



The Cartographic Heritage of Tokyo: The Representation of Urban Landscapes on Maps from the Seventeenth to Nineteenth Centuries

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Abstract

This study presents an overview of the history of maps depicting Tokyo (Edo) published from the seventeenth to nineteenth centuries. Of these maps, the main emphasis is given to *Edo Kiriezu*, sectional maps of Edo; these maps are used to determine the ways people were conscious of their city, and also to discuss past geographical thought. Here, an investigation is made of the cityscape characteristics of Edo as depicted on old maps. The study concludes that the urban landscape of Edo as depicted in *Edo Kiriezu* is the terminal point for considering what kind of spatial awareness “Edoites” had of the places where they lived. The Edo cityscape depicted in these maps has also served modern Tokyo as an important tool for recollecting and understanding Edo. Not only do maps of Edo help us to reconstruct lost urban landscapes, they also function as our cartographic heritage and illuminate the geographic thought of people who came before.

Keywords: Cartographic Heritage, Edo, Edoites, Geographical Thought, Landscape, Map Publication

1. Introduction

For this study, specific maps of Tokyo from the seventeenth to nineteenth centuries were selected. The aim was to clarify how Tokyo’s landscapes were expressed on these maps.

Tokyo was called Edo from the twelfth century to mid-nineteenth century. When the official era name was changed from Edo to Meiji in 1868, the Emperor of Japan moved his residence to Tokyo, and the capital of the country was changed from Kyoto in the west to the “eastern capital” (the literal meaning of

Tokyo, which was the name that replaced Edo). Thus, from the Meiji period on, Tokyo served as the imperial capital; many people came to live in Tokyo, and the city was progressively modernized. Yet, in the midst of this rapid modernization, some Tokyoites began to wonder if the memories and traditional cityscapes of old Edo would be lost forever (Kobayashi and Nakamaru, 2020; Komeie, 2020). This led to movements to protect and preserve the historical heritage of the city (Iwabuchi, 2018).

Modern Tokyo twice suffered major physical damage: in the Great Kanto Earthquake of

September 1923 and in the March 1945 bombing during the Asia-Pacific War (World War II). Even in the modern Tokyo city of today, there are many who think back with fondness on old Edo, and the way of thinking that emphasizes the importance of history still lives on today. While contemporary Tokyo retains historical traces of the Edo period, including Edo Castle, much of the built environment was destroyed by fires and the disasters noted above, such that few historical buildings and structures still exist. Historical materials essential for reconstructing and remembering the old landscapes of Edo today include old maps, woodblock prints and other paintings, old photographs, and so on. The maps created during the Edo period show things such as Edo Castle and nearby districts with the mansions of the upper-class samurai and feudal lords (*daimyo*), as well as streets, demarcations of Edo districts, and so on. This makes such maps key historical resources for reconfiguring the urban structure of Edo (Tamai, 1986).

The Author considers old maps as not simply research materials for restoring past landscapes but as important historical materials for examining how the people of the time thought about geography. Old maps depicting Edo are important historical and cartographical artifacts of Tokyo (Iida and Tawara, 1988; Tawara, 2003). To determine how the city of Edo was represented on old maps, correctly reading and interpreting their methods of expression will clarify the geographical awareness and thought of the people of Edo and of Tokyo.

2. Edo's urban configuration and the publication of Edo maps

Edo was located on the eastern edge of the Musashino Plain, at the edge of what is now called Tokyo Bay. In 1603, Tokugawa Ieyasu was appointed "Conqueror General" (*Sei TaiShogun*) by the Japanese Emperor, and he established his Bakufu government in Edo. This led to major infrastructure projects, including the reinforcement of Edo Castle and formation of urban town districts, the so-called *shita-machi*, which were "below the castle". Civil engineering projects, including the Edo Castle

moat and town-district construction, were performed with great decorum by the *daimyo*, the feudal lords and samurai from throughout Japan who had sworn allegiance to the Tokugawa Bakufu.

Urban planning in Edo was founded on constructing districts based on the existing class system. Elevated areas were set aside for the feudal lords and samurai families and lower lands for urban dwellers (merchants, craftsmen and workers). Temples and shrines were built in the vicinity of feudal lords houses and samurai family mansions. The most salient characteristic of this urban space was the large area dedicated to these mansions, 70% of the city. The remaining 30% was occupied by urban dwellers, as well as by shrines and temples. Included among the samurai or warrior class were the Tokugawa family retainers as well as the *daimyo* from throughout Japan. Especially numerous were the residences (mansions) of the feudal lords. The reason why feudal lords kept a residence in Edo was due to the alternate attendance system (*Sankin-kotai*), under which the Tokugawa government mandated that feudal lords from throughout Japan had to spend a full year in Edo. Thus, Edo served as a unique political and governmental central urban district, something not seen in other Japanese cities.

