

Chapter 4

Ink Brushes, Seals, and Printmaking

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THIS chapter examines four ancient yet foundational art forms that have played a central role in the development of Japanese visual culture over several centuries. Each continues to exert a significant influence on contemporary Japan, serving both as sources of cultural export and as living traditions that permeate society, including contemporary design practice. While other visual arts have developed in Japan, such as *Nihonga* — a term for modern painting using traditional Japanese materials — and *yōga* (Western-style painting), the focus here is on ink-based practices that predate both movements.

The chapter first explores Japanese calligraphy (*shodō*) and the closely related art of sumi ink painting (*sumi-e* or *suibokuga*), analyzing their shared materials, techniques, and philosophical foundations. It then addresses the use of seals, such as *inkan* and *banko*, as both practical tools of authentication and forms of artistic expression. Finally, the discussion turns to woodblock printing (*mokubanga*), an art form central to Japan's global artistic identity and one that continues to attract significant interest both domestically and internationally.

1 Brush and Ink: Japanese calligraphy and sumi ink painting

Japanese calligraphy, referred to as *shodō*, has a long history, going back to the sixth century (Asuka period), when Chinese *kanji* characters were first introduced to Japan from China via Korea. Since Japan had already developed a spoken language ...

these newly-arrived ideograms were given two different pronunciations: the original sound from its Chinese use, and the Japanese way of pronouncing that same vocabulary item's meaning.¹

ひらがな
カタカナ
漢字

Figure 1: The three scripts of the written Japanese language, from top to bottom, *hiragana*, *katakana*, and *kanji*. Here, they are written left-to-right, but Japanese can also be written top-to-bottom or right-to-left.

Unlike the characters within alphabet-based writing systems, “a single ideogram of kanji is a ‘word’ carrying a specific meaning.”² As will become evident in this and subsequent chapters, this ideogrammatic basis of the Japanese written language yields interesting forms of expression that are not easily achieved in alphabet-based languages.

Following the introduction of *kanji*, calligraphy was primarily used for official documents, the transcription of Buddhist sutras, and inscriptions. By the eighth century (Nara period), Japanese writing began to develop more distinct characteristics, diverging further from the Chinese language. In addition to *kanji*, *kana* – meaning both the *hiragana* and *katakana* writing systems – emerged, creating a more distinctly Japanese style of writing (Figure 1):

Hiragana was developed from the *sosho* (cursive) style of writing, to become a graceful, flowing, semi-formal writing style known as the “grass” style ... Katakana,

¹Shozo Sato. *Shodo: The Quiet Art of Japanese Zen Calligraphy: Learn the Wisdom of Zen Through Traditional Brush Painting*. Tuttle Publishing, 2014, 16.

²Sato, see n. 1, 16.

in contrast, was developed from what is known as the *kaisho* [square] style, and reflected one simple portion copied from a *kanji* ideogram. Therefore the *katakana* symbols are more square in shape.³

Hiragana was regarded as a more graceful form of expression and was often referred to as the “women’s style” of writing. In contrast, *katakana* was adopted by Buddhist priests and government officials and was thus considered the “male” style of writing, a distinction that is perhaps unique among writing systems.⁴ Both *kana* systems were used to represent the syllabary of spoken Japanese.



Figure 2: A depiction of Fujiwara no Sukemasa by Yōsai Kikuchi (1788-1878AD). Fujiwara is among the three figures most crucial to the foundation of calligraphy in Japan.

The most significant figures in this early development of written Japanese were the three masters of calligraphy, referred to as *Sanseki* (“three brush traces”): Ono no Michikaze (894-966 AD), Fujiwara no Yukinari (972-1028AD), and Fujiwara no Sukemasa (944-998AD) (Figure 2). All were active during the Heian period (794-1185AD), and are credited with establishing a uniquely Japanese style of calligraphy. Each blended Chinese techniques with Japanese writing forms, helping to popularize the use of *kana* alongside *kanji*, and creating a more fluid, expressive script that influenced generations of Japanese calligraphers.⁵

In contemporary Japanese calligraphy, four principal styles of character scripts are commonly taught, though a fifth related to the design of carved seals is also worth mentioning here, given its importance to past and present typography in Japan. See Figure 4 as a visual reference for these styles:

³Sato, see n. 1, 16.

