Mapping the World in Bakumatsu Japan: Shibata Shūzō (1820–1859)

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In 1856 Shibata Shūzō (1820-1859), originally from the remote island of Sado, became the first academic officer of Western cartography appointed by the shogunate to its Institute of Western Studies, Bansho Shirabesho. Studies of cartographic development in Japan often acknowledge Shibata's contribution to bakumatsu-era mapmaking, typically referring to his publication of a world map, Shintei kon'yo ryakuzenzu in 1852, and his role in the bakufu project to produce the second official Japanese map of the world, Chōtei bankoku zenzu in 1855. The significance of his work, however, goes far beyond the results of technical investigations of his maps. Shibata's career development provides a vivid example of the interplay between increasingly popular participation in educational and cultural activities and the rapid growth in Japan's knowledge about the world and its dealings with foreign countries. This study analyzes Shibata's maps, texts, and personal documents as examples of a Japanese intellectual's reactions to the paradigm shift in relations with the outside world in the nineteenth century. By emphasizing the term "bakumatsu," this essay intends to distinguish the historical context of Shibata's work from both "early modern" mapping and "modern" cartography. It argues that his personal experiences encapsulate the broader national experience at a moment when the intellectual landscape was changing rapidly in response to Japan's encounter with Western nations.

Keywords: Shibata Shūzō, cartographers, mapmaking, bakumatsu, Bansho Shirabesho, world maps, world geography, Northeast Asia, Western studies

Introduction

Active in the 1840s and 1850s, Shibata Shūzō 柴田 (新発田) 収蔵 (1820–1859) was a cartographer best known for his map of the world, *Shintei kon'yo ryakuzenzu* 新訂坤輿略全図 (Newly revised map of the earth, 1852, figure 1), evaluated by several specialists as one of the most sophisticated bakumatsu-era world maps.¹ Shibata was born to a fisherman's family

¹ A print of *Shintei kon'yo ryakuzenzu* is on display at several museums including the National Museum of Japanese History in Sakura (as of April 2019). Its digital image is also available on websites of other institutes such as Kyoto University (https://rmda.kulib.kyoto-u.ac.jp/item/rb00011631) and Yokohama City University

on Sado Island. He died in Edo while serving as a research officer in cartography at the bakufu's Institute of Western Studies (Bansho Shirabesho 蕃書調所). During his lifetime, the bakufu and many domain governments had to deal with foreign threats, particularly from Russia, the U.S., and Britain. The establishment of the Institute of Western Studies in 1857 was part of an attempt by the bakufu to maneuver Japan into a position where it could deal with the international threat.

As suggested by Shibata's transformation from a fisherman on a remote island to a government cartographer in the capital city, the period of his lifespan was also a time when commoners' opportunities for education, travel, cultural, and literary activities increased greatly. Shibata had three separate opportunities to study in Edo. Using the skills and contacts he acquired in Edo, he became a doctor, and then later a mapmaker using Western cartographic skills. He published several maps and geography books.² Shibata's career development provides a vivid example of the interplay between the increasingly popular participation in educational and cultural activities and the rapid increase in Japan's knowledge about the world and its dealings with foreign countries. This study analyzes Shibata's texts and other works as examples of Japanese intellectuals' reactions to the paradigm shift in relations with the outside world in the nineteenth century.

I argue that there was a distinctive "bakumatsu" development in Japanese intellectuals' learning of world geography, and I focus on Shibata's engagement in mapping the world, in both charts and texts, to make my point. By emphasizing the term "bakumatsu," I intend to distinguish the historical context of Shibata's work from both "early modern" mapping and "modern" cartography, and, in so doing, address a weakness in current understandings of Japanese cartographical history. Marcia Yonemoto's Mapping Early Modern Japan (2003), for example, explores the rich tradition in mapping in the Tokugawa period, yet pays little attention to texts of the 1850s and 1860s. Thus she reaffirms the traditional understanding that Japan's modern "cartographic revolution" took place in the Meiji period, thanks to those who studied in Europe after 1868.3 On the other hand, a newer publication, Cartographic Japan (2016), edited by Kären Wigen, Sugimoto Fumiko, and Cary Karacas, situates essays about late-Tokugawa-period mapmakers such as Inō Tadataka 伊能忠敬 (1745-1818) and Mamiya Rinzō 間宮林蔵 (1780-1844) in a section entitled "Modern Maps for Imperial Japan." The editors appear to argue those mapmakers were significant because they had somehow anticipated the developments of the Meiji period, and not because they reflected the specific knowledge and understandings of their own age. Another indication of the difficulty of situating Japanese developments in the first half of the nineteenth century in cartographic discussions is the exclusion of materials produced in that period from works such as Edo chishikijin to chizu 江戸知識人と地図 (Edo intellectuals and maps, 2010) by

⁽http://www-user.yokohama-cu.ac.jp/-ycu-rare/pages/WC-0_67.html). This map has been discussed by several specialists in cartography. See, for example, Unno 1994, p. 442, and Miyoshi 1999, p. 128. For English translations of the titles of this and other Japanese maps, I follow Unno 1994 where appropriate. Otherwise, I provide my own translations.

² A previous article of mine analyzed Shibata's life in Edo in 1850 as a student of medicine and Dutch studies (Moriyama 2016). Also, in Japanese, I have discussed Shibata's learning experiences in Sado and Edo (Moriyama 2018).

³ Yonemoto 2003, pp. 173-174.

⁴ Wigen 2016.

Uesugi Kazuhiro.⁵ Mary Elizabeth Berry in her *Japan in Print: Information and Nation in the Early Modern Period* (2006) also pays little attention to maps or other materials after 1800, and insists that "the Tokugawa and Meiji ideas of territory were profoundly different."

It is not my intention to criticize this lack of scholarly attention to cartographic materials from 1800 onwards, because I also find it difficult to interpret Shibata Shūzō's 1850s maps and geography books in their early modern context. Instead, in this essay, I demonstrate that Shibata's maps and books deserve to be understood on their own terms as quintessentially "bakumatsu" texts, reflecting Japanese intellectual life around the 1850s. Bakumatsu roughly corresponds with Shibata's lifespan of the 1820s to 1850s. I regard it as a time of transition from early modern to modern Japan. While continuing to work and live under the Tokugawa regime, people witnessed many unprecedented events and phenomena. Many members of the social and intellectual elite were conscious of changes in Japan's international environment at this time. To varying extents, people tried to adjust their views and policies at the level of bakufu or domain government, in schools and academies, and as individuals. Bakumatsu can be regarded as a period of social, political, and cultural movement "towards modernity" within the world of Tokugawa society. Shibata Shūzo's work and his legacy are good examples of Japanese intellectuals' interactions with the bakumatsu transition between early modern and modern Japan.

The arguments that follow are based on my reading of Shibata's diaries, which are available for the years 1842, 1843, 1846, 1847, 1848, 1850, and 1856, as well as my analysis of his maps and handbook in geography. Chronologically tracing his learning, mapmaking, and writing in the field, I show, first, how Shibata's intellectual foundation and keen interest in cartography were formed by the established connection between his home island of Sado and the capital city of Edo. Second, I examine the 1852 map, Shintei kon'yo ryakuzenzu, and discuss Shibata's knowledge of world geography as well as his perspective on the world as a mapmaker, which was a product of his study in Edo. Third, I analyze other publications of his from the viewpoint of his engagement with the 1850s political and intellectual environment. Next, I examine an 1855 bakufu map of the world to which Shibata was invited to contribute as a cartographer. My analysis of maps and texts published between 1852 and 1855 reveals the common concern and interest among Japanese intellectuals about their country's international situation just before and just after the visits of the so-called "Black Ships." In the last section I discuss Shibata's appointment to the Institute of Western Studies, assessing his advance within the central academic world of Tokugawa Japan, and the limitations of his position.

