Torn between Tradition and Modernity:  
the future of design education directions of China

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ABSTRACT

The rapid economic development of the People's Republic of China (PRC) in the past two decades has transformed commercial design for promoting consumption in the country. Design is no longer viewed as the evil it was once considered to be. The ensuing expansion of design activities and design programs has been phenomenal. China is a craft rich country with a long-standing tradition in arts and crafts. The new modern medium - design, combined with a touch of arts and crafts, technology and marketing, is considered a Western import. This study addresses the development of modern design education from a historical perspective with a focus on the interactions between tradition and modernity in China. The paper reviews the formative years of modern design education development during the Republican period (1911-1945) and the most recent rapid expansion following three decades of isolation from the outside world beginning in 1979. The author argues that the pattern of the development of the last decade was very similar between these two periods. Although the 1978 Open Door policy of market economy reform gave a much clearer concept of what design is to society than in the past, design educational reform in China is yet to be defined. This study aims at initiating further discussion especially on the interaction between modernity and tradition in design educational development in China. Instead of providing a hasty remedy for the present or the future, this paper will provide a basic understanding of the development Chinese design education so far, while providing future direction for continued growth in this area.

Keywords
Tradition, modernity, design education history, China, Chinese culture

1) Introduction

In the foreseeable future, China is expecting to become one of the world’s biggest economic players. With the open market economic policy, commercial design with the purpose of promoting consumption is no longer viewed as the evil it was once considered to be. The ensuing expansion of design activities, such as design competitions, establishment of designers’ associations and design publications, has been phenomenal since the mid-1990s. Among these activities, graphic design was the most prominent area that received public attention from both among local young students and the international design community. Although China has endorsed the Open Door Policy and is implementing market economy reforms since 1979, the
progress in the first decade was slow. It was only the 1990s that graphic design activities started to take off thanks to the increasing business opportunities available to local Chinese graphic designers. The 1990s not only witnessed the growth of Chinese graphic design, but also marked a very important era in the art and design education history of China. Here, I argue that the economic boom in the early 1990s provided business opportunities to the local talent with art skills, enabling them to demonstrate their ability through commercial work. It also required a rapid expansion of design programmes in higher education sector of China from the mid-1990s to present to meet the demand presented by the market.

These developments meant that graphic design work was all of sudden receiving a lot of attention from people from all walks of life, ranging from young students, business people, government officials and academic personnel. This was particularly evident at the initial stages in Shenzhen, a small village adjacent to the border of Hong Kong. Under the economic reforms led by DENG Xiaoping, Shenzhen became the first Special Economic Zone with market economy privileges like those enjoyed in a capitalist system. Due to the geographic proximity of Shenzhen to Hong Kong, Shenzhen was able to attract a good number of investors from overseas and within the country, and soon became a magnet for workers with different skills from all over the nation. Among them were graduates from art and design schools, recruited to work for the newly established private companies on commercial jobs. Within several years, this group of university trained graphic designers accumulated work experience and self-confidence. In the early 1990’s they struck out on their own, establishing their professional reputations in society.

It was in Shenzhen that a group of graphic designers from different provinces formed the first professional graphic designers association in China under the communist regime. The Shenzhen Graphic Design Association was established in 1996. Many of its founding members met each other while they were key participants of the first intra-regional competitive show, Graphic Design in China '92. Among them, CHEN Shoahua, a former teacher at the Xian Academy of Fine Arts and a graduate of Central Academy of Arts and Design (now Academy of Fine Arts at the Tsinghua University). He was one of the prominent designers who received wide recognition for his work on the logo design for the bidding of the 2008 Beijing Olympics in 2001. It was also the Shenzhen Graphic Design Association that first initiated the intra-regional thematic poster design show - Communication, in corporation with designers associations from Taiwan, Hong Kong and Macau in 1996. This event generated a fad of thematic poster show frenzy in various cities in the following years. The poster exhibitions were important because they introduced international design to the local Chinese graphic design community, finally bringing them up to date with international design developments during China’s years of isolation. In 1999, thematic poster exhibitions reached its height with exhibitions such as Opening of Design Museum in Beijing, Shanghai International Poster Invitational Exhibition, and International Fashion and Culture Poster Exhibition in Ningbo (Wong, 2001).