⁴Sato, see n. 1.

⁵N. Nagayoshi. “Nihon shodō riron-shi josetsu: Sesonji-ke ni yoru shodō riron taikaika no kokoromi [An Introduction to the History of Japanese Calligraphic Theories: An Effort to Systematize the Calligraphic Theory by the Sesonji Family].” In: *Calligraphic Studies* 28 (2018), pp. 29–42. DOI: 10.11166/shogakushodoshi.2018.29.

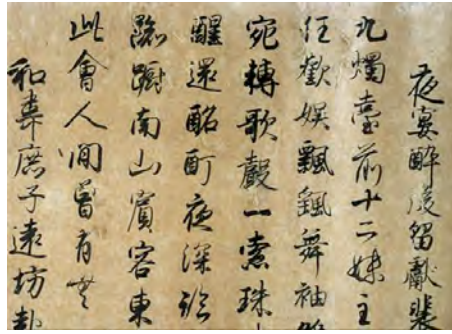


Figure 3: An excerpt from *Hakushi shikan* (An anthology of poems), written by the Chinese poet Bai Juyi (772-846AD), with text said to have been written by the calligrapher Fujiwara no Yukinari. From the collection at Tokyo National Museum.

- **Reisho**: This script is often referred to as the “cleric’s script.” This was influenced by the *Tensho* style, created for seals a generation earlier.
- **Kaisho**: A simplified version of *Reisho*, and considered the “correct” form of writing. It is considered the most legible script.
- **Gyosho**: A slightly cursive style that is less formal than *Reisho* and *Kaisho*.
- **Sosho**: This is a style analogous to cursive handwriting in Western languages. This is considered the least formal style of writing but is therefore highly artistic.
- **Tensho**: A script style originally created through the carving of seals such as *inkan* and *hanko*, as discussed later in this chapter.⁶



Figure 4: Typefaces displaying the two characters for the word *shodō* (calligraphy) based on styles of Japanese scripts that have evolved over the centuries, from calligraphy and seal carving.

Although printing techniques such as *banki-insatsu* (woodblock printing) have existed since the introduction of *kanji* to Japan, calligraphy has persisted into the contemporary era

⁶Sato, see n. 1.

as both a means of communication and an artistic pursuit. Calligraphy was not the only art form to develop in China and later in Japan that utilized brush and ink.

From the twelfth century (late Heian to Kamakura period) onward, Zen Buddhist monks exerted a strong influence on both calligraphy and ink painting, emphasizing simplicity, spontaneity, and expressive brushwork. Ink painting, known in Japan as *sumi-e* or *suibokuga*, began during the twelfth century, introduced from China by Japanese Buddhist monks who studied there.⁷

It was not until the fifteenth century (Muromachi period), though, that *sumi-e* developed into a more distinctively Japanese art form. In particular, Sesshū Tōyō (1420–1506AD) developed a distinctly Japanese style, emphasising simplicity, asymmetry, and Zen-inspired forms. Later, Jakuchū Itō (1716–1800AD), sometimes referred to simply as Jakuchū, further advanced the form in the Edo period, creating intricate, detailed compositions while working in the mostly monochrome tradition.



Figure 5: Jakuchū’s eighteenth-century painting *Abunishokeizu* (Chickens with a Gadfly), on display at the Hosomi Museum, Kyoto.

Throughout these periods, *sumi-e* primarily employed ink of varying shades, predominantly monochrome, with minimal or no use of colour. Despite this limitation, the forms produced are highly expressive, and many artists continue to work in the sumi medium today, maintaining traditional techniques while occasionally incorporating modern influences.

