

Exotic Medicine: How Ignatius Sichelbarth's Painting of a Musk Deer Appeared in the *Philosophical Transactions*

Kristina Kleutghen

In 1750, the Jesuit father Ferdinand Augustin Hallerstein, S. J. (Liu Songling; 1703–74), a corresponding member of the London Royal Society, sent a letter from Beijing answering several questions posed by Dr Cromwell Mortimer (c. 1693–1752), secretary of the society and editor of its *Philosophical Transactions*. Scholarly papers and correspondence by Jesuits were included in the *Philosophical Transactions* from its beginnings in 1665 through the suppression of the order in 1773, as well as by the formal corresponding membership of Jesuits scattered around the world. Although Dr Mortimer's

original letter does not survive, Hallerstein's response, published in the *Philosophical Transactions* in 1751, acknowledges Mortimer's queries regarding astronomical observations; maps of China and its cities; a Chinese dictionary; specimens of butterflies, insects and shells; and, specifically, musk deer. Included with Hallerstein's response was a small painting of a female musk deer produced by Ignatius Sichelbarth, S. J. (Ai Qimeng; 1708–80), a Czech Jesuit serving the Portuguese mission in Beijing as a court painter to the Qianlong emperor (r. 1735–96) (Fig. 1).

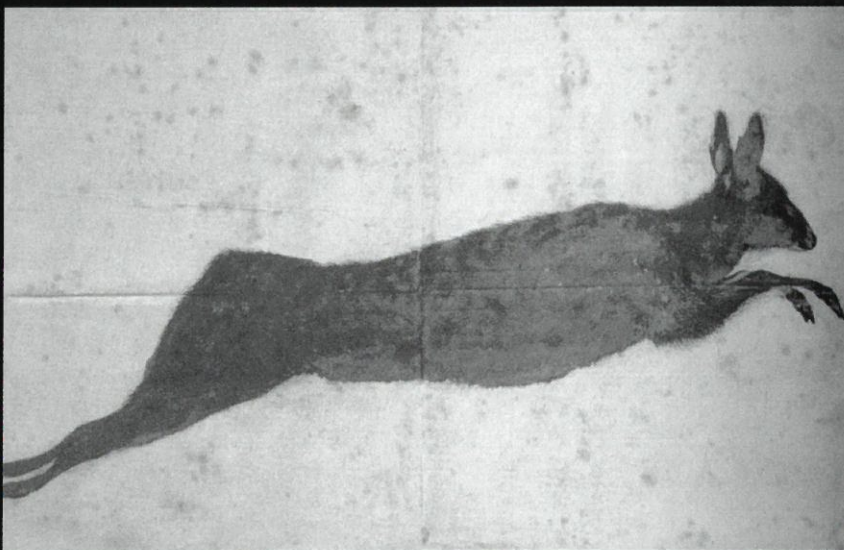


Fig. 1 *Female Musk Deer*
By Ignatius Sichelbarth, S. J. (1708–80),
before 18 September 1750
Painting on paper, dimensions unknown
Mengeš Museum, Slovenia
(After Mitja Saje, ed., *A. Hallerstein -
Liu Songling 劉松齡: The Multicultural
Legacy of Jesuit Wisdom and Piety at the
Qing Dynasty Court*, Maribor, 2009, p. 240)

The musk deer is an unusual creature, existing in several species across the Himalayas, the Tibetan plateau, northern China and Siberia. But it is the Chinese species that in 1758 the Swedish botanist, zoologist and physician Carl Linnaeus (1707–78) classified using zoological binomial nomenclature as the 'musk deer' (*L. Moschus moschiferus*), specifying its habitat as Tartary in north China. This small quadruped stands about 50 to 60 centimetres tall at the shoulder and weighs between 7 and 17 kilograms. The male grows two small, downward-pointing tusks instead of antlers, and produces and stores 15 to 30 grams of waxy and granular musk in the musk pod, a gland between the navel and the genitals. The

strong-scented musk is best known as a component of perfume.