The trend of the poster design exhibitions also resulted in the publishing of numerous exhibition catalogues in high quality offset printing. China had been isolated from the outside world for almost three decades and the flow of information from the outside had been very limited. Now that was soon to change. For the first time, publications
printed in China were able to achieve high quality with an affordable price for local readers. The investment and experience from Hong Kong was transferred from Hong Kong printing companies to the Mainland branches. Areas such as Shenzhen and the Pearl River Delta region benefited the most. Within a short period, a lot of major publishers (including university publishers) rushed to publish design books, hoping to profit from the trend. Although most portfolio books on world design masters seldom have analytical comments or basic informational text, for the Chinese audience, they helped fill the gaps in knowledge of what had happened in the international design world during China’s decades of isolation.

Looking at the trends reviewed above, it is safe to say, the increased potential of commercial opportunities and the availability of the glossy design books were two of the main forces contributing to the latest rapid expansion of design programmes within the higher education sector. Actually under the surface, the “Outline for the Reform and Development of China’s Education” reform policy introduced in 1994 by the Chinese Central Government (Ding, 2001) played an important role. Here I argue that it was because of the government reform policies on economy and education together with the outside commercial forces and publishing phenomenon of design books, contributed to the recent rapid development of design programmes. If the commercial force represents the “modern” force and the old design education represents the “traditional” force, it was a confrontation between these two forces once again. The friction between tradition and modernity marks the history of art and design education in China. In this analysis, there are two main phases to the development of design education in China, which will be discussed in detail. However, in order to discuss the current and the future direction of design education, it is necessary to go back to its past and examine how historical developments contributed to the present and how it affects future developments down the road. However, the objective of this study is not to provide an absolute remedy in any form for the design education reform in China but rather to deliver better understanding of the development design education and point towards future directions.

2) Phase One: the formative years of modern design education in China

China is one of the four ancient civilizations and over its 5000 years has developed a proud tradition of history and heritage. The four ancient inventions of China - compass, gunpowder, paper and printing - belong to the glory of the old Chinese civilization. However, the inward looking policy implemented by the Ming Dynasty in the early 1400s made China suffer greatly in self-isolation for centuries. The proud kingdom was forced open by the Western powers in the mid-1800s, suffering through a century of foreign invasions, civil unrest and wars. During this period, after centuries as a leading civilization, the ancient Chinese culture finally encountered the newly evolved advanced Western technology. So began a new era of Chinese interaction between tradition and modernity. The impact of the modernity that foreign powers brought to China was very important in the context of contemporary Chinese history. It is impossible to begin the inquiry of the future development of design education in China at the macro level in relation to the changing political and economical milieu, without first taking a brief look at this important historical background.
Modern design is considered a Western import in China. The “term ‘design’ does not have a natural equivalent or a directly translatable term in most Asian languages” as pointed out by Rajeshwari Ghose (1990, p. 3) in studies of design and development in South and Southeast Asia. China is a craft rich country with a long tradition of arts and crafts. Many Chinese scholars of art and design education and history will argue that China has a long tradition of modern graphic design equivalent arts and crafts work (see Yuan, 2003; Wang, 1995) or the work of “gongyi 工藝”. Indeed we can easily find ancient graphic work samples, such as the yin-yang and I Ching symbols created in ancient times are the classic examples. Minick and Ping (1990) claim those examples are the creation of balance “within the discipline of Chinese design” and “is deeply rooted in the Confucian conception of the artist-scholar “ (p. 11). They point out the “Confucian tradition defined artistic excellence through the mastery of poetry, music, calligraphy and painting” and so “[I]t is also a key by which the Chinese designer develops a broad interdisciplinary understanding of the design process and is able to form a strong and unifying link between concept and creation” (p. 12).