In both *sumi-e* and calligraphy, the minimalism associated with the aesthetics described in Chapter 1 is evident. These art forms are highly expressive, and their appreciation “involves more than simply making judgments regarding the marks on paper, but also calls for an appreciation of the bodily movements that created the work.”⁸

⁷K. Katori. *Kyokasho: Tanoshii suibokuga I – Kiso* [Textbook: Fun Sumi-e Painting I – Fundamentals]. International Sumi-e Association, 2012.

⁸David E. Cooper. “Japanese Aesthetics.” In: *The Stanford Encyclopedia of Philosophy*. Ed. by Edward N. Zalta and Uri Nodelman. Winter 2022. Metaphysics Research Lab, Stanford University, 2022. URL: <https://plato.stanford.edu/entries/japanese-aesthetics/>, sec. 7.

Negative space plays a crucial role in the overall composition of both art forms, reflecting the *ma* aesthetic. Consider this description of one of the most well-known landscape paintings of Sesshū, *Splashed Ink Landscape* (*haboku sansui-zu*):

The mysterious grace of his most celebrated landscape painting derives as much from the space that is left un-touched, the invisible and absent ... as from what is painted and visible. The work appears incomplete, still in the act of formation, and the dramatic negative spaces created by the mists allow the various forms to dissolve and blend into one another ... this negativity invites the viewer into the painting to actively complete it.⁹

Although both media rely primarily on monochromatic, often simple and sometimes abstract compositions that leave much of the paper untouched, calligraphy and sumi ink painting have produced a wide variety of expressive works using the most economical means. Both art forms depend on four essential materials (Figure 6):

- Brushes
- Sumi ink, and water to dilute it with
- Japanese paper, referred to as *washi*
- *Hanko* and *inkan* seals as a form of signature – explained in further detail below.

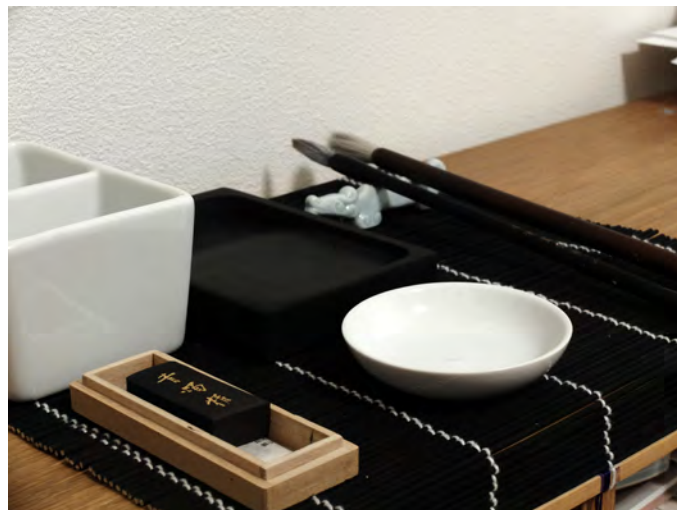


Figure 6: Tools for creating *sumi-e* work: A water container, brushes, a *sumi* ink stick, an ink stone (*suzuri*) for grinding the *sumi* and mixing it with droplets of water (usually added with a dropper called a *suiteki* — not pictured), and a dish for mixing the ink with more water.

⁹Cooper, see n. 8, sec. 7.

Sumi ink is made from the soot of burned wood, oils, or pine resin, mixed with animal glue and formed into solid sticks. Common wood sources include pine, cherry, and maple, and the choice of material affects the ink’s richness and tone. While black ink is most typical, *sumi* can also produce brown or bluish tones, offering subtle variations for expressive effects.

Artists grind the ink stick on an inkstone with a small amount of water to create liquid ink, allowing them to control the darkness, density, and texture. The brush, usually made of animal hair, responds to subtle changes in pressure, producing expressive lines.

