

## Characteristics of Japanese Block Printed Books in the Edo Period: 1603–1867

### INTRODUCTION

In 2003 I had an opportunity to examine Japanese book-bindings from the Edo period (1603–1867) in the Asian Division of the Library of Congress. Approximately 200 items were reviewed, and the structures, materials, and decoration of the bindings were recorded. The Edo period texts were almost exclusively produced by wood-block printing on Japanese paper bound with a side-stitch into paper covers (fig. 1). While the binding style is relatively simple and seems less diverse than western bindings, I have found wide variations in cover decoration as well as dimensions, both of which are associated with certain genres of writing. Today's scholars of Edo literature agree that students and researchers should be able to identify easily the genre of a monograph by looking at its physical appearance. Therefore, it is important for conservators to gain better understanding of this topic to avoid mistakenly ignoring or destroying such historical evidence.

This paper highlights the results of my article published in the March 2009 issue of the *Journal of the Institute of Conservation (JIC)*, formerly *The Paper Conservator* (Hioki 2009). Since limited subjects and references are included in this paper, those interested are encouraged to read the original article. In addition, two other papers in the same *JIC* issue may be of use (Munn 2009; Song 2009). They discuss traditional Eastern Asian bindings similar to the Edo books.

### EDO PERIOD

In 1603, Shogun Ieyasu Tokugawa (1543–1616) established hegemony over a country that had seen intermittent warfare between various provincial warlords over much of the past two centuries. The Tokugawa shogunate controlled Japan during the Edo period from 1603 to 1867, bringing stability and prosperity to the society and economy. By early 1700, the

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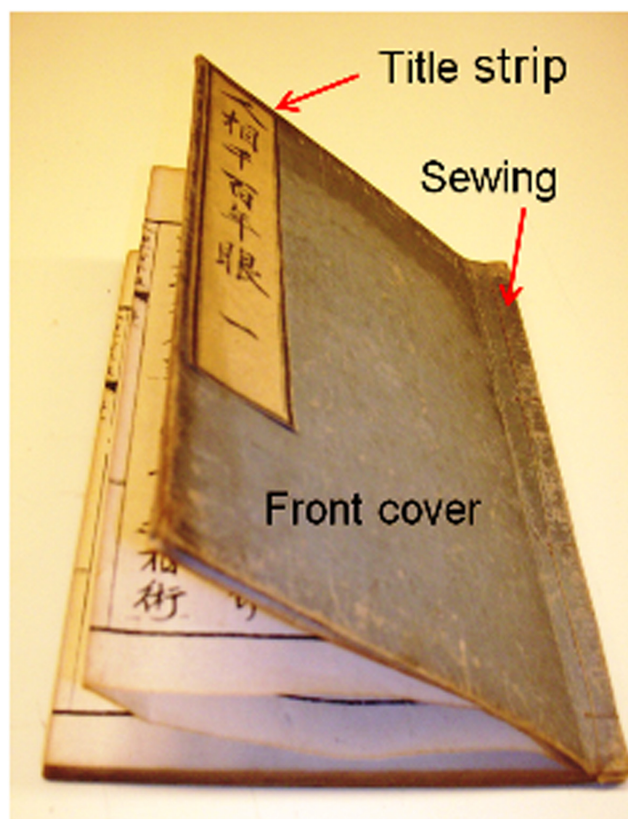


Fig. 1. Example of a side-stitched binding showing the sewn right-hand edge and folded fore-edge of the text block pages

capital Edo (now Tokyo) had become the largest metropolitan center in Japan with a population of over one million.

With urbanization, economic growth, and the government policy of rule by law, literacy increased during this period. By the end of the Edo period, approximately 50–60% of the Japanese population was literate. This represented a growth of literacy that was due to the reinvention of print technology and the emergence of the commercial publishing industry.

## WOODBLOCK PRINTING

Until the seventeenth century most Japanese texts were circulated in the form of manuscripts. Although printing had been introduced as early as the eighth century, it was practically a Buddhist monopoly for centuries. Buddhist institutions produced very small print runs using woodblocks. Around the 1590s movable type had been introduced to Japan from Europe and Korea. For a half century court aristocrats, political elites, and commercial publishers used movable type technology, and over 500 titles were printed.