What Minick and Ping said may make a perfect sense in today’s understanding of design education. However, to the late Qing government, during the turn of the 20th century, the modern design brought by the Western powers was about advanced technology and technical skills training. The term “gongyi” no longer refers exclusively to wide range of ancient arts and folk handicrafts but also to the semi-machine made handicrafts in a modern manufacturing context based on the traditional handicrafts. This term was first incorporated in the early education system for the training on handicraft skills by the late Qing government in 1903. The extension of this term, “gongyi meishu 工藝美術” was borrowed from the Japanese kanji in the late 1920s as a reference to the applied arts (Yuan, 2003).

During that period, the Japanese arts and crafts education model influenced the early gongyi education in late Qing period (Yuan, 2003). With the success of economic and modernization reforms in Japan, the late Qing government found the Japanese model had more relevance to its culture than the Western one. The skills and drawing based vocational gongyi education was slowly picked up in the early 1900s. At the same time, there was heated debate about whether the training of arts and craft should be the enhancement of individual tastes or a practical skill based subject as was already started among Chinese educators. However, with the urgent needs for industrialized development, the skill-based training was in high demand.

During the early 1900s, the commonly used terms were gongyi meishu jiaoyu or meishu jiaoyu (arts and craft education). Other terms such as satyong meishu jiaoyu (applied art education) and tuan jiaoyu (pattern education) were generally used during the Republican period (1911-49). “Tu” means diagram, chart, picture and portrait and can refer to intention, plan and purpose. “An” means a physical object of a narrow long table, bench or a legal record. “Tuan” (pattern) was a phrase that used in Japan to refer to design and the Chinese borrowed it for use in a similar context. In the 1920s, Japanese education had a great influence in China in many disciplines (Ding, 2001) including art and design. Students were sent to Japan to learn and study. Among the overseas Chinese students, the early art and design educator –
CHEN Zhifat was the first graduate from Japan specialized in gongyi tuan. Chen gave a clearer definition of tuan as a drawing and plan for the purpose of producing of artefacts (Yuan, 2003). This general definition of tuan indicated a modern approach of design education in China, and the potential of its practical implications. During this period, all the above terms were used interchangeably to refer to modern design that we understand it today. Apart from the major influence of Japan, new modern Chinese art and design school often used a mixed pedagogy from other Western countries such as Germany, United Kingdom, France and America (Yuan, 2003).

In April 1918, the first government funded art school with a design (tuan) department, National Beijing Arts School, was established under the advocacy of CAI Yuanpei, an important educational reformer in the history of China. Later the school was renamed the National Beijing Specialized Art School and put under the directorship of a newly returned French educated artist LIN Fengmian (CAFA, 2004). Lin was an important modern Chinese artist with a painting style which integrated Western flavours and Chinese spirit. He advocated a revival Chinese art through a process of understanding Western art, researching Chinese traditional art, and then balancing Chinese and Western art to create the new Chinese art with a contemporary touch. His voice was not alone. Examples of the practice of both Chinese and Western theory can be found in the commercial work in the industry during this period.

In the of spring 1934 the first professional design organization in Shanghai, Zhonggong Gongshang Meishu Zuojia Xiehui (China Commercial Artists Association) was established (Yuan, 2003). The association aimed at promoting commerce and business in China (ZGMZX, 1937). The establishment of this professional body marked the early development of “modern design” in China, and the transition of ancient gongyi activities to a modern profession, commercial art and design. In the catalogue of the show organized by the Association, one of their members criticizes the mainstream gongshang meishu in China, which at that time was full of “Western style” imitation work, and there was a lack of studies on how ancient gongyi can adapt to the modern context (ZGMZX, 1937). From the comments of this early pioneer, we can see the word and concept of “design” in modern China did not stop at the terminology of profession and activity, but rather, as a signifier that reflects the national identity.

