

Birth of an Asian Design:

Origins of the Chinese word 'sheji' and its relationship with the Japanese word 'sekkei'

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Abstract

In the West, the term 'design' is used widely in English-speaking countries, and in many nations such as France. It is used even in the names of schools, for example, 'école supérieure d'art et design.' In East Asia, the Chinese word 'sheji' and the Japanese word 'sekkei' are common, both signifying 'design' using the same Chinese characters. 'Sheji/sekkei' could be even more widely used than the English 'design' itself. However, not much research has been done on the origins of these words despite their historical importance. This study shows that the modern Chinese 'sheji' lexicographically originated in the nineteenth century, and became to be used more widely in the twentieth century, partly affected by the Japanese 'sekkei' and 'dezain'. This study also makes some other comparisons between 'sheji' and 'sekkei' to demonstrate the significant interrelationship between these two equivalents for the English 'design', used by over a billion Asian people.

Keywords

Chinese 'sheji', Japanese 'sekkei', English 'design', lexicography, design education

Introduction

Chinese 'sheji' and Japanese 'sekkei' mean the same and use the same two Chinese characters, corresponding to English 'design'. In East Asia, the Japanese 'dezain' or Korean 'dijain' are also used, which were directly borrowed from English. In Japan and South Korea, the word 'dezain/dijain' is generally used for more artistic design, and another word 'sekkei/seolgye' is used for more technological design. In a wider East Asian perspective, however, the word 'sheji/sekkei' is also interesting and even more important because of its much longer history and larger area where it is used; mainland China, Taiwan, Japan, Korea, and Vietnam (thiết kế).

We can find the ancient usage of 'sheji' in the *Sanguozhi (Records of the Three Kingdoms*) edited in the third century. Used for a campaign plan for a battle, it meant 'plot' or 'conspiracy'. It was used in a strategic meaning rather than artistic or creative one in this historical text. Some studies suggest that modern Chinese 'sheji' as an equivalent for English 'design' was influenced by Japanese 'sekkei' in the early twentieth century. In fact, the Japanese 'sekkei' was first used for the titles of official documents and books in the late nineteenth century, whereas the Chinese 'sheji' seems to have been officially used since the 1920-1930s in this meaning. Although it is partly true, 'sheji' as an equivalent for English 'design' had gradually appeared in the nineteenth century in dictionaries edited and printed in East Asia. This study is based on the analyses of descriptions in various dictionaries of the Chinese, English, and Japanese languages, and the titles and contents of design-related books published in East Asian countries.

Dictionaries by Japan's Dutch-interpreters

The first English dictionary compiled by Japan's Dutch interpreters was the *Angeria Gorin Taisei* in Nagasaki in 1814. In this small dictionary, the English verb 'to design' was translated as 'omonpakaru' which meant 'to consider' or 'to think with a specific purpose in mind.' The English noun 'project' was translated as 'mohan', which meant 'model' or 'example' (Motoki et al, 1814). Another comparable English word 'plan' was not included in this dictionary. In 1830, Walter Henry Medhurst (1796--1857) published the *English and Japanese and Japanese and English Vocabulary* in Batavia. The English verb 'to design' was translated as 'sitagaki (shitagaki)' and 'nozokf (nozoku)'. The English noun

'design' was translated as 'omoi'. The English word 'project' was not included, and 'plan' was translated as 'hetto (hatto)', which meant 'rule' or 'law.'

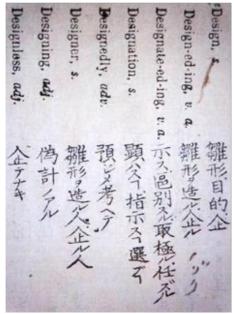


Figure 1: Hori, A Pocket Dictionary of the English and Japanese Language, 1862, Edo (Tokyo)