Sumi-e techniques include layering washes of diluted ink to create atmospheric depth, employing dry brush strokes for texture, and varying the brush’s pressure and speed to convey movement or emotion. Unlike many other forms of painting, such as watercolour, *sumi* artists typically paint foreground objects first and add the background later.

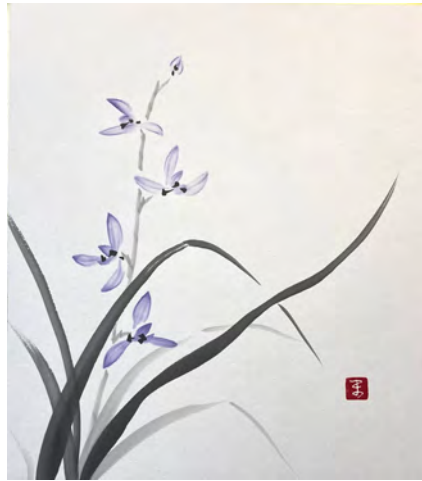


Figure 7: *Sumi-e* work depicting orchids. This is one of the four classic themes that Japan inherited from China, referred to as *shikunshi* (the “four gentlemen”). Work by Machiko Haimes.

Drawing from the traditional Chinese curriculum, common themes include the *shikunshi*, or “four gentlemen”: bamboo, orchids, plum blossoms, and chrysanthemums.¹⁰ Buddhist motifs, such as cloud dragons (*unryū*), are also prevalent (Figure 8), as are landscapes featuring mountains and water, referred to as *sansui*.¹¹

Another common theme is characters from the *Chōjū-jinbutsu-giga* (often translated as “Scrolls of Frolicking Animals and Humans”), originally created by unknown monks, sometime in the twelfth or thirteenth centuries (Figure 9).

Throughout the history of *sumi-e*, artists have also frequently integrated calligraphy into their paintings, combining visual and textual expression in works known as *shigajiku* (“poem-

¹⁰K. Katori. *Kyokasho: Tanoshii suibokuga II – Shikunshi* [Textbook: *Fun Sumi-e Painting II – The Four Gentlemen*]. International Sumi-e Association, 2012.

¹¹Kinsui Katori. *Kyokasho: Tanoshii suibokuga VI – Sansuiga 1* [Textbook: *Fun Sumi-e Painting VI – Landscape Painting 1*]. International Sumi-e Association, 2015.



Figure 8: Cloud dragon (*unryū*) painted on the ceiling at Kenninji temple in Kyoto.



Figure 9: *Chōjū-jinbutsu-giga* (Scrolls of Frolicking Animals and Humans). Created by unknown monks in the twelfth or thirteenth centuries.

and-painting scrolls”).

2 Hanko and Inkan: Marks of identity

Another significant import from the Chinese mainland to Japan around the seventh century was the use of carved seals for personal and official authentication. These seals were “objects specifically designed to serve as transmitters of impressed images.”¹²

Originally used by government officials to validate documents, seals gradually spread to the aristocracy and later to the general population. Unlike, say, the design of coins for a commonly-

¹²M. C. Root. *The Art of Seals: Aesthetic and Social Dynamics of the Impressed Image from Antiquity to the Present*. Kelsey Museum Publications Series. Ann Arbor, MI: Kelsey Museum of Archaeology, University of Michigan, 1984. URL: https://lsa.umich.edu/content/dam/kelsey-assets/kelsey-publications/pdfs/The_Art_of_Seals.pdf, 7.

used currency, the design of seals is an endeavour that allows for a great deal of expression:

An essential aspect of the production of a sealing is its intimate and even unique link with the individual or institution which uses it. This link is based partly on symbolic aspects of the seal design ... But it is also based on the importance of the individual act of applying the seal to produce an impression.¹³

