

Sasaki Takahiro

Manuscript Features of Early Japanese Movable Type Books

On the Intersection of Eastern and Western Typesetting Techniques

1 Introduction

In order to reflect from a global history perspective on the relationship between handwritten and printed books in Japan, it is worthwhile to focus on the characteristics of movable type printing there starting from the end of the 16th century. Both Eastern and Western techniques of movable type printing reached Japan simultaneously at the beginning of its early modern period, during a phase of political consolidation and intense interaction with foreign countries and people. However, there are still many unanswered questions regarding the interaction between these two printing techniques, to the point where there is currently no shared explanation accepted among scholars. Researching the material characteristics of the books printed with movable type in this period leads to a reassessment of their relationship to the two printing techniques. This contribution shows that early movable type editions can be positioned at an intermediate point between manuscripts and woodblock prints, and furthermore had a major impact on the establishment of commercial publishing in Japan.

2 Summary of the History of Printing in Premodern Japan

Before breaching the main topic, it is necessary to briefly summarize the history of printing in Japan until the advent of movable type.¹ It is an accepted fact that printing in Asia began in China in the seventh century CE. As evidenced by the oldest dated surviving print, the *Hyakumantō Darani*, printing technology reached Japan from China in the 8th century.² However, at this point only single sheets of paper were printed, which cannot be considered ‘printed books’ as such. The first mention of the production of a printed book in Japan is found in *Midō Kanpakuki*, the diary of the courtier Fujiwara no Michinaga (966–1027) now listed in UNESCO’s Memory of the World Register. In the entry for the 14th day of the 12th month of 1009 CE, Michinaga wrote that he started

¹ For comparable discussions cf. Kornicki 2001, 112–124; Kamei-Dyche 2011, 273–276.

² Cf. Kornicki 2012.

I want to thank Radu Leca for translating this chapter and providing valuable advice. According to East Asian name conventions, surnames are cited before given names.

printing 1000 copies of the *Lotus Sutra* (Sanskrit: *Saddharma Puṇḍarīka Sūtra*). Since this sutra comprises eight fascicles, Michinaga would have had to print 8000 fascicles in total. Since it is unlikely that such a feat could have been accomplished without precedent, sutra printing projects had presumably already been undertaken before this date. The oldest dated printed book is a 1088 version of the Buddhist sutra *Joyui Shikiron* (Sanskrit: *Vijñapti-mātratā Siddhi Śāstra*). However, the oldest surviving woodblock with certain dating is a 1195 commentary on that same sutra, *Joyui Shikiron Jukki*. Thus, from the 11th century onwards, mostly Buddhist texts were continuously printed in Japan.

In the history of printing in Japan, an often-noted phenomenon are changes in book binding.³ The first printed books were bound as scrolls. Then, following changes in China, text-bearing sheets in Japan, instead of being rolled up, also started to be folded and stacked in the *orihon* ('accordion') format. This may seem quite a simple form of binding, but more complex forms of binding using double-sided printed sheets also emerged such as *decchōso* ('butterfly binding'). This binding technique was transmitted from Tang-period China at the beginning of the ninth century. It required calculating the desired number of sheets to be folded in half, then glue to be applied to their outer fold, and these to be glued on top of the preceding sheet. In China sheets made from thicker paper would be written on both sides, while those made from thinner paper would only be inscribed on the inner surface of the fold, while the outer surface would be left blank. Meanwhile, in Japan double-sided inscription was the norm, perhaps because it became possible to produce enough paper that allowed such intensive use. In China *decchōso* is called 'butterfly binding', and printed books bound this way were produced in the Northern Song period (960–1127 CE) from the second half of the tenth century. During the Song and Yuan dynasties, many *decchōso*-bound printed books were imported to Japan, but all of these were printed only on the inner surface of the folded sheets. Meanwhile, *decchōso*-bound books printed on both sides started to be produced in several Buddhist temples in Japan from the second half of the 13th century onwards. Although books produced in China and Japan shared the same binding, it is difficult to establish a direct connection between them because of significant differences in sheet design and font use. Although it is tempting to conclude that books with these characteristics were also produced in limited numbers in China, a Japanese origin of such books cannot be established with certainty.

Likewise, one might conclude that double-side-printed *decchōso*-bound books were invented in Japan. However, although the binding was *decchōso* rather than *orihon*, there are Chinese Song dynasty sutra texts that were printed on both sides of folded books, and their introduction to Japan can be confirmed. Thus, such examples most likely inspired double-sided printing in *decchōso*-bound books in Japan. Such books in Japan, as with earlier printed books bound as handscrolls and as *orihon*, were restricted to Buddhist texts in content, and they were designed to look like manuscripts. This suggests that copying Buddhist texts by hand was considered important in Japan and that their printed

³ For example Kornicki 2001, 43–44.

versions were perceived as substitutes of manuscripts. This was different than the situation in China, where printed books stood out because of features such as printed borders. This might be explained by the fact that in China manuscripts were considered vulnerable to copying mistakes, while texts that had been printed after thorough checking were considered more trustworthy. This preference for printed texts over manuscripts did not gain hold in Japan, where manuscripts continued to be produced in large numbers.

Both *orihon*- and *decchōso*-bound printed books kept being imported from China to Japan. From the end of the 13th century, single-side printed books also started to be produced in Japan in significant numbers. This may be related to the change from the Southern Song to the Yuan dynasty, which led some supporters of the old regime to emigrate to Japan and thus transmit, among others, technical knowledge of printing. So, by the end of the 13th century, double-sided prints that imitated manuscripts as well as one-sided printing that drew attention to its printed nature were being produced in Japan. This is a highly important development in the history of printing in Japan.

While the two types of printing differed in appearance, they were both used exclusively for the reproduction of Buddhist texts. That being said, one-sided printing came to be associated with the rising influence of the Zen school of Buddhism, which had been transmitted to Japan in the 13th century and gained popularity starting then. There were two branches of this new form of Buddhism. The first was called Rinzai, which took a particular interest in literature and thus permitted the printing of poems and other writings by monks. Due to this, vernacular texts, mainly related to Chinese poetry, also started to be printed, marking a major shift in the history of printing in Japan.

Such books printed by the Rinzai branch of Zen Buddhism are called *Gozan-ban*, which translates literally as ‘five-mountain editions’, since most were produced in the five main Rinzai temples around Kyoto. However, the term *Gozan-ban* has also come to include books printed in other Rinzai temples as well as in temples of the rival Sōtō branch of the Zen school. While *Gozan-ban* initially replicated or mimicked imported Chinese books, there was a gradual shift towards printing texts authored by Chinese immigrants to Japan as well as by Japanese monks. Despite the increasingly diverse content, the default script used was that of *Kanji* (‘Chinese characters’), aside from the occasional Sanskrit letters featured in Buddhist texts. However, a few exceptional examples of the use of the *kanji*-derived phonetic script *Hiragana* in prints before the advent of movable type are known. This appears in the *Kurotani shōnin gotōroku* (a collection of sermons by the monk Hōnen of the Jōdo or Pure Land School of Buddhism) from 1321 and the 1391 scroll-bound *Yūzū nenbutsu engi emaki* from 1391.⁴ *Hiragana* script is legible even with only a minimum of instruction. Presumably, the Buddhist schools that printed these texts used *Hiragana* because they were actively seeking to gain followers among the common people. Furthermore, these texts were made as imitations of manuscript formats.