1. Learning Geography in Sado and Edo: Shibata's Diaries, 1842–1850

Shibata's account of his study of geography and mapmaking appears in his diaries from 1842. This was the year after his return home from his two-year study trip, yūgaku 遊学,

⁵ Uesugi 2010. Uesugi 2015 does not deal with maps after 1800 either.

⁶ Berry 2006, p. 226.

⁷ There are two compilations of Shibata Shūzō's diaries and other writings: Shibata Shūzō nikki 柴田収蔵日記, 2 vols., 1971, and Shibata Shūzō nikki: Mura no yōgakusha 柴田収蔵日記: 村の洋学者, 2 vols., 1991. Hereafter I abbreviate the former to SSN (a) and the latter to SSN (b).



Figure 1. Shibata Shūzō, Shintei kon'yo ryakuzenzu. Shunsōdō, 1852. Courtesy of Sado Museum.

to Edo to learn from Confucian scholar Nakane Hansen 中根半仙 (1798-1849).8 Using the skills he had acquired, the newly educated Shibata participated in the administration of Shukunegi 宿根木 village on his father's behalf. The job necessitated frequent trips to the Sado magistrate's office in the town of Aikawa 相川, a day's journey away from his home.9 He used these opportunities to obtain knowledge of geography, particularly from Ishii Natsumi 石井夏海 (1783-1848) and his son Bunkai 文海 (1804-1849), both of whom were employed by the magistrate's office to draw and make maps. A project assigned to the Ishiis in 1842 provided Shibata with a hands-on opportunity to learn mapmaking. The result was Sado ikkoku kaiganzu 佐渡一国海岸図 (A coastal chart of the province of Sado), a traditional scroll-style map with illustrations of terrain and with every coastal community marked.¹⁰ Previously, Inō Tadataka and his team had surveyed the Sado coastline in 1803 as part of their famous venture that later led to the production of Dai Nihon enkai yochi zenzu 大日本沿海輿地全図 (Maps of the coastlines of great Japan).11 It is likely that the Ishiis were revising the Inō map in response to a bakufu order prompted by the ever-increasing foreign threat exemplified by nothing so much as the Opium War in China of 1840. While introducing a new policy to handle foreign ships seeking water, food, or fuel, the administration of Mizuno Tadakuni 水野忠邦 (1794-1851) instructed local authorities on the coasts to submit reports about coastlines and ports.¹² The Sado magistrate's office must have been urged to follow this instruction. This would explain why, unlike the Inō maps, Sado ikkoku kaiganzu contains notes about each port or bay of the island. For example, a

⁸ Narita 1971, pp. 335-339.

⁹ Shibata's diary in 1842, for example, reveals that he went to Aikawa twelve times in that year, staying there for five to sixteen days each time. SSN (b) l, pp. 39–128.

¹⁰ Ishii, "Sado ikkoku kaiganzu."

¹¹ See, for example, Kawamura 2010, pp. 173–175; Unno 1994, pp. 450–453; Suzuki 2016.

¹² See Yokoyama 2001, pp. 288–291; Fujita 1994, pp. 167–173; Bolitho 1989, pp. 146–147.

note on Shukunegi reads "Rocks on both left and right sides. Depth: 7.2 meters (4 *hiro* 尋). Bottom: stones. Bad southerly winds. Fourteen to fifteen boats can berth."¹³

Shibata was fortunate enough to share the Ishiis' privileged access to geographic information, which was normally limited to the political elite. His diary reveals that he saw the Inō map of Sado while observing as Bunkai pointed to the many discrepancies between the results of his own survey and the Inō map.¹⁴ Few Tokugawa-era commoners could have seen a copy of the Inō maps, even a section. This was because, once the mapping project had been completed and formally submitted to bakufu senior councilors in 1821, access was supposed to be limited to bakufu officers and select daimyo.¹⁵ Shibata must also have learned by listening to Bunkai. In addition to local maps, Shibata started studying maps of the world through the Ishiis' network. The item that he most enthusiastically worked on in 1843 was a world map produced in copperplate print by Shiba Kōkan 司馬江漢 (1747–1818), presumably its 1796 version.¹⁶ According to Unno Kazutaka, this map exerted a strong influence over map readers in Japan in the early nineteenth century.¹⁷ Shibata made his own copy of Kōkan's map over a period of forty-eight days, and afterwards showed it to some members of the village elite.¹⁷ This provides good evidence that the practice of map collection and replication using peer networks had spread among intellectuals.¹ゥ

Shibata's determination to map the world is next seen in his 1846 and 1847 diaries. Once again he had just returned from a two-year yūgaku to Edo for medical training, where he studied initially under the same teacher as on his first trip, but then moved to a Rangaku school run by Itō Genboku 伊東玄朴 (1801–1871) in 1845. The latter environment presumably further fostered his interest in and knowledge of Western geography. Returning home in 1846, Shibata made one more replication of a world map, and in late 1847 he produced "his own version of maps of the globe" (jisei no chikyūzu 自製の地球図) in two different types: an ellipsoidal chart and a twin-hemisphere chart. Although draft maps by Shibata have not been definitively identified, I speculate, for reasons explained below, that the twin-hemisphere map is that shown in figure 2, which was reportedly brought back from Edo to Sado by Shibata's widow after his death in 1859. I also suggest that this work was largely based on an official bakufu map, Shintei bankoku zenzu 新訂万国全図 (Newly revised map of all countries; see pub. ca.1816), a project assigned to the Department of

¹³ Ishii, "Sado ikkoku kaiganzu."

¹⁴ SSN (b) 1, p. 101.

¹⁵ See Uesugi 2015, pp. 208–209; and Watanabe 1999, pp. 214–218.

¹⁶ If Shibata correctly noted the title ("Chikyūzu"), then the Shiba Kōkan map that he copied must be its 1796 version. See Shiba, Chikyū zenzu.

¹⁷ See Unno 1994, pp. 435-436.

¹⁸ See SSN (b) 1, pp. 214–241.

¹⁹ See Uesugi 2010, particularly chapters 3 and 6. This section of Shibata's diaries has also led the historian Tsukamoto Manabu 塚本学 to comment that Shibata was typical of rural intellectuals in the late Tokugawa period, in that they all had to craft their lives within a rapidly changing political environment. See Tsukamoto 1977, pp. 184–187.

²⁰ See "Shokan rui" in SSN (a) 2, pp. 308-310.

²¹ See SSN (a) 1, pp. 473-479.

²² See the book cover of SSN (a) 1.



Figure 2. "Enkei sekai chizu" 円形世界地図 (A round style map of the world). Private collection, deposited at Sado Museum.

Astronomy (Tenmonkata 天文方) , which was led by Takahashi Kageyasu 高橋景保 (1785–1829).²³ Shibata's 1846 diary mentions a "Takahashi map" twice.²⁴

Many studies acknowledge the significance of *Shintei bankoku zenzu* in providing an archetype of world maps for later cartographers in Japan. Shibata must have been one of those who learned well from this map. Similarities between Shibata's draft map and the Takahashi map can easily be identified. Besides the projection and basic layout of the two maps, the outlines of each continent are almost the same, except for the northern end of North America, where Shibata drew clear lines while Takahashi retained blurred outlines to indicate its unsurveyed status. Also, almost identical are the shapes of Australia and New Zealand. It is believed that Takahashi used Aaron Arrowsmith's world map, published between 1797 and 1804 in London, exploiting the results of James Cook's (1728–1779) voyages from 1768 to 1780 and the voyages of George Bass (1771–1803) and Matthew Flinders (1774–1814) in 1798–1799. It seems that Shibata also followed the Takahashi map in choosing place names and writing them in Japanese script, although the highly detailed entries on the Takahashi map are much more comprehensive. There is one clear mistake in Shibata's work, however. He presents Sakhalin as two separate islands, "Karafuto" in the south and "Saharin" in the north.