However, around the 1640s woodblock printing re-emerged because of its financial advantages over movable type. By 1640 there were over one hundred commercial publishers in Kyoto. By 1700 the number doubled. Publishers usually ran a small number of copies at one time and reprinted repeatedly, using the same woodblocks for an extended period—sometimes over one hundred years. The curved wooden blocks could be stored and used again as the market demanded. In addition, both a publisher's right to print and the blocks themselves had capital value, and publishers could make a profit by selling their blocks. The reversed images of both the text and illustrations were carved on the blocks. Each sheet was printed on only one side because of the thin and translucent Japanese paper. The printed paper then was folded in half so the printed side was outermost.

## PAPER

During the Edo period, paper became one of the greatest sources of tax income for most local governments or *han*. Under the *han's* monopoly system and their promotion of papermaking, paper production grew throughout the country. Before the Edo period, paper was expensive and used exclusively for writing. As the demand for paper grew, the production of mass-produced and inexpensive paper increased for different uses such as printed books, stationery, and even clothing.

A type of mass-produced, low-quality paper was recycled paper, which was made from waste paper that was supplied to papermakers by waste business communities that had developed in the slums of Edo.<sup>1</sup> Generally, recycled paper was employed for the covers of books. As shown in figure 2, the waste paper had not been sorted well, resulting in high content of non-paper waste such as fabric, animal hair, straw, and dust. And since techniques of ink removal were not available at the time, the final paper was usually gray in color.

## BOOK SIZE

During the Edo period, paper sizes were standardized. As a result, book sizes were standardized. Paper for printed



Fig. 2. Example of recycled paper used for a book cover

book production was consolidated into two standard sizes: the larger paper, or *mino* size paper, which measured 10–12 inches long by 15–17 inches wide; and the smaller paper, or *hanshi* size paper, which measured 9–10 inches long by 13–14 inches wide. Unlike factory-made twentieth-century paper, the standardization of paper sizes and book sizes was crude, varying slightly from one papermaker to the next. Papers for books would be either folded or cut, and they are categorised based on their dimensions. The resulting standard book sizes are shown in figure 3.

Generally, the publications in the early Edo period, including serious studies such as classic literature, medical texts, and Buddhist scriptures, were made in the largest size of *ō bon*, which measured approximately 10 inches long by 7 inches wide. As literacy increased, book sizes became smaller and shifted from *ō bon* size to *hanshi bon* size, which measured approximately 9 inches by 6 inches. Then, in the later Edo period, new genres of popular fiction appeared in the

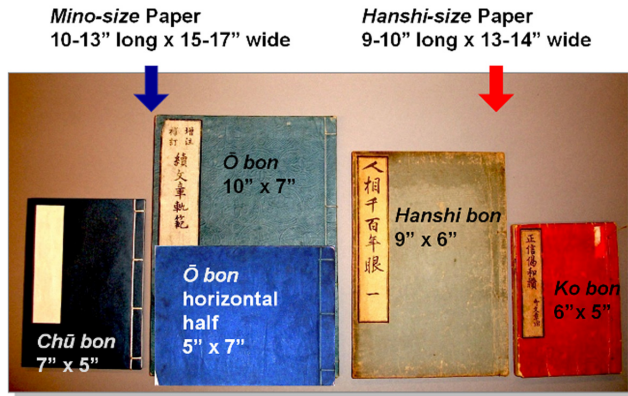


Fig. 3. Comparison of four vertical standard book sizes and one horizontal book. Ō bon (Mino sized book), chū bon (medium sized book) and yoko-chūbon (ō bon horizontal half sized book) are made from mino size paper. Hanshi bon and ko bon are made from hanshi size paper



Fig. 4. Example of a book cover construction showing the laminated layers of recycled paper and a sheet of dyed paper and turn-ins

smaller book size of *chū bon*, which measured 7 inches long by 5 inches wide.

Practical books such as how-to manuals, travel guides, and pocket books were made in the smallest size of *ko bon*, which measured approximately 6 inches long by 5 inches wide. In addition to the vertical format, horizontal books, such as *ō bon* horizontal half, which measured 5 inches long by 7 inches wide, were also often employed for practical books.

COVER CONSTRUCTION

The majority of the covers were constructed of layers of poor-quality paper—generally recycled paper—and an outermost sheet of thin, dyed paper. Layers of sheets were cut to size allowing 1–2 cm turn-ins on all sides (fig. 4).

