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Daniel Said Monteiro

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Université Paris Cité

**Ecole Doctorale 131 - Langue, Littérature et Image : civilisations et
sciences humaines**

Centre de recherche sur les civilisations de l'Asie orientale (CRCAO)

MONITORED CONNECTIONS

*Transnational Nagasaki and the Circulation of Hybridized Cosmologies
in Early Modern Japan (1630–1720)*

Par **Daniel SAID MONTEIRO**

Thèse de doctorat d'**Asie orientale et sciences humaines**

Dirigée par **Annick HORIUCHI**

Et par **Catherine JAMI**

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INTRODUCTION

The two nations that are tolerated, namely, the Chinese, or those who go under that name, and the Dutch, cannot land anywhere but in this harbor.

Engelbert Kaempfer (1651–1716) on Nagasaki¹

Japan under the Tokugawa 徳川 regime (1603–1868) has often been depicted as a prime example of a self-isolated polity, structured around strict control of its population and a strong rejection of foreign people and ideas – conditions grouped under the notion of *sakoku* 鎖國 (“bolted land” or “closed country”). This term has its origins in a book by Nagasaki interpreter Shizuki Tadao 志筑忠雄 (1760–1806), who finished writing *Sakokuron* 鎖國論 (“Discourses on a bolted land”) in 1801 as a translation of an essay² appended to *De Beschryving van Japan* (“Description of Japan”), the 1733 Dutch edition of Engelbert Kaempfer’s *The History of Japan*, from which the quote above is taken. Kaempfer was a native of Lemgo, Lippe, in the Holy Roman Empire, who documented his travels through several parts of Asia as a surgeon for the Dutch East India Company – the *Verenigde Oostindische Compagnie* or VOC.

Kaempfer’s book, originally written in German under the title *Heutiges Japan* (“Today’s Japan”), was first published in English and printed in London in 1727, before appearing in other European languages and becoming one of the main references on the Japanese archipelago for scholars in Europe throughout the 18th and 19th centuries.³ By contrast, Shizuki’s translation of the appendix, albeit circulating widely in manuscript form among scholarly circles, was not printed for almost fifty years after its completion. The ideas it inspired of Japan as a “bolted land” would only become more widespread and gain political significance after the end of the Tokugawa shogunate and the transition into the Meiji 明治 era (1868–1912).⁴

¹ Translation from German in Beatrice M. Bodart-Bailey, trans., *Kaempfer’s Japan: Tokugawa Culture Observed* (Honolulu, Hawaii: University of Hawai’i Press, 1999), 137.

² The essay appeared first in Latin in Kaempfer’s earlier book *Amoenitates Exoticae*, published in 1712. Ōshima Akihito 大島明秀, “*Sakoku*” to *iu gensetsu: Kenperu cho, Shizuki Tadao yaku “Sakokuron” no juyōshi* 「鎖国」という言説ーケンペル著・志筑忠雄訳『鎖国論』の受容史 (Minerva shobō, 2009), 28–35. For an account of Kaempfer’s ideas within the context of European political theory, see David Mervart, “A Closed Country in the Open Seas: Engelbert Kaempfer’s Japanese Solution for European Modernity’s Predicament,” *History of European Ideas* 35, no. 3 (2009): 321–29.

³ Bodart-Bailey, *Kaempfer’s Japan*, 7–11; Ōshima, “*Sakoku*” to *iu gensetsu*, 36–48.

⁴ Ōshima, “*Sakoku*” to *iu gensetsu*, chap. 3.

Since the second half of the 20th century, researchers have both nuanced and challenged the prevailing image of pre-Meiji Japan as a closed country, particularly from the perspective of economic and diplomatic history.⁵ The lasting effects of the *sakoku* paradigm in Japanese historiography are nevertheless difficult to ignore. One profound consequence of the conceptualization of Tokugawa Japan as “cut off” from the rest of the world – politically, economically, and culturally – is the dichotomy between what is “Japanese” and what is “foreign” in accounts that include, but are not limited to early modern intellectual history.⁶

Despite clear connections between the archipelago and the rest of Eurasia, notably within the shared East Asian heritage around Sinitic texts, cultural or scholarly practices in pre-modern Japan tend to be presented as distinctively “Japanese” (*wa* 和), as opposed to “Chinese” (*kan* 漢) or “Western” (*yō* 洋). To mention only two examples most relevant to the present study, mathematics in the form that developed during the Tokugawa period is generally designated as *wasan* 和算 (“Japanese reckoning”), while bound written materials produced in the same time are called *wahon* 和本 (“Japanese books”).⁷ Admittedly, these terms function as a shorthand for more complex phenomena that have certain qualities peculiar to their geographic location, but the very existence of *wa* as a category contributes to essentializing “Japan” and its implied uniqueness. This framework of analysis belies the entanglements of early modern Japanese history with other parts of the globe.

The *sakoku* model of interpretation, besides being deployed to describe Japan’s political situation, has also shaped discourses on the country’s history of science, which has been slower to update its own paradigms as a field.⁸ According to the established view, the

⁵ Two classic studies are Ronald P. Toby, *State and Diplomacy in Early Modern Japan: Asia in the Development of the Tokugawa Bakufu*, Studies of the East Asian Institute (Princeton: Princeton University Press, 1984); Arano Yasunori 荒野泰典, *Kinsei Nihon to higashi Ajia* 近世日本と東アジア (Tokyo: Tōkyō Daigaku Shuppankai, 1988). See also Reinier H. Hesselink and Yōko Matsui, “Sakoku, or Japan ‘closed off’ from the World: A New Stage: The Second Half of the Seventeenth Century,” in *Bridging the Divide: 400 Years, the Netherlands-Japan*, ed. Leonard Blussé, Willem Rummelink, and Ivo Smits (Leiden: Hotei Publishing, 2000), 35–53; Arano Yasunori 荒野泰典, “Sakoku” o minaosu 「鎖国」を見直す (Tokyo: Iwanami shoten, 2019).

⁶ For a brief overview of the development and transformation of views on *sakoku*, see Ōshima, “Sakoku” to *iu gensetsu*, 1–6.

⁷ See Peter Kornicki, *The Book in Japan: A Cultural History from the Beginnings to the Nineteenth Century* (Leiden: Brill, 1998); Annick Horiuchi, *Japanese Mathematics in the Edo Period (1600–1868): A Study of the Works of Seki Takakazu (?–1708) and Takebe Katahiro (1664–1739)*, trans. Silke Wimmer-Zagier, Science Networks, Historical Studies 40 (Basel: Birkhäuser, 2010); Hashiguchi Kōnosuke 橋口侯之介, *Wahon nyūmon: Sennen ikiru shomotsu no sekai* 和本入門一千年生きる書物の世界 (Tokyo: Heibonsha, 2011).

⁸ Ironically, dominant paradigms are still largely indebted to the works of Nakayama Shigeru, who, beyond his own contributions, also translated Thomas Kuhn’s *The Structure of Scientific Revolutions* and works by Joseph Needham into Japanese, being one of the strongest proponents of the notion of “paradigms” for understand history of science around the world. Cf. Nakayama Shigeru 中山茂, *Rekishi to shite no gakumon* 歴史としての学

reign of the Tokugawa, spanning over 250 years of national seclusion, stifled scientific and technological development, with Japan only being able to modernize itself once it opened up to the West in the late 19th century.⁹ This interpretation has been countered by recent scholarship with evidence of rational and systematized knowledge in Japan parallel to Europe,¹⁰ but the fundamental opposition between “Japanese,” “Eastern,” and “Western” as overarching categories has yet to be frontally tackled.¹¹

Some of the issues stem from the difference in “internalist” and “externalist” approaches traditionally associated with the field – whether transformations in the history of science are attributed to intellectual changes within disciplines or to external (social, political, economic) factors – and the preponderance of practitioners of modern scientific disciplines in Japan who would research premodern scholars as forerunners of today’s sciences.¹² Although such boundaries have become blurrier to the point that purely “internalist” arguments are now rarely made, discussions to enlarge and redefine the sciences in the pre-modern Japanese context remain incipient.¹³ Even if the field is no longer dominated by practitioners of modern sciences, some recent publications, often aimed at a less specialized audience, continue to emphasize the character of “Japanese pioneers” in narratives that mix national

問 (Chūo kōronsha, 1974). This work was translated as Shigeru Nakayama, *Academic and Scientific Traditions in China, Japan, and the West* (Tokyo: University of Tokyo Press, 1984). See also Nakayama Shigeru 中山茂, *Paradaimu de tadoru kagaku no rekishi* パラダイムでたどる科学の歴史 (Bere shuppan, 2011).

⁹ See Sugimoto Isao 杉本勲, *Kagakushi* 科学史, Taikai Nihonshi sōsho 体系日本史叢書 19 (Yamakawa shuppansha, 1967); Shigeru Nakayama, *A History of Japanese Astronomy: Chinese Background and Western Impact*, Harvard-Yenching Institute 18 (Cambridge: Harvard University Press, 1969); Nakayama Shigeru 中山茂, *Nihon no tenmongaku: Seiyō ninshiki no senpei* 日本の天文学 – 西洋認識の尖兵, Iwanami shinsho 岩波新書 837 (Tokyo: Iwanami shoten, 1972); Sugimoto Masayoshi and David L. Swain, *Science and Culture in Traditional Japan, A.D. 600-1854* (MIT Press, 1978).

¹⁰ A fairly early example is Tsuji Tetsuo 辻哲夫, *Nihon no kagaku shisō: Sono jiritsu e no mosaku* 日本の科学思想 – その自立への模索 (Chūo kōronsha, 1973). For more recent studies, see Federico Marcon, *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan*, Studies of the Weatherhead East Asian Institute, Columbia University (Chicago: The University of Chicago Press, 2015); Kazu Tsuguto 嘉数次人, *Tenmongakusha tachi no edo jidai: Koyomi, uchūkan no daitenkan* 天文学者たちの江戸時代 – 暦・宇宙観の大転換 (Tokyo: Chikuma shobō, 2016); Yulia Frumer, *Making Time: Astronomical Time Measurement in Tokugawa Japan*, Studies of the Weatherhead East Asian Institute, Columbia University (Chicago: The University of Chicago Press, 2018); Hayashi Makoto 林淳, *Shibukawa Harumi: Ushinawareta koyomi o motomete* 渋川春海 – 失われた暦を求めて (Yamakawa shuppansha, 2018).

¹¹ For a critical discussion beyond the scope of history of science, see Julia Adeney Thomas, “Why Do Only Some Places Have History?: Japan, the West, and the Geography of the Past,” *Journal of World History* 28, no. 2 (2017): 187–218, <https://doi.org/10.1353/jwh.2017.0018>.

¹² On this debate, and for an account of the state of the field regarding premodern history of science in Japan as a whole, see Kristina Buhrman, “Knowledge of Nature and Craft: Researching the History of Science, Mathematics, and Technology in Japan before 1600,” in *Routledge Handbook of Premodern Japanese History*, ed. Karl F. Friday (London: Routledge, 2017), 364–76.

¹³ Buhrman, 369–70.

pride and individual genius while retaining teleological views around modern (Western) science as the gold standard.¹⁴

While these discussions might appear outdated in a larger framework of a global history of science – with the very notion of “science” being called into question – research produced on and in Japan still has to contend with this legacy. To a great extent, studies on premodern scientific practices in the Japanese archipelago still echo Joseph Needham’s question of why “modern” science did not emerge in non-Western societies.¹⁵ Partly due to the persistence of the *sakoku* framework, the ongoing “global turn” in the history of science of other early modern contexts, including East Asia at large,¹⁶ has taken longer to reach the field of Japanese studies, even concerning post-Meiji scientific endeavors with clearer transregional dimensions.¹⁷

One way to overcome some of the issues outlined above is to focus on themes that transcend the boundaries of modern scientific disciplines, engaging with concepts that resonate with historical actors and their categories. The general theme that guides this study is that of cosmology, particularly as it emerged in the port city of Nagasaki in the first half of the Tokugawa period. Cosmology – knowledge about the shape, constitution, and workings of heaven and earth and everything in between – is crucial for understanding early modern Japanese history.¹⁸ It is well-established that there were significant social and political transformations that took place between the 16th and 17th centuries in the Japanese archipelago with profound consequences for religious and intellectual history.¹⁹ Cosmological

¹⁴ See Nakamura Tsukō 中村士, *Edo no tenmongakusha hoshizora o kakeru: Bakufu tenmongata, Shibukawa Harumi kara Inō Tadataka made* 江戸の天文学者星空を翔ける – 幕府天文方、渋川春海から伊能忠敬まで, *Shiritai saiensu 知りたいサイエンス* 32 (Tokyo: Gijutsu hyōronsha, 2008); Nakamura Tsukō 中村士, *Edo no tenmongaku: Shibukawa Harumi to Edo jidai no kagakusha tachi* 江戸の天文学 – 渋川春海と江戸時代の科学者たち (Tokyo: Kadokawa gakugei shuppan, 2012).

¹⁵ For an outline of some of the main critiques of Needham’s approach, see Morris F. Low, “Beyond Joseph Needham: Science, Technology, and Medicine in East and Southeast Asia,” *Osiris* 13 (1998): 1–8.

¹⁶ Fa-ti Fan, “The Global Turn in the History of Science,” *East Asian Science, Technology and Society: An International Journal* 6, no. 2 (2012): 249–58, <https://doi.org/10.1215/18752160-1626191>.

¹⁷ Morris Low, “The History of Japanese Science: Recent Developments,” *East Asian Science, Technology and Society: An International Journal* 3, no. 4 (2009): 519–24, <https://doi.org/10.1215/s12280-009-9111-8>. A recent example of interconnected global history in early modern East Asia is Nicolas Standaert, *The Chinese Gazette in European Sources: Joining the Global Public in the Early and Mid-Qing Dynasty*, *Sinica Leidensia*, volume 155 (Leiden, The Netherlands; Boston: Brill, 2022).

¹⁸ In Japanese-language historiography, the early modern era is generally rendered as *kinsei* 近世, succeeding the medieval era (*chūsei* 中世) and preceding modernity (*kindai* 近代). In Japanese, as in English, both *kinsei* and early modern are ambiguous terms. The concept of “early modern” is adopted here in a broad sense to designate a timeframe starting in the mid-16th century – corresponding roughly to the Azuchi-Momoyama 安土桃山 period (1568–1600) in Japanese history – and continuing until the end of the Tokugawa regime in 1868. Cf. John Whitney Hall and James L. McClain, eds., *Early Modern Japan*, *The Cambridge History of Japan* 4 (Cambridge: Cambridge University Press, 1991), chap. 1.

¹⁹ Hall and McClain, chap. 6.

issues, straddling religious and philosophical fields, constitute a fundamental part of the transition from medieval to early modern Japan. Changes in the ways scholars and political authorities conceptualized the world they inhabited are at the core of what distinguishes people in the two periods.

These intellectual changes have often been framed in relation to the impact of “Western” ideas, particularly geocentric Aristotelian-Ptolemaic cosmographical models presented in the works of Jesuits active in East Asia, in opposition to traditional views inherited from ancient China or Buddhist cosmologies centered around Mount Sumeru.²⁰ Conversely, there are also other strands of research focusing instead on the continuities and parallel developments within Confucian paradigms in the continent and in Japan, with less emphasis on interactions with European cosmologies.²¹ Studies along these lines tend to highlight concepts indigenous to East Asia and its shared Neo-Confucian heritage, such as the notion of “practical studies” or “concrete learning” (*jitsugaku* 實學),²² or yet qi (Jp. *ki* 氣) as a key way to understand Japanese cosmologies.²³

The first focus on the “Western” impact entails a more prominent role being accorded to Nagasaki in the intellectual landscape of early modern Japan, for it was through this port that cosmological notions originating in Europe passed to reach Japanese scholars in other regions. As I will demonstrate in this study, there is little doubt that cosmological knowledge was a central feature of Nagasaki’s scholarly communities, but their roots were not all “Western.” Elements of astronomical, geographical, cartographical, and medical knowledge that could be traced back to both Chinese and European sources were at the core of what distinguished the city’s hybridized cosmologies. Nagasaki’s composite forms of cosmological scholarship became consolidated throughout the 17th century and the first half of the 18th

²⁰ Ebisawa Arimichi 海老澤有道, *Nanban gakutō no kenkyū: Kōdai nihon bunka no keifu* 南蠻學統の研究—近代日本文化の系譜 (Tokyo: Sōbunsha, 1958); Hirose Hideo 広瀬秀雄, Nakayama Shigeru 中山茂, and Ōtsuka Keisetsu 大塚敬節, eds., *Kinsei kagaku shisō* 近世科学思想, vol. 2, 2 vols., *Nihon shisō taikai* 日本思想大系 63 (Tokyo: Iwanami shoten, 1971); Watanabe Toshio 渡辺敏夫, *Kinsei Nihon tenmongakushi*. 近世日本天文学史, vol. 1, 2 vols. (Tokyo: Kōseisha kōseikaku, 1986); Kawamura Hirotada 川村博忠, *Kinsei Nihon no sekaizō* 近世日本の世界像 (Tokyo: Perikansha, 2003); Unno Kazutaka 海野一隆, *Nihonjin no daichizō: seiyō chikyūsetsu no juyō o megutte* 日本人の大地像—西洋地球説の受容をめぐって (Taishūkan, 2006).

²¹ See, for instance, Yokoyama Toshio 横山俊夫, ed., *Kaibara Ekiken: tenchi waraku no bunmeigaku* 貝原益軒—天地和楽の文明学 (Tokyo: Heibonsha, 1995); Wakao Masaki 若尾政希, *Andō Shōeki kara mieru Nihon kinsei* 安藤昌益からみえる日本近世 (Tōkyō daigaku shuppankai, 2004); Sakuma Tadashi 佐久間正, *Tokugawa nihon no shisō keisei to jukyō* 徳川日本の思想形成と儒教 (Tokyo: Perikansha, 2007).

²² Cf. Wm. Theodore De Bary and Irene Bloom, eds., *Principle and Practicality: Essays in Neo-Confucianism and Practical Learning*, Neo-Confucian Studies (New York: Columbia University Press, 1979); Minamoto Ryōen 源了圓, *Kinsei shoki jitsugaku shisō no kenkyū* 近世初期実学思想の研究 (Sōbunsha, 1980).

²³ Yamada Keiji 山田慶兒, *Ki no shizenzō* 気の自然像 (Iwanami shoten, 2002).

century, especially between the 1630s and the 1720s. During this formative period, knowledge produced locally in the form of maps and manuscripts – as well as printed books by Nagasaki scholars published in Kyoto, Osaka, and the political capital of Edo – caught the attention of a wide public around the archipelago. It also attracted interest within the highest political circles, leading the eighth shogun Tokugawa Yoshimune 徳川吉宗 (1684–1751, r. 1716–1745) to summon two local scholars to his court and consult them on matters of astronomy and calendar-making in 1719. These two scholars were Chinese interpreter Ro Sōsetsu 盧草拙 (1675–1729) and popular author Nishikawa Joken 西川如見 (1648–1724), two key figures for understanding the significance of Nagasaki in this period.

Due to its status as a contact zone, Nagasaki and its cosmological traditions were inevitably intertwined with views associated with Catholic missionaries active both in Japan and China. From its inception, the shogunal regime perceived Christianity as a foreign threat to combat, deeming that it inspired peasant revolts that could upset the political order of the newly unified polity. Catholic missionaries, under the aegis of Iberian powers, were targeted as the main source of disruption. The Society of Jesus – arguably the religious order with the most concrete results in spreading their ideas in early modern East Asia²⁴ – was one of the sworn enemies of the regime. Jesuit writings, produced in Chinese and Japanese, impacted cosmological views in the continent and Japan alike, reaching both those who favored and those who opposed the religion. Tokugawa authorities banished missionaries in the first half of the 17th century, forcing the few who remained to apostatize together with local converts by means of torture, often executing those who refused to renounce their faith.

In Tokugawa Japan's tangled history with the Eurasian continent, the role of censorship as part of the shogunal policies can hardly be overlooked. As Catholic missionaries continued their activities in the rest of Asia, there existed a fraught relationship with potential converts infiltrating the archipelago aboard Chinese ships. This perceived danger also extended to texts and objects. Judith Butler, expanding on the distinction between “repressive” and “productive” forms of power formulated by Michel Foucault, defines censorship as “not merely restrictive and privative, [...] but also formative of subjects and the legitimate boundaries of speech.”²⁵ Applying this definition to the context of early modern Japan, one sees a seemingly paradoxical phenomenon. The shogunal government's efforts to

²⁴ Cf. Andrew Ross, *A Vision Betrayed: The Jesuits in Japan and China, 1542-1742* (Maryknoll: Orbis Books, 1994); Liam Matthew Brockey, *Journey to the East: The Jesuit Mission to China, 1579-1724* (Cambridge: Harvard University Press, 2008).

²⁵ Judith Butler, *Excitable Speech: A Politics of the Performative*, Routledge Classics (London: Routledge, 2021), 132.

suppress certain ideas from Europe – in particular Christian notions associated with Jesuit missionaries – not only served to assert the legitimacy of its rule, quelling challenges to its supremacy, but also acted as a catalyst for cross-cultural interactions.

At the heart of the suppression of Christianity were cosmological systems that intersected and at times clashed with each other. Cosmological knowledge – together with a wide range of associated objects such as maps, astrolabes, and terrestrial and celestial spheres in which it was embodied – was an essential component of Jesuit proselytizing strategies in East Asia. Jesuit cosmology offered new explanations about the structure of the universe and the reasons behind various celestial and terrestrial phenomena. There was also a practical aspect to such knowledge, which could be mobilized for predicting eclipses or calendrical reforms. In premodern East Asia, the production of an accurate calendar was paramount, as it determined seasonal rites, including harvest and political ceremonies. Even with the ban on Jesuit texts, the technical elements of “barbarian” knowledge – be it of Jesuit origin or otherwise – were still attractive to both scholars and authorities.