I assume it was in Edo in 1850 that Shibata had opportunities to correct his understanding of Sakhalin and update his knowledge of world geography. When Shibata

²³ See *Shintei bankoku zenzu* under Takahashi ca. 1816. This map is dated 1810 but actual publication with a revision was about 1816, according to Unno 1994, p. 439.

²⁴ SSN (a) 1, pp. 263, 478.

²⁵ See, for example, Kyōto Daigaku 2007, pp. 99–103; Kinda 2012, pp. 285–287; Onoda 1999, pp. 121–122; Kinda 2007.

²⁶ Kinda 2012, p. 286; Kinda 2007, pp. 351-352.

obtained permission for a third *yūgaku* to Edo, he re-enrolled in the Itō Genboku academy.²⁷ Within just three days he was invited by the academy's head student to a meeting with Koga Kin'ichirō 古賀謹一郎 (1816–1884).²⁸ Koga served the bakufu as a Confucian scholar at the Shōheikō 昌平黌 school, but was known for his interest in and knowledge of foreign affairs rather than the Chinese classics. He convened a study group attended by like-minded young students.²⁹ In his diary, Shibata describes in vivid detail his meetings with Koga.

[Kaei 嘉永 3 (1850).4.23] In the evening, [head student Ikeda] Tōun 池田洞雲 (d. 1855) invited me to a meeting with Mr. Koga. [At Koga's residence] I showed him my oval-style map of the globe and asked for his comments. He is very knowledgeable about geography. He showed me a fine map [from Europe]. I also saw [his notes?] on a comparison between maps in [the Chinese classics] and those in Dutch books. [On our way back,] Tōun and I had drinks near the Izumibashi bridge.

[5.7] Toun showed me a letter from Mr. Koga saying that Mr. Koga had examined my map and wanted to give me some comments in person. In the afternoon, I went to the Koga residence. He pointed out the notes he had put on the map where he had found problems.... [He showed me in his collection of maps that] a land has been discovered south of the South American continent as drawn on an 1845 Western map, and how the shape of the northern part of North America is being revealed. I saw maps of the world, of Ryukyu, Korea, Manchuria,, – dozens in total! ... Mr. Koga offered me dinner too.

[6.10] Mr. Koga sent me a message telling me to come and look at some maps that he had newly obtained.... He showed me a German map of the world. It is more or less the same as the 1845 Dutch version [which he had previously shown me]. To modify my draft, I copied from the Dutch map such areas as the south of South America, New [Holland?] and the northern frontiers of North America.... I borrowed a map of South America that Mr. Koga had copied himself, as well as a map of Australia. At night, I examined my own draft map.

[6.11] I started revising my draft oval map using the Dutch map that I had borrowed from Mr. Koga.³⁰

Their scholastic bond developed quickly. Shibata, who was clearly amazed by Koga's knowledge and collection of resources, was able to assimilate the new knowledge and utilize the material he needed to improve his previous work. There was a clear knowledge-gap between them in world geography. It is more important, however, to note that the gap was breachable. Koga, too, seemed happy in his discussions with the young mapmaker from the remote island of Sado. Below we will see the process by which Shibata caught up with the new knowledge in world geography.

²⁷ For Shibata's 1850 study trip, see Moriyama 2016 in English and Moriyama 2018 in Japanese.

²⁸ SSN (b) 2, p. 189.

²⁹ See Onodera 2006, pp. 26-43.

³⁰ SSN (b) 2, pp. 189, 192, 200-201.

2. Publishing a World Map: Shintei kon'yo ryakuzenzu, 1852

Between 1852 and 1855, Shibata published three works in Edo: a world map, a handbook of world geography, and a map of Ezo and its surroundings. Disappointingly, none of his diaries exist for this period, but the charts and text in these publications give us a clear picture of the development in his knowledge of Western geography. They also contain valuable information about bakumatsu geographers' interests and skills in how to present the world to their contemporary readers in Japan. First, this section analyzes Shibata's first publication, *Shintei kon'yo ryakuzenzu*, a world map which appeared in 1852 (figure 1).

Shibata published this map only one and a half years after he met Koga. So, I presume that it was a direct result of Shibata's revision of his draft map using Koga's resources. In addition, I suggest that his newly acquired knowledge appears clearly in the "preface" (hanrei 凡例) of this map, where Shibata mentions three areas of development in mapping, resulting from geographic surveys from the eighteenth century. One concerns Oceania. Shibata explains that the existence of a great southern landmass, Magallanica/Magellanica (Megarani taishū 墨瓦蠟大洲, named after Magellan), had long been assumed and had been drawn on old maps, but its existence had been comprehensively disproved by "a number of Westerners whose ships have recently navigated the area and have found no large lands other than New Holland and New Guinea." Thus, the whole of this area, including countless islands, was now called "Australia" (Austrararī 南島嶼洲), which, according to the preface, was considered as one of the world's five continental regions (godaishū 五大洲). The freshness of the information about Oceania is evident if we compare Shibata with Takahashi, who did not recognize "Australia" as a region in his 1816 map, and more so if we compare him with Shiba Kōkan, whose 1796 map had still accepted the existence of Magallanica. Yet, Shibata continued to label the continent of Australia as New Holland until his next project in 1855, even though European maps had changed the name to Australia by the end of the 1820s.³¹

A second area of development for Shibata was Sakhalin. Shibata was still unsure whether "North Ezo (Kita Ezo 北蝦夷), also known as 'Karafuto,' is an island separate from or a peninsula connected to Manchuria." For this map, however, he decided to present it as an island, and omit another island which was shown on old maps as "Sagaren" 薩牙蓮 (Sakhalin). Shibata had clearly moved on from his previous misunderstanding of Sakhalin, displayed in the draft map discussed above. The northeastern coastlines of the Eurasian continent and islands nearby had long been a point of discussion among European explorers and geographers. As shown by Akizuki Toshiyuki 秋月俊幸, early major attempts to identify the terrain include during journeys by Jesuit missionaries from the late sixteenth century, a voyage by Maerten G. Vries (d. 1647) of the Dutch East India Company in 1643, and Russian surveys ordered by Peter the Great (1672-1725) such as those by Vitus Bering (1681-1742) and Martin Shpanberg (d. 1761). From the late eighteenth century, Japanese explorers joined the endeavor, largely motivated by the expansionist threat from Russia. Major contributors to Japan's new knowledge of its north prior to Shibata's day include Mogami Tokunai 最上徳内 (1754-1836), Kondō Jūzō 近藤重蔵 (1771-1829), Matsuda Denjūrō 松田伝十郎 (b. 1769), and Mamiya Rinzō. Matsuura Takeshirō 松浦

³¹ For the development of maps in relation to the exploration to Australia, see Tooley and Bricker 1976, pp. 245–268.

