

1 Population Statistics

Between Building a Modern State and Governing Imperial Subjects

If we define population statistics as leaders' attempts to collect, record, and sort data, numerical and otherwise, about the people inhabiting their political domains, then Japan has a long history in this field. However, if we regard population statistics as the modern scientific field we know today, its history is not as long – it starts in the 1860s. The development of modern population statistics was firmly embedded in the political transformation of Japan from a federation of feudal domains to a centralized nation-state and empire. Population statistics was instrumental during this transformation process. The nascent Meiji government (1868–1912) used population data to understand – and if necessary mobilize – people for the sake of nation- and empire-building. This happened in part because individuals trying to establish the European-derived science of statistics in Japan took full advantage of the political conditions in their country. They promoted population statistics, arguing it was a civilizing tool that could help the government efficiently enhance Japan's national power. However, their promotion of a modern population census was not always smooth. The advocates struggled at times especially in the specific intellectual, political, and social milieu of Japan in the latter half of the nineteenth century, when the concepts of population and science were themselves in flux. In this context, a population census was conducted in colonial Taiwan, while the Japanese government dragged its feet when it came to implementing it in the metropole. This chapter depicts how population statistics as a subfield of modern statistics and the population census as a technology of governance developed in a place where Japan's effort to build a modern state met its aspiration to govern imperial subjects.

Collecting Population Statistics in Japan: Then and Now

Morita Yūzō (1901–94), an acclaimed twentieth-century Japanese statistician, once claimed that population statistics in Japan “can be praised, from a statistical point of view, as [of] high value in terms of its content and

periods it covers, [it is] even a global standard.”¹ And population experts today note that the centralized administration in Japan compiled data to produce a population registry in the mid-seventh century and early eighth century by following legal codes they adopted from China.² They also point out that in the Tokugawa period (1603–1867), political rulers produced other kinds of population registers: *shūmon aratamechō* (registers of religious scrutiny) and *ninbetsu aratamechō* (person-by-person registers).³

This suggests there is historical continuity. However, the population data produced throughout Japan’s history could not have been more different; for example, compare population registers from the Tokugawa period and today’s population census. Tokugawa data recording relied on brush, paper, and ink, while today’s census takers apply various electronic technologies and collaborate with scientists, such as geographers.⁴ Today’s population census, centrally organized by the Statistics Bureau of Japan (Sōmushō Tōkeikyoku), adopts a nationally standardized form. In contrast, the Tokugawa practice was, for the most part, neither standardized nor exhaustive.⁵ Reflecting the pluralistic nature of the Tokugawa polity, in which the *bakufu* (“shogunate”) governed over 250 domains, each with its own lord, the method of collating population data and the population groups that became the target of population surveys varied according to the domain. These methodological differences have also shaped what the data sets are able to show. While today’s census data represent the demographics of Japan as a whole, data gleaned from the Tokugawa population registers illustrate a fragmented demographic reality.⁶

¹ Yūzō Morita, *Tōkei henreki shiki* (Nihon Hyoronsha, 1980); Nihon Jinkō Gakkai, ed., *Jinkō daijiten* (Baifukan, 2002), 272.

² Nihon Jinkō Gakkai, *Jinkō daijiten*, 272.

³ In some domains, *ninbetsu aratamechō* and *shūmon aratamechō* were merged to form *shūmon ninbetsu (aratame)chō*. Fabian Franz Drixler, *Mabiki: Infanticide and Population Growth in Eastern Japan, 1660–1950* (Berkeley: University of California Press, 2013); Osamu Saito and Masahiro Sato, “Japan’s Civil Registration Systems Before and After the Meiji Restoration,” in *Registration and Recognition: Documenting the Person in World History*, eds. Keith Derek Breckenridge and Simon Szreter (Oxford: Oxford University Press, 2012), 113–35; L. L. Cornell and Akira Hayami, “The Shumon Aratame Cho: Japan’s Population Registers,” *Journal of Family History* 11, no. 4 (December 1986): 311–28.

⁴ Takashi Abe, Shigeru Kawasaki, Atsushi Otomo et al., “Chirigaku niokeru tōkei no riyō to kongo no kadai: ‘Tōkei’ wo meguru kan, gaku no renkei wo mezashite,” *E-Journal GEO* 6, no. 1 (2011): 81–93.

⁵ Naotarō Sekiyama, *Nihon jinkōshi* (Shikai Shobo, 1942), 52–58. However, the question of universal coverage is an issue contemporary census takers are grappling with, too. Akira Ishikawa and Tsukasa Sasai, “Gyōsei kiroku ni motozuku jinkō tōkei no kenshō,” *Jinkō mondai kenkyū* 64, no. 4 (December 2010): 23–40.

⁶ For more, see Yuriko Yokoyama, *Meiji ishin to kinsei mibunsei no kaitai*, Dai 1-han. (Yamakawa Shuppansha, 2005).

In addition, the objectives of collecting demographic data were also different. Today, the Statistics Bureau of Japan stresses that the population census aims to provide an “informational infrastructure” supporting the activities of citizens, corporations, and the state administration.⁷ Responding to its articulated goals, the census attempts, broadly speaking, to discover inhabitants’ social attributes, details about their domiciles, education, work, and household information.⁸ In contrast, the Tokugawa rulers recorded peoples’ personal details to secure taxes or *corvée* labor.⁹ They also compiled population registers because they thought the data would provide information about what they were most concerned about: social order.¹⁰ The original objective of compiling *shūmon aratamechō* was to police people’s Christian religious activities, which the Tokugawa oligarch deemed a threat to social order.¹¹ Tokugawa population registers recorded personal details that would immediately impact social relations, such as statuses within the household.¹²

Finally, there were distinct semantic traditions associated with the two data sets. Today, demographers define the term *jinkō* – officially used to refer to “population” and composed of the Chinese characters for “person” and “mouth” – as “a mathematical expression” for a group of people living in a given area.¹³ Some, especially those focusing on economics, have used a Malthusian metaphor to explain the term as the “number of mouths to feed.”¹⁴ But, in the Tokugawa period, the character compound – also sometimes read as *ninkō* – was more commonly referred to as “gossip,” or what the “mouth” of a “person” produces in social interactions. In this period, the term *minikō* seemed to refer to an idea similar to what is expressed by *jinkō* today.¹⁵

In addition to the abovementioned shifting meanings, the concept of “population” meant different things throughout history. Today, we tend to assume population is an aggregate of people bound by a political

⁷ Sōmushō Tōkeikyoku, “Kokusei chōsa no kihon nikansuru Q&A (kaitō),” accessed October 17, 2019, www.stat.go.jp/data/kokusei/qa-6.html.

⁸ Ibid.

⁹ Drixler, *Mabiki*, 6–8.

¹⁰ Cornell and Hayami, “The Shumon Aratame Cho.”

¹¹ Saito and Sato, “Japan’s Civil Registration Systems,” 116.

¹² Sekiyama, *Nihon jinkōshi*, 48.

¹³ Jinkōgaku Kenkyūkai, ed., *Gendai jinkō jiten* (Hara Shobo, 2010), 131–32; Jinkō Daijiten Henshū Iin, *Jinkō daijiten*, 3.

¹⁴ Masaaki Yasukawa, *Yasashii jinkōgaku kyōshitsu* (Japanese Organization for International Cooperation in Family Planning, 1978), 12.

¹⁵ Jinkōgaku Kenkyūkai, *Gendai jinkō jiten*, 132.

entity, most commonly the nation-state.¹⁶ Moreover, demographic studies are premised on the idea that a population exhibits patterns of societal behaviors.¹⁷ Demographers also contend that population dynamics are directly shaped by cultural, economic, and social conditions and thus can be managed by measures that aim to improve these conditions.¹⁸ In contrast, population in the Tokugawa period was understood as less susceptible to human intervention, though it did indicate some natural laws. For instance, in 1798, the year Thomas Robert Malthus published the canonical *An Essay on the Principle of Population*, Honda Toshiaki observed “rules from the heaven” (*tensoku*) in the patterns of fertility and, like Malthus, warned of an imbalance between the growth of the population and human subsistence.¹⁹ However, unlike Malthus, who thought population growth could be tamed by “preventive restraints,” Honda believed it was an uncontrollable phenomenon that humans could do little to counter.²⁰ Data predicated on these different interpretations of population tend to carry distinctive characteristics.

What made population statistics in Tokugawa and contemporary Japan so distinct? I argue that the 1860s was a watershed moment. Amid the drastic sociopolitical change Japan underwent during that decade, the recently founded government wished to gather data that showed exactly how many, and what kinds of, people lived within the territories they now reigned. Alongside this, emerging groups of intellectuals, inspired by modern statistics in Europe, tried to implement modern statistical methods within the state bureaucracy.²¹

¹⁶ Population data published by the international organization consolidates this understanding, e.g., United Nations Department of Economic and Social Affairs, “World Population Prospects 2019,” accessed May 9, 2022, <https://population.un.org/wpp/Maps/>.

¹⁷ Jinkōgaku Kenkyūkai, *Gendai jinkō jiten*, 131–32.

¹⁸ Sato and Kaneko, *Posuto jinkō tenkanki*, 21–24, 25–40.

¹⁹ Ishii, “Statistical Visions of Humanity,” 13–14.

²⁰ *Ibid.*, 17–18.

²¹ For the story in this chapter, I am indebted to the wealth of knowledge accumulated over the years on the history of population statistics and the census in modern Japan and Taiwan under Japanese colonial rule, e.g., Sōmushō Tōkeikyoku, “‘Nihon tōkei nenkan’ 120 kai no ayumi,” accessed April 28, 2017, www.stat.go.jp/data/nenkan/pdf/120ayumi.pdf; Masahiro Sato, *Kokusei chōsa nihon shakai no hyakunen* (Iwanami Shoten, 2015); Masahiro Sato, *Kokusei chōsa to nihon kindai* (Iwanami Shoten, 2002); Ishii, “Statistical Visions of Humanity”; Yoshiro Matsuda, “Formation of the Census System in Japan: 1871–1945 – Development of the Statistical System in Japan Proper and Her Colonies,” in *Historical Demography and Labor Markets in Prewar Japan*, ed. Michael Smitka (New York: Garland, 1998), 100–24; Takeshi Yabuuchi, *Nihon tōkei hattatsushi kenkyū* (Kyoto: Hōritsu Bunka Sha, 1994); Ryuken Ohashi, *Nihon tōkeigaku* (Kyoto: Hōritsu Bunkasha, 1965).