The oldest woodblock-print map of Edo was made in 1632 and is called the *Bushu Toshimagun Edo Shō Zu*, shown in Figure 1. This map is found in many books and publications, as it depicts Edo in the early Edo period, and numerous copies were made. This map shows, in painted form, the Edo Castle tower as well as Zojoji Temple, and as in so many Edo maps, the western direction is shown at the top (Tamai, 2016).

A large survey map called the *Kanbun zu* (the five-piece map made in the *Kanbun* era) was created in the late seventeenth century (Figure 2). It was made by a famous mapmaker called Ochikochi Doin (his given name was Fujii Hanchi of the Toyama Domain), who also created roadmaps of the Tokaido road.



Figure 1. Map of Edo in Toshima county, Musashi Province (*Bushu Toshima-gun Edo Shozu* 武州豊嶋郡江戸庄図), 1632, size 93.4x126.2 cm. Source: National Diet Library of Japan, open access, <https://dl.ndl.go.jp/info:ndljp/pid/1286168>.



Figure 2. A part of map copied by *Kanbun* map (寛文図), 1699, size 166.6x189.4 cm. Source: National Diet Library of Japan, open access, <https://dl.ndl.go.jp/info:ndljp/pid/2542475>.

The *Kanbun* map divides Edo into 5 districts, and the scale is 1:3,250. Detailed depictions of the region are found, extending to approximately 15 kilometers in the south-north directions from central Edo, and to approximately 12 kilometers in the east-west directions (Tamai, 1986). This map has such a degree of accuracy that it practically overlaps the survey maps made from the Meiji era on. The *Kanbun* map served as a foundational published map of Edo and was repeatedly copied, with ever newer information being added.

Popular in the eighteenth century were the so-called *Ōezu*, which means “large maps” (Iida and Tawara, 1988). These popular maps depicted in detail the entire Edo area, all on a single large map. They were printed in color using woodblocks onto *washi*, sturdy, strong paper made in Japan. These maps were unique in that they could be folded repeatedly and opened up on the straw *tatami* mats that covered Japanese house floors. Large maps with smaller dimensions were 83.7 centimeters in width vertically and 102 centimeters in length horizontally, while the largest measured 182.4 centimeters in width and 201.8 centimeters in length (Tawara, 2003, p. 102). A portion of the 1721 map called *Bundo Edo Ōezu* was created by the *ukiyo-e* artist Ishikawa Tomonobu, shown in Figure 3. This map incorporates painting-like elements and presents the appearance of Edo in an easy-to-understand way.

From 1806 to 1816, an epoch-making map was created. This pride of Japanese mapmaking was the *Dai Nihon Enkai Yochi Zenzu*, created on the basis of survey work performed throughout Japan by Ino Tadataka. In 1817, another notable survey map of Edo, the *Edo Funaizu* (Edo city map), was created. These maps were preserved in the Bakufu government archives and not made available to the general public. However, it is thought that several draft maps drawn during the survey work existed, and that related information also reached the common people. Two maps are thought to have been especially influenced by these, the *Tenbo Kaisei Ōedo On Ezu* of 1843 (Figure 4) and the *Bunken Edo Ō Ezu* of 1859 (Tawara, 2003; Waley, 2016).

3. The publication of maps showing Edo’s divisions: *Edo Kiriezu* and their circulation

What kind of awareness did Edoites have of their city? There exist published maps that help to answer this question. These are the deeply interesting and essential *Edo Kiriezu* produced in the mid-nineteenth century. These maps depict in detail Edo’s urban interior and list the names of the feudal lords and samurai residents. Below are some reasons why these maps are special in their depiction of the landscapes of urban Edo.

As described above, in the early part of the seventeenth century, highly accurate survey maps were already being published in Edo. Many other maps were printed based on these survey maps (Iida and Tawara, 1988). Many of these maps were large-scale woodblock-print maps, depicting Edo on a single big piece of *washi* paper. Yet, large-scale, detailed, and accurate maps were not easily carried, nor referred to when walking in the city or riding on horseback to one’s destination. This resulted in the first appearance of folding-type large-scale maps. Thereafter, in the pursuit of even more convenience, so-called “sectional” maps became popular. Each single map depicted one town or community division of Edo. In fact, *Kiriezu* means “sectional-division map”.