Seals continue to play a significant role in contemporary Japan, serving as personal signatures for both official and informal purposes, even as the country gradually transitions to more digitized workplaces and governance.¹⁴ Different types of seals are used according to the level of formality. For example:

1. A *mitomein* is used for everyday documents, such as parcel deliveries or office paperwork.
2. A *ginkōin* is designated for banking and financial matters.
3. The most important seal is the *jitsuin*, which must be registered at the local city hall and is required for major legal or financial transactions, including purchasing property, obtaining a mortgage, or buying a car. Registration ensures that each seal is uniquely associated with its owner, thereby helping to prevent forgery or misuse.¹⁵

The red ink or paste used for seals, known as *shuniku* (Figure 10), is typically made from a mixture of finely ground cinnabar (a mercury sulphide pigment), castor or rapeseed oil, and silk or plant fibres to produce a dense, slightly sticky consistency. This allows the impression to adhere cleanly to paper or parchment, leaving the distinctive vermilion-red mark that signifies authenticity.¹⁶ The design of seals is also considered an artistic practice that continues to this day.

Characters are often engraved in *tensho* (seal script), as mentioned above, or other decorative styles that can range from highly formal to freely expressive, depending on the intention of the carver. Over time, this has developed into a distinctive art form, and it is not unusual to see exhibitions showcasing particularly expressive seals that reflect their creators' individual sense of style and expression. Finally, these seals are often used in Japanese artworks, including calligraphy and sumi paintings, serving as the artist's signature (e.g., Figure 7).

¹³Root, see n. 12, 8.

¹⁴D. G. Prawiro et al. "Technology Adaptation in Japan's Work Culture: Usage of Electronic Signatures (E-Signatures) in Post-COVID-19 Japan." In: *Engineering Proceedings* 74.1 (2024), p. 66. DOI: 10.3390/engproc2024074066.

¹⁵L. Maurizi. "Hanko" and "Inkan": *Japanese Stamps and Personal Seals*. Nippon.com. 2016. URL: <https://www.nippon.com/en/features/jg00077/>.

¹⁶Sato, see n. 1.



Figure 10: An artist's *hanko* and *shuniku* red paste. The paste has a dense, sticky consistency.

3 Woodblock prints in the floating world

Few images from Japan are as globally recognizable as Katsushika Hokusai's (1760-1849) *The Great Wave off Kanagawa* (c. 1831), known as *Kanagawa-oki Nami Ura* in Japanese (Figure 11). This woodblock print, or *mokuhanga*, exemplifies a technique that became one of Japan's most celebrated art forms.

Woodblock printing is notable for two primary reasons: it was among the earliest Japanese art forms to gain international attention when Japan opened to the world in the late Edo and early Meiji periods, and it represented one of the first examples of mass production in Japanese art, enabling intricate, painterly images to reach a broad audience.



Figure 11: Hokusai's 1831 work *Kanagawa-oki Nami Ura* (*The Great Wave off Kanagawa*). This work is one of the most reproduced artworks in the world.

Despite a persistent rumour that such prints were once used merely as wrapping for ceram-

ics exported overseas, Davis points out that this story “has always seemed to me to be a myth. Yet it is so persistently and perennially invoked that I began to wonder: Where did it come from?”¹⁷

In reality, throughout the Edō period, *ukiyo-e* prints circulated widely in Japan, depicting the energy and colour of the so-called “floating world,” *ukiyo*. This encompassed Edō’s (present-day Tokyo) urban entertainment districts, including *geisha*, *kabuki* theatre, *sumō*, and various forms of both refined and popular, sometimes disreputable, amusement:

Prints were exported and sold to European collectors as works of art long before the Impressionists came on the scene, and it is quite clear from period evidence that people in Japan saw these prints as ‘art’ centuries earlier.¹⁸

Ukiyo-e artists worked within a collaborative production system involving painters, carvers, printers, and publishers, yet the artistry remained deeply rooted in individual skill. As Davis observes:

The skilful use of brush and ink to render an image was central to the *ukiyo-e* artist’s task. These illustrator-designers were trained as painters. The brush was their primary tool, its practice the foundation for their art.¹⁹

Although prints were mechanically reproduced, each impression retains subtle differences in colour, registration, and pressure, revealing the hand of the maker.