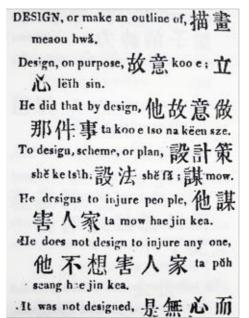


Figure 2: Morrison, An English and Chinese Diction-

The second English dictionary compiled by a Japanese editor was a Pocket Dictionary of the English and Japanese Language published in 1862 in Edo (Tokyo). The editor Hori Tatsunosuke was also a Dutch interpreter of the Tokugawa government. He made this dictionary based on the Part I (English-Dutch) of a New Dictionary of the English and Dutch Languages by H. Picard, published in 1843 and revised in 1857 (Picard, 1843). Hori translated its Dutch texts in order to make his English dictionary. Related English words 'design', 'plan', and 'project' were all translated as 'hinagata' and 'kuwadate.' 'Hinagata' primarily means 'pattern', 'model' or 'miniature', while 'kuwadate' means 'attempt' or 'scheme' (Hori, 1862). Both of these words are more authentic Japanese rather than imported Chinese. The other Japanese translation of 'design' included in this dictionary was 'mokuteki', which means 'aim' or 'purpose' (Figure 1).

Dictionaries by European missionaries in China

'She ji' appeared in the Dictionary of the Chinese Language, edited by an Anglo-Scottish missionary Robert Morrison (1782-1834), printed in Macao in 1822 (Figure 2). Although the English noun 'design' was not translated as 'sheji', the English verb 'to design' was translated as 'she ji ce', by using three Chinese characters which meant 'to make a plan' or 'to make up a scheme' as we can find in ancient Chinese literature since the days of Sanguozhi. 'She ji', the translation of the English verb 'to design' by using two Chinese characters, appeared in the English and Chinese Dictionary, edited by another missionary W. H. Medhurst, published in 1847–1848. He worked in Batavia and in 1842 moved to Shanghai where he founded the London Missionary Society Press.

In an English and Chinese Dictionary edited by a German missionary Wilhelm Lobscheid (1822--1893) and published in Hong Kong in 1866-69, the Chinese word 'sheji' was included as a translation of the English verb 'to design' (Figure 3). By analysing this difference in descriptions among the dictionaries produced in Macao, Batavia, Shanghai, and Hong Kong in the 1820s, 1840s, and 1860s, we can see that 'sheji' was chosen step by step as a translation of English verb 'to design' by British and German missionaries in collaboration with various Chinese advisors and assistants.

During those times, a traditional cultural sphere existed where Chinese characters were used still. In 1879, Lobscheid's English and Chinese Dictionary was revised by Nakamura Keiu as the Dictionary of the English, Chinese, and Japanese Languages with the Japanese Pronunciation and published in Tokyo. 'Sheji' was included in Chinese characters, although Japanese pronunciation was not 'sekkei' but 'hakaru', 'tsumoru', and 'kufusuru' (Figure 4). In 1884, the same dictionary was revised and enlarged by Inoue Tetsujiro, also published in

Tokyo, as the *English and Chinese Dictionary*. It was republished in Shanghai in 1903. Inoue's dictionaries were used in China, Taiwan, Japan, etc.

Figure 3: Lobscheid, *A Dictionary of the English and Chinese Languages*, 1866--1869, Hong Kong

Design, v. t. to sketch, 描畵, 圖畵, 繪樣 子, 畫形圖, カク, kaku, ヒク, liku, ッドル, dzu-doru; to plan, 設計,立計 謀,圖謀,畵策,籌策, ハカル, hakaru, ツモル, tsumoru, クフウスル, ku-fu suru; to purpose, 立定主意, ココロ 押ス、kokoro-zasu、ミコミラタテル、 mi-komi wo tateru; to design evil against any one, 謀害人, ヒトラか 12 n + n n n, hito wo gaisuru wo hakaru; to design for a friend, 想 交朋友, 定俾朋友,トモトスル, tomo to suru, FE=PFN× n, tomo ni ate hameru. Design, n. a plan, 圖, 圖形, 樣子, ッ, dzu, エグ, ye-dzu, ヒナガタ, hinagata; a plan of any work of art

Design, n. a plan, 圖, 圖形, 標子, デ, dzu, エデ, ye-dzu, ヒナガタ, hina-gata; a plan of any work of art drawn out in the mind, 計, 計議, 計策、カリゴト, hahari-goto, クフウ, ku-fū、ツモリ, tsumori; purpose, 意思,故意,志,立心、ココロザシ,kokoro-zashi、ニコニ, mi-komi; through design, 故意, ワザト, vazato、コトサラニ, kotosara ni; to bring about

Figure 4: Lobscheid, revised by Nakamura, et al., A Dictionary of the English, Chinese, and Japanese Languages with Japanese Pronunciation, 1879, Tokyo

Japanese publications in the 1880-1890s

It was at the end of the 1880s when the Japanese word 'sekkei' was included in a dictionary or lexicon. Although various English-Japanese dictionaries were published in the 1870s and 1880s, editors of these publications tried to include more authentic Japanese words as translations of English words such as 'hinagata' or 'moyo' for the English noun 'design', and 'kuwadateru' or 'hakaru' for the English verb 'to design'. Also included were 'zu' (tu) or 'zuan' (tu'an) and 'isho' (yijiang) derived from a poem 'Song of Painting' by a Tang dynasty poet Du Fu.