COVER DECORATION

Before the early eighteenth century, covers usually had simple monochromatic colors such as brown or blue, and then brighter colors as well as cover decorations became common. A major reason for this diversity is the flourishing commercial publishing industry. At the peak of the printed culture in the eighteenth century, over 10,000 titles were published and millions of copies were circulated among the population. The total number of commercial publishers exceeded 6,000 during the Edo period. Covers were one of the most effective merchandizing tools. Eye-catching, multi-colored printed images decorated the covers of fiction books; popular *ukiyo-e* artists designed the cover illustrations.

Certain genres of text became associated with certain cover designs as well as book sizes. The below list outlines the selected cover decoration styles for commercially printed books:

- *Chestnut shell color* (*kurikawa hyōshi* 栗表紙) covers were a plain brown color that was produced by brushing the cover with persimmon tannin juice. This was the most common cover style before 1644 and was usually found on books about Buddhism and medicine. Chestnut shell covers have a lustrous shine from the persimmon juice. Because of its association with older publications, covers from eighteenth- and nineteenth-century editions were sometimes replaced with chestnut shell-colored covers taken from other books to fake authenticity.
- *Burnished* (艶だし, 空ずり) cover decoration style started in the early Edo period, and was frequently employed until the early twentieth century. In its process, the verso of a laminated paper cover was placed on a wooden block that had been carved with the cover design. The paper surface was rubbed with a smooth boar’s tusk or a piece of ceramic until the burnished design was exhibited lightly on

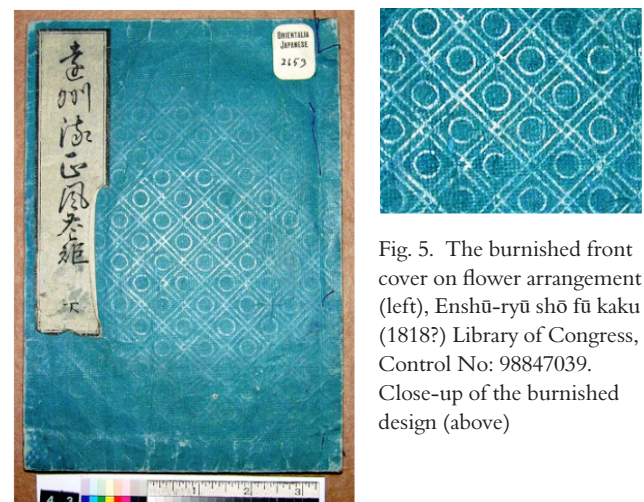


Fig. 5. The burnished front cover on flower arrangement (left), Enshū-ryū shō fū kaku (1818?) Library of Congress, Control No: 98847039. Close-up of the burnished design (above)

the paper's surface. Various designs, usually small repeated patterns, were used (fig. 5). Burnished decoration is delicate and subtle. It was easily worn out and missed. As shown in figure 6, the recto of the cover seems to have no

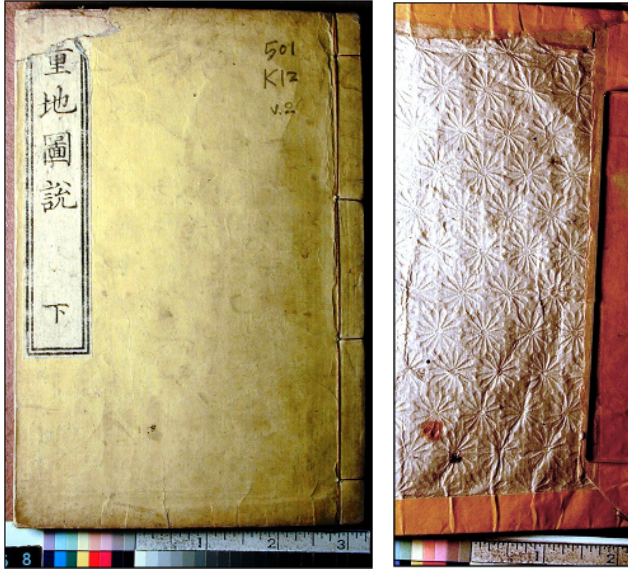


Fig. 6. Recto of burnished front cover (left) and verso of the cover (right), showing the impressions of the small flower design. Ryōchi zusetu, Koei Kai, Edo (1852?), Library of Congress, Control No: 98847154

decoration, but the verso preserves the impression from the curved block.

