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# A History of Traditional Japanese Bridges, with Several Remarkable Examples

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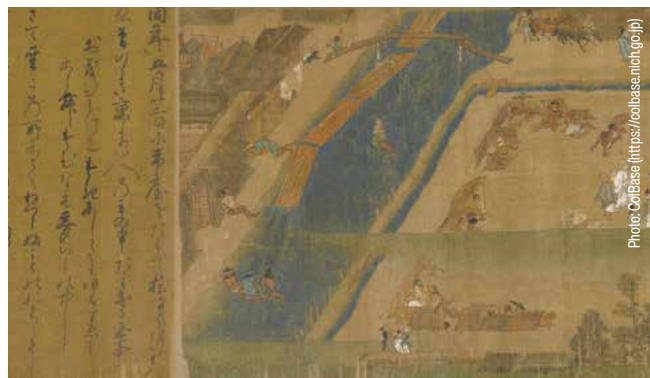
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Japan has a lengthy history of bridge construction, primarily those with wooden structures. We turned to Matsumura Hiroshi, an expert on the bridges of Japan, to learn more about the history of traditional Japanese bridges and a number of famous examples, known as “*meikyo*.”

Could you tell us about traditional Japanese bridges, their history starting from ancient times, and their special characteristics?

Up until the early modern period, almost all Japanese bridges were wooden — except for extremely short stone bridges — and most were *mokugeta-bashi*<sup>1</sup> (wooden-beam bridges). There are a number of reasons: lumber was relatively easy to obtain in all regions; many rivers have swift currents, so using forms like stone arches that would obstruct the flow was not feasible; and Japan’s complex topographical factors such as mostly mountainous prevented the development of mass transport involving carriages for war and other vehicles. It is also thought that general technological innovation in bridge construction did not progress much for such reasons.

While the remains of several ancient bridges have



A section of *Ippen Hijiri-e* (“Paintings from the Life of the Holy Man Ippen,” 1299) depicts a wooden plank bridge across the Horikawa River at that time in Kyoto toward the top.



**Matsumura Hiroshi**  
Employed by the Osaka City Public Works Bureau’s Bridges Division, the Planning Bureau’s Urban Planning Division, the Osaka Urban Engineering Information Center, and others. His written works include *Osaka no Hashi* (“Bridges of Osaka,” Shoraisha, 1987) and *Nihon Hyaku Meikyo* (“One Hundred Famous Bridges of Japan,” Kajima Institute Publishing Co., Ltd., 1998).

been excavated, only things like wooden piles that were identified as bridge parts were found. There are virtually no examples of bridges from ancient times where we have enough information to understand how the upper structures were built. Sources including *Nihonshoki* (“The Chronicles of Japan”)<sup>2</sup> contain passages on bridges, and from these, the locations of bridges can be presumed. However, it is difficult to reconstruct the structures they would have had.

In a later era, *emaki-mono* (picture scrolls)<sup>3</sup> produced in Japan’s Middle Ages contain some considerably realistic depictions of bridges. From those, we can presume what the structures of bridges in those times might have been like. These were primarily wooden beam bridges, and the small-scale ones almost all had simple wooden structures, like *itabashi* (wooden plank bridges) and *dobashi* (earthen bridges with wooden frames). As Yasuda Yojuro<sup>4</sup> noted in his *Nihon no Hashi* (“Bridges of Japan”), for the most part “the bridges of Japan generally lacked names and were, moreover, built simply for practical use.”

The early modern period (around the latter half of the 16th century to the latter half of the 19th century) brought advancements in infrastructure development, and bridges were put in place in main castle towns and cities, including Edo (now Tokyo), Kyoto, and Osaka. Due to the natural features of rivers, bridges were usually located in alluvial plain settings, and almost all were made with wooden poles and beams. The wood material was gradually damaged, however. Flooding could wash them away, and there were sometimes fires. All this meant they required frequent repairs and restorations. On the other hand, wooden beam bridge construction techniques did become established, and bridge designs became more stylized, as well. We can deduce what special charac-



*Toto Meisho Ryogokubashi Yu-suzumi no Zu* ("Enjoying the Evening Cool at Ryogoku" from the Series Famous Places of the Eastern Capital") by Utagawa Sadafusa (woodblock print, c. 1830–43) depicts a lively scene of people cooling off in the evening air atop a bridge.

teristics these had from *nishiki-e* ("brocade" prints)<sup>6</sup> produced in the late Edo period.

In the Edo period, stone-arch bridges started to be constructed in parts of Kyushu, and *hanebashi* (arch bridges with series of cantilever beams) were built in certain regions of Yamaguchi Prefecture. Stone-arch bridges were seen in just a small area on the main island of Honshu as well, but I think they can be considered exceptional cases.

