

Beetles and the Buddha: The Tamamushi Shrine, Smallpox, and Healing in Seventh-Century Japan

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Abstract: Buddhism arrived in Japan around the same time as the onset of devastating epidemic outbreaks due to a newly transmitted contagious disease: smallpox. Created in an age plagued by fear and anxiety toward immature death in rampant epidemics, Buddhist artefacts can be conceived as powerful worldmaking devices that actively construct an alternative reality in which mortality and suffering can be transcended through devotional practices. This paper studies the seventh-century Tamamushi Shrine from the Hōryūji Temple in Nara Prefecture as an informative window into the healing functions performed by Buddhist artefacts and the intertwined early histories of Buddhism and smallpox epidemics. By situating the use of beetle wings within the healing and religious traditions of premodern East Asia, I will demonstrate that the unique visual and material properties of the beetle wings supply them with medical and magical efficacy. Their presence on the Tamamushi Shrine equips the artefact with the power to provide spaces of healing and hopes of salvation in seventh-century Japan where the newly introduced Buddhist religion and smallpox epidemics work in conjunction to transform lived experiences and inhabited worlds.

Keywords: Buddhism, smallpox, material culture, animal studies, colour

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Buddhism underwent its earliest blossoming in Japan in a glamorous age of state building, artistic creativity, and religious fervour that was at the same time haunted by the gloomy shadow of death. The turbulent period between the sixth and the eighth centuries not only witnessed a rapidly evolving religious landscape spurred by the spread of Buddhism and the formation of centralized states across East Asia in an increasingly integrated geopolitical landscape, but it also marked the onset of devastating epidemic outbreaks due to the transmission of a new contagious disease: smallpox. The frequent diplomatic and cultural exchange between the Japanese archipelago and the continent fueled the movement of things, animals, and peoples across the Korea Strait, catalyzing new forms of social and religious practices in Japan as well as introducing the deadly smallpox virus. As much as the arrival of Buddhism inspired fresh hopes of longevity, enlightenment, and a prosperous reign, the newly transmitted disease instilled in rulers and commoners alike acute fears of death and destruction.

Created at a time when premature death was a palpable reality, Buddhist artefacts can be conceived as powerful worldmaking devices that actively construct an alternative reality in which mortality and suffering can be transcended through devotional practices. This paper studies the seventh-century Tamamushi Shrine 玉虫厨子 from the Hōryūji Temple 法隆寺 in Nara Prefecture as an informative window into the healing functions performed by Buddhist artefacts and the intertwined early histories of Buddhism and smallpox epidemics in Yamato 大和 (an early term for the Japanese islands) (Figure 1).¹ The following analysis focuses on one of the most distinctive material features of the shrine, namely the use of thousands of iridescent beetle wings on its exterior, which links the shrine to a dynamic infrastructure of inter-regional exchange in the East Asian region that enabled objects, animals, immigrants, technologies, ideas,

¹ I follow Michael Como in using the term ‘Yamato’ for the discussion of Japanese history of this early period so as to acknowledge that ‘Japan’ itself was being constructed at this time. See Como, ‘Horses, Dragons, and Disease’, 394, note 2.



FIG. 1

Tamamushi Shrine, front view

Asuka period, early seventh century

Mixed media; h. 226.6 cm, d. 119.1 cm

Daihōzōin, Hōryūji Temple, Nara Prefecture, Japan

Photo by Tsujimoto Yonesaburō; by courtesy of the Hōryūji Temple and the Iwanami Shoten. After Nara Rokudaiji Taikan Kankōkai, *Nara rokudaiji taikan* Vol. 5

and viruses to travel from the continent to the Japanese islands. By situating the use of beetle wings within the healing and religious traditions of premodern East Asia, I will demonstrate that the unique visual and material properties of the beetle wings supply them with medical and magical efficacy. Their presence on the Tamamushi Shrine equips the artefact with the power to provide spaces of healing and hopes of salvation in seventh-century Japan where the newly introduced Buddhist religion and smallpox epidemics work in conjunction to transform lived experiences and inhabited worlds.

Numinous Colour

The timeworn surfaces of the Tamamushi Shrine were once loci of lively ornamentation that showcase remarkable feats of colour engineering from the seventh century. The palace section and the pedestal of the shrine are decorated with anywhere from 2,600 to 9,083 beetle wings (Figure 2).² Embedded underneath gilt-bronze openwork, the metallic beetle wings add a particular texture and luminosity to the artefact. These wings come from a species of wood-boring beetle commonly referred to in Japanese as *tamamushi* 玉虫 (*Chrysochroa fulgidissima*), or ‘jewel beetle’ in English. Incorporating beetle wings onto the shrine entails highly skilled artisanal labour: first, thousands of beetles had to be hunted and gathered; then their wings needed to be skilfully removed without damaging their pristine surfaces; subsequently, the individual wings were carefully aligned and pasted onto a wooden surface, and, finally, an intricate gilt-bronze openwork was placed over the aligned wings to finish the sumptuous look (Figure 3).

While the use of jewel beetle wings has fascinated generations of scholars, it has proved to be the aspect of the shrine most resistant

² Previous scholars have offered different estimations for the number of Tamamushi beetle wings used for the shrine. Yamada Yasuji estimates as many as 9,083 beetles; Franziska Schenk and colleagues estimate 5,200; and Hamada Kōsaku 2,600. See Yamada, *Kodai bijutsu*, 22; Schenk, Wilts, and Stavenga, ‘The Japanese Jewel Beetle’, 2; Hamada, ‘Tamamushi zushi’, 287.

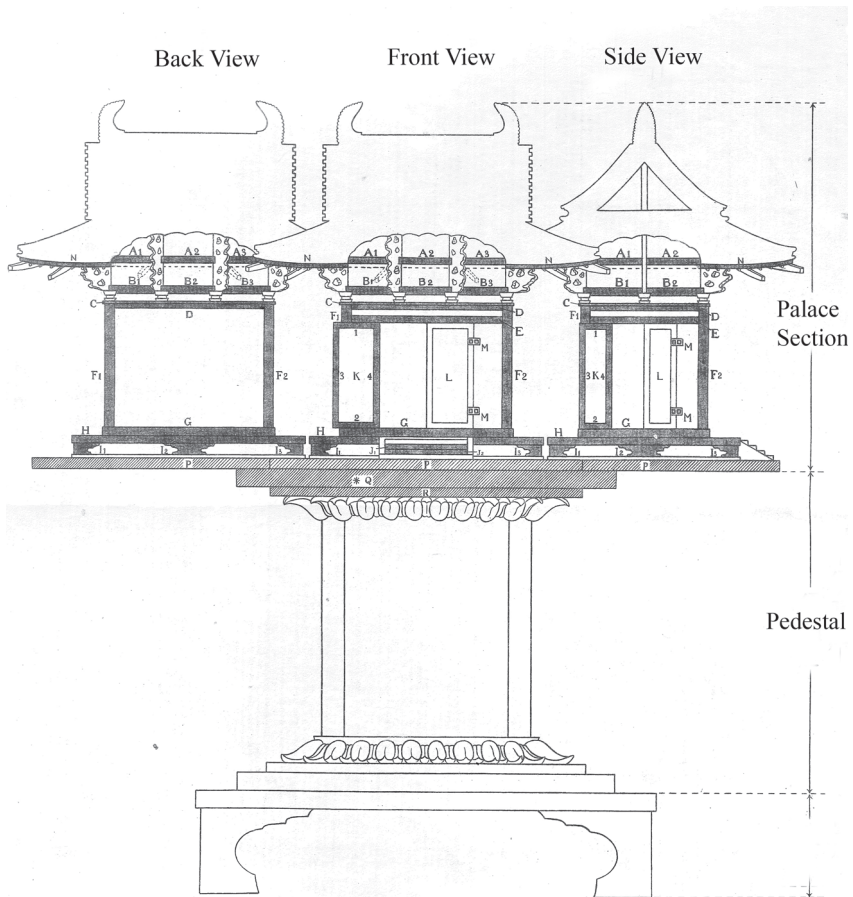


FIG. 2

Graph of the Tamamushi Shrine showing areas decorated with jewel beetle wings

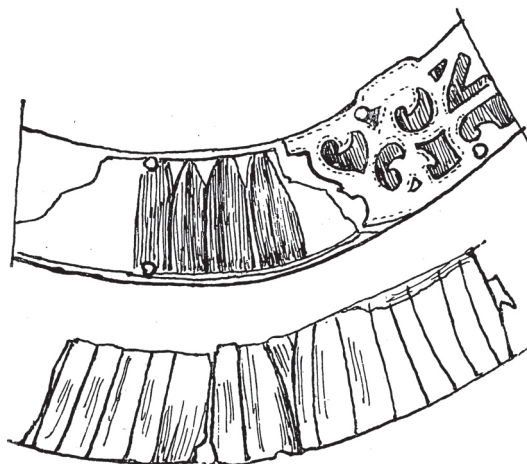
Black: Areas with remnant jewel beetle wings

Grey: Areas conjectured to have been decorated with jewel beetle wings

Image adapted by author from Yamada, *Kodai bijutsu kōgeihin ni ōyō serareshi 'Tamamushi' ni kansuru kenkyū*, Plate 6.