What follows is the story of how a small circle of intellectuals and bureaucrats that formed around Sugi Kōji (1828–1917) instigated arduous campaigns to implement a nationwide population census amidst the political changes that occurred in the 1860s. Their campaigns brought about novel understandings of population, society, and sovereignty and assigned a fundamentally new role to the act of collecting population data. In later years, the calculation of figures premised on these new conditions added new connotations to statistics produced after the 1860s.

Institutionalizing Statistics in a Burgeoning Modern State

One day in the mid-1860s, while working for the *bakufu*-sanctioned School for Western Studies as a translator of foreign materials for senior councilors, thirty-seven-year-old Sugi Kōji happened to find Dutch statistical tables from 1860 and 1861.²² The statistics contained population figures written in decimal numbers. Sugi wondered, “how on earth could people become decimal numbers” and “felt strange about this way of studying people.”²³ Yet he also “felt research of this kind would be useful for Japanese people.”²⁴ Sugi “did not act on it then because it was a turbulent time,” but later he clearly recalled that it “sowed seeds of statistical interest in me.”²⁵

This oft-told episode tells how Sugi, celebrated as the “father of modern statistics” in Japan, discovered the scientific field.²⁶ When Sugi encountered Dutch statistics, it was indeed a turbulent time in Japan. In his formative years, the arrival of the American ambassadors, led by Commodore Matthew C. Perry in 1853, and the unequal Kanagawa Treaty signed with the United States in the following year, catalyzed a succession of bloody civil wars and social unrest that lasted for more than two decades. The political turmoil profoundly impacted the lives of Sugi and his fellows, who were students of “Dutch Studies” (*ran-gaku*), learning western knowledge associated with Japan’s relations with its only western trade partner, the Dutch East India Company.²⁷ While

²² Taichi Sera, ed., *Sugi sensei kōenshū* (1902), 18–19, accessed May 9, 2022, <https://dl.ndl.go.jp/info:ndljp/pid/898298>.

²³ *Ibid.*, 19.

²⁴ Sato, *Kokusei chōsa to*, 18–19.

²⁵ *Ibid.*, 18.

²⁶ Takeshi Yabuuchi, “Nihon ni okeru minkan tōkei dantai no shōtan: ‘Hyōki gakusha’ to sono keifu,” *Kansai daigaku keizai ronshū* 26, nos. 4–5 (January 1977): 587–88.

²⁷ Terrence Jackson, *Network of Knowledge: Western Science and the Tokugawa Information Revolution* (Honolulu: University of Hawai‘i Press, 2016).

some collaborated with the revolutionaries and applied their knowledge to overturn the *bakufu*, others tried to secure their professional positions within the *bakufu*, which was also exploring ways to maintain its authority by utilizing western-derived scientific knowledge and technology.²⁸ Under the tutelage of the prominent *bakufu* retainer Katsu Awa-no-kami (aka Katsu Kaishū), Sugi was able to get closer to the latter group of Dutch Studies scholars. This became even more apparent when, in 1855, the powerful senior councilor Abe Masahiro (1819–57) employed Sugi as a retainer.²⁹ Later, in 1864, when the *bakufu* built the School for Western Studies, Sugi was appointed to serve as a translator and teacher for its Office of Examination of Foreign Books. However, due to his proximity to them, Sugi ultimately lost his job when the revolutionaries overthrew the *bakufu* in 1867. For a little while thereafter, he lived in Suruga (part of today's Shizuoka Prefecture) after following the former ruler, Tokugawa family, that retired there.

Although he faced a setback in his work life due to his affiliation with the now outcast oligarch, the experience Sugi gained working under the auspices of the *bakufu* paved the way for the development of statistics as a scientific field in Japan. In the mid-1860s, Sugi began to study western statistics with the lecture notes compiled by Nishi Amane (1829–97) and Tsuda Mamichi (1829–1903) who, as part of a study trip to the Netherlands with a *bakufu* stipend, learned statistics under Simon Visseling (1818–88) at Leiden University. In Suruga, under the aegis of the retired Tokugawa family, Sugi conducted a pilot population census by applying the knowledge he had obtained from the European-language books and notes. The census, published in June 1869, provided data on the population of Suruga organized by age, occupation, and marital status, and it also provided figures for population inflows and outflows.³⁰

In later years, the pilot study became celebrated as “the first modern static statistical population survey” in Japan.³¹ But what made the survey “modern”? To the contemporaries, the survey was modern first and foremost because the European science of statistics acting as its base

²⁸ For a profile of Dutch studies scholars during this period, see Tsutomu Kaneko, *Edo jinbutsu kagakushi: “Mou hitotsu no bunmei kaika” wo tazunete* (Chuokoron-Shinsha, 2005).

²⁹ Abe was the daimyo of the Fukuyama domain (part of today's Hiroshima Prefecture), Tokugawa *bakufu*'s chief senior councilor (*rōjū shuseki*) from 1845 to 1855, and one of the most passionate supporters of foreign diplomacy within the *bakufu* at the time.

³⁰ Yabuuchi, *Nihon tōkei hattatsushi kenkyū*, 149–60.

³¹ Akira Hayami, “Koji Sugi and the Emergence of Modern Population Statistics in Japan: The Influence of German Statistics,” *Reitaku Journal of Interdisciplinary Studies* 9, no. 2 (2001): 3; Yabuuchi, “Nihon ni okeru minkan tōkei dantai no shōtan,” 589.

was a “new technology of the civilized world” and had a transformative power.³² Sugi argued that statistics, “like the railway, telephone, and locomotive,” were such technology that would “manifest power” when they were transposed to a new society and eventually modernize the society. In later years, Sugi presented another reason his census work was doubly modern: It could help Japan become a modern nation-state. In particular, he thought that a strand of statistics he called “government statistics” (*seifu sutachisuchikku*) would be particularly useful.³³ According to Sugi, “government statistics” clarified the “circumstances of [the] country’s people” – including their everyday economic activities and social interactions – that had a direct impact on the “rise and fall” of a nation.³⁴ It would allow government officials to efficiently identify the factors in people’s economic and social lives that might impede the development of new societies and industries which were currently underway as part of nation-building, thereby helping the government to proactively act on these factors and enabling Japan to “rise” as a modern nation-state.³⁵

As it is clear from Sugi’s description of “government statistics,” when it came to the modern statistics he wished to promote in Japan, he stressed its utility for the officially endorsed social, economic, and political reforms.³⁶ For this reason, Sugi’s idea of modern statistics garnered support from Meiji luminaries and statesmen, who were actively involved in these reforms. One of the most prominent Meiji intellectuals, Fukuzawa Yukichi (1835–1901), fervently promoted statistics, arguing it was a highly useful tool for Japan to overcome various challenges confronting the country in the process of becoming an independent nation.³⁷ Fukuzawa explained that Japan’s independence depended on the “nation’s civilization,” which was composed of a “total sum of people’s intellect and virtue distributed across the nation,” but currently there was no way of knowing how much of a “nation’s civilization” Japan possessed.³⁸ He then pointed out that in

³² Sera, *Sugi sensei kōenshū*, 136; Sato, *Kokusei chōsa nihon shakai*, 37–38; Sato, *Kokusei chōsa to*, 23–25.

³³ Sera, *Sugi sensei kōenshū*, 143.

³⁴ *Ibid.*, 158.

³⁵ *Ibid.*

³⁶ Sugi’s utilitarian understanding of statistics was derived from German social statistics. Tadao Miyakawa, *Tōkeigaku no nihonshi: Chikoku keisei eno negai* (Tokyo Daigaku Shuppankai, 2017), 38–39.

³⁷ Miyakawa, *Tōkeigaku no nihonshi*, 9–15. For work that analyzes Fukuzawa’s idea of “practical learning” (*jitsugaku*), see Ayumi Kaneko, “Nēshon to jitsugaku: ‘Keimō’ to ‘gesaku’ no kōten,” in *Meiji, Taisho-ki no kagaku shisoshi*, ed. Osamu Kanamori (Keiso Shobo, 2017), 13–64.

³⁸ Yukichi Fukuzawa, *Bunmeiron no gairyaku kan no ni* (1875), 4–5, accessed May 11, 2022, <https://dl.ndl.go.jp/info:ndljp/pid/993900>.

Western Europe and North America, scholars used statistics to show the level of civilization effectively in concrete numbers. Fukuzawa described how statisticians recorded “how much and [how] little of the land, how many and how few of the people, the high and low of the price and wage, how many are married, how many have fallen ill, and how many die,” to quantify civilization.³⁹ He then suggested Japanese scholars should learn Western statistics to better understand the level of the “nation’s civilization” in Japan and, with that knowledge, help the country achieve the goal of national independence efficiently. Like Sugi, Fukuzawa promoted statistics because he believed it was a tool of civilization that would facilitate Japan’s nation-building effort.

Within the government, Ōkuma Shigenobu (1838–1922), one of the most important statesmen of the early Meiji period, saw the benefit of statistics for statecraft.⁴⁰ While exploring ways to prove the need to conduct a land reform as a high-rank official in charge of the country’s finance, Ōkuma learned about Western statistics and how the United States government even had a large office within the Department of Treasury dedicated to statistical works.⁴¹ He then proposed that the Japanese government should set up an office for statistics. Ōkuma’s idea garnered support from Itō Hirobumi (1841–1909) and Shibusawa Eiichi (1840–1931), both key figures who shaped the country’s economy in the early Meiji period.⁴² Consequently, in 1871, the government founded the Division of Statistics within the Ministry of Finance to facilitate official economic planning.

The increased demand for statistics coming from intellectual circles and the government gave Sugi an unprecedented opportunity to advance his career. The tangible opportunity came when delegates from the Iwakura Mission, an eighteen-month diplomatic mission in countries in Western Europe and the United States that commenced in 1871, demanded the government provide them with statistics. They were planning to use statistics to introduce Japan to these foreign powers and renegotiate the terms of the unequal treaties. This demand led the government to set up another, smaller office for statistics, the Section of Statistics within the Grand Council of State (*dajōkan*).⁴³ Around

³⁹ *Ibid.*, 4–5, 10–11.

⁴⁰ Sadanori Nagayama, “Nihon no kanchō tōkei no hatten to gendai,” *Nihon tōkeigakkaishi* 16, no. 1 (1986): 101–9.

⁴¹ Miyakawa, *Tōkeigaku no nihonshi*, 18–19; Shiro Shimamura, *Nihon tōkeishi gunzō* (Nihon Tōkei Kyōkai, 2009), 31–38.

