



Opening Jan. 31, 2023 The Digital Gallery of Hōryūji Treasures

At Tokyo National Museum, Cutting-edge Technology Brings Treasured Antiquities into Clear View



Image 20 Gallery of Horyuji Treasures



Image 0 Key visuals of the exhibition

The National Center for the Promotion of Cultural Properties (CPCP) and the Tokyo National Museum (TNM) are pleased to announce the opening of the Digital Gallery of Hōryūji Treasures, an interactive, technology-based exhibit that will become part of the regular exhibition in the museum's Gallery of Hōryūji Treasures from Jan. 31, 2023. **A press preview with a guided tour in English will be provided on Monday Jan. 30 from 2:00 pm.**

Background: Prince Shōtoku and Hōryūji Temple

Early in the 7th century, the revered Japanese statesman Prince Shōtoku founded Hōryūji Temple in the city of Nara. The buildings of the temple's Western Precinct (Saiin Garan), which include the Kondō Hall, Five-story Pagoda, Chūmon Gate, and Covered Corridor, are among the oldest surviving wooden structures on earth. In 1878, during the Meiji era, the temple presented more than three hundred of its historic treasures to the Imperial Household. The Gallery of Hōryūji Treasures was established in 1964, as part of the Tokyo National Museum, to preserve and display these priceless objects. In 1999, the original gallery was replaced with a striking new building by Yoshio Taniguchi, a well-known Japanese architect who also designed the renovation and expansion of the Museum of Modern Art (MoMA) in New York.

Experience ancient art in new ways, made possible by digital technology

The Digital Gallery of Hōryūji Treasures will allow museum visitors to view and interact with digital reproductions of historic objects from the temple that, due to their fragility, cannot be offered on permanent display. While viewing on a massive 8K monitor or taking a close look at the reproduction panels, visitors will be able to freely examine and study these ancient works of art, down to the smallest detail, and with much better clarity than is possible when viewing the originals. Initially, from Jan. 31, the content of the digital gallery will feature on the *Illustrated Biography of Prince Shōtoku*, a series of

paintings that is a designated National Treasure. Later, from Aug. 1, the content will change to a world-famous series of the murals that originally hung in the temple's Kondō Hall. After these initial showings, the two themes will rotate onto view in the gallery for successive periods of six months each. In addition, the gallery will present replicas of Gigaku masks and costumes that reconstruct what these objects may have originally looked like, offering a window into the colorful world of this ancient performing art that once enthralled throngs of people at the temple.

*This project is supported by the Agency for Cultural Affairs, Government of Japan, through the Japan Arts Council, Fiscal Year 2022.

Highlights of the exhibition

① Digital Content: Cultural Properties in 8K: The National Treasure *Illustrated Biography of Prince Shōtoku*

The National Treasure *Illustrated Biography of Prince Shōtoku* is a series of paintings that once adorned the inner walls of the Hall of Paintings at Hōryūji Temple. These 10 large panels together depict 57 episodes in Prince Shōtoku's life. Created by Hata no Chitei in 1069, during the Heian period, they are the oldest among paintings that chronicle the prince's life and deeds, and they exemplify the early Yamato-e style of classical Japanese painting. Time, however, has taken a considerable toll. Colors have faded and many details can no longer be seen in normal viewing.

To overcome these obstacles to full appreciation of these priceless paintings, Cultural Properties in 8K presents ultrahigh-resolution images on a large 8K monitor. Each of the 1.9-by-1.5-meter paintings was photographed in 28 sections, which were then recombined to create 1.8 billion pixels of data per painting. The application processes two panels—3.6 billion pixels of data—in real time as viewers explore the work at their own pace, with the benefits of an enlarged and high-resolution view on a 75-inch 8K monitor.

Visitors may zoom in on any part of the illustrated biography to see Prince Shōtoku's expressions in stunning detail or choose an episode from the prince's life to view with commentary.