The first effectively accurate image of the musk deer comes to us via the Italian Jesuit Martino Martini (1614–61) and Dutch cartographer Johan Blaeu (1596–1673) in the 1655 *Novus Atlas Sinensis*. On the map of Shaanxi province in northern China (Fig. 2), the natural habitat of the musk deer, the animal itself is found grazing on the legend (Fig. 2a). The text of Martini's *Atlas* is the source most often cited in the Jesuit Athanasius Kircher's (1602–80) *China Illustrata* (1667), which quotes Martini by name on the subject of the musk deer but includes a new image plus an attempt at the name of the deer written (albeit

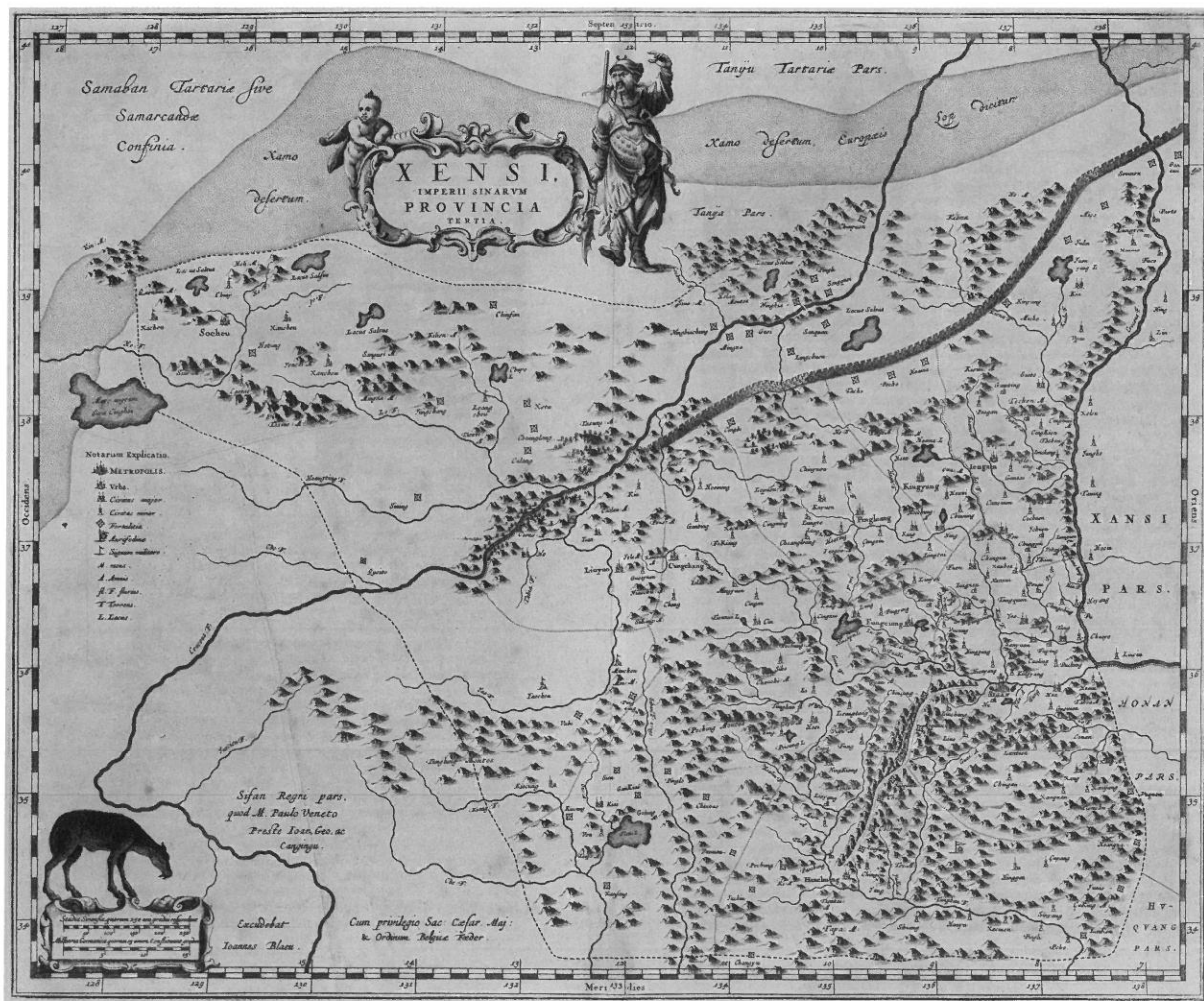


Fig. 2 *Xensi, Imperii Sinarum Provincia Tertia*, from *Novus Atlas Sinensis*, between pages 42 and 43
 By Martino Martini (1614–61)
 Published as part of Johan Blaeu (1596–1673), *Atlas Maior* (1655)
 Hand-coloured map on paper, 40 x 48 cm
 The Renaissance Exploration Map Collection, Stanford University Libraries, Stanford, CA



Fig. 2a Detail of the map in Figure 2 showing the illustration of the musk deer

incorrectly) in Chinese characters (Fig. 3). Pictured in a landscape near two pagodas thus ensuring that the reader identifies the setting as China, Kircher's deer is rendered not unskilfully, but its rather stylized appearance hardly qualifies as a natural history image. Intriguingly, Kircher also includes the musk deer in his frontispiece in a tiny inset directly below the map, visually correlating the animal with China and the Jesuit mission there from the very first illustration in the book (Fig. 4).

Both Kircher's description and illustration of the deer were found lacking by the Royal Society, as was pointed out in 1681 by the English plant anatomist and physiologist Nehemiah Grew (1641–1712) in his catalogue of the rarities in the Royal Society's museum, which already possessed a Chinese male musk deer specimen (Grew, 1681, pp. 21–23). The