

Wheeled Transport and the Urbanization of Meiji Japan

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Popular lore has it that on the inaugural run of Japan's first railway in 1872, passengers removed their shoes when boarding the train, leaving behind a neat row on the platform.¹ Japan had never made much use of wheeled vehicles before the Meiji period, relying on ships and river ferries to transport goods. When the Tokyo-Yokohama line was completed, it heralded a radical change in the role of Japan's cities and the lifestyle of their inhabitants.

The railways themselves were both a symbol and a tool of Meiji modernization. In addition to providing military advantages in troop movement and military readiness, the railways radically changed the size, shape, and purpose of Japan's cities, linking them as they did to the outlying areas. The railways became a vital issue for the modernizing nation, as well as a topic of fascination for popular culture.

In this paper, I will explore the introduction of the railway to Japan during the Meiji period, and its effects on Japanese cities and their citizens. I will examine some of the *Ukiyoe* prints of the late Tokugawa and early Meiji periods along with secondary and scholarly sources on the history of the railways and the character of urban Japan.

¹Fujii 1997

Iron Dragons

One form of mass artwork that was very popular in Edo (and later Tokyo) at the time leading up to the Meiji restoration was the *ukiyo*e print. These cheap and colorful posters were often stitched together from three pages of paper into triptychs. Being an urban sort of art, formed by the printing press and the publishing house rather than the palace or monastery, they tended to depict city life and the fascinating foreign ways of the newly-discovered West.

In 1854, American Commodore Perry brought a miniature railroad to Yokohama, and it attracted the interest of many Tokugawa government officials.² The demonstration system became the centerpiece of a miniature exposition of Western life and technology, and helped spark a public fascination with railways. The *ukiyo*e depicting the West often take on a carnival feel, presenting Western cities (sketched from imported newspaper illustrations) whose skies are littered with hot-air balloons.³

The horse-drawn carriage was not native to Japan, and was used mainly by foreigners who traveled from the treaty port city of Yokohama up to Tokyo.⁴ The Tokugawa caste system forbade most Japanese from even riding a horse, reserving them for samurai. As a result, Japan never developed the civilian infrastructure of livery stables and feeding troughs that flourished in Europe. Wheeled vehicles were a foreign concept for most Japanese, who traveled and shipped goods by waterways or on foot.

As a consequence of the complete unfamiliarity with wheeled vehicles, many of the early

²Ike, 1955, p 218.

³*Bankoku meisho zukushi no uchi: Amerika Washinton fu*, Yonemura, 1990, pp 160-161.

⁴Ike, 1955, p 218.

images of trains were like drawings of dragons. The image of the mythical dragon is often a cross between familiar animals, be it a snake with a dog's head or a lizard with bat wings. The early *ukiyo*e railway artist may have had a fleeting experience with the 1854 display train, and may have been informed of the basic concept of steam power, but the locomotive was still a mythic beast. Seidensticker describes the representations of trains in early *ukiyo*e prints as “highly fanciful, like representations of elephants and giraffes by people who have never seen one.”⁵

To the modern American viewer, many of the *ukiyo*e prints contain obvious and somewhat jarring misunderstandings of Western lifestyles and technology. In a dark, almost monochromatic print from 1861 entitled “The Transit of an American Steam Locomotive,” (see Figure 1.) a crowd of vaguely caucasian-looking men and women stand in front of what appears to be a Mississippi riverboat that has been perched on rails.⁶ Another triptych shows a woman in Western dress strumming a violin with her fan in the same manner as the kimono-clad samisen player across from her.⁷

Yokohama to Tokyo

The people who marveled at Perry's little locomotive had less than a generation to wait before Japan had a railway of its own. Throughout the 1860s, representatives from the West pressured the newly-opened Tokugawa government to construct railroads, and when a famine broke out in Northern Japan, British Prime Minister Sir Harry Parkes took advantage of the tragedy to proclaim

⁵Seidensticker, 1983, p 49.

⁶*Amerikakoku jōkisha ōrai*, Yonemura, 1990, p 162.

⁷*Yokohama ijin shōkan no zu*, Yonemura, 1990, p 140.



Figure 1: Yoshikazu's *Amerikakoku jōkisha ōrai*, 1861.

the benefits of being able to ship goods rapidly across the country. The Tokugawa government actually granted permission to an American diplomatic official to build a line between Edo and Yokohama, but after the Meiji restoration this permit was revoked on the grounds that Japan's railways should not be built by foreigners.⁸

The Meiji government was concerned with national wealth and military strength, so it studied railway technology early on. The Foreign Office issued a memorial in 1869 lauding the ability to move goods from areas of plenty to areas of scarcity, to reclaim waste lands, and to move troops quickly during emergencies. The memorial urged the government to build a railway between Tokyo and Yokohama, hoping that the unobstructed terrain would make it an inexpensive project that could increase foreign trade.⁹ By 1872, the project was completed with a great deal of foreign

⁸Ike, 1955, p 219.