Image① Age 11: Powers of Levitation

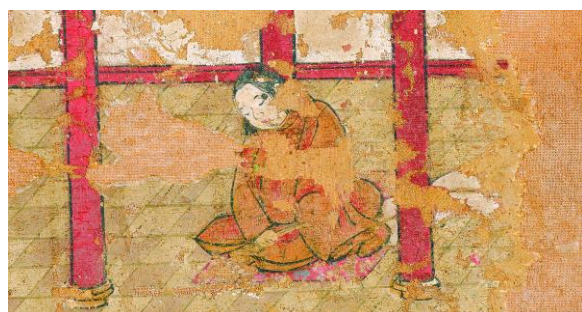


Image④ Content's screen image

Production: National Center for the Promotion of Cultural Properties (CPCP), NHK Educational Corporation
 See the complete explanatory text for the National Treasure, *Illustrated Biography of Prince Shōtoku*.
https://cpcp.nich.go.jp/modules/r_free_page/index.php?id=46



Image⑤ "Age 27: Flying to Mount Fuji on a Black Stallion (detail)" on the Panel 3



Image⑥ "Age 12: Venerated by a Sage from Baekje (detail)" on the Panel 10

About the *Illustrated Biography of Prince Shōtoku* (National Treasure)

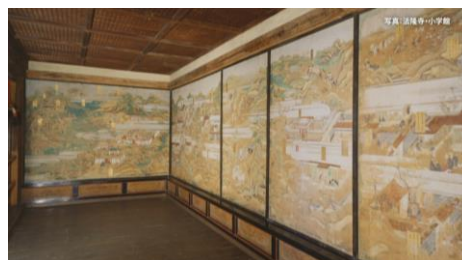
By Hata no Chitei, 1069 (Heian period), color on twill-weave silk; 10 panels, Tokyo National Museum.

(Note: the original paintings will not be on view as part of this exhibition.)

Prince Shōtoku (574–622) was the second son of Emperor Yōmei. During the reign of Empress Suiko, the prince is believed to have authored Japan's first constitution while also actively promoting Buddhism and sending envoys to China to learn more about this religion. Painted in 1069 by Hata no Chitei, this is the oldest surviving example of paintings describing the life of Prince Shotōku. This series of 10 paintings depicts 57 episodes based on *Shotōku Taishi Denryaku*, the definitive account of the prince's life completed in the early 10th century. They are also exquisite examples of Yamato-e style narrative paintings in the eleventh century. The paintings originally decorated the inner walls of the Hall of Paintings in Hōryūji Temple. The composition shows Ikaruga Palace at the center, but also includes views of Asuka, Naniwa, and even Mount Heng in China.



Hall of Paintings in Hōryūji Temple



Inside the Hall of Paintings (copies)
Photo: Hōryūji, courtesy of Shogakukan Inc.



Image② Reproduction panels (to scale) of
Illustrated Biography of Prince Shōtoku



Image⑦ Original paintings when on exhibit
at the Gallery of Hōryūji Treasures in 2019

② Digital content: Glass Photographic Plates of the Murals in the Kondō Hall of Hōryūji Temple— Digital Viewer



Content's screen image of Glass
Photographic Plates of the Murals in the
Kondō Hall of Hōryūji Temple— Digital Viewer



Image⑧ Mural No. 2: Bodhisattva (detail)
in the Kondō Hall of Hōryūji Temple

A beautiful series of murals, thought to have been painted between the latter half of the 7th century and the early 8th century, once covered the inner walls of the outer sanctum of the Kondō Hall of Hōryūji Temple. Tragically, the originals suffered extensive damage in a fire on January 26th, 1949; but prior to the fire, in 1935, a photographic record of the murals was made by the fine-art printing company Benrido. The original glass photographic plates have now been restored and digitized, allowing us to see what the murals looked like before they were damaged. The new digital images will be presented on a large monitor as an interactive exhibit within the Gallery of Hōryūji Treasures.

This digital viewer will present ultrahigh-resolution images of the original plates on a large 8K monitor. Each plate was scanned at 1,500 dpi in five sections using a special scanner developed for this purpose. Distortions caused by the camera lens when the photos were taken and contrast issues that arose during the development process were digitally corrected, and the scans were joined to create more than three billion pixels of data for each large mural, and 1.7 billion pixels for each small one.