The *Vocabulary of Mathematical Terms in English and Japanese*, edited by Fujisawa Rikitaro, where the Japanese 'sekkei' was first printed as the only translation of the English noun 'design', was published as a small lexicon in Tokyo in 1889 but rather symbolic, because from the 1890s, the term 'sekkei' started to be used in the titles of publications on architecture and civil engineering in Japan, and later in books on mechanical, electrical and chemical engineering. Fujisawa was a professor at the University of Tokyo where many of his colleagues played important roles as national leaders of various fields. The word 'sekkei' perhaps started to be used in various disciplines of engineering and natural sciences around this time.

In 1894, Yokan Kenchiku Sekkei-sho Shoshiki (Drawings and Specifications of Western Architecture) was published in Tokyo (Figure 5). In 1895, Gakko Kenchiku-zu Setsumei oyobi Sekkei Taiyou (Outline of Specifications and Drawings for School Buildings) was published by the Ministry of Education. The use of the word 'sekkei' also started for the titles of books of mechanical engineering at the end of the nineteenth century. Kikai Sekkei Seizugaku Shoho (Rudiments of Machinery Design and Drawing) was published in 1899 (Matsuo, 1899), followed by Kikai Sekkei oyobi Seizu (Machinery Design and Drawing, 1906), Kikai Sekkei-ho (Machinery Design Method, 1906), etc.

Before the 20th century, a comparison between the presses in Japan and China was difficult, because except for some Christian mission presses, there was scarcely any modern publishing company in China before 1897 when the Shangwu Yinshuguan (The Commercial Press) was established in Shanghai. The number of Chinese books with the titles including 'sheji' gradually increased in the 1950s, more in 1980--1990s, and widely in the 2000s. However, the word 'sheji' had actually appeared in the titles of Chinese books published in the 1920s, which were on 'project' rather than 'design', and in the field of children's education rather than design education.

'Sheji' as project and 'sheji' as design

In the early 1920s, a strong interest in the 'project method' grew both in China and Japan. In August 1920, an article 'Koan-kyoju no Shinri' ('Psychology of the Project Method') appeared in a Japanese educational journal, Teikoku Kyoiku, followed by a series of articles 'Purojekuto Mesoddo toha nanzoya' ('What Is the Project Method') in Jido Kyoiku in March 1921. In China, the article 'Sheji fa shi shenme?' ('What Is the Project Method?') appeared in Jiaoyu Zazhi (Chinese Educational Review) in May 1921, followed by another article 'Study of the Project Method' in July 1921.

The 'project method' is a progressive and practical method of teaching used in the schools of architecture and engineering in Europe in the eighteenth century. In the early twentieth century, William Heard Kilpatrick (1871--1965) expanded the 'project method' into a philosophy of education, based on the pragmatism philosophy of his colleague John Dewey (1859--1952). Dewey visited Japan in February, China in April 1919, and stayed there until 1921, giving more than 200 lectures in various places. Kilpatrick visited Japan in May 1927, China in late May or June. His lectures were translated into Chinese and published in Jiaoyu Zazhi (Educational Review, formerly Chinese Educational Review) in June, September, and October 1927.



Figure 5: Tatekawa, Yokan Kenchiku Sekkei-sho Shoshiki (Drawings and Specifications of Western Architecture), 1894, Tokyo: Kaikosha

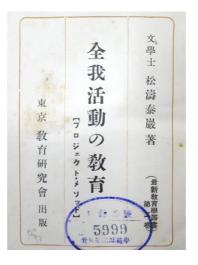




Figure 6: Matsunami, Zenga Katsudo no Kyoiku [Projekto Mesoddo], 1922, Tokyo: Kyoiku Kenkyukai (centre) and Matsunami, Sheji Jiaoyu Daquan (Sekkei Kyoiku Taizen / All about the Project Method), 1923, Shanghai: The Commercial Press (right).

