original technical-school setting and Liu

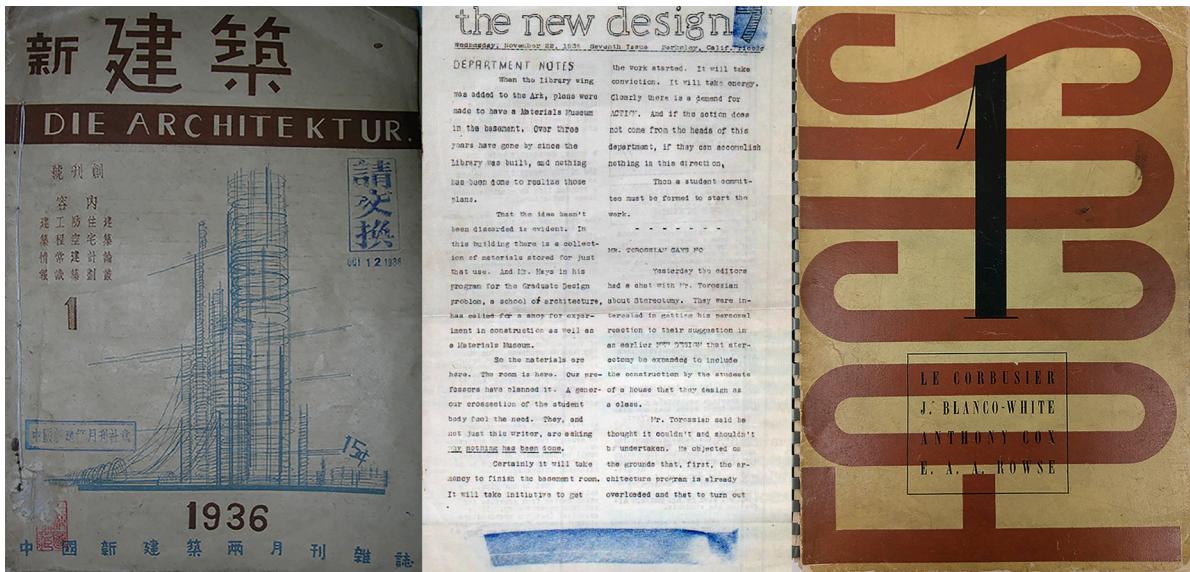


Figure 2: 1st edition of *The New Architecture* (*Xinjianzhu*, 新建築), 1936; 7th edition of *The New Design*, 1939; 1st edition of *Focus*, 1938 (left to right, Archival dossier respectively from Fudan University; University of California at Berkeley, Architectural Association)

Dunzhen continued to teach, the impact from Japan's Tokyo Polytechnique also remained.

Another program that deserves attention in the context of bricolage modernity, but which operated for only three years due to the Japanese invasion of Manchuria in 1931 was the most radical Beaux-arts program in China, at Northeast University in Shenyang, founded by three University of Pennsylvania alumni Liang Sicheng, Chen Zhi, and Tong Jun in 1928. From the library collection to models and other facilities, remarked by Tong himself, 'the department was just like a branch of Penn'.<sup>27</sup>

### Proto-modernity (1933-42)

Publications were a principal resource for many Chinese architects who kept abreast of increasing international discourse in architectural design through foreign journals such as *Architectural Record*, *Pencil Points*, and *L'Architecture d'Aujourd'hui*.<sup>28</sup> However, in the 1930s, Chinese architects had more exposure to local publications such as newspapers *Shishi Xinbao* (1930) and *Shanbao* (1934), they could publish their own work in new journals like *The Builder* (1932) and *The Chinese Architect* (1933), also engaged in professional discourse through newly established groups including the Society of Chinese Architects (1927) and the Society for Research in Chinese Architecture (SRCA, 1929).

As Denison depicted in *Modernism in China*, 'By the 1930s, China would have its own crop of foreign-trained and home-grown architects putting into practice innovative techniques and working with new materials, desperately keen to arrive at an architectural language befitting their national character and manifesting their country's newly found modernity ... emerged from its humble vernacular origins to a vocation represented in dedicated university departments, with its own trade publications, industry regulations.'<sup>29</sup> The unprecedented setting of the profession welcomed alternative pedagogies, in addition to Beaux-Arts, for would-be modern architects.