The Digital Viewer was released online in 2020 and is available on PCs, tablets, and smartphones. But in the museum visitors will be able to view it on a 75-inch 8K monitor, becoming immersed in this masterpiece of Buddhist painting with beautiful brushwork.

Production: Hōryūji, Nara National Museum, National Institute of Informatics Takano Lab

With the support of: National Center for the Promotion of Cultural Properties (CPCP), Benrido, Inc.

Available in English and Japanese. <https://horyuji-kondohekiga.jp/>

About *Glass Photographic Plates of the Murals in the Kondō Hall of Hōryūji Temple* (Important Cultural Property), 1935, glass (dry-plate collotype); 363 plates, Hōryūji Temple, Nara

Before they were damaged by fire, the original 12 murals—four large Buddhas interspersed with eight smaller bodhisattvas—were very highly regarded. For example, in 1920, Kuki Ryūichi, the first director general of the Imperial Museum (the forerunner of the Tokyo National Museum) wrote the following in his *Investigative Report on Means to Preserve the Murals of Hōryūji Temple*:

“The murals that adorn Hōryūji Temple’s Kondō Hall are generally recognized to be the finest known examples of the art form in any Asian nation.”



Image© Mural No. 6: The Pure Land of Amida (detail)

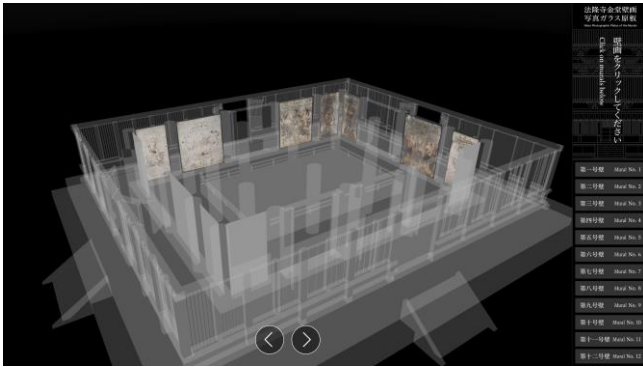
The glass photographic plates were designated as an Important Cultural Property in 2015, along with the 83 negatives held by Benrido, Inc, including four-color separation and infrared photographs, which were made at the same time. The plates required five years of cleaning and restoration before they could be digitized.



Original glass photographic plates



Digitalizing work in progress



Image⑩ Content's screen image of Glass Photographic Plates of the Murals in the Kondō Hall of Hōryūji Temple — Digital Viewer

Visitors can select different views and which mural they would like to see.

■ Murals in the Kondō Hall of Hōryūji Temple

Ref. <https://view.horyuji-kondohekiga.jp/>

No. 1: The Pure Land of Shaka (Śākyamuni)

This painting shows the ten principal disciples of Śākyamuni listening to him preach. All the disciples are easily identified by age, although the young man to Śākyamuni's right is especially eye-catching. Note the beautiful Hiten, a type of Buddhist angel, flying above to praise the gathering.

No. 2: Bodhisattva

No. 3: The Bodhisattva Kannon

No. 4: The Bodhisattva Seishi

No. 5: Bodhisattva

No. 6: The Pure Land of Amida

This painting shows the buddha Amida preaching to bodhisattvas born from numerous lotus flowers. The bodhisattvas Kannon and Seishi, who flank Amida, are painted in an exotic style likened to murals in the Ajanta Caves in India. Those who viewed this mural must have turned their thoughts to the buddha's realm.

No. 7: The Bodhisattva Kannon

No. 8: The Bodhisattva Monju

No. 9: The Pure Land of Miroku

No. 10: The Pure Land of Yakushi

No. 11: The Bodhisattva Fugen

No. 12: The Eleven-Headed Bodhisattva Kannon

③ Reconstructed Gigaku Masks and Costumes

Gigaku, a form of masked, outdoor performance, reached Japan from mainland Asia during the Asuka period (593–710). The fifth painting in the National Treasure *Illustrated Biography of Prince Shōtoku* shows the prince assembling youths to learn this art. Their teacher, a performer named Mimashi, studied Gigaku while living in what is now China before he returned to Japan via the Korean peninsula in 612, during the reign of Empress Suiko. The popularity of Gigaku declined in the Heian period (794–1192) and is now known only through written records and inscriptions on masks.