height of the Royal Society's interests in sinology occurred during the 1680s, when it prioritized enquiries into the Chinese language and the medicinal use of ginseng, which remained a frequent topic throughout the 18th century (Appleby, 1983). How the musk deer was acquired is not noted, but Grew presents more than two full pages of careful description, including measurements and firsthand observations made with a magnifying lens—far more discussion than is typically allotted to the other specimens in the Royal Society's collection. Grew's unusually long and detailed description epitomizes the empirical approach to natural history codified by the 'father of empiricism' Francis Bacon (1561–1626):

made using reliable instruments, by a fellow of the Royal Society, and in an attempt to rectify earlier authors' mistakes and general under-reporting, as Grew remarks concerning his general motivations in the preface. Specifically, he notes that Kircher's musk deer is 'faulty as to the snout and feet', but that it is better than average considering that the deer is 'almost everywhere else worse described' (Grew, 1681, p. 22). So if, at the height of the early Royal Society's interests in sinology in the late 17th century, there was already reliable, detailed information about the musk deer, why did it suddenly become the subject of renewed scientific interest in the mid-18th century? What prompted Secretary Mortimer to request more information about the animal from Father Hallerstein?

A Slovenian Jesuit from the Austrian empire, Hallerstein was attached to the Portuguese mission in Beijing, where from 1746 to 1774 he was the astronomer in charge of the Beijing imperial observatory. In 1746, Hallerstein was formally invited to become a corresponding member of the London Royal Society, and his astronomical observations, sent as correspondence to London, Paris and St. Petersburg, were published by those three separate