According to the studies by design education scholar YUAN Xiyang (2003), the formative years of arts and design education during the Republican period suffered from the restriction of a weak social and economic environment, unstable political climate, poor social status of gongyi meishu and inadequate education funding. Although from the year 1911 to 1927 had a small boom of both government and privately funded arts and design schools in Shanghai and other cities, most of them were short lived and suffered from a lack of qualified teachers. Students were in general lacking interests in research and study of arts and design theories. And the influence of the traditional Confucian teaching and practices continued to have an effect on the society and individuals. Yuan’s observations are evidence of the failure of early Chinese modern education reform where reformers call for the “cultural task of molding a ‘modern’ Chinese ‘person’” (Borevskaya, 2001). The promotion of “Chinese learning as the essence and Western learning for its usefulness" (Zong
and Hayhoe, 2001) a slogan originating in the late Qing dynasty was never successful. Similarly, LIN Fengmin and many pioneers advocated a new direction of Chinese arts and design movement and education, one integrating the best essence of Western and Chinese arts in the 1930s. Unfortunately, all the new developments were disrupted because of the Second Sino-Japanese War from 1937 to 1945. I argue that the development during the Republican period was the first example of the tear between tradition and modernity in the history of design education in China.

3) Phase Two: the great expansion and the immense confusion in the new era

The formative years of modern design education in the Chinese language played a very important role in the history of modern design and education in China. The early art and design education during the Republican period was more than just finding a way to teach a modern profession to an ancient civilization, but was the process of modernization and progress required time. The Second World War was followed by three years of civil war with the Chinese Communist Party, and led to the end of the Republican period headed by the National Party. The National Party was defeated and fled to Taiwan. Under the communist regime, arts and design education faced a brand new direction and an ideology opposing capitalism. As locally trained scholar, WANG Shouzhi (1995) emphasizes, design activity under the communists before the introduction of the Open Door policy in 1979, was mostly to service party propaganda. In the period between 1950s through to 1970s, China was isolated from the outside world, except for a short diplomatic relationship with Soviet Union from the early to mid-1950s.

Under the new communist government, all aspects of Chinese society including education were ruled under a system of centralized administration. By the time the People’s Republic of China was established in 1949, it had twelve arts and design schools nation wide. Like all other disciplines in education, the arts and design schools were reorganized and developed centrally copying the Soviet model. Former National Beijing Arts School was restructured with other art schools and became the Central Academy of Fine Arts operated directly under the Central government. The other two major institutes, The Central Academy of Arts and Design in Beijing and China Academy of Arts in Huangzhou were also restructured and renamed during this period (Yuan, 2003). All arts and design schools were under the tight control of the government and pedagogy was skills based after the Soviet model (Lin, 2000). During this isolation period, the Soviet model was the only direct influence from the outside world. Some scholars argue that China’s experience “was not a matter of simply copying the Soviet Union without any critical reflection” (Ding, 2001, p. 173). However, without creative freedom and a market driven economy, the arts and design education suffered greatly together with the whole nation.

When the nation opened up again to the world in 1978, China was lagging behind the industrialized world in all aspects and the nation was desperate to know what had happened to the outside world. Shortly after the announcement of the Open Door policy, some arts and design institutions started to interact with overseas organizations with activities such as Guangzhou Academy of Fine Arts inviting international designers and educators to give lectures to its students. Hong Kong
graphic designers, Kan Tai-keung gave his lecture in 1978 (Wang, 1999), Walter Landor from the United States (Anderson, 1998) and Wucius Wong delivered theirs in 1979 (Yuan, 2003). Among them, American-trained Chinese educator, Wong introduced his two design textbooks at his lecture, *Principles of Two-Dimensional Design* and *Principles of Three-Dimensional Design*. This had a strong impact on the design foundation curriculum reform in China at that time. Within a short period, textbooks on fundamental Bauhaus design principles were introduced indirectly from Hong Kong, Taiwan and Japan and published widely throughout the country (Yuan, 2003).

According to the survey by Yuan (2003), in the beginning of 1980, China had about 2,100 students majoring in arts and design subjects with approximately 750 specialized teachers. The academy was virtually without any updated teaching materials and any information from the outside world. Guided by DENG Xiaoping, education reform was on the way to the new direction of facing “modernization, the world, and the future” (Ding, 2001, p. 174). The cultural exchanges and publishing of overseas design textbooks were evidence of the “conscious effort to both nationalize and internationalize Chinese education” (Ding, 2001, p. 172) under the new era of economic system reform. Ding (2001) points out, “[d]uring this period educators were very active in researching foreign education systems” (p. 177) and their effort contributed greatly to the first major education reform document announced by the Central government in May 1985. This policy document gave higher education institutions greater autonomy over academic planning and administration.