China's first modern architecture programme was established at Xiangqin University (today's South China University of Technology) in Guangzhou by 1932. Its founding dean, Lin Keming, was a student of Tony Garnier (pioneer architects of reinforced concrete amongst Auguste Perret and Le Corbusier) during his study in France, and he had continued to stay up-to-date with the Congrès Internationaux d'Architecture Moderne (CIAM)'s development. In 1936, Xiangqin University published a students' magazine titled *The New Architecture* under Lin's guidance, and this activist publication paralleled similar ones in other high-profile institutes including UC Berkeley's *The New Design* in 1937 and the AA's *Focus* in 1938 (see figure 2). These proto-modernist endeavours tried to undo the previously



Figure 3: MARS's catalogue of the exhibition on Modern Architecture, 1937 (printed by Lund Humphries, from special collection of the National Art Library at V&A Museum)

established Beaux-arts pedagogical system at schools.

Outside the academy, another institutional shift took place in architectural practice. The business model of the Architectural & Engineering Company (Engineering Division) shifted to Associated Architects: Lu Yanzhi's Yanji's office in 1926, Fan Wenzhao's in 1927, Dong Dayou's in 1930, Allied Architects (Zhao Shen, Chen Zhi, Tong Jun) in 1933, and Xingye Architects (Xu Jingzhi, Yang Junchun, Lei Huipo) in 1935. Amongst these, I would like to highlight Fan Wenzhao, a University of Pennsylvania graduate whose Shanghai office accommodated many of the returning Chinese architects as junior draughtsmen. He even hired foreign professionals such as Carl Lindbohm from Sweden, who lobbied the MoMA's 1932 International Style exhibition<sup>30</sup> in China, which made Fan's office seem very modernist-oriented, yet also gave rise to a controversial debate over Chinese architecture regarding modernism: 'beauty' versus 'economy,' or as Lai put in his Studies in Modern Chinese

Architectural History, to be more concise: 'classical beauty' versus 'structural rationalism.'<sup>31</sup>

#### Ultra-modernity (1942-49)

In the final section, I investigate two of the most representative architectural programmes founded in China during the 1940s. Both were aligned with the European Modern Movement in terms of social and cultural concerns, rather than the previous case which was applied more formalistically. This period is potentially the most distinctive part because it has so many opportunities for unpacking previously overlooked transnational links of Chinese architectural history.

The department of architecture at St. John's University (today's Tongji University) in Shanghai was founded by the British-trained architect Huang Jorsen in 1942. According to Gu Daqing, it 'was the first architecture program directly under the influence of modern architecture.'<sup>32</sup> Since then, the so-called 'Harvard-Bauhaus' has become an

academicised term, thus most current accounts attribute the Chinese-Bauhaus to Huang's study with Walter Gropius at Harvard University's Graduate School of Design (GSD), but I would alternatively propose that his progressive modernity stemmed from the undergraduate study at Architectural Association (AA) in London from 1933 to 1939. In accordance with British architectural historian John Summerson, this was a critical period of transformation at the institute when the 'unit' system replaced the 'year' one.<sup>33</sup> This had much to do with the principle appointment of Mr. E. A. A. Rowse, who contributed an article *The Unknown Towns* in the first edition of aforementioned AA students' magazine *Focus*, bringing sociological methods of organisation and town planning to the school.

The modernities called into question here are at least two: architects shifted their vision to a larger scale of design, the 'urban,' and collaborationist approach reverberated from practice (associated partnership) to academy (unit system). Taken together, a 'co-operative' thesis project—Design for a Town—at the AA in 1938 was crucial, and A. J. Brandt—Huang's classmate at AA and later his teaching colleague at St. John's—was one of key members of the project.

In addition, Huang and Brandt were also influenced by the CIAM branch in England: Modern Architectural Research Group (MARS). Few Chinese scholars have mentioned Huang's appreciation of Britain modernists like Berthold Lubetkin, Maxwell Fry, and F. R. S. Yorke, all leading MARS members. In particular, Brandt had offered a review published in *Architectural Association Journal* (AAJ, today's *AA Files*) of the MARS exhibition New Architecture: Elements of Modern Architecture in 1938<sup>34</sup> (see figure 3). Given the camaraderie between them, Huang should be aware.