武四郎 (1818–1888), another contributor, was Shibata's contemporary.³² As far as Sakhalin is concerned, it is normally thought that the 1808–1809 exploration by Mamiya settled the island-or-peninsula question.³³ But Shibata's notes to his readers here indicate that Mamiya's conclusion had not yet reached or fully convinced people, even those like Shibata who were interested in geography. Akizuki is probably right in suggesting that Japanese mapmakers did not have full access to, or did not completely trust, Mamiya's materials.³⁴

The third area of development that Shibata referred to in his preface concerned the Antarctic Peninsula. Shibata informs his readers of the British discovery of "a land 'south of Fuego Island" at the southern end of South America. Shibata wrote that "details are not yet known," and suggested that the newly discovered land may have been "the tip of a landmass." Accordingly, Shintei kon'yo ryakuzenzu presents a relatively large land with an incomplete outline where we now know the Antarctic Peninsula is located. Western nations' race for discovery and claim over lands in the Antarctic region had been heating up since around 1819 because of the hunt for seals for their fur and oil. Shibata's reference here to a British discovery probably relates to the sighting of the Antarctic Peninsula by Edward Bransfield (1785-1852) and William Smith (1790-1847) in 1820. An almost coincident but more significant event was the voyage by their Russian rival, Thaddeus von Bellingshausen (1777-1852), whose ships circled Antarctica in 1820-1821 for the first time in history.³⁵ On the map, Shibata draws a dozen lands that were newly discovered and claimed by these British and Russian ships around 1820. He marks the southernmost part of the Antarctic Peninsula as "Czar Peter's Land" (Kēzeru Peterusu rando), for example.36 By around 1845, Western intellectuals had heard many stories of discovery on and around the continent, including those from James Clark Ross's (1800-1862) expedition in 1839-1843.³⁷ Shibata's note suggests that their Japanese counterparts had yet to be informed.

In the preface, Shibata also notes political developments in each of the five continental regions. He supplies a mixture of very outdated information and relatively new happenings, such as the collapse of the Mughal Empire in India in the late eighteenth century and its subsequent "split into many territories of native powers and those under British control," the balance of which was "now reportedly equal." This development caused Shibata to make "many changes in place names" to his map. News from Europe included "the Austrian acquisition of Hungary," an incident now one hundred and fifty years old; "the territorial expansion of Prussia," probably referring to the outcome of the 1814–1815 Congress of Vienna; and the "splitting up of the Netherlands," likely meaning the independence of Belgium in 1830. "Significant changes in Africa in recent years" were "the independence of Egypt" and "the French annexation of Algeria." The former meant the Egyptian rebellion in the early nineteenth century, and the latter referred to the French military campaign

³² See Akizuki 1999, chapters 2, 3, 5, 8, 9, and 10.

³³ For Mamiya's exploration to Sakhalin, see, for example, Akizuki, pp. 285–294; Walker 2007; Morris-Suzuki 2016.

³⁴ Akizuki 1999, p. 308. Sakhalin was still presented as a peninsula in an 1853 map published in Edo. See Akizuki 1999, pp. 323–333. Another good summary of the development of geographical knowledge in Japan in relation to the northern engagement is Yoshida 1997.

³⁵ See Landis 2001, pp. 27-47.

³⁶ Others include "King George Island" and "Alexander Island," which were discovered by Bransfield on 18 January 1821 and Bellingshausen on 28 January 1821, respectively. See Landis 2001, pp. 32, 43.

³⁷ See Landis 2001, pp. 63-107.

from 1830 onwards. A note by Shibata on South America informed readers about the independence of "the united countries," meaning the establishment of Gran Colombia in 1819 against Spanish colonial rule, and its subsequent "breakup into three parts," namely the secessions of Venezuela and Ecuador in 1829. For North America, Shibata wrote positively about the "Western countries' settlement," which turned "once deserted and almost uninhabited land" into "a strong and united country," with "great cities like Boston, New York, and Washington." The news that "has lately impressed people" was the United States' acquisition of California. Presumably he referred here to the official declaration in September 1850 by the U.S. government of the establishment of California State as a result of the 1846–1848 war against Mexico.³⁸

Where did Shibata learn about these political events in each continent? It seems likely that one of his prime sources was a reference book of world geography, *Kon'yo zushiki* 坤興 図識 (The world in charts and notes) written by Mitsukuri Shōgo 箕作省吾 (1821–1847) in 1845. Shibata's diaries for 1846, 1847, and 1848 reveal his keen interest in this book. He spent thirty-eight days in total in transcribing it.³⁹ Mitsukuri's book covers many of the political changes that Shibata referred to in *Shintei kon'yo ryakuzenzu*.⁴⁰ It is also highly probable that Shibata's meetings with Koga and other like-minded people in Edo played a key role in building his knowledge of the contemporary world. Koga, a bakufu officer, must have had privileged access to news from foreign countries, most notably information conveyed in the Dutch reports on world affairs (*fūsetsugaki* 風說書), which were compiled by translation officers in the employ of the Nagasaki magistrate's office. For example, Mexico's cession of California to the USA was mentioned in the 1848 report.⁴¹ Presumably Shibata was suitably placed to hear rumors at least of these overseas events from Koga and others.⁴²

3. Engaging with Geopolitical Discourse About the World

Shibata's interest in the contemporary geopolitical structure of the world led him to compile his second publication, *Kakkoku shoryō bankoku chimei shōran* 各国所領万国地名捷覧 (Concise handbook for names of countries and their territories in the world; see figure 3). This handbook appeared in 1852, soon after his world map. Shibata's aim was to supplement his readers' knowledge of world geography. In the handbook's preface, Shibata explains the context in which he wrote: "Western nations have annexed many countries and provinces around all the five continental regions," and these "political changes in the world today are hard to understand for Japanese people." So he produced a full list of "independent states"

³⁸ For the political events mentioned here, see, for example, Palmer and Colton 1995, pp. 223, 445–452, 487–488, 570–571, 651–656, 1075–1079.

³⁹ Diary entries between Kōka 弘化 3 (1846). 4.2 and Kaei 1 (1848). 4.27 in SSN (a) 1, pp. 286–432 and SSN (b) 2, pp. 28–60.

⁴⁰ Mitsukuri's book covers the collapse of the Mughal Empire and the advancement of the British East India Company into India, the German recovery of territories after the Congress of Vienna, and Belgian independence from the Netherlands, which are all pre-1840 events. Not included in the 1845 book is, of course, the USA's acquisition of California in 1850, the most recent news for Shibata's contemporaries. See Mitsukuri 1847, vol. 1, fol. 13a; vol. 2, fols. 9a, 13b; vol. 4II, fols. 3b–6a.

⁴¹ Also, news about the Egyptian uprising against the Ottomans was included in the 1833 report, and Algerian resistance against the French invasion appeared in the reports of 1846, 1847, and 1848. See Nichi-Ran Gakkai 1977–1979.

⁴² The leaking of information from the Dutch reports on world affairs, despite the limitation of official access, is discussed in Iwashita 1997.

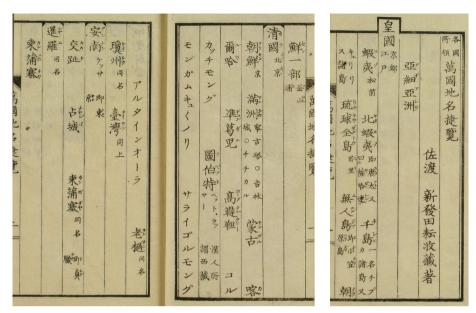


Figure 3. Shibata Shūzō, *Kakkoku shoryō bankoku chimei shōran*. Shunsōdō, 1852. First three pages of the main text. Waseda University Library.

(dokuritsukoku 独立国) in the world, under each of which he named "subject countries" (zokkoku 属国) as well as home countries or provinces of those independent states. Great Britain, the prime example of colonial power, had acquired a long list of subject territories throughout the six regions: nineteen in Europe in addition to the home countries of England, Wales, Scotland, and Ireland, fourteen in Asia, including Hong Kong, Fuzhou 福州, Amoy 厦門, and Shanghai in China, seventeen in Africa, fifty-nine in North America, including many Caribbean islands, one in South America, and twenty-two in Oceania. As supporting evidence of the British annexation of Australia, Shibata referred to a world map just published in France in that year, 1852.44

This handbook is also a good indication of the source of Shibata's knowledge, and so of its place in the genealogy of early modern Japan's study of world geography. A primary model was presumably Mitsukuri's *Kon'yo zushiki*, mentioned above. As Maeda Tsutomu demonstrates, it was *Kon'yo zushiki* which presented the contemporary world order in terms of "actual power relations between 'empires' and their colonies," and thus devised a mark to distinguish between "independent states" and "subject countries" in every region on the globe. This realization of the importance of imperialism was stimulated by Japanese intellectuals' sense of crisis upon receiving the news of the Opium Wars of 1840–1842. *Kon'yo zushiki*'s political insights and its comprehensiveness made it one of the most influential and enlightening resources for bakumatsu activists as well as mapmakers. Shibata's pocket-size handbook of world geography seems a kind of a digest of Mitsukuri's

⁴³ Shibata, Kakkoku shoryō bankoku chimei shōran, fols. hanrei 1a-hanrei 3b.