Image⑪ “Age 41: Mimaji of Baekje Teaches Gigaku Dance (detail)” on the Panel 5

The Hōryūji Temple treasures in the Tokyo National Museum's collection include 31 Gigaku masks. Although the Shōsōin Imperial Repository and Tōdaiji Temple in Nara preserve other examples, most date from the Nara period (710–794). Only the Hōryūji collection includes masks made in the Asuka period. The Tokyo National Museum and the National Center for the Promotion of Cultural Properties collaborated to create replicas of two Gigaku masks in 2019, as well as, in 2021 replicas of two costumes. Based on surviving records and careful research, these reproductions give visitors a sense of what these masks and costumes must have looked like originally, providing a glimpse of the colorful vision that once animated the now lost art of Gigaku.



Image③ Reproductions of Gigaku costumes, a robe (hō) and skirt (mo), produced by Sengiren, 2021; and reproductions of Gigaku masks, “Woman of Wu” (Gojo) and Garuda; produced by Matsuhisa Sohrin Buddhist Studio, 2019.

The original masks and costumes, which were presented to the Imperial Household by Hōryūji Temple, can be viewed in Room 3 of the Gallery of Hōryūji Treasures at the Tokyo National Museum. For purposes of preservation, viewing is restricted to Fridays and Saturdays only.

Gigaku Mask: Gojo

(Important Cultural Property)

Gigaku Mask: Garuda

(Important Cultural Property)

Asuka period, 7th century,
Painted camphorwood
Tokyo National Museum,
Treasures from Hōryūji Temple

For reasons of preservation, Gigaku masks are displayed only on Fridays and Saturdays in The Gallery of Hōryūji Treasures, Room 3.

Of the 31 Gigaku masks, Gojo is the only female portrayed. Garuda is a sacred bird of India. The original masks were studied using X-rays, CT scans and infrared photography to faithfully reproduce the materials, techniques, and coloring.



Carved wood Gigaku mask (left, **Image⑫**), “Woman of Wu” (Gojo), and its modern reproduction (right, **Image⑬**).



Carved wood Gigaku mask (left, **Image⑭**), Garuda and its modern reproduction (right, **Image⑮**).

Pictured below, fragments of a Gigaku costume (Mo), 8th century (Nara period), silk clamp-resist (kyōkechi) and tie-resist (kōkechi) dyeing, with its modern reproduction



Image16 Surviving fragments of Gigaku costume



Image17 Reproduction of costume (Mo)

Gigaku costumes survive only in fragments. These reproductions were made using ancient dyeing techniques and insights gained while the originals underwent disassembly and restoration to show the original vivid colors they once had.

*** Not scheduled for exhibition.**

Fragments of a Gigaku costume (Hō), Nara period, 8th century plain-weave silk



Image19 Original 8th c. costume



Image18 Reproduction of costume (Hō)

Outline of the Exhibition

Title: The Digital Gallery of Hōryūji Treasures

Newly open from January 31st, 2023 (Contents will be changed every six months.)

URL: https://cpcp.nich.go.jp/modules/r_exhibition/index.php?controller=dtl&id=34&lang=en

Venue: Mezzanine Floor, The Gallery of Hōryūji Treasures, Tokyo National Museum
13-9 Ueno Park, Taito-ku, Tokyo, 110-8712 Phone: 03-5777-8600 (Hello Dial)

Organizers: Tokyo National Museum, National Center for the Promotion of Cultural Properties (CPCP)

With the Support of Hōryūji Temple, Nara National Museum, National Institute of Informatics Takano Lab

Exhibition Schedule:

January 31–July 30, 2023

Digital content: Cultural Properties in 8K: The National Treasure *Illustrated Biography of Prince Shōtoku*; 2018–19