(a)



(b)

FIG. 3

(a) Jewel beetles and separated elytra

(b) Graph showing details of a sixth-century stirrup decorated with jewel beetle wings excavated from the Gold Crown Tomb (Geumgwanchong), Gyeongju, South Korea

Upper: jewel beetle elytra (shaded) beneath metal openwork; lower: the alignment of jewel beetle elytra

(a) By courtesy of the Gyeongju National Museum, Korea. (b) Adapted by author from Hamada, 'Tamamushi-shi shoku kō', Fig. 3

to interpretation. As one of the most iconic early Buddhist artefacts from East Asia, the Tamamushi Shrine has sustained scholarly interest since the nineteenth century for the valuable information it offers about the transmission of Buddhist teachings and practices. Much ink has therefore been spilled on almost every aspect of the shrine, from dating and iconography to architectural prototypes and material composition.³ Within this large corpus of scholarly writings, the jewel beetle wings are frequently mentioned but very rarely receive sustained analysis.⁴ Previous scholarship tends to privilege other aspects of the shrine, such as the pictorial programme, to decipher the conceptual framework and ideological messages underlying the design of the artefact as a whole, while relegating the beetle wings to a purely decorative role. The archaeologist Hamada Kōsaku 濱田耕作 (1881–1938) proposed an influential ‘substitution thesis’ that frames the jewel beetle wings as substitutions for jade—a highly cherished material in East Asia—that serve to add aesthetically pleasing colours to the artefacts they adorn.⁵

However, treating beetle wings as mere substitutions for precious stones fulfilling a decorative function presumes a primarily aesthetic concern behind their use on the Tamamushi Shrine and precludes consideration of their potential religious significance. The art historian Ishida Hisatoyo is among the few who have attempted to explore alternative meanings behind the beetle wings. Prompted by

³ For a comprehensive bibliography of the Japanese scholarship on the Tamamushi Shrine, see Ōhashi, ed., *Hōryūji*, 54–57; Nara Rokudaiji Taikan Kankōkai, *Hōryūji*, 117–18. For a survey of Japanese scholarship on various aspects of the Tamamushi Shrine, see Kataoka, ‘Tamamushi no zushi’, 258–93. However, as Akiko Walley has pointed out, there have been surprisingly few studies on the Tamamushi Shrine in Western languages. See Walley, ‘Flowers of Compassion’.

⁴ As the structure of Kataoka Naoki’s most recent survey of previous scholarship on the Tamamushi Shrine indicates, other aspects of the shrine—such as painting, architectural structure, and decorative patterns—have engendered and continue to sustain scholarly discourses, whereas the beetle wings have been studied by only a handful of scholars. See Kataoka, ‘Tamamushi no zushi’.

⁵ Hamada, ‘Tamamushi-shi shoku kō’, 793–832.

a question he received about the justification for killing thousands of beetles to make a Buddhist artefact, Ishida suggested that the beetle wings might have had religious importance that served Buddhist teachings about achieving transcendence in a corrupted world.⁶ Though provocative, Ishida's reading remains largely speculative with little concrete supporting evidence. As such, much remains unexplored regarding the potential connections between the use of jewel beetle wings and the function of the Tamamushi Shrine as a ritual implement and medium of Buddhist teachings.

The following analysis focuses on a unique visual property of the jewel beetle wings, namely their iridescent colouration, to shed light on their role as an organic part of the Tamamushi Shrine integral to the artefact's ritual efficacy and symbolic mechanism. To a human observer, the wings of the jewel beetle strike the eye with their characteristic metallic texture and iridescent appearance, qualities that have been captured by the various names given to the species. The scientific binomen used by taxonomists and zoologists since the eighteenth century literally means 'golden' (*Chrysochroa* in Greek) and 'the shiniest' (superlative of the Latin *fulgidus*).⁷ The much older Japanese name dated to the eighth century (*tamamushi*, literally 'jewel insect') similarly references the creature's unusual surface texture and colour.⁸ Recent work by colour scientists has revealed that the distinctive iridescence of the jewel beetles derives from a mechanism known as structural colouration. In contrast to the more common-

⁶ See Ishida, *Shōtoku Taishi to Tamamushi no zushi*, 247–50.

⁷ Historically, various scientific names have been used to designate the jewel beetles. When the species was first introduced into modern scientific taxonomy in 1775, the Swedish entomologist Carl Johan Schönherr used the name *Buprestis elegans* ('the graceful or attractive beetle'). An alternative name, *Chrysochroa fulgidissima*, which came into being toward the end of the eighteenth century, became the official scientific name of the species still used today since it was adopted by the renowned Belgian entomologist Charles Kerremans. See Hamada, 'Tamamushi zushi no tamamushi hane kazari', 287–88, 300, note 5.

⁸ For the earliest surviving textual evidence of the name, see Yoneda, *Shōsōin hōmotsu*, 248–52.

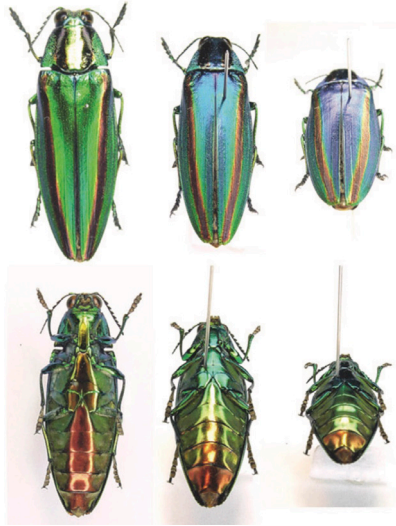


FIG. 4

Viewing-angle dependence of dorsal and ventral sides of the Japanese jewel beetle *Structural Colors in the Realm of Nature*, Kinoshita Shūichi, Copyright © 2008 World Scientific.

place pigmentary colouration that involves the selective absorption and reflection of certain wavelengths of light by pigmented materials, structural colouration operates through a purely physical process in which light is reflected, scattered, and deflected by microscopically structured surfaces. This complicated interaction between light and microstructures accounts for the unusual intensity and variability of optical properties that characterize structurally coloured materials.⁹ The wings of the jewel beetle offer prime examples of structural colouration from nature. Consisting of various intertwined complex chemicals, including proteins, lipids, polyphenols, and chitins, they produce striking lustre and varying colours at different viewing angles (Figure 4).¹⁰ Jewel beetle wings thus represent a unique type of biologi-

⁹ Kinoshita, *Structural Colors*, 1.

¹⁰ Stavenga et al., 'Polarized Iridescence of the Multilayered Elytra of the Japanese Jewel Beetle', 709–23.

cal material naturally furnished with luminous and dynamic colour.

Colour in ancient and medieval East Asia, to borrow a term by the anthropologist Michael T. Taussig, embodies a 'polymorphous magical substance' that affects all bodily senses, not just sight, thereby fundamentally shaping human interaction with the world.¹¹ The belief that colour possesses epistemic, cosmological, and medical significance permeates artistic, religious, and pharmacological practices alike. Many of the materials used for making pigments in artistic activities, including minerals and plants, also serve as toxins or medicines on account of their chemical properties. The power to kill or to heal inherent in such substances is believed to transfer to the colour they produced.¹² Intimately bound to its materiality, colour plays a key role in medical thinking and healing traditions in premodern East Asia. In the realm of philosophical and religious thought, colour serves as a major indicator of ontological status. The essence of a creature is believed to reside in its skin, the 'vital wrapping' that envelopes its body and visibly distinguishes it from other kinds of beings.¹³ In contrast to modern scientific taxonomy that focuses on anatomical, behavioral, and genetic traits, the classification system in premodern East Asia sorts all creatures into five categories according to the covering of their skin: the scaly (Ch. *lin* 鱗), the feathered (Ch. *yu* 羽), the hairless (Ch. *luo* 裸), the hairy (Ch. *mao* 毛), and the armored (Ch. *jia* 甲).¹⁴ In this surface-oriented taxonomic culture, the exterior colour and texture of a being condition the understanding and perception of its nature.

A combination of multiple colours, especially a set of five colours, is considered a source of significant therapeutic and sacred power. As an expression of the so-called five-phase cosmology, the five colours represent the five basic elements of the universe that interact with one another in a dynamic relationship, which can be used to aid comprehension of the cosmos as well as to effect change in the nat-

¹¹ Taussig, *What Color Is the Sacred?*, 40.