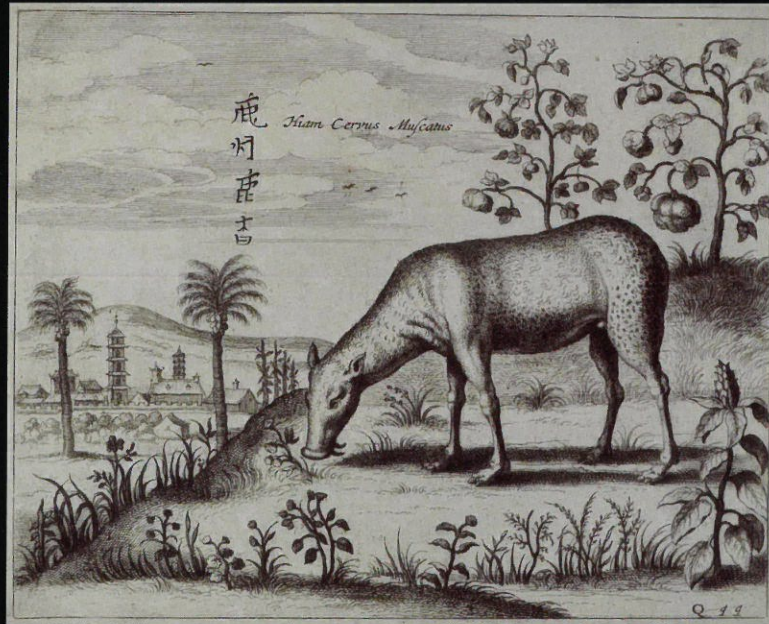


Fig. 3 *Musk Deer*, from Athanasius Kircher, S. J. (1602–80), *China Illustrata*, pars quarta, caput VII, 'De Exoticis Chinae Animalibus', between pages 190 and 191 Artist unknown, Amsterdam, 1667 Print, height of volume 39 cm Boston College Library (DS708 .K58 1667b)

Royal Societies. Hallerstein's Latin response to Mortimer, dated 18 September 1750, was translated into English and read to the London Royal Society on 19 December 1751. The section pertaining to the musk deer is as follows:

We have not yet had the good fortune here at Pekin to see an accurate figure of the male musk animal: the figure here [enclosed] is that of the female; and it is not this, but the male, that is said to bear the musk. This figure was drawn in our house by Father Ignatius Sichelbarth, from a dead animal, as it was brought to us. The Chinese, who have seen the male, say, that it is not much unlike this figure, excepting that it has larger

teeth, and sometimes tusks like those of a boar. On some other occasion, we will take care to send you its figure. In *fine*, the Chinese call both the male and female *hiam cham fu* [*xiang she lu* 香麝鹿], which means the *little odiferous deer* (*damula odorifera*).

(Hallerstein, 1751, p. 321)

Indeed, it is clear from the absence of the tusks and the gland in Sichelbarth's original painting, which still exists in the Mengeš Museum in Slovenia (see Fig. 1), that this musk deer is not the male of the species, from which the musk was harvested. The painting presents only the animal on an empty picture plane, which can be read within the context of both the negative space aesthetics of Chinese painting, in which Sichelbarth was trained upon his arrival in Beijing, and the focus on the specimens rather than on the background in natural history illustration. The deer is depicted in what might seem like a flying gallop if we did not know that the animal was dead. But by emphasizing in his text that the female is otherwise physically very similar to the male and that the painting was made from a European artist's direct observation of the animal, and by including the hunters' firsthand empirical experience in the description, Hallerstein nevertheless characterizes the image as reliable and scientific in its own way. Asking Sichelbarth to paint the image is an unexpected choice given that Giuseppe Castiglione (1688–1766), the most talented missionary artist to serve at the Qing (1644–1911) court, was also attached to the Portuguese mission. Castiglione is mentioned several times in Hallerstein's correspondence with high praise, and in one letter he even states that Castiglione is a much better painter than Sichelbarth (Vampelj Suhadolnik, 2015, p. 47). But by 1741, Hallerstein had already written of the exhausting demands that the emperor placed on Castiglione, suggesting that the astronomer was reluctant to add to his overburdened Italian colleague's tasks (*ibid.*, p. 48).

