

Epilogue

Hirofumi Yamamoto

Transportation in modern Japan has experienced many severe ups and downs and intersectoral imbalances but has, as a whole, developed quite rapidly in line with the other industrial sectors. When Japan opened its doors to foreign countries in the middle of the nineteenth century, the Western world had already entered a period of rapidly advancing railroads and steamships. Japan was still transporting goods and passengers by post relays of horses and men, rope-pulled ferries across rivers, and square, flat-bottomed, one-sailed Yamato ships. Such were the circumstances in transportation when the Meiji government came to power in 1868.

Government transportation policy consisted of two parts: reforming the old system and introducing new technology in railroads, steamships, and Western-style sailing-ships. However, policy was hampered by the old-fashioned economic concepts of the policy makers at that time: the railroads had to be government-built and government-operated, and the government intervened to a great extent in coastal shipping. Such a policy was not only a great fiscal burden on the government, it was heavily criticized for interfering with the freedom of the operator. However, a series of large-scale study tours of the European and North American countries from 1871 to 1873 allowed government officials to seriously reflect on the policies of government operation and intervention. This resulted during the latter half of the 1870s through the early 1880s in a change in policy emphasis from direct government operation to development of private management, and during the 1880s, most businesses operated by the government, except for posts, telegraph, railroads, and weapons' factories, were sold to private interests. This was accompanied in the transportation field by aid to such companies as the Mitsubishi Company in shipping and Naikoku Tsuun in land transport and by granting permission to private companies to operate railroads.

In addition to these changes in policy, there was a drastic reform of inconvertible currency, which resulted in, beginning in 1886, the development of private industry in such areas as cotton-spinning, textiles, and

land and water transport, so that by the latter half of the 1890s an almost completely self-sufficient capitalist system had been established. In transportation, coastal and deep-water shipping companies emerged, for example Nippon Yusen, Osaka Shosen, and Toyo Kisen, and railroads and land-transport companies, mainly for long-distance railroads and their auxiliaries.

Those in charge of policy during the first stage of industrialization were chiefly bureaucrats born into the lower levels of the old samurai class. They had been educated in Confucian precepts within the feudal fiefs and were equipped with political skills honed in the turmoil of restoration. Although much of feudal society, for better or worse, remained a part of thought and policy, skilled bureaucrats were trained in an environment open to the rest of the world and were able to select appropriate policies that were suited to an age of rapid progress. Although the members of the samurai class were extremely autocratic toward the common people, the rivalry between feudal factions provided mutual constraints within the government that functioned to make appropriate policy selection possible. Good examples of this are the changes in policy during the latter half of the 1870s and in the Hokkaido Colonization Office Scandal of 1881. The tone of policy moved from direct government operation in the initial period to special aid for designated commercial or heavy industrial corporations (given in the latter half of the 1870s and the 1880s to Naikoku Tsuun, Mitsubishi, Japan Railway, Nippon Yusen, and Osaka Shosen), and then to general aid for heavy industry and commerce in the later periods, as embodied in the navigation and shipbuilding promotion laws of 1896.

Private entrepreneurial activities were also active during this period. One example, as we have seen, was the Japanese-operated public passenger service by horse-drawn coach between Yokohama and Tokyo that appeared in 1869. In 1870 freight carts were being converted into rickshaws for passenger service, and in 1872 horse-drawn coaches began operations between Tokyo and Takasaki and Tokyo and Utsunomiya. In the 1880s, vehicular traffic consisting of rickshaws, horse-drawn freight carts, passenger coaches, and ox carts mushroomed, and horse-drawn coaches based on imported models were manufactured throughout the nation.

But government policy on road transport and construction presented many problems. For one, the government paid only a very small amount of road costs; most of the funds, even for national highways, had to come from local governments. Not only did this invite anger from the local citizenry, it kept road structure and regulations at very low levels until the middle of the twentieth century. The situation was also one in which the country did not go through a genuine horse-and-carriage stage but was thrown, by means of a government transportation policy that emphasized railroads as the major means of transport, directly into the railroad age. This jump hampered the proper development of roads and highways and diminished the efficiency of railroad transport at the terminals. Another outcome of the government's policies was the push by the National Railways in the 1910s and 1920s for

programmes that would improve the railroad freight-handler business. However, the railroad bureaucracy that quickly increased in size and strength through the 1906 nationalization of 17 private trunk railroads was unable to provide an outlook for a rational transport system of roads and railroads, and the overall expansion of local lines placed a heavy burden on National Railway finances.

This creation of a rational road and railroad transport system ran into even more difficult problems after the Second World War, with an unbalanced, even reversed, progress in transportation: the postwar years saw rapid motorization and declining railroad transport. The biggest problem in Japan's transport policy for sometime will be the National Railways' cumulative debt of ¥37.3 trillion.

Technological Innovation and the Development of Transportation in Japan

Japan is currently at the forefront in the areas of high-speed rail transport and automobile manufacturing. Yet, it was just a little over 100 years ago that the movement of goods and people in Japan was carried out largely on foot and by ox cart.

The creation in Japan of a modern transportation system is described here in English for the first time by a distinguished group of Japanese historians of transportation. Covering roughly 120 years from 1867 to 1980, the authors provide the reader with a thorough account of the history of the development of modern transportation in Japan. Divided into eight historical stages, their survey traces the development of road, river, coastal, and rail transport. At every stage and for each transport mode, the authors consider technology transfer from the West, government industrialization policy, domestic development and improvements of technology, and the achievement of technological independence. The authors also pay close attention to the government's policy on transportation, how it aided or inhibited the different transportation sectors at different times, and how it evolved during the period of Japan's development of a modern transport system.

This detailed examination of the course of Japan's progress from lagging behind the industrialized countries of the late nineteenth century to attaining one of the world's most advanced transportation systems will not only be of value to those interested in this component of Japan's modernization but may also serve as a comparative model to countries currently engaged in technological development, particularly, in creating an effective system of transport.

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