4 Cf. Takagishi 2015.

A further notable feature of the history of printing in Japan is the change in binding techniques among *Gozan-ban* in the period between the 13th and 16th centuries. Initially, *Gozan-ban* were one-sided prints bound in the *decchōso* format, just like the books imported from China of the Song and Yuan dynasties. However, the way books were made in China started to change around the time of the dynastic shift from the Yuan to the Ming in the second half of the 14th century, and these changes were duly adopted in Japan. In *decchōso* binding, the printed page is folded inward along the middle of its wider side. In the new type of binding, the page is folded outward and the sheets are stacked together, then the ends of the paper opposite the folds are perforated and stitched together with thread. In Japan, this binding technique is called *fukurotoji* ('pouch binding'). *Decchōso* binding has the disadvantages of easily coming apart because of glue peeling off, as well as frequent insect damage: The bookworms prefer the glued sections. The production process also presents many difficulties: For example, it takes effort to apply the glue properly, and one needs to wait for it to dry before attaching the next page. On the other hand, *fukurotoji* binding simply changed the folding technique and used only string and thread for binding. These modifications did not require any change in the printing process and were therefore particularly appropriate for a medium such as printing, which prioritized efficient large-scale production. This explains why this type of binding, called *xiàn zhuāng* ('stitched binding') in Chinese, became the predominant form of binding for printed books in China.⁵ After *fukurotoji* binding became widespread in Japan, *decchōso*-bound books imported earlier from Sung and Yuan dynasty China started to be rebound with the new technique. This change also occurred in the case of *Gozan-ban*, and from then on *fukurotoji* became the main binding technique for printed books in Japan as well.

3 Overview of the History of Movable Type Printing in Japan

The major role played by the commercialization of print in changing the forms of publishing is a phenomenon shared across cultures around the world. The emergence of publishers that produced books as commercial products had a multifaceted impact on the characteristics of printed books. Printing requires a significant financial investment, so in order to make it economically viable, it is necessary to have a critical mass of buyers. If the society in question does not already have a mature mercantile economy, it is difficult for vernacular printing to emerge and endure. In China private commercial publishers emerged around the 12th century during the Song dynasty, while in Japan vernacular publishing only emerged and developed in the 17th century. The beginning of movable type printing in Japan at the end of the 16th century immediately preceded the establishment of commercial publishing and had a major influence on the transformation of printed books into a commercial product.

5 Cf. Hu/Yang 2012, 76–77.

The first movable type book was printed in Japan in 1591. This was connected to the beginning of direct exchanges between Europeans and the Japanese, which happened in 1543 when two Portuguese people, Francisco Zeimoto and Antonio da Mota, reached Tanegashima island southeast of Kyushu and sold their matchlock guns to the local ruler.⁶ Soon after, Jesuit priests started a successful proselytizing campaign throughout Japan. To aid their efforts, they shipped a printing press from Lisbon to their Collegio in Kazusa, not far from Nagasaki, where it was installed in July 1590. Among the books printed there is the 1591 *Sanctos no gosagveo* ('Excerpts from the Lives of the Saints'). However, by this time, the rulers of Japan had already issued edicts banning Catholicism, and this continued until exchanges between Europeans and the Japanese ceased, with the exception of the Protestant Dutch. Because of this, printing with Western movable type ceased after only two decades.

Nonetheless, during his last years as ruler of Japan, Toyotomi Hideyoshi (1537–1598) developed the ambition to conquer China. He started with the attempt to conquer the 'gateway to China' (the Korean Peninsula) by sending invasion troops in 1592 and 1598. In Japan, these ill-fated expeditions are known as the *Bunroku Keichō* campaigns (after their respective imperial era names). While wars cause suffering irrespective of time or place, it is also true that conflict between different populations and cultures results in the transmission of technology. A representative example is that of the 751 AD Battle of Talas between the Abbasid Caliphate and the Chinese Tang empire, as a result of which Chinese war prisoners transmitted the technology of paper making to the Arab world.⁷ Likewise, Japan's failed invasion attempt did result in the transmission of technologies of ceramic production and metal movable type printing to Japan, which in turn had a monumental impact on the country.

The history of movable type printing in Asia starts around the middle of the 11th century, and the oldest surviving movable type-printed book is an edition of the *Amitāyurdhyāna Sūtra* dating between 1102 and 1106. This technology most likely entailed carving characters in a bed of hardened glue and then baking them for hardening.⁸ As for wooden movable type printing, a description of its production process is found in a section of a 1313 book from Yuan dynasty China.⁹ Metal movable type is reported to have been used during the Goryeo kingdom in Korea between 1237 and 1241 AD, and the oldest surviving book printed this way dates from around 1377.¹⁰

While in China the large distances and immense demand for copies made movable type impractical and thus scarcely used, in Korea metal movable type was actively used because it allowed repeated reprinting of a variety of texts. In Japan, the value of books printed with metal movable type from the start of the Joseon period was known

⁶ On this topic cf. Lidin 2002, 13–15.

⁷ For more information cf. Park 2012, 25–26.

⁸ For more information cf. Needham 1985, 201–202.

⁹ Cf. Needham 1985, 205–211.

¹⁰ Cf. Kornicki 2011, 119; Lee 1993, 536–540.

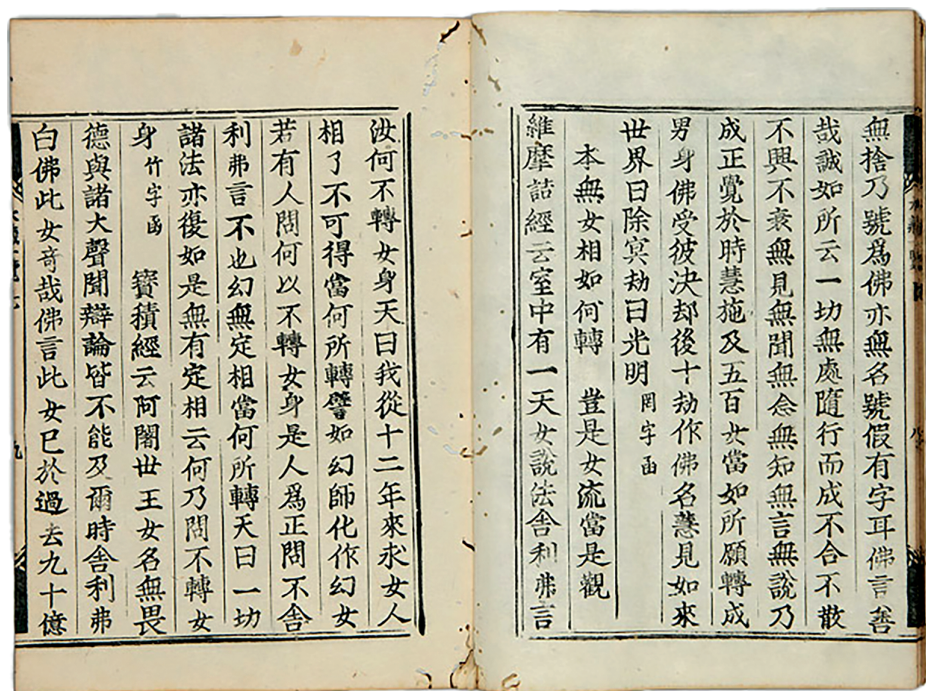


Fig. 1: *Daizō ichiranshū* ('Digest of the Tripitaka'), 1615, metal movable type print, National Archives of Japan, Tokyo.