¹² Dusenbury, 'Introduction', 11.

¹³ Sterckx, *The Animal and the Daemon*, 188.

¹⁴ *Idem*, 'Animal Classification', 26–53.



FIG. 5

Five-colour medical stones (purple crystal, sulphur, realgar, red ochre, and turquoise)

Western Han period (202 BCE–9 CE)

Discovered in the tomb of the King of Nanyue of the Western Han Dynasty, Guangzhou, Guangdong Province, China

By courtesy of the Museum of the Mausoleum of the Nanyue King, Guangzhou, China

ural and human world.¹⁵ In the realm of premodern medicine, the five colours (Ch. *wuse* 五色), consisting of red, blue, black, white, and yellow, offer an enduring paradigm for administering cures. Ancient and medieval pharmacological practice frequently makes use of the so-called ‘five-colour medical stones’ (Ch. *wuseshi* 五色石) composed of mineral and herbal substances in different colours.¹⁶ The exact material constitution of the individual stones can vary, but the overall colour profile of the set conforms to the five-colour scheme, as evidenced by a group of medical stones excavated from the tomb of the King of Nanyue of the Western Han dynasty, in current-day Guangzhou, China (Figure 5). Only two of the stones are made of

¹⁵ Dusenbury, ‘Introduction’, 12.

¹⁶ Li, *Zhongguo fangshu kao*, 260–66.

materials known to possess chemical properties that affect the human body (sulphur and realgar, which are toxic), while the other three (purple crystal, red ochre, and turquoise) have been chosen for the purpose of completing the set of five colours.¹⁷ The five colours are thus perceived to possess medical potency independent of the actual chemical properties of the source materials. In the realm of religious beliefs, the phrase ‘five-coloured’ (*wuse*) is often synonymously employed with the word ‘sacred’ or ‘daemonic’ (*shen* 神) in textual sources to designate creatures with numinous power such as the mythical dragon. The correlation between variegated colours and divinity reflects a larger belief that supernatural beings possess a composite physiognomy and complex skin patterns.¹⁸ An amalgamation of multiple colours thus serves to demarcate the sacred and conjure up a magical force that can affect change in the human condition.

Considering the manifold significance of colour, the iridescent beetle wings adorning the Tamamushi Shrine would not have functioned as mere embellishments but would have fundamentally shaped the ways in which the shrine was experienced and utilised. Due to deterioration and exposure to dust and incense smoke, many of the beetle wings have fallen off or darkened in their lustre. In their original condition, however, the thousands of beetle wings would have turned the shrine into a stunning, dazzling entity glowing with iridescent light, which evokes at once the numinous body of a sacred being and the colourful appearance of medicinal substances. The religious and medical efficacy that the beetle wings impart to the shrine emerges with greater clarity when examined in the historical context of seventh-century Japan, where, as I will argue, Buddhist material culture cannot be understood separately from the onset of smallpox epidemics.

¹⁷ Lai, ‘Colors and Color Symbolism’, 43.

¹⁸ Sterckx, *The Animal and the Daemon*, 179.

Buddhism, Medicine, and Epidemics

The period from the fifth to the seventh centuries witnessed an increasingly integrated geopolitical landscape in East Asia that had far-reaching ecological consequences. The ancient Japanese state or Yamato repeatedly sent troops to aid the incessant wars fought among the Korean Kingdoms in return for personnel with a range of specialized skills, including scholars, physicians, and craftsmen.¹⁹ Adding to the officially sanctioned immigrants were those who sought refuge in Yamato from the frequent wars on the peninsula.²⁰ The frequent population movements across the Korea Strait bound Yamato and the Korean Kingdoms in an interactive socio-political landscape, but also weakened the natural protective barrier that had insulated the archipelago from the disease pool on the continent.²¹ Starting in the sixth century, the population in Yamato began to taste the bitter side effects of increased inter-regional connectivity in the form of recurrent epidemic outbreaks.²² Smallpox, an infectious

¹⁹ Farris, *Sacred Texts and Buried Treasures*, 109–18. See also Brown, ‘The Yamato Kingdom’, 159; Inoue, ‘The Century of Reform’, 171–72; Okazaki, ‘Japan and the Continent’, 306.

²⁰ Farris, *Sacred Texts and Buried Treasures*, 108–09.

²¹ The earliest recorded epidemic outbreak in Japanese history is found in the *Chronicles of Japan* in 93 BCE during the reign of the Emperor Sujin. The Japanese scholar Kawamura Jun’ichi 川村純一 (1948–2021) believed that the epidemic outbreak in 93 BCE actually happened in history. However, there is no way of confirming its historicity or determining the type of disease. See Kawamura, *Yamai no kokufuku*, 16–17. In the *Chronicles of Japan*, the early epidemic outbreak in 93 BCE is a stand-alone event, and it is not until the sixth century CE that the text mentions recurrent epidemic outbreaks.

²² William Hardy McNeill (1917–2016) in his book *Plagues and Peoples* draws on the work of the Japanese scholar, Fujikawa Yū 富士川游 (1865–1940) to pinpoint Japan’s first recorded contacts with the disease pool on the continent to the year 538 or 552 CE when Paekche sent emissaries to the Yamato court bearing Buddhist texts and objects. He claims that this group of diplomatic figures brought a new and lethal disease—perhaps smallpox. McNeill, *Plagues and*

disease that spreads easily through physical contact, had arrived in China in multiple waves between the second century BCE and the fourth century CE, from where it spread to the Korean Kingdoms in the sixth century.²³ Among travelling soldiers, immigrants and diplomats, the lethal disease found ready human carriers to cross the sea and reach the Japanese archipelago.²⁴ Starting in the mid-

Peoples, 140; Fujikawa, *Nihon shippeishi*, 11–66. Instead of following McNeill in linking particular events documented in surviving textual sources with the timeline of disease transmission, I believe it is more productive to focus on the role of large-scale population movement from the fifth to the seventh centuries (driven by immigration, diplomatic exchange, and warfare) in exposing the Japanese islands to the disease pool on the continent.

²³ Smallpox is caused by one of two virus variants, *Variola major* and *Variola minor*, both of which are highly contagious. An infected victim sheds millions of viruses into the immediate environment from the rash on his/her skin and open sores in the throat. Each victim remains infectious from just before the rash appears until the last scab drops off about three weeks later. Corpses of the victims and clothing that have come into contact with pus or scabs can also be contagious. For a detailed account of the pathology of smallpox, see Dixon, *Smallpox*. Scholars disagree about the transmission route of smallpox to East Asia, since the first unmistakable description of a smallpox outbreak in China comes from the fourth century BCE. Kawamura Jun'ichi believes that smallpox was introduced from India into China (Kawamura, *Yamai no kokufuku*, 35). The physician Donald R. Hopkins argues that the Huns introduced the disease from Central Asia to China around 250 BCE. See Hopkins, *The Greatest Killer*, 20. For a close study of the transmission route of a later smallpox outbreak in which ambassadors sent by the Yamato court to Silla in 736 CE served as the carriers, see Sakaehara, ed., 'Ken Shiragi shi to ekisō', 3–15.

²⁴ The reconstruction of the early history of smallpox in Japan is complicated by many uncertainties. While some scholars believe that the first unmistakable outbreak took place in 735 CE during the Tenpyō period when the disease was explicitly identified for the first time in the historical record, scholars like Kawamura Jun'ichi and the medical historian Hattori Toshirō 服部敏良 (1906–1992) believe that sixth-century outbreaks recorded in the *Chronicles of Japan* were also smallpox epidemics. Kawamura argues that there is a significant time

sixth century and persisting until the thirteenth century, smallpox was introduced repeatedly to the archipelago and caused recurring epidemic outbreaks, which were documented in the *Chronicles of Japan* (*Nihon shoki* 日本書紀) as the epidemic (Jp. *eki* 疫) or illness (Jp. *yamai* 病) of sores (Jp. *sō* or *mogasa* 瘡).²⁵ Before the thirteenth century when Japan's population grew to a sufficient size to enable smallpox to become an endemic childhood disease, each new exposure to the virus would have produced a dramatic high-mortality event amongst the vulnerable local population.²⁶ The Tamamushi Shrine and other early Buddhist artefacts thus belong to an age of great demographic upheaval caused by newly transmitted pathogens.