The act of censoring Jesuit knowledge served the purpose of delimiting the scope of legitimate discourses in the eyes of the shogunate. The fact that shogunal censors were employed in Nagasaki elevated the city to a prominent position in negotiating the boundaries of what was epistemologically acceptable. Nagasaki censors were, to borrow Butler’s words, “enforcing the very distinction between permissible and impermissible speech.”²⁶ In such circumstances, the promotion of a discourse of intellectual orthodoxy, paired with an eclectic approach to knowledge as a whole, deeply impacted the local scholarship of the city, resulting in a rippling effect all over the archipelago.

This study sets out to unravel the enduring consequences of anti-Christian measures for the history of cosmological thought in Tokugawa Japan. I demonstrate how Nagasaki functioned as a springboard for novel cosmological ideas not *despite* it being a highly monitored environment but *because* of it. To clarify this tension, I delineate the milieu of Nishikawa Joken as a prominent local scholar who, alongside the Chinese interpreter Ro Sōsetsu, was recognized for his expertise in astronomy and geography, ultimately offering that knowledge to the shogunal regime.

²⁶ Butler, 139.

Previous research

While there is a variety of studies on Nishikawa Joken across the fields of intellectual, environmental, and economic history,²⁷ in addition to older research centered on his role as a “rationalist” precursor to modern sciences,²⁸ there are yet no monographs on him, and his grounding in the distinctiveness of Nagasaki’s scholarship – notably his relationship with Ro Sōsetsu and the community of Chinese interpreters – is generally overlooked. The most comprehensive accounts of Joken’s thought are found in two articles that place him not in the immediate conditions of his hometown but in the *longue durée* of Tokugawa intellectual history.²⁹ By casting Joken as an actor in the broader landscape of Tokugawa Japan’s scholarship, the articles by Sakuma Tadashi and Takano Nobuharu have the advantage of transcending the teleological concerns of previous research from within the field of history of

²⁷ A non-exhaustive list of articles might include: Kojima Kogorō 小島小五郎, “Nishikawa Joken no suido shisō” 西川如見の水土思想, *Nagasaki shigaku* 長大史学 2 (1958): 1–7; Yanagisawa Minami 柳澤南, “Nishikawa Joken no jugaku shisō” 西川如見の儒学思想, *Nihon shisō shigaku* 日本思想史学 14 (1982): 49–60; Sakuma Tadashi 佐久間正, “Nishikawa joken ron: chōnin ishiki, tengaku, suidoron” 西川如見論—町人意識・天学・水土論, *Nagasaki daigaku kyōyō bu kiyō* 長崎大学教養部紀要 26, no. 1 (1985): 1–29; Kawaguchi Hiroshi 川口浩, “Nishikawa Joken no keizai ninshiki to jukyō” 西川如見の経済認識と儒教, *Shakai keizai shigaku* 社会経済史学 56, no. 4 (1990): 451–79; Wakao Masaki 若尾政希, “Tenpen chū no shisō: Andō Shōeki no tenjin sōkan setsu to Nishikawa Joken” 天変地異の思想—安藤昌益の天人相関説と西川如見, *Nihon Bunka Kenkyūsho kenkyū hōkoku* 日本文化研究所研究報告 26 (1990): 57–107; Yonechi Fumio 米地文夫, “Nishikawa Joken ‘Kaii bendan’ ni miru jikeikan/kankyōkan” 西川如見『怪異辨断』にみる地形観・環境観, *Sōgō seisaku* 総合政策 2, no. 2 (2000): 145–52; Takano Nobuharu 高野信治, “‘Sekai’ to ‘shingoku’: Nishikawa Joken no ‘tengaku’ ron wo megutte” 「世界」と「神国」—西川如見の「天学」論をめぐって, in *Kyōkai no aidentiti* 境界のアイデンティティ, ed. Kyūshū shigaku kenkyūkai, vol. 1, 2 vols., “Kyūshū shigaku” sōkan gojū shūnen kinen ronbunshū 「九州史学」創刊五〇周年記念論文集 (Tokyo: Iwata shoin, 2008); Annick Horiuchi, “Eloges du Japon et de la japonité au seuil du XVIIIe siècle: Nishikawa Joken (1648-1724) et la culture de Nagasaki,” in *Nihon no aidentiti: keisei to hankyō* 日本のアイデンティティ—形成と反響, ed. Hōseidaigaku kokusai Nihon-gaku kenkyūjo 法政大学国際日本学研究所, Kokusai Nihongaku kenkyūsōsho 国際日本学研究叢書 16 (Tokyo: Hōsei daigaku kokusai nihongaku kenkyū sentā, 2012), 113–39; Daniel Struve, “Identité sociale et identité nationale dans ‘Chōnin bukuro’ et ‘Hyakushō bukuro’ de Nishikawa Joken,” *Extrême-Orient, Extrême-Occident*, no. 41 (2017): 45–68.

²⁸ Cf. Uchida Hideo 内田秀雄, “Nishikawa Joken to sono chirigaku” 西川如見と其の地理学, *Shirin* 史林 24, no. 1 (1939): 138–64; Sugimoto Isao 杉本勲, *Kinsei jitsugakushi no kenkyū: Edo jidai chūki ni okeru kagaku/gijutsugaku no seisei* 近世実学史の研究—江戸時代中期における科学・技術学の生成 (Tokyo: Yoshikawa kōbunkan, 1962); Satō Shōsuke 佐藤昌介, *Yōgakushi kenkyū josetsu: yōgaku to hōken kenryoku* 洋学史研究序説—洋学と封建権力 (Tokyo: Iwanami shoten, 1964); Nakayama, *A History of Japanese Astronomy*, 110–15; Minamoto Ryōen 源了圓, “Shushigakuha no jitsugakukan to ri no kammē (2) nishikawa joken no baai” 朱子学派の実学観と理の観念(2)—西川如見の場合, *Kokoro* 心 29, no. 4 (April 1976): 66–74.

²⁹ Sakuma, *Tokugawa nihon no shisō keisei to jukyō*; Takano, “‘Sekai’ to ‘shingoku’: Nishikawa Joken no ‘tengaku’ ron wo megutte.” Sakuma’s article is reproduced in a slightly modified version as Sakuma Tadashi 佐久間正, “Nishikawa Joken no gakumon to shisō” 西川如見の学問と思想, in *Tokugawa nihon no shisō keisei to jukyō* 徳川日本の思想形成と儒教 (Tokyo: Perikansha, 2007), 331–72. Another article that draws connections between Joken’s thought and those of Ming-Qing literati but neglects the material and geopolitical conditions that enabled the circulation of ideas between the continent and the archipelago is Yanagisawa Minami 柳澤南, “Nishikawa Joken to shindai jugaku” 西川如見と清代儒学, *Tetsugaku, shisō ronsō* 哲学・思想論叢, December 1982, 3–15.

science, proposing instead to formulate Joken’s ideas according to his own categories. While they accurately portray Joken’s affiliation with intellectual lineages in China and Japan, the circulation of people and books in Nagasaki that prompted Joken’s encounters with eclectic epistemologies needs to be further explored.

Traditionally, there has been a tendency in Japanese historiography to find in Jesuit-inspired cosmologies of the so-called “Christian century” (1549–1650)³⁰ the origins of Western scientific knowledge, identified in this early period by the epithet *nanban* 南蠻 (“southern barbarian”) used for the Iberian seafarers who first reached Japan. Western scholarship would then later take the form of *rangaku* 蘭學 (“Dutch studies”) under the initiative of Nagasaki interpreters and scholars from Edo. Following this perspective, one could identify a linear progression of knowledge from the West – initially Europe and later also North America – that steadily builds upon previous elements, starting with the culture of the *nanban*, moving through *rangaku*, and culminating in the ultimate “Westernizing” efforts after Meiji.³¹ Koga Jūjirō 古賀十二郎 (1878–1954), a prominent 20th-century researcher of the intellectual history of Nagasaki, presents such a view in his posthumous book *Nagasaki yōgakushi* 長崎洋學史 (“History of Western studies in Nagasaki”).³² This has become a foundational work in the field of the history of “Western studies” (*yōgaku* 洋學), especially concerning its purported origins in the contact zone of Nagasaki.

Koga’s research is complemented by the works of historian Ebisawa Arimichi 海老澤有道 (1910–1992), who places *nanban* scholarly lineages at the center of an ostensible “genealogy of modern Japan.”³³ There are in fact various stages of circulation, assimilation, and transformation of cosmological knowledge that can be partially traced back to European sources. These overlapping stages might be classified, as Koga does, according to their place of origin – Iberian or Netherlandish for instance – but they are not necessarily cumulative, let alone linear. It is necessary, above all, to refrain from retrospectively overestimating the impact of certain texts or ideas around the time they were produced and impose a sequential narrative on their development. In this sense, the present dissertation is a direct response to traditional narratives that attempt to trace back Japan’s later “modernizing” efforts to a

³⁰ Coined in C. R. Boxer, *The Christian Century in Japan, 1549-1650* (Berkeley: University of California Press, 1951).

³¹ See Numata Jirō 沼田次郎, *Yōgaku* 洋学, *Nihon rekishi sōsho* 日本歴史叢書 40 (Tokyo: Yoshikawa kōbunkan, 1989), 1–7.

³² Koga Jūjirō 古賀十二郎, *Nagasaki yōgakushi* 長崎洋学史, ed. Nagasaki Gakkai 長崎学会, 3 vols. (Nagasaki: Nagasaki bunkensha, 1966).

³³ Ebisawa, *Nanban gakuō no kenkyū*.

kernel of Nagasaki’s “Western scholarship” that supposedly emerged in the late 16th and early 17th centuries. Albeit meaningful on its own, *nanban* cosmology was one element among many that made up the scholarly practices of early modern Nagasaki, but one can hardly assert that it constituted the foundation upon which all subsequent “Western studies” around the archipelago were built. Indeed, a closer look at cosmological works produced in 17th- and 18th-century Nagasaki challenges the very notion of a unified tradition that fits under the all-encompassing rubric of *yōgaku*.

The recent research of Hiraoka Ryūji is notable for drawing attention to the prominent role of Nagasaki as a localized venue for knowledge production and circulation as it relates to *nanban* cosmology.³⁴ Unlike Ebisawa, Hiraoka does not identify *nanban* culture as the fountainhead of Japan’s modernity, presenting it instead within its specific historical and geographical circumstances. Hiraoka underscores the link between Aristotelian cosmology taught in Jesuit books written in Japan and its later ramifications in the writings of Nagasaki’s scholars, with Nishikawa Joken being the culmination of such heritage.³⁵

General goals of this study

Recognizing the importance of locality to trace transregional and even global connections, my research takes Joken and his intellectual milieu as the starting point for clarifying how cosmological knowledge circulated across heavily monitored borders. Building on the research of Koga, Ebisawa, and Hiraoka, I expand beyond the notions of *nanban* cosmology to embrace other equally consequential strands – to wit, technical information from VOC merchants and late Ming scholarship displaying hybridized cosmologies with Jesuit elements.

In addition to the heritage of Jesuit missionaries, the inhabitants of Nagasaki had arguably stronger bonds with the culture of southern China at the end of the Ming 明 dynasty

³⁴ Hiraoka Ryūji 平岡隆二, *Nanbankei uchūron no gententeki kenkyū* 南蛮系宇宙論の原典的研究, Hikaku shakai bunka sōsho 比較社会文化叢書 27 (Hana shoin, 2013).

³⁵ Hiraoka Ryūji 平岡隆二, “*Arisutotesu o unkiron de yomitoku: ‘nanban unkiron’ to 17 seiki Nagasaki ni okeru seigaku rikai*” アリストテレスを運氣論で読み解く – 『南蛮運氣論』と17世紀長崎における西学理解, in *Ten to chi no kagaku: Higashi to nishi no deai* 天と地の科学 – 東と西の出会い, ed. Takeda Tokimasa 武田時昌 and Mak Bill M. 麥文彪 (Kyoto: Kyōto Daigaku jinbun kagaku kenkyūjo, 2019), 396–407. A revised English version of this article appears as Ryūji Hiraoka, “Deciphering Aristotle with Chinese Medical Cosmology: Nanban Unkiron and the Reception of Jesuit Cosmology in Early Modern Japan,” in *Overlapping Cosmologies in Asia: Transcultural and Interdisciplinary Approaches*, ed. Bill M. Mak and Eric Huntington, Crossroads - History of Interactions across the Silk Routes 4 (Leiden: Brill, 2022), 98–115.

(1368–1644). Merchants, monks, Ming loyalists, and expatriates originally from the areas of Nanjing and Fujian, who moved to or through the city, deeply affected local scholarship and contributed significantly to the circulation of novel cosmological ideas. As the quoted passage from Kaempfer’s book suggests, “the Chinese, or those who go under that name” in Tokugawa Japan were a diverse group of people, even in the rather confined spaces of the “Chinese” community of Nagasaki.

In the first half of the 17th century, following increasingly restrictive shogunal measures to control the influx of traders coming into Japan, different groups of Chinese speakers started congregating in the city, clustering around temples that represented three main linguistic groups: the two Fujianese languages of Eastern and Southern Min, and the Nanjing Mandarin lingua franca. These three cultural groups would largely shape the communication between local actors and the growing number of continental émigrés who settled in Nagasaki. Moreover, as commerce with lands in Southeast Asia was normally ensured by diasporic Chinese-speaking seafarers, those who spoke languages as far removed as Thai and Vietnamese would also fall under the same rubric of “Chinese” (*tōjin* 唐人), hence Kaempfer’s description.

By introducing the concept of “hybridized cosmologies” circulating in the transnational liminal space of Nagasaki, I approach the port city as a contact zone in which disparate epistemic systems collided and overlapped. Notions of hybridization or transcultural encounters have been discussed in colonial contexts, notably in South Asia and the Americas, where the populations living in contact with other forms of culture were often themselves of mixed ancestry.³⁶ The very idea of a “contact zone” is frequently linked with imperial expansion, to the extent that Mary Louise Pratt, who coined the term, uses it as a synonym for “colonial frontier,” with the distinction that it “shifts the center of gravity and the point of view.”³⁷ Epistemological hybridity in contact zones is therefore closely associated with concurrent processes of creolization and the emergence of a distinctive in-between cultural environment.

Nagasaki under the Tokugawa regime, despite the presence of colonial actors in the form of VOC officials, can hardly be defined as a “colonial frontier.” It does, however, have

³⁶ Homi K. Bhabha, *The Location of Culture*, Routledge Classics (London: Routledge, 1996); Serge Gruzinski, *The Mestizo Mind: The Intellectual Dynamics of Colonization and Globalization*, trans. Dusanberre Deke (New York: Routledge, 2002); Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900* (Basingstoke: Palgrave Macmillan, 2007); Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation*, 2nd edition (London: Routledge, 2008).

³⁷ Pratt, *Imperial Eyes*, 8.

traits of a “space in which peoples geographically and historically separated come into contact with each other and establish ongoing relations.”³⁸ From that perspective, 17th-century Nagasaki can be understood as an extra-colonial contact zone, in which processes of epistemic hybridization were shaped not so much by imperial agents from distant lands, but rather by the centralized power of the newly established Tokugawa shogunate directly administrating and monitoring the city. Further complicating such processes, a growing number of restrictions were imposed on both the local population – which became gradually less mixed in terms of their ancestry – and those who reached the city from other parts of the world. Albeit fairly unusual for the level of political control and the censoring practices to which it was submitted, Nagasaki was not the only place in East Asia where disparate epistemic systems intersected. Indeed, the types of “Western” knowledge that came to inform local scholars like Joken were themselves the product of hybridizations that took place in other contact zones in China.³⁹ The cosmological hybridity that flourished in the city was thus an extra layer added to already eclectic forms of knowledge circulating in the region.

The main aim of this dissertation is to reframe cosmological traditions in Tokugawa Japan by placing them within larger patterns that permeate Eurasia at large, not simply in relation to European views. Articulating the nature of the connections between local scholars and transnational actors, I bring out the specificities of the port city of Nagasaki as a closely surveilled nodal point in global networks of people, goods, and information in the 17th and early 18th centuries. Rather than responding to a perceived lack of endogenous development of science in East Asia, I advance the argument that mid-Tokugawa Japan, partly due to the restrictive conditions imposed by the shogunal regime on transnational trade, was home to an amalgamation of composite forms of cosmological knowledge that transcended East-West binaries.

Main primary sources

As a study of the local cosmological traditions of Nagasaki and its transnational connections, this dissertation relies on diverse sources, including Jesuit-inspired Sinitic books, writings by Joken and other scholars, records of the Dutch East India Company, family

³⁸ Pratt, 8.

³⁹ See Qjong Zhang, *Making the New World Their Own: Chinese Encounters with Jesuit Science in the Age of Discovery* (Leiden: Brill, 2015).

archives from the Chinese diaspora, and documents from local temples and shogunal administrative offices.

Among these, there are three indispensable main sources for understanding the conditions that enabled hybridized cosmological traditions to emerge in the city. The first one is the family archives of the Ro clan, to whom Ro Sōsetsu belonged, the so-called *Roshi monjo* 盧氏文書. Although not all of the original documents are extant today, they have been transcribed by the aforementioned Koga Jūjirō, who organized the archives and provided his commentary in 1911.⁴⁰ Recently, Koga's handwritten transcription has been edited by the Kyushu historian Kawahira Toshifumi and printed with an accompanying index and a general overview of Sōsetsu's scholarly circles.⁴¹ The transcribed documents are divided into three parts: 1) genealogies of the Ro clan (*Roshi keifu* 盧氏系譜), 2) administrative documents related to the creation of shrines in Nagasaki spearheaded by Sōsetsu (*Roke monjo* 盧家文書), and 3) letters exchanged between Sōsetsu and interlocutors in Nagasaki and other parts of Japan, particularly Edo (*Nagasaki senken shokanshū* 長崎先賢書翰集).⁴² The most important elements for the present study are the biographical information contained in the first part – also featuring a list of books owned by Sōsetsu and his father – and the letters transcribed from the third part, including those that Sōsetsu himself wrote concerning his trip to Edo in 1719.

The second main source I utilize is a book titled *Nagasaki senmin den* 長崎先民傳 (“Biographies of Nagasaki's ancient notables”), started by Sōsetsu himself and later brought to completion by his adoptive son Ro Senri 盧千里 (1707–1755). This is one of the earliest sources on the intellectual milieu of the city, and the information it contains would later become the basis for most historical accounts of Nagasaki's scholars in the early to mid-Tokugawa period. Sōsetsu started collecting biographies about those he considered notable figures in the recent history of Nagasaki, admonishing his son to continue his project, which was finished in 1731. Circulating in print during the 18th century, *Nagasaki senmin den* was printed for the first time in 1819 under the auspices of Hara Nensai 原念齋 (1774–1820), himself the author of another compilation of biographies called *Sentetsu sōdan* 先哲叢談 (“Collected accounts of past learned men”). The printed edition of *Nagasaki senmin den* has

⁴⁰ Koga Jūjirō 古賀十二郎, “*Roshi monjo*” 盧氏文書 (Manuscript, 1911), Koga Bunko 古賀文庫, Kyushu University Library, <https://hdl.handle.net/2324/1627100>.

⁴¹ Kawahira Toshifumi 川平敏文, *Roshi monjo: Ro Sōsetsu shiryōshū* 盧氏文書—盧草拙資料集, *Gazoku kenkyū sōsho* 雅俗研究叢書 4 (Fukuoka: Gazoku no kai, 2019).

⁴² See Kawahira, 106–8.

been the object of a recent fully annotated critical edition, containing not only reproductions of the original woodblock prints for each page, but also a transcription of the Sinitic text into Japanese, footnotes, and explanatory essays.⁴³ This central source and its impact are analyzed in detail in the second chapter of this dissertation.

The third main source is a compilation of letters grouped under the title *Sokuryō higen* 測量秘言 (“Confidential information on [land] surveying”), organized by a scholar named Hosoi Kōtaku 細井廣澤 (1658–1735) in 1727. It consists of letters sent by three important figures in Nagasaki – Sōsetsu once again, but also the Confucian scholar and book censor Mukai Gensei 向井元成 (1656–1727) and the interpreter for the Dutch Imamura Eisei 今村英生 (1671–1736) – to a shogunal official named Watanabe Gunzō 渡邊軍藏 (dates unknown). There are different manuscript versions of this book with the letters, and they have been transcribed at least twice,⁴⁴ but not yet entirely translated into either English or modern Japanese. Despite the title of the book, the content of the letters does not refer so much to land surveying methods as to adjacent technical knowledge concerning astronomical measurements for determining the position and distance of celestial bodies from one’s location on the surface of the globe. Due to their technical nature, these documents are difficult to translate, and they refer to specific mathematical methods of interest for shogunal projects of calendrical reform.

These three sources are very valuable for encompassing the types of cosmological knowledge available to scholars in Nagasaki in the late 17th and early 18th centuries, and the appeal it might have had to shogunal authorities in search of technical information. As it will become apparent in the chapters below, the fact that Sōsetsu is connected to all of them is not fortuitous. Sōsetsu, and the Ro family in general, was well integrated into the community of Chinese interpreters of Nagasaki as well as the scholarly circles frequented by Nishikawa Joken and the local Confucian academy Nagasaki Seidō 長崎聖堂, headed by the aforementioned Mukai Gensei. The Ro archives, *Nagasaki senmin den*, and the letters from *Sokuryō higen* display the range of scholarly knowledge that local scholars possessed, revealing

⁴³ Wakaki Taiichi 若木太一, Takahashi Masahiko 高橋昌彦, and Kawahira Toshifumi 川平敏文, *Nagasaki senminden chūkai: Kōsei nagasaki no bun’en to gakugei* 長崎先民伝注解—近世長崎の文苑と学芸 (Tokyo: Bensei shuppan, 2016).