through trade. Thus, Hideyoshi's invasion forces brought back not only large numbers of such books but also the metal movable type sets needed to print them.¹¹ There is a high possibility that, along with a large number of potters, many printers also crossed the seas in this way.

There are records of the fact that the sets of movable type confiscated in Korea were gifted by Hideyoshi to Emperor Goyōzei, who then used them to print the book *Kobun Kōkyō* ('Classic of Filial Piety') in 1593.¹² The oldest extant book printed with Korean technology is a 1595 edition of the Buddhist text *Hokke gengijo* ('Introduction to the Commentary on the Flower Garland Sutra'). The use of wooden movable type to print that text shows that movable type had spread rapidly in Japan. Furthermore, Tokugawa Ieyasu, who became ruler of Japan after Hideyoshi, commissioned the production of a new set of metal movable type characters, which were used for printing books in 1615 and 1616 (Fig. 1).¹³ However, since the use of movable type required both sophisticated technology and significant financial investment, most books printed with movable type in Japan used wooden characters.

11 For details on Korean books brought back by the invasion forces cf. Kornicki 2013a.

12 Cf. Kinoshita 2000, 57; Lillehoj 2011, 66–70.

13 On this topic cf. Kornicki 2008, 75, 81; Horikawa 2020.

4 Script Use and Design Features of Early Movable Type Editions

Printing with movable type of Korean origin continued until around 1650, and well over 500 books were thus produced. To distinguish between the books printed during that half century from the ones made with the resurrected wooden movable type technology, the former are called ‘early movable type editions’. Although half a century seems to be a brief period, early movable type editions went through many changes during this time. The earliest are very similar to Korean editions, from the type size and font style down to the page layout. Gradually, type sizes diminished, and the number of lines and characters per line increased. This process is directly linked to a reduction in production budget and thus demonstrates the tendency to turn movable type printed books into commercial products.

Another important change was the diversification of the types of script used. Both Chosŏn-period Korea and Japan had used the characters originating from China. Then in the middle of the 15th century, the Chosŏn emperor of the time commissioned the development of a new phonetic alphabet called *Hangul*, which was eventually also used for printing. On the other hand, in Japan, two types of phonetic alphabets derived from *Kanji* were developed independently in the 9th century and started to be used in manuscripts together with *Kanji*. One of these alphabets, *Katakana*, was formed by isolating individual elements from the more complex shape of *Kanji*. It was initially used as a reading aid for Buddhist texts but eventually served to transcribe the pronunciation of all words of foreign origin. The other alphabet, *Hiragana*, was derived from the cursive writing style of *Kanji* for the purpose of rendering the sounds of the Japanese language. *Hangul* was not used in Japan, so early movable type editions did not use it, but there are examples of such editions using movable type sets for *Hiragana* and *Katakana*. As mentioned earlier, most books printed before this period used only Chinese characters, so the fact that indigenous script types came to be used extensively in early movable type editions constitutes an epoch-making event in the history of printing in Japan.

A high level of literacy is needed for reading books containing only text in *Kanji*. Since *Hiragana* and *Katakana* were also used by the general population, texts using these scripts would be intelligible to a larger number of readers. *Hiragana* in particular was used to record *waka* poetry and *monogatari* narratives,¹⁴ so its use meant that essential texts of Japanese literature could now be widely reproduced. This development led to a dramatic quickening of the commercialization process of the printed book.

Since *Katakana* evolved from constituent elements of *Kanji*, each character functioned independently, and accordingly it could function in similar ways to *Kanji* when it came to movable type set production and use. *Hiragana*, however, emerged from the cursive writing style of *Kanji*, and therefore its characters were not written independently but were customarily linked with a continuous line. Furthermore, type sets

14 On *waka* cf. Morris 1986; on *monogatari* cf. Jinno 2020.

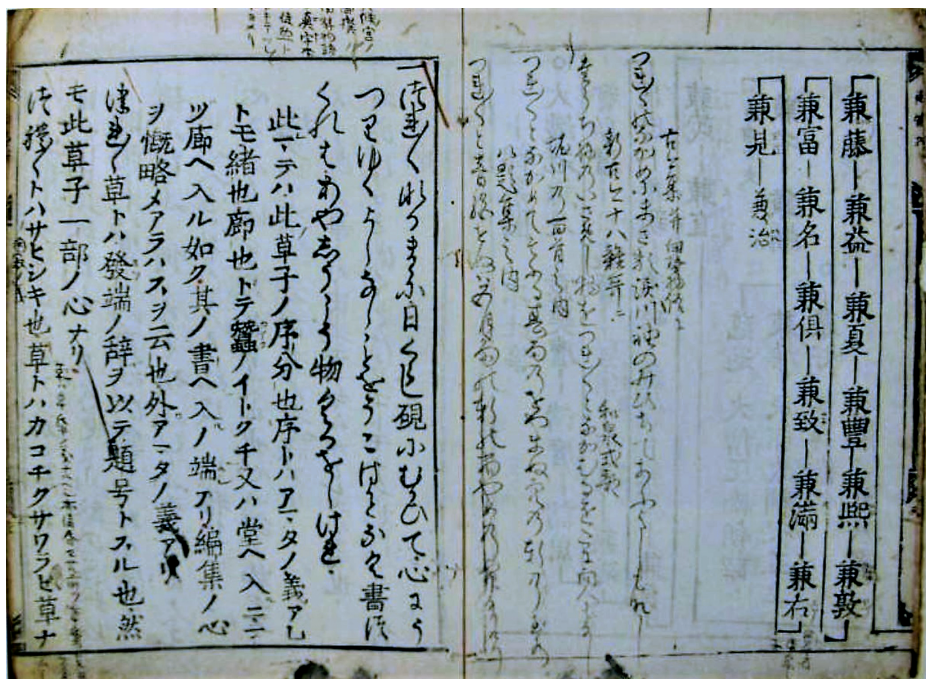


Fig. 2: Hata Sōha, *Tsurezuregusa Jumyō'in shō* ('Essays in Idleness—Commentaries by Jumyō'in'), 1604, wooden movable type print (1931 facsimile edition), National Diet Library, Tokyo.

for *Kanji* used together with *Hiragana* also had to follow the cursive style. Since *Hiragana* had different characteristics than *Kanji* and *Katakana*, its transfer to movable type print was more difficult.