- *Embossed covers* became common in the nineteenth century. The paper cover was first moistened before being placed recto-down on the carved wooden block. Pressure was applied to impress the design onto the sheet. Various designs were used, ranging from simple geometric patterns to elaborate drawings that might depict, for example, a landscape and plants (fig. 7).
- *Clove brush line* (丁子引き, 刷毛引き) was a decorative cover-style in which horizontal, diagonal lines, or lattice patterns were drawn onto the cover by hand with a brush. Originally, these lines were drawn using yellowish light-brown dye made from the floral buds of cloves. Clove dye was replaced with cheaper by-products of safflower dye, and then gray dye made from ash. This decoration was considered to be one of the cheapest covers and became more common in the eighteenth century (fig. 8).
- *Colored covers*. New popular fiction genres flourished from the late seventeenth century to the end of the nineteenth century. These popular fiction genres included red-covered books, black-covered books, blue-covered books, yellow-covered books, and combined books. They were grouped by the cover color as well as content.

Red-covered books were the earliest group of popular fiction appearing in the late seventeenth century, and had plain bright-red (*niro* 丹色) covers. The colorants



LEFT TO RIGHT

Fig. 7. Front cover embossed with plant design on a book about geography and industries, *Nippon sankai meibutsu zue*, Tessai Hirase (not before 1797), Library of Congress, Control No: 98847077

Fig. 8. Front cover showing clove brush line decoration of a book of Chinese poems. *Kaifusō*, Kyoto (1793), Library of Congress, Control No: 98847008

Fig. 9. Front cover of yellow-covered book. *Kamado shōgun kanryaku no maki*, Hokusai Katsushika, Edo (1800?), Library of Congress, Control No: 2005550672

employed were inorganic pigments, probably red lead ( $Pb_3O_4$ ) or cinnabar/vermilion composed of mercury sulphide ( $HgS$ ). Red-covered books were replaced by black-covered books (colored with black carbon ink) and then by blue-covered books, which dealt with more adult subjects. The blue-covered books were replaced by yellow-covered books, which were dyed with saffron yellow or other organic yellow. Yellow-covered books signified satiric and didactic literature, and often had color-printed, illustrated title slips (fig. 9). The color of blue-covered books was actually a yellow-green made by mixing the saffron yellow of turmeric, or a variety of organic yellows, and blue dye extracted from the dayflower. The dayflower dye was so light-sensitive that it faded, leaving behind the visible yellow color only. The result is that existing blue-covered books look the same color as yellow-covered books. It is not clear why red was replaced by black and blue. One theory is that the increase in demand caused the price of the red pigments to rise, resulting in the use of cheaper, alternative organic dyes. Likewise, blue was replaced by yellow probably because the extra step for mixing two colors (yellow and blue dyes) to make blue was eliminated as the demand increased.

The stories, which had consisted of two or three fascicles in yellow-covered books, were gradually lengthened and the number of fascicles in a story increased. In order to minimize the binding cost, several fascicles were bound together to form a combined book (fig. 10). The illustrated title strips used for yellow-covered books gave way to multi-colored, woodblock-illustrated covers to eliminate the extra step of placing title strips on the cover.

#### POPULAR FICTION

Books defined as popular fiction, including red-, black-, blue-, yellow-covered, and combined books, were illustrated novels with illustrations on each page. Their text filled the blank spaces surrounding the illustrations, resembling the comic books of today. Texts run vertically. They use little symbols that help readers navigate to the next scene (fig. 11). The monographs appealed to those who had little ability to read.