⁴⁴ Hiraoka Ryūji 平岡隆二 and Hibi Kayoko 日比佳代子, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen’*” 史料紹介 細井広沢編『測量秘言』, *Kagakushi kenkyū* 科学史研究 43, no. 230 (2004): 94–105; Urakawa Kazuo 浦川和男, “*Hosoi Kōtaku hen ‘Sokuryō higen’*” 細井広沢編『測量秘言』, *Tōgakushi kenkyū* 洋学史研究 28 (2011): 118–56. All of the letters, as transcribed by Hiraoka and Hibi, are reproduced in the appendices of the present study.

how cosmological expertise could be mobilized to serve the purposes of the Tokugawa regime and boost the status of the city as a venue for knowledge production and circulation.

Finally, there is another source that provides an additional perspective on the activities of Nagasaki's scholars, namely the official journals, or *dagregisters*, kept by the head (*opperhoofd*) of the outpost of the Dutch East India Company in Japan. The manuscript journals kept at the National Archives of the Netherlands (*Nationaal Archief*) have all been digitized and are easily consultable online, covering both periods when the VOC factory was located in Hirado (1609–1641) and the artificial island of Dejima in the Nagasaki bay (1641–1860).⁴⁵ For this study, I have consulted the original entries chiefly for the beginning of the 18th century, around the early years of the reign of Tokugawa Yoshimune. Although there are English translations of the marginalia of these journals from 1700–1740 that have been organized to provide valuable information on the numerous figures who interacted with the Dutch merchants,⁴⁶ the original entries offer yet further clues as to how cosmological circulated not only in Nagasaki but also around Japan.

Methodological approaches and structure of the dissertation

Similar to the phenomena it examines, this study is a composite of eclectic elements. Anchored to the sources described above, it combines prosopographical and bibliographical approaches with close textual analyses and a broader focus on the circulation of specific cosmological notions. This unusual organization reflects the complexity of the subject, requiring multiple perspectives to unravel the monitored connections announced in the title. These connections consisted of relationships that scholars in Nagasaki established with other scholars, authorities, and booksellers in different parts of Japan, but also most importantly, they refer to the scholars' interactions with licit and illicit forms of knowledge arriving from the continent. As we shall see in the next four chapters, the early modern cosmological scholarship of Nagasaki, including but not limited to its *nanban* facets, emerged at the intersection of transnational and transregional forces that both delimited and enlarged its boundaries.

⁴⁵ <https://www.nationaalarchief.nl/en/research/archive/1.04.21/>

⁴⁶ Rudolf Bachofner and Paul van der Velde, eds., *The Deshima Diaries: Marginalia 1700-1740*, Nichi-Ran Gakkai Gakujutsu Sōsho 12 (Tokyo: Japan-Netherlands Institute, 1992).

In the first chapter, I present the position of Nagasaki in Tokugawa Japan as a gateway to Eurasia and beyond, simultaneously open to the influx of a large number of merchants and heavily regulated by local and central authorities. I begin with an examination of the anti-Christian policies adopted by the shogunal regime in the first decades of the 17th century, and the long-term impact of such all-out efforts to eradicate the religion from the archipelago. I then turn to the position of the Chinese communities in a city undergoing profound changes, comparing them to the newly arrived VOC representatives as both cultural mediators and informants for the shogunate. The third section of the chapter tackles the consequences of the fall of the Ming dynasty in the continent for the commercial activities of Nagasaki, emphasizing how it also shaped the intellectual development of Japan as a whole. The first chapter concludes with an analysis of Sinitic texts associated with Jesuit knowledge that were banned under the Tokugawa, introducing cosmological works that later circulated in Japan, and indicating that censorship in the city had very specific targets.

The second chapter takes the notion of censorship and shows its productive dimensions for articulating a distinctive local tradition enmeshed in transregional and transnational eclectic forms of knowledge. It starts with the figure of Mukai Genshō 向井元升 (1609–1677), the father of Mukai Gensei mentioned above, highlighting his role not only as a censor of Sinitic books that passed through Nagasaki but also as a curator of “barbarian” knowledge from European sources. This leads to the second section of the chapter, which describes how Gensei built on the legacy of his father, expanding the dual role of censor and curator assigned to him, and consolidating the academy Nagasaki Seidō as a center for the promotion of Confucian orthodoxy in Japan. The third section of the chapter utilizes *Nagasaki senmin den* as a source to delve into how the Ro clan was able to construct a discourse of Nagasaki’s scholarship as a cosmopolitan enterprise, recognized well beyond its immediate sphere of influence; whereas the fourth section incorporates information from *Sokuryō higen*, underscoring how the heritage of local cosmological knowledge was greatly determined by practical navigational astronomy that first circulated in the city thanks to border-crossing seafarers. The fifth section of the chapter explores the documents from the Ro archives and demonstrates how Sōsetsu’s scholarly activities were in constant dialogue with developments in Ming China as well as the two capitals of Kyoto and Edo.

The third chapter marks the second half of this study, in which we turn our attention to Joken and his activities more specifically, while still engaging with the three main sources associated with Sōsetsu. I start with an overview of Joken’s biographies, challenging the received interpretation that he represented an early proponent of “Western” scientific

rationality and empiricism in Tokugawa Japan. The second section of the chapter collates Japanese accounts of Joken's and Sōsetsu's summons to Yoshimune's court with information found in the journals of the VOC *opperhoofden* on their annual visit to Edo, which coincided with the trip of the two scholars from Nagasaki. Closely related to the summons and the VOC visit, Yoshimune's decision to unban some Jesuit-adjacent cosmological books is also discussed, leading into the next section. In the third section, I contextualize the shogun's interest in acquiring updated technical knowledge from eclectic sources within his larger projects of calendrical rectification and economic reform. In the fourth section, I return to the role of the Dutch merchants in providing Yoshimune with miscellaneous information, acting as loyal purveyors of goods and intelligence. The fifth section concludes the chapter by revealing exactly what types of astronomical and geographical knowledge the shogun was attempting to gather from Sōsetsu and Joken as well as the VOC officials.

In the fourth chapter, I delve into the details of Nagasaki's hybridized cosmologies as represented by Joken's writings. The first section offers a holistic picture of the works produced by Joken, with particular emphasis on how books that circulated in print and as manuscripts differed from one another. By classifying his publications according to a literacy spectrum ranging from Sinitic to vernacular registers, I evaluate the various types of readership at which they were aimed, identifying an overall cosmological discourse and an edifying streak that permeates them. The second section develops the themes of "civilization" and "barbarity" as categories used in Joken's more popular geographical works to explain the existence of many inhabited lands beyond the familiar framework of the Sinosphere. I argue that there was a palimpsest of knowledge that informed his views concerning the position of China, Japan, and Asia as a whole on a spherical world with no obvious center. In the third section, I shed light on Joken's use of ancient Chinese cosmological theories to justify empirical approaches to astronomy in his day, framing them in a long tradition of the armillary sphere going back to the sages of antiquity. I show how Joken operates within a division of astronomical phenomena into their immutable "celestial" aspects and their "human" components as manifested in timekeeping and calendar production. In the fourth section, I conclude this study by addressing head-on the key notions of the composite cosmologies that Joken embodied, and how they were related to the interplay between Jesuit knowledge and late Ming scholarship. This last section demonstrates Joken's strategies to obfuscate the hybridized nature of his cosmological views, masking its Catholic elements behind a discourse that fully supports Confucian orthodoxy as the ultimate paradigm.

CHAPTER ONE:

A STRICTLY CONTROLLED GATEWAY TO THE WORLD

Located at the tip of the southern island of Kyushu connecting Japan to the Eurasian continent, the port city of Nagasaki occupied a unique position in the archipelago during the early modern era. Nagasaki was at the heart of a range of economic, political, and cultural transformations that marked the shift into the early modern period in Japan, and cosmological knowledge played a central role in this process. Originally a small fishing village, starting in the 1570s Nagasaki became a transnational commercial port dominated by missionaries of the Society of Jesus.¹ In the 17th century, the city turned into a strategic commercial port during the reign of the Tokugawa 徳川 – also known as the Edo 江戸 period (1603–1868), named after the political capital where the shogun resided, in present-day Tokyo.

During the early days of the shogunal regime, Christianity was strongly suppressed, and the Catholic missionaries were chased away. The early presence of the Jesuits in the city, who came with the Portuguese traders in the wake of Iberian expansion throughout Asia, established a foundation for the assimilation of elements of their doctrine and created an environment fraught with tension surrounding the spread of their religion in Japan. In the intervening period between the late 16th century and the early 17th century, Nagasaki shifted from being a hub for the promotion of the Catholic faith to a stronghold in the efforts to eradicate it.

This shift started as early as 1587 when Toyotomi Hideyoshi 豊臣秀吉 (1536–1598) – the successor to Oda Nobunaga 織田信長 (1534–1582) in unifying Japan – issued an edict banning both the trade of enslaved people carried out by Portuguese merchants and the activities of the Jesuit missionaries in the archipelago.² The next year, the city was put under the direct control of Hideyoshi, and the first Nagasaki intendant (*Nagasaki daikan* 長崎代官) was appointed.³ This hands-on approach to the administration of Nagasaki was continued by the first shogun Tokugawa Ieyasu 徳川家康 (1543–1616), who ruled under this title between

¹ On the development of early Nagasaki and the role of the Jesuits, see Reinier H. Hesselink, *The Dream of Christian Nagasaki: World Trade and the Clash of Cultures, 1560-1640* (Jefferson: McFarland & Company, 2016), 19–75.

² Hesselink, 80.

³ Hesselink, 85.

1603 and 1605 – when he appointed his son Tokugawa Hidetada 徳川秀忠 (1579–1632) as his successor – but retained considerable power until his death. The position of the Nagasaki intendant, also called that of Nagasaki magistrate (*Nagasaki bugyō* 長崎奉行),⁴ was maintained into the Tokugawa regime and acquired growing importance as the shogunate tightened its control over the commerce going through the port city.⁵

In 1601, the shogunal authorities implemented a system of official permits known as the “vermillion seal” (*shuin* 朱印) to control the Japanese trading vessels allowed to sail to ports in Southeast Asia. In 1612, Ieyasu issued an initial ban on Christianity, carrying out increasingly expansive measures against missionaries and converts in his lands, including Nagasaki. Two years later, an edict known as *Bateren tsuihō no fumi* 伴天連追放之文 (“Proclamation on the expulsion of the padres”) was signed by the second shogun Hidetada; it was a critical point in the Tokugawa escalating campaign to eradicate the religion from Japan.⁶

The measures in the first decades of the 17th century were still somewhat limited in scope. As political power was not yet completely centralized, many domains in Kyushu enjoyed considerable autonomy. In an attempt to eliminate the leadership of the Christian converts, the shogunate executed several prominent members of the community in Kyoto in 1619, Nagasaki in 1622, and Edo in 1623, where it exercised its authority.⁷ In the 1630s, the shogunate started carrying out increasingly restrictive policies around transnational trade and the movement of people in and out of the archipelago. In 1635, Nagasaki became the sole port of trade for Chinese merchants. At the same time, the vermillion seal system was abolished, so Japanese traders were prohibited from leaving the country and those living abroad were unable to return. In 1636, the mixed children of Portuguese and Japanese who lived in Nagasaki were banished to Macao, and the remaining Portuguese merchants were

⁴ Until 1638, both *Nagasaki daikan* and *Nagasaki bugyō* seemed to have been used interchangeably to designate the direct representative of the shogunate in the city, sometimes translated as governor. For consistency, in this study I always use the term Nagasaki magistrate to refer to the function of *Nagasaki bugyō*. See Hesselink, 128.

⁵ On the sociopolitical organization of the city, Nagasaki shishi hensan iinkai 長崎市史編さん委員会, ed., *Shin Nagasaki shishi* 新長崎市史, vol. 2 (Nagasaki: Nagasaki-shi, 2012), chap. 3.

⁶ There is a partial translation of the edict in Kiri Paramore, *Ideology and Christianity in Japan*, Routledge/Leiden Series in Modern East Asian Politics and History 4 (London: Routledge, 2009), 53–59. For full translations in English and French, as well as a more detailed commentary on this text, see Nathalie Kouamé, “The Sûden’s Anti-Christian Edict (1614),” in *Encyclopédie Des Historiographies : Afrique, Amériques, Asies*, ed. Éric P. Meyer, Anne Viguier, and Nathalie Kouamé, vol. 1, TransAireS (Paris: Presses de l’Inalco, 2020), 1760–79, <http://books.openedition.org/pressesinalco/31744>.

⁷ Martin Nogueira Ramos, “Renier sa foi sans perdre son âme. Les catholiques japonais au début de la proscription (XVIIe s.),” *Cahiers d’études des cultures ibériques et latino-américaines*, no. 5 (2019): 182.

confined to the artificial island of Dejima 出島, which started being built in 1634 in the Nagasaki bay specifically for the purpose of housing them.

By 1639, the Portuguese were expelled from Nagasaki and banned from reentering the country. Two years later, the factory of the Dutch East India Company (VOC), previously located in Hirado 平戸,⁸ was transferred to Dejima, and the Dutch replaced the Portuguese as European interlocutors with the Japanese regime. Nagasaki became, by the mid-17th century, the only authorized port for trade with Chinese and European merchants, first the Portuguese and then the Dutch. It was also the single port of entry into Japan directly administered by Tokugawa authorities, who kept it under strict surveillance.⁹ The combination of transnational traders coming to the port, a dynamic local community of Chinese residents, and a population comprised almost entirely of merchants contributed to creating a distinctive form of scholarship associated with the city.¹⁰

⁸ The small natural island of Hirado, located about a hundred kilometers north of Nagasaki, was one of the Japanese ports for commerce with Chinese and European merchants in the 16th and early 17th century before all foreign trade was moved to Nagasaki. The VOC had an outpost there between 1609 and 1641. See Adam Clulow, “From Global Entrepôt to Early Modern Domain: Hirado, 1609–1641,” *Monumenta Nipponica* 65, no. 1 (2010): 1–35.

⁹ Arano Yasunori developed the concept of “four openings” (*yottsu no kuchi* 四つの口) through which goods could enter and leave Japan after the implementation of what he designates as the “maritime bans” (*kaikin* 海禁) – a term used for analogous policies in Ming and Qing China. Nagasaki was the only “opening” under the unmediated authority of the shogun instead of being controlled by a local domanial lord. Arano, *Kinsei Nihon to higashi Ajia*, 161–244.

¹⁰ For an overview of the scholarship of Nagasaki in the *longue durée*, see Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, vol. 2, chap. 8.

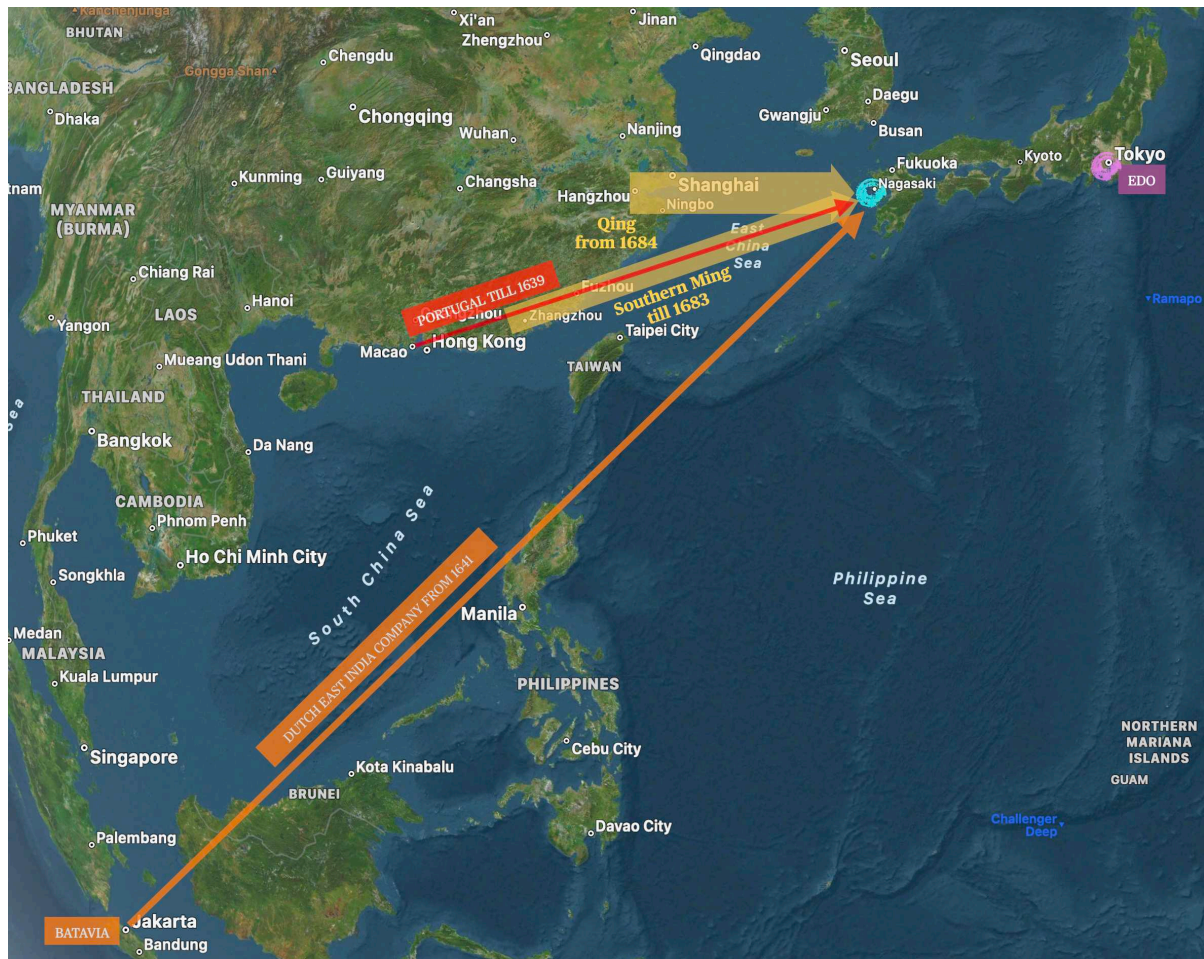


Figure 1.1. Satellite image of East and Southeast Asia showing the trading routes that came to Nagasaki in the 17th century (author's creation)

This chapter is divided into four sections. The first section presents the strategic position of Nagasaki to the Tokugawa regime, with particular emphasis on the shogunal attempts to eradicate Christianity from its soil. I delve into the enduring impact of the anti-Christian policies on early modern Japanese society, and how they shaped Nagasaki's intellectual landscape. The second section turns to the role of the Chinese community that emerged in the city in the first half of the 17th century and contrasts it with a considerably smaller but also significant Dutch presence in the form of VOC officials.

The third section of this chapter concerns the transition from the Ming 明 (1368–1644) to the Qing 清 dynasty (1644–1912) in the continent and its consequences for Nagasaki and Japan at large. I analyze what notions of “civilization” and “barbarity” meant for Japanese scholars and authorities in this context and frame the discussion within shogunal attempts to consolidate a new political order. The last section returns to the measures against the spread of Christianity carried out by the shogunate, and I investigate the proscription of

specific written works that were deeply intertwined with Jesuit activities in China. I demonstrate that the ban targeted mainly figures surrounding the Italian Jesuit Matteo Ricci (1552–1610), whose cosmological views still circulated in Nagasaki and throughout the Japanese archipelago despite the suppression of their works.

1. A regional hub for circulating goods and knowledge

Early modern Nagasaki was a highly connected city that ensured a constant flow of goods and information throughout the region and beyond; it was a nodal point linking the Japanese market with major regional and global trading routes. It was the main port of entry for Chinese merchants, monks, and scholars who emigrated to Japan throughout the 16th and 17th centuries.

Until 1635, Chinese merchants called at different ports throughout Kyushu, from the Fukuoka 福岡 domain on the northern tip of the island to the Satsuma 薩摩 domain in the south. After that year, the shogunate restricted all commercial activities with Chinese junks (*tōsen* 唐船) to Nagasaki, which greatly impacted the culture of the city. From a privileged point of contact between Japan and the continent, the port city turned into the sole place to obtain goods, books, and information that Chinese traders brought.

Even before the Chinese were limited to entering Japan through Nagasaki only, regional networks in China extended to Japan and were often behind the decisions of émigrés to relocate. As a number of them came from the same regions on the southeastern coast, in particular the Jiangnan 江南 and Fujian 福建 areas, the Chinese diaspora in the city was centered around the shared culture of these local communities. The influx of people, objects, and knowledge from the continent transformed Nagasaki into a focal point for both Chinese scholarship and for gathering intelligence about the world at large.

Besides Nagasaki, other routes connecting Japan to the continent passed through the Tsushima 對馬 domain – to reach the Chosŏn 朝鮮 dynasty (1392–1897) in the Korean Peninsula¹¹ – and through Satsuma, which exerted control over the Ryūkyū 琉球 Kingdom (1429–1879) in present-day Okinawa, the latter ambiguously aligned with Tokugawa Japan

¹¹ On the position of Tsushima vis-à-vis Tokugawa Japan and Chosŏn Korea, see James B. Lewis, *Frontier Contact between Chosŏn Korea and Tokugawa Japan* (London: Routledge, 2003), chap. 3.

and China at the same time.¹² These other routes, although helping inform Japanese authorities about affairs beyond their borders, were mediated by local domanial lords (*daimyō* 大名), and were arguably less crucial for the development of cosmological thought in early modern Japan.