⁴² Miyakawa, *Tōkeigaku no nihonshi*, 19.

⁴³ Shugen Takagi, “Akiyoshi Mizukuri to tōkeigaku,” *Kansai daigaku keizai ronshū* 19, no. 1 (April 1969): 15.

this time, Shibusawa – who had formerly served the Tokugawa family – learned about Sugi’s Suruga survey. Based on Shibusawa’s recommendation, Sugi was selected to head the technical team within the section.⁴⁴ Sugi directed three staff working under him and, together, they compiled general statistics for the Iwakura Mission.⁴⁵ The section then published the first statistical almanac in 1872, which was regularly updated. In 1875, Sugi was promoted to head the entire section. These works helped Sugi restart his career, this time as a government employee under the new political regime.

While working as a government bureaucrat, Sugi also promoted statistics widely among the public. In 1876, with sixteen colleagues, Sugi founded a private research group called Society for the Statistical Science (*Hyōki Gakusha*) with the aim to “research the methods and principles of statistics and work on applying them.”⁴⁶ In 1883, having failed to lobby for a state-sponsored educational institution dedicated to modern statistics, Sugi and other members of the Society for the Statistical Science established a private training and research institution, the Kyōritsu School of Statistics.⁴⁷ In 1886, the school published the *Journal of Statistics*, the field’s first specialist journal in Japan.⁴⁸ Sugi was also one of the fourteen founding members of the Statistics Society (*Seihyōsha*), another statistical research community established in 1878.⁴⁹

Throughout the 1880s, the statistical community expanded even further through the activities of Sugi and his colleagues, who created more research and training opportunities, mainly based on a private-government partnership.⁵⁰ By the early 1890s, observers felt that statistics had become established as a field of inquiry. Their feelings were confirmed when *tōkeigaku*, “a study of systematizing measurements,” was adopted

⁴⁴ Miyakawa, *Tōkeigaku no nihonshi*, 19.

⁴⁵ Hayami, “Kōji Sugi,” 1–10; Yabuuchi, *Nihon tōkei hattatsushi kenkyū*, 3.

⁴⁶ Cited in Nihon Jinkō Gakkai, *Jinkō daijiten*, 272. *Hyōki Gakusha* could be literally translated as the “association of notation studies.” For the actual members’ list, see Kenta Higasa, “Sugi Kōji hakase to Meiji ishin no tōkei (7),” *Tōkeigaku zasshi*, no. 624 (June 1938): 22–34.

⁴⁷ As part of the school name, *kyōritsu* (“established in collaboration,” literally translated) suggests it was a privately funded school, but many of the staff running the school were in fact civil servants such as Sugi.

⁴⁸ The original Japanese names for the journal’s title changed over time, from the more phonetic *sutachisuchikku zasshi* to *tōkeigaku zasshi*.

⁴⁹ As *seihyō* was one of the words used to refer to statistics at the time, *Seihyōsha* could be translated as the “Association of Statistics.”

⁵⁰ Masahiro Sato, *Teikoku nihon to tōkei chōsa: Tōchi shoki Taiwan no senmonka shūdan* (Iwanami Shoten, 2012), 184–88.

as an official translation after a heated discussion in 1889 between the statistician Imai Takeo and the military doctor and renowned writer Mori Ōgai.⁵¹

Yet the institutional demands of the Meiji government and statisticians' interest that emerged in the context of 1860s Japan were not the only reasons modern statistics thrived during this period. The development of population statistics as a subdiscipline of modern statistics also owed much to a fundamental shift in the meanings assigned to the relationships between population, society, and the Japanese sovereignty that emerged as Japan was turning into a modern state.

Population Statistics for the Making of a Modern State

Among the various kinds of statistics, high-rank government officials considered population statistics to be particularly significant for the Meiji government's effort to build a modern nation-state. For them, knowing roughly how many, and what kinds of, people lived and traveled within the country was a prerequisite for the smooth operation of the wide-ranging reforms they launched in the early 1870s, such as the introduction of the prefectural administrative system (1871), military conscription (1873), and land tax reform (1873). In the words of Etō Shinpei (1834–74), the first minister of justice in the nascent government, the demographic data indicating “laws of marriage, birth and death” would help the government to construct a “rich and strong” nation by “clarify[ing] the position of people.”⁵² Indeed, this kind of knowledge ascertaining the “position of people” – in both geographical and social terms – was particularly useful for the government because it facilitated the process of locating the group targeted for government reforms. In the early Meiji period, government officials saw the benefits of demographic data primarily because of their practical value.

Thus, from fairly early on in the reforms, various offices within the government compiled population data. First, Sugi's Section of Statistics was tasked to collect population data as part of their work compiling statistic almanacs. The police compiled population data early on as part of its independent household survey.⁵³ Beginning in 1871, the Ministry of

⁵¹ Miyakawa, *Tōkeigaku no nihonshi*, 53–113.

⁵² Masataka Endo, *Koseki to kokuseki no kingendaishi: Minzoku, kettō, nihonjin* (Akashi Shoten, 2013), 119–20.

⁵³ Masuyo Takahashi, “Meijiki wo chūshin nimita nihon no jinkō tōkei shiryō ni tsuite (keizai tōkei tokushū),” *Keizai shiryō kenkyū* 14 (June 1980): 19.

Finance's Division of Statistics compiled population statistics for a brief period. In the 1870s, the Home Ministry's Sanitary Bureau began to collect vital statistics (see Chapter 2).⁵⁴ Furthermore, some prefectural governments, such as Kumamoto, Tokyo, and Kobe, conducted population censuses in their respective administrative areas.⁵⁵ Finally, starting around 1888, the army began to conduct a population survey.⁵⁶ In the first two decades of the Meiji period, government offices independently collected population data and applied them to the reforms they were in charge of.⁵⁷

In addition to these localized initiatives, the early Meiji government also orchestrated population work around the reform of the existing population registers, including the abovementioned *ninbetsu aratamechō* and *shūmon aratamechō*. Confronted with the need to come up with population statistics for the whole of Japan for the effective operation of various reforms but lacking the established infrastructure or manpower to conduct a comprehensive national population survey, the Meiji government pragmatically decided to use existing population registers to get a general sense of the new country's population. However, as mentioned above, the Tokugawa population registers were diverse in terms of format and content. To standardize the population registration system, the government embarked on reform as early as August 1869. On April 4, 1871, the Grand Council of State issued the Household Registration Law (*Koseki Hō*), which mandated the creation of a nationally applicable single population register called *koseki*.⁵⁸ The law was implemented on

⁵⁴ See Chapter 2 for details.

⁵⁵ *Ibid.*, 20.

⁵⁶ *Ibid.*, 18.

⁵⁷ This official exercise acted as the basis for which the biologically determined age calculated according to the newly implemented Western solar calendar became the determinant for mobilizing people for the reforms. However, implementing the new idea of age caused some tensions and confusions. See, e.g., Sayaka Chatani, "A Man at Twenty, Aged at Twenty-Five: The Conscription Exam Age in Japan," *American Historical Review* 125, no. 2 (April 2020): 427–37; Gregory M. Pflugfelder, "The Nation-State, the Age/Gender System, and the Reconstitution of Erotic Desire in Nineteenth-Century Japan," *The Journal of Asian Studies* 71, no. 4 (2012): 963–74.

⁵⁸ *Koseki* is still one of the most important official population registration systems in Japan. Karl Jacob Krogness and David Chapman define *koseki* in contemporary Japan as "fundamentally a civil registration system that records and documents individual civil status by household unit and is the definitive state mechanism for determining in individual's legal identity as Japanese." *Koseki* does not represent individuals in their own rights but locates them within a "household" (*ko*). This structure, as Krogness and Chapman argue, reflects the official understanding of civil-state relations in contemporary Japan, which pivot around the family as a social unit. Karl Jakob Krogness and David Chapman eds. *Japan's Household Registration System and Citizenship: Koseki, Identification and Documentation* (New York: Routledge, 2014), 2.

February 1, 1872. After issuing the law, the government set up the independent Bureau of Household Registration within the Grand Council of State. As early as March 1873, the bureau completed the *koseki* register, from which the government could learn roughly how many and what kinds of people lived in which parts of the country, as well as the movements of people.

In addition to pragmatic reasons, the *koseki* reform was also shaped by political concerns that cropped up as the archipelago went through drastic transformations. Specifically, the government's fervor for the *koseki* reform was fueled by government officials' anxiety over *dappansha* or *dassekisha*, people who had left their registers toward the end of the Tokugawa period.⁵⁹ *Dappansha* were a diverse migrant group with wide-ranging social and political backgrounds, and Meiji leaders striving to construct a self-contained sovereign state considered these people too unwieldy and viewed them suspiciously as a potential cause of political disturbances. Under the circumstances, high-rank officials hoped the demographic knowledge extracted from the reformed *koseki* population register would act as a form of surveillance technology. To borrow the words of David Chapman and Karl Jakob Krogness, the *koseki* reform was expected to "bring order to the previous era's disorder" and, in so doing, ensure Japan's peaceful transition from a feudal to a modern state.⁶⁰

At the same time, the government conducted the *koseki* reform because high-rank officials believed the reform would perform another important political function in the nation-building exercise: help the government to draw the boundaries of the "Japanese."⁶¹ After the Household Registration Law was issued, the process to implement and upgrade the *koseki* registration system coincided with the creation of a new definition of the Japanese population, which accompanied the government's effort to

For the *koseki* reform in early Meiji, see David Chapman, "Geographies of Self and Other: Mapping Japan through the Koseki," *The Asia-Pacific Journal: Japan Focus* 9, no. 29 (July 19, 2011), <http://apjpf.org/2011/9/29/David-Chapman/3565/article.html>; Kenji Mori, "The Development of the Modern Koseki," in *Japan's Household Registration System*, eds. Chapman and Krogness, 59–75; Endo, *Koseki to kokuseki*; Masataka Endo, *Kindai nihon no shokuinchi tōchi ni okeru kokuseki to koseki* (Akashi Shoten, 2010).

⁵⁹ Chapman, "Geographies of Self and Other"; Mori, "The Development of the Modern Koseki," 65–69; Endo, *Koseki to kokuseki*, 112–15.

⁶⁰ David Chapman and Karl Jakob Krogness, "The Koseki," in *Japan's Household Registration System*, eds. Chapman and Krogness, 6.