Furthermore, Sichelbarth was known at the Qing court for his ability to paint, specifically, quadrupeds in the European manner, relying on colour and tone to create relatively realistic-looking animals characterized by mass and volume, which effectively erased the artist's hand from the image. The level of observation that the Jesuit artists display in their paintings borders on the scientific, in order for them to achieve the degree of detail and texture desired. Most of Sichelbarth's extant paintings for the Qing

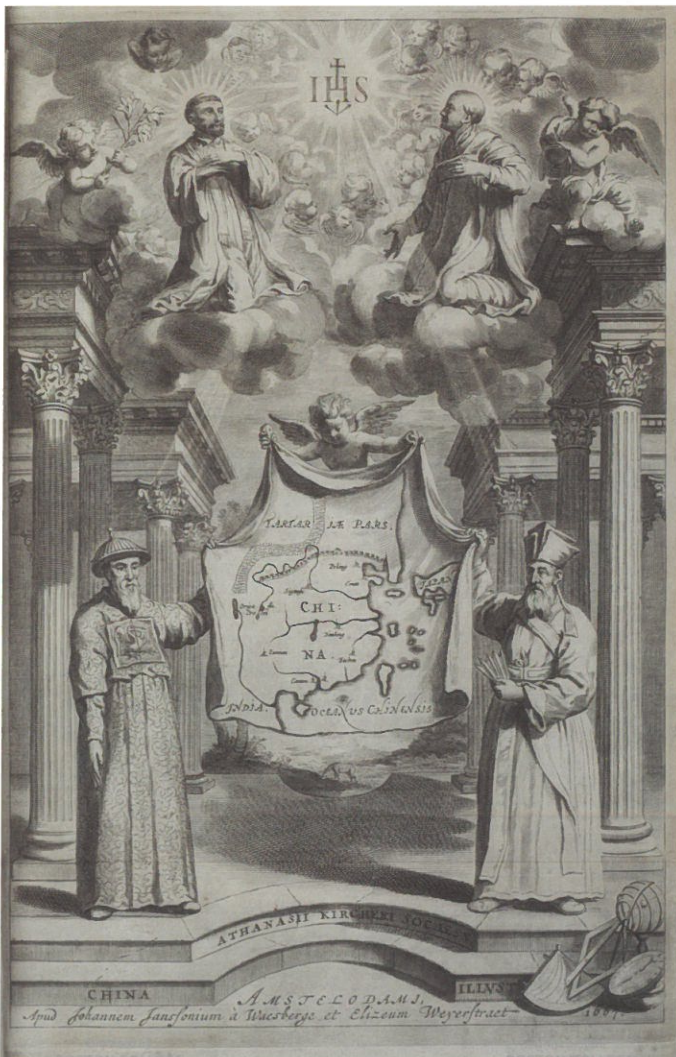


Fig. 4 Frontispiece, from Athanasius Kircher, S. J. (1602–80), *China Illustrata*. Artist unknown, Amsterdam, 1667. Print, height of volume 39 cm. Boston College Library (DS708.K58 1667b)



Fig. 5 *The Submission of the Ili*, from *The Conquests of the Emperor of China*
 Designed by Ignatius Sichelbarth, S. J. (1708–80), engraved by Benoit Louis Prevost (1747–c. 1804), 1769
 Etching and engraving, plate 1 of sixteen, 57.4 x 93.3 cm
 The Metropolitan Museum of Art
 Harris Brisbane Dick Fund, 1945 (45.100.1)

court are of deer and horses, both of which served a powerful purpose for the Manchu imperium (Fig. 5). Deer and horses were deeply important to Qianlong and the reigning Qing dynasty, who were ethnically Manchu, in contrast to the majority of the population, which was Han Chinese. One of the ways in which the Qing emperors maintained their distinctly non-Chinese ethnocultural identity was by perpetuating traditional Manchu activities such as hunting deer from horseback using a bow and arrow, a subject that was frequently commanded of the European missionary painters at the Qing court. These artists produced every possible permutation of the topic, from the hunt in action and the emperor's equestrian prowess, to the animals involved as conveyance and as prey, and even to the antler trophies acquired (Fig. 6). Although the emperor did not hunt musk deer, Sichelbarth's experience in painting quadrupeds at imperial command meant that he was more than equipped to produce an image of a musk deer for a colleague. While missionary artists in Beijing did occasionally paint for their own missions, the emperor kept them so busy that very

few such works exist, making Sichelbarth's painting an important piece of evidence for their activities beyond the court.