The illustrated popular fictions were revolutionary publications in book marketing. Before these, most books had been borrowed from lending libraries because of their high cost. The average price for one fascicle of a classical text was \$58 in today's converted value. By contrast, a fascicle of a yellow-covered book cost \$3 on average, which was affordable for average Edo citizens. The publishers' major clients shifted from dozens or hundreds of lending libraries to thousands of individual customers. The publishers' strategy in the marketing of popular fiction was to achieve low price and high volume, and they published thousands of copies at one time until the woodblocks were worn out, and then



Fig. 10. Front (left) and back (above) covers of combined book. *Fūzoku kingyō den*, Bakin Takizawa, Edo (1852), Library of Congress, Control No: 98847023

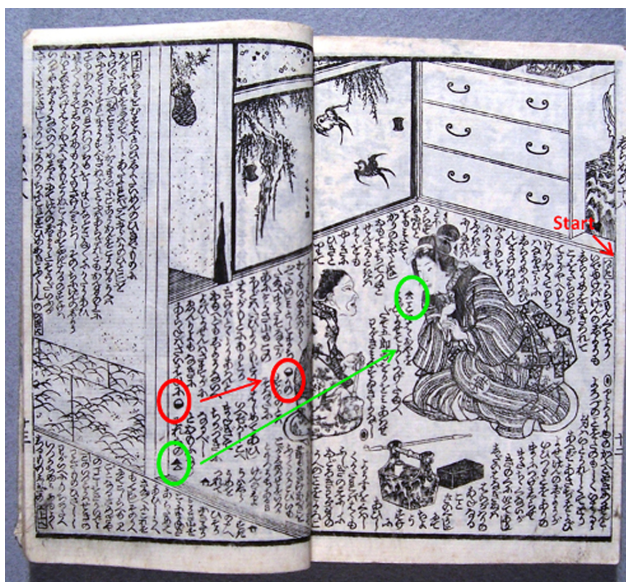


Fig. 11. Text pages of combined book showing the closer visual relationship between the illustrations and text. Text starts at the right top corner and runs vertically. The symbols in circles navigate the readers to the next sentence (see the arrows.) *Shiranui monogatari*, 17 hen, Tanekazu Ryukatei, Edo, Library of Congress

made new blocks to continuously release up-to-date texts in fresh and current styles. In order to minimize the cost, the book dimensions became smaller and thinner. Popular fiction was issued in the small *chū bon* size (7 inches long by 5 inches wide), with only five sheets (or 10 pages) to a single fascicle. After they had been bought and read, these popular fictions were often discarded. The cover was usually made of a single sheet which was trimmed on three or four sides to match the text size.

The combined books, which were serially published, were the last group of popular fiction. Covers to sequential fascicles could be laid side by side to create a panoramic image or scene. Usually two or three fascicles could be joined to create a diptych or triptych. One fascicle alone gave no clue to the scene, and urged the customer to buy the next volume. It was a clever marketing tactic (fig. 12). The publishers often employed a popular artist to design the covers, and printed the artist's name on the cover along with the names of the author and the publisher. In this



Fig. 12. Front covers of two fascicles of combined book (left: jo or 1st volume, right: ge or 2nd volume). Shiranui monogatari, 17 hen (jo and ge), Tanekazu Ryukatei, Edo, Library of Congress



Fig. 13. Front covers of two fascicles of combined book showing the names of the artist and author in yellow-circle as well as publisher's name in dash-circle. Kantan shokoku monogatari, 19 hen (jo and ge), Senka Ryutei, Edo (1834–56), Library of Congress, Control No: 00714383

manner, their names and brands started to bear commercial values (fig. 13).

The combined books continued into the 1880s until they were replaced by newspaper novels printed using new western-style metal movable type. By 1890 movable type and the mechanized press ended the dominance of woodblock printing. Binding practices also changed from the soft cover side-stitched binding to the hard cover western binding.

## CONCLUSION

The construction and design of a printed Edo book reflect its development, readership, and content, and inform us about the society and culture of Edo. The decrease in book size and the development of a more appealing appearance reflected the increase of readership and the rise in competition within the publishing industry. The association of certain genres with certain book dimensions and cover designs was deeply rooted in the society of Edo. In this society, formalism and appearance embodied content and spirit.

This study has only touched the surface of the vast subject of printed Edo books.

There are many topics that need further research, such as recycled paper production including its process and makers. It is hoped that this paper will encourage further study of the printed book during the Edo period.

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## NOTE

1. Waste business communities were made up of a class of people called *eta*, *hinin* or “the humble,” who lived in the slums of Edo and engaged in waste collection, including waste paper. Their trash business was organized under government control, and the gathered waste

paper was sold to the makers of recycled paper. There were a couple of recycled papermaking villages (communities) in the Edo region. These villages were located very close to the waste business communities (waste paper suppliers).

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