Buddhism arrived in Japan around the same time as smallpox and played a central role in shaping the lived experience of epidemics. According to the two earliest Japanese historical records about the arrival of Buddhism in Yamato—the *Chronicles of Japan* and the *Origins of the Gangōji Monastery and Register of Its Assets* (Jp. *Gangōji*

lapse between the time when smallpox became endemic in China and the supposedly first smallpox outbreak in Japan in 735 CE, which appears odd especially when there had been frequent exchange between Japan and the continent since the fifth century. For this reason, Kawamura believes that there were smallpox outbreaks in Japan before the 735 date that escaped the historical record. See Kawamura, *Yamai no kokufuku*, 35. Hattori Toshirō believes that the first smallpox outbreak happened during the Emperor Bidatsu's reign in 585 CE. See Hattori, *Nara jidai igaku no kenkyū*, 183.

²⁵ It is impossible to know for sure whether the various Japanese terms in fact denote the same infectious disease. Fujikawa Yū believes it is likely that they all refer to smallpox, and McNeill supports his opinion on the grounds that the frequency at which the outbreaks are recorded fits well with what would have happened if the same disease was repeatedly introduced to an island population, namely at intervals of thirty to fifty years when antibodies would have had time to disappear. See McNeill, *Plagues and Peoples*, 324, note 87.

²⁶ *Ibid.*, 141. McNeill's argument has been tested and confirmed by the historian William Wayne Farris with extensive reconstruction of mortality figures from 645 to 900 CE. See Farris, *Population, Disease, and Land*, 50–73.

garan engi narabi ni ruki shizai chō 元興寺伽藍縁起并流記資財帳)—the Buddhist icons and scriptures brought by ambassadors from the Korean Kingdom of Paekche in 538 or 552 CE set off political turmoil at court and calamities in the land.²⁷ Progressive politicians led by the Soga clan argued for the acceptance of the new religion, while conservative ministers adamantly resisted the foreign faith and asserted the primacy of pre-existing *kami* 神 worship.²⁸ Facing the heated disagreement between the two parties, the Emperor Kinmei 欽明天皇 (r. 539–571) decided to take a middle path, giving the Buddhist icon and scriptures to the head of the Soga clan to worship privately. Immediately following Kinmei’s decision, an epidemic (Jp. *eyami* 疫気), possibly of smallpox, broke out in the land. Many people died prematurely (Jp. *akarashima ni shi nuru* 夭殘) and the mortality rate rose uncontrollably due to the lack of a remedy. Conservative ministers led by Mononobe no Moriya 物部守屋 (?–587) interpreted the pestilence as a result of native deities’ anger at the state’s acceptance of a foreign god and convinced the Emperor to sanction the

²⁷ *Nihon shoki*, 13.300–02; *Gangōji garan engi*, 8. The *Chronicles of Japan* and the *Origins of the Gangōji Monastery* disagree on the precise date for the official introduction of Buddhism, with the former claiming 538 CE and the latter 552 CE. The *Origins of the Gangōji Monastery and Register of Its Assets* is a history and inventory of the Gangōji Temple that was supposedly drawn up in 748 CE. The precise date of the document is widely debated. Many scholars believe that it actually came into being later than the 748 stated in the document itself, probably in the latter half of the eighth century. The Japanese historian of Buddhism Yoshida Kazuhiko argues that the document is in fact dated to even later, the latter half of the ninth century. See Yoshida and Swanson, ‘The Credibility of the Gangōji Engi’, 89–107. Some scholars believe that the narratives about the beginning of Buddhism in the *Origins of the Gangōji Monastery* and the *Chronicles of Japan* derive from a single earlier text. See Sonoda, *Nihon kodai Bukkyō*, 36–42. Despite the unsettled issues of dating, however, the *Origins of the Gangōji Monastery* remains a key document for understanding the early history of Buddhism in Japan.

²⁸ For an overview of the history of *kami* worship in Japan and modern scholarship on Shinto traditions, see Breen and Teeuwen, ‘Introduction’, 1–12.

first persecution of Buddhism, which led to the abandonment of Buddhist icons in the Canal of Naniwa and the burning of newly constructed Buddhist temples.²⁹ When another epidemic of sores broke out in 585, the anti-Buddhism ministers repeated their argument and carried out another more violent purge in order to appease native deities. Buddhist icons and temples were burnt again, and Mononobe no Moriya stripped three nuns—the very first Buddhist practitioners in Japan—and publicly flogged them. On the other hand, the pro-Buddhist Soga clan asserted that the pestilence in fact resulted from the Buddha's wrath and recommended the worship of Buddhist icons as the effective way to halt the disasters.³⁰ While these accounts should not be taken as literal historical facts, they nonetheless powerfully illustrate that the early history of Buddhism in Japan is inextricably entangled with reactions to the unprecedented mortality rates induced by smallpox.³¹

Produced in a period when deadly epidemic diseases occupied a prominent place in the social consciousness, Buddhist icons offered a mechanism to cope with the fear and anxiety toward premature death, especially that of the ruling elite. The introduction of smallpox to Japan engendered a sense of crisis concerning the health of the ruler's body. Over the course of Japanese history, smallpox claimed a large number of royal victims. The Emperor Bidatsu 敏達 (r. 572–585) died from infection with sores, likely the first Japanese sovereign to die from smallpox. From the eighth to nineteenth century, thirty-one out of eighty-one emperors were infected with smallpox.

²⁹ *Nihon shoki*, 3.300–02; *Gangōji garan engi*, 8.

³⁰ *Nihon shoki*, 4.44–46; *Gangōji garan engi*, 11–12.

³¹ As Kawamura Jun'ichi points out, while the accounts of textual records such as the *Chronicles of Japan* should not be taken as literal historical facts, it is certain that smallpox played a central role in the power struggle between the Soga and Mononobe clans, as well as the fate of Buddhism in Yamato. Kawamura, *Yamai no kokufuku*, 46–48. While not a specialist in Japanese history, Donald R. Hopkins also links the histories of smallpox and Buddhism in Japan. According to him, the smallpox epidemic facilitated the acceptance of Buddhism. See Hopkins, *The Greatest Killer*, 105–08.

Their average age at death was about ten years shorter than emperors who had not suffered from the disease.³² As early as its arrival in Japan in the sixth century, Buddhism supplied ways of responding to the crisis of a dying sovereign. When the Emperor Yōmei 用明天皇 (d. 587) caught smallpox, Tasuna of the Saddlemakers' Guild, a clan of immigrant artisans from the Korean Kingdoms whom the pro-Buddhist Soga clan patronized, vowed to make a sixteen-foot statue of the Buddha and construct a temple on behalf of the ailing Emperor.³³ From the Buddhist perspective, the making of Buddhist icons and temples constitute meritorious acts that transfer merit (Jp. *kudoku* 功德; Skt. *guṇa*) to the ailing emperor with the hope of restoring his health.³⁴ When Yōmei's son Prince Umayado 厩戸皇子 (574–622), the later Prince Shōtoku 聖徳太子, fell sick around 622, the new leader of the Saddlemakers' Guild named Tori similarly made a Buddhist icon to prolong the prince's life, a monumental statue that survives to this day at the Hōryūji Temple in Nara Prefecture.³⁵ Tori's monumental early-seventh-century statue, known as the Shaka Triad (*Shaka sanzōzō* 釈迦三尊像), is preserved at the Golden Hall of the Hōryūji Temple. According to the inscription on the back of the statue, the work was commissioned by Prince Umayado's wife, sons, and retainers 'in the size of the Prince' to 'restore the Prince to health and extend his life' or, if he should die, to ensure his swift attainment of Buddhist awakening and escape from all suffering.³⁶ The well-being

³² For a list of Japanese emperors who were infected with smallpox and their dates, see Kawamura, *Yamai no kokufuku*, 83–85.

³³ *Nihon shoki*, 4.62. While some scholars argue that the ancestors of the Saddlemakers' Guild came to Japan directly from the Liang Dynasty in China, Donald F. McCallum contends, quite convincingly, that they were more likely from the Three Kingdoms Korea based on archaeological evidence of the shared typologies of horse trappings found in Japan and the Korean Peninsula. McCallum, 'Tori-Busshi', 26.

³⁴ Triplett, *Buddhism and Medicine in Japan*, 56–57. For a discussion about the mechanism of transferring merit in Buddhism, see Ohnuma, 'Gift', 110–17.

³⁵ For the various different names of Prince Umayado, see Shinkawa, *Shōtoku Taishi no rekishigaku*, 16–23.

of members of the ruling family in this world and beyond was thus a major concern behind the commissioning of Buddhist artefacts.