Sichelbarth's painting was engraved for publication in the *Philosophical Transactions*, together with the translated letter, by James Mynde (1702–71), a British master engraver with a large studio in London, whose signature can be found on many of the printed illustrations, particularly of plants and animals, that accompany papers published in the *Philosophical Transactions* in the middle decades of the 18th century. Tipped in between two pages of Hallerstein's published letter, the illustration reverses the original orientation of the deer and exaggerates the tonal roughness of its fur, the interior of its ears, and the bifurcation of its cloven hooves (Fig. 7). As Sachiko Kusukawa has argued, both original paintings or drawings, and their engraved versions published in the *Philosophical Transactions*, are important sources of information about the Royal Society's use of images, as well as 'how images were used in the process of forming knowledge about nature' (Kusukawa, 2011, p. 285). Mynde's

visual enhancement of the details in Sichelbarth's painted musk deer results in an image with far more information, and it is therefore more like a scientific illustration as would appeal to the Royal Society and the readership of the *Philosophical Transactions*.

At the time, there was a new and growing English interest in the medical applications of musk, just then undergoing experimentation, which were being presented to the Royal Society. By the 9th and 10th centuries, both Tibetan and Arab scholars were using musk medicinally as a stimulant and an antispasmodic, exchanging ideas and ingredients along the 'musk route' connecting the medieval Islamic and Tibetan worlds (Akasoy and Yoeli-Tlalim, 2007). Although Arab scholars did introduce the medicinal use of musk to medieval Europe, it remained primarily an ingredient in perfume there from the 13th to the mid-18th century.

At the Royal Society in December 1744, a pair of letters (referred to as 'papers' in society parlance) were read that presented successful medical applications of musk and mark a shift in the English scientific interest in the substance (Wilmot, 1744, p. 225). The first acknowledged musk as a known antispasmodic but argued that the dosage should be significantly increased because 'the *Chinese*, who are much better acquainted with the Nature and Uses of this excellent Drug, order it in much larger Quantities'. Here the author, a Dr Wall, directed the reader to consult the French Jesuit historian Jean-Baptiste Du Halde's (1674–1743) discussion of musk in Chinese medicine as presented in the four volumes

of his *General History of China*, first published in French in 1735 and translated into English in 1736. Wall described several cases in which larger doses of musk were successfully administered to patients who had been bitten by mad dogs or suffered from other maladies, including hiccups, seizures and convulsions. The accompanying letter, written by one Alexander Reid, Esquire, noted that around 1730 in China he had learned of a highly effective mix that he referred to as the 'Tunquinese medicine', which combined musk, cinnabar and vermilion in the distilled spirit arrack. Reid claimed that the 'Tunquinese medicine', named after the area of south China on the Gulf of Tonkin, was infallible in cases of mad dog bites, and that he had tested it on both convicts and regular citizens. Only two months later, another letter was read at the Royal Society noting that the author had increased his dosages of musk as a result of the two earlier letters, with great success (Parsons, 1746). Mortimer's letter to Hallerstein and the resulting painting of the musk deer by Sichelbarth are thus inseparable from the scientific community's research into the medical applications of musk, which surpassed the Royal Society's previous interest in sinology.