### Could you give a few examples of historical "*meikyo*" famous bridges?

Before I respond to that, let me outline the standards for defining *meikyo*.

- Bridges whose construction had been strongly desired
- Bridges with outstanding technical features
- Bridges with beautiful shapes and forms
- Bridges that blend in harmoniously with stunning surroundings
- Bridges with long histories or ancient traditions associated with them
- Bridges that are familiar to people

To be considered a *meikyo*, a bridge needs to possess more than one of these traits. *Meikyo* can be found in all regions of Japan, but if we really narrow the list, the main examples include the Seta no Karahashi Bridge in Shiga Prefecture, the Ujibashi Bridge in Kyoto Prefecture (see page 10), and the Nagarabashi Bridge in Osaka Prefecture.

These bridges all have long histories and ancient

traditions and folklore associated with them, while at the same time still being in use today. This gives them special charm to people.

Bridges designated by the Japanese government as National Treasures or Important Cultural Properties should fall under the category of *meikyo*, as well.

One example is the Tsujunkyo Bridge (see page 18), which is designated as a National Treasure in September, this year, 2023. It had to be restored after the 2016 Kumamoto Earthquake. Also, a portion of the Gokurakubashi Bridge that was inside Toyotomi Hideyoshi's Osaka Castle has been relocated and reconstructed on Chikubu Island in Lake Biwa, where it now stands as the Karamon Gate. While it may not technically be a bridge, it has been declared a National Treasure and can be considered a precious remnant of a bridge.

As far as bridges from before the Edo period that are designated Important Cultural Properties, other than stone-arch bridges in Kyushu and Okinawa's Tenryobashi Bridge, all are located on the grounds of shrines and temples. Representative examples of these include three bridges at the Itsukushima Shrine in Hiroshima Prefecture



Above: The Seta no Karahashi Bridge in Shiga Prefecture

Below: The Karamon Gate on Lake Biwa's Chikubu Island, a National Treasure

and five bridges in Kyoto City: three bridges located at Kamo-wakeikazuchi Shrine, also known as Kamigamo Shrine, plus the Kangetsu-dai Bridge at Kodaiji Temple, and the Engetsukyo Bridge at Tofukuji Temple. Other famous examples include three bridges at the Hiyoshi Taisha Shrine in Shiga Prefecture and the Shinkyo Bridge on the Futarasan Shrine's grounds in

Nikko, Tochigi Prefecture.

The Kintaikyo Bridge (see page 16) in Iwakuni City, Yamaguchi Prefecture, which has been designated a National Place of Scenic Beauty by the Japanese government, is also worthy of special mention. This bridge features a superstructure with a wooden-arch construction not seen elsewhere in the world. It is also highly noteworthy for its special, inventive design features, including its bridge pier structure and stone paving set into the riverbed to help it withstand swift currents. I have heard that there are currently efforts underway to achieve a UNESCO World Heritage site designation for the Kintaikyo Bridge.



The Sorihashi Bridge of the Itsukushima Shrine in Hiroshima Prefecture, an Important Cultural Property



The Tsutenkyo Bridge at Tofukuji Temple in Kyoto City



A mikoshi portable Shinto shrine is carried across the taikobashi bridge at Osaka's Sumiyoshi Taisha Shrine during a festival.

**What special features are unique to Japanese bridges? Also, is there a particular cultural background that might be relevant, such as certain perceptions or sensibilities Japanese people have about these bridges?**

There is a great deal of folklore from all regions of Japan concerning bridges: mysterious phenomena occurring on bridges, *kami* spirits and deities inhabiting bridges, even possibly *hitobashira*<sup>8</sup> sacrifices. This may not be unique to Japan, but as Amino Yoshihiko<sup>9</sup> has indicated, bridges were conceived of as “*muen no ba*” — sites free of the usual bonds or connections — that is to say, existing in the world, yet belonging to nowhere and no one. People sensed fear or awe associated with them as extraordinary places where *oni*<sup>10</sup> ogres made frequent appearances.

Meanwhile, bridges had a feminine image associated with them as well. They seem to have been thought of as inhabited by female spirits and deities. The fact that one Hashihime (“maiden of the bridge”) metamorphosed from a being with strong spiritual power into the image of a lovelorn woman must be a reflection of Japanese sensibilities.