Like the icons made by the Saddlemakers' Guild, the Tamamushi Shrine grew out of the burgeoning demand for Buddhist artefacts in response to the keenly perceived threat to the health of royal bodies. The use of beetle wings indicates that the makers of the shrine possessed first-rate artisanal skills on par with the prestigious Saddlemakers' Guild. A survey of all extant beetle-wing artefacts from current-day Japan and South Korea indicates that the technique of beetle-wing ornamentation was first developed by the highest-ranking artisans working directly for the rulers of the Korean Kingdoms who specialized in the manufacture of horse accoutrements.³⁷ The technique was likely transmitted to Japan in the early seventh century by migrant artisan groups whom Yamato rulers eagerly employed to produce Buddhist artefacts. As the most spectacular instance of beetle-wing ornamentation surviving in Japan, the Tamamushi Shrine was likely manufactured by an artisan group of Korean descent similar to the Saddlemakers' Guild whose members had full mastery of the sophisticated technique. Besides the shrine, beetle wings were used on some of the most elaborate seventh-century Buddhist artefacts preserved at the Hōryūji Temple, including a statue of the Buddhist deity Kannon 觀音 produced by the Saddlemakers' Guild.³⁸ Having been created by prominent artisans of the time, the

³⁶ For a complete transcription and translation of the inscription as well as a discussion about the issues of its dating, see Walley, 'Inscribing and Ascribing Merit', 299–337.

³⁷ For a survey of extant artefacts decorated with beetle wings, see Kamiya, 'Tamamushi sōshokuhin shūsei', 169–201.

³⁸ The use of beetle wings on early Japanese Buddhist artefacts other than the Tamamushi Shrine remains an insufficiently understood area that requires further research. Because Buddhist artefacts were installed in worship halls and exposed to dust and smoke from incense burning, traces of beetle wings, if there were any, might have deteriorated significantly and even completely. Despite the lack of firm evidence, scholars have long referred to the use of beetle wings on the weapons and metal ornaments of two of the Four Heavenly Kings statues at the

shrine was then placed in a small Buddhist worship hall within the residence of Prince Yamashiro 山背大兄王 (?–643), the son of Prince Umayado, where it was used by royal residents for Buddhist rituals.³⁹ Therefore, in terms of the identity of the patrons and the makers, the shrine shares much in common with the Buddhist icons that the Saddlemakers' Guild made for ailing royal patrons.

In an age plagued with the constant fear of sudden death from epidemics, Buddhist artefacts like the Tamamushi Shrine functioned as efficacious devices to prolong life and aid deliverance from suffering in the afterlife. It is likely that they were believed to have a literal medical function considering the close connection between Buddhism and the introduction of continental medicine to Japan. One of the four artisans responsible for making the Hōryūji Four Heavenly Kings was a 'Medicine Master' (Jp. *kusushi* 薬師) named Tokuho 徳保, as documented in the inscription on the back of one of the statues.⁴⁰ The title of 'Medicine Master' was first given to Enichi

Hōryūji Temple. See Kamiya, 'Tamamushi sōshokuhin shūsei', 193; *Kokubō. File 89, Tamamushi no zushi*, 9. According to author's personal communication with Fujioka Yutaka, a specialist of early Japanese sculpture at Osaka University, a recent investigation in November 2020 revealed that jewel beetle wings were likely used on the crown of the Kuze Kannon sculpture at the Hōryūji Dream Hall. Further scientific research on early Buddhist sculpture in the future will hopefully bring new insights into the important topic of the use of beetle wings on early Buddhist artefacts in Japan.

³⁹ By the Tenpyō period (729–749), the shrine had been transferred to the Horyuji Temple. Kataoka, 'Tamamushi no zushi', 259.

⁴⁰ The other three artisans named in the inscriptions on the Four Heavenly Kings statues are Tetsushi Maroko 鉄師手古, Yamaguchi Ōguchi no Atae 山口大口費, and Tsugi no Komaro 次木閉. Previous scholars have proposed various theories about the division of labour among the four named artisans in creating the sculpture set. According to one theory, the Four Heavenly Kings were produced as a collaborative project, with Ōguchi no Atae serving as the sculptor, Tokuho the Medicine Master as the painter, and Tetsushi Maroko as the maker of the crowns, staffs, and various metal decorative pieces. Another possibility is that the four sculptures were produced by two separate teams: the first group consists of

惠日, the fifth-generation descendant of a Paekche physician who had studied medicine in China and came to Yamato during the reign of the Emperor Yūryaku 雄略天皇 (r. 456–479 CE).⁴¹ At first sight, the participation of a medical practitioner in the production of Buddhist artefacts might seem unusual, but it is actually representative of the multiple identities shared by immigrant communities, from which came proponents of Buddhism, continentally trained physicians, and highly skilled makers of religious icons and temple builders. For instance, the *Meidō-zu* 明堂圖, the first known medical writing to be transmitted to Japan, was brought by a monk named Chisō 智聰 from the Korean Peninsula.⁴² Moreover, the majority of the artisans who produced the earliest Buddhist images in Yamato were the descendants of immigrants from China and the Korean peninsula (the so-called *toraijin* 渡来人) trained in a variety of specialized skills, ranging from bronze casting and ironwork to embroidery and medicine. Individuals and groups within these immigrant communities could and often did possess multiple identities, including healing practitioners, Buddhist practitioners, and image makers.⁴³ Members of the aforementioned Saddlemakers' Guild, for instance, possessed knowledge of a variety of advanced technologies from the continent, including bronze casting, wood carving, embroidery, and even acupuncture.⁴⁴ Considering the multifaceted and fluid nature of immigrant identity, Medicine Masters and other trained specialists

Yamaguchi Ōguchi no Atae as the main artisan and Sugi no Komaro as the assistant; the second one has Tokuhō the Medicine Master as the main artisan and Tetsushi Maroko as the assistant. See Kuno and Suzuki, *Hōryūji*, 182.

⁴¹ Kuno and Suzuki, *Hōryūji*, 182.

⁴² The *Meidō-zu* contains images of the distribution of acupuncture holes on the human body. See Kosoto, *Nihon kanpō tenseki jiten*, v.

⁴³ For more detailed discussions of the *toraijin* and their role in shaping Yamato history, see Rhee, Aikens, and Barnes, *Archaeology and History of Toraijin*; Como, *Shōtoku*.

⁴⁴ According to a 645 CE entry in the *Chronicles of Japan*, a clan member named Kuratsukuri no Tokushi studied various magical arts in Goguryeo, including acupuncture.

involved in the making of Buddhist artefacts might have collectively taken on the role of healing practitioners whom members of the royal family called on in the case of sickness or imminent death.

Besides the identity of the makers, the colourful appearance of many early Buddhist artefacts also contributed to their medical efficacy. As previously discussed, colour and medicine overlap significantly in premodern East Asia due to their shared source materials. Medicine Masters like the above-mentioned Tokuhō were probably trained in handling minerals and plants to make pigments and medicines alike. Equipped with specialized knowledge of medicinal substances, Medicine Masters worked not only as physicians but also as painters who created the colourful surfaces of Buddhist paintings and sculptures. Considering the therapeutic power attributed to colour and especially to a combination of multiple colours, the polychromy typical of early Buddhist artefacts represents not so much an aesthetic choice as a means of bestowing objects with healing capacity.

Jewel beetle wings offer choice materials for making medically efficacious artefacts on account of their distinctive colour profile that correlates with the five-colour paradigm in Chinese medicine. The earliest medicines surviving in Japan attest to the loose interpretation of the Chinese concept of the five colours. While the concept originally designated a specific colour scheme (red, blue, black, white, and yellow), it came to refer broadly to an amalgamation of multiple colours. This expanded concept of five colours is evidenced by a corpus of medicines donated by the Empress Kōmyō 光明皇后 (701–756) to the Tōdaiji Temple 東大寺 in the year 756, which includes several items labelled ‘five-coloured dragon teeth’ (Jp. *goshiki ryūshi*). Despite their name, the objects are in fact fossilized molars of proboscideans (*Palaeoloxodon namadicus*) likely imported to Japan from the animals’ native habitat in India (see Figure 6 for one of the molars).⁴⁵ The molar surface manifests conspicuous polychromy: the grayish white dentin is covered by glossy yellow dental enamel on the crown side and by blue streaks throughout, creating an overall effect of intermingling colours. While falling short of precise conformation

⁴⁵ Shōsōin Jimusho, *Shōsōin hōmotsu*, xxxvi.