Hallerstein's translated letter and Sichelbarth's illustration added to early modern European knowledge about this rare animal, which had long excited European curiosity about the exotic East but which now did so in England in the new direction of medicine derived from animal rather than botanical sources. Hallerstein's statement that the painting was made from a dead creature is an unexpected acknowledgement of the paradox inherent in the

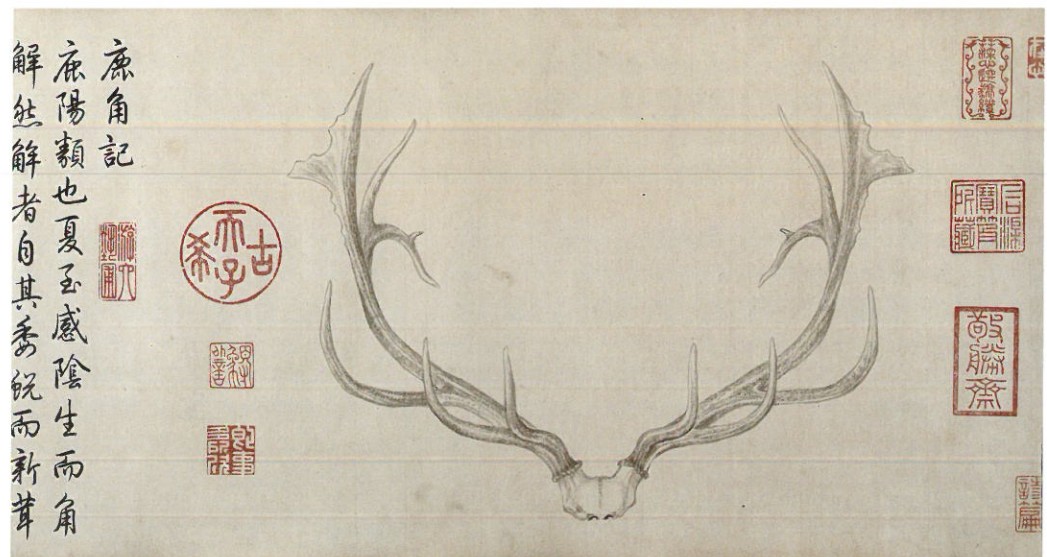


Fig. 6 *Painting of Deer Antlers* (detail)
By the Qianlong emperor
(r. 1735–96), China, Qing
dynasty (1644–1911), 1767
Handscroll, ink and colour
on paper, 25.1 × 206.4 cm
The Metropolitan Museum of Art
John Stewart Kennedy
Fund, 1913 (13.220.127b)