⁴⁴ Shibata, Kakkoku shoryō bankoku chimei shōran, fols. 24a-30b.

⁴⁵ Maeda 2009, pp. 95-96.

book, considering their sizes and volumes.⁴⁶ The mere fact that Shibata's small book was published suggests that interest in the contemporary world order had spread beyond the intellectual community by this time.

Compared with Mitsukuri's book published a decade earlier, Shibata's handbook more strongly asserts Japan's status in the nineteenth-century world order. Shibata placed Japan at the beginning of the volume and referred to it as "Kōkoku" 皇国 or "the imperial realm." As can be seen in figure 3, he elevates the word "Kōkoku" simply to stress its superiority over all other "independent states." Mitsukuri's first volume, on the other hand, begins with a general introduction to Asia, followed by Japan, which he also calls "Kōkoku," and China, referred to as "Kara" 漢土. It is clear that Mitsukuri still valued China greatly, appreciating the size of its land ("larger than the whole of Europe"), its population ("145.4 million people") and military power ("3.8 million soldiers"), as well as the prosperity of the capital city of Beijing, which has "three million residents, by far livelier than London." Unlike Shibata, it is probable that Mitsukuri wrote this section before hearing news of the Opium Wars of 1840-1842 or understanding the seriousness of China's defeat. Moreover, with regard to subject countries of Japan, Mitsukuri claimed Ezo, Hachijō Island, the Ryukyu Islands, Oku-Ezo and Sakhalin, but also noted that "Sakhalin, also known as Karafuto, belongs to Japan and China, half and half."47 In Shibata's book, Japanese territories grew: they include Ezo, "Kita-Ezo, also known as Sakhalin," "all islands of Ryukyu," with the addition of "Chishima" (Kuril Islands), "Ogasawara" (Bonin Islands), and the port of Busan in Korea, although the remainder of Korea is treated as Chinese territory.

Shibata's claim that the Bonin Islands and Busan belonged to Japan is remarkable. The status of the Bonin Islands had been ambiguous since their discovery in the seventeenth century by the Dutch East India Company, and, separately, by Japanese castaways. From the early nineteenth century, the islands attracted the interest of Britain, France, Russia, and the U.S. as a whaling base or a potential territory for settlers. However, in 1852, neither the bakufu nor any Western government had made any claim of possession.⁴⁸ As for Busan, the Kingdom of Joseon (1392-1897) had allowed Japan to maintain a trading station at the port since the fifteenth century, and at one stage the port accommodated four hundred Japanese residents on its thirty-three hectares. Yet, there were apparently no changes in ownership of the port of Busan during the Tokugawa period.⁴⁹ Shibata's claim of Japanese ownership over the Bonin Islands and Busan suggests that an argument existed for Japan's territorial privilege in those places, regardless of the formal government position. At any rate, Shibata's 1852 handbook, as well as the 1845 books by Mitsukuri, sharply distinguish bakumatsu intellectuals from their predecessors in terms of a greatly expanded view of Japanese territory. On Hayashi Shihei's 林子平 (1738-1793) map in 1786, for example, the territory of "Great Japan" does not even include Ezo beyond Matsumae domain, nor

⁴⁶ Kokkoku shoryō bankoku chimei shōran, one volume with 104 pages, measures about 165 x 85 mm, so-called hanshi mitsu-giri bon 半紙三切本 size, while Kon'yo zushiki is a substantial work consisting of five booklets over 278 pages in ōbon 大本, 260 x 185 mm, a standard size for academic publications.

⁴⁷ Mitsukuri 1847, vol. 1, fols. 1b-2a.

⁴⁸ See Chapman 2016, chapters 1 and 2.

⁴⁹ See Tashiro 2002, pp. 19, 64, 73-74; Okamoto 2008, pp. 53-60, 63-68.

Ryukyu, Ogasawara, nor, needless to say, any part of the Korean Peninsula, as Ronald Toby has shown.⁵⁰

Writing any geography guidebook demanded decisions on how to classify countries, in other words, how to construct the world for a contemporary audience. A comparison between Shibata's Kakkoku shoryō bankoku chimei shōran and earlier works in this genre shows the emergence of a new conception of the world order as well as Japan's position in it. Shibata divided his book into seven sections, the first of which dealt with Asia, led by Japan, before Europe, Africa, North America, South America, and Oceania with a final section on "newly discovered Antarctic lands."51 This is roughly the same order that Mitsukuri used in his 1845 Kon'yo zushiki, although the two books differ in their assessment of the relative independence of countries.⁵² In contrast, Wakan sansei zue 和漢三才図会 compiled by Terajima Ryōan 寺島良安 (b. 1654) in 1712 shows a Sino-centered world order, as Toby points out.⁵³ Terajima arranged countries and regions in this order: China, Japan, Korea, Ryukyu, Ezo, "West [of China]" (sai'iki 西域, modern Central Asian region), India (tenjiku 天竺), "northern barbarians" (hokuchi shoteki 北地諸狄), and "southwestern barbarians" (seinan shoban 西南諸蛮).54 In 1713, however, Arai Hakuseki 新井白石 (1657-1725) used a different, Euro-centric structure in his multivolume work Sairan igen 采覧異言, based on information he had gained from a Christian missionary. There was a volume each for Europe, Africa, Asia, South America, and North America, in that order. Hakuseki placed Japan at the end of the Asia volume together with Ezo and Tatar.⁵⁵ This Euro-centered structure was retained in an 1803 edition revised by Yamamura Saisuke 山村才助 (1770-1807), who, however, added "New Holland" and "Antarctic lands" to the Asian countries.⁵⁶

Shibata's involvement in contemporary foreign affairs and the articulation of his own political views are more clearly displayed in his third publication, *Ezo setsujō zenzu* 蝦夷接 壤全図 (Map of Ezo and surroundings; see figure 4), which appeared in 1854. The central issue of this map was Japan's renewed encounters in 1853 and 1854 with the Russian mission led by Evfimii Putiatin (1803–1883). Shibata no doubt knew of the Russians' arrival because his mentor, Koga, was a member of the bakufu negotiating team led by Kawaji Toshiakira 川路聖謨 (1801–1868). They negotiated over the demarcation of Russo-Japanese borders in the Kuril Islands and on the island of Sakhalin, where clashes between the two countries had already occurred. Koga took part in the meetings with Putiatin in Nagasaki from the last month of Kaei 6 (1853) until his return to Edo early the following

⁵⁰ Toby 2016, pp. 25-26.

⁵¹ See Shibata, Kakkoku shoryō bankoku chimei shōran.

⁵² Volume 4 of the five-volume *Kon'yo zushiki* deals with the Americas, but places the south first and the north later. There is no section on the Antarctic lands. It understands Korea as part of "Great Tatar" together with Manchu, Mongol, and other peoples in North Asia. See Mitsukuri 1847.

⁵³ Toby 2001, pp. 91-92.

⁵⁴ Terajima, *Wakan sansei zue*, vols. 61–64. After this section, all of the Japanese provinces are covered in vols. 65–80.

⁵⁵ Arai, Sairan igen.