The first *Edo Kiriezu* published in the mid-nineteenth century were Bancho maps (Figure 5). Bancho districts were located to the west of Edo Castle; they were samurai districts housing the residences of “flag-carriers” (*hatamoto*) that is, mid-level samurai who were retainers of the Tokugawa Bakufu government. These Bancho districts were complex concentrations of middle-class samurai residences (Jinnai, 1992, pp. 67-77; Jinnai, 1995, pp. 39-48). They were not particularly large, but not easily navigable. This made maps indispensable to anyone who visited these areas. There were no nameplates on Edo *buke* homes, or other identifying marks as found in the residences of today’s Tokyo.



Figure 3. Large Map of Edo (*Bundo Edo Oezu*分道江戸大絵図), 1721, size 101.0x160.3 cm.
Source: National Diet Library of Japan, open access, <https://dl.ndl.go.jp/info:ndljp/pid/2542714>.



Figure 4. Large Map of Edo in the Tenpo period (*Tenpo Kaisei Oedo On-ezu*天保改正大江戸御絵図), 1843, size 121.0x133.6 cm.

Source: National Diet Library of Japan, open access, <https://dl.ndl.go.jp/info:ndljp/pid/2542443>.



Figure 5. Sectional-Division Map of Bancho (番町切絵図), 1849, size 48.9x56.0 cm.
Source: National Diet Library of Japan, open access, <https://dl.ndl.go.jp/info:ndljp/pid/1286255>.

Neither were the main residences lined up along the streets, as in European cities. Adding to the complications was the fact that Bancho were located in elevated areas, with many gradual slopes and rises. The Bancho were thus divisions made of these “micro-topograph(ies)” (Jinnai, 1992, p. 70; Jinnai, 1995, p. 43). Thereafter, sectional maps continued to be made, not only of mid-level samurai districts, but also of upper-class samurai districts, including those where feudal lords from around Japan lived. These maps were thus centered on the *buke* family districts of Edo.

Omiya Gohei was the first publisher of the *Edo Kiriezu*, sectional maps of Edo city. Located

in Kojimachi district were merchant residences. Omiya primarily was an *Aramonoya* – a shop selling household goods and cleaning tools. Why, then, did a store that was neither a bookstore nor a dedicated publisher of maps? Kojimachi district served entranceway to the Bancho, the district of samurai as described earlier. There was a need to provide information to the visitors to Kojimachi, who were unfamiliar with the way around the city. Thus, Omiya began to publish maps to meet this demand, with its maps of Bancho attaining an unexpected popularity. Eventually Omiya began publishing sectional maps of Edo other than those of the Bancho as well. Owariya Seishichi,

on learning about the popularity of these maps, also began to publish maps. Consequently, he became the first after Omiya to produce *Kiriezu* maps. His store was also located in Kojimachi.

There were four types of *Kiriezu* by Omiya, Owariya, Hiranoya, and Kichimonjiya. There were some unique variations depending on the bookstore where they were published, and the most popular were those published by Owariya Seishichi (Figure 6). Owariya *Kiriezu* had several characteristics that increased their appeal. The first was their production of maps not based on divisions of survey maps, but rather with historical configurations that were readily understood by people of the time. Such maps did not necessarily pursue total accuracy, but rather incorporated “painterly” (picture-like) expressions. As for the map legends, *buke* residential areas were shown in white, temple and shrine districts in red, bridges and roads in yellow, natural areas in green, and the residential districts of merchants and craftsmen in gray.

Thus, the maps used color to show how each land area was divided for use. The names of the residents of a district were placed on the right, where the entranceway of the residence would be located, making entranceway locations readable at a glance. In other words, the aim of these maps was not survey-like accuracy; rather, they emphasized a true depiction of the actual state of the district, enabling ready understanding and usability.

Owariya maps circulated widely in the market and became “bestsellers”. It is estimated that, in total, 1,200 maps of Edo were published. Based on the population of Edo, there was a demand for approximately 500,000 copies of maps. Of the maps that have survived today, *Edo Kiriezu* account for 20% (Tawara, 2003). In the year toward to the end of the Edo period, as sectional maps accounted for a significant percentage of the total maps published, one might conclude that the *Bakumatsu* (the last days of Bakuhu government) was “the era of the Edo *Kiriezu* maps” (Tawara, 2003, p. 57).