The highest authorities in Nagasaki were not *daimyō* but rather the Nagasaki magistrates representing the unmediated power of the shogun. Despite it being a shogunal city, directly administered by the shogunate itself, its population was composed almost entirely of merchants. While the function of the Nagasaki magistrates was fulfilled by individuals belonging to the warrior class who rotated in office, all those below them were townspeople. The magistrates, together with local officials, exerted tight control over commerce. They were the liaison between the shogunate and international powers. Nagasaki was embedded in regional geopolitics and could offer protection to de facto stateless Chinese merchants trading in Southeast Asia. The magistrates would, for instance, act as mediators in international conflicts occurring far from Japanese shores between Dutch merchants and Chinese junks attacked by them. At times, the magistrates even had some leverage to pressure the VOC to compensate the Chinese merchants attacked by its employees.¹³

Local scholar Nishikawa Joken 西川如見 (1648–1724) described many distinctive traits of the city in his book *Nagasaki yawa gusa* 長崎夜話草 (“Notes on the night stories of Nagasaki”) – organized by his son Nishikawa Seikyū 西川正休 (1693–1756) and published in 1720. At the beginning of this work, one finds the following account:

The combined [rice production] of the three domains of Nagasaki, Yamasato, and Fuchimura, being that of about three thousand four hundred *koku*, is insufficient for quenching the thirst of the population of fifty thousand. However, due to the bustle of boats [from] civilized and barbarian [lands] with merchandise [valued at] two hundred thousand coins that reach more than four thousand families and ten thousand households, there is an abundance for the palate of fish and plants, birds and beasts, Chinese fruits and vegetables, and rare barbarian confectioneries; [sounds from] the wind and string instruments of the Chinese fill the ears; gems and pearls, brocade and embroidery delight the eyes. There are skillful works of calligraphy and skillful paintings, there are poems and songs, and there are

¹² On the political situation of Ryukyu in the 17th century, see Gregory Smits, *Maritime Ryukyu, 1050-1650* (Honolulu: University of Hawai'i Press, 2019), 224–44.

¹³ Adam Clulow, “Determining the Law of the Sea: The Long History of the Breukelen Case, 1657–1662,” in *Sea Rovers, Silver, and Samurai: Maritime East Asia in Global History, 1550-1700*, ed. Tonio Andrade and Xing Hang, *Perspectives on the Global Past* (Honolulu: University of Hawai'i Press, 2016), 181–201.

numerous handicrafts both in the Chinese style and in the barbarian manner. In the pursuit of pleasure, one need not envy the splendid capital [Kyoto].

長崎・山里・淵村の三庄合せて三千四百餘石にて、民口五萬の喉をうるほすに乏しといへども、華夷の船の商ひ物二十萬金のぞめきあれば、家は四千餘り、竈は一萬に及びて、魚菜鳥獸、唐土の菓菜、蠻夷の珍菓口に饒かに唐人の管弦耳を富まし、珠玉錦繡目をとろこぼしむ。能書あり、能畫あり、詩あり、歌有、唐様蠻風の細工品々おほかり。樂みを求むるに華洛を羨むべからず。¹⁴

Due to its strategic geopolitical position, Nagasaki was pivotal in the circulation of astronomical and geographical knowledge from China, Europe, and beyond throughout the Japanese archipelago. It was a place where one could obtain technical information about navigation, learn about calculations for predicting eclipses, or be exposed to various theories surrounding the form and constitution of heaven and earth. Knowledge from China, old and new, arrived in the form of books that were imported through Chinese junks and was also circulated by scholars and monks from the continent who visited the city. European notions about the earth as a static orb surrounded by rotating concentric celestial spheres were conveyed in books and objects brought by both Chinese and Dutch merchants, not to mention the heritage of Jesuit missionaries who wrote their own works while in Japan. These disparate elements were all part of the scholarship unique to Nagasaki and were key in the transformation of cosmological paradigms that spread throughout the rest of the country.

1.1. *Policies against Christianity and their ramifications*

Up until the early 18th century, the shogunate was intent on eradicating Christianity from Japanese soil, even if the imprisonment of Catholic missionaries and converts gradually decreased. The last representative figured to be persecuted and interrogated was the Italian missionary Giovanni Battista Sidotti (1668–1714), who made his way into Japan in 1708 and was imprisoned at the so-called *Kirishitan yashiki* 切支丹屋敷 (“Christian residence”) in Edo.¹⁵ After Sidotti’s death there, the prison housed common criminals before ceasing to be

¹⁴ Nishikawa Joken 西川如見, *Chōnin bukuro, Hyakushō bukuro, Nagasaki yawa gusa* 町人囊・百姓囊・長崎夜話草, ed. Iijima Tadao 飯島忠夫 and Nishikawa Tadayuki 西川忠幸 (Iwanami shoten, 1942), 220–21.

¹⁵ See chapter four of the present study.

employed altogether in 1792, once the function of “inspector of sects” (*shūmon aratame yaku* 宗門改役) for prosecuting suspected Christians was abolished.¹⁶

The memory of the Iberians continued, even well into the first half of the 18th century, to be inextricably linked with the activity of the Jesuits, who had been brought to Japan aboard Portuguese ships. The shogunal regime perceived what was often called the “sect of Jesus” (*yaso shūmon* 耶蘇宗門)¹⁷ as a foreign threat to be combatted, for it inspired peasant revolts that could upset the political order of the newly unified country. Catholic missionaries, under the aegis of Iberian powers, were targeted as the main source of disruption. The Society of Jesus – arguably the religious order that had the most concrete results in spreading the religion in China and Japan – was one of the sworn enemies of the regime, although not necessarily identified by name.

Jesuit writings, produced in Chinese and Japanese, impacted cosmological views both in the continent and in the Japanese islands, reaching at the same time scholars for and against Christianity. In Japan, the Jesuits and their followers were severely suppressed after the rise of the Tokugawa regime. The shogunal authorities banished the missionaries from the country and forced the few who remained together with local converts to apostatize by means of torture, often executing those who refused to renounce their faith.

A turning point in the repression of Christianity and its converts was the revolt of Shimabara-Amakusa 島原天草, lasting between 1637 and 1638. This was a large-scale peasant rebellion that took place in the Shimabara peninsula and the Amakusa islands, adjacent areas respectively to the east and south of the city of Nagasaki. Although these lands belonged to local *daimyō* – and thus were not under the direct control of the shogunate – the uprising was of great concern for the central authorities in Edo. As it gradually acquired messianic traits from Christian figures who led the rebellion, both shogunal and domanical

¹⁶ Hubert Cieslik and Gustav Voss, eds., “Das Kirishitan-Yashiki,” in *Kirishito-Ki Und Sayō-Yoroku: Japanische Dokumente Zur Missionsgeschichte Des 17. Jahrhunderts*, Monumenta Nipponica Monographs (Tokyo: Sophia University, 1940), 191–202; George Elison, *Deus Destroyed: The Image of Christianity in Early Modern Japan*, Harvard East Asian Monographs 141 (Cambridge: Harvard University Press, 1988), 241–42.

¹⁷ Here and elsewhere in this study I follow the nomenclature proposed in Pierre-Emmanuel Roux, “The Prohibited Sect of Yaso: Catholicism in Diplomatic and Cultural Encounters between Edo Japan and Chosŏn Korea,” in *Space and Location in the Circulation of Knowledge (1400-1800): Korea and Beyond*, ed. Marion Eggert, Felix Siegmund, and Dennis Würthner, Research on Korea 1 (Frankfurt: Peter Lang, 2014), 119–40. Roux equates the “Yaso sect” in both Japan and Korea with Catholicism, indicating that the use of the term “Yaso” for Jesus is in all likelihood borrowed from Chinese languages. As there were only Catholic missionaries in East Asia during the 16th and 17th centuries, one could argue that the designation of “Yaso sect” applies to Christianity in general, being thus interchangeable with the more widespread term *kirishitan* 切支丹, itself derived from Portuguese *cristão* (“Christian”).

authorities were mobilized to suppress it.¹⁸ Even Dutch ships were summoned to fire their cannons at the castle of Hara 原 in the Shimabara peninsula, where the insurgents had barricaded themselves in their final confrontation with the authorities.¹⁹

This was the largest demonstration of military support that the VOC, then still stationed in Hirado, showed toward the shogunate.²⁰ As opponents to the Portuguese and the Spanish in their enterprise in Asia, Protestant Dutch merchants had little sympathy toward the insurgent Catholic converts. Their collaboration with authorities soon bore fruits. Once the Portuguese traders, closely associated with the sect of the rebellious peasants, were banned from entering Japan, the Dutch quickly replaced them in the economic ecosystem of Nagasaki. While there has been an ongoing debate in Japanese historiography surrounding the ultimate causes that led to the uprising – whether it was mainly due to economic reasons, as a reaction to the imposition of heavy taxes, or essentially religious, spurred by Catholic leaders fighting against persecution – its strong Christian elements are undeniable.²¹ Dutch merchants themselves were aware that among the insurgents there were Catholic converts who burned down shrines and temples and built churches in their stead but that should not have deterred them from shelling the barricades, for they represented the Catholic faith of the Iberian powers, avowed enemies of the VOC.²²

More importantly, shogunal authorities unequivocally perceived it as a Christian revolt and reacted accordingly. In *Tokugawa jikki* 徳川實紀 (“Veritable records of the Tokugawa”), compiled by shogunal officials in the first half of the 19th century, the peasants are described as “having plotted a rebellion to promote the teaching of the Lord of Heaven” (天主教を奉するもの一揆をくはだて), which was “strictly prohibited all over the realm” (天下の大禁).²³ The “teaching of the Lord of Heaven” 天主教 (Ch. *tianzhujiao*, Jp. *tenshukyō* 天主教) was the term adopted by Jesuits in China to designate their own religion, still used today (mainly in Chinese languages) as a name for Roman Catholicism in East Asia. The

¹⁸ Historical sources indicate that over thirty-seven thousand men and women were barricaded in the castle. Koga Jūjirō 古賀十二郎, ed., *Nagasaki shi seihen* 長崎志正編 (Nagasaki: Nagasaki bunko kankōkai, 1928), 261.

¹⁹ Nagasaki kenshi hensan iinkai 長崎県史編纂委員会編, *Taigai kōshō-hen* 対外交渉編, Nagasaki kenshi 長崎県史 (Yoshikawa kōbunkan 吉川弘文館, 1963), 198–200.

²⁰ Adam Clulow, *The Company and the Shogun: The Dutch Encounter with Tokugawa Japan*, Columbia Studies in International and Global History (New York: Columbia University Press, 2014), 125–28.

²¹ On the religious motivations of the insurgents, cf. Martin Nogueira Ramos, *La foi des ancêtres: chrétiens cachés et catholiques dans la société villageoise japonaise (XVIIe-XIXe siècles)* (Paris: CNRS Editions, 2019), 76–86.

²² Clulow, *The Company and the Shogun*, 2014, 125.

²³ *Tokugawa jikki* 徳川實紀, vol. 2 (Tokyo: Keizai zakki sha, 1904), 465.

violent suppression of the Shimabara-Amakusa revolt was an integral part of the Tokugawa battle against Christianity.

1.2. *Cutting the “heretical sect” at the root*

Nagasaki scholars themselves did not fail to notice the significance of the Shimabara-Amakusa revolt as a milestone in the shogunal campaigns to eradicate Christianity from Japanese soil. Nishikawa Joken was one to establish a correlation between the aftermath of the uprising and the definitive expulsion of the Portuguese in 1639. His aforementioned *Nagasaki yawa gusa* contains a section titled “On the suppression of the heretical sect and the cessation of [commerce] with the black ships” (邪宗門制禁并黒船停止之事), in which Joken argues that the revolt was a catalyst for the shogunal measures against the missionaries and the Iberians as a whole.

With the black ships arriving [in Nagasaki] every year, the alien doctrine of Jesus gradually became widespread. Farmers from [the villages of] Amakusa and Takaku who followed the heretical sect [of Christianity], enraged with the harsh rule of their lords, formed a faction and seized the ruins of the castle of Hara in southern Arima, in which twenty thousand men and women barricaded themselves. (...) The fact that this upheaval took place, originating from the alien doctrine of the southern barbarians (i.e., Iberians), led to further animosity from the shogun, who ultimately imposed a ban on the black ships (...) and drove them away, issuing the strict order that they should not come to Japan ever again. From this moment, the route of the black ships reaching Japan was terminated. Although the shogun had by then already ordered that the teaching of the heretical sect be ceased, it had not been applied consistently. It was from this time [after the revolt] that [Christianity] was cut at the root and its leaves withered.

黒船年毎に來りしにつれて、耶蘇の外法漸くにひろまり、天草・高來の農民邪宗隨ひ、領主の苛政を憤り、徒黨を催し、南有馬・原の城の廢跡を取たて、男女二萬人楯籠りぬ。 (...) かゝる亂逆のおこりも、南蠻の外法より出きにければ、公けの御惡み深く成て、終に黒船御制禁として (...) 重ねて日本に來るべからずと堅く仰ありて歸されぬ。夫より黒船日本渡海のみち絶たり。此さきより邪宗の教へをば公けよりとゞめさせ玉ひしかど、いまだ一統に及ばざりしを、此時よりこそ根をたち葉を枯し玉ふ事となりぬ。²⁴

²⁴ Nishikawa, *Chōnin bukuro*, *Hyakushō bukuro*, *Nagasaki yawa gusa*, 226–27.

Joken identifies the ban on the “black ships” (*kurofune* 黒船)²⁵ of the Portuguese ever coming back to Japan as the culmination of the attempts by the shogunate to obliterate all followers of the “alien doctrine of Jesus” (*yaso no gehō* 耶蘇の外法) – i.e., Christianity, or more specifically, Roman Catholicism as propagated by Jesuit missionaries. One of the goals was to prevent once and for all that other such rebellions took place.

Terms such as “alien doctrine” (*gehō* 外法) and “heretical sect” (*jashū* 邪宗) represent foreign ideas that did not conform to the orthodox doctrines sanctioned by the regime, which were themselves a combination of Buddhism, Shinto, and Neo-Confucian elements. While notions associated with the Jesuits were not so easily erased, especially in the domain of cosmological knowledge, the vigorous suppression of Catholic converts both in and around Nagasaki made it dangerous to openly espouse them. The promotion of a discourse of intellectual orthodoxy while adopting an eclectic approach to knowledge would shape the scholarship of Nagasaki.

1.3. *Long-lasting consequences*

In the aftermath of the Shimabara-Amakusa revolt, the shogunate implemented a registry system of affiliation with Buddhist temples known as *tera uke* 寺請 (“temple application”) throughout the archipelago as part of broader policies designated as *shūmon aratame* 宗門改 (“inspection of religious sects”).²⁶ All Japanese, regardless of class, had to demonstrate their affiliation with Buddhist temples and Shinto shrines. Suspected Christians even had to undergo what was then called *fumie* 踏繪 or *efumi* 繪踏 (“treading on images”), that is, the practice of desecrating a religious symbol by stepping on it to prove that they did not adhere to Christianity.²⁷ In Nagasaki in particular, even before the revolt, there was a continuous proliferation of Buddhist temples backed by the shogunal power to supplant the

²⁵ This term is adopted, not unintentionally, once again in the late 19th century to describe the American ships that pressured the shogunate to open its ports to commerce with them.

²⁶ For a concise description of the outcome of the revolt, and the implementation of the *shūmon aratame* system that ensued, see Ōhashi Yukihiro 大橋幸泰, *Kenshō Shimabara Amakusa ikki* 検証島原天草一揆, *Rekishu bunka raiburari* 歴史文化ライブラリー 259 (Tokyo: Yoshikawa Kōbunkan, 2008), 140–52. See also Nam-lin Hur, “Anti-Christian Temple Certification (Terauke) in Early Modern Japan: Establishment, Practice, and Challenges,” in *Religion, Power, and the Rise of Shinto in Early Modern Japan*, ed. Stefan Köck, Brigitte Pickl-Kolaczka, and Bernhard Scheid (New York: Bloomsbury Academic, 2021), 21–32.

²⁷ Paramore, *Ideology and Christianity in Japan*, 55; Hur, “Anti-Christian Temple Certification (Terauke) in Early Modern Japan: Establishment, Practice, and Challenges,” 23.

presence of Catholic institutions that formerly dominated the city.²⁸ The increasing presence of Buddhist monks in Nagasaki changed the landscape of this contact zone, with the local Chinese community also clustering around temples as a way to demonstrate their distance from the Christian faith. Throughout the 17th century, Zen (Ch. *Chan* 禪) monks would connect the city not only to the imperial capital Kyoto but also to the continent, as the newly formed Ōbaku (Ch. Huangbo 黃檗) sect quickly became a vital part of the local religious scene.

Despite the harshness of shogunal measures and the increasing sense of urgency in extirpating Christianity throughout the realm, recent research suggests that the regime lacked an overall cohesive plan, relying rather on ad hoc repressive policies.²⁹ In the 1640s, shogunal authorities remained apprehensive about the possibility of new Christian-inspired revolts resembling that of Shimabara-Amakusa still fresh on their minds. The specter of the “heretical sect of Jesus” was at the same time a menace that originated abroad and an insidious force from within the archipelago that could lead to violent uprisings.

The incremental steps taken against Catholic missionaries and converts had a considerable impact on the cultural and intellectual landscape of Nagasaki. The preeminent role of the Portuguese and their associates as intermediaries between Japan and European powers was over. Except for a few missionaries who tried to reach the Japanese islands until the 1640s and two last Portuguese embassies that attempted to renegotiate their position with the Tokugawa regime – the first ending with the whole crew being executed and their ship burned down, and the second failing to even disembark³⁰ – Iberian sailors and the Jesuit missionaries were no longer anywhere to be seen.

The Dutch had proved themselves useful allies for the shogun and were transferred to Nagasaki as more reliable interlocutors with the shogunal regime. Unencumbered by the proselytizing aspirations of the Catholic missionaries, Protestant Dutch merchants held the discourse of coming to Japan strictly for business, and ensured that the shogunate recognized

²⁸ See Carla Tronu, “Sacred Space and Ritual in Early Modern Japan: The Christian Community of Nagasaki (1569-1643)” (Ph.D., London, SOAS, University of London, 2012), chap. 8; Carla Tronu, “Anti-Christian Measures in Nagasaki During the Early Edo Period (1614–44),” in *Religion, Power, and the Rise of Shinto in Early Modern Japan*, ed. Stefan Köck, Brigitte Pickl-Kolaczia, and Bernhard Scheid (New York: Bloomsbury Academic, 2021), 47–60.

²⁹ Kouamé, “The Sūden’s Anti-Christian Edict (1614);” Martin Nogueira Ramos, “The Monk and the Heretics: A Reappraisal of Sessō Sōsai’s Anti-Christian Documents (Mid-Seventeenth Century),” *Japan Review*, no. 35 (2021): 59–90.

³⁰ See, for instance, Boxer, *The Christian Century in Japan, 1549-1650*, 384–89.

them as willing partners.³¹ With the disappearance of the Iberian Catholics and the suppression of their enterprise of religious expansion, the 1640s inaugurated a new transitional period in the scholarship of Nagasaki. Any association with Christianity was potentially punishable with torture and execution, forcing Catholic converts to go underground. The new presence of the VOC merchants in town provided yet a new window into the world, adding to the mixture of an already diverse environment.

2. The Chinese diaspora in a transforming city

While the assimilation and transformation of Chinese paradigms in Japan can be traced back to the very beginnings of the country as a politically organized entity,³² the 17th century inaugurated a distinct period of interaction between Japanese scholars and knowledge from the continent. For Chinese literati, Nagasaki might not have appeared at first as the most evident place of settlement. Throughout the largest part of the Ming dynasty, there was little incentive for scholars in China to even conceive of a life outside of their own civilizational sphere. While their Japanese counterparts saw in Chinese traditions a shared heritage, often attempting to emulate the model of the continental “ancient sages” (*kosei* 古聖), the admiration was far from being reciprocal.

Why would Chinese scholars permanently relocate to what was considered a culturally inferior land if not because they were forced to leave? Although it may be impracticable to determine the precise reasons for the departure of all scholars who established themselves in Nagasaki or even further afield in the Japanese archipelago, it is not difficult to imagine that major political and social upheavals caused by the Manchu conquest of China during the Ming-Qing transition (1618–1683) were a central factor for a sizable number of émigrés. Besides, once the commercial activity of Chinese junks arriving in Kyushu was restricted to Nagasaki in 1635, merchants residing in other port cities such as Fukuoka 福岡 to the north and Satsuma 薩摩 to the south relocated to the city, contributing to the swift growth of the local expatriate community.

³¹ Adam Clulow, *The Company and the Shogun: The Dutch Encounter with Tokugawa Japan*, Columbia Studies in International and Global History (New York: Columbia University Press, 2014), 95–131.

³² cf. Sugimoto and Swain, *Science and Culture in Traditional Japan, A.D. 600-1854*, chap. 1; Joshua A. Fogel, *Articulating the Sinosphere: Sino-Japanese Relations in Space and Time* (Cambridge: Harvard University Press, 2009), chap. 1.