⁵⁶ Yamamura 1804. Shibata copied this book in 1850 while staying at the Itō Academy. See SSN (b) 2, pp. 201–227; Moriyama 2016, p. 39.

⁵⁷ For the Nagasaki and Shimoda negotiations in 1853–1854, see Kawaji's accounts of his mission in Kawaji 1968, together with detailed annotations by Kawada. For Koga's involvement in the Russo-Japanese negotiations, see Onodera 2006, pp. 47–77, 95–126.

⁵⁸ See, for example, Beasley 1989, p. 271; Walker 2001, pp. 161–179; Wells 2004, pp. 9–10.



Figure 4. Shibata Shūzō, Ezo setsujō zenzu. Publisher unknown, 1854. Waseda University Library.

year. He was involved several months later in the next round of meetings, which took place at Shimoda, a newly designated port of call for foreign vessels. The negotiations finally concluded with the signing of a treaty on Ansei 安政 1 (1854).12.21. 59

Shibata's map of the northern territories is dated the seventh month of Ansei 1. However, the actual prints were probably made after the conclusion of the Japanese-Russian negotiations; at least, they reflect the substance of those negotiations. In Shibata's map, for example, the Japan-Russia border in the Kurile Islands is drawn between Etorofu (Iturup) and Urup (Uruppu) islands, with the territory of Japan outlined in red and that of Russia in blue. The entire island of Sakhalin is presented as Japanese territory. This corresponds to the provisions of the Shimoda Treaty, or more correctly, to an interpretation that favored Japan. The Russian and Japanese delegates had finally reached an agreement to set a border between Etorofu and Urup for Kurile. But they gave up on Sakhalin and decided "not to draw a border but to retain the existing arrangement as it has been till the present." Shibata and his publisher would naturally have concluded that Sakhalin remained Japanese territory or at least that there was no necessity to make changes.

Japan's territorial claim over Sakhalin Island seems to have affected the reprinting of Shibata's earlier world map, *Shintei kon'yo ryakuzenzu*. I have identified two versions of this map, which differ in their coloring of Japanese territory on Sakhalin. One claims Japanese sovereignty over the entire island; the other claims only the southern area, below fifty degrees latitude north, leaving the northern part, interestingly, as Chinese territory,

⁵⁹ Onodera 2006, pp. 62-63, 97-102.

⁶⁰ See Kawaji 1968, pp. 191-192.

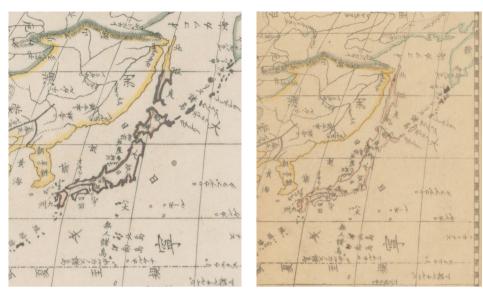


Figure 5. Two versions of Shintei kon'yo ryakuzenzu (excerpts). Yokohama City University Library.

not Russian (see figure 5).⁶¹ Judging from the print quality, the latter version seems to be a reprint of the original 1852 work. Onodera's biography of Koga hints at why this version was produced. During the argument about Sakhalin in Nagasaki, Putiatin had pointed out that the Russians had already settled the southern half of the island, and that only about twenty Japanese people resided at its southern tip. It was Koga who urged the leader of the delegation, Kawaji, to counter this assertion using world maps produced in Europe. The Japanese delegates borrowed several maps of the world from the Dutch office at Deshima, and then argued that the border should be set at fifty degrees latitude, and internationally recognized as such. If this argument did not completely win over Putiatin, it helped lead to the ambiguous conclusion mentioned above. 62 Possibly, there is a link between Koga's stance at the Nagasaki meetings and the new version of Shintei kon'yo ryakuzenzu. It is conceivable that the publisher decided to go ahead with that version after a discussion with Shibata, who probably knew from Koga of the negotiations with Russia. There seems to be no other explanation for the existence of the new version of Shintei kon'yo ryakuzenzu. Japan formally acquired the land below fifty degrees latitude on Sakhalin only as a result of the Russo-Japanese War (1904–1905).

4. Working on a National Project

The 1852 publication of a world map and the handbook mentioned above seem to have earned Shibata wide recognition among Edo intellectuals, subsequently leading to his appointment to the bakufu's Department of Astronomy. Shibata was employed on a project

⁶¹ I have so far found prints of the entire-island version at Sado City Museum, Kyoto University Library, and Meiji University Library; and of the below-fifty-degrees version at the National Museum of Japanese History, Waseda University Library, and Tōyō Bunko Library. Yokohama City University Library holds both versions.

⁶² See Onodera 2006, pp. 67-68.

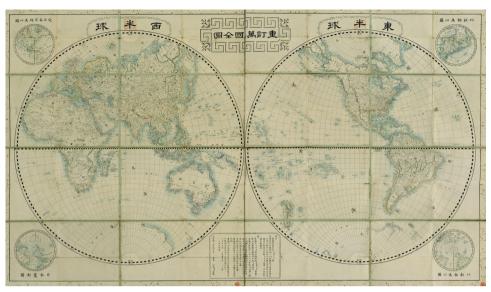


Figure 6. Bakufu official map of the world, *Chōtei bankoku zenzu* (reprint 1872, original 1855). National Diet Library.

led by the then director of the department, Yamaji Yukitaka (Kaikō) 山路諧考 (1777–1861). It resulted in the publication in 1855 of *Chōtei bankoku zenzu* 重訂万国全図 (Further revised map of the world; see figure 6). In the preface appended to this map, Yamaji acknowledged Shibata as the sole assistant to his son, to whom the department had assigned this project. Many scholars therefore recognize Shibata as a major contributor. The preface explained that, "there have been a great number of changes in many countries as well as a number of discoveries of new lands" since the previous official map had been published in 1816. It is true that it was high time for a new map, but initiation of this project must also have been prompted by the specific and urgent need for a good map of the world to assist the bakufu in handling its new diplomatic relationships with Western governments. This map was principally based on the 1846 edition of a world atlas by Karl Sohr and Friedrich Handtke of Germany, whereas its predecessor had relied on 1770s sources that derived from James Cook's navigations. The effect of using recent sources is clear on the Yamaji/Shibata map. Its presentation of coastlines, along with names of geographical features, especially bays, capes, and straits, most conspicuously in the Oceania region, reflect up-to-date information.

Also conspicuous is the growth in territorial and imperial consciousness between the 1816 and the 1855 bakufu maps. One example is the naming of the waters surrounding Japan. On the 1816 map, the sea east of the Korean Peninsula is labelled "Korean Sea" (Chōsen kai 朝鮮海), and what is now called the Japan Sea or the East Sea remains blank. "The Great Japan Sea" (Dai Nihon kai 大日本海) is the label for the sea off the Pacific coast from Honshu to Kyushu. On the 1855 map, however, the whole of the Japan/East Sea appears only as "Japan Sea" (Nihon kai), and the 1816 label "Great Japan Sea" is replaced

⁶³ See Unno 1994, p. 440; Kinda 2012, p. 288; Miyoshi 1999, p. 122.

⁶⁴ Unno 1994, p. 442.

by "Territory of Great Japan" (Dai Nihon ryō 大日本領), covering the archipelago from Etorof Island in the north to all the Ryukyu Islands in the south. Another noticeable point on the 1855 map is the special status of Kyoto. The Japanese emperor's capital (honpō Keishi 本邦京師) is given a double-square mark, while Edo is treated in the same way as other countries' capital cities (kakkoku shufu 各国首府. That is, it is marked with a double circle. The implication is that Kyoto is more important than Edo. The consciousness of imperial authority is also evident in the notation for the year of publication. The 1855 map used "the second year of the Ansei era in the imperial calendar" (Kō Ansei ni nen 皇安政二年), whereas its predecessor recorded its publication date as "the seventh year of the Bunka era of Japan (Nihon bunka shichinen 日本文化七年)."