After an article 'Slum and Land' in the *Architects' Journal* (AJ) in 1933, the year Huang registered at the AA, Fry worked hard to develop socially-sensitive planning and kept in close contact with Gropius. Despite an immigration requirement for the German émigrés, there was a well-known partnership inside the AA circle which led to the first contact between Huang and Gropius. Regarded

圣约翰大学建筑系“建筑理论课”课程大纲	
● 建筑理论大纲 (七)	1. 概论：建筑与科学、技术、艺术 2. 史论：建筑与时代背景、历史对建筑学的价值 3. 时代与生活：机械论 4. 时代与建筑：时代艺术观 5. 建筑与环境：都市计划与环境
	(一) 讲解新建筑的原理, 从历史背景、社会经济基础出发, 讲述新建筑基本上关于美观、适用、结构上各问题的条件, 以及新建筑的目 (二) 新建筑实例的批判 (criticism), “评论”的意思, 引者注) 新建筑家 (的) 介绍和批判
	● 该课程的参考书都有: <i>Architect For Children, Adventure of Building, Le Corbusier 著; Toward a new Architecture, F.L.Wright 著; On Architecture, F.R.S.Yorke 著; A Key to Modern Architecture, S.Giedion 著; Space, Time and Architecture, S.Giedion 著</i>
	资料来源: 圣约翰大学建筑系档案, 1949年

Syllabus: 'Architectural Theory,' Department of Architecture, St. John's University	
● Outline:	1. Introduction—Architecture and Science, Technique, Art. 2. History & Theory—Architecture and Context, History's Value in Architecture. 3. Time & Living—On Machine 4. Time & Architecture—Artistic Perspectives of Ages 5. Architecture & Circumstance—Urban Planning and Built Environment Explanation for the principles of new architecture, in terms of historical background and socio-economic context, as well as those requirements regarding aesthetics, function and structure, including the goals of new architecture. Criticism of examples of new architecture and of new architects and their survey.
● Course References:	<i>Architecture for Children, Architecture of Building, Le Corbusier's Toward a New Architecture, F. L. Wright's On Architecture, F. R. S. Yorke's A Key to Modern Architecture, Sigfried Giedion's Space, Time, and Architecture.</i>
	Source: Archival dossier at the Department of Architecture, Tongji University, 1949

Figure 4: Course syllabus of Architectural Theory at St. John's University, 1949 (Tongji University, original source is Chinese, English translation is author's)

in tandem with Fry, both modern architects had great impact, respectively, on Huang's UK and US sojourns; and, consequently, his later teaching at St. John's.

Interrogating merely Huang's heyday at Harvard's Graduate School of Design is an unfair way to understand his approach in teaching, which much more of a coalescence of approaches, drawing also upon the AA's legacy. In addition to the Bauhaus's Vorkurs-inspired foundation course in Shanghai, Huang's ground-breaking architectural theory course became part of the fundamental

training, in which he included Yorke's 1939 book *A Key to Modern Architecture* (see figure 4).<sup>35</sup> Moreover, just as MARS proposed their 1942 Greater London Plan as a team of planner-architects, Huang visited slums with students in the city and devoted themselves to the Greater Shanghai Plan with Brandt and other core faculty members honed in the UK, such as Luke Him Sau.

Another leading figure, as far as concerns this section, is Liang Sicheng, who was unique for founding two architectural departments in his career. He helped establish the more modernist department at Beijing's Tsinghua University in 1946, by which time Laing had stepped away from his formalised training in classicism at the University of Pennsylvania. He did so for



Figure 5: Group photo at Planning Man's Physical Environment Conference, Princeton University, 1947 (Princeton University Press)

two reasons: firstly, admitting the conflict between Beaux-arts and modernism; secondly, aligning the conventional Chinese style with modern design through structural rationalism; and his second visit to the US, which enabled him to cope with modern architecture on more than a formalistic level and instead embrace the most progressive ideas of modernism with his global counterparts.

Two well-known reasons that brought Liang to the US in 1940s were his visiting professorship at Yale University in Chinese Art and Architecture, and his advisory service overseeing the construction of United Nation's new headquarter in New York City. However, it is a global picture with Liang amongst Le Corbusier, Oscar Niemeyer, Garnett Soilleux, Louis Skidmore that overshadows many other vital activities, such as his participation at the 'Planning Man's Physical Environment' conference at Princeton University in 1947. As the one and only participant from China, Liang was surrounded not only by scholars, architects and planners, but by building engineers, industrial designers, and social scientists as well (see figure 5).

Amongst those heavyweights, I would like to highlight Joseph Hudnut and William Wurster. On the one hand, they both housed different fields of expertise concerned with the built environment under one roof. On the other, they had influence on Liang's environmentalism

back in Beijing. Not only did he extend the Tsinghua curriculum to include sociology, psychology, economics and political science for budding architects, he also tried to institutionalise a college to accommodate departments including building (in lieu of architecture), landscape architecture, building engineering, industrial arts, and not least, city planning, for which Liang used the title 'physical environment' at the Princeton Conference. This was an event that paved the way, for Laing, to develop his own modernist thinking at the expense of the more formulaic modalities he had developed at the Northeast University.