Although sharing similar Chinese characters, different words were occasionally used for the translation of some Western words in China and Japan. In 1903, Lobsheid's English and Chinese Dictionary, revised and enlarged by Inoue and published in Tokyo in 1884, was republished in Shanghai. Although not included in its original version published in Hong Kong in 1866, 'sheji' was included as one of Chinese translations of the English 'project' also. However, it was not the first case. 'Sheji' had already been included as a Chinese translation of not only 'design' but also 'project' in a small English and Chinese Dictionary compiled by an American missionary, I. M. Condit and published by the American Tract Society in 1882.

While the Chinese 'sheji' was used for the English 'project', 'koan' was used in Japanese regarding the 'project method'. Above all, the English 'project' was also written as 'projekuto' in the katakana syllabary mainly used for transcription of foreign language words into Japanese. Therefore, the Japanese 'koan' was not as important as the Chinese 'sheji' in this regard. In 1922, a Japanese book on the 'project method' was published by Matsunami Taigan who studied in the US when Kilpatrick's important article 'The Project Method' was published in the Teachers College Record of Columbia University (Kilpatrick, 1918). Matsunami used neither 'koan' nor 'sheji' but a rather unique title for his book. He also used the katakana 'purojekuto mesoddo' as its subtitle. When translated into Chinese, the Chinese 'sheji' was used for its main title (Figure 6).

The Chinese translation of Matsunami's book was published by the Commercial Press of Shanghai in 1923. The Commercial Press for which Wang Yunwu (1888--1979) served as the chief editor and translator since 1921 became a very important publisher in China. Wang held up two principles, the 'extension of education' and the 'academic independence'. The Commercial Press has also published Jiaoyu Zazhi which carried China's first articles on the 'project method', besides more than ten 'project method' books in the 1920s. In the *Model English-Chinese Dictionary* published by the Commercial Press in 1930, 'sheji' was included as a translation of not 'design' but 'project', and the 'project method' was included as an example of the English word 'project.'

Wang started the Wanyu Wenku (Complete Library) for the Commercial Press in 1929. It might have been modelled on the Banyu Bunko started in Tokyo in 1926, but grew much larger libraries consisting of more than 150,000 titles, covering from philosophy to technology. In 1930, one of the books on the 'project method' published under the Wanyu Wenku had the Chinese term 'sheji' in its title (Figure 7). In 1933, three engineering books were also published under Wanyu Wenku.

They were *Jixie Sheji* (*Machine Design*), *Dianji Sheji* (*Electric Machine Design*), and *Gongchang Sheji* (*Factory Design*). These are among China's first engineering 'sheji' books (Figure 7), following the first educational 'sheji' books published by the Commercial Press in the 1920s. Wang supervised all of these early 'sheji' books in China, covering both education and engineering, using the same Chinese term 'sheji' for the translation of both 'project' and 'design'.

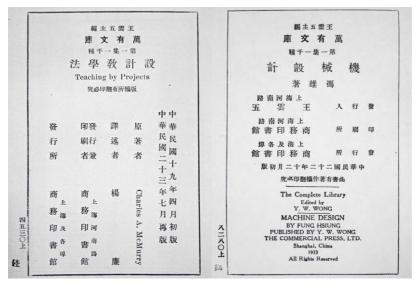




Figure 7: McMurry, *Sheji Jiaoxue Fa (Teaching by Projects*), 1930, Shanghai: The Commercial Press (Wanyu Wenku), reprinted 1934 (left) and Fung, *Jixie Sheji* (*Machine Design*), 1933, Shanghai: The Commercial Press (Wanyu Wenku) (centre).

Figure 8: Kawabe, *Dezain-shu* (*Design Collection*), 1913, Kyoto (right).

Changing 'sheji' and shifting 'sekkei'

The Japanese term 'sekkei' was used mainly for engineering 'design' from the 1890s. In China, the modern 'sheji' was first used for the 'project method' in primary education in the 1920s, but also for engineering design from the early 1930s. Although the number of Chinese books with the word 'sheji' in their titles was much smaller than Japanese books with 'sekkei' in their titles even in the 1940s and 1950s, we can find its usage in various fields, from education to engineering, and from architecture to economics. This is a characteristic of the usage of modern Chinese 'sheji', which was mainly started from the 'project method' used in progressive education.

