Japanese industrial design concepts in the transition from the nineteenth to the twentieth century: with special reference to the Japanese industrial design educators Hirayama Eizo (1855 - 1914) and Matsuoka Hisashi (1862 - 1944)

Industrial design / Kogyoteki Isho / Kogyo Zuan / Japanese industrial design education

In the transition from the nineteenth to the twentieth century, in a departure from the early idea of applying art to industry, Hirayama Eizo and Matsuoka Hisashi discussed industrial design, which was expressed by the Japanese terms of Kogyoteki Isho and Kogyo Zuan. Matsuoka in particular defined the aim of industrial design as the beautification of all industrial products and harmonization of daily life with beauty.

1. Introduction

In this paper, I investigate the concepts of Japanese industrial design, expressed by the Japanese terms Kogyoteki Isho and Kogyo Zuan, in the transition from the nineteenth to the twentieth century, by focusing on the ideas of two leading industrial design educators, Hirayama Eizo (1855-1914) and Matsuoka Hisashi (1862-1944).

Hirayama Eizo studied applied art at the School of Applied Art (Kunstgewerbeschule) in Vienna from 1874 to 1877, and introduced European applied art theories to Japan by translating important passages from Jacob von Flaks's book titled Aesthetik des Kunstgewerbe, Felix Kanitz’s book titled Katechismus der Ornamentik and Gottfried Semper’s book titled Der Stil in the 1890s (Amagai 2003). Hirayama worked for the Product Design Department (Seihin Gazu Gakari) in the late 1870s and for the Patent Bureau from the late 1880s. He educated students on industrial design at the Training Institute of Industrial Teachers (Kogyo Kyoin Yosejo) and at the Higher Technological School of Tokyo (Tokyo Koto Kogyo Gakko, originally known as Tokyo Kogyo Gakko) from 1897 to 1907.

Matsuoka Hisashi studied Western-style painting under the direction of Antonio Fontanesi, an Italian painter, at an art school called Kobu Bijutsu Gakko in Tokyo from 1876 to 1878, and studied fine art, especially painting, at the Royal Institute of Fine Art in Rome (Regio Istituto di Belle Arti in Roma) from 1881 to 1887. After returning to Japan, he established an art association called Meiji Bijutsu Kai and worked for the Patent Bureau in the 1890s. He taught industrial design at the Higher Technological School of Tokyo (Tokyo Koto Kogyo Gakko) from 1906 to 1914. By publishing many articles on design, especially industrial design (Kogyo Zuan), Hirayama and Matsuoka played a leading role in Japanese industrial design education from the 1890s to the 1910s. Their ideas on industrial design showed changes from the early idea of applying art to industry to the new idea of beautifying all industrial products for daily use, on which the establishment of a new institution for industrial design education was based in the 1920s.

2. Kogyoteki Isho and Kogyo Zuan as industrial design

After the Meiji Restoration (Meiji Ishin) of 1868, Japanese art and design were promoted from above. During the 1870s and the 1880s, the Japanese government established schools, museums, organizations and regulations for art and industry by following Western models, which was one link in a continuing chain of the efforts to revise the unequal treaties. In 1876, the Ministry of Home Works established an art school called Kobu Bijutsu Gakko to teach Western-style painting and sculpture (Amagai 2003: 35-44). This art school was attached to the Imperial College of Engineering (Kobo Daigakko) to encourage new Japanese industry. In his book, Henry Dyer, the first principal of the Imperial College of Engineering, wrote:

The chief motive which urged the Japanese in their adoption of Western civilization was neither the desire for increased wealth nor the blind imitation of Western customs; it was the sense of honor which cannot bear to be looked down upon as an inferior power. The new system of education was adopted in order that men might be trained who were able to guide the destinies of the nation under the altered conditions. The laws and the administration of justice were brought into harmony with Western ideas and practice that foreigners might feel they had security for the safety of their persons and property. (Dyer 1904: 311)

At the same time, the Home Ministry organized Western-style museums to promote native art industry, and established the Product Design Department (Seihin Gazu Gakari) to provide good design drawings to manufacturers whose products were mainly porcelain, metal work and lacquer works. The Department’s aim was to prepare good exhibits, some of which were called Hyakko Zuan to express industrial design, for national and international exhibitions. In 1885, the government abolished the Product Design Department and established the Patent Bureau. In 1888, the first Japanese design regulations called Isho Jorei were enacted not only to protect design copyrights but also to promote native industry and to encourage the development of the idea of applying art to industry (Amagai 2003).