The early members of the Chinese community in Nagasaki were merchants who settled in the city and Buddhist monks affiliated with local temples. Three main temples that served the Chinese diaspora were established in the 1620s and continued to occupy a prominent position in the circulation of people and knowledge from the continent throughout the Edo period. Kōfukuji 興福寺, commonly known as the Nanjing temple (*Nankin-dera* 南京寺), was the first to be founded in 1620. It is mostly associated with those who came from the Jiangnan 江南 region around the southern capital of Nanjing, hence its name. The second temple was Fukusaiji 福濟寺, founded in 1628, and was called either the Zhangzhou temple (*Shōshū-dera* 漳州寺) or the Quanzhou temple (*Zenshū-dera* 泉州寺) after two major port cities in the Minnan 閩南 linguistic and cultural region of southern Fujian 福建 province. The third temple, Sōfukuji 崇福寺, was founded in 1629 and named the Fuzhou temple (*Fukushū-dera* 福州寺) in reference to the major port city in the Mindong 閩東 region of the same province.³³

As their names suggest, these three temples catered to different members of the Chinese community. Those who went to Kōfukuji, the “Nanjing temple,” likely spoke the prestige variety of Mandarin (Ch. *guanhua* 官話) that originated in the southern capital. In the Ming dynasty, it had become a lingua franca among literati and officials from different regions, spreading far beyond its place of origin. The members of Fukusaiji tended to be speakers of Southern Min dialects (Ch. *Minnan yu* 閩南語), also designated under the umbrella term Hokkien.³⁴ Finally, those who spoke Eastern Min dialects (Ch. *Mindong yu* 閩東語)³⁵ congregated in Sōfukuji.

All three temples were originally established to worship the sea goddess Mazu 媽祖 and offered protection to sailors who came to the city.³⁶ Chinese junks carried protective images of the goddess that were then transported to the main hall of these temples not long

³³ Yamamoto Noritsuna 山本紀綱, *Nagasaki Tōjin yashiki* 長崎唐人屋敷 (Tokyo: Kenkōsha, 1983), 146–93; Matsuura Akira 松浦章, “*Shindai hansen no sennai saishi: enkaichi chūiki ni okeru shūkyō denpa no katei ni oite*” 清代帆船の船内祭祀—沿海地域における宗教伝播の過程において, *Higashiajia bunka kōshō kenkyū* 東アジア文化交渉研究, no. 2 (2009): 109–20; Harada Hiroji 原田博二, “*Tōdera to tōsō*” 唐寺と唐僧, in *Nagasaki: tōzai bunka kōshōshi no sutēji* 長崎・東西文化交渉史の舞台, ed. Wakaki Taiichi 若木太一, vol. 2, 2 vols. (Bensei Shuppan, 2013).

³⁴ The use of Southern Min among Chinese diasporic communities is far from being unique to Nagasaki. For a case study of the Hokkien variety spoken in Manila around the same time, see Henning Klöter, *The Language of the Sangleys: A Chinese Vernacular in Missionary Sources of the Seventeenth Century*, Sinica Leidensia 98 (Leiden: Brill, 2011).

³⁵ On the classification of the Min language family, see Jerry Norman, *Chinese*, Cambridge Language Surveys (Cambridge: Cambridge University Press, 1988), 228–39.

³⁶ An overview of the cult of Mazu in Nagasaki is found in Hesselink, *The Dream of Christian Nagasaki*, 122–27.

after arrival. There was a celebratory procession when the images were taken back and forth between the boats and the Chinese quarters.³⁷ Each temple had a strong link with local religious practices from their places of origin and represented the different communities of Chinese seafarers who reached Nagasaki.³⁸

In a city undergoing rapid transformations, Buddhist temples also helped efface the legacy of the Jesuits who formerly dominated the local religious landscape. Even before the establishment of the Tokugawa regime, there were efforts to promote Buddhism to counter the remaining presence of the Jesuits. In 1598, during the reign of Toyotomi Hideyoshi, Goshinji 悟眞寺 was established as the first Buddhist temple in the Nagasaki area, and it received a donation from two Fujianese merchants from Zhangzhou.³⁹ This event, which came after Hideyoshi's expulsion of Franciscan missionaries the previous year, can be seen as a significant first step toward changing the outlook of a city filled with Jesuit churches but under growing pressure.⁴⁰ The three Chinese temples that followed suit more than two decades later played an important role in the context of Tokugawa's battle against Christianity. They offered means to prove that there were no Christian converts among those brought in Chinese junks, for there were fears that Chinese Catholics could be infiltrating the country.⁴¹ As the suppression of the religion intensified throughout the first decades of the Tokugawa shogunate, these temples became part of a growing system designed to combat the spread of Jesuit teachings in Nagasaki and beyond.

The budding Chinese community became more consolidated starting in 1635, once Chinese merchants had their activities restricted to the Nagasaki harbor. The escalation of the conflicts associated with the end of the Ming dynasty around the same time contributed to bringing a wider variety of émigrés to the city besides the usual sailors, including Confucian scholars and Buddhist monks. One of the most prominent figures to make the trip was the Fujianese Zen monk Yinyuan Longqi 隱元隆琦 (1592–1673), known in Japanese as Ingen Ryūki, who arrived in Nagasaki in 1654. He came after repeated invitations from Yiran

³⁷ Harada, "Tōdera to tōsō," 91–92.

³⁸ Nikaidō Yoshihiro 二階堂善弘, "Nagasaki tōdera no masodō to saijin ni tsuite: enkai 'shūen' chiiki ni okeru shinkō no denpa" 長崎唐寺の媽祖堂と祭神について—沿海「周縁」地域における信仰の伝播, *Higashi ajia bunka kōshō kenkyū* 東アジア文化交渉研究, no. 2 (2009): 99–108.

³⁹ Matsuura, "Shindai hansen no sennai saishi: enkai chiiki ni okeru shūkyō denpa no katei ni oite," 110.

⁴⁰ Tronu, "Sacred Space and Ritual in Early Modern Japan," chap. 5.

⁴¹ Matsuura, "Shindai hansen no sennai saishi: enkai chiiki ni okeru shūkyō denpa no katei ni oite," 111.

Xingrong 逸然性融 (1601–1668) – a native of Hangzhou 杭州⁴² and head of Kōfukuji, the “Nanjing temple” – and had many connections with local Fujianese groups.⁴³

Yinyuan Longqi founded in Japan what became known as the Ōbaku sect. Garnering approval from the shogunate, Yinyuan and those around him were able to extend their sphere of influence in the archipelago far beyond Nagasaki. He obtained an audience with the fourth shogun Tokugawa Ietsuna 徳川家綱 (1641–1680) and was given a plot of land in Uji 宇治, on the outskirts of Kyoto, where he founded the head temple Manpukuji 萬福寺 for the newly established sect.⁴⁴ While Ōbaku Buddhism would later become an established lineage in Japan, its initial development was largely due to Nagasaki’s burgeoning Chinese population.

2.1. *Chinese cultural mediators*

The active engagement of Chinese residents in Nagasaki propelled the development of the Ōbaku sect and other forms of contemporary Chinese scholarship. Particularly important to this process were those known as “Chinese interpreters” (*tōtsūji* 唐通事). Acting as mediators between local officials and overseas merchants who spoke different languages, the interpreters often emphasized their personal connections to the continent even when they were many generations removed from their Chinese ancestors. They lived in the interstitial space between the Chinese community and the shogunal authorities they served, often participating in the scholarly and literary circles of the city.

The official role of the Chinese interpreters is reported to have begun in 1604 with a certain Feng Liu 馮六 (dates unknown), who was officially recognized as a “resident Chinese” (*jūtaku tōjin* 住宅唐人), i.e., someone who had received a permit to settle in Nagasaki. Throughout the 17th century, the function of the interpreters became progressively institutionalized around a few hereditary families. They were divided into ranks, with the three main positions being senior interpreters (*ōtsūji* 大通事), junior interpreters (*kotsūji* 小通

⁴² Hangzhou was the capital of Zhejiang province and a major commercial port in the Jiangnan region.

⁴³ Jiang Wu, *Leaving for the Rising Sun: Chinese Zen Master Yinyuan and the Authenticity Crisis in Early Modern East Asia* (New York: Oxford University Press, 2015), chap. 3.

⁴⁴ Jiang Wu, “Taikun’s Zen Master from China: Yinyuan, Tokugawa Bakufu, and the Founding of Manpukuji in 1661,” *Journal of East Asian History*, no. 38 (2014): 75–98. This article is reproduced with minor modifications in Wu, *Leaving for the Rising Sun*, chap. 4.

事), and training interpreters (*keiko tsūji* 稽古通事).⁴⁵ Translation and interpretation were far from being their only functions. They inspected the cargo of Chinese junks, ensuring that it contained no Christian objects, and were also employed to keep order among Chinese residents. Besides the “main interpreters” (*hontsūji* 本通事), who belonged to one of the original Chinese lineages and enjoyed a prestigious position, there were lower-ranking non-hereditary “inner interpreters” (*naitsūji* 内通事), who performed more menial tasks related to the daily needs of the Chinese merchants.⁴⁶

The interpreters translated for the three different groups of languages represented by the aforementioned temples that embodied their linguistic and cultural community of origin. They were accordingly identified in Japanese as speakers of the “Nanjing tongue” (*Nankin-guchi* 南京口) for Mandarin, the “Zhangzhou tongue” (*Shōshū-guchi* 漳州口) or “Quanzhou tongue” (*Zenshū-guchi* 泉州口) for Southern Min, and the “Fuzhou tongue” (*Fukushū-guchi* 福州口) for Eastern Min. Considering the reach of the “Nanjing tongue” as a common language not only in the Chinese mainland but also for overseas populations, there is evidence that interpreters of Min languages felt the need to learn Mandarin to communicate with individuals from the Jiangnan region.

An undated manuscript that was used as a textbook to teach Chinese vernaculars to Nagasaki interpreters in the 18th and 19th centuries, titled *Tangtongshi xinde* 唐通事心得 (“Instructions for Chinese interpreters”), illustrates the dynamics between these various spoken languages.⁴⁷ Probably written in the first half of the 18th century,⁴⁸ one of its episodes introduces a “Zhangzhou interpreter” who starts learning Mandarin for “the times when [he] goes on officials businesses, meets people from Jiangnan, and cannot quite communicate with them” (有公幹出去、見了外江人、說話不大通的時節).⁴⁹

Especially after the consolidation of the Qing dynasty, Mandarin acquired an even more prominent role in the continent as a necessary skill for the imperial examinations (Ch. *keju* 科舉), and “proper pronunciation academies” (Ch. *zhengyin shuyuan* 正音書院) were

⁴⁵ Hayashi Rokurō 林陸朗, *Nagasaki tōtsūji: Daitōtsūji Hayashi Dōei to sono shūhen* 長崎唐通事—大通事林道榮とその周辺 (Nagasaki: Nagasaki bunkensha, 2010), 1–6.

⁴⁶ Kitada Kunihiko 喜多田久仁彦, “Tōtsūji no chūgokugo ni tsuite” 唐通事の中国語について, *Kenkyū ronsō* 研究論叢 87 (2016): 10–11.

⁴⁷ For a presentation and Japanese translation of this text, see Kizu Yūko 木津祐子, “‘Tōtsūji kokoroe’ yakuchū kō” 『唐通事心得』 訳注稿, *Kyōto daigaku bungakubu kenkyū kiyō* 京都大學文學部研究紀要 39 (2000): 1–50.

⁴⁸ Kizu, 4.

⁴⁹ Kizu, 13; Kitada, “Tōtsūji no chūgokugo ni tsuite,” 14.

established in southern provinces like Fujian and Guangdong 廣東 to teach the language.⁵⁰ In Nagasaki, the chances of encountering Mandarin-speaking merchants and scholars increased substantially from the 1680s century onwards as an increasing number of ships were sailing out of ports around Nanjing instead of Fujian.

Throughout the seventeenth century, Chinese junks bringing their goods to the city came from a variety of ports that extended well into Southeast Asia. Even those that originated in Siam or Vietnam had an overwhelmingly Chinese crew.⁵¹ For communicating with sailors who came in long-distance ships (*okubune* 奥船), however, there were interpreters of non-Chinese languages. There were “Tonkin interpreters” (*Tonkin-tsūji* 東京通詞) for Vietnamese, “Siam interpreters” (*Shamuro-tsūji* 暹羅通詞) for Thai, and even “Moor interpreters” (*Mōru-tsūji* 莫臥爾通詞) who could speak Farsi.⁵² These were all categorized as “Chinese interpreters,” for often the term *tō* (Ch. Tang 唐) was used indistinctly to indicate anything foreign. Some of these interpreters of non-Sinitic languages, however, did trace their origins to China, such as the Gi (Ch. Wei 魏) family of “Tonkin interpreters,” whose ancestor was born in Fujian before moving to Tonkin and then settling in Nagasaki as a “resident Chinese.”⁵³

With each new generation, the distance between the families of interpreters and their roots in the continent increased. The men married Japanese women but often continued to hold on to their Chinese ancestral clan names in addition to newer Japanese family names. Some interpreters adopted into these families had originally no blood connection with China, as was the case with Ro Sōsetsu’s son Ro Senri 盧千里 (1707–1755), who came from a family of Nagasaki physicians and married into the Ro family.

In early modern Japan, the adoption of male in-laws, disciples, or even children of close friends well into their adulthood was not uncommon. It fulfilled an important function of continuing the family line when no other male biological descendants were available due to a variety of reasons such as death, illness, or young age. In such cases, the adoptees would

⁵⁰ Kizu, “*Tōtsūji kokoroē’ yakuchū kō*,” 15; Märten Söderblom Saarela, “Manchu, Mandarin, and the Politicization of Spoken Language in Qing China,” in *Language Diversity in the Sinophone World: Historical Trajectories, Language Planning, and Multilingual Practices*, ed. Henning Klöter and Märten Söderblom Saarela, Routledge Studies in Sociolinguistics (New York: Routledge, 2021), 40–48.

⁵¹ Yoneo Ishii, *The Junk Trade from Southeast Asia: Translations from the Tōsen Fusetsu-Gaki, 1674–1723*, Sources for the Economic History of Southeast Asia 6 (Singapore: Institute of Southeast Asian Studies, 1998), 3.

⁵² Wakaki Taiichi 若木太一, “*Tonkin tsūji Gi-shi no kakei: Gi Gozaemon Ryūzan o chūsūn ni*” 東京通詞魏氏の家系—魏五左衛門竜山を中心に, *Nagasaki daigaku kyōyōbu kiyō* 長崎大学教養部紀要 37, no. 3 (1997): 1–16.

⁵³ Wakaki, 2–4.

change their family names and become legitimate heirs to the new lineage to which they now belonged. The practice of adoption ensured that their profession remained in the same family, which was paramount for Chinese interpreters.

2.2. *Connections with the Dutch*

Besides the Chinese, merchants of the Dutch East India Company were also present in Nagasaki, where they had a permanent outpost on the man-made Dejima island. When they moved there in 1641 from Hirado, VOC officers were already the only Europeans allowed to trade in Japan. Dutch merchants occupied a strategic position for the shogunate. In addition to their commercial activities, they also provided the regime with valuable information about regional and global geopolitics. Unlike Chinese seafarers, who were largely independent and came to Japan as private traders, the VOC established diplomatic ties with the shogunal power. The status of VOC representatives was closer to that of Ryukyuan and Korean envoys, but their embassies were much more frequent.

The protocol of the yearly Edo visit – known in Dutch as the *hofreis* (“court journey”) – followed closely that of the *daimyō* who pledged allegiance to the Tokugawa regime every one or two years. The head of the VOC factory in Japan – called *opperhoofd* in Dutch and *oranda kapitan* 阿蘭陀甲比丹 in Japanese, the latter possibly derived from Portuguese *capitão* (“captain”) – was required to present gifts and prostrate himself before the shogun. Instead of acting as an ambassador of the Dutch Republic, or even a fictitious “King of Holland” as presented in shogunal documents, the *Oranda Kapitan* stood as an improbable sovereign of his own “domain” of Dejima, the diminutive artificial island that the VOC rented from Nagasaki merchants.⁵⁴

The *opperhoofden* alternated in their post every year, and their annual trip to Edo was essential for renegotiating their political and commercial position vis-à-vis the regime. It also contributed to the circulation of technical knowledge they possessed on a variety of issues, including cosmological matters of great interest to the shogunate. While the consultations with the Dutch intensified considerably during the reign of Tokugawa Yoshimune 徳川吉宗 (1684–1751) – between 1716 and 1745 – the VOC was already a

⁵⁴ On the ambiguous position occupied by the VOC in Tokugawa Japan and its relationship with other forms of performed vassalage Clulow, *The Company and the Shogun*, 2014, chap. 3.

major source of information since the early 17th century, even before its factory was moved to Nagasaki.

So-called “Dutch interpreters” (*oranda tsūji* 阿蘭陀通詞) were the ones who mediated the interactions between VOC officials and Japanese authorities. Despite the similarity with Chinese interpreters, there were pronounced differences in their identities. Those who interpreted for the Dutch were all Japanese and claimed no ancestral lineage going back to the Netherlands. They had at first no prior connection with the language and culture of the country they were supposed to represent. Their interlocutor came from a region of the world that, unlike China, was not familiar to the vast majority of people in Japan. The process of familiarization was gradual even among the interpreters themselves. Over several generations, the interpreters became more acquainted with the VOC merchants and their language, eventually becoming able to translate entire books written in Dutch. These successive changes were reflected in the formative period of cosmological scholarship in 17th-century Nagasaki, which comprised overlapping features of both Dutch and Iberian origins.

The individuals who initially became interpreters for the Dutch formed a continuum with the interpreters for the Iberians (*nanban tsūji* 南蠻通詞). Iberians, represented by the Portuguese merchants and Catholic missionaries who came with them, were identified as “southern barbarians” (*nanban* 南蠻) and the Netherlanders received the epithet of “red-haired” (*kōmō* 紅毛). In the early stages of the transition from the Iberian to the Netherlandish trade, the interpreters of Dutch still relied on Portuguese to communicate, as they did not master Dutch. The designation of *oranda tsūji* was in the early 17th century a somewhat generic term for the interpreters who communicated with the VOC merchants but not necessarily in their language. Once their position was systematized, they would be employed according to their hereditary families and organized hierarchically according to seniority much like the Chinese interpreters.⁵⁵

“Dutch interpreters,” who could understand written and spoken European languages to varying degrees, played a pivotal role in enabling the circulation of cosmological knowledge of European origin among Japanese scholars and authorities. They were in a delicate position, for too close an association with Europeans could be misconstrued as affinity with Christianity, which could lead to imprisonment or even execution. As the

⁵⁵ On the organization of “Dutch interpreters,” see Katagiri Kazuo 片桐一男, *Oranda tsūji no kenkyū* 阿蘭陀通詞の研究 (Yoshikawa kōbunkan, 1985), 21–47; Harada Hiroji 原田博二, “*Oranda tsūji no shokkai to sono henshen ni tsuite*” 阿蘭陀通詞の職階とその変遷について, *Jōhō media kenkyū* 情報メディア研究 2, no. 1 (2003): 45–55, <https://doi.org/10.11304/jims.2.45>.

Iberians were expelled, and the Dutch themselves turned against the Catholics, the interpreters made sure to adjust their allegiances accordingly.⁵⁶

2.3. *Chinese and Dutch intelligence*

Both Chinese and Dutch merchants provided intelligence to the shogunate in different forms, always mediated by their respective interpreters. Chinese junks, sailing from various locations in China and Southeast Asia, conveyed regional information from the ports where they stopped on the way to Japan. VOC officials brought news from events taking place around the globe in addition to relaying rumors about the political situation in the region. Nagasaki interpreters translated the information transmitted orally by the Chinese and the Dutch and the final written documents were known respectively as *Tōsen fūsetsugaki* 唐船風説書 (“Report of rumors from Chinese junks”) and *Oranda fūsetsugaki* 阿蘭陀風説書 (“Report of rumors from the Dutch”). These transcribed documents were then sent to Edo and informed shogunal policies regarding transnational commerce. One of the reasons that the shogunate had for collecting intelligence was its search for any type of information about Catholic missionaries and the presence of Iberian powers in Asia.

The Dutch reports started being produced after the VOC outpost was permanently relocated to Nagasaki in 1641 and were gradually institutionalized as part of their regular duties.⁵⁷ For VOC officials, this was an opportunity to demonstrate that they collaborated fully with the shogunal regime and there was no collusion between them and the Portuguese. In fact, contributing with intelligence was a required condition to continue commerce in Japan as determined by the Tokugawa regime. It was considered a duty of the Dutch merchants toward the shogun they served. The Dutch themselves did not fail to use this requirement in their favor and spread rumors of Catholic missionaries who attempted to reach the archipelago aboard Chinese junks.⁵⁸ In this manner, they could at the same time

⁵⁶ Cf. Leonard Blussé, “From Inclusion to Exclusiveness: The Early Years at Hirado, 1600-1640,” in *Bridging the Divide: 400 Years, the Netherlands-Japan*, ed. Leonard Blussé, Willem Remmelink, and Ivo Smits (Leiden: Hotei Publishing, 2000), 13–32; Katagiri Kazuo 片桐一男, *Edo jidai no tsūyakukan: oranda tsūji no gogaku to jitsumu* 江戸時代の通訳官—阿蘭陀通詞の語学と実務 (Tokyo: Yoshikawa kōbunkan, 2016), chap. 1.

⁵⁷ cf. Matsukata Fuyuko 松方冬子, *Oranda fūsetsugaki: “sakoku” Nihon ni katarareta “sekai”* オランダ風説書—「鎖国」日本に語られた「世界」, *Chūkō shinsho* 中公新書 2047 (Tokyo: Chūō Kōron Shinsha, 2010), chaps. 2–3.

⁵⁸ Matsukata, 43–44.

counter the ongoing presence of Iberian commercial competitors in the region and cast doubt on the Chinese merchants themselves – other major contenders in the Nagasaki trade.