The *Edo Kiriezu* differed from geographically accurate maps with their symbols, lines, and scales; instead, these were colorful, expressive maps of great beauty. However, there were not intended to aesthetically pleasing, as the samurai residence area in Edo were characterized by complicated landscapes with several visitors. A glance at an *Edo Kiriezu* sectional maps showed landmarks, streets, community district lines, and much more. They were practical maps for the people also sought to navigate, mostly on foot, the labyrinthine complexity of Japanese large city.

4. The use of Edo maps for posterity

Edo became Tokyo in 1868, and the Land Survey Department of the Japanese Army took charge of making modern terrain maps based on survey measurements. As Japan modernized along the lines of Western Europe, land usage changed; the information contained in Edo maps vanished and maps were redrawn to include novel data on Tokyo.

Nagai Kafu (1879-1959), a writer who traveled and studied in the West and whose written works showed a strong longing for Edo (Kobayashi and Nakamaru, 2020), wrote the following about Tokyo maps in his 1915 essay titled *Hiyori Geta* (“Fair-weather *geta* footwear”): “[...] Among Tokyo maps, those with the greatest precision and accuracy are superior survey maps made by the Army’s Land Survey Department. Looking at these, however, stimulates zero interest in me, and I get no idea of what the landscape might actually look like. Symbols which look like insect legs trace the elevations of the land in these maps accurate to a scale of 1-to-several ten thousands. Unwieldy things, these rather spark irritation than pleasure in the viewer” (Nagai, 1915, Section 4, 2nd par.).