The excesses of Westernization, however, provoked nationalistic reactions. In 1883, the government decided to close the Kobu Bijutsu Gakko and to open a new art school in order to develop...
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young artists in Japanese-style arts, excluding Western-style drawing, painting and sculpture. In 1889, the Ministry of Education established a new art school called *Tokyo Bijutsu Gakko* to teach Japanese-style painting (*Kaigo*), sculpture (*Chokoku*), metal work (*Kinko*) and lacquer work (*Shikko*). In the same year, the Imperial Household organized the Imperial Museum (*Teikoku Hakubutsu Kan*) to collect and preserve historic works of Japanese traditional art and art industry, and moreover established the Institution of Imperial Artists (*Teisitu Gigei In*) to encourage skillful artists and craftsman in the Japanese style. These institutions played an important role in the development of the Japanese-style art industry: ceramics (*Yogyo*), cloisonné (*Shippo*), metal work (*Kinko*) and lacquer work (*Shikko*), which were called *Bijutsu Kogei* (Masaki 1908).

By the 1890s, Japan had restored the country’s independence with respect to tariffs and legal jurisdiction by bringing the unequal treaties to an end, and new Japanese industry developed. Many joint-stock companies were established and produced new consumer goods comprising Western clothing, buttons, eyeglasses, matches, tin boxes, toys, clocks, enameled ironware, and bicycles. Suzuki Junichiro, a lecturer of industrial economics in the Higher Technological School of Tokyo, wrote:

> Up to this period the manufactured articles were mostly intended for home consumption, but subsequently they were made with the object of export, either to Oriental or Occidental countries, and to suit the tastes and the changes of fashion in each foreign market. Business men made the tour of the world in order to study the requirements of foreign markets, while others opened a new field for our products in Australia, the Malay Islands, and South America, both of which proceedings tended greatly to extend the oversea export of our manufactures. (Suzuki 1908: 546-547)

Against this backdrop, the Japanese term *Kogyo Zuan* and *Kogyo Zuan* came into being to express industrial design. The term *Kogyo Zuan* was first appeared in the Japanese translation of an international treaty called Paris Convention for the Protection of Industrial Property, which Japan ratified in 1899, and next in the Design Act called *Isho Ho*, which was a revised version of the Design Regulations (*Isho Jorei*), in 1903. The term *Kogyo Zuan* appeared in the name of a new department, which was established at the Training Institution of Industrial Teachers in 1899 and at the Higher Technological School of Tokyo in 1899, to educate students not on art industry but on industrial design. The new department was named *Kogyo Zuan Ka* to express the department of industrial design with the term *Kogyo Zuan* meaning industrial design.

The Paris Convention gave a wide interpretation of industrial property including industrial design, but it did not detail the concept of industrial design itself. The Design Act gave a legal definition of design, but it was too formal and strict to understand the concept of industrial design. Holding a post in the Patent Bureau, Hirayama started to educate students at the depart-

ment of industrial design in 1897, and was appointed head of the department in 1899. Taking over the head of the department from Hirayama, Matsuoka started to teach industrial design at the Higher Technological School of Tokyo in 1906. As the leading design educators, Hirayama and Matsuoka discussed both educationally and generally the ideal Japanese industrial design in their articles published from the 1890s to the 1910s.

3. **Hirayama’s idea of elevating the aesthetic value of industrial products**

The idea of applying art to industry, which was introduced by Hirayama from the 1880s and the 1890s, was based on Historicism. By the 1900s, Hirayama had broken away from Historicism, and had the idea of elevating the aesthetic value of industrial products not by applying traditional style paintings and sculptures but by designing new ornamentation. It was in the 1910s that Hirayama directly learned about new European art called *Art Nouveau* and *Secession*.

In his article on the element of design (Hirayama 1902), referring to Frank G. Jackson’s book titled *Theory and Practice of Design*, Hirayama pointed out that the industrial designer should design ornamentation, which was developed by the addition of elements derived not from historical art works but from every part of the natural world. In his article on the relationship between invention and design (Hirayama 1904), Hirayama pointed out that the industrial products for daily life should serve the varied necessities of mankind and the desire of beauty, in other words, beauty and utility should unite to form the perfect industrial product. Hirayama explained that the aim of *Isho*, which expressed design, was to elevate the aesthetic value of conveniences without interfering with their utility while the aim of *Hatsu-me*, which expressed invention, was to create and improve convenience.

