

Chapter 8

The Principle of Nishiki-e

Japan in the Edo era had technologies to make it possible to mass-produce nishiki-e, plate prints in multicolor. Nishiki-e is one of the most original art forms created by the Japanese. Nishiki-e artwork was a creative commodity for the general public. It not only nurtured the Japanese people's sensitivity to art over the centuries, but also inspired French impressionists so much that its influence is still evident in today's visual art of the world.

It was rare in those days to have a product where so much value was added into one piece of paper that was being mass produced. However, because the whole production process required only simple materials--paper and board and painting tools--the energy consumption did not rise above the levels of solar energy obtained during the preceding few years.

We call this ability to rapidly create great value while best meeting consumer needs with only limited resources, the "Nishiki-e Principle". It is for certain this principle was the basis for leading a better-quality life while only using scarce solar energy resources.

All nishiki-e materials, except for the blades of the woodblock carving knives, were made from sustainable botanical resources. Other than the simple materials, only the detailed work of human hands is required. The Japanese paper used for Nishiki-e were made from young branches of paper mulberry matured in the preceding year or two at the most. Woodblocks were mainly made from cherry wood and craftsman fully utilized this resource, by using both sides of woodblock boards. Except in the case where one whole side was one color, one woodblock would be carved for several colors. It was typical to use only five woodblocks to print a nishiki-e in ten colors. More interestingly, professional craftsmen were hired specifically to shave used woodblock boards flat so that they could be reused over and over.

Since the technology of nishiki-e had made it possible to print complex colors and figures easily, nishiki-e became a popular local product of the Edo town, being also called "azuma-nishiki-e" or simply, "edo-e." As many nishiki-e shops were built in several parts of Edo town in the early 19th century, the nishiki-e price fell down to an affordable 16 or 32 mon, often found in children's pocket money. ("Mon" is a monetary unit of the Edo Period. Sixteen mon is about U.S.\$3-6.)

Just like today's children collect their favorite character goods, it appears that their Japanese counterparts in the Edo era bought woodcut prints produced by their favorite artists such as Toyokuni or Kunisada (popular nishiki-e artists of the era). Those ordinary children who lived in the community flats along narrow streets were playing with picture cards created by artists who have become highly renowned and valued worldwide today.

In a matured society, some people appear to become patrons and aid creators of artwork. In Europe, such patrons were found among royalties, aristocracy or rich local magnates. In Edo Japan, plain commoners including children fulfilled the role of patrons through the purchase of their favorite nishiki-e woodcut prints with pocket change. Thanks to the invention of nishiki-e, the Japanese received many benefits--some of which they were not conscious of.

The effect of the nishiki-e principle is seen most visibly in hand-crafted products. Today manual production may appear to be inferior to mass-production in efficiency, as no matter how experienced the artists are they can never make exactly the same item in shape or function twice. However, this apparent inefficiency in nishiki-e was in fact a huge benefit in disguise. The strongest point is that because each item is slightly different, customers could easily choose the items that struck their fancy. It is said in Japanese,

"ten people, ten colors"--hand-made art is easily adapted for each person's unique tastes.

Take the example of a hoe, a farming tool used for plowing. In times where agriculture meant labor, farmers used hoes and relied on the local farm-blacksmiths called "Nokaji" who manually made farming tools for them. If you have never broken ground, you may think a hoe is just a stick with an iron plate on top, but there is more to it than this. A good, easy-to-use hoe has a subtly different shape for use, depending on the purpose of its work and soil quality of the specific ground.

The experienced farm-blacksmith forged steel and made the handle into different shapes to suit each of his customers, based on his expert knowledge about the individual farmer and the soil on his property. In fact, every product was all specially ordered. According to "Mura-no kajiya" which means "Village Blacksmith" by Setsuko & Yoichiro Kazuki, published by Heibonsha, a veteran farm-blacksmith not only had an astonishing number of different hoe shapes in his repertoire reaching into the hundreds, but also could tell who the hoe belonged to by the look of its wear and tear.

Viewed in this light, life in the Edo era can be characterized by a great deal of luxury of customization, but this was luxury measured by quality, not quantity.

For a veteran farm-blacksmith, it didn't take long or cost much at all in labor, steel, or energy to accommodate clients' needs. However, it made a significant difference for the farmer between working in the field all day with a hoe that fit his hands and suited the land and working with one that didn't. In the end, this subtle difference ultimately led to greater harvest and profit.

Kimono, the traditional Japanese attire, has remained almost unchanged from the mid Edo era to this day. Compared to western clothes, a kimono has a far simpler structure. From a bolt of fabric 36 centimeters wide and 11.4 meters long, all the eight parts necessary for the whole attire--two sleeves, two lower front bodies, one back body, one upper front body, and inside and outer collars--are simply cut out in straight lines and sewn together.

This straight cutting leaves virtually no useless fabric behind, whereas, in the process of making western clothes, ten percent of the fabric is wasted.

The kimono has always endured passing fads, thanks to its simple structure and straight cutting form. As long as the fabric remains intact, you can sport a kimono from the Edo Period even centuries later with just a few simple adjustments. It's fair to say that the kimono has never been and will never be influenced by "fashion trends" each year like today's western clothes. It can also be easily adapted to any occasion by how you wear it. You can present a new look just by choosing a different detachable collar on top or beneath. And there are many ways to adjust a kimono to any size or taste of the person wearing it, or to any temperature of the season.

So simple is the structure of a kimono, it can easily be re-dyed to a different color. Your favorite kimono can still be worn many years later by dyeing it a suitable color over and over again. This illustrates the kimono's superior longevity and versatility to western clothes that are made to a certain size, style or fashion. It is clear that the form of kimono embodies the Japanese wisdom in those times to live abundantly with minimum resources. And this is exactly what we call the nishiki-e principle, pronouncing that the intricate adjustment to individual needs can offset inconveniences of lack of quantity.

= = =

Copyright(C) 2004 Japan for Sustainability All Rights Reserved.