What Liang endorsed in Tsinghua's curriculum underscored the concept of the holistic design of the physical environment, as evidenced by the fact that he co-signed a letter to the United Nations Educational, Scientific and Cultural Organisation proposing the reform of the training for architects and planners.<sup>36</sup> That letter stated the importance of new architects and planners to understand the interrelation of social, economic and emotional factors in design as 'environmentalists.'

Moreover, in July of 1947, after the Princeton Conference, Liang visited the housing and hydroelectric projects of the Tennessee Valley Authority (TVA). Laing's private correspondence with his American planner Clarence Stein says: "The TVA is wonderful.

Socially, economically, and architecturally. We shall need hundreds of TVAs in China.<sup>37</sup>” Furthermore, TVA chief architect Roland Wank also attended the Princeton Conference and gave a talk on ‘Democratic Planning.’ And not least, these threads are collectively explored in *Democracy on the March*, a book published by TVA chairman David Lilienthal in 1944. Presumably Liang was inspired by and indebted to all these in his expertise during his later career as an architect-planner in Beijing.

## A Tentative Summary

It seems appropriate to undertake a succinct review of the four modernities discussed in this article. Firstly, regarding my description of an unexpected modernity, many returning Chinese architects found it far easier to design, especially in international settlements or foreign concessions, in relation to a Western tradition than a Chinese one (e.g. Allied and Kwan-Chu-Yang Architects, at least in their fledgling careers). Secondly, bricolage modernity: China beheld broader philosophical distinctions aligned not only with the persuasive account of ‘adaptive architecture’ from Cody on American Murphy, but also with a striking resemblance to the works of the Chinese practitioner Lu Yanzhi or the theorist William Chaund. Thirdly, in understanding proto-modernity, the matters of tradition vis-à-vis modernism were sharpened and the balance shifted between *ti* (essence, 體) and *yong* (form, 用), as Rowe and Kuan amalgamate,<sup>38</sup> further away from tradition terms, hence offering a Chinese audience very modern, yet culturally well-grounded, design when Chinese architects, such as Yang Tingbao, learned how to adjust to the locality of their cities. Fourthly, ultra-modernity, progressive Chinese architects, like Huang Jorsen, moved beyond the adjustment of transplanted knowledge or the intervention of new building requirements; too, like Liang Sicheng, set the criteria straight for thoroughly understanding ‘Chineseness’ in architecture whilst taming people’s purview essential to conserve and document its presence, and not least, to reverberate, in turn, to the West.

Seen in this light, this article aims to construct a clearer picture of what precisely constituted the territory—or such a ground—characterised by the influence of Western architectural paradigms within the specific context of China

during the first four decades of the twentieth century, as well as to call into question an arbitrary division between insiders and outsiders involved in this historically-constructed circulation of architectural knowledge by means of practicing, teaching, and institutionalising. Using the approach of multiple modernities, the essay interrogates forms of Chinese architectural modernities (unexpected, bricolage, proto- & ultra-modern) through three inter-related fields of intellectual production: practice, pedagogy, and discourse. These accounts also reverberate how thematically-driven narratives are inextricably selective and simplified through an attempt to craft a local context for a to-be-modern China in the early twentieth century. Namely, modernism’s century in global vision, yet one that privileged Euro-American ideas, methods and territories whilst suppressing ‘others.’ For example, future research that could hail from this essay may touch upon the type of training for architects exercised in Japan.

History, after all, is a record of power. Stories and legends of the early generation of Chinese architects—Yang Tingbao, Tong Jun, Lin Keming, Huang Jorsen and Liang Sicheng, to name a few, with new laws and regulations in pre-war Republican China—should never be downplayed merely as a thread of culture-knowledge exchange between China and the West,<sup>39</sup> let alone the uneven struggle of early Chinese builders and craftsmen against the colonial-like hierarchies. This research is not unlike other related scholars bearing exceptional testimony to this inequity by the turn of last century, but this essay concentrates primarily on the pedagogical and institutional context, especially on so-called proto- and ultra-modernities, which are comparatively under-researched and have largely escaped scholarly attention. The work, in a sense, also reflects on the relationship between pedagogy and practice, investigating the key figures, divergent discourses and institutional developments that collectively characterised China’s intense pedagogic and, consequently, architectural heterogeneity before 1949.

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