⁹Ike, 1955, p 219.

assistance at a cost three times what the Foreign Office had projected.¹⁰

Hiroshige's 1874 triptych "Picture of a Steam Locomotive along the Yokohama Waterfront" shows a fleet of impressive black battleships against a red, white and blue sky. The Yokohama-Tokyo train runs along the shore, operated by Westerners and containing mostly Western passengers.¹¹ The line was not staffed with Japanese locomotive engineers until 1879.¹²

The Meiji government was still concerned with the large amount of foreign involvement in railroad development. When the Tokyo-Yokohama line was completed, 81 foreigners were involved in railway construction.¹³ As part of a plan for industrial self-sufficiency, the government started a workshop in Kobe that turned out Japan's first locally-built locomotive in 1893.¹⁴

Filling in the Gaps

The railway's introduction in the 1870s reshaped and expanded the borders of the Japanese city, and the citizens adapted to the changing size and shape of the urban sphere by incorporating new modes of wheeled transport. Yoshitora's 1870 *ukiyoe* triptych "Enumeration of Vehicles in Transit in Tokyo" appears to be an educational display of the various new forms of transportation that were going to be available in Japan. The print concerns itself mostly with a wide collection of horse-carts, but includes two steam vehicles and a pair of prototype *jinrikisha*, or rickshaws.¹⁵

While the railway was still in the planning stages, the first *jinrikisha* was invented in Tokyo.¹⁶

¹⁰Ike, 1955, p 221.

¹¹*Yokohama kaigan tetsudō jōkisha no zu*, Yonemura, 1990, p 182.

¹²Ike, 1955, p 222.

¹³Ike, 1955, p 221.

¹⁴Aoki 1994

¹⁵*Tōkyō ōrai kuruma-zukushi*, Yonemura, 1990, p 178.

¹⁶Seidensticker, 1983, p 42.

The human-powered rickshaw was better suited to Tokyo's narrow and dusty streets than a horse-drawn carriage, and it brought wheeled transportation to the city without the costly infrastructure required by horses or engines. The rickshaws in the Yoshitora triptych are square carts with a flat canopy, and are being pulled by hunched men with muscular arms.

As the rickshaw increased in popularity for intra-city trips, the old canals and rivers became less important transportation corridors and the businesses that depended on them began to go out of business.¹⁷ But just as the *jinrikisha* replaced ferries as the principal urban vehicle, so too was it replaced. By 1903 Tokyo would begin to build electric streetcars capable of carrying more passengers than the rickshaws and at a lower fare, reducing the rickshaw to the role of a taxi for the suburbs.¹⁸

The New City

Edo had relied on its extensive system of waterways for transportation within the city as well as for shipping goods to and from the inland regions. As wheeled transportation grew in popularity, Meiji Tokyo's canals languished. The city moved on rickshaws into the spaces between the rivers and canals, and the railway drove the urban sphere inland.

In Natsume Soseki's 1908 story *Sanshiro*, the main character takes offense when a man from the countryside jumps into his train car and strips to the waist. Although this act bothered Sanshiro's urban Meiji sensibilities, the rural man may have thought it no different from removing his shoes. It was common for travelers to remove their trousers on long train rides, folding them

¹⁷Seidensticker, 1983, p 43.

¹⁸Seidensticker, 1983, p 44.

into the overhead compartment. The disrobed passengers would sit in a dignified fashion on their muslin underclothes, unaware that anyone would find this impolite.¹⁹

Fujii notes that the scene in *Sanshiro* would have been acceptable in a more informal or “rural” setting, but that the railway car represented a moving pocket of the modern urban social environment. It was more likely to mix with people from different walks of life on board a railway car, giving it an aspect of the bustling city that it supports.²⁰

The very existence of the suburb was the result of railway development, as decreasing costs in rail travel made it possible to live outside a major city and ride into the central business district each day. The population of Japan’s cities grew rapidly as rail lines came in, but the cities also had to accommodate the population of commuters who rode the train in to work every morning. Yoshitora’s triptych “Traffic Jams at Shinagawa” shows a bustling scene in which two trains on a collision course while the streets above are cluttered with smoke and rickshaws.²¹

The Japanese government saw the problems that increased urbanization had brought, and looked to the West for solutions. Ebenezer Howard’s *Garden Cities of Tomorrow* was introduced to Japan in 1907, during the period referred to as the Taishō Democracy.²² Howard’s plan involved the construction of a human-scale satellite city built in rings around a suburban train station.

Denenchōfu (literally “pastoral city”) was the first residential development of what is today the Tokyu corporation. Tokyu made a great deal of business in the 20th Century by improving land values by building train lines, and then financing new retail centers from the real estate profits.

¹⁹Fujii, 1997, p 13.

²⁰Fujii, 1997, p 13.

²¹Seidensticker, 1983, color plate.

²²Oshima, 1996, p 140.

Although they only ever built the one Garden City, their methods are today held up as an exemplar of the “transit village” neighborhood style.²³

Run in on a Rail

The transportation technology that the West introduced to Japan was singularly transformative. The public fascination with railways in late Tokugawa Japan was similar to the obsession with space travel in post-WWII America. The artwork of the time shows a culture still getting used to the idea of wheeled transportation, and eager to learn.

The first railway may have been too expensive and impractical for common everyday travel, but the citizens of Tokyo were inspired to develop their own transportation networks and mechanisms. The shape of Japanese cities owes partly to the legacy of Meiji railway planning, but also to the ingenuity of the *jinrikisha* inventors who helped expand the city within its own borders.

The changes in size, shape, and speed of the city affected all of Japan, connecting everyone more closely to Tokyo or Osaka. The railway networks may have made Japan a “smaller world,” but the industrial possibilities that steam power brought helped turn them into a large colonial power in the early 20th Century.

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²³Bernick and Cervero 1997.

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