The 1980s can be considered a decade of China’s effort to catching up with the rest of the world. It was a period of learning what they had missed, and searching overseas for appropriate models to reference the new modernization reform. This decade marked a very important nurturing era for a new generation of designers, who later on generated a wave of attention from both national and international audiences. Prominent designers such as WANG Xu, CHEN Fang, CHEN Shaohua, and HAN Jiaoying who became known to the international design sphere in the 1990s, all received their education locally during that period of time. From 1981 to 1987, the expansion of arts and design education was rapid. In 1989 there were about 1,100 arts students and 686 design students graduating in that year alone (Yuan, 2003). Students majoring arts and design were at least four times more than the numbers in the early 1980s. The 1990s marked the emergence of the modern Chinese graphic design. Like the Republican period Chinese design, the new Chinese graphic design merged traditional Chinese design principles with Western sensibilities, making it a perfect match for the global economy that China was entering. However, due to the lack of understanding of the contemporary value of design education among young students and traditional arts schools, the numbers of design graduates failed to meet the emerging commercial needs for the market economy reform.

In 1993, the launch of another important Central educational policy, “Outline for the Reform and Development of China’s Education” finally gave greater autonomy to universities and colleges. Zhong and Hayhoe (2001) summarized this policy as one that “urged universities and colleges to establish mechanisms of self-regulation and responsibility” and gave them rights to “govern themselves under their charter and
organize teaching activities and student admission; to control registration and internal discipline; to issue diplomas and certificates; to hire faculty members and other staff and reward or punish them; to manage and spend funds allocated to the institute; to reject any individual or organization’s illegal interface into teaching and learning activities in the institution; and to enjoy all other rights granted by law” (p. 276). This policy contributed a major force of waves of educational reform among the academia, starting in the mid-1990s and including the discipline of arts and design.

Armed with the new Central policy, now arts and design schools and departments within the university have the autonomy needed to develop according to the market needs. With the academics finally caught up with the emerging commercial demands of economic development in the mid-1990s, the expansion in design education was done at an extraordinary speed. Among the many newly emerged schools and programmes, Wuxi University of Light Industry (later became part of Southern Yangtze University) established the first School of Design in 1995 (Yuan, 2003). In the same year, a new department of design was set up at the Central Academy of Fine Arts and the number of students enrolled soon surpassed other departments. The term on the various graphic design related subjects was officially named as “yishu sheji” (or Design Arts in English) nation wide in that year. By 1998, it has about 270 design related academic programmes established all over the nation. Since then, design programmes at various levels continue to expand rapidly.

The Design Online China website, lists 119 industrial design programmes offered by universities and colleges prior to 2000. In 2001, 30 more new industrial design programmes were added (NIC, 2004). Industrial design programme was the hottest area of study emerging in late 1990s after the boom in graphic design programmes in the mid-1990s. As Yuan (2003) critiques in his studies, the rapid expansion of design education created a lot of problems such as lack of quality assurance in the programmes, teaching quality, facilities and even overlap of the same programmes within the same institutions. The landscape of arts and design education in China at present is full of confusion and chaos. Here, I argue that the pattern of the development of the last decade was very similar to the period before the outbreak of the Second Sino-Japanese War in 1937. The Open Door policy of the market economy reform although gave a much clearer concept of what design is to the society as compared to the past, the design educational reform in China is still yet to be defined. The core issue is still on the interaction between modernization and tradition as LIN Fengmin and other educational reformers from the Republican period once pointed out. The current development of design education is another example of a new rip between tradition and modernity with the similar problems that were experienced in the past.