Shibata's assumptions illustrate the shift in understanding of territorial borders that characterized the transition from early modern to modern in Japan. Historians such as Ronald Toby, Mary Elizabeth Berry, and David Howell have shown that maps and prose works in the Tokugawa period were ambiguous about the external borders of Japanese territory, in contrast to the modern territorial consciousness that emerged with the Meiji government's endeavor to build a nation-state. 65 These historians' studies deal only with seventeenth- and eighteenth-century texts. Shibata's maps and texts are a valuable illustration of the changes taking place during the transition from "early modern Tokugawa" to "modern Meiji." Shibata's materials, for instance, supplement Toby's discussion of the issue of Ezo, Ryukyu, Ogasawara, and Korea as Japan's peripheral lands. Examining work by Terajima Ryōan and others, Toby argues that the early modern consensus on Japan's territory was fragile, because the ambiguity of national borders had never been a real concern to the government or people. The transformation of national borders from "vague zones" to "clear lines" occurred only after Japan was forced by the Western powers to accept a "Congress of Vienna"-style understanding of the sovereignty and territory of each state, he adds. 66 Shibata's case suggests, however, that Japanese intellectuals' willing exploration of how to present countries and their borders in maps may have been more important than forced acceptance of new rules. It was perhaps a natural development that the clearer the shape of each land and its location on the grid in maps of the world or a region, the greater the temptation for a mapmaker to present clear borders and territories. It is also likely that color printing encouraged readers to look for, and the mapmaker to show, an unambiguous picture. Mapmaking might have caused Shibata continuously to ask himself which nation governed the corner of land his hand was drawing.

5. Japan's First Officer of Western Cartography

Shibata's participation in the bakufu world map project led to his appointment to the bakufu's new Institute of Western Studies (Bansho Shirabesho), in 1856. In mid-1854, Kawaji Toshiakira, magistrate for finance and governance (kanjō bugyō 勘定奉行), had proposed the establishment of a special bakufu department for research in Western studies. Kawaji was responding to a plan presented by Abe Masahiro 阿部正弘 (1819–1857), the shogun's senior councilor (rōjū 老中), designed to deal with the rapidly escalating pressure from the Western powers. When the bakufu approved the proposal, Koga Kin'ichirō was

⁶⁵ See Toby 2001; Berry 2006, pp. 218–228; Howell 2005, pp. 4–8, 150–153.

⁶⁶ Toby 2001, pp. 98-99. See also Toby 2016.

invited to join in the planning, and subsequently, in mid-1855, he was appointed as the foundation director of the new institute.⁶⁷

When planning started in 1855, Shibata's name was included in two lists of recommended academic staff, which had been independently prepared by two different officers. One of them was Katsu Rintarō 勝鱗太郎 (1823–1899), an up-and-coming officer with knowledge of the West. In his profile of Shibata, Katsu described him as "a doctor attached to the Sado magistrate's office, currently in the employ of the Department of Astronomy." This description probably indicates the persistent importance of social status in the Tokugawa period. In order to secure a high-level appointment, the son of a fisherman from a remote island needed pseudo-officer status in a shogunal organization or a daimyo house in addition to his track record in academic work. 68

Even so, it was still not easy for Shibata to win a position in the Institute of Western Studies. The first round of appointments was made in the fourth month of Ansei 3 (1856) with the hiring of two foundation professors (*kyōju* 教授) and six assistant professors (*kyōju tetsudai* 教授手伝). Shibata was added as the sixteenth appointee in the fourth round at the end of the year. His diary for Ansei 3 reveals days of anxious waiting and frustration before jubilation at his appointment. On the day of the appointment, the Sado magistrate invited Shibata to his residence in Edo and conveyed to him a statement from a senior councilor. The magistrate then warmly congratulated Shibata, remarking that his appointment was "an unprecedented event," as Shibata excitedly recorded in his diary.⁶⁹

According to Shibata's own note, the title of his position was "Ezu shirabe shutsuyaku" 絵図調出役 or "researcher of pictorial charts on temporary assignment." He may have dealt with a variety of materials besides maps, as his first task was to translate the catalogue of a shipping company in India. The remuneration of his position was fifteen person-units (fuchi 扶持) of rice (that is 13.5 liters of rice per day) and ten ryō of gold per annum. This was half of a full professor's remuneration or about 70 percent of that of an assistant professor. Even so, the pay was generous: the bakufu approved Koga's proposal to set attractive salary scales in order to compete with powerful daimyo in seeking good scholars of Western studies. Shibata left a copy of an 1857 payment slip, which suggests his annual income was about fifty-four ryō. The bakufu officially opened the institute on Ansei 4

⁶⁷ The institute was initially called Yōgakusho 洋学所 (Western Studies Center) but was renamed first as Kaiseijo 開成所 (Development Center), then by early 1856 as Bansho Shirabesho, literally meaning "foreign books research center." The renaming from Yōgakusho to Bansho Shirabesho was a result of compromise with anti-Western voices from the Shōheikō, the bakufu's school for Confucian and Chinese studies. Ōkubo 1986, p. 89, n. 35. Also see Jansen 1957, pp. 570–582.

⁶⁸ Miyazaki has examined staff appointments to the Institute of Western Studies between 1856 and 1867 and identified 133 appointments of shogunal retainers (*jikisan* 直参), eighty-nine daimyo retainers (*baishin* 陪臣), one ronin, and six people whose status is unknown. Miyazaki 2001, pp. 151, 153, 181.

⁶⁹ SSN (b) 2, pp. 333-334.

⁷⁰ SSN (b) 2, p. 336.

⁷¹ SSN (a) 2, p. 330, where there is an error in the sources: 絵図調書役 should be 絵図調出役.

⁷² The remuneration scheme of the Institute of Western Studies in 1856 was 30 person-units of rice and 20 ryō of gold for a full professor (kyōju), 25 person-units of rice and 20 ryō of gold for an associate professor (kyōju nami 教授並), and 20 person-units of rice and 15 ryō of gold for an assistant professor (kyōju tetsudai), according to a government report in 1892. "Bansho Shirabesho kigen kōryaku," pp. 664–665.

⁷³ Tōkyō Daigaku hyakunen shi, pp. 18-19.

⁷⁴ SSN (a) 2, pp. 331–332. The stipend of fifteen person-units of rice was exchanged in money at the rate of 3.5 ryō of gold and 3.85 monme of silver (together roughly 3.56 ryō) by a licensed agent, probably in Asakusa.

(1857).1.18 with 191 students recruited from among the shogun's retainers.⁷⁵ The institute developed its curriculum over the next six years, adding chemistry, English, French, Western painting, natural history, mathematics, and German to the initial specialization in Dutch studies.⁷⁶

Strangely, however, Shibata's appointment is acknowledged nowhere in bakufu or Meiji government records. As a result, his name has been either completely omitted or inconsistently mentioned in previous studies of the institute and in histories of the University of Tokyo and Tokyo University of Foreign Studies, both of which claim their origins from the bakufu institute. The sustained ignorance of Shibata's appointment is clearly shown in Tōkyō Gaikokugo Daigaku shi 東京外国語大学史 vol. 1 (1999), which synthesizes major sources for, and previous studies of, the Institute of Western Studies.⁷⁷ Shibata's name does not appear either in the list of inaugural members of staff or the description of the process of their appointments up to the opening of the institute in early 1857, even though the study correctly includes two others employed at the same time.⁷⁸ The volume later refers, however, to Shibata's appointment in 1856 as an assistant professor. 79 I presume that this inconsistency is due to the editors' careless acceptance of two contradictory sets of sources: on the one hand, early studies based on bakufu and Meiji government records, and, on the other, a 1943 article by Hara Heizō 原平三 which did recognize Shibata's 1856 appointment.80 Hara elsewhere failed to include Shibata in a list of academic staff of the Institute of Western Studies.81

I have been unable to ascertain why Shibata is absent from the bakufu and Meiji government documents. Compared with other academic staff appointed before the opening of the institute, Shibata's specialties in cartography and position were unique. All other members of institute staff were professors, assistant professors, or (Dutch) language instructors (kutō kyōju 句読教授). Seven months after the institute opened, one low-ranking bakufu officer was appointed to the same position as Shibata, and he was officially recorded in a register of staff. Another samurai was added to the mapmaking team in early 1858.⁸² Unlike his coworkers, Shibata was not a samurai but this does not explain the absence of his name from the register. After all, some other academic staff were originally from families of non-samurai village doctors.⁸³ We can also discount Shibata's comparatively young age as a possible reason: at thirty-seven, he was one year older than the average among the appointees as far as I can ascertain. A simple clerical error in the register is also unlikely, because his name is missing in all primary sources available to date, except his own personal records.