⁶¹ David Chapman, "Managing 'Strangers' and 'Undecidables': Population Registration in Meiji Japan," in *Japan's Household Registration System*, eds. Chapman and Krogness, 96–98; Chapman, "Geographies of Self and Other"; Endo, *Koseki to kokuseki*, 23.

demarcate its sovereign boundaries. In the north, as soon as the Meiji government declared Ezochi to be the Japanese territory of Hokkaido in 1869, the *koseki* population survey was organized there and integrated the inhabitants of Hokkaido into the category of “Japanese subjects” (*nihon shinmin*).⁶² After the 1871–72 *koseki* reform, the population registration system set up there also further defined the indigenous Ainu people as Japanese.⁶³ Similarly, in the south, the implementation of the *koseki* registration system was done in tandem with the Ryūkyū kingdom’s transformation into the Okinawa Prefecture, as well as with the possession of the Ogasawara Islands, where the *koseki* also recorded the inhabitants as Japanese.⁶⁴ After the colonization of Taiwan in 1895, the modern *koseki* system also buttressed the creation of the hierarchical relationship between the Japanese colonizer, called *naichijin*, or “people of the internal land,” and “external” colonial subjects.⁶⁵ The *koseki* reform facilitated Japan’s transformation into a modern sovereign state by offering an administrative basis for creating the category of the Japanese population at a time when Japan’s territorial border and the accompanying idea of Japanese national identity were themselves highly unstable.⁶⁶

The compilation of population statistics was a core activity within *koseki* reform. Initially, the Ministry of Public Affairs, in charge of administering matters related to household and public infrastructure, was tasked with calculating the total population based on the Tokugawa registers. In 1873, when the Home Ministry set up the Office of Household Registration (*Naimushō Kosekiryō*), the office took over the population calculation work from the Ministry of Public Affairs. That same year, the Home Ministry proposed launching an annual population survey to perfect the population data in the first *koseki* register, and an annual nationwide population survey began on January 1, 1874.⁶⁷

Witnessing how the population work in the *koseki* reform was firmly embedded in the nation-building exercise, Sugi once again stressed the significance of population statistics in a way that made it appear relevant to Japan’s aim to become a modern state. In addition to “government

⁶² Endo, *Koseki to kokuseki*, 149.

⁶³ *Ibid.*, 151–54.

⁶⁴ *Ibid.*, 154–59.

⁶⁵ Tessa Morris-Suzuki, “Becoming Japanese: Imperial Expansion and Identity Crises in the Early Twentieth-Century,” in *Japan’s Competing Modernities: Issues in Culture and Democracy*, ed. Sharon Minichiello and Gail Bernstein (Honolulu: University of Hawai‘i Press, 1998), 168.

⁶⁶ David Luke Howell, *Geographies of Identity in Nineteenth-Century Japan* (Berkeley: University of California Press, 2005).

⁶⁷ However, the survey was discontinued in 1877. Endo, *Koseki to kokuseki*, 126.

statistics,” Sugi also claimed that statistics in general provided the state with invaluable knowledge about “inhabitants” (*jūmin*), or “people” (*kokumin*), which he characterized as “a nation’s weight and aim.”⁶⁸ He stated, “if a nation embarks on an important project, it has to rely on its inhabitants. For this reason, the number and the state of people (for instance, men and women, marriage, marital relationship, births and death), as well as their occupations and business are the most needed [knowledge] for politics.”⁶⁹ Sugi further argued that population statistics, showing facts about inhabitants in “big numbers,” exhibited people’s “living capability” (*seikatsuryoku*) and “growth and withering, rise and fall,” which ultimately shaped “a country’s state of affairs.”⁷⁰ The role of statisticians in this context was to clarify patterns in these “big numbers” and provide materials to the political leaders so they could make an informed decision about the future of the country without the people “withering.”⁷¹ Sugi’s claim represented statisticians’ tireless efforts to carve out a niche for population statistics within the government’s plan to establish modern sovereignty.

Significantly, through this field-building exercise, Sugi and his fellow statisticians turned out to have captured an image of the population that was distinct from the one prevalent in the previous era. Compared to Honda’s characterization of population in the late eighteenth century, which stressed the population’s uncontrollable nature – despite following some natural laws – the population described by statisticians in the 1870s and 1880s appeared more susceptible to human intervention *because* it followed patterns.⁷² The public lecture Sugi delivered to the Tokyo Academy on November 13, 1887 attests to this. In the lecture, Sugi introduced the census data he gathered in 1879 in Kai Province (most of today’s Yamanashi Prefecture). He explained how the census showed some people following “regular rules [*seisoku*]” and others who “succumbed to irregular rules [*hensoku*].”⁷³ When it came to marriage, for instance, 80 percent of the surveyed population followed the “regular” pattern, namely, a legal marriage with both spouses living. The other 20 percent were “irregular,” referring to groups such as “wives whose husbands died” and “husbands who have divorced wives.”⁷⁴ Sugi then claimed that

⁶⁸ Sera, *Sugi sensei kōenshū*, 295.

⁶⁹ *Ibid.*, 295.

⁷⁰ *Ibid.*, 403–4.

⁷¹ *Ibid.*, 403.

⁷² Ishii, “Statistical Visions of Humanity,” 34.

⁷³ Sera, *Sugi sensei kōenshū*, 168.

⁷⁴ The complete list was: “wives whose husbands died,” “husbands whose wives died,” “men whose personal identities [*minoue*] are unclear,” “women whose personal

the larger the size of the “irregular” groups became, “the more vulgar and weak a country would become, and it would naturally fall.”⁷⁵ However, instead of leaving it there, as Honda would probably have done, Sugi recommended that a sign of irregularity, once detected, “should be questioned and researched,” and if the irregularity was judged as “negative” (i.e., detrimental to the country), the government should consider “setting up legislations to prevent it from corrupting” the country.⁷⁶

Sugi’s lecture, which characterized population as manipulable, clearly indicated the emergence of a new population discourse. However, the significance of Sugi’s lecture did not end here. It showed just how congruent the new population discourse was with the government’s nation-building effort, which it carried out by modifying people’s everyday practices. Sugi’s theory of population thus opened up a discursive space in which “population” was transformed into a governable entity, and this justified the government’s involvement in people’s everyday lives under the name of nation-building.

However, this new population discourse did not emerge out of a vacuum. Behind the statisticians’ claims, there was an idea they had just become familiar with: “facts” (*jijitsu*) expressed in large numbers could account for the internal workings of a society. Indeed, statisticians in the 1870s and 1880s were excited that statistics permitted them to see what they called “human society” (*jūnri shakai*) in a novel way.⁷⁷ In particular, they found it fascinating that they could extract a society’s “natural laws” (*tenpō* or *ten’nen no hōsoku*), or what Sugi sometimes called “reasons” (*dōri*), through an analysis of the numerical “facts.”⁷⁸ As Sugi’s student Kure Ayatoshi also explained, they were able to do this because these numbers were not just random, they revealed regular patterns in human phenomena.⁷⁹ Sugi then claimed the pursuit of these numerical “facts” through observation was “the academic style today” and no longer something to be looked down on, as past academics had on “ideological grounds.”⁸⁰ Sugi and his statistician colleagues were convinced statistics was cutting-edge precisely because of their trust in numerical facts and the empiricism engrained in their pursuit of knowledge.

identities are unclear,” “wives who have divorced from husbands,” “husbands who have divorced from wives,” “men whose whereabouts are uncertain,” and “women whose whereabouts are uncertain.” Ibid.

⁷⁵ Ibid.

⁷⁶ Ibid., 166.

⁷⁷ Ayatoshi Kure, *Riron tōkeigaku, jissai tōkeigaku* (Senshū Gakkō, 1890), 7.

⁷⁸ Sera, *Sugi sensei kōenshū*, 147–48.

⁷⁹ Kure, *Riron tōkeigaku, jissai tōkeigaku*, 7.

⁸⁰ Sera, *Sugi sensei kōenshū*, 147–48.

Sugi's characterization of the "academic style today" was not so far-fetched; within a broader community of social commentators and thinkers, statistical rationality was becoming vogue for the theorization of society. As suggested above, Fukuzawa Yukichi agreed that the numerical facts of people as a collective would display patterns that shaped social phenomena.⁸¹ Inspired by Henry Thomas Buckle's *History of Civilization in England*, Fukuzawa maintained that what determined a society was not the power coming out of a person's individualized free will but natural laws inscribed in the details of people's everyday lives that, if analyzed en masse, exhibited statistical regularities.⁸² Fukuzawa thus concluded that statistics, aiming to identify these regularities, was an effective tool for understanding society, and this was behind his endorsement of statistics.⁸³ As a frequent visitor to gatherings reserved for Meiji luminaries such as Fukuzawa, Sugi had ample opportunity to exchange ideas about the benefits of his science in the intellectual community.⁸⁴

Capitalizing on the intellectual milieu that was largely in favor of statistics, statisticians tried to persuade the government to conduct a scientifically informed, nationwide population census. However, in the early years, the Meiji government dragged its feet regarding the census, although it otherwise fervently endorsed modern science for the sake of nation-building. The story surrounding the census indicates that the relationship between the making of scientific population statistics and the making of a nation-state was more complex than it appeared on the surface.

Statisticians' Struggles to Implement a Nationwide Population Census

Once they embarked on the campaign to popularize statistics in Japan, the biggest ambition of Sugi and his subordinates at the Section of Statistics was to conduct a nationwide population census. As mentioned above, Sugi conducted the population census in Suruga in the late 1860s. However, he was not entirely satisfied with it because it was small in scale, covering only three regions in the domain of Suruga; he thought

⁸¹ Ishii, "Statistical Visions of Humanity," 29–32.

⁸² *Ibid.*, 29–30.

⁸³ *Ibid.*, 29.

⁸⁴ Sugi was indeed a constituent of the community of Meiji intellectuals. He was a founding member of the *Meiroke zasshi* magazine, which attests to his central position within the society of Meiji luminaries. Sömushō Tōkeikyoku, "Nihon kindai tōkei no so 'Sugi Koji,'" accessed May 7, 2017, www.stat.go.jp/library/shiryo/sugi.htm.

he could hardly claim to have collected numbers large enough to analyze “natural laws.” Wishing to conduct a population census of an old domain, Sugi submitted a proposal to the government in March 1873. The proposal was approved in 1879. On December 31, 1879, Sugi's section conducted the aforementioned demographic survey in Kai Province using techniques derived from the Eighth International Statistics Congress that was held in Saint Petersburg in 1872.⁸⁵ The team published the results in 1882 under the title *The Survey of the de facto Population of Kai Province*.⁸⁶ The staff at the section hoped the survey would act as a prequel to a full-fledged, nationwide census.