Also, *taikobashi*<sup>11</sup> (arched drum bridges) in front of Japanese Shinto shrines' gates, which are conceived of as bridges traversed solely by *kami* deities, feature distinctive forms with large, round curves. I believe this design might represent a high degree of uniquely Japanese originality. On the grounds of shrines, where *kekai* (dividing lines between sacred and secular zones) are established, *taikobashi* appear to act as barriers to enter by people. They can also, however, be thought of as something like stage-setting structures

encouraging people to adopt the proper frame of mind to make their entry into the *shin'iki* (sacred precincts) of the shrine.

**Are there any bridges you would like to particularly recommend that visitors to Japan see for themselves – and cross over – in person?**

I think there are many examples of bridges that blend into the surrounding landscapes and actually add something to them. One of the best examples would have to be the Togetsukyo Bridge in Kyoto City's Arashiyama district. In its present form, it is made of steel, with components like bridge piers given reinforced concrete structures, yet the design recalls its original wooden form. This is a bridge that can be said to blend in harmoniously with stunning surroundings.

Others I can think of include the Sanjo Ohashi Bridge, also in Kyoto City, the Kintaikyo Bridge that I mentioned a little earlier, and the Kai no Saruhashi Bridge in Yamanashi Prefecture. Some historical *meikyō*, such as the Ujibashi Bridge in Kyoto Prefecture and the Seta no Karahashi Bridge in Shiga Prefecture, bear signs of the different ways those in charge of keeping up the bridges have tried to preserve the original feel the wooden bridges had in past days.

Additionally, I think Japanese gardens are designed to express nature as it is, at the same time, its space is created well by incorporating man-made objects such as bridges. There are also examples of bridges that exist as gardens' compositional elements and objects to be appreciated for their appearance, while at the same time providing garden-viewing locations themselves. In particular, the Koishikawa Korakuen Garden,<sup>12</sup> a *daimyo* garden in Tokyo, incorporates a number of different types of Japanese bridges – stone, red-painted lacquer, earthen, and more – into its single landscape with well-balanced arrangement. ㊦



The Togetsukyo Bridge in Arashiyama, Kyoto



The Tsutenkyo Bridge in Tokyo's Koishikawa Korakuen Gardens



The Engetsukyo Bridge in Ritsurin Park, located in Takamatsu City, Kagawa Prefecture

1. A simple form of bridge made of wooden *keta* beams spanning a pair of support bases, with planks laid on top of them.
2. The first official history of Japan, completed in 720. Toneri Shinno, the son of Emperor Tenmu, compiled it by decree of Emperor Gensho. The work consists of 30 chapters, the first two concerned with the mythological age of divine beings and the rest detailing successive imperial reigns in the nation's history.
3. A form of Japanese painting in which long sheets of paper (or silk) are connected horizontally to form a canvas of great width for the depiction of a series of scenes or tales.
4. A literary critic born in Nara, who lived from 1910 to 1981. Founding the *Nihon Romanha* ("Japanese Romantics") literary magazine in 1935, he came to advance traditionalism and criticism of modern civilization. His collections of critical writings include *Nihon no Hashi* ("Bridges of Japan").
5. A type of plainland with topographical features formed primarily by sedimentation from rivers.
6. A form of multi-colored *ukyo-e* woodblock printing that became prevalent after late 18th century.
7. A form of bridge in which single ends of structural components are embedded in opposing banks or cliff faces and secured, and cantilever beams are laid across the opposite, protruding ends of them.
8. A type of sacrifice made to deities to pray for the successful completion of a castle, bridge, levee, or other structure, involving a person's burial in the ground or underwater. It is not considered actually to have been practiced in Japan.
9. A Japanese historian born in Yamanashi Prefecture, who lived from 1928 to 2004. He specialized in medieval Japanese history and the history of Japanese maritime peoples. His written works include *Nihon Chusei no Hi-Nogyomin to Tenno* ("Non-Agricultural Peoples and Emperors of Medieval Japan"), *Muen - Kukai - Raku* ("Freedom from Bonds - The Public World - Comfortable Ease"), *Igyo no Oken* ("Variant Royal Authority"), *Moko Shurai* ("The Mongol Invasions"), and *Nihon no Rekishi o Yominaosu, Sei/Zoku* ("Rereading Japanese History: Principal Text and Sequel"), among many others.
10. Imaginary demons and monstrous apparitions considered capable of causing harm to people.
11. A form of bridge with a rounded arch that curves upward like the frame of a *taiko* drum.
12. The oldest extant Edo *daimyo* garden, constructed by Tokugawa Yorifusa, the first *daimyo* feudal lord of the Mito branch of the Tokugawa family and completed by the second *daimyo*, Tokugawa Mitsukuni. Located in Tokyo's Bunkyo City.