The above difficulties help explain why early movable type editions with *Hiragana* started to be produced slightly later than those with *Kanji* and with *Katakana*. One of the solutions found was to make types that linked two or three *Hiragana* characters often written together. There are even examples of types containing four or five characters. Nowadays these are called 'linked movable types' or ligatures. One of the advantages of movable type is its modularity, which increases printing efficiency by recombining individual types. Ligatures, on the other hand, have a limited frequency of use, and are thus ill-suited for cost-effective printing. To make possible the printing of *Hiragana* with movable type, publishers had to turn a blind eye to this disadvantage.

Although it seems that the earliest movable type printed book with *Hiragana* was the 1599 medical text *Enju satsuyō* ('Long Life Compendium'), an early example with a fully ascertained date is the 1604 *Tsurezuregusa Jumyō'in shō* ('Essays in Idleness—Commentaries by Jumyō'in') (Fig. 2).¹⁵ However, such early movable type

¹⁵ This is the oldest existing full-length commentary of what became a classic of Japanese literature. Cf. Chance 1997, 42.

editions were probably not printed in large numbers and had more of a trial-and-error character. The text of both of those books was placed within frames, and furthermore two parallel lines marked the fold along the middle of the printed page. This layout design was customary for books printed in the Song, Yuan, and Ming dynasties and Chosŏn-period Korea, as well as Japanese books with *Kanji* and *Katakana* (with the exception of some editions of Buddhist texts).

The fold mark was a crucial element in the making of the book. More than just providing a visual aid for folding the page approximately along its middle, the mark included an abbreviated version of the book's title, the fascicle number, and the pagination, thus facilitating the assembly of the book. Additionally, even with an identical text being printed, variations in fold mark design reveal that a different typeset or woodblock has been used. Even manuscript books that use *Kanji* often feature frames around the text as well as borders dividing each line of text, but of course they do not have fold marks. Furthermore, the lines in manuscript are usually thin, while lines in printed books are mostly thick and in many cases doubled. Thus, a thick-lined fold mark signaled the fact that the book in question was printed. The inclusion of borders and fold marks in the design of the two above examples of trial-and-error early movable type editions using *Hiragana* shows that these were considered necessary elements for printed book design. However, how should we interpret the fact that once movable type printing with *Hiragana* was standardized, its book design omitted those elements? Considering that lines or fold marks are not usually featured in manuscripts using *Hiragana*, the printed books were presumably trying to imitate the look of manuscripts. The publishers probably thought that lines or fold marks did not fit well with the look of cursive style script.

5 Manuscript-like Features of Japanese-Script Early Movable Type Editions

Although there is a significant visual difference between a book with borders and fold marks and one without, the difference is only slight from a production point of view. Borders are printed by placing four rod-shaped types along the edges of the type plate. However, if the plate is lined with rod-shaped types of lower height, the border will not be printed. The use of this method is demonstrated by traces of these low-height types that occasionally got printed unintentionally. Early movable type editions can thus be divided into those using *Kanji* and *Katakana*, which stress their printed nature by including borders and fold marks, and those using *Hiragana*, which omit those elements in order to look like manuscripts (Fig. 3). Although both groups are printed with movable type, the intention behind them is different.

There is also another way to prove that early movable type printed books using *Hiragana* were designed to look like manuscripts: the shape and size of the books. The material characteristics of early movable type editions differ both from books printed

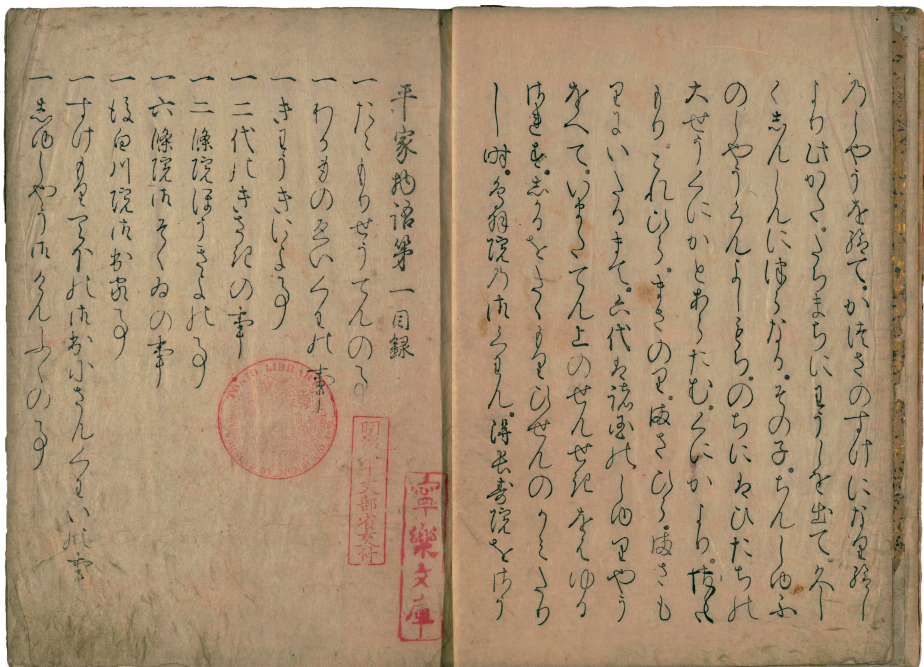


Fig. 3: *Heike Monogatari* ('Tales of Heike'), Nakanoin edition, early 17th century, wooden movable type print, National Diet Library, Tokyo.

in Ming-period China and in Chosŏn-period Korea. Leaving aside differences in front covers and focusing only on shape and size, movable type printed Korean books are the largest, many almost 40 centimeters high. By comparison, Ming-period woodblock-printed books are much smaller, around 25 centimeters high. Most early movable type editions in Japan are almost 30 centimeters high, larger than Ming-period books but smaller than Chosŏn-period movable type editions. Furthermore, when we compare height to width ratios, Ming-period books are narrow and high, while Korean and Japanese books tend to be wider. This size-ratio comparison thus corroborates the fact that early movable type editions in Japan are more similar to Chosŏn-period books than to Ming-period editions. However, early movable type editions with *Hiragana* have slightly different characteristics: They are a little smaller in height but wider than the books using *Kanji*. It is possible to provide an explanation of these differences from a production point of view: The *Hiragana* books were trying to imitate manuscript books not just in their look but also in their shape and size. That some *Gozanban* with Buddhist texts were trying to imitate manuscripts has been discussed above. It can also be argued that this precedent influenced the production of early movable type editions with *Hiragana*, yet this does not provide a sufficient explanation.