The Chinese who traded in Nagasaki, despite not being unified under a single company and lacking a direct representative like the *opperhoofd*, also played their part in communicating with the regime. The reports of news brought by Chinese ships were systematized later than those of the Dutch, as there was no official requirement for them to provide intelligence in order to carry their trade. Compared to the Dutch, Chinese merchants enjoyed much more freedom of movement and commerce in the city, particularly before the construction of the Chinese quarters in 1689. That being said, collaboration with local authorities was crucial for their business in Nagasaki, and the Chinese interpreters were at the forefront of passing on any relevant information that the Chinese brought from their various ports of call. Although Chinese interpreters had been writing intelligence reports to the shogunal authorities since at least 1644, they only became standardized thirty years later, when Chinese junks were assigned numbers as they entered the port of Nagasaki.⁵⁹

The shogunal demand for information concerning the continent increased considerably with the decline of the Ming and the rise of the Qing in China. The first compilation of Chinese intelligence reports, titled *Kai hentai* 華夷變態 (“Transformation from civilization into barbarity”), begins with documents dating from 1644, the year that the Ming northern capital, Beijing 北京, was conquered. This voluminous collection, completed in 1732, was organized by Hayashi Gahō 林鶯峰 (1618–1680) and his son Hayashi Hōkō 林鳳岡 (1644–1732), respectively the son and grandson of the renowned scholar Hayashi Razan 林羅山 (1583–1657). Like Razan, his descendants Gahō and Hōkō were employed by the shogunate in official capacities and utilized documents from the archives of the Hayashi family in Edo to write *Kai hentai*, which consists of over 2200 reports produced between 1644 and 1717, tracing the political developments in the continent.⁶⁰ This was a period of momentous changes in the power dynamics of the East Asian region.

3. The Ming-Qing transition and its impact

⁵⁹ Ishii, *The Junk Trade from Southeast Asia: Translations from the Tōsen Fusetsu-Gaki, 1674-1723*, 9.

⁶⁰ Ishii, 6–8; Matsuura Akira 松浦章, *Kaigai jōhō kara miru Higashi Ajia: Tōsen fūsetsugaki no sekai* 海外情報からみる東アジア—唐船風説書の世界 (Osaka: Seibundō shuppan, 2009), 3–21.

The ties of Nagasaki residents to the continent ensured that the city played a central part in strengthening transnational networks during the 17th century. It was a time of profound historical transformations in East Asia, with lasting consequences for the ways local scholars and authorities conceptualized the world. A central geopolitical event was the tumultuous Ming-Qing transition in China, rippling around the region well into the 18th century.

The conflicts between the Ming empire and the invading Manchu forces that eventually established the Qing reign spanned over six decades. They started in 1618 with Jurchen military campaigns under the command of Nurhaci (1559–1626) in the Liaodong 遼東 region of northern China – at the border of modern-day North Korea – and ended definitively with the capitulation of the last Ming loyalists in Taiwan in 1683.⁶¹ The Ming dynasty itself is generally considered to have ended when Qing troops seized Beijing in 1644, and the Chongzhen 崇禎 emperor committed suicide. The southern capital Nanjing 南京 fell in 1645 during the short-lived reign of the Hongguang 弘光 emperor, executed in 1646.

After the fall of the northern regions to Qing forces, the resistance of Ming loyalists continued in the south. Notable among the loyalists was the Zheng 鄭 clan, which began with the powerful sea lord Zheng Zhilong 鄭芝龍 (1604–1661). Starting as a pirate in his original Fujian, Zheng Zhilong controlled powerful fleets sprawling across the East and South China Seas by the end of the Ming dynasty. His influence culminated in 1628 when he was elevated to the official rank of a military commander and was put in charge of curbing piracy around the Ming maritime borders.⁶² This coincided with the consolidation of the Chinese community in Nagasaki described previously. As the Chinese diaspora was composed of a great number of seafarers from Fujian, they often benefited from the protection offered by Zheng's troops.

Once the two capitals of China were conquered by the Qing, there were two contenders to the Ming throne, namely Zhu Yujian 朱聿鍵 (1602–1646) and Zhu Yihai 朱以海 (1618–1662). Zhu Yujian had a one-year reign (1645–1646) as the Longwu 隆武 Emperor of the Southern Ming based in Fuzhou, in eastern Fujian, where he initially enjoyed the

⁶¹ For an overview of this transitional period, see Jonathan D. Spence, *The Search for Modern China*, Third Edition (New York: W.W. Norton & Company, 2013), 26–56.

⁶² Tonio Andrade and Xing Hang, eds., *Sea Rovers, Silver, and Samurai: Maritime East Asia in Global History, 1550–1700*, Perspectives on the Global Past (Honolulu: University of Hawai'i Press, 2016), 12–13. On the rise and fall of Zheng Zhilong, see also Xing Hang, *Conflict and Commerce in Maritime East Asia: The Zheng Family and the Shaping of the Modern World, c. 1620–1720* (Cambridge: Cambridge University Press, 2015), 40–72.

support of Zheng Zhilong, before being captured and executed by the Qing in 1646 after Zheng switched allegiances. Zhu Yihai established an opposing court in the city of Shaoxing 紹興 in Zhejiang 浙江 province and held the title of regent from 1645 to 1653. Afterward, Zhu Yihai moved further south to Fujian, where he garnered support from Zheng Zhilong's son Zheng Chenggong 鄭成功 (1624–1662), who continued to back Ming loyalists despite his own father's change of camps.⁶³

As noted above, the provinces of Zhejiang, in the Jiangnan region, and Fujian were significant for Nagasaki due to the considerable number of Chinese residents and interpreters tracing their origins there. It is not difficult to imagine that the proximity of the Nagasaki Chinese community to Ming loyalists and émigrés derived from its association with those areas.

Alongside a series of palpable economic and geopolitical consequences of the Ming-Qing transition for Nagasaki and Japan as a whole, the violent dynastic change also left a mark on the ways Japanese scholars and authorities conceptualized the position of China in the world. In other words, the collapse of the Ming dynasty significantly impacted the cosmological views held in early modern Japan, which were already undergoing transformations. Once the Ming succumbed to the Manchu rule of the Qing, deemed barbarian, China's status as the civilizational center of the world could no longer go unchallenged.

This sudden fall from grace is illustrated by the title of *Ka'i hentai*, the compilation of intelligence reports discussed earlier. The initial lines of the preface clarify the meaning of the title:

Upon the death of the Chongzhen [emperor] (1611–1644), and [once] the Hongguang [emperor] (1607–1646) succumbed to the enemies, [the Princes of] Tang and Lu⁶⁴ still maintained some corners [of the Ming territory] in the south, but as Tartar hordes raided the Central Plains, this was when China (*chūka*) turned into a state of barbarity.

崇禎登天、弘光陷虜、唐魯纔保南隅、而韃虜橫行中原、是中華變於夷之態也。⁶⁵

As evidenced by this source compiled in the early 18th century, the definitive end of China as the center of civilization (Jp. *chūka*, Ch. *zhonghua* 中華) was perceived – at least in

⁶³ On the attempts to preserve the Ming dynasty in southern China and the role played by the Zheng clan, see Lynn A. Struve, “The Southern Ming, 1644–1662,” in *The Cambridge History of China*, ed. Frederick W. Mote, Denis Crispin Twitchett, and John King Fairbank, vol. 7 (Cambridge: Cambridge University Press, 1998), 641–725.

⁶⁴ The Princes of Tang and Lu are respectively Zhu Yujian and Zhu Yihai.

⁶⁵ Hayashi Gahō 林鷺峰, “*Ka'i hentai*” 華夷變態 (Manuscript, undated), vol. 1.1, Naikaku bunko, National Archives of Japan, <https://www.digital.archives.go.jp/file/1271611>.

retrospect – as directly correlated with the fall of the two capitals and the invasion of the Central Plains (Ch. *zhongyuan*, Jp. *chūgen* 中原). The latter region was considered the very heart of Chinese civilization, where the ancient capitals of Luoyang 洛陽 and Chang'an 長安 (modern-day Xi'an) were situated. With no trace of the Ming dynasty left on the continent, only isolated pockets of resistance in the south, China in its entirety had “shifted from civilization to barbarity.”

While this discourse was formulated not long after the Qing troops took over, the recognition of the purported shift toward a barbaric state was not immediate in Japan. Although the fall of the two capitals amounted to the de facto end of the Ming dynasty, the survival of the Southern Ming based in Fujian meant that Japanese authorities still dealt, via the Nagasaki harbor, mainly with Ming loyalists and merchants well into the second half of the 17th century. This was due in great part to the maritime might of the Zheng clan around the southeastern Chinese coast and their hegemony over the junks involved in the Nagasaki trade.

Nagasaki residents did not necessarily have a clear-cut understanding of the Ming-Qing transition as momentous events like the fall of the two capitals were unfolding. The most dramatic change directly felt in the city – indicating that China had become visibly Manchu – came only in 1683, after the defeat of the last Zheng descendants in Taiwan. The memory of the Ming, however, continued into the 18th century despite the continuous arrival of Qing-aligned merchants and scholars.

3.1. *The Zheng clan, Taiwan, and Nagasaki*

Although Zheng Zhilong shifted his allegiance to the Qing toward the end of his life, that did not at first represent the end of the bonds between the Zheng family and the Ming dynasty. His son Zheng Chenggong, born in Hirado to a Japanese mother, occupied an important position both as a Ming loyalist and in the collective memory of Nagasaki. Also known as Koxinga or Guoxingye (Jp. *Kokuseiya* or *Kokusenya* 國姓爺), Zheng Chenggong attempted several negotiations with the shogunate to intervene in favor of the Ming during the conflicts in the continent.⁶⁶ Mostly remembered for having defeated and chased the

⁶⁶ Patrizia Carioti, “The Zheng Regime and the Tokugawa Bakufu Asking for Japanese Intervention,” in *Sea Rovers, Silver, and Samurai: Maritime East Asia in Global History, 1550-1700*, ed. Tonio Andrade and Xing Hang, *Perspectives on the Global Past* (Honolulu: University of Hawai'i Press, 2016), 156–80.

Dutch away in southern Taiwan, where he seized Fort Zeelandia⁶⁷ from the VOC in 1662, he died there that same year. Zheng Chenggong's son Zheng Jing 鄭經 (1642–1681) and his other descendants continued to rule in Taiwan for twenty more years, renaming it Dongning 東寧 (“eastern tranquility”) in opposition to the Qing lands to the west.⁶⁸

Nishikawa Joken narrates the exploits of Zheng Chenggong and his clan in the aforementioned *Nagasaki yawa gusa*, first published in 1720.

[Zheng Chenggong], having a deep-seated conviction to restore the dynasty of the Great Ming, renamed [the island of] Xiamen (Amoy) as Simingzhou, which means “thinking about the Ming court.” In addition, he changed the name of Taiwan, calling it Dongning, which might also have meant that he had not forgotten Japan and was commemorating his birthplace. The fact that Guoxingye [Zheng Chenggong] was unparalleled in wit and resourcefulness is well documented by the people of Nagasaki in their records of the Ming-Qing conflicts. Although it is what [they] witnessed with their own eyes, these [records] belong now to the past, and there are [no longer] people who know [about them], so I have written down in general terms what I can recall about stories the elders told.

大明の世を再興せんとおもふ志し深かりければ、廈門の名を改め思明州と號せしは明朝を思ふの意なり。また臺灣の名をあらため東寧を稱せしも、日本を忘れず故郷を祝きし意とかや。國姓爺智謀無雙の軍將たりし事、長崎人の民清鬪記に委し。眼前に見聞し事なれど、これもいまはむかしと成て知人もなければ、思ひ出るあらましとて老たるが語りしをしるし侍りぬ。⁶⁹

Joken's account demonstrates that Zheng Chenggong was perceived in Nagasaki as a strong link between Ming China and Japan. He even goes as far as claiming that the name Dongning was a nod to Japan, the “eastern tranquility” supposedly meant by Zheng Chenggong, but there is evidence that the Zheng reign in Taiwan was only designated as such during the time of Zheng Chenggong's son Zheng Jing.⁷⁰ At any rate, Zheng Chenggong's story was considered part of the history of the city, and local figures like Joken attempted to ensure that this shared Sino-Japanese heritage was preserved.

As the last members of the Zheng rule in Taiwan surrendered to the Qing empire in 1683, and battling ceased around the southeastern coast of mainland China, routes to Japan became more stable under Qing control. This was accompanied in 1684 by the Qing repeal

⁶⁷ Located in the modern-day city of Tainan 台南, this fort was the center of the Dutch colonial rule in Taiwan between 1624 and 1662.

⁶⁸ On Zheng Jing's attempts to create a “new China” in Taiwan while still pledging alliance to a decimated Ming dynasty, see Hang, *Conflict and Commerce in Maritime East Asia*, 146–75, especially 155–162.

⁶⁹ Nishikawa, *Chōnin bukuro, Hyakushō bukuro, Nagasaki yawa gusa*, 261.

⁷⁰ Hang, *Conflict and Commerce in Maritime East Asia*, 156.

of the so-called “maritime bans” (Ch. *haijin* 海禁), intermittent policies for regulating sea trade that had their origins in the Ming dynasty and continued during the Qing.⁷¹ As such measures restricted the number of Chinese vessels that could leave the continent, the relaxation of the bans led to a steep increase in Chinese merchants sailing to Nagasaki, notably from the capital region of Nanjing.

Before the capitulation of Taiwan, Chinese junks calling in at the Nagasaki harbor were by and large aligned with the Ming loyalist Zheng clan, and as many as 30 or 40 percent of them came from Southeast Asia instead of mainland China.⁷² This changed dramatically after 1684. The new incoming sailors, besides representing a new political power, also looked physically different from their Ming counterparts, as they donned the garments associated with the Manchu conquerors. From this period onward, Nagasaki merchants, local authorities, and Chinese interpreters had to accept that, whether they liked the new dynasty or not, there was no other option but to deal with these Manchu-looking merchants as the only Chinese who came to trade in Japan. The memory of the Ming would start to slowly fade away as Qing merchants took over commerce in Nagasaki.

3.2. *Chinese quarters and new rules*

In order to regulate trade, destabilized by the massive arrival of Qing junks following the end of the maritime conflicts, the shogunate established an annual monetary cap in 1685 for trade with both Chinese and Dutch merchants. Once that limit was reached for each of these two groups, other ships were unable to unload their goods and were forced either to return to their ports of origin without having made any profit or to try and engage in unauthorized trade while still in Japan.⁷³

Another consequence of the sudden upsurge of new Chinese merchants in the city was the creation of the so-called “Chinese quarters” (*Tōjin yashiki* 唐人屋敷) in 1689. Before, Chinese merchants were able to inhabit different parts of the city and interacted more freely with Nagasaki residents. As one of the attempts to curb smuggling (*nukeni* 拔荷) between the Chinese merchants and the Nagasaki population – and also prevent the spread of Christian ideas via books brought by the Chinese merchants – the shogunate decided to enclose all

⁷¹ Hang, 237.

⁷² Ishii, *The Junk Trade from Southeast Asia: Translations from the Tōsen Fusetsu-Gaki, 1674-1723*, 10.

⁷³ Hao Peng, *Trade Relations between Qing China and Tokugawa Japan: 1685-1859* (Singapore: Springer, 2019), 42–43.

Chinese residents in an area built specifically for that purpose, not unlike what they had done to the Portuguese and then the Dutch in Dejima.⁷⁴

The differences in location and scale between Dejima and the Chinese quarters reflected their respective commercial and cultural status in the city. In contrast to Dejima, a reclaimed island jutting out over the bay of Nagasaki, the Chinese quarters were erected inside the city in an area at least twice as large.⁷⁵ Within its walls, there were temples, shops, and several residences that housed a population of almost five thousand people the year it opened.⁷⁶ Despite initial reservations by the Nagasaki magistrates, the decision of the shogunal authorities in Edo to build it was ultimately carried out. Chinese interpreters were highly involved in the process of construction and continued to work closely with the local authorities who administered the compound.⁷⁷

The seclusion of incoming Chinese merchants in this enclosure did not mean the end of scholarly interactions between China and Nagasaki. In the early 18th century, scholars and physicians came from different parts of Qing China and collaborated with local scholars and interpreters.⁷⁸ Besides, the creation of the Chinese quarters did not entirely solve the problem of smuggling. In the subsequent decades, the regime continued to try and adjust its grip on the Chinese trade. While the number of junks allowed into the port of Nagasaki was fixed at seventy in 1688, then raised by ten in 1698, it was reduced to fifty-nine in 1708 due to a copper shortage.⁷⁹ The instability of commerce and the continuing unauthorized trade practiced by merchants who exceeded the limit spurred stricter regulation.

In 1715, during the short-lived reign of the seventh shogun Tokugawa Ietsugu 徳川家継 (1709–1716), the scholar Arai Hakuseki 新井白石 (1657–1725) conceived a new regulatory system that became known as *Shōtoku shinrei* 正徳新例 (“New ordinances of the Shōtoku era”) – a designation that appears in premodern sources such as the diplomatic

⁷⁴ For an account of the histories of both Dejima and the “Chinese quarters,” see Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, vol. 2, chap. 6.

⁷⁵ While Dejima measured no more than 1.31 hectares, the Chinese quarters varied between circa 2.65 and 2.87 hectares as it expanded. Clulow, *The Company and the Shogun*, 2014, 122; Yamamoto, *Nagasaki Tōjin yashiki*, 217–18.

⁷⁶ Yamamoto, *Nagasaki Tōjin yashiki*, 212.

⁷⁷ Yamamoto, 232–35.

⁷⁸ On the presence of Chinese physicians in Japan during this period, see Angela Schottenhammer, “Exchange of Medicinal Knowledge and Specialists in Early Modern East Asia: The Triangle of China, Japan and the Ryukyu Islands,” in *Tribute, Trade, and Smuggling: Commercial, Scientific and Human Interaction in the Middle Period and Early Modern World*, ed. Angela Schottenhammer, East Asian Maritime History 12 (Wiesbaden: Harrassowitz, 2014), 165–88.

⁷⁹ Peng Hao 彭浩, *Kinsei Nisshin tsūshō kankeishi* 近世日清通商關係史 (Tokyo: Tōkyō Daigaku Shuppankai, 2015), 27.

history of the Tokugawa dynasty titled *Tsūkō ichiran* 通航一覽 (“Overview of maritime relations”).⁸⁰ Hakuseki had been a tutor and close advisor to Ietsugu’s father Tokugawa Ienobu 徳川家宣 (1662–1712), who ruled as the sixth shogun from 1709 to 1712.

After Ienobu’s death, Hakuseki had already been able to carry out a monetary reform that led to the issuance of a new currency better regulated by the shogunate.⁸¹ Together with this recently established coinage policy, the new regulations of commerce in Nagasaki had the purpose of preventing an outflow of precious metals from Japan. Although Hakuseki was dismissed from the shogunal court in the reign of Yoshimune, his economic reforms were continued and even reinforced after 1716. The system, applying to both Chinese and Dutch merchants, targeted in particular smuggling by non-authorized Chinese ships. The impact was stronger for the considerably larger Chinese trade, but the VOC was far from being unaffected by the economic policies. According to entries in the official Dutch journal from late 1715, after the new rules were enacted, there were considerations of the Company leaving Japan and stopping its trade altogether.⁸² The VOC remained in Japan and the Qing merchants kept coming, eventually adapting to the stricter policies, but such protectionist efforts underscored a general attitude by the shogunate to surveil and control the commercial – and to a great extent intellectual – activities that took place in Nagasaki.⁸³

3.3. *Where barbarian ships swarm in from overseas*

The Chinese and Europeans who came to the city belonged to two opposite poles in the official discourse of the shogunal regime.⁸⁴ At least until the fall of the Ming, China was considered a paragon of civilized culture, or *Hua* (Jap. *ka* 華). Europeans represented the otherness of “barbarians,” or *Yi* (Jap. *i* 夷). This opposition was based on the ancient Chinese division of the world into a civilized core surrounded by the four types of barbarian peoples occupying the cardinal directions, namely the Eastern Yi (Jap. *tōi* 東夷), the Western Rong (Jap. *seijū* 西戎), the Southern Man (Jap. *nanban* 南蠻), and the Northern Di (Jap. *hokuteki* 北

⁸⁰ This comprehensive collection was compiled in 1853 on shogunal orders by Hayashi Akira 林耀 (1800–1859), descendant of Hayashi Razan. Toby, *State and Diplomacy in Early Modern Japan*, 15.

⁸¹ See, for instance, Conrad D. Totman, *Early Modern Japan* (Berkeley: University of California Press, 1993), 282–83.

⁸² Bachofner and Velde, *The Deshima Diaries*, 194–95.

⁸³ On the commercial regulations, see Peng, *Kinsei Nisshin tsūshō kankeishi*; Peng, *Trade Relations between Qing China and Tokugawa Japan*.

⁸⁴ On how this conception of the world informed the policies of the Tokugawa regime, cf. Toby, *State and Diplomacy in Early Modern Japan*, 217–28; Arano, *Kinsei Nihon to higashi Ajia*, 29–36.

狄). While in theory there was a clear distinction between these two poles, scholarly venues of Nagasaki often combined knowledge from both Hua and Yi sources. This dichotomy was further complicated after the establishment of the Qing dynasty. While scholars and authorities throughout East Asia recognized the Ming dynasty as the legitimate inheritor of the Hua tradition in China – having defeated the Mongol rule of the Yuan 元 dynasty (1271–1368) – the Qing could be perceived as a “barbarian” rule, dominated by the northern Manchus.

The Hua-Yi opposition, with all its contradictions, was particularly meaningful in Nagasaki. The city was a gathering place for both “civilized” and “barbarian” traders before and after the Ming-Qing transition. Under the Tokugawa regime, it was the Japanese port most open to the transnational movement of goods, people, and information, and yet subject to the strictest surveillance. One description from early in the reign of Yoshimune illustrates the types of friction that could arise. In the appendix (*furoku* 附録) to Yoshimune’s section in *Tokugawa jikki*, one finds the following description concerning Nagasaki’s environment around the time of the Shōtoku reforms:

In Nagasaki, a place where barbarian ships swarm in from overseas, depraved merchants mingle together in great numbers, and are prone to trade goods for selfish purposes, their greed for profit having no end.