Graphic Panel: The National Treasure *Illustrated Biography of Prince Shōtoku*; 10 panels, to scale; 2022
Reproduction: Gigaku Mask: Woman of Wu (Gojo); produced by Matsuhisa Sohrin Buddhist Studio, 2019
Reproduction: Gigaku Costume: Skirt (Mo); produced by Sengiren, 2021

August 1, 2023–January 28, 2024

Digital content: Ancient Paintings, Revived: The Murals of Hōryūji Temple; 2020
Graphic Panel: Murals in the Kondō Hall of Hōryūji Temple; 12 panels, scaled down; 2022
Reproduction: Gigaku Mask: Garuda; produced by Matsuhisa Sohrin Buddhist Studio, 2019
Reproduction: Gigaku Costume: Robe (Hō); produced by Sengiren, 2021

* This project is Supported by the Agency for Cultural Affairs, Government of Japan, through the Japan Arts Council, Fiscal Year 2022.

Visitor Information

Closed: Mondays (Open if the Monday falls on a national or other holiday, and then closed on the following weekday.); Tuesday, February 7, 2023, Year-end holidays.



*Dates and hours are subject to change.

*Visit the Tokyo National Museum [website](https://www.tnm.jp/modules/r_free_page/index.php?id=113&lang=en) for the latest information.

https://www.tnm.jp/modules/r_free_page/index.php?id=113&lang=en

Hours: 9:30 a.m. - 5:00 p.m.

* Last admission 30 minutes before closing.

* Opening hours are the same as those for regular exhibition. Those for special exhibitions may differ.

Tokyo National Museum Admission: Regular exhibitions, including the Gallery of Horyuji Treasures, ¥1,000 (adults), ¥500 (university students); free with ID for persons under 18 and over 70.

* Persons with disabilities are admitted free of charge along with one attendant. Please show an ID or other documentation upon entry.

* Special exhibitions at the Tokyo National Museum require a separate ticket, which also allows entry to regular exhibitions, including the Gallery of Horyuji Treasures, on same day without reservation.

Access by JR Line: 10-minute walk from the Ueno Station Park Exit or the Uguisudani Station South Exit; Ginza or Hibiya Tokyo Metro Line: 15-minute walk from Ueno Station; Chiyoda Tokyo Metro Line: 15-minute walk from Nezu Station; Keisei Line: 15-minute walk from Keisei Ueno Station

Visit our website for museum hours and admission details. (<https://www.tnm.jp/?lang=en>)



Tokyo National Museum

Founded in 1872, during the Meiji era, Japan's oldest museum now celebrates its 150th anniversary.

TNM houses more than 120 thousand Cultural Properties. Its collection spans Japan, China, the Korean Peninsula, and ranges as far afield as West Asia and Egypt. At TNM, you can follow the history of Japanese art from ancient pots and clay figures to ukiyo-e paintings, swords, armor, modern paintings, and more.

東京国立博物館
創立 150 年記念特設サイト

<https://www.tnm.jp/150th/>

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National Center for the Promotion of Cultural Properties

Established in 2018 by the National Institute for Cultural Heritage, the CPCP exists to promote Cultural Properties.

Its vision is to create a society where all people think and work together to preserve Cultural Properties for thousands of years to come. Through a variety of activities, the CPCP pursues its mission of giving as many people as possible a chance to get close to Cultural Properties.

Web site URL

<https://cpcp.nich.go.jp/>

Twitter
@cpcp.nich

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Instagram
@cpcp.nich

<https://www.instagram.com/cpcp.nich/>

To request images and for other general inquiries, please contact:

The Digital Gallery of Hōryūji Treasures Public Relations Office, Youth Planning Center, Inc.

Contact: Chikako Hirano or Satomi Ikebukuro

E-mail: digitalhoryuji2023@ypcpr.com

To sign-up for the press tour in English, please submit your information via this Google Form:

<https://forms.gle/EEmiapTyZ4YGKaCh8>

For inquiries in English about the press tour, please contact Alice Gordenker:

E-mail: gordenkeralice@gmail.com