Since there are no manuscript-like features in Chosŏn-period early movable type editions, the characteristics of Christian-printed books should be considered. Just as

early movable type editions can be divided into those using *Kanji* and *Katakana* and those using *Hiragana*, so too can Christian-printed books be grouped into two categories according to the script used. On the one hand, there are Western-script books printed with alphabet metal types, and on the other hand there are Japanese-script books using combinations of *Kanji*, *Hiragana*, and *Katakana*, which are also printed with metal movable type. The former were printed with the types thought to have been made in Venice and brought over to Japan, which then served as a model for the metal types of local script produced in Japan. The differences in appearance between Western-script and Japanese-script books are more significant than those between the two categories of early movable type editions. While Western-script books have the same size and are made in the same way as Western books, the ones with Japanese script are made to look like Japanese books of the time, from their size and binding down to their front cover.

13 out of the 32 types of Christian printed books known today use Japanese script. Among these there are two subtypes: large and small. *Dochirina Kirishitan* ('Doctrina Christam') and *Bauchizumo no sazukeyo* ('The Way to Administer Baptism'), thought to have been among the first to be printed, used large types (Fig. 4).¹⁶ Oddly enough, the only other known use of these large types is for printing a one-page pamphlet with the text of prayers. The *Dochirina Kirishitan* is thought to have first been printed in 1591, and the other two publications were probably made close to that date.¹⁷

There was a gap of a few years in the printing of Japanese-script Christian books. When the printing of such works resumed, locally made metal types are thought to have been used. These were smaller than the earlier types. The 1598 *Rakuyōshū* ('Collection of Fallen Leaves') is among the earliest books produced this way, with a clear indication of having been printed in Nagasaki.¹⁸ The gap in printing is probably due to the change in the physical location of the printing press. Except for one work produced in Kyoto with local technology around 1611, all Japanese-script Christian books used these smaller types. Additionally, there are significant differences between early and later Japanese-script Christian printed books that go beyond the size of the types used. They concern the presence or absence of borders. The large-type books do not include a border, while the small-type books do include it.¹⁹ This could be explained by the fact that the knowledge of books in Japan increased during the printing gap: A border was added because it became clear that Western books usually have this feature.

The Chinese character dictionary *Rakuyōshū*, one of the earliest books to be printed with the smaller type, is an important work for the study of the history of the

¹⁶ For a discussion of *Dochirina Kirishitan* cf. chapter three in Higashibaba 2001.

¹⁷ However, recent research has unearthed a printed version of *Salvator Mundi*, which belongs to this group, dated to 1595, cf. Osterkamp 2022.

¹⁸ Cf. Yamagiwa 1955; Bailey 1961.

¹⁹ The recently rediscovered 1595 edition of *Salvator Mundi* is printed with large types but includes a border, and thus has a transitional character.

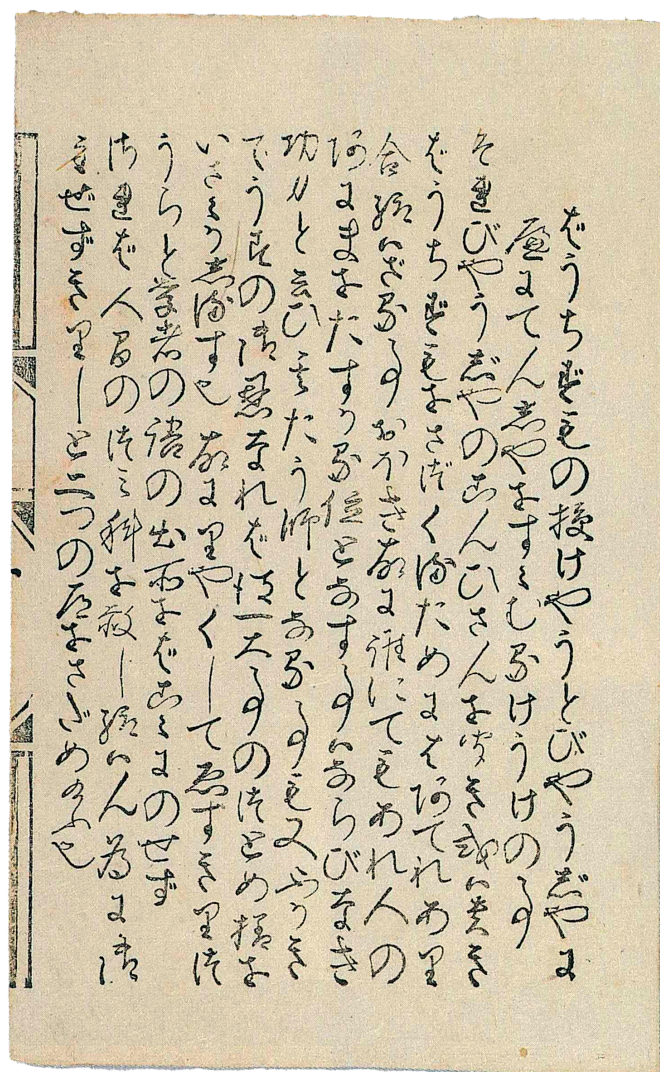


Fig. 4: *Bauchizumo no sazukeyo* ('The Way to Administer Baptism'), 1593, Christian movable type print, Tenri University Library.

Japanese language because of its structure and the information it contains and is also notable for being the first dictionary to be printed with movable type in Japan (Fig. 5). Besides including a border, there are also lines delimiting each vertical row of text. No other Japanese-script movable type Christian book has this feature. However, many character dictionaries printed in East Asia include row lines. This shows how movable type-printed Christian books integrated the characteristics both of Japanese and of East Asian printed books.

While the large-type and small-type Japanese-script books differ in these ways, they also share an important feature: the fold mark. The large-type *Dochirina Kirishitan* and *Bauchizumo no sazukeyo* do not have borders, but they do carry fold marks.

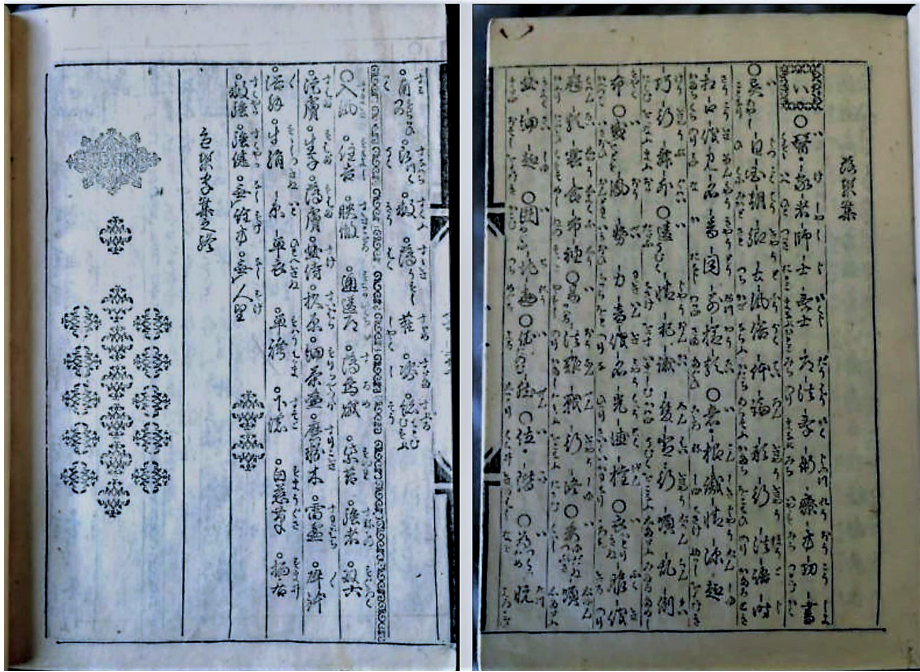


Fig. 5: *Rakuyōshū* ("Collection of Fallen Leaves"), 1598, Christian movable type print, Tenri University Library.