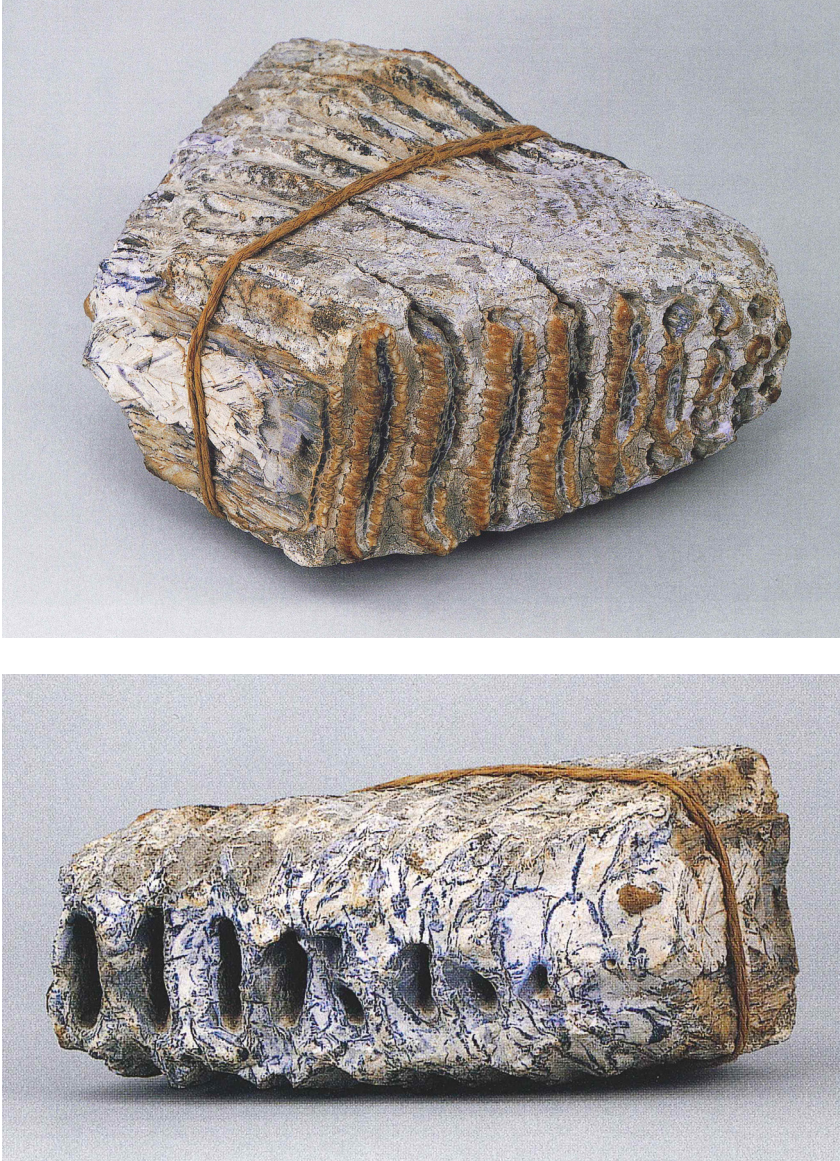


FIG. 6

One of the proboscidean teeth (front and back views)

North Section, Shōsō-in, Nara Prefecture, Japan

Courtesy of the Imperial Household Agency Shōsō-in Jimusho. Photograph courtesy of the Nara National Museum. After Nara National Museum, ed., *Dainanajūni kai Shōsōin ten* 62, 40

to the five-colour scheme, the colouration of the proboscidean teeth nonetheless earned them the appellation of ‘five-coloured dragon teeth’ and the status of prized medicine. In this light, jewel beetle wings with their impressive colour profile would have readily evoked the therapeutic power attributed to five-coloured medicines. The thousands of beetle wings adorning the surface of the Tamamushi Shrine would have generated an entity with prominent polychromy and palpable healing potency.

Diseased and Divine Bodies

Smallpox, like other disfiguring diseases, creates distorted bodies that often elicit responses of terror and disgust. Early Japanese historical records frequently refer to smallpox as the sickness of ‘red sores’ (Jp. *aka-mokasa* 赤疱瘡) because of the characteristic red skin rash on infected victims’ bodies.⁴⁶ As indicated by an intriguing image on the Tamamushi Shrine, diseased bodies can acquire cultural and moral connotations of foulness. One of the paintings on the pedestal contains the earliest representation of a *rākṣasa* demon known in Japan, a terrifying human-eating monster frequently mentioned in Buddhist scriptures and stories (Figure 7). To visualize the ghastly creature, earlier Chinese paintings have employed exaggerated, stereotyped features of racial and ethnic others—specifically individuals from South Asia—including unruly hair and flat noses.⁴⁷ In comparison, the demon figure on the Tamamushi Shrine stands out with the detailed portrayal of red dots on its bloated body parts, the distinctive corporeal markers of smallpox infection. Other extant visual depictions of smallpox victims similarly feature red speckles on the skin, including a copy of the *Illustrated Scroll of Unusual Afflictions* originally circulated in the Heian period (794–1185) (Figure 8).⁴⁸ In

⁴⁶ The term is found in the Heian-period text *Nihon kiriyaku* 日本紀略 [Abridged Annals of Japan]. See Kawamura, *Yamai no koku fuku*, 24.

⁴⁷ Shimono, ‘Kondō Yakushi’, 120–24.

⁴⁸ The image comes from a version of the *Illustrated Scroll of Illnesses* (known



FIG. 7

Side panel, pedestal of the Tamamushi Shrine, details showing the demon
 Photos by Tsujimoto Yonesaburō; by courtesy of the Hōryūji Temple and the Iwanami Shoten. After Nara Rokudaiji Taikan Kankōkai, *Nara rokudaiji taikan* Vol. 5

as *Ihon yamai no sōshi* 異本病草紙) that survives only in much later copies. However, the iconography is believed to reflect closely the earlier version circulating in the Heian period. For a detailed discussion of the typology of extant versions of the *Illustrated Scroll of Illnesses* and their dating, see Teramoto, ‘The “Yamai no Soshi”’, 135–87. As Yamamoto Satomi recently argued, the *Illustrated Scroll of Illnesses* was based on a Buddhist sūtra titled *The Base of Mindfulness of the True Dharma* (Jp. *Shōbōnenjokyo* 正法念處經), which had reached Japan by 746 CE. Yamamoto, *Chūsei bukkyo kaiga no zuzōshi*, 41–74. Further research is needed to assess whether the early representation of the *rākṣasa* on the Tamamushi Shrine was influenced by this sūtra, and whether it is connected to the iconography of the *Illustrated Scroll of Illnesses*.



FIG. 8

A woman afflicted with sores, scene from *Illustrated Scroll of Unusual Afflictions*
Kanō Tanyū (1602–1674)

Ink and colour on paper; (entire scroll) 29.7 x 1246.4 cm

From the collection of the Kyoto National Museum

Courtesy of the Kyoto National Museum. After Kasuya and Yamamoto, *Yamai no sōshi*

the context of seventh-century Japan when death by smallpox was a pressing concern, the demon figure on the Tamamushi Shrine would have evoked sick bodies covered in sores for the intended aristocratic audience, who was by then well acquainted with the symptoms and lethal nature of the illness.

The diseased body of the demon constitutes an indispensable element in the larger pictorial narrative on the Tamamushi Shrine that presents the Buddhist dharma as the supreme medicine for overcoming suffering of all kinds. Medical language is ubiquitous in Buddhist texts. Metaphors of dharma as medicine and Buddhist deities as healers are shared by Buddhist literature across different schools and languages.⁴⁹ In the same logic, Buddhist teachings frequently

compare the lack of enlightenment to illness.⁵⁰ The painting of the demon figure on the Tamamushi Shrine offers a vivid illustration of the power of the dharma to transcend death and sickness. The image illustrates the Buddha as a brāhmaṇa in one of his previous lives who practiced diligently in a grass hut in the Himalayas. The story goes that, one day, the god Indra approaches the brāhmaṇa in the form of a *rākṣasa*, and expounds half a verse of Buddhist teaching. Eager to hear the remaining half of the verse, the devout brāhmaṇa agrees to the *rākṣasa*'s demand for his life and throws himself off a tall tree. In the end, Indra reveals his true form and catches the brāhmaṇa in midair.⁵¹ In the pictorial illustration of the story on the Tamamushi Shrine, the demon's ghastly body transforms to Indra's idealized divine body that offers protection and enlightenment on account of the ascetic's devotion to Buddhist teachings. Though the painting is based on a widely known story, it deliberately evokes a horrific body covered by sores that would have inspired fear and anxiety in its seventh-century audience. The juxtaposition of the demon's diseased body and Indra's divine body functions as a skilful compositional strategy that helps generate a compelling visual argument for the efficacy of Buddhism in overcoming a major source of suffering at the time.

Besides the story of the brāhmaṇa, the pedestal of the shrine also features a painting of the Mahāsattva *jātaka* (Figure 9). As the story relates, the Buddha Śākyamuni was born as Prince Mahāsattva in one of his previous lives, the youngest of three sons of King Mahāratha. One day on an outing to a forest, Mahāsattva encountered a starving tigress with her seven newly born cubs, and, out of great compassion, decided to offer his own body as food for the carnivorous beasts.⁵²

⁴⁹ Salguero, 'Buddhist Medicine in Medieval China', 136–37.