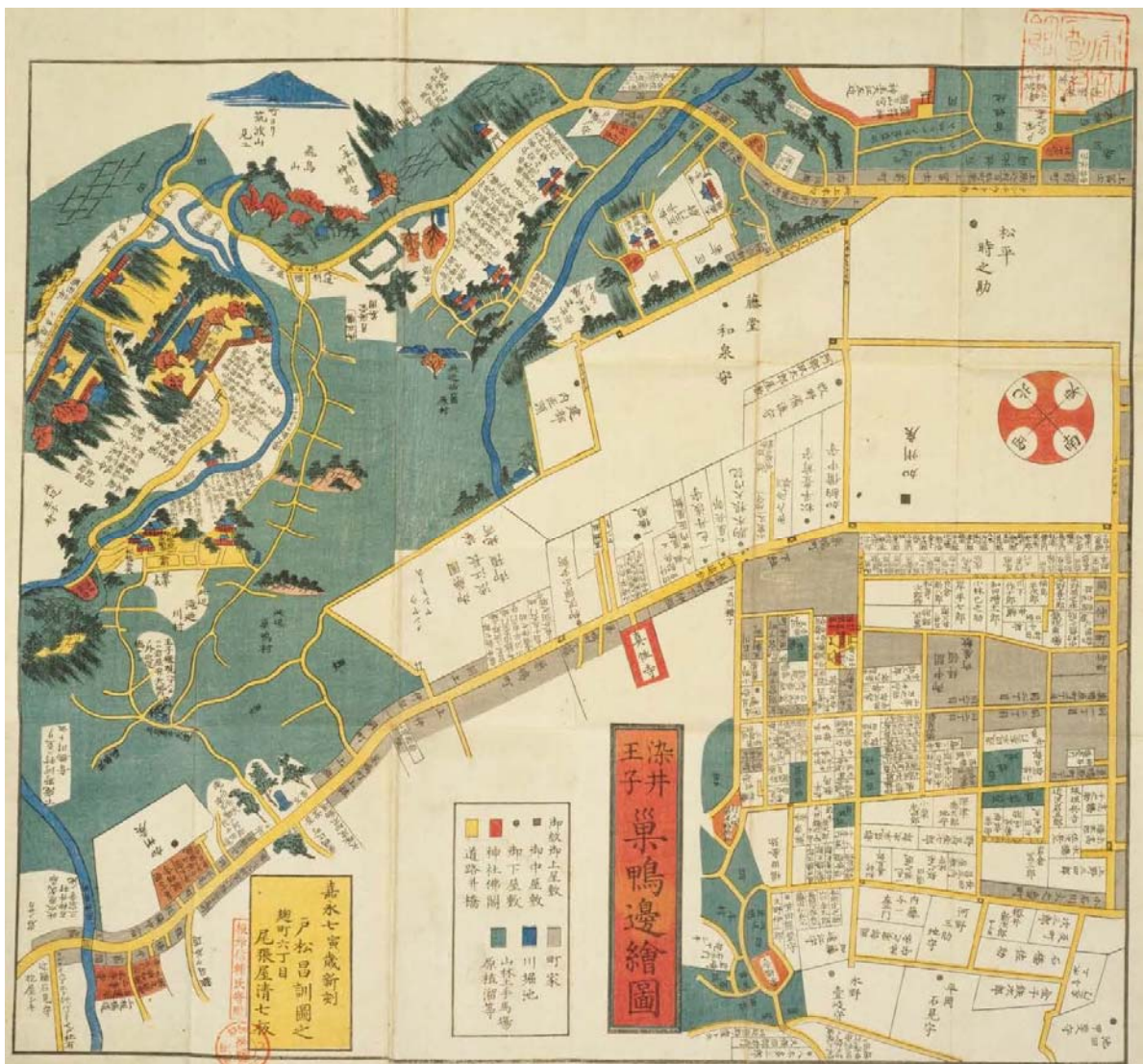


Figure 6. Sectional-Division Map of Sugamo (巢鴨切絵図), 1854, size 48.9x54.0 cm.

Source: National Diet Library of Japan, open access, <https://dl.ndl.go.jp/info:ndljp/pid/1286255>.

Here, Nagai Kafu indicates the dullness of modern survey maps. Looking at one of those maps gave one no sense of the actual “lay of the land”, meaning the cityscape. Conversely, Kafu continues with the following comments on the maps of Edo: “The inaccurate maps of Edo show, for example, depictions of cherry trees blossoming in famous blossom-viewing areas such as Ueno Park. Or, from the top of Asukayama, one can see the far-off mountains of Nikko and Tsukuba as depicted on maps. Some maps simultaneously use completely different depiction methods. One can thus flexibly, depending on need or pleasure, discover various

points of interest or importance. These maps of Edo, while lacking the accuracy of the new maps of Tokyo, use methods of expression which can be intuitively understood, and which leave a deep impression” (Nagai, 1915, Section 4, 2nd par.).

Whenever Nagai Kafu took his strolls in the towns and districts of Tokyo, he always carried related *Edo Kiriezu* (Nagai, 1915). He especially valued the depictions of Edo landscapes and cityscapes found on these maps. Kafu’s stance reflects his deep appreciation and respect for the methods Edoites used to express the geographical landscape of their city. This is high

praise for their historical geographic thought, based on reflections on the traditional Edo against the backdrop of a rapidly modernizing Tokyo.

Edo Kiriezu were marketed only during the *Bakumatsu*. Nevertheless, prior research has confirmed that the number of *Edo Kiriezu* maps sold was similar to the total amount of all Edo maps sold during the 200-plus years of the Edo period (Tawara, 2003). Even after Edo ended and the Meiji period began, the maps of Edo were handed down and preserved. They serve as tangible heritage artifacts of cartography and enable us to imagine how Edoites thought about geography and talk about their ideas from an accurate historical perspective.

5. Conclusion

Mid-nineteenth-century maps of Edo were not limited to survey maps with accurate measurements and a high degree of precision. The *Edo Kiriezu*, maps drawn in sections that emerged at this time, enabled one to see at a glance landforms (topology) as well as specific areas within Edo. These were not survey maps. Despite the fact that highly accurate, precise maps had already been created and published by the seventeenth century, the *Edo Kiriezu* represented a move toward less-accurate maps. Looking at the development of maps solely from a scientific perspective, the *Kiriezu* might be considered as retrograde. Ironically, however, these maps demonstrated the development of mapmaking within Edo. They were the result of creative work by Edoites who had a keen spatial awareness of Edo as the capital city.

The urban landscape of Edo as depicted in *Edo Kiriezu* is the terminal point for considering what kind of spatial consciousness Edoites had of the places where they lived. The Edo cityscape depicted in these maps has also served as an important tool for recollecting and understanding Edo in modern Tokyo.

Edo maps have become the cartographic heritage of contemporary Japan. Many people collect originals or copies; these maps appear on t-shirt (Figure 7), shoes, and consumer items, and one can also see digitized versions of old maps on the Internet. Thus, the geographical

thought of Edoites continues to live with us today, even in our ordinary daily lives.



Figure 7. T-shirt of Sectional-Division Map, *Honjyo Fukagawa Ezu*, by Media Kiryu. Source: photo by Shinobu Komeie.

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