While there are examples of printed Buddhist texts with fold marks, no other examples exist of Japanese-script printed books with fold marks. The fold mark of *Dochirina Kirishitan* is unobtrusive: without a vertical line, only with the sign of the cross, the book's title, and a Chinese character numeral indicating the page number. By contrast, the fold mark of *Bauchizumo no sazukeyo* comprises two vertical lines and three connecting triangular lines, and, in terms of text, only an additional Chinese character numeral indicating page order. This design is very similar to that found among *Gozanban* editions. The radically different fold mark designs of these two large-type works provide insight into the experimental nature of their production. Meanwhile, the fold mark design of the newly discovered edition of *Salvator Mundi* is comprised of two vertical lines connected by two symbols, again indicating its transitional character between large- and small-type editions.

As for the small-type books, they have many variations to their fold mark design, but they have one feature in common: two rectangular marks are inserted between double vertical lines. Even the variations are similar to those found in Chinese and Japanese printed books using *Kanji*. Thus, after the initial period of experimentation with large type, the makers of Christian movable type books succeeded in developing a Japanese-script book design that integrated borders and fold marks. Regardless of the size of the type used, all movable type printed Christian books with Japanese script

were printed on *washi* ('Japanese paper'), were bound as *fukurotoji* like most books in Japan at the time, and although slightly differing in size, they were all roughly the size of *fukurotoji*-bound Japanese books of the period.

Another notable feature are the front covers. Although only a few of the surviving Japanese-script books still carry their front covers, the designs of the existing ones suggest that they are similar to the front cover design of manuscript books using *Hiragana*. Taken together, these features of Japanese-script books clearly show that they were conceived as replicas of manuscript books using *Hiragana*. This should not come as a surprise considering the parallels with early movable type printed books in Europe, which also replicated the look of manuscript books.²⁰

6 Korean vs. Western Influence on Early Japanese Movable Type Editions

There is still no definitive conclusion to the ongoing debate between scholars on the issue of whether early movable type editions of Japanese books were more influenced by the two movable type technologies that reached Japan almost simultaneously—one from Korea, the other from Europe. The accepted view used to be that Korean technology was the sole origin for movable type printing in Japan.²¹ However, as the study of Christian printed books has intensified in recent years, the view that they had a significant influence on Japanese editions has gained traction.²²

For the proponents of the thesis of Korean influence, the evidence is abundant: The emergence of movable type in Japan dates shortly after the introduction of Korean technology, and there are a number of examples of early movable type editions that show direct influence from Korean books, such as in the design of borders, fold marks, and character shape.²³ While that evidence is irrefutable, the argument for the European influence rests on the shared features of the movable type printing technology. There were actually two types of movable type printing invented in China. The one thought to have been invented first involves carving a bordered type plate in advance then carving the interior slightly deeper than the height of the type. Hot wax is then poured in the plate, and while it is still soft, low-height types are placed in it. When the wax cools and hardens, the types are fastened in place, hence the name 'fastening method'.²⁴ The other so-called 'assembly method' involves placing high types on a plate and securing them in place with four surrounding thin rectangular types. While the Korean books were produced with the 'fastening method', early movable type editions in Japan were

²⁰ On this topic cf. Schmitz 2018, 11–41.

²¹ Cf. Satow 1882, 66–67; Marceau 2009, 120.

²² Cf. Kornicki 1998, 129; Kinoshita 2000, 57–58; Kornicki 2013b, 609–610.

²³ For the material characteristics of Korean books cf. Song 2009.

²⁴ For a description cf. Jialu Fan et al. 2015, 194–238.

produced with the ‘assembly method’, which is very similar to the Western technology with which Christian books were printed. This points to a stronger probability that the technology of Christian printed books influenced that of early movable type editions.

However, further advances in the study of Korean printing showed that while initially the ‘fastening method’ was used, later the ‘assembly method’ also started to be used for printing.²⁵ However, this did not completely contradict the proponents of the importance of the influence of Christian printed books. This is because of one of the features of early movable type editions using *Hiragana*: the use of ligatures. While there are a few examples of ligature use for large-type Christian printed books, the examples increase dramatically for small-type books. Focusing on this aspect increases the persuasiveness of the argument for the connection between Christian printed books and early movable type editions.

Such ligature types are found in the early days of printing in the West, and for those who knew about this, it was most likely not so difficult to adapt this technique to a different script. However, examples of using types combining several characters



Fig. 6: *Ise monogatari* ('Tales of Ise'), Saga edition, 1608, wooden movable type print, linumasan Enpuku-ji temple, Chōshi.

25 Cf. Oh 2013, 106–107.

have also been reported in the case of Korean books and this makes it difficult to argue conclusively for a direct connection between Christian printed books and early movable type editions.²⁶ It is important to note here the use in Christian books of types with the length of two characters but containing only one lengthened character. Combining these with ligature types further increased the handwritten look of the text. The use of these lengthened character types is also found in early movable type editions.

Furthermore, recent scholarship has argued for the influence of Christian books from the perspective of illustrations.²⁷ The first literary work using *Hiragana* to be printed as an illustrated book is the celebrated 1608 edition of the ‘Tales of Ise’, grouped as a *Saga-bon* edition from the name of its place of publication (Fig. 6). While the compositions of its illustrations follow traditional Japanese conventions, the shape of clouds and mist is rendered through many fine lines. This technique had not previously been used for illustrations in East Asian printed books. It has been suggested that the fine horizontal lines might have taken cues from the Western etching technique since a record has been found that the illustrations were designed by the Christian painter Kano Ichi’un.²⁸ It is worth noting that copperplate prints were used for the title pages of some of the Christian books in both Western and Japanese script.

7 Further Thoughts on Korean vs. Western Influence

This study thus far has revealed the difficulties in determining if the characteristics of early movable type editions were influenced by Korean or European movable type printing technology. Because of several features already discussed, it is clear that early movable type editions using *Kanji* and *Katakana* were heavily influenced by Korean printed books. However, it is difficult to imagine that the *Hiragana* editions, which have very different characteristics, were produced under the influence of only the Korean books. It is certain that the use of linked and lengthened types, the omission of borders and of fold marks, and changes to the proportions of the shape of early movable type editions were all features intended to mimic the appearance of *Hiragana*-written manuscripts. It is difficult to dismiss the fact that many of these features are also shared with the Japanese-script Christian printed editions. However, there is no doubt that the *Hiragana* editions also used Korean printing techniques. It is therefore helpful to think that the similarities between the *Hiragana* early editions and the Japanese-script Christian books were not the result of direct contact, but rather that the makers of early editions had a chance to see the Christian books and were greatly inspired by the concept of making manuscript lookalikes and emulated them.