長崎の地は海外の蠻舶輻湊する所なれば、姦商共多く入交り、動もすれば私に貨を交易し利を貪る事止まず。⁸⁵

This account of the Nagasaki trade at the beginning of the 18th century reflects the logic behind the increasing regulatory measures adopted by the shogunate. The regime was generally wary of a *laissez-faire* approach to commerce and made sure that it controlled not only the number of incoming goods but also the people who brought them and the contents of their cargo. Although the city was teeming with opportunities for commercial transactions and cross-cultural interactions, these were also fraught with danger, as the specter of severe punishment for being associated with smuggling activities – or worse, with heretical teachings like those of Catholic missionaries – loomed over Nagasaki residents and incoming merchants alike.

⁸⁵ Kuroita Katsumi 黒板勝美, ed., *Tokugawa jikki* 徳川實紀, vol. 9, Kokushi taikai 國史大系 46 (Tokyo: Kokushi taikai kankōkai, 1934), 161, <https://doi.org/10.11501/3431662>.

3.4. *Trade permits for the Chinese merchants*

As part of the new measures that began during the reign of Ietsugu and continued well into Yoshimune's time, shogunal authorities started issuing trade permits called *shinpai* 信牌 (“trust tablets”) to a limited number of Chinese junks. These permits had to be obtained in advance and enabled sailors to legally sell their goods at the port of Nagasaki. All other ships that did not possess such a permit were unable to trade. The Nagasaki magistrate in charge of the implementation of the new regulations and the initial distribution of permits, Ōoka Kiyosuke 大岡清相 (1679–1717), wrote in 1716 a book titled *Kiyō gundan* 崎陽群談 (“Assembled accounts of Nagasaki”), which became an important source on the history of the city. In a section titled “On the details concerning the new ordinances of the fifth year of [the] Shōtoku [era] (1715) being promulgated” (正徳五年新例被仰出候子細之事), he explains the reasoning behind it as follows:

Heeding the warning by the late shogun Ienobu about gold and silver being transferred abroad above the official limit, and also due to the output of copper from the various provinces and mountains [of Japan] declining year by year, the proposal that foreign commerce should also be reduced was [seen as] a necessity.

御制外金銀外國へ相渡候段家宣公御遺戒にも被相載候、加之諸國諸山の出銅も追年減少候へ共、外國の商賣も減少可申段必然之事に候。⁸⁶

The motivation for more rigorous control of transactions going through Nagasaki was essentially economic but it also had political consequences. The distribution of trade permits to the Chinese merchants could be interpreted as a way for the shogunate to affirm its professed superiority over the “barbarians” of Qing China. Ronald Toby sees in these restrictive measures designed by Arai Hakuseki the culmination of shogunal attempts to “demote China to the lowest rung of its hierarchy of partners” that went back to 1621 when it rejected official relations with the then Ming government.⁸⁷

According to Toby's argument, Hakuseki was carrying out what Hayashi Razan – responsible for a great amount of diplomatic correspondence in the early Tokugawa reign – had envisioned even before the fall of the Ming, that is, to treat the Chinese as barbarians who subjected themselves to Japanese rules.⁸⁸ The fact that the Chinese merchants, after

⁸⁶ Ōoka Kiyosuke 大岡清相, *Kiyō gundan* 崎陽群談, ed. Nakata Yasunao 中田易直 and Nakamura Tadashi 中村質 (Kondō shuppansha, 1974), 53.

⁸⁷ Toby, *State and Diplomacy in Early Modern Japan*, 196.

⁸⁸ Toby, 199–201.

much protestation, eventually accepted to carry the trade permits – recognized even by the Kangxi 康熙 Emperor (1654–1722, r. 1661–1722) – is taken as evidence that they accepted Japan, and the shogunate, as the center of a newly established world order.

Toby makes the compelling claim that this was part of a “system of protocols and symbols” in which whether the perceived hierarchy was shared or not by the Chinese themselves was irrelevant, as long as the shogunate kept “the *appearance* of acceptance by foreign states” like in China’s own tributary system.⁸⁹ The political goal of the regime was thus a “matter of national policy”⁹⁰ analogous to the Korean and Ryukyuan embassies to Edo and the yearly court journeys of the VOC *opperhoofden*.

However, even if one accepts the premise that the official shogunal discourse concerning diplomatic protocols was that the Chinese were below them, a closer look at the dealings that went on in Nagasaki reveals a more nuanced picture. The manner both local authorities and scholars perceived the Chinese merchants who came to the city varied widely, and there was no single overarching categorization of them as barbarians. That being said, the rise of the Qing dynasty undeniably introduced a source of tension, especially as the city was home to several Ming loyalists. In addition, Nagasaki authorities had other reasons to be ambivalent about the Chinese junks and their cargo. They could carry people and cultural objects that promoted the prohibited “sect of Jesus” and spread teachings that were unequivocally “barbarian” and heretical.

4. Inspecting Christian writings

In the eyes of the shogunal power, the potential risk of Christianity infiltrating the country did not hinge solely on Catholics landing on Japanese soil. Besides going to great lengths to eradicate all traces of missionaries and their “heretical sect,” the shogunate was careful not to let any Christian ideas seep into the country by any means. Cultural objects that hinted at the existence of the religion were controversial for they could inspire people to convert and rebel against authority.

Besides their regular duties, the Chinese interpreters of Nagasaki fulfilled a fundamental role in ensuring that no trace of Catholic teachings reached the archipelago

⁸⁹ Toby, 202.

⁹⁰ Toby, 203.

from China or elsewhere. If a book, pamphlet, or religious object that referenced the religion were brought to Nagasaki, it was to be immediately reported to the magistrates and then promptly destroyed. This zero-tolerance policy toward Christianity had far-reaching consequences for the development of cosmological ideas in Nagasaki, as elements of Christian origin, notably Jesuit natural philosophy, had to be duly erased or concealed.

Written materials brought aboard Chinese ships were not devoid of unorthodox elements, including Christian ideas. In addition to direct measures against the Portuguese merchants and Catholic missionaries, the shogunate also followed indirect courses of action. The goal was to promote different forms of orthodox thought and to weed out all heretical elements that could inspire the population to revolt. At the cultural and intellectual level, the practice known as “inspection of writings” (*shomotsu aratame* 書物改) stands out. It involved not only domestic politics but also cross-border trade with the continent.

This policy consisted in inspecting Chinese ships for hidden Christian writings and artifacts. Although the shogunate clamped down on missionary activities in the first half of the 17th century, Jesuits were still active in the continent and their publications in Sinitic⁹¹ could be read by Japanese scholars. The implementation of the “inspection of writings” began in 1630 when the first list of proscribed titles was issued. The proscription, reinforced by successive confiscations of titles from 1685, was somewhat relaxed in 1720, when, by Yoshimune’s order, some specific titles were unbanned.

The “inspection of writings” was conceived in the 1630s for cargo coming in from China, and did not, in principle, apply to VOC merchants. There were still restrictions on the Dutch bringing Christian books and artifacts into Japan, but even if they smuggled writings that mentioned Christianity, these would be in European languages inaccessible to everyone except perhaps for a handful of interpreters. The larger perceived risk was Chinese books containing Christian teachings that educated Japanese *could* read or even translate into the vernacular. Since the number of such works in circulation was not large, the original list of proscribed writings was quite limited in its scope.

The first inspectors responsible for enforcing the ban were monks of the Buddhist temple Shuntokuji 春徳寺, founded in 1630, the same year that the first list of proscribed titles came out. Although unrelated to the three recently established Chinese temples in town,

⁹¹ In this study, I follow Victor Mair and Peter Kornicki in referring to Classical Chinese (Ch. *wenyan* 文言, Jp. *kanbun* 漢文) as Sinitic. Victor H. Mair, “Buddhism and the Rise of the Written Vernacular in East Asia: The Making of National Languages,” *The Journal of Asian Studies* 53, no. 3 (1994): 707–51; Peter Kornicki, *Languages, Scripts, and Chinese Texts in East Asia*, First edition (Oxford: Oxford University Press, 2018), 19.

Shuntokuji also served an analogous function of acting as a bulwark against the spread of Christianity in a city with a growing Chinese population, who also fell under suspicion of having some converts among them. According to the temple's own records about its foundation, it was established with an order from the shogunate that "in the two regions of Tsushima and Nagasaki, the Christian sect should be monitored, and banned writings should be inspected" (對州長崎之兩所、切支丹宗門目付、并御制禁之書吟味、被差下之由).⁹²

This information reveals that the threat of Christian writings entering Japan was perceived to be the strongest in these contact zones – Tsushima with the Korean peninsula and Nagasaki with Chinese merchants sailing from various ports in East and Southeast Asia. Although further research is necessary to assess the extent of the impact that commerce with Chosŏn Korea had on the circulation of banned Christian writings in Edo Japan, authorities no doubt perceived Tsushima and Nagasaki to be, at least in the first decades of the Tokugawa reign, analogous ports of entry for Sinitic books with potentially Christian ideas.⁹³

In Nagasaki, the purpose of Shuntokuji was, from the very beginning, to aid in the suppression of Christianity, and the monks of the temple were handsomely rewarded for the task. There are records of its founder, Taishitsu Seian 泰室清安 (?–1650), being provided with thirty sacks of rice and a stipend for five persons for his services.⁹⁴ The position of Shuntokuji revealed the importance of Buddhist temples in the city to supplant the role formerly occupied by Catholic churches. The replacement was often both physical and intellectual, as the temple was moved in 1643 to the former location of a Jesuit church known as Todos os Santos (Portuguese for "All Saints"), overlooking the port of Nagasaki. This church was built by order of the Jesuit missionary Gaspar Vilela (1526–1572) in 1569 and contained living quarters and graves of Christian converts on its grounds before it was dismantled in 1614 in the wake of the edicts banning the religion.⁹⁵

In the late 16th century, Todos os Santos became a sort of underground headquarters for the Jesuits in the wake of Hideyoshi's execution of Christians and crackdown on missionary activities.⁹⁶ The construction of a Buddhist temple where such a strategic church

⁹² Quoted in Etchū Tetsuya 越中哲也, *Nagasaki Shuntokuji shi* 長崎春徳寺史 (Nagasaki: Shuntokuji, 1981), 2.

⁹³ On the ways the Tokugawa regime pressured Chosŏn Korea to cooperate in their combat against Christianity, especially after the Shimabara-Amakusa revolt, see Pierre-Emmanuel Roux, "La Trinité antichrétienne : Essai sur la proscription du catholicisme en Chine, en Corée et au Japon (XVIIe-XIXe siècles)" (Ph.D. dissertation, Paris, École des Hautes Études en Sciences Sociales, 2013), 568–601.

⁹⁴ Wakaki Taiichi 若木太一, "Shomotsu aratame: Shuntokuji to nagasaki seidō" 書物改 – 春徳寺と長崎聖堂, in *Nagasaki: tōzai bunka kōshōshi no suteji* 長崎・東西文化交渉史の舞台, ed. Wakaki Taiichi 若木太一, vol. 2 (Bensei Shuppan, 2013), 349.

⁹⁵ Etchū, *Nagasaki Shuntokuji shi*, 4; Wakaki, "Shomotsu aratame: Shuntokuji to nagasaki seidō," 347.

⁹⁶ Tronu, "Sacred Space and Ritual in Early Modern Japan," 136–41.

used to stand is a telling representation of the issues at stake – it was a matter of eliminating all traces of the religion that the Jesuits promoted by literally replacing their previous venues with institutions actively participating in the eradication of their teachings.

4.1. *The European Li Madou*

The shogunal order for “monitoring Christianity and inspecting proscribed writings” lead the founder of Shuntokuji to be assigned to Nagasaki, where he was to “inspect writings that proselytize the ‘sect of Jesus’ [like those] composed by the European Li Madou” (歐羅巴利瑪竇之作耶穌宗教化之書を相改), according to the aforementioned records the temple.⁹⁷ Li Madou (Jp. *Ri Matō* 利瑪竇) was the Chinese name of the well-known Italian Jesuit Matteo Ricci (1552–1611). Ricci worked closely with Ming scholars and officials who eventually converted to Christianity – such as Xu Guangqi 徐光啓 (1562–1633) and Li Zhizao 李之藻 (1565–1630) – to produce a great number of books written in Sinitic that circulated not only throughout China but also in Korea and Japan. Such works presented at the same time the Catholic doctrines promoted by the Jesuits in their efforts to convert the literati elites and the cosmological foundations to support their worldview.

The identification of Matteo Ricci by name as the main target of the proscription was not fortuitous. He was one of the first missionaries in China to successfully consort with high-ranking officials in order to spread Christian ideas among them, earning himself a reputation as a “Western [Confucian] scholar” (Ch. *xi ru* 西儒).⁹⁸ Jesuit missionaries, together with Chinese converts, promoted their teachings as *tianxue* (Jp. *tengaku* 天學), which could be translated as “celestial scholarship,” “heavenly learning,” or even “Learning from Heaven.”⁹⁹ It was an ambivalent term that encompassed not only theological issues of the Catholic faith but also cosmological knowledge pertaining to the material world, such as astronomy and natural philosophy. It represented the product of an accommodative approach that the Jesuits adopted in the process of learning the customs and traditions upheld by Chinese scholars to

⁹⁷ Etchū, *Nagasaki Shuntokuji shi*, 2.

⁹⁸ On Ricci’s transformation into a Chinese-style literatus see Willard J. Peterson, “Learning from Heaven: The Introduction of Christianity and Other Western Ideas into Late Ming China,” in *China and Maritime Europe, 1500–1800: Trade, Settlement, Diplomacy, and Missions*, ed. John E. Wills (Cambridge: Cambridge University Press, 2011), 88–92. For a discussion on how Ricci’s activities contributed to the formation of new notions about “Europe” and “the West” in Ming China, see Florin-Stefan Morar, “The Westerner: Matteo Ricci’s World Map and the Quandaries of European Identity in the Late Ming Dynasty,” *Journal of Jesuit Studies*, no. 6 (2019): 14–30.

⁹⁹ This is the translation proposed in Peterson, “Learning from Heaven: The Introduction of Christianity and Other Western Ideas into Late Ming China.”

better convert them to their religion.¹⁰⁰ As a result, this new “celestial scholarship” incorporated significant elements of Confucian thought. It was an amalgamation of the scholasticism taught in the European institutes where the missionaries studied – such as the Roman College of the Society of Jesus in Italy and the University of Coimbra in Portugal – with the orthodox views held by scholars in the imperial system of Ming and later Qing China.¹⁰¹

Since its foundation in 1540, the Society of Jesus emphasized both its education and international expansion. In 1551, the Jesuits established their Roman College and set a benchmark for Jesuit education that would be exported around the globe. Within the Society’s overarching objective of doctrinal and pedagogical uniformity conformity, culminating in the publication of the educational program *Ratio Studiorum* in 1599,¹⁰² there existed a considerable range of cosmological views among Jesuits.¹⁰³ This divergence was frequently manifested in the distinct teachings of missionaries operating in disparate geographic locales. Christoph Clavius (1538–1612), who was pivotal for the development of mathematics as an essential part of the curriculum in the Roman College, greatly impacted the circulation of European mathematical and astronomical knowledge in East Asia through his students and adaptations of his works.¹⁰⁴

Matteo Ricci did part of his training in the Roman College during the 1570s and studied under Clavius, with whom he continued to correspond later in his life.¹⁰⁵ Around the time that Ricci was his student, Clavius contributed to the commission that eventually led to the implementation of the Gregorian calendar.¹⁰⁶ Clavius’s translation and commentaries of the *Elements of geometry* of Euclid, alongside what Ricci had learned from him while in Rome, became the basis of *Jihe yuanben* 幾何原本 (“Foundations of geometry”), a partial translation

¹⁰⁰ D. E. Mungello, *Curious Land: Jesuit Accommodation and the Origins of Sinology* (Honolulu: University of Hawai‘i Press, 1989), chap. 1.

¹⁰¹ On the position of the Jesuits and their technical knowledge in China, see Florence C. Hsia, *Sojourners in a Strange Land: Jesuits and Their Scientific Missions in Late Imperial China* (Chicago: University of Chicago Press, 2009); Catherine Jami, *The Emperor’s New Mathematics: Western Learning and Imperial Authority during the Kangxi Reign (1662–1722)* (Oxford: Oxford University Press, 2012).

¹⁰² Cristiano Casalini, “Rise, Character, and Development of Jesuit Education: Teaching the World,” in *The Oxford Handbook of the Jesuits*, ed. Ines G. Županov (Oxford: Oxford University Press, 2019), 153–76.

¹⁰³ Casalini.

¹⁰⁴ Jami, *The Emperor’s New Mathematics*, 13–30.

¹⁰⁵ Jonathan D. Spence, *The Memory Palace of Matteo Ricci* (New York: Penguin Books, 1985), 140–44; R. Po-chia Hsia, *A Jesuit in the Forbidden City: Matteo Ricci, 1552–1610* (Oxford: Oxford University Press, 2010), 14–16.

¹⁰⁶ James M. Lattis, *Between Copernicus and Galileo: Christoph Clavius and the Collapse of Ptolemaic Cosmology* (Chicago: University of Chicago Press, 1994), 20.

into Sinitic of Euclid’s book, which Ricci first published in 1607 in collaboration with Xu Guangqi.¹⁰⁷

4.2. *Matteo Ricci’s world maps*

During his lifetime and in posterity, Ricci became known for the world maps he produced in China. Starting from 1584, his maps were printed in four different versions of varying sizes and under different titles.¹⁰⁸ All these maps contain a planisphere of a spherical earth as their main feature and offer a depiction of the world in which China does not occupy the position of a “central land” or the “Middle Kingdom” (Ch. *Zhongguo*; Jp. *Chūgoku* 中國)¹⁰⁹ but is rather one of the “myriad lands” (Ch. *wanguo*, Jp. *bankoku* 萬國) that humans inhabit on the globe. There seems to be no extant print of the very first edition by the title of *Yudi shanhai quantu* 輿地山海全圖 (“Complete map of mountains and seas of the earth”), but such a map is reproduced in the massive compendium *Tushu bian* 圖書編 (“Compilation of images and writings”) by Zhang Huang 章潢 (1527–1608).¹¹⁰

¹⁰⁷ For a study of this book, see Peter M. Engelfriet, *Euclid in China: The Genesis of the First Chinese Translation of Euclid’s Elements, Books I–VI (Jihe Yuanben, Beijing, 1607) and Its Reception up to 1723*, Sinica Leidensia 40 (Leiden: Brill, 1998).

¹⁰⁸ For an extensive if somewhat dated account of the four editions of the maps, Pasquale M. D’Elia, “Recent Discoveries and New Studies (1938–1960) on the World Map in Chinese of Father Matteo Ricci SJ,” *Monumenta Serica* 20 (1961): 82–164.

¹⁰⁹ Bo Chen, “The Making of ‘China’ out of ‘Zhongguo’: 1585–1690,” *Journal of Asian History* 50, no. 1 (2016): 73–116. See a response in Nicolas Standaert, “The Making of ‘China’ out of ‘Da Ming,’” *Journal of Asian History* 50, no. 2 (2016): 307–28.

¹¹⁰ For a bibliographical overview of this work, see Yahano Takao 矢羽野隆男, “‘Tosho hen’ no shoshigakuteki kōsatsu” 『圖書編』の書誌学的考察, *Machikaneyama ronsō Tetsugaku-hen* 待兼山論叢・哲学篇 28 (1994): 15–27. See also Alexander Akin, *East Asian Cartographic Print Culture: The Late Ming Publishing Boom and Its Trans-Regional Connections* (Amsterdam: Amsterdam University Press, 2021), 65–79.