Woodblock prints are created through an intricate process that has not differed significantly since the Edō period. Prior to printing, the artist’s design is redrawn on thin *washi* paper, and pasted onto several wooden blocks – one for each of the individual colours used.²⁰ Next, non-printing areas are carefully carved away, leaving raised surfaces for inking. The process starts with cutting registration marks (*kento*) in the corners and along one side of the block. Accurate alignment is essential, especially for multi-colour works:

The *kento* marks... allow for precise registration of subsequent colour impressions. Each colour requires a separate block, and the artist must carefully align the paper for every print.²¹

¹⁷J. D. Davis. *Picturing the Floating World: Ukiyo-e in Context*. University of Hawai’i Press, 2021, 5.

¹⁸Davis, see n. 17, 6.

¹⁹Davis, see n. 17, 13.

²⁰M. Bożyk. “The Technique of Traditional Japanese Woodblock Print as Interpreted by Contemporary Artists.” In: *IN & AW Journal* 2.2 (2021), pp. 68–78. URL: <https://systeminawjournal.asp.krakow.pl/index.php/inaw/article/download/72/131/523>.

²¹Bożyk, see n. 20, 72.

The drawing is then affixed to the prepared surface with rice glue (*nori*) and cut along its outlines so that the raised areas will hold the colour. The block is then secured and aligned for precision in multi-colour printing, using a board with a special railing affixed, known as a *hanga sagyōdai*.²²

Before printing, the pigments and brushes are prepared. As Bożyk describes, the pigments are blended with the *nori* glue and applied to the block using a *maru-bake*, a round brush designed to spread the colour — either evenly or by creating delicate tonal gradations known as *bokashi*. Printing is done by hand, using a circular pad called a *baren* to press the paper against the inked surface:

When the paint has been applied, the moistened paper is placed on the wood and pressed with a *baren* – a special circular pad covered with bamboo sheath. The pressure and circular motion of the hand allow the paint to be transferred evenly.²³

Finished prints are then dried and sometimes given a gloss coating.²⁴



Figure 12: *Kameido Umeyashiki* (Plum Park in Kameido), created in 1857 by Hiroshige. This work was later reinterpreted by Vincent Van Gogh.

Though contemporary artists continue to work in the medium, Hokusai remains almost undoubtedly the most famous woodblock artist both within and outside Japan, and his name is synonymous with *ukiyo-e*. Yet, he was just one of many practitioners working in the medium.

²²Bożyk, see n. 20.

²³Bożyk, see n. 20, 72.

²⁴Bożyk, see n. 20.

Katsushika Hokkei (1813-1818; a student of Hokusai) and Utagawa Hiroshige (1797-1858), for instance, produced refined images of everyday life and landscapes that rival Hokusai's in composition and atmosphere.

Indeed, Hiroshige would later influence Western painters – most famously Vincent van Gogh (1853-1890), who produced his own versions of Hiroshige's works, admiring their flattened perspective, strong lines and vibrant colours (Figure 12).

4 Summary

This chapter introduced four traditional art forms that continue to influence both Japanese and global visual culture. Beyond admiration for historical figures such as Hokusai, the development of calligraphy, *sumi* ink painting, seal culture, and woodblock printing shows a shared concern for simplicity, balance, and sensitivity to materials. Each uses the most limited means to achieve a wide range of expression, where restraint and empty space are as significant as the forms used. These practices form a visual tradition that still strongly influences how art and design are understood in Japan. As later chapters will show, these older ways of working persist, continuing to inform how Japanese designers think about form, rhythm and space today.

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