²⁶ Cf. Park 2022, 24–25.

²⁷ Cf. Hayashi 2005.

²⁸ Cf. Hayashi 2010.

There are also a few examples of *Hiragana* early editions printed on both sides of the paper, with very similar binding to that of Western-script Christian books. These also copy the look of Japanese manuscripts, but it is possible that the Western-script books had an influence on how their production was conceived. Compared to technological influences, these conceptual influences are more difficult to prove, but they deserve further careful consideration.

Recent research has shown that the care taken not to break a line in the middle of a word in the earliest *Hiragana* movable type editions is also a feature of the small-type Christian books in Japanese script. In Japanese *Hiragana* manuscripts, such care is usually not taken, so this might have also been the result of the examination of Christian books by the producers of early editions. In other words, this is a further reinforcement of the possibility that early editions were influenced by Christian books.²⁹

The advent of early movable type editions marked the beginning of the commercialization of printed books and contributed to a rapid increase in the number of readers and—implicitly—buyers. However, wooden movable type was not suitable for large print runs, and it was difficult to make the printing surface more complex to meet the needs of readers. For these reasons, after half a century it fell into disuse and was replaced by the already existing woodblock printing, which was far more efficient for large print runs. It is ironic that the commercialization of the book ended up strangling the printing technology that initiated it.

For some time after the switch to woodblock printing, *Hiragana* editions did not have borders or fold marks and retained the character of replicas of manuscripts. However, from the second half of the 17th century, *Hiragana* editions gradually began to appear with borders and fold marks, and by the end of the century printed books without them were rare. By this point, printed books had ostensibly ceased trying to imitate manuscripts and instead stressed their printed character. We can conclude that Christian books in Japanese script printed with Western technology thus catalyzed the emergence of printed books with *Hiragana* and, consequently, played a discrete role in the establishment of commercial printing in Japan. One can only wonder how publishing would have evolved in Japan if Christianity had not been banned.

8 Conclusion

Manuscripts are basically one-off items, while printed editions are considered to be multiple identical copies. It is true that printed copies share the same text, but even when printed with the same woodblocks, each copy is slightly different in size and has a different color and pattern on the cover, making it impossible to state that they are exactly the same. The trimming and binding of the printed editions were also done

²⁹ Cf. Koakimoto 2021.

by hand, and in this respect printed texts are akin to manuscripts in their variability. However, rather than this variability being unintentional, there are examples of early movable type editions in which the printed copies were intentionally differentiated. The *Saga-bon Ise monogatari* ('The Tales of Ise') introduced above is a case in point: After setting the type and printing one sheet, several types were removed and replaced with differently shaped types for the same characters, and the process was repeated for every sheet printed so that no two sheets are exactly alike.

This might be considered as a diversion for the typesetter, but it is hard to believe that a craftsman would voluntarily go through such a tedious process. This should be regarded as a deliberate act of trying to approximate a manuscript in cases where, while being printed books, there are never identical copies. This variability approximated the modulations of a handwritten text, in a way that a woodblock-printed text, although retaining the look of handwriting, could achieve only with much more difficulty. From this point of view, early movable type editions can be positioned at an intermediate point between manuscripts and woodblock prints. The fact that the covers of early movable type editions are often unique shows that they are close to the nature of manuscripts.

Such early movable type editions produced with the intention of being close to manuscripts were published in small numbers and at great expense, and it is also said that the *Saga-bon Ise Monogatari* was not intended for sale but was produced as a gift for nobles.³⁰ Yet even those editions not designed as luxury items could only be produced in a limited number of copies since the wooden movable types would quickly wear out. And even if those books were eventually sold, they were expensive, so it makes sense to think that they were intended for the upper classes.³¹ Even so, when compared to the rate of production of manuscripts, such early movable type editions were produced in astonishing numbers for the time and were quickly distributed.

The period of peace brought about by the Tokugawa shogunate stimulated the mercantile economy and the expansion of a newly affluent social class. Their presence promoted the commercialization of printed books, but this resulted in the decline of the early movable type editions, which faced difficulties in meeting growing demand while being unlikely to scale profits. Woodblock printing required more initial investment than type printing but could produce an exponentially higher number of copies and generate greater profits. It is therefore not surprising that woodblock printing became the mainstay of commercial publishing in the following years.

Although early movable type editions disappeared after only half a century, there is no doubt that their existence had a major impact on the establishment of commercial publishing in Japan. Many of the texts of early movable type editions were also regarded as being of good quality, well revised, and proofread, and many of them were

³⁰ Cf. Totman 2005, 243–244.

³¹ Cf. Shively 1991, 726.

transferred to the woodblock print medium. In this way, early movable type editions played an extremely important role in the history of the book in Japan. Among these, early movable type editions in *Hiragana*, which facilitated the publication of works in local script, are particularly noteworthy. The possibility that the Christian editions produced in Japan with Western type printing technology, with their integration of manuscript features, may have influenced the development of these early movable type editions in *Hiragana* is a matter of great importance for the global history of the book.

