

New Bridges for a New Japan

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Abstract

Japan experienced a program of radical and sustained Westernization following the Meiji Restoration of 1868. New technologies and new ideas were introduced including new means of mobility: the railroad became a powerful symbol of Japan as a modern and industrial state. Necessarily, stone and iron and eventually ferro-concrete bridges, emerged equally as visible symbols of modernity.

This paper surveys the history of modern bridges in Japan. It focuses on the bridging of the Tama, a short river (138 km) that flows into Tokyo Bay between Tokyo and Yokohama. Rivers in Japan are short, swift, and flood easy. A 218 meter wooden bridge across the Tama was built in 1600, it suffered repeated damage by floodwaters and was eventually abandoned. Other rivers along Japan's famous Tokaido Highway were similarly left unbridged. Finally, in the early 20th century, design of a new ferro-concrete bridge was entrusted to Masuda Jun, a civil engineer who became Japan's master bridge builder. Completed in 1926, the Rokugo Bridge inaugurated a golden age of modern ferro-concrete bridge building in Japan. Masuda was responsible for over 50 such bridges during the ten years between 1922 and 1932, including iconic bridges still in use such as the Jūsō Bridge over the Yodo River, the Yoshino River Bridge in Tokushima, the Muko River Bridge in Hyōgo, the Ise Ōhashi Bridge over the Nagara River and the Shirahige Bridge over the Sumida River in downtown Tokyo. The conclusion of the paper examines postwar (post 1945) bridge building programs, including the infamous building of "bridges to nowhere" associated with Japan as a construction state. The revival of pre-war dreams to bridge the Tsushima Straits in order link Japan with the Asian mainland will also be discussed.