At a glance, this episode seems to imply that Sugi and the government worked well together to gradually implement a nationwide population census over the 1870s and 1880s. In reality, however, their collaboration was not so smooth. To start with, despite Sugi's incessant appeals, it took the government nearly six years to approve the Kai Province population census project. Furthermore, while Sugi wanted the government to support a comprehensive nationwide survey following the Kai Province project, the government only agreed to fund the project and nothing more.⁸⁷ Consequently, the census study Sugi's team conducted in the late 1870s was confined to the former *bakufu* domain, covering a mere 110,000 households. Clearly, Sugi and high-rank government officials did not see eye to eye on the population census.

The government's lukewarm attitude to the population census seems at odds with the story presented so far. If the high-rank officials recognized the value of population statistics for nation-building, why did the government hesitate to support the national census promoted by Sugi? There were chiefly two interlinked reasons for the government's response: The institutional constraint and the different opinions about the role of statistics in the governance of Japan's population. The first was derived from the shifting internal structure within the government, which ultimately acted unfavorably toward Sugi. In the 1870s, the government, eager to set up the basic infrastructures of a modern state, expanded the administrative office, but it did so too quickly and haphazardly. Thus, when inflation hit Japan in the early 1880s, the government adopted retrenchment policies and, as part of the policies, downsized statistical bureaus.

⁸⁵ Sato, *Teikoku nihon*, 184.

⁸⁶ “Kai no kuni genzai ninbetsu shirabe [1882],” in *Sōrifu tōkeikyoku hyakunenshi shiryō shūsei*, vol. 2, ed. Sōrifu Tōkeikyoku, (Sōrifu tōkeikyoku, 1976), 161. See also Hayami, “Koji Sugi,” 3–5.

⁸⁷ Kōji Sugi, “Yamanashi-ken genzai ninbetu shirabe shogen [August 1882,]” in *Sōrifu tōkeikyoku hyakunenshi*, ed. Sōrifu Tōkeikyoku, 162–64.

The restructuring came as a blow to Sugi and his Section of Statistics. From the onset, the Section of Statistics was the weakest of the three statistical offices, lacking in specialisms the other two (the Ministry of Finance's Division of Statistics and the Home Ministry's Sanitary Bureau) had.⁸⁸ Furthermore, Ōkuma Shigenobu, who institutionalized statistical work within the Ministry of Finance in the first place, had lost the political battle within the government office and, consequently, in 1880 was demoted to head the Grand Council of State's Department of Accounting, which included Sugi's Section of Statistics.⁸⁹ Under the circumstances, the Section of Statistics became exposed to scrutiny when the government decided to reorganize the administrative offices.

After the restructuring, the Section of Statistics ceased to exist, and Sugi was dismissed from the government office.⁹⁰ Sugi's dismissal had a lasting impact on the statisticians' campaign to introduce a nationwide population census. With Sugi's departure, bureaucrat-statisticians lobbying for the national census within the government administration lost a leader and came to possess even less power than before. Consequently, their campaign became less effective, and a population census remained a low priority within the government. The specific way the government office developed in the first two decades, and the accompanying internal political struggle, prevented Sugi and his subordinates from effectively persuading the government to set up a national population census system in Japan.

The gap that existed between statisticians and political leaders over the interpretation of official population statistics was another reason why the government was initially reluctant to take up the national census.⁹¹ From the statisticians' point of view, official population statistics should be informed by the principles of statistical science and accurately reflect the demographic reality of the entire population. Based on this understanding, they stressed that only a nationwide census deserved the title of official population statistics, because it aimed to collect data from the whole population through the scientifically rigorous method of fieldwork. Only data compiled in this way would allow population statisticians to conduct an efficient and sophisticated analysis of probability in the patterns of social behavior, and only the natural laws identified in this analysis could present an accurate picture of the current societal

⁸⁸ Matsuda, "Formation of the Census System in Japan," 49–50.

⁸⁹ Shimamura, *Nihon tōkeishi gunzō*, 34.

⁹⁰ Sōmushō Tōkeikyoku, "Nihon tōkei nenkan."

⁹¹ Sato, *Kokusei chōsa nihon shakai*, 35–37.

situation, which the government should use to come up with effective strategies for running the country.⁹²

Behind this assertion was statisticians' dissatisfaction over the government's use of the *koseki* to calculate population figures. They claimed the current population statistics were incomplete and full of errors because the *koseki* register, compiled by "untrained, low-rank town and village officers," was prone to produce duplicates and omissions of data.⁹³ Statisticians further argued that the current *koseki* registration system relied on people's goodwill to notify the local authorities about their personal details, and this was causing additional errors in the statistics.⁹⁴ Thus, they claimed, a nationwide census conducted by trained fieldworkers should replace the *koseki* register as a source of official population statistics, precisely because the former would generate more accurate and comprehensive knowledge about the Japanese population. This perspective, which no doubt was infused by statisticians' desire to carve out a niche for their science within the government, also undergirded the statisticians' campaign to promote a nationwide population census in Japan.

Unfortunately for the proponents of the census, top government officials did not share this sentiment. As far as the government was concerned, the population data thus far collated through the *koseki* reform, though far from perfect, were sufficient for government reforms.⁹⁵ Furthermore, high-rank government officials wished to invest in improving the existing system rather than building an entirely new infrastructure for the census.⁹⁶ Based on the calculation of cost against effect, the government decided to prioritize the existing system over a census and, in 1886, conducted another *koseki* reform, which mandated people register births, deaths, and their whereabouts.⁹⁷ High-rank government officials did not think the census would add value. This perspective was behind the government's, at best tepid, response to the call for a nationwide census.

Population statisticians were not at all satisfied with the government's decision.⁹⁸ Throughout the 1880s, they continued to insist that the government take up a population census. Following in the footsteps of Sugi and Fukuzawa from a decade earlier, proponents of the population census

⁹² See Kure Ayatoshi, *Jissai tōkeigaku* (Senshū Gakkō, 1895), 79–88.

⁹³ Sera, *Sugi sensei kōenshū*, 51–52.

⁹⁴ *Ibid.*, 48–50.

⁹⁵ *Ibid.*, 47.

⁹⁶ For the internal politics taking place for the legal reform surrounding the *koseki* during the period, see Endo, *Koseki to kokuseki*, 125–32.

⁹⁷ *Ibid.*, 127–30.

⁹⁸ For more details on why statisticians mistrusted the *koseki*, see Sato, *Kokusei chōsa to*, 48–52.

stressed that the nationwide census was a symbol of modernity and national power that Japan should be equipped with if the country wished to be seen as a “civilized country” (*bunmeikoku*) by the rest of the world.⁹⁹ In 1886, the Tokyo Statistics Association (formerly *Seihyōsha*) submitted the “Proposal for the Population Census” to the newly formed Cabinet Bureau of Statistics (CBS),¹⁰⁰ arguing:

There is no civilized country with an organized government that does not conduct a population census, ... it is an urgent task of the government to clarify people’s power [*minryoku*], specifically, the physical strength, level of knowledge, popular custom, economy and industry of the governed people to which the government serves. This is the reason why [we argue that the government should] adopt population census derived from western countries and consider it to be one of the important national ... projects.¹⁰¹

After reading the proposal, some politicians expressed agreement with the statisticians’ argument. However, the majority were of the same opinion as the government officials, preferring to adhere to *koseki* reform.¹⁰² Politicians, too, saw little benefit in the government investing in the population census.

However, by the 1890s, the tide had changed. This time, more and more political leaders began to consider endorsing the census. A direct trigger came from outside Japan, from the International Statistical Institute (ISI).¹⁰³ During the 1890s, the ISI was planning to compile a worldwide census to commemorate the year 1900. As part of the campaign, it made an inquiry to the Japanese government in 1895, asking if Japan would be interested in participating in the project.

Japanese political leaders in 1895 had plenty of reasons to answer positively to the request from the ISI, especially since the request came at a time when Japan’s international position was still precarious. In 1894, Japan took an important step toward revising the unequal treaties by signing the Anglo-Japanese Commercial Treaty, which would end British extraterritorial rights and partially restore Japan’s rights of tariff autonomy. Despite the diplomatic success, a long-drawn-out process awaited the country before it could regain complete tariff autonomy. Furthermore, government leaders were to feel bitter about political

⁹⁹ Sato, *Kokusei chōsa nihon shakai*, 37–38; Sato, *Kokusei chōsa to*, 23–25.

¹⁰⁰ The CBS was founded in 1885 as a successor organization to the Bureau of Statistics within the Grand Council of State, along with the Grand Council of State’s replacement with the cabinet that same year. Upon establishment, it also took charge of the existing *koseki* registration work.

¹⁰¹ Sōrifu Tōkeikyoku, ed., *Sōrifu tōkeikyoku hyakunenshi shiryō shūsei*, vol. 2 (Sōrifu tōkeikyoku, 1976), 193.

¹⁰² Ishii, “Statistical Visions of Humanity,” 87–88.

¹⁰³ W. Winkler, *A History of the International Statistical Institute 1885–1960* (Oxford: Blackwell, 1962).

interference from Russia, France, and Germany following the Sino-Japanese War (1894–95), as a result of which Japan, despite being the victorious nation, was forced to relinquish the Liaodong Peninsula, the greatest prize the country had won in the war. In a world order dominated by western imperial powers, political leaders poignantly felt Japan would have to show the world what the country was capable of, even if it was emerging belatedly and as the only non-western imperial power.

Under these circumstances, political leaders understood the ISI's call as a matter of national pride. They considered it a sign that the international community recognized Japan's achievements thus far.¹⁰⁴ Thus, the government acted on the request immediately. As soon as he received the message from the ISI, Itō Hirobumi, now prime minister, forwarded it to the head of the CBS, with a note that the matter required an urgent response.¹⁰⁵ Itō also urged the government to form a census executive committee in the House of Peers and House of Representatives. At the same time, more and more politicians came to endorse the argument statisticians had been presenting for a long time: Japan, as the "civilized nation of the East," ought to conduct a population census.¹⁰⁶ As a result, in 1902, the government issued the Population Census Law. The external pressure acted as a catalyst for the implementation of a national population census within Japan's governing body.