Bibliography

- Bailey, Don Clifford (1961), “The Rakuyōshū”, in: *Monumenta Nipponica* 16 (3/4), 289–376.
- Chance, Linda (1997), “Constructing the Classic: Tsurezuregusa in Tokugawa Readings”, in: *Journal of American Oriental Society* 117 (1), 39–56.
- Hayashi, Susumu 林進 (2005), “Saga-bon ‘Ise Monogatari’ no sashie ni okeru seiō dōbanga no eikyō ni tsuite: tenkū to unka no hyōgen 嵯峨本『伊勢物語』の挿絵における西欧銅板画の影響について：天空と雲霞の表現”, in: *Senryō: Kansai daigaku hakubutsukan no ihō* 51, 4–7.
- Hayashi, Susumu 林進 (2010), “Saga-bon ‘Ise Monogatari’ (Keichō jūsan nen shokan) no tanjō (ge) sono sashie to kirishitan gaka Kano Ichi’un 峨本『伊勢物語』（慶長十三年初刊）の誕生（下）その挿絵とキリシタン画家・狩野一雲”, *Nihon kosho tsūshin* 75 (10).
- Higashibaba, Ikuo (2001), *Christianity in Early Modern Japan*, Leiden.
- Horikawa, Takashi 堀川貴司 (2020), “Suruga-ban ‘Daizō ichiranshū’ – Nihon hatsu no kinzoku katsuji shuppanbutsu 駿河版『大蔵一覽集』 – 日本初の金属活字出版物”, in: *MediaNet* 27, 62–63.
- Hu, Yang/Yang, Xiao (2012), *Chinese Publishing*, Cambridge.
- Hakubutsukan, Insatsu (ed.) (2020), *Nihon insatsu bunkashi* 日本印刷文化史, Tokyo.
- Fan, Jialu/Han, Qi/Wang/Zhaochun/Dai, Nianzu (2015), “The Four Great Inventions”, in: Yongxiang Lu (ed.), *A History of Chinese Science and Technology*, vol. 2, London, 194–238.
- Jinno, Hidenori (2020), “Monogatari Literature of the Heian Period and Narratology. On the Problem of Grammatical Person and Character”, in: Sebastian Balmes (ed.), *Narratological Perspectives on Premodern Japanese Literature* (Beiträge zur Mediävistischen Erzählforschung, Special Issue 7), 25–57.
- Kamei-Dyche, Andrew (2011), “The History of Books and Print Culture in Japan: the State of the Discipline”, *Book History* 14, 270–304.
- Kinoshita, Kyoko 木下今日子 (2000), “The Advent of Movable-type Printing: The Early Keichō Period and Kyoto Cultural Circles”, in: Felice Fischer (ed.), *The Arts of Hon’ami Kōetsu, Japanese Renaissance Master*, Philadelphia, 56–73.
- Koakimoto, Dan 小秋元段 (2021), “Saga-bon to sono zenshi no ichi sōbō 嵯峨本とその前史の一相貌”, in: *Bulletin of the Faculty of Letters, Hōsei University* 82, 21–37.
- Kornicki, Peter (2001), *The Book in Japan: A Cultural History from the Beginnings to the Nineteenth Century*, Honolulu.
- Kornicki, Peter (2008), “Books in the Service of Politics: Tokugawa Ieyasu as Custodian of the Books of Japan”, in: *Journal of the Royal Asiatic Society* 18 (1), 71–82.
- Kornicki, Peter (2011), “Japan, Korea and Vietnam”, in: Simon Eliot and Jonathan Rose (eds.), *A Companion to the History of the Book*, London, 111–125.

- Kornicki, Peter (2012), "The *Hyakumantō Darani* and the Origins of Printing in Eight-century Japan", in: *International Journal of Asian Studies* 9 (1), 43–70.
- Kornicki, Peter (2013a), "Korean Books in Japan: From the 1590s to the End of the Edo Period", in: *Journal of the American Oriental Society* 133 (1), 71–92.
- Kornicki, Peter (2013b), "Japan", in: Michael Suarez and H. R. Woudhuysen (eds.), *The Book—A Global History*, Oxford, 605–621.
- Lee, Peter (1993), *Sourcebook of Korean Civilization*, vol. 1, New York.
- Lidin, Olof (2002), *Tanegashima—The Arrival of Europe in Japan*, Copenhagen.
- Lillehoj, Elizabeth (2011), *Art and Palace Politics in Early Modern Japan, 1580s-1680s*, Leiden.
- Marceau, Lawrence (2009), "Cultural Developments in Tokugawa Japan", in: William Tsutsui (ed.), *A Companion to Japanese History*, Malden, 117–135.
- Morris, Mark (1986), "Waka and Form, Waka and History", in: *Harvard Journal of Asiatic Studies* 46 (21), 551–610.
- Needham, Joseph (1985), *Science and Civilisation in China*, vol. 5, part 1, Cambridge.
- Park, Hyunhee (2012), *Mapping the Chinese and Islamic Worlds: Cross-Cultural Exchange in Pre-Modern Asia*, Cambridge.
- Park, Si Nae (2022), "Manuscript, Not Print, in the Book World of Chosŏn Korea (1392–1910)", in: Heekyoung Cho (ed.) *The Routledge Companion to Korean Literature*, New York, 19–38.
- Sasaki, Takahiro 佐々木孝浩 (2016), "Kirishitan-ban kokujitaibon no zōhon ni tsuite – hiragana kokatsujibon to no hikaku wo tōshite キリシタン版国字本の造本について一平仮名古活字本との比較を通して", in: *Shido Bunko ronshū* 51.
- Satow, Ernest (1882), "On the Early History of Printing in Japan", in: *Transactions of the Asiatic Society of Japan* 10, 48–83.
- Schmitz, Wolfgang (2018), *Grundriss der Inkunabelkunde. Das gedruckte Buch im Zeitalter des Medienwechsels* (Bibliothek des Buchwesens 27), Stuttgart.
- Shively, Donald (1991), "Popular Culture", in: John Whitney Hall (ed.), *The Cambridge History of Japan* vol. 4, Cambridge, 706–770.
- Song, Minah (2009), "The History and Characteristics of Traditional Korean Books and Bookbinding", in: *Journal of the Institute of Conservation* 32 (1), 53–78.
- Suzuki, Hiromitsu 鈴木広光 (2015), *Nihongo katsuji insatsushi* 日本語活字印刷史, Nagoya.
- Takagishi, Akira (2015), "The Reproduction of Engi and Memorial Offerings: Multiple Generations of Ashikaga Shoguns and the *Yūzū nenbutsu engi emaki*", in: *Japanese Journal of Religious Studies* 42 (1), 157–182.
- Tenri Toshokan 天理図書館 (ed.) (1973), *Kirishitan-ban no kenkyū* きりしたん版の研究, Tenri.
- Toyoshima, Masayuki 豊島正之 (2013), *Kirishitan to shuppan* キリシタンと出版, Tokyo.
- Oh, Youn Kyun (2013), *Engraving Virtue: The Printing History of a Premodern Korean Moral Primer*, Leiden.
- Osterkamp, Sven (2022), "A Hitherto Unknown Jesuit Confessionary in Japanese Language and Script (c. 1595)", *Utrecht University Special Collections Blog*, <https://www.uu.nl/en/utrecht-university-library-special-collections/collections/early-printed-books/theological-works/a-hitherto-unknown-jesuit-confessionary-in-japanese-language-and-script-c-1595> (accessed 8/10/2022).
- Yamagiwa, Joseph (1955), "Revisions in the *Rakuyōshū* at the Time of Its Printing in 1598", in: *Monumenta Nipponica* 11 (2), 185–194.

Figure Credits

Fig. 1: *Daizō ichiranshū* ('Digest of the Tripitaka'), 1615, metal movable type print, National Archives of Japan, Tokyo.

Fig. 2: Hata Sōha, *Tsurezuregusa Jumyō'in shō* ('Essays in Idleness—Commentaries by Jumyō'in'), 1604, wooden movable type print (1931 facsimile edition), National Diet Library, Tokyo.

Fig. 3: *Heike Monogatari* ('Tales of Heike'), Nakanoin edition, early 17th century, wooden movable type print, National Diet Library, Tokyo.

Fig. 4: *Bauchizumo no sazukeyo* ('The Way to Administer Baptism'), 1593, Christian movable type print, Tenri University Library (with friendly permission).

Fig. 5: *Rakuyōshū* ('Collection of Fallen Leaves'), 1598, Christian movable type print, Tenri University Library (with friendly permission).

Fig. 6: *Ise monogatari* ('Tales of Ise'), Saga edition, 1608, wooden movable type print, Inumasan Enpuku-ji temple, Chōshi.