Hirayama retired from the department of industrial design in 1907, and he was dispatched to the world fair held in Turin, Italy, as a member of the Japanese Exhibition Committee in 1911. During the fair, he made a short trip from Turin to Vienna, where he learned firsthand about many industrial products and furniture, which were based on the new European art called *Art Nouveau* and *Secession*. In his article on the world fair (Hirayama 1912), Hirayama reported that the style of many European products showed the change from the traditional Western art style derived from Greek and Roman style, which was based on Historicism, to the new style, which was characterized by Japanese-style or Chinese-style, especially by simple form, irregular ornamentation and soft color. And moreover, reporting that new European furniture had shown the change from the complex form with carving to the simple and plain form, Hirayama criticized Japanese industrial designers for being all too particular about the details of ornamentation. In his article on the improvement of Japanese goods (Hirayama 1913), Hirayama advised Japanese industrial designers to move beyond *Art Nouveau* and *Secession*, which had spread quickly throughout Japan, and to
design new Japanese ornamentation, and he finally defined that the industrial designer should refine and elaborate not ornamentation but form to elevate the aesthetic value of useful products for daily life.

4. Matsuoka’s idea of beautifying all industrial products

Matsuoka published an article on the Design Act in 1906, when he started to teach industrial design at the Higher Technological School of Tokyo. During the early 1910s, Matsuoka published a series of articles on the history of Western architecture and on the improvement of Japanese goods. Matsuoka discussed the aim of industrial design, and advocated the idea of beautifying all industrial products in articles published in the late 1910s.

In his article published in 1906 (Matsuoka 1906), pointing out that Art Nouveau and Secession, whose character had been mostly derived from Japanese art and art industry, were in vogue among Japanese designers, Matsuoka advised them against imitating European art and design. And he emphasized that the designer should devote himself to displaying his own originality in designing. In Matsuoka’s view (Matsuoka 1914), some Japanese designers enthusiastically copied the old Japanese art, some the new European art, while others mixed Japanese art and Western art. Matsuoka criticized them for being the cult of ‘art for art’s sake’. He emphasized that the industrial designer should give priority to the utility, and encouraged Japanese industrial designers to express their own originality in the designing of new industrial products for daily use. Matsuoka defined:

The industrial designer should accomplish his duty to serve the purpose of beautifying all industrial products by designing daily necessities, common machines and even the ditch covers, and to elevate public taste by harmonizing daily life with beauty. (Matsuoka 1914-4)

At the same time, Matsuoka, as the head of the department of industrial design, requested the government to make efforts to raise the status of the industrial designer, but the government decided to close the department of industrial design and to affiliate its students with the Tokyo Art School (Tokyo Bijutsu Gakko) against Matsuoka’s wishes in 1914 when Hirayama died. Matsuoka strongly argued against the decision of the government, and he conducted a campaign to establish a new institution for industrial design education in Tokyo with his colleague from the department of industrial design, Yasuda Rokuzo, who had studied applied art under Josef Hoffmann at the school of applied art in Vienna from 1911 to 1912.

Publishing many articles to establish a new school for industrial design and to promote the development of design called Zuan, Matsuoka eagerly stressed the idea of beautifying all industrial products for daily use (Matsuoka 1917). Maintaining the same stance as Matsuoka, Yasuda published articles serially in a newspaper from 1916 to 1917, in which he insisted that the government should develop promising young designers to elevate the quality of Japanese industrial products in general, which he called Kogei-hin, through the application of arts and industrial technology (Yasuda 1917).

Matsuoka and Yasuda finally succeeded in their attempts to establish a new industrial design school, which was named Tokyo Koto Kogei Gakko (The Tokyo Higher School of Arts and Technology), in 1921. The term Kogei Zuan was replaced by the term Kogei Zuan to express the broadened concept of industrial design at the new school. In his address to the first students, Matsuoka, as the first principal of the new school, defined Kogei as techniques to produce beautiful and useful goods through the application of the mechanical, electric and chemical industries, and he emphasized that the aim of Kogei Zuan was to harmonize arts with industrial technology and to beautify industrial products for daily use in order to elevate their market value (Matsuoka 1921). It was in the 1920s that Matsuoka’s idea of beautifying all industrial products was finally realized.

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References


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About the author

AMAGAI Yoshinori is a professor of aesthetics and design history at the Akita Municipal Junior College of Arts and Crafts in Japan, and is conducting research on the history of Japanese applied art and design. He published a book titled _Oyo Bijutsu Shiso Donyu no Rekishi_ in 2010. <amagai@amcac.ac.jp>