Nevertheless, even after the law was enacted, the path toward materializing the census was not straightforward. The original 1902 law stipulated that the first national census would be taken on October 1, 1905 and would cover Hokkaido, Okinawa, South Sakhalin, and Taiwan in addition to the Japanese archipelago. However, the plan had to be shelved in the wake of the Russo-Japanese War (1904–5).¹⁰⁷ In the end, it was only in 1920 that the first national census took place in Japan.¹⁰⁸

In contrast, in colonial Taiwan, the census was taken in 1905 as originally planned according to the 1902 law. The call for the first census in Taiwan was enabled by the political structure and discourse of scientific colonialism specific to the Japanese rule there.

¹⁰⁴ Takahashi Jirō, "Meiji jūninenmatsu Kai no kuni genzai ninbetsu shirabe tenmatsu," August 1905, in Sōrifu Tōkeikyoku ed., *Sōrifu tōkeikyoku hyakunenshi*, 189.

¹⁰⁵ Sato, *Kokusei chōsa to*, 26. For the correspondence between the ISI and the Japanese government on this subject, see Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, vol. 2, 201–6.

¹⁰⁶ Sato, *Kokusei chōsa to*, 26–27.

¹⁰⁷ Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, 972–78.

¹⁰⁸ For the actual process of implementing the 1920 census, see Sato, *Kokusei chōsa nihon shakai*, 43–64; Sato, *Kokusei chōsa to*, 53–67, 103–39.

Population Census in Taiwan: Scientific Colonialism in Action

In stark contrast to Japan, in Taiwan, which became Japan's first official colony in 1895 as a result of Japan's victory in the first Sino-Japanese War, the colonial government enthusiastically took up the population census.¹⁰⁹ On October 1, 1905, the Government-General of Taiwan (GGT) organized the first population census, the Temporary Taiwan Household Investigation.¹¹⁰ Thereafter, under the aegis of the GGT, the population census was conducted every five years, on October 1, until the end of Japanese colonial rule. In addition, the GGT compiled and published vital statistics based on the population census. In Taiwan, census-taking quickly developed into routine work within the colonial administration.

Indeed, in colonial Taiwan, statistics in general enjoyed a high status, being "at the heart of colonial statecraft from the beginning."¹¹¹ Already in 1897, only two years after Japan occupied the land, the GGT compiled statistics on matters relating to public health.¹¹² However, more fully-fledged statistical surveys bloomed soon after Gotō Shinpei (1857–1929) arrived in Taiwan in 1898 as the civilian governor directly

¹⁰⁹ Pei-Hsin Lin, "The Unfolding and Significance of the Temporary Taiwan Household Investigation in Japanese Taiwan (1905–1915)" [in Chinese], *Cheng Kung Journal of Historical Studies* 45 (December 2013): 87–128; Ishii, "Statistical Visions of Humanity," 73–107; Sato, *Teikoku nihon*; Mau-Shan Shi et al., "A Conversion of Population Statistics of Taiwan at the Sub-Provincial Layer: 1897–1943" [in Chinese], *Renkouxuekan*, 2010, 157–202, <https://doi.org/10.6191/jps.2010.4>; Jen-to Yao, "The Japanese Colonial State and Its Form of Knowledge in Taiwan," in *Taiwan Under Japanese Colonial Rule, 1895–1945: History, Culture, Memory*, eds. Binghui Liao and Dewei Wang (New York: Columbia University Press, 2006), 37–61; Kurihara, Jun, "The National Census, Family Registrations and the Extraordinary Taiwan Census of 1905" [in Japanese], *Tokyo joshi daigaku hikaku bunka kenkyūsho kiyō* 65, 2004, 33–77. In contrast, in Korea under Japanese rule (1910–45), it was not until 1925 that even a simplified general census was taken. Following the census law in the metropole, the general population census was scheduled for 1920, but it was cancelled due to the disruptions of the March First Movement and the independent movement that ensued in 1919. For a fresh take on gender and the workings of the household registry in colonial Korea, see Sungyun Lim, *Rules of the House: Family Law and Domestic Disputes in Colonial Korea* (Berkeley: University of California Press, 2018).

¹¹⁰ Yao, "The Japanese Colonial State," 53.

¹¹¹ *Ibid.*, 42.

¹¹² Michael Shiyung Liu, *Prescribing Colonization: The Role of Medical Practices and Policies in Japan-Ruled Taiwan, 1895–1945* (Ann Arbor, Michigan: Association for Asian Studies, 2009); Chin Hsien-Yu, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895–1950s," *Osiris* 13, no. 1 (January 1998): 326–38.

accountable to the governor-general, Kodama Gentarō (1852–1906).¹¹³ The GGT under Kodama and Gotō quickly sponsored a succession of statistical surveys.¹¹⁴ In September 1898, it established the Temporary Land Survey Group to prepare for a Taiwan-wide land survey. In 1901, it further set up the Temporary Group for the Investigation of Traditional Customs in Taiwan, which aimed to study the legal structures, kinship, rituals, and customs of Taiwan.¹¹⁵ Finally, in 1905, the aforementioned population survey was conducted under the aegis of the GGT.

Gotō's enthusiasm for the statistical surveys, including the population census, was informed by the specific understanding of Japan's colonies and colonial development that he had nurtured over the years as a medically trained bureaucrat who became interested in German colonial policy.¹¹⁶ Through his experience as a high-rank officer serving the Home Ministry's Sanitary Bureau, he came to hold a unique view on colonies, which he expressed through the term "biological principle" (*seibutsugaku no gensoku*).¹¹⁷ Using this term, Gotō likened a colony to a human body. Just as eyes and arms have prefixed functions for the human body, existing cultural practices and social organizations fulfill certain predetermined roles for the colony. Based on this idea, Gotō maintained that colonial rule was best done when it made use of existing local customs and structures. As a person would not get rid of body parts and replace them with prostheses each time they became ill, a colonial government should not wipe out existing local customs or impose entirely new

¹¹³ There are a countless number of biographies of Gotō but for a more recent and comprehensive one, see the volumes authored by Yusuke Tsurumi, *Seiden Gotō Shinpei* (Fujiwara Shoten, 2004).

¹¹⁴ Akihiro Nomura, "Shokuminchi ni okeru kindaiteki tōchi ni kansuru shakaigaku: Gotō Shinpei no Taiwan tōchi wo megutte," *Kyoto shakaigaku nenpō* 7 (1999): 1–24.

¹¹⁵ Makito Saya, *Minzokugaku, Taiwan, kokusai renmei: Yanagita Kunio to Nitobe Inazō* (Kodansha, 2015); Katsumi Nakao, "Taihoku teikoku daigaku bunsei gakubu no dozoku jinshugaku kyōshitsu ni okeru firudo waku," in *Teikoku nihon to shokuinchi daigaku*, eds. Sakai Tetsuya and Matsuda Toshihiko (Yumani Shobō, 2014), 221–50; Timothy Y. Tsu, "Japanese Colonialism and the Investigation of Taiwanese 'Old Customs,'" in *Anthropology and Colonialism in Asia and Oceania*, eds. Jan Van Bremen and Akitoshi Shimizu (London: Routledge, 1999), 197–218.

¹¹⁶ Haruyama Meitetsu, "Meiji kenpō taisei to Taiwan tōchi," in Shinobu Oe et al., eds., *Iwanami kōza kindai nihon to shokuminchi 4 tōchi to shihai no ronri* (Iwanami Shoten, 1993), 47–48; Mark R. Peattie, "Japanese Attitudes toward Colonialism, 1895–1945," in *The Japanese Wartime Empire, 1931–1945*, eds. Peter Duus, Ramon H. Myers, and Mark R. Peattie (Princeton: Princeton University Press, 1996), 80–127.

¹¹⁷ Yao, "The Japanese Colonial State," 45–47.

systems in order to maintain the health of a colony.¹¹⁸ This bodily metaphor buttressed Gotō's attitude toward Japan's colonial rule.¹¹⁹

Gotō then applied the "biological principle" to develop a theory of "scientific colonialism," which he claimed was a systematic and research-driven approach to colonial development that Japan should incorporate.¹²⁰ Gotō contended that scientific investigations into the preexisting cultural, social, political, and environmental conditions would yield in-depth knowledge of the colony, and the knowledge gleaned from such organized studies would ultimately lead to more efficient colonial management based on the effective application of the local systems that were working well. Through this theory, Gotō endorsed colonial studies as a scientific field and campaigned for the creation of the chair of Colonial Studies at the University of Tokyo, which came to fruition in 1908.

This was the backdrop against which Gotō pressed for statistical surveys as soon as he arrived in Taiwan. With absolute trust in large numbers, Gotō was convinced that statistical knowledge about land, customs, and population would display natural laws governing the colonial society, and he judged that the statistical surveys providing such knowledge would be essential for materializing the vision of colonial governance expressed in the "biological principle." Specifically in Taiwan, statistical knowledge would build foundations for policymaking, which would then be used to cultivate the island as Japan's "model colony."¹²¹ In Gotō's terms, statistical surveys, including the population census, were one critical item ensuring his grand experiment with "scientific colonialism."

The 1905 population census displayed many features of the scientific investigations conducted under the banner of "scientific colonialism." Most conspicuously, the preparation for the census was based on a top-down command system, with the GGT at the top. After issuing the Population Census Law in the metropole in 1902, the GGT set up

¹¹⁸ Yet, the support for local autonomy and respect for local cultures implied in the "biological principles" did not automatically lead to peaceful governance. In fact, the "biological principle" justified an armed control of the factions the GGT deemed to be the ills of a colonial society. As Gotō testified, under his administration a total of 11,950 "native bandits" (*dohi*) were executed between 1898 and 1902. Shin'ichi Kitaoka, *Gotō Shinpei* (Chuokoron-sha, 1988), 44.

¹¹⁹ Huiyu Cai, *Taiwan in Japan's Empire-Building an Institutional Approach to Colonial Engineering* (New York: Routledge, 2009).

¹²⁰ For "scientific colonialism," see Ming-cheng Miriam Lo, *Doctors within Borders: Profession, Ethnicity, and Modernity in Colonial Taiwan* (Berkeley: University of California Press, 2002), 35–39; Peattie, "Japanese Attitudes," 83–86.

¹²¹ Masahiro Sato, "Chōsa tōkei no keifu: Shokuminchi niokeru tōkei chōsa shisutemu," in *Teikoku nihon no gakuchi dai 6 kan kenkyū chiiki toshite no ajia*, ed. Akira Suehiro (Iwanami Shoten, 2006), 191.

the Temporary Taiwan Population Survey Group (TTPSG), with Gotō assuming its directorship. Between 1902 and 1905, the TTPSG created the top-down population census network by liaising with local authorities, while also keeping in close communication with the administrative offices in Tokyo, most notably the CBS. In August 1904, the TTPSG organized a pilot survey in Taoyuan as part of a training course. On January 1, 1905, leading up to the actual survey, the TTPSG conducted a local survey in Taipei.