⁵⁰ Richter, 'Teaching from the Sickbed', 62.

⁵¹ *Da banniepan jing*, T no. 374, 12: 449b–451b.

⁵² There are several versions of the story in extant Buddhist sūtras, including the *Golden Light Sūtra* and the *Sūtra of the Wise and the Foolish*. See *Jinguangming jing*, T no. 663, 16: 353c–356c; *Xianyu jing*, T no. 202, 4: 352b–353b. The panel painting on the Tamamushi Shrine is likely based on the *Golden Light*



FIG. 9

Side panel, pedestal of the Tamamushi Shrine

Photo by Tsujimoto Yonesaburō; by courtesy of the Hōryūji Temple and the Iwanami Shoten. After Nara Rokudaiji Taikan Kankōkai, *Nara rokudaiji taikan* Vol. 5

The painting on the Tamamushi Shrine, modelled on pictorial precedents from China such as mural paintings at the Dunhuang Caves, offers a dramatic rendition of the story by capturing the prince's act of self-giving in a temporal sequence:⁵³ on the upper left of the composition, Mahāsattva is shown taking off his garb and hanging it on a tree branch, an act that signals his bodily transformation from a royal prince to a piece of fresh flesh, the choice sustenance for tigers;⁵⁴ the centre of the composition shows Mahāsattva hurling himself off the cliff, diving toward the famished beasts and his own death; on the lower right, Mahāsattva appears motionless on the ground, offering a fleshy feast for the tigress and her cubs. The violence of Mahāsattva's bodily disintegration is visually enacted by the sharp vertical forms of the bamboo grove that cut across his supple figure.⁵⁵ The gruesome nature of the scene is further emphasised by the detailed portrayal of his entrails, which the famished tigers gleefully drag out from his ripped abdomen (Figure 10). The story of Mahāsattva belongs to a

Sūtra, since it depicts seven cubs, a numerical detail that corresponds to the version of the story in the *Golden Light Sūtra*. See Walley, 'Flowers of Compassion', 274.

⁵³ The composition of the Mahāsattva panel on the Tamamushi Shrine shows affinity to early illustrations of the *jātaka* at the Kizil Caves, but is most likely associated with the later iconographic configuration represented by the murals at Dunhuang. For a systematic analysis of the illustration of the Mahāsattva *jātaka* on the Tamamushi Shrine in relation to Dunhuang murals, see Uehara, 'Tonkō Bakkōkutsu', 3–189. The connection between the Tamamushi Shrine and early Chinese illustrations of the Mahāsattva *jātaka*, such as those from the Kizil Caves, has been pointed out by Jin Weinuo 金維諾 (1924–2018). See Jin, *Zhongguo meishushi lunji*, 163.

⁵⁴ According to the text of the *Golden Light Sūtra*, Mahāsattva asked his two princely brothers what kind of food the tigress eats, to which the elder prince responded that the tigress only eats fresh meat and hot blood (Ch. *xinre rouxue* 新熱肉血). See *Jingguangming jing*, T no. 663, 16: 354b07.

⁵⁵ According to the text, the prince in fact stabbed his own neck with a bamboo stalk so as to entice the tigress to feed on him. *Jingguangming jing*, T no. 663, 16: 354c16.

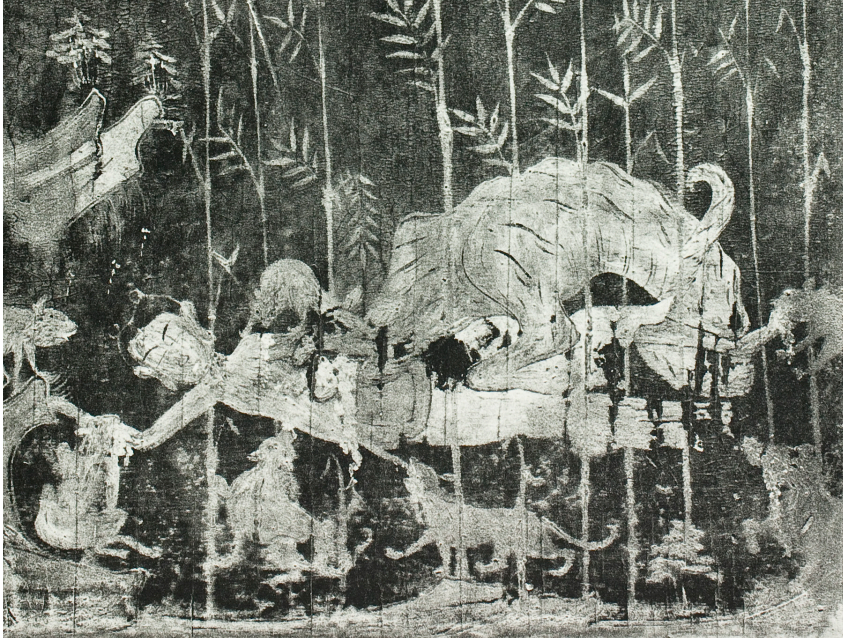


FIG. 10

Details of the side panel of the Tamamushi Shrine, showing the corpse of Mahāsattva. Photo by Tsujimoto Yonesaburō; by courtesy of the Hōryūji Temple and the Iwanami Shoten. After Nara Rokudaiji Taikan Kankōkai, *Nara rokudaiji taikan* Vol. 5

prominent category of *jātaka* tales (narratives about the Buddha's past lives) that thematizes the 'abandonment of one's body' (Ch. *sheshen* 捨身), and powerfully demonstrates the prince's readiness to give up his own life for the welfare of all sentient beings.⁵⁶

Considered as a whole, the pictorial programme of the Tamamushi Shrine performs a dynamic scenario of the transformation of the Buddha's body and its transcendence over corporeal death.⁵⁷

⁵⁶ Gao, 'Zhongguo hanchuan fojiao yishu', 170; Sasamori, 'Bukkyo ni okeru jiko gisei', 209–20; Liang, *Xianyu jing' yanjiu*, 542.

⁵⁷ Previous scholars have proposed a variety of interpretations of the pictorial programme of the Tamamushi Shrine. In the most recent scholarship on the subject in English, Akiko Walley argues that the painting programme reflects the

The two side panel paintings on the pedestal, featuring the brāhmaṇa and Prince Mahāsattva respectively, represent the demise of the Buddha's human body. In the case of the mountain ascetic who pursues wisdom even at the cost of his own life, the painting captures the moment when the future Buddha chooses to annihilate his feeble mortal body (Ch. *bujian shen* 不堅身) in order to acquire an indestructible 'diamond-like body' (Ch. *jin'gang shen* 金剛身) fortified by the true dharma.⁵⁸ The other side panel illustrating the Mahāsattva *jātaka* shows the transformation of Prince Mahāsattva's human body into a piece of lifeless flesh, an abject thing that can be readily sacrificed for the welfare of sentient beings. Besides the shared theme of giving up the frail mortal body, the two paintings also mirror each other compositionally, featuring the dramatic downfall of the Buddha's human body towards its physical and symbolic demise. While the side panels present the Buddha in his destructible human form, the painting on the front panel shows his resurrected body in the form of relics emerging from the burial ground and ascending heavenwards (Figure 11). The upward movement of the relics, reinforced by the representation of rising incense, serves as a visual reversal of the downfall of the Buddha's earthly body depicted on the side panels, effectively conveying the Buddha's power to overcome death. As constitutive parts of an organic programme, the paintings collectively enact a dramatic performance of the birth of the Buddha's transcendent body that promises deliverance from suffering, sickness, and death.

unified theme of charity (*fuse* 布施 or Jp. *danbaramitsu*; Skt. *dāna*), the practice of giving fundamental to Buddhism. See Walley, 'Flowers of Compassion', 265–322. Ishida Hisatoyo 石田尚豊 (1922–2016) proposed that the paintings on the Tamamushi Shrine teach about freeing oneself from attachment in order to achieve the Buddhist truth and performing compassionate acts toward other sentient beings. See Ishida, 'Tamamushi no zushi-e kō', 1–40; Ishida, *Shōtoku Taishi to Tamamushi no zushi*, 98–105. There are many other interpretations of the pictorial programme on the Tamamushi Shrine by Japanese scholars. For a summary of the previous scholarship on the paintings, see Kataoka, 'Tamamushi no zushi', 281–88.

⁵⁸ *Da banniepan jing*, T no. 374, 12: 450b–450c.