Although we can find a few early Chinese examples of the word 'sheji' in the design of stage or exhibition in the 1950s, it was basically in the 1980s when it began to be used in the titles of books for artistic design as well as engineering design, that is, after the Great Cultural Revolution of China. During this age, it started in Taiwan or Hong Kong, and sometimes related to Japan.

One of the first Chinese books entitled *Fuzhuang Sheji* (*Fashion Design*) was published in 1969 by the Taiwan Shangwu Yinshuguan which was developed from the Taipei office of the Commercial Press opened in 1948. Wang Yunwu moved to Taiwan in 1951 and became a representative of the Taiwan Shangwu Yinshuguan in 1964. Therefore, Wang was related to all the beginning of the usage of the modern Chinese word 'sheji' in educational method ('project'), engineering ('design'), and more artistic design ('fashion design'), although one of the first modern Chinese books on design, *Zuixin Tu'an Fa*, was also published by the Shanghai Commercial Press in 1926, by using the term 'tu'an' rather than 'sheji'.

The origin of the title of the book Fuzhuang Sheji was 'fukushoku dezain' rather than 'fukuso

sekkei'. Its author Sugino Yoshiko (1892--1978), one of the pioneers of fashion design in Japan, published one of the first Japanese books for which the katakana word 'dezain' was used in its title in 1947. The Japanese word 'dezain', which is closer to the English 'design', actually began to be used before the war. However, the use of this kind of English-origin words during the war was prohibited or at least avoided. One of the first publications with the katakana word 'dezain' in their titles was Dezain-shu (Design Collection) of Kawabe Gyoho published in Kyoto in 1913 (Figure 8). It was a publication of his pattern design. Among periodicals, a monthly journal Dezain was published in Osaka between 1927 and 1933. It was a journal for modern architecture, art, and design.

After the war, the katakana word 'dezain' began to be used in various design such as graphic or industrial design following fashion design. However, the number of books in which 'sekkei' was used in their titles was much more than that of 'dezain' books. It was around the year 2000 when the number of 'dezain' books approached that of 'sekkei' books. In the 2010s, the former is gradually overtaking the latter in Japan.

Conclusion

The modern Chinese word 'sheji' now used for almost all kinds of design from fashion to architecture in Greater China lexicographically originated in the nineteenth century. Although pronounced differently as 'sekkei' in Japan, 'shit ke' in Vietnam, and 'solgye' in Korea, 'sheji' is used by more than a billion East Asian people, which is as many as the total population of Western people who use the English 'design', French 'dessin', Italian 'disegno', Portuguese 'desenho', and Spanish 'diseño'. In a sense, 'sheji/sekkei' is from the beginning a kind of international term of Asia originated in China and gradually applied to modern meanings by Chinese, Japanese, and East Asian people in neighbouring countries, as well as by Western people who lived in East Asia in the nineteenth century.

'Sheji' and 'sekkei' are still experiencing modifications in both countries. In Japan, the katakana word 'dezain' is gradually applied also to technological design for which 'sekkei' has been mostly used. This is a phenomenon in a country where both Chinese characters as ideograms and kana as phonetics are used in combination. In China where phonetics are not used in normal writing and all Western names and terms have to be translated by using Chinese characters, a different change is happening in recent years.

It is the new usage of 'meishu sheii' and 'vishu sheii', by adding 'meishu' (fine arts) or 'vishu' (art) in front of 'sheji' (design). 'Meishu sheji' ('fine arts design') appeared in Chinese book titles in the 1970s and more widely in the 1990s and 2000s. 'Yishu sheji' ('art design' or 'art and design') appeared in the 1990s and even more widely in the 2000s and 2010s. These changes probably coincide with the different stages of the development of design activities including education in Greater China. The appearance of 'meishu sheji' and 'yishu sheji' in China chronologically coincides with the growing usage of 'dezain' over 'sekkei' in Japan.

Although concentrated only on the words for design in East Asia, this study could have perhaps shown some significance of international comparative studies of the words for design which we have been doing mainly in Western languages in collaboration with colleagues across the world for almost 10 years. The exchange of information and historical data is not very active in East Asia despite the great population and still growing design activities, in view of the fact that different writing systems such as Chinese characters, Japanese kana, Korean Hangul, or Vietnamese alphabet are used. We expect further development of international collaboration in East Asia in this kind of research, which may stimulate some related studies on Western words for design again.

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Biographical note

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