However, while at the top of the command chain, the GGT administrators did not work alone. In fact, the police played a pivotal role in the execution process.¹²² For the census, the GGT appointed the Commander in Chief of Police Inspectors Ōshima Kumaji (1865–1918), vice-director for the TTPSG. Together with Ōshima, Gotō decided the census fieldwork would be arranged through the police network and policemen would be mobilized as fieldworkers for the census.¹²³ The police, thus, provided the bulk of resources for the census work.

The reasons for the involvement of the police in the census work were multifaceted. First, Gotō, once a student of the *Medizinische Polizei* system of Prussian Germany, trusted the police when it came to medical and public health administration and saw them as a positive and productive force for colonial governance.¹²⁴ Second, the police had the network appropriate for the census work. Since the 1901 bureaucratic reform, the police had an island-wide network evolved from the existing mutual surveillance structure called *baojia*, and it was hoped that this *baojia* system, embedded within the administration of local affairs, would facilitate the fieldwork.¹²⁵ Finally, the police were already conducting a household survey as part of the attempt to implement the *koseki* registration system in Taiwan, and the GGT concluded it would be more efficient to

¹²² Ishii, “Statistical Visions of Humanity,” 78–85.

¹²³ Sato, *Teikoku nihon*, 228–29.

¹²⁴ Ishii, “Statistical Visions of Humanity,” 81–82. Historians of medicine have described the *Medizinische Polizei* system as a state system in Germany that aimed to ensure the health of citizens by deploying various forms of policing, e.g., the policing of physical environments, dangerous materials, elements of everyday lives deemed hazardous, and practices and individuals deemed “nuisances.” For works describing how the originally German *Medizinische Polizei* system was tied to Japanese colonial rule in Taiwan, see Liu, *Prescribing Colonization*; Hsien-Yu, “Colonial Medical Police.” 326–38.

¹²⁵ Hui-Yu Ts’ai, “Shaping Administration in Colonial Taiwan, 1895–1945,” in *Taiwan Under Japanese Colonial Rule, 1895–1945: History, Culture, Memory*, eds. Binghui Liao and Dewei Wang (New York: Columbia University Press, 2006), 99–104; Ching-Chih Chen, “The Japanese Adaptation of the Pao-Chia System in Taiwan, 1895–1945,” *The Journal of Asian Studies* 34, no. 2 (February 1975): 391–416.

take advantage of the existing practice instead of making a completely new system from scratch.¹²⁶ Based on these factors, Gotō thought police involvement would make census work more efficient. In turn, police participation in census work indicated another important aspect of colonial governance. In contrast to the ideal presented by Gotō, which alluded to local autonomy, in reality, the scientific knowledge buttressing the colonial rule under the Kodama-Gotō administration was premised on the modern system of control and surveillance that encroached on people's everyday lives.

The census illustrates another aspect of the scientific colonial rule of Taiwan that is linked to the point above: Japanese staff dominated the census's organization. The overwhelming majority of local fieldworkers and supervisors recruited for the census work were Japanese; the ratio of Japanese to local Taiwanese officers was nine to one.¹²⁷ One reason for this outcome was the suspicious attitude toward the native administrators that some high-rank Japanese officers harbored. For instance, Ōshima noted that "low-rank administrative personnel" in the police organization could "obstruct our effort by spreading groundless rumors."¹²⁸ Some Japanese officials believed it would be inappropriate to involve these local officers because of the sensitive nature of the census data. They pointed out that the colonial government might use these data for intelligence purposes, thus the data should be kept among the Japanese and not shared with the local officers.¹²⁹

This kind of condescending attitude toward the local populations, which shaped the 1905 census, was also a characteristic of "scientific colonialism." "Scientific colonialism," as Mark R. Peattie once explained, also referred to "a way of looking at differences in political capacity between ruler and ruled," wherein the superiority of the ruler was implied.¹³⁰ This "way of seeing" directly shaped the process of organizing the population census. The census organizers insisted on Japanese control over the investigation because they were convinced of the natural superiority of the Japanese in the political *and* scientific management of the colony. The domination of the Japanese staff in the population surveys was therefore indicative of the Japanese attempt to assert their authoritative position based on the line they had drawn between

¹²⁶ Endo, *Kinai Nihon no*, 137–38.

¹²⁷ Sato, *Teikoku nihon*, 244.

¹²⁸ Cited in Sato, *Kokuzei chōsa to*, 74.

¹²⁹ *Ibid.*, 74–75.

¹³⁰ Peattie, "Japanese Attitudes," 85.

the Japanese as the colonial investigator and the colonial subjects as the object of investigation.¹³¹

However, this clear-cut hierarchical positioning between the ruler and the ruled did not always apply in the actual fieldwork.¹³² First, while the census's primary target group was the local populations, the census also aimed to comprehensively investigate the total population *in* Taiwan. The census therefore ended up collecting data from Japanese expats, making the Japanese colonizers as exposed to the demographic survey as the colonial subjects. On the one hand, this practice threatened the binary of Japanese colonizer-investigator versus the colonized Taiwanese under investigation. On the other, by covering the whole population living on the island, the census was actually assisting the GGT to govern colonial Taiwan more effectively than otherwise. Evidence shows that Japanese expats in the early years of Japan's colonial rule in Taiwan were as diverse as the local populations, ranging from socially respected high-rank bureaucrats and businesspersons to hustlers, human traffickers, and others thriving on the margins of the emerging nation-states.¹³³ In this context, the census, uncovering the details of the whereabouts of Japanese expats of all walks of life as much as those of the local populations, would work as a technology of surveillance that would buttress the efficient colonial governance, even though it might have eroded the framework that expressed the idealized relationship between the colonizer and colonized.

The actual work involved in collecting the census data was another site where the dichotomous framework was overridden. In day-to-day fieldwork, Taiwanese fieldworkers contributed as much as the Japanese, mostly acting as interpreters for the Japanese fieldworkers. For the 1905 census, 1,431 out of a total of 4,369 badges – handed out to the fieldworkers to indicate their participation in the census project – were reserved for local interpreters.¹³⁴ These interpreters played a pivotal role in the success of the 1905 census. They facilitated the census-taking process by liaising between the Japanese fieldworkers and the local research subjects who shared neither linguistic traditions nor attitudes to census-taking. Evidence also suggests they might have brought success to the

¹³¹ This was done in parallel with various attempts to “Japanize” the people in Taiwan. Leo T. S. Ching, *Becoming “Japanese”: Colonial Taiwan and the Politics of Identity Formation* (Berkeley: University of California Press, 2001).

¹³² Toru Sakano, “Joron ‘teikoku nihon’ ‘posto teikoku’ jidai no firudowāku wo toinaosu,” in *Teikoku wo shiraberu*, ed. Toru Sakano (Keiso Shobo, 2016), 4.

¹³³ David Richard Ambaras, *Japan's Imperial Underworlds: Intimate Encounters at the Borders of Empire*, Asian Connections (Cambridge: Cambridge University Press, 2018).

¹³⁴ Sato, *Teikoku nihon*, 224–25.

census indirectly by enhancing local populations' levels of understanding about the census.¹³⁵ Local fieldworkers were certainly indispensable cogs in the operation by playing effective mediator roles.¹³⁶

In part thanks to the smooth collaboration between the Japanese and local fieldworkers, the 1905 census went relatively well. Yet, this was not to say the fieldwork was without complications. While the Japanese plan to conduct a population census came to be understood among the upper echelons of local communities, it seemed to cause some rumors and confusion among many population groups, and this disrupted the census survey to some extent. For instance, many local people panicked because they believed the Japanese government was conducting the census to impose tax or conscription duties on the natives.¹³⁷ Others feared they would lose their nationality or a position in the household register if they were not registered in their hometowns. For this reason, many returned home immediately before the time designated for the census, which ended up causing heavy traffic and overcrowded public transportation.¹³⁸ Some women who had abandoned the custom of foot-binding bound their feet specifically for the occasion, because they thought they would lose the right to bind feet if they were registered as having "natural feet."¹³⁹ Others pretended they were blind, hoping they would receive government subsidies.¹⁴⁰ The census work was carried out while negotiating these chaotic situations it had caused.

The result of the 1905 population census was over 450 pages of tabulations published by the TTPSG in 1908. An impressive array of figures described diverse aspects of the demographic and living conditions of the colonial subjects, of the Japanese expats recorded as *naichijin*, and of other "foreigners" (*gaikokujin*) in Taiwan at the time.¹⁴¹ It covered topics as diverse as population, race, physicality, age, kinship, occupation (adults and children), language, education, disability, foot-binding practice, the place of origin of the Japanese living in Taiwan, the details of travel to Taiwan experienced by the Japanese, foreign nationals, the

¹³⁵ Ibid., 223–26.

¹³⁶ In addition to the interpreters, the leaders of the local *baojia* system also played a pivotal role, even though they were not officially registered as local collaborators. For details, see Ibid., 230.

¹³⁷ Lin, "The Unfolding and Significance," 107.

¹³⁸ Ibid., 108.

¹³⁹ Ibid., 109.

¹⁴⁰ Ibid.

¹⁴¹ Rinji Taiwan Kokō Chōsa Bu, "Meiji sanjū hachinen rinji taiwan kokō chōsa kekkahyō," National Archives of Japan Digital Archive (1908), accessed August 18, 2019, www.digital.archives.go.jp/das/image/F1000000000000061277.

use of opium, household, and finally, type of domicile.¹⁴² As Jen-to Yao once argued, through the census, everything became unambiguous, and nobody in the colony had “the privilege of remaining anonymous.”¹⁴³ Furthermore, the knowledge, by presenting colonial reality in numbers, transformed the population “from estimation and imagination to calculation and classification.”¹⁴⁴ The numerical facts in the census offered a foundation for the colonial governance by displaying the lives of Taiwan’s inhabitants as a mathematically categorizable, clear-cut entity, and in so doing, turned the people living in Taiwan into a more governable population.