FIG. 11

Front panel, pedestal of the Tamamushi Shrine

Photo by Tsujimoto Yonesaburō; by courtesy of the Hōryūji Temple and the Iwanami Shoten. After Nara Rokudaiji Taikan Kankōkai, *Nara rokudaiji taikan* Vol. 5

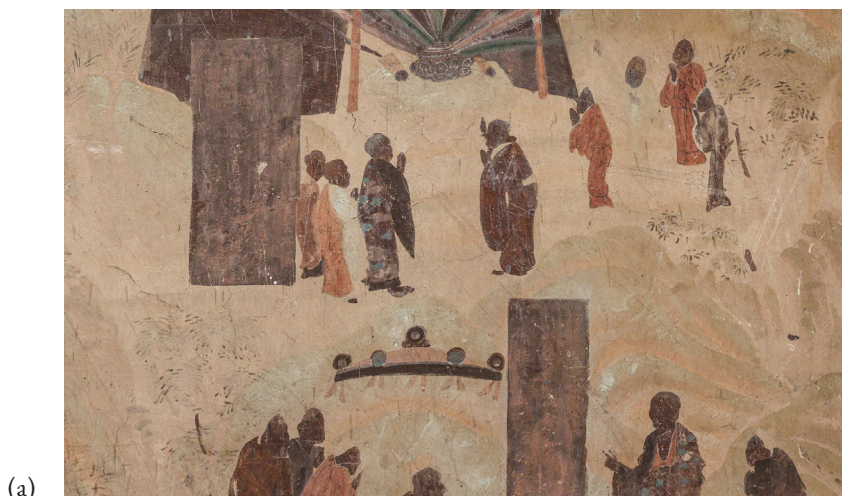
The Buddha's divine body, visually represented in the pictorial programme of the Tamamushi Shrine, obtains a tangible material presence via the variegated, luminous colour of the jewel beetle wings. In the surface-oriented taxonomic culture of premodern East Asia, covering an artefact with the skin of an animal is believed to induce a metamorphosis, turning it into the very animal whose skin it dons.⁵⁹ The all-important ontological and epistemic role of the skin thus allows for the manipulation of surface appearances to artificially create certain types of beings. A surface adorned by thousands of iridescent beetle wings can thus be conceived as an artificially engineered 'skin' that mimics the complex physiognomy and multicoloured appearance attributed to numinous beings. The large number of beetle wings on the Tamamushi Shrine shroud the artefact in dazzling colour and construct an artificial body that constantly generates its own sacred presence.

The radiance and polychromy of the shrine make it a particularly effective framing device for the Buddha's transcendent body. Buddhist scriptures and stories frequently connect colourful light with the Buddha's corporeal presence. Golden-coloured skin in fact constitutes one of the thirty-two extraordinary somatic features of the Buddha.⁶⁰ Early Buddhist paintings also frequently depict multicoloured light accompanying the miraculous appearance of relics and icons (Figure 12).⁶¹ Furthermore, artisans in East Asia create Buddhist artefacts with striking visual effects of luminosity and polychromy to imbue them with the Buddha's bodily presence. For instance, early Buddhist reliquary sets use a variety of materials, including coloured glass and precious metals, to evoke the dazzling bodily appearance of the Buddha and frame the relics housed inside as his authentic remains. The Tamamushi Shrine, with its powerful luminosity and chromaticity, would have impressed the viewer with its resemblance to the Buddha's colourful and radiant body. The shrine in fact served originally as a repository of a small gilt-bronze

⁵⁹ Sterckx, *The Animal and the Daemon*, 188.

⁶⁰ Boucher, 'The Physiognomy of Virtue', 3.

⁶¹ Sun, *Fojiao dongchuan gushibhua juan*, 123–66.



(a)



(b)

FIG. 12

Dunhuang Cave 323, north and south walls, details

Early Tang Dynasty (618–712)

(a) The monk Kang Senghui presenting Buddhist relics to Sun Quan

(b) A fisherman from the Eastern Jin discovering an ancient Buddhist sculpture from the river

Courtesy of the Dunhuang Research Academy

icon in the palace section elevated above the pedestal (see the graph in Figure 2). The icon would have remained hidden behind closed doors except on rare occasions of special viewing. The iridescent beetle wings, applied in a concentrated manner on the outer walls of the miniature palace, mark the location of the hidden icon as the sacred centre of the shrine. The multicoloured light reflected by the beetle wings serves as a bodily extension of the enshrined Buddhist deity, asserting the tangible presence of the invisible icon. In this sense, the beetle wings constitute the visible exterior or ‘skin’ of the concealed Buddha that at once covers and reveals his divine body.

The iridescence of the beetle wings further extends the salvific and healing power of the Buddha’s body—the very embodiment of Buddhist wisdom—from the shrine’s pictorial programme into the actual air. The light reflected by the beetle wings creates a rich sensory universe and helps engender an efficacious ritual environment in which the user of the shrine can readily experience the deliverance from suffering promised by Buddhist teachings. The *Flower Ornament Sūtra* (Ch. *Huayan jing* 華嚴經), one of the most influential texts in East Asian Buddhism, compares the Buddha’s body to a bright jewel that spreads its sanctifying presence through light:

The Buddha possesses the light of wisdom of the jewel-body (Skt. *ratnakāya*). Sentient beings will take on the same colour as the Buddha’s body if they come into contact with this light. Those who see this light will have purified eyes. Those who encounter this light will eliminate all suffering and attain dignity, wealth, happiness, and even ultimate enlightenment.⁶²

The Buddha is likened to a radiant jewel emitting an unbiased light that benefits any being coming into contact with it, endowing them with eyes and bodies identical to those of the Buddha. Light acts as an extension of the Buddha’s body equipped with the power of enlightening sentient beings. Travelling in space and penetrating

⁶² *Huayan jing*, T no. 278: 9.617b. English translation adapted from Guang, *The Concept of the Buddha*, 85.

into the worshippers' eye, light divests them of their former bodies and transforms their corporeal composition to become Buddha-like. Through this contagious mechanism, the Buddha's light heals, purifies, and enlightens by imbuing all beings with his own corporeal substance. The luminous beetle wings adorning the Tamamushi Shrine help conjure up the presence of the Buddha's jewel-body at work with its overflowing healing and salvific power. Before the availability of modern lighting, the iridescent beetle wings would have served as a powerful source of light in the dark interior of a Buddhist worship hall. The profuse multicoloured light emanating from thousands of beetle wings generates a stunning sensory alterity that would have transported the beholder into an otherworldly space.

Conclusion

The art historian Mimi Yiengpruksawan, when studying Heian-period Buddhist sculpture, has argued that the fear of polluted, disfigured bodies from prevalent diseases at the time such as smallpox and measles might have accounted partially for the idealized beauty characteristic of the sculptural style of the period.⁶³ In the context of seventh-century Yamato, where smallpox frequently caused high mortality in the population, a pervasive fear of bodies diseased by smallpox and a keen awareness of the corruptible nature of the human body might have inspired desire and admiration for the idealized divine body of the Buddha with its jewel-like purity and diamond-like indestructibility. The demon depicted on the Tamamushi Shrine offers a vivid illustration of a ghastly body afflicted by physical ailment and the lack of spiritual enlightenment. In contrast, the iridescent beetle wings help conjure up the Buddha's purifying divine body that brings deliverance from all kinds of suffering. The rich colouration of the beetle wings also equips the shrine with magical and medical efficacy, further bolstering the religious messages about the transcendence of sickness and death conveyed in the pictorial

⁶³ Yiengpruksawan, 'The Visual Ideology of Buddhist Sculpture', 76.

programme. The Tamamushi Shrine would have offered a healing presence and space of refuge from the fears of death and sickness in a troubled, frightened world.

This essay has sought to disrupt conventional scholarly discourses that treat beetle-wing ornamentation as a material aspect of the shrine barren of meaning, reframing it instead as a fertile ground for exploring the shrine's entanglement with the evolving religious and medical practices in Japan's first age of smallpox epidemics. While the jewel beetle wings have been treated historiographically as a site of the suspension of meaning, the preceding analysis has sought to unlock the analytical potential of the beetle wings and create new ways of telling the story of human and non-human actors collectively shaping the orchestration of new religious experiences and the changing conceptions of life and death, sickness and healing. In an age plagued by fear and anxiety toward immature death caused by rampant epidemics, the Tamamushi Shrine serves to generate an alternative world for Buddhist believers, a world in which sickness and death can be overcome through devotion to the Buddha.

Bibliography

Abbreviation

T *Taishō shinsū daizōkyō* 大正新脩大藏經. See Secondary Sources, Takakusu and Watanabe, eds.

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Gangōji garan engi narabi ni ruki shizai chō 元興寺伽藍緣起并流記資財帳 [Origins of the Gangōji Monastery and Register of Its Assets]. 1 volume. See Sakurai, Hagiwara, and Miyata, eds. *Jisha engi*.

Huayan jing 華嚴經 [Skt. *Avatamsaka-sūtra*]. 60 *juan*. By

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