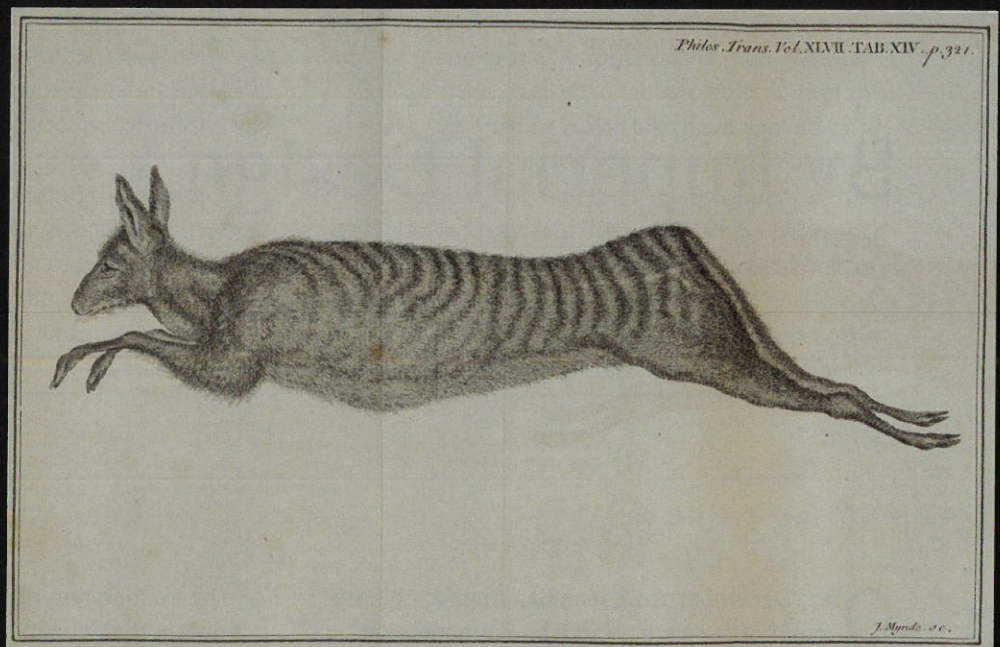


Fig. 7 Musk Deer, from *Philosophical Transactions* 47, between pages 320 and 321. By James Mynde (1702–71), 1751, engraved after the painting by Ignatius Sichelbarth, S. J., in Figure 1. Print, dimensions unknown (After royalsocietypublishing.org)

fact that natural history and medicine, despite their focus on the living, both rely on dead specimens. Not only could art serve to bridge the gap between death and life, but it also contributed to the discovery and dissemination of new scientific knowledge. Sichelbarth's musk deer in the *Philosophical Transactions*, therefore, marks a moment when the histories of Chinese painting and European scientific illustration intersect with medicine and sinology in the context of the Royal Society as a truly globalized centre for art and science.

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Flask (*hu*)
China, Eastern Zhou period (770–
221 BCE), early 5th century BCE
Bronze, height 33 cm
The British Museum (1991,0802.1)
(see p. 52)

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COVER: *Amida Raigō* (detail)
Japan, Edo period (1603–1868)
Ink, colours and gold on silk,
image: 119.4 x 131.5 cm
Newark Museum
Gift of Herman A. E. Jaehne
and Paul C. Jaehne, 1941 (41.1456)
(Photograph: Richard Goodbody)
(see p. 68)

In this issue we feature articles covering a number of Asian regions, namely China, Japan, Korea, India and Myanmar. The first article, by Quanyu Wang, Yi Chen and Rongyu Su, is a groundbreaking study of some of the Houma bronzes in The British Museum. In 2018, a scientific examination was made of these bronzes, including microscopy and X-radiography, in order to better understand their construction in relation to the pattern-block method of production. The article details the sometimes surprising results.

Next we turn to Buddhist art, with Katherine Anne Paul's discussion of the merits of Japanese Buddhist art of the Edo and Meiji periods—a subject all too often ignored. Chin-Sung Chang focuses on a Korean gilt-bronze statue of Avalokitesvara, found originally by a farmer in Korea in 1907 and rediscovered last year in a private collection in Japan. The image epitomizes the sophisticated Buddhist art of the Baekje kingdom, and is inseparable from the flourishing of the Pure Land tradition.

Two articles in this issue relate to weaponry. Rachel Parikh presents weapons and imagery from the Harvard Art Museums' collection that are connected with the hunt in South Asia, where the practice was an important part of kingship. Christophe Munier-Gaillard examines depictions of Portuguese in the Buddhist murals of Myanmar. Frequently shown carrying firearms, they played a role in the moral teachings of these paintings.

The musk deer is an unusual creature that once inhabited north China. Its musk was regarded as having significant medicinal properties, sparking renewed interest in the animal in 18th century England. Kristina Kleutghen discusses a painting of the musk deer by Ignatius Sichelbarth, S. J., an artist at the Qianlong emperor's court, which was sent to the Royal Society in 1750 and engraved for publication in its *Philosophical Translations*. Missionary painters at the Chinese imperial court are also the subject of Hugh Moss's article, which explores an unusual group of paintings depicting snuff bottles. Our feature articles conclude with Kim Inhye's look at the work of the Dansaekhwa (Korean monochrome painting) master Yun Hyong-keun, currently featured in a retrospective at Palazzo Fortuny in Venice.

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