4) The search of future directions

The ensuing expansion of design activities and design programmes, first graphic design and then industrial design, has been phenomenal. Discussions on the future directions of design education in China are heated. For example, LIN Jiayang (2000), former Dean of the School of Design at the Wuxi University of Light Industry, advocated the change from the outdated Soviet skill-based curriculum model. Since
then, the curriculum on graphic design has improved, as evidenced by the various
textbooks available in the market. The design education reforms came in many
forms including hiring “foreign experts” to lead or as visiting professors. For example,
Shantou University, with the strong financial support of LEE Ka Shing, the rich
businessman in Hong Kong, was able to hire experienced international experts to
lead the changes in the university’s Cheung Kong School of Art and Design. Among
major reforms, the school was restructured from the previous Fine Arts Department in
January 2004 under the deanship of Kan Tai-keung, the internationally renowned
Hong Kong designer. Also, locally trained scholar WANG Shouzhi, associate
professor at the Art Center College of Design, was appointed as the Associate Dean.
WANG Min, a graduate of China Academy of Arts in 1982, holding a Masters degree
from Yale University in 1988 as well as with extensive working experience in the
United States for Adobe and other big clients, was hired as a professor at the Central
Academy of Fine Arts recently.

In fact, in the past fifteen years, China has had no shortage of professor trained
abroad or academic exchanges with overseas institutions. While this has benefits, it
also has drawbacks. Very often, foreign academic scholars are happy to offer their
insights after their brief encounter with China. In the First Doctoral Education in
Design Conference held in 1998, former Chair of the School of Design at the Hong
Kong Polytechnic University recommended China to offer design degrees at the
doctoral level (Clark, 1998). In fact, China already had a doctoral program
established in 1984 at the Central Academy of Arts and Design. Fung and Lo (2001)
proposed China address the “endemic problems” for their future design education
development without acknowledging the struggles of traditional arts and crafts
heritage with the modern education system throughout decades. Indeed the issues
design education that China is confronting are enormous and require well-rounded
contextual in-depth research.

This study aims at initiating further discussion especially on the interaction between
modernity and tradition in the development of design education in China rather than
providing a hasty remedy for the present and the future. The Academy of Arts and
Design at the Tsinghua University (formerly The Central Academy of Arts and
Design) initiated the studies of the Chinese arts and crafts tradition about 15 years
ago. There is a strong call for studies of traditional craft into the modern application
of design so as to develop the national identity of Chinese design (see Yuan, 2003;
Jiang, 2003). Actually back to 1993, in the First Industry Design Meeting in China,
Matthew Turner (1993), design historian who once taught in Hong Kon
g, suggests
“imitation is not necessarily a ‘stage’ on the road to originality” (p. 20). He reminds us
that identity “is produced through a combination of the distinctions we draw between
ourselves and others, and others draw between themselves and us” (p. 21).
Precisely, there is problem, as quite a large gap exists between these two
perceptions.

Most of the Western friends that I encounter expect to see a match of their concept of
“Chinese-ness” from Chinese design and contemporary everyday life. Academics
such as Clive Dilnot (2003) call for “the invention and development of an authentically
modern Chinese culture” (p. 16) in China. But what is his definition of authentic
modern Chinese? Most of Chinese designers that I know, are not interested to cater
to the “Chinese” taste of Westerners. They are driven by a desire to live the same
cmaterial life enjoyed in most Western countries. Where will be the meeting point of
these two perceptions if there is any? The question of the future directions of design
education and design national identity will be positioned on the modern self-image of
China to its people, the consciousness of preservation of cultural heritage and the
cultural understanding of the Western world about contemporary China. To conclude,
a lot of studies still need to be conducted in order to obtain a well-rounded
understanding on the future of design directions of China.

References
and Russia. In Glen Peterson, Ruth Hayhoe, and Yongling Lu (eds.), Education,
Culture, and Identity in Twentieth-Century China, p.31-53. Ann Arbor: The
University of Michigan Press.
Pittsburgh: Carnegie Mellon University.
Ding, Gang. (2001). Nationalization and Internationalization: Two turning points in
China’s education in the twentieth century. In Glen Peterson, Ruth Hayhoe, and
Yongling Lu (eds.), Education, Culture, and Identity in Twentieth-Century China,
171-179.
Ghose, Rajeshwari. (1990). Design and development in South and Southeast Asia:
An overview. In Rajeshwari Ghose (ed.), Design and Development in South and
Southeast Asia, (p. 3-16). Hong Kong: Centre of Asian Studies, University of
Hong Kong.
p. 29-34. [In Chinese]
Century. London: Thames and Hudson.
“Internationalisation.” In YIN Qingshan, CHEN Hanqing, and TAO Jingyang


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