The making of the 1905 census thus exhibits how statistics became quickly integrated into the colonial administration in Taiwan, in part due to Gotō’s fervor for scientific colonialism. At the same time, it also shows how the census work in colonial Taiwan paved the way for the development of a statistical community there. Furthermore, the work involved in the preparations for the census also shaped statistical practice in the metropole, suggesting that the science surrounding population statistics developed in tandem with the construction of the Japanese Empire through coordination between the metropole and the colony.¹⁴⁵

The science of Population Statistics in Taiwan and “Japan Proper”

Since Gotō firmly believed in “scientific” colonial management, he considered the statistical science that Sugi and his colleagues had been promoting in Japan since the 1860s should be the pivot for the census work in Taiwan, too. Thus, to prepare for the 1905 census, Gotō invited Mizushina Shichisaburō from Japan to act as the GGT technical bureaucrat specializing in statistics.

¹⁴² Su-chuan Chan, “Identification and Transformation of Plains Aborigines, 1895–1960: Based on the ‘Racial’ Classification of Household System and Census” [in Chinese], *Taiwanshi yanjiu* [Taiwan historical research] 12, no. 2 (December 2005): 134–37; Akira Tomita, “1905-nen rinji Taiwan kokō chōsa ga kataru Taiwan shakai: Shuzoku, gengo, kyōiku wo chūshin ni,” *Nihon taiwangakkaihō* 5 (May 2003): 87–106.

¹⁴³ Yao, “The Japanese Colonial State,” 56.

¹⁴⁴ *Ibid.*, 54.

¹⁴⁵ Sato, *Teikoku nihon*; Sato, “Chōsa tōkei no keifu,” 179–204. Further research is required to uncover how multivalent politics in Japan’s colonies – including not only Taiwan but also Korea and other “informal” colonies – shaped population statistics in the metropole and the colonies.

Mizushina arrived at statistics in the 1880s after starting his career in meteorology.¹⁴⁶ In 1883, he entered the Kyōritsu School of Statistics to improve the statistical side of his meteorological work. After graduating, Mizushina initially returned to meteorological work, first at the Nemuro Weather Station and then at the Hokkaido Prefectural Government. However, in the 1890s, Mizushina set up prefectural-level statistics training courses with colleagues he had met at the Kyōritsu School of Statistics. Eventually, in 1899, the Ministry of the Navy appointed him to work on general statistical administration and education. In August 1903, probably through his connection with Nitobe Inazō (1862–1933), who acted as his supervisor while in Hokkaido and moved to Taiwan thereafter, Mizushina was appointed to establish the statistical administration in Taiwan.¹⁴⁷ He stayed in the position until the 1915 census was conducted.¹⁴⁸

Mizushina was the general manager of the 1905 census. He worked directly under Gotō and Ōshima in the TTPSG. He laid the groundwork for the fieldwork, and once the fieldwork was completed, he oversaw the compilation of raw data and the publication of the aforementioned report. In December 1903, he toured Taiwan and the Pescadores Islands (Penghudo) to investigate the current state of the infrastructure for the census fieldwork.¹⁴⁹ Based on the trip, he made recommendations to the GGT in February 1904. These recommendations were detailed, but they mostly aimed to explain the locally variable cultural practices to the Japanese fieldworkers. For instance, he called for the documentation of reference tables that listed local traditional Chinese medicine names for diseases and presented them alongside the corresponding modern medicine names.¹⁵⁰ Mizushina's legwork eventually helped to generate the relatively smooth operation of the 1905 census work.

In addition, to aid the census work, Mizushina ran the training sessions under the aegis of the GGT. Based on the Regulation for GGT Statistics Training issued in September 1903, Mizushina organized the

¹⁴⁶ For Mizushina's biography, see Yoshinori Ishimura and Sakura Ishimura, "Mizushina Shichisaburō' nōto (oboegaki): Hokkaido ni okeru sangaku kōsō kansoku, kishō kansoku gyōsei oyobi tōkei kyōiku, Taiwan kokō chōsa wo chūshin toshite," *Takushoku daigaku ronshū* 2, no. 3 (July 1994): 143–95.

¹⁴⁷ Tiejun Wang, "Kindai nihon bunkan kanryō seido nonakano Taiwan sōtokufu kanryō," *Chūkyō hōgaku* 45, no. 1–2 (2010): 117. Nitobe was another important individual lobbying to make Japanese population science an international science that was simultaneously embedded in Japan's colonial rule.

¹⁴⁸ Ishimura and Ishimura, "Mizushina Shichisaburō' nōto," 184–85.

¹⁴⁹ Sato, "Chōsa tōkei no keifu," 192–93.

¹⁵⁰ *Ibid.*, 192–93.

training course between October 20 and November 24, targeting senior officers in the local authorities who would be involved in the administration of fieldwork. In the following year, he ran the same course, this time aimed at officers working for the Ministry of Arms.¹⁵¹ From February 1904 onward, the GGT mandated that police superintendents and prison guards be taught about the population census in their respective training courses, which Mizushina was involved in organizing. Between 1903 and 1911, with Mizushina’s help, the GGT organized a total of six training courses.

Mizushina’s training work seemed to catalyze the local-level training courses targeting the fieldworkers. Between 1903 and 1919, a total of fifty-five training courses of this kind were organized in the *chō/ting*, *gaishō/jiezhuang*, and other, smaller administrative units. Most of the attendees of these local-level courses were policemen and other low-rank administrators. Through the training, they learned both about the theories of statistics and the techniques in actual practice. Though they were expected to study statistics in general, given the imminence of the census work, the population census occupied a large part of the learned content. Including those in the GGT training sessions, a total of 1,968 mid- to low-rank civil servants were taught statistics in Taiwan between 1903 and 1919, and they supported the first and second (1915) population census surveys.

Through the training activity, a community of statisticians was quickly formed in colonial Taiwan. Mizushina also played a central role in the development of this community. It was Mizushina who launched the Taiwan Statistical Association that was attached to the GGT training courses. Mizushina also safeguarded the association’s *Journal of the Taiwan Statistical Association* as its editor-in-chief, and the journal published between 1,000 and 2,000 copies of each issue.¹⁵² Finally, Mizushina ensured that the GGT training sessions fostered a sense of community through events such as a social gathering held after completing the courses.¹⁵³ Through these activities, Mizushina contributed to the development of a community around statistical work.

Thus, the scientific field of population statistics developed in Taiwan was certainly situated in a colonial context. Furthermore, among the Japanese based in Taiwan, there was a high hope that the knowledge

¹⁵¹ By 1905, a total of 540 personnel had taken part in the training sessions organized by the GGT. Sato, *Kokusei chōsa to*, 72.

¹⁵² Masuyo Takahashi, “‘Taiwan tōkei kyōkai zasshi’ sōmokuji kaidai” (Hitotsubashi University Research Unit for Statistical Analysis in Social Sciences, May 2005).

¹⁵³ Sato, *Teikoku nihon*, 21–23.

the community of statisticians had produced would genuinely facilitate the governing of populations in Taiwan. Attesting to the shared sense of optimism, the highest echelon of Taiwan's Japanese expat communities, as well as generally renowned Japanese figures in business and state bureaucracy, including Nitobe Inazō, Yagyū Kazuyoshi, Kinoshita Shinsaburō, and Nakamura Tetsuji, took time to attend the grand launch ceremony of the Taiwan Statistical Association.¹⁵⁴ In Taiwan, the growth of population statistics certainly hinged on the local infrastructure supporting the island's transformation into a Japanese colony.

At the same time, census work in Taiwan had a symbiotic relationship with the development of the science of population statistics of "Japan Proper." Having overseen the second population census in Taiwan, in 1919, Mizushina was transferred to Tokyo, this time appointed to serve the CBS as a commissioned technical bureaucrat. At the CBS, he joined forces with the team charged with organizing the first census in Japan, which, as mentioned above, was eventually conducted in 1920. Once back in Tokyo, Mizushina was also elected to serve as a councilor for the Tokyo Statistics Association. Finally, once the first census work was done, he left the CBS in 1924 to teach statistics at the Tokyo-based Takushoku University, which maintained strong ties with the colonial government in Taiwan.¹⁵⁵ Arguably, the early years of the colonization of Taiwan offered a critical background to what statistician Matsuda Yoshio once called a "great leap toward the modernization of the statistical survey system" in Japan between the 1890s and 1920s.¹⁵⁶ In part, via the network centering around Mizushina, the expertise in building population statistics that was nurtured in colonial Taiwan circulated between metropole and colony, making the metropolitan and colonial contexts more intertwined than before.

Conclusion

As a subdiscipline of modern statistics, population statistics owes much to the dramatic sociopolitical transformation Japan witnessed from the 1860s onward. It emerged along with Meiji statesmen's efforts to build a modern nation-state and empire, which necessitated numerical

¹⁵⁴ Sato, *Teikoku nihon*, 10. Yagyū was the president of the Bank of Taiwan, Kinoshita the chief editor of the *Taiwan Nichinichi Shinpō* newspaper, and Nakamura the executive director of Taiwan Minpōsha.

¹⁵⁵ Ishimura and Ishimura, "Mizushina Shichisaburō' nōto," 184–85.

¹⁵⁶ Sato, *Teikoku nihon*; Kurihara, "Taiwan sōtokufu kōbunruisan"; Lin, "The Unfolding and Significance."

knowledge that would be readily applicable to their efforts. At the same time, population statistics was actively promoted in the burgeoning intellectual scenes where bureaucrat-statisticians like Sugi and a new generation of thinkers caricatured European statistics as a civilizing tool that could potentially enhance Japan's national power. In this context, modern statistics presented a concept of "population" that resonated with Japan's nation- and empire-building efforts.

However, the story of the population census also confirms how complex the relationship between science and politics was. Despite their coterminous position with political power, Sugi and his colleagues failed to persuade government officials to conduct a scientific nationwide population census within Japan. Instead, the population census thrived in colonial Taiwan, where high-rank officials such as Gotō believed in its usefulness as a tool of governance. The census-taking expertise accumulated in Taiwan then helped to implement the census in the metropole via bureaucrat-statisticians such as Mizushina. The trajectory of the population census was not determined merely by the statisticians' position in relation to the political organization but was also contingent upon the practice's perceived utility for the demands of the political exigencies.

Vital statistics was another kind of population statistics that intimately interacted with national politics. Similar to the population census, vital statistics evolved into a technology of statecraft over the Meiji period. Along with this, the profile of midwives as witnesses to births and deaths in childbirth labor changed greatly, from a group subject to state surveillance to healthcare professionals ensuring the smooth operation of the state health administration. The following chapter describes how medical midwifery developed in tandem with vital statistics.