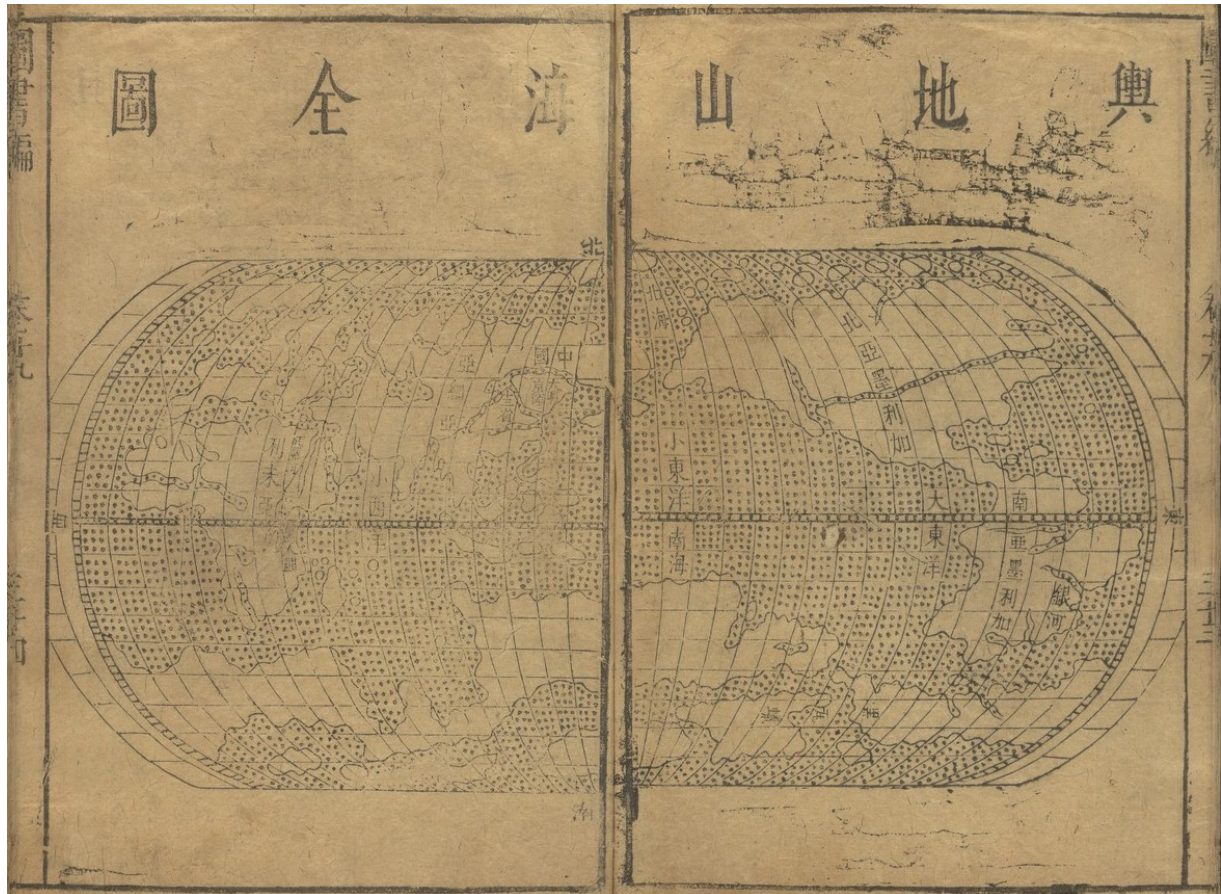


Figure 1.2. *Yudi shanhai quantu* as reproduced in *Tushu bian* (Harvard Yenching Library)

The second edition of the map was printed in 1600 and has a similar title to the first one, *Shanhai yudi quantu* 山海輿地全圖 (“Complete map of mountains and seas of the earth”). It was commissioned by Wu Zhongming 吳中明 (dates unknown), a high official of Nanjing who also composed the preface. While it appears that there is no extant copy of this second version either, a reproduction is found in a 1602 book by Feng Yingjing 馮應京 (1555–1606) titled *Yueling guangyi* 月令廣義 (“Broad meaning of the monthly ordinances”), which contains the prefaces by both Wu Zhongming and Matteo Ricci from the original map.¹¹¹ Another reproduction is included in the encyclopedia *Sancai tuihui* 三才圖會 (“Illustrations of the three powers”), published in 1609,¹¹² and which inspired a Japanese version titled *Wakan sansai zue* 和漢三才圖會 (“Illustrations of the three powers in Japan and China”), appearing in 1712.

¹¹¹ This second edition of the map was also published as an atlas in 1604 by Guo Qingluo 郭青螺, governor-general of Guizhou 貴州, who wrote a new preface. D’Elia, “Recent Discoveries and New Studies (1938-1960) on the World Map in Chinese of Father Matteo Ricci SJ,” 96.

¹¹² Cf. Akin, *East Asian Cartographic Print Culture*, 79–83.

The existence of such reproductions enabled the Ricci maps to circulate.¹¹³ The representation of a spherical earth and its underlying cosmological ideas reached a wider public throughout East Asia as books such as *Yueling guangyi* and *Sancai tuhui* were read in both Japan and Korea.¹¹⁴



Figure 1.3. *Shanhai yudi quantu* as reproduced in *Sancai tuhui* (Harvard Yenching Library)

The third edition of the map, published by Li Zhizao in Beijing in 1602 under the title *Kunyu wanguo quantu* 坤輿萬國全圖 (“Complete map of the myriad lands of the earth”), is arguably the best-known version and enjoyed the widest circulation in its original form. It was printed in six large panels, and it greatly refined the details and descriptions of the world from the previous editions. Besides the planisphere, the large map also contains a geocentric cosmographical model that shows nine tiers of heaven (Ch. *jiuchongtian tu*, Jp. *Kyūjūten zu* 九重天圖) and a representation of an armillary sphere (Ch. *tiandiyi*, Jp. *tenchigi* 天地儀).

¹¹³ Akin, 168–77.

¹¹⁴ See the last section of chapter four in the present study. On the impact of these maps in Korea, cf. Jongtae Lim, “Matteo Ricci’s World Maps in Late Joseon Dynasty,” *The Korean Journal for the History of Science* 2, no. 33 (2011): 277–96.



Figure 1.4. Print copy of *Kunyu wanguo quantu* (Miyagi Prefectural Library)

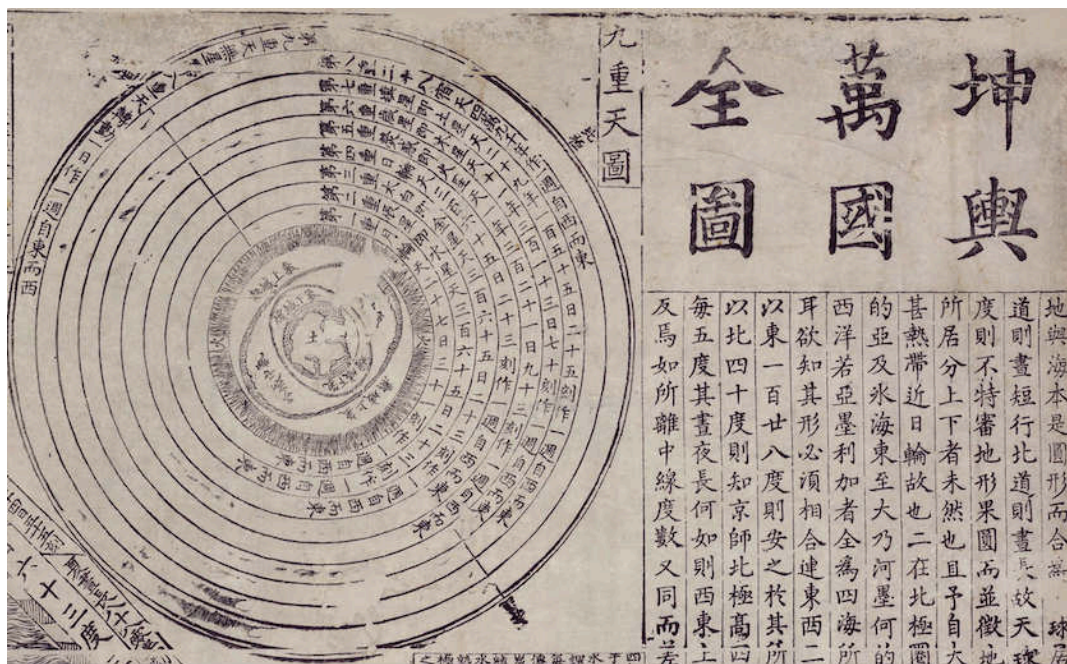


Figure 1.5. Detail of *wanguo quantu* with a cosmographical model presenting the nine-tiered heavens (Miyagi Prefectural Library)

According to Ricci's account, the printers in Beijing carved two woodblocks for this same edition, printing and selling the map on their own besides making the copies under the supervision of Li Zhizao.¹¹⁵ This contributed to circulating even further. Prints of this third

¹¹⁵ D'Elia, "Recent Discoveries and New Studies (1938-1960) on the World Map in Chinese of Father Matteo Ricci SJ," 114.

edition produced in China also reached Japan, where they were copied by hand into often richly colored manuscripts, such as the one held at the Miyagi Prefectural Library reproduced below.¹¹⁶ There are extant copies of the Chinese prints of *Kunyu wanguo quantu* currently preserved at the Miyagi Prefectural Library (in addition to a colored manuscript) as well as the Kyoto University Library, and the National Archives of Japan – the last one containing only the main illustration of the world map, i.e., without the accompanying diagrams and explanations.¹¹⁷

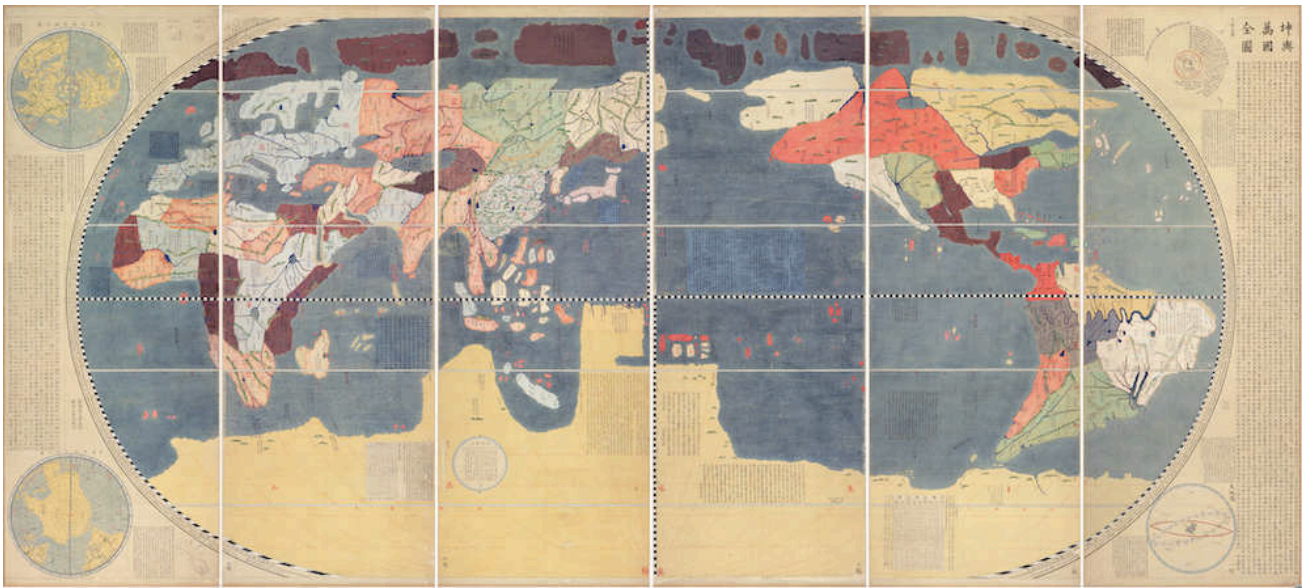


Figure 1.6. Japanese manuscript colored copy of *Kunyu wanguo quantu* (Miyagi Prefectural Library)

The fourth edition of the map was published circa 1603 as *Liangyi xuanlan tu* 兩儀玄覽圖 (“Map of the profound view of heaven and earth”) under the auspices of convert Li Yingshi 李應試 (?–1653) to satisfy the high demand that the previous edition generated.¹¹⁸ The map, printed in eight panels, is slightly larger than the third edition both in length and height.¹¹⁹ There are new accompanying texts added to this edition, including one by Li Yingshi himself, as well as by Feng Yingjing – who had published his own *Yueling guangyi* with

¹¹⁶ Aoki Chieko 青木千枝子, “*Nihon ni genson suru ‘Kon’yo bankoku zenzu’ sho zu ni tsuite*” 日本に現存する「坤輿万国全図」諸図について, *Kirishitan bunka kenkyūkai kaihō* キリシタン文化研究会会報, no. 102 (n.d.): 1–12.

¹¹⁷ On the less than ten known original prints of *Kunyu wanguo quantu* preserved in different parts of the world today, see Unno Kazutaka 海野一隆, “*Ri Matō ‘Konyo bankoku zenzu’ no shohan*” 利瑪竇『坤輿万国全図』の諸版, *Tōyō gakuhō* 東洋学報 87, no. 1 (2005): 101–43.

¹¹⁸ D’Elia, “Recent Discoveries and New Studies (1938–1960) on the World Map in Chinese of Father Matteo Ricci SJ,” 120–21.

¹¹⁹ D’Elia, 125.

Ricci's second map not too long before.¹²⁰ One major difference is the cosmographical model depicted on the top right-hand corner of the map, right next to the new title. Instead of nine tiers of heaven, this one contains eleven tiers. The armillary sphere is also depicted, although not at the bottom of the rightmost panel, but instead at the top of the leftmost panel. Few copies of the fourth version appear to have survived,¹²¹ and less research has been conducted on this fourth edition compared to the third one.¹²²

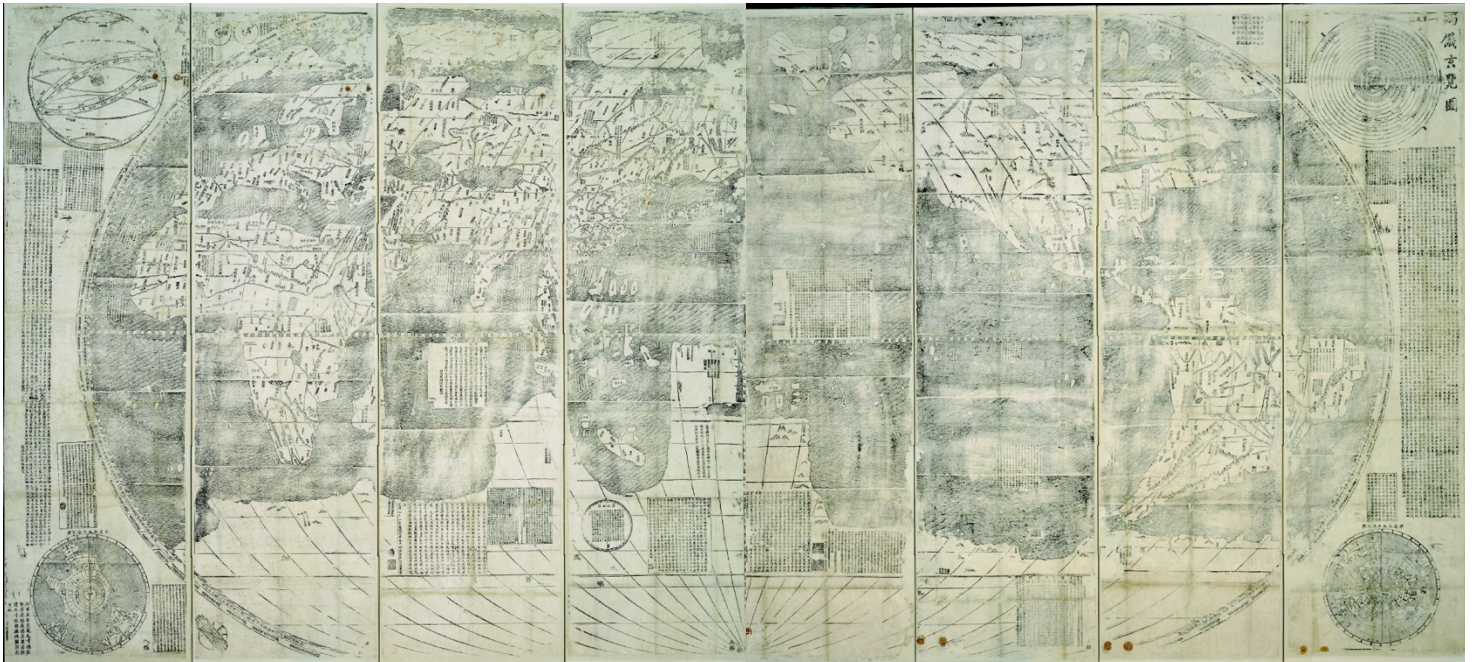


Figure 1.6. Print copy of *Liangyi xuanlan tu* (Korea Christian Museum at Soongsil University)

¹²⁰ D'Elia, 127–58.

¹²¹ Only two extant copies seem to be known: one in Korea, at the Korean Christian Museum at Soongsil University in Seoul, and one in China, at the Liaoning Provincial Museum in Shenyang. For a study of the second version and its annotations in Manchu, see Florin-Stefan Morar, “Relocating the Qing in the Global History of Science: The Manchu Translation of the 1603 World Map by Li Yingshi and Matteo Ricci,” *Isis* 109, no. 4 (2018): 673–94.

¹²² For recent articles, see Suzuki Nobuaki 鈴木信昭, “Chōsen ni denrai shita Ri Matō ‘Ryōgi genran zu’” 朝鮮に伝来した利瑪竇『兩儀玄覽圖』, *Chōsen gakuho* 朝鮮学報 201 (2006): 1–30; Suzuki Nobuaki 鈴木信昭, “Ri Matō ‘Ryōgi genran zu’ kō” 利瑪竇『兩儀玄覽圖』攷, *Chōsen gakuho* 朝鮮学報 206 (2008): 21–60; Hsu Kuang-Tai 徐光台, “Li Madou, Li Yingshi yu ‘Liangyi xuanlan tu’” 利瑪竇、李應試與《兩儀玄覽圖》, *Hanxue yanjiu* 漢學研究 4, no. 30 (2012): 133–67; Morar, “Relocating the Qing in the Global History of Science.”

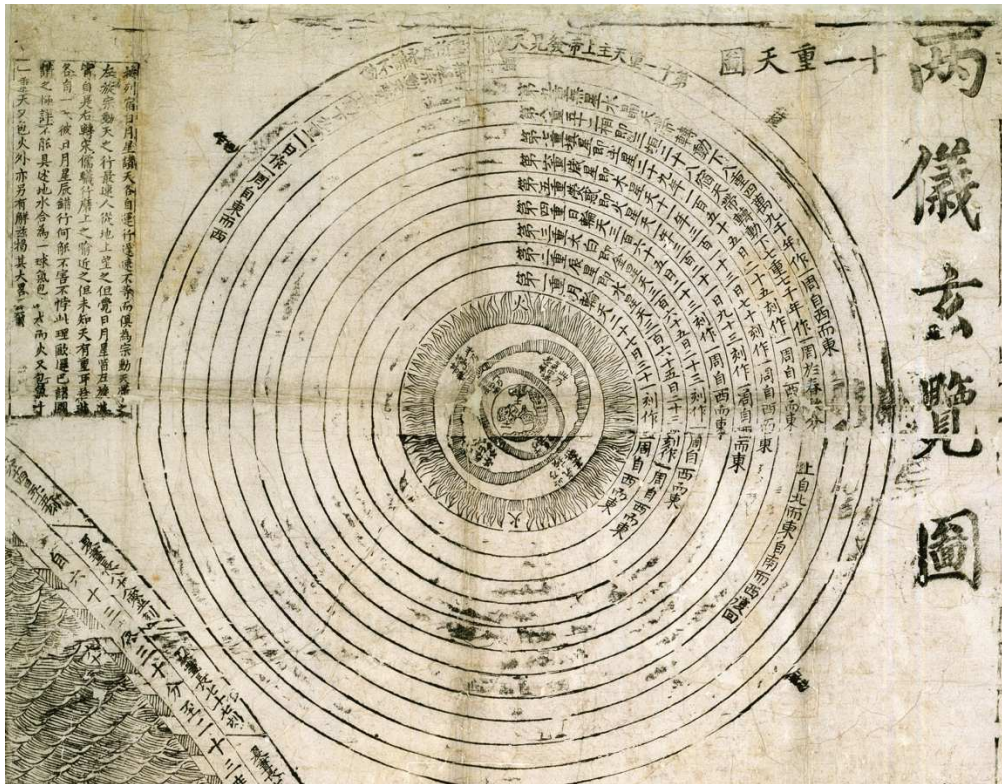


Figure 1.8. Detail of *Liangyi xuanlan tu* with a cosmographical model presenting the eleven-tiered heavens (Korean Christian Museum at Soongsil University)

The varying versions of these maps and the associated cosmographical models reached Japan under different forms and circulated despite the explicit ban on the writings of Ricci and those around him. While the individual titles of the maps were not featured in any of the lists of banned books, all versions contained clear references to Christian cosmology or to countries that followed the religion, not mention Ricci himself clearly identified by his Chinese names, so their possession was potentially dangerous. The extent of the shogunal efforts to efface any traces of the Jesuits and their religion is evidenced in the copy of the third edition of the map, i.e., *Kunyu wanguo quantu*, housed at the Kyoto University Library. As can be seen in the image below, the imprints of the Society the Jesus around the map were torn off from the map, probably as an attempt to distance it from any association with Christianity, even if only superficially.¹²³

¹²³ It is unclear why the imprint remains intact in the Miyagi printed copy. The colored manuscript from the same library does not reproduce the imprint and contains other significant differences. Another copy that seems to have had the seals removed after printing is currently preserved at the James Ford Bell Library at the University of Minnesota.



Figure 1.9. Detail of *Kunyu wanguo quantu* print with the Jesuit IHS insignia removed (left, Kyoto copy) and intact (right, Miyagi copy).

4.3. The “First collection of celestial scholarship”

While Ricci’s world maps became the visual representation of Jesuit cosmology in East Asia, they were neither the only nor the most detailed account of their views. The “writings that proselytize the ‘sect of Jesus’” identified in the Shuntokuji document cited above referred in great part to one specific set of books under the collective title *Tianxue chuhan* 天學初函 (“First collection of celestial scholarship”).¹²⁴ This collection of twenty works written by the Jesuits and their Chinese associates, divided into two sections with ten titles each, was compiled by Ming scholar and Catholic convert Li Zhizao – who, as seen previously, was responsible for printing *Kunyu wanguo quantu*, the most circulated version of the Ricci world maps. The first section of *Tianxue chuhan* is called that of the “principle” (Ch. *li*, Jp. *ri* 理), and concerns largely moral and theological subjects, while the second one is called that of the “instrument” or “vessel” (Ch. *qi*, Jp. *ki* 器), and refers to more practical technical knowledge.¹²⁵

¹²⁴ There is some debate as to the first date of publication of this compilation, generally placed between 1628 and 1630. Dayuan Ren, “The Influence of Tianxue (Heavenly Learning) on Chinese Thought in the Seventeenth Century,” *Monumenta Serica* 69, no. 1 (2021): 143–60.

¹²⁵ On the practical section, see Ahn Daeok 安大玉, *Minmatsu seiyō kagaku tōdenshi: “Tengaku shokan” kihen no kenkyū* 明末西洋科学東伝史—『天学初函』器編の研究 (Chisen shokan, 2007).

Table 1. Titles in the first part of *Tianxue chuhan*, the “principle section” (*libian* 理編)

ORIGINAL