^{75 &}quot;Bansho Shirabesho kigen kõryaku," p. 664.

⁷⁶ See "Bansho Shirabesho kigen kõryaku," pp. 664-668.

⁷⁷ Tōkyō Gaikokugo Daigaku shi, pp. 1-41.

⁷⁸ Tōkyō Gaikokugo Daigaku shi, pp. 17, 19.

⁷⁹ Tōkyō Gaikokugo Daigaku shi, pp. 27–28.

⁸⁰ Hara 1992, p. 67. Hara also mentions Shibata's appointment on p. 91 but there he wrongly concludes it was in the tenth month of 1859, whereas Shibata had died in the fourth month of that year.

⁸¹ Tōkyō Gaikokugo Daigaku shi, pp. 55–56. Numata 1951 simply repeats Hara's inconsistent recognition and error regarding Shibata's appointment (pp. 60–61, 71, 76–77). Nor is Shibata recognized in Miyazaki 2001.

^{82 &}quot;Bansho Shirabesho shokuin meisaichō." Their names are Kawakami Mannojō and Maeda Matashirō.

⁸³ Murata Zōroku 村田蔵六 (1824–1869) and Tezuka Ritsuzō 手塚律蔵 (1822–1878) were sons of village doctors in Suō Province.

Leaving aside administrative documents, his name is mentioned once on a map, providing a final footprint of Shibata in history. An undated map of East Asia entitled *Dai Shin ittōzu* 大清一統図 (A map of China under the Qing dynasty) has an inscription that reads "posthumous manuscript of Shibata Shūzō, based on a German map." This fact has naturally led scholars to conclude that Shibata had prepared this map, but had died before seeing it published.⁸⁴ A recent study by Ida Kōzō 井田浩三, however, argues convincingly that this is incorrect. According to Ida, the map in question was based on another map with the same title published in China by an American missionary, in two versions, one in English and one in Chinese. Ida also concludes that there is no sign that Shibata contributed to *Dai Shin ittōzu*, the version that was published in Japan.⁸⁵ I would only add here that the shape of Shibata's home island of Sado as shown on *Dai Shin ittōzu* is clearly inaccurate, and differs from what he drew on the map *Sado ikkoku kaiganzu* when he assisted Ishii Bunkai back in 1842.

The fact that Shibata's name appears on *Dai Shin ittōzu* suggests that he was popular among mapmakers. "Posthumous manuscript of Shibata Shūzō" appears to express a sense of regret among his colleagues at his untimely death. It represents their tribute to Shibata's contribution to the development of cartography in Japan. This view is supported by a letter written in 1859 by a colleague of Shibata's in the Institute of Western Studies to his family in Sado. The letter reports with sorrow Shibata's death after several months of ill health since the beginning of that year, and tells his family that Shibata "received great recognition for his devoted work" (*ichigei no tame ni wa mi no menmoku mo kore ari* 一芸の為には身の面目も有之).86

Conclusion

The life of Shibata Shūzō is emblematic of the crossover between early modern and modern Japan. In terms of views of world geography, first of all, there is a clear eagerness in his work to identify accurately the shape of every land on earth. From the island of Sado, to the northern islands of Ezo, Sakhalin, and their surroundings, to Australia and Antarctica in the south, his eyes and hands traced the coastlines as precisely as available sources allowed. The quantity and quality of information available to Shibata greatly exceeded that of the eighteenth century, particularly with regard to European maps. However, compared with his later counterparts who could use an established system of education and libraries, Shibata's access to institutional repositories was limited. Instead, he relied on personal relationships with his teachers such as Ishii Natsumi and Bunkai in Sado and Koga Kin'ichirō in Edo.

Shibata's strong interest in contextualizing the state of Japan in the post-Opium-War world order reflects the sensibility of bakumatsu intellectuals. A concrete example is his 1852 geography handbook, *Kakkoku shoryō bankoku chimei shōran*, which attempts to position Japan as a colonizing empire. Shibata's 1854 map of the northern territories, *Ezo setsujō zenzu*, also exhibits this kind of perception in the sense that he seeks to display the territories of the Japanese, Chinese, and Russian empires as clearly as possible, but favorably to Japan. Shibata's mapping work also exemplifies the limits of bakumatsu intellectuals'

⁸⁴ Takahashi 1998, p. 79.

⁸⁵ Ida 2014, p. 24.

⁸⁶ Letter collected in Narita 1971, pp. 374-375.

knowledge of world geopolitical history. The preface of *Shintei kon'yo ryakuzenzu* in 1852 contains an odd mixture of fresh and outdated information ranging from 1840s news about California to century-old events in European history.

Shibata embodies bakumatsu commoners' opportunities in education and publishing. His education helped him considerably in carving out a career pathway that was different from what would normally have been expected under the Tokugawa status quo. At the same time, the steps that he took to establish himself as a specialist in Western cartography represent a process of negotiation between existing conventions and new possibilities. His first trip, to study in Edo under a Confucian scholar, might have been possible for sons of well-to-do villagers even before Shibata's day. The opportunity to study medicine in Edo, too, was available for commoners, although subject to family financial and social status, as well as academic ability. But engaging with Dutch and Western studies, particularly with a specialization in geography, was a brave new endeavor for Tokugawa commoners. He was well placed, too, to benefit from the phenomenal growth of print culture in nineteenthcentury Japan. The publishing industry and its market had flourished to the extent that Shibata, an amateur mapmaker, could contemplate publishing his own maps and geography handbook. It is not yet clear how Shibata managed to finance his publications, but the appearance of his maps and books in the 1850s was a response to the strong public interest in world geography and foreign affairs at that time. Few of these opportunities in education and publishing would have been available to a young rural man like Shibata without the specific historical environment of the bakumatsu period.

Shibata's career development, together with his relocation from his home village to the capital city, also suggests the extent to which bakumatsu circumstances promoted or did not promote social mobility. While the conventional Tokugawa-era mechanisms designed to limit people's freedom of choice in their occupations and residence were still very much alive, Shibata managed to obtain employment in two bakufu organizations: first, the Department of Astronomy, and then the Institute of Western Studies. When Shibata was appointed to a position in the bakufu institute, the Sado magistrate, in his congratulatory words, called it "an unpreceded event." It was a new opportunity made possible by Shibata's expertise and the urgency of the nation's political situation. Shibata himself should be considered a new type of Tokugawa commoner because of his ambitious pursuit of a government position. However, the Tokugawa tradition still had a powerful influence over the terms of his employment, leading to his purely nominal status as a doctor at the Sado magistrate's office. Even now, the status of mapmaker was not established, as indicated by the title of his position, "a researcher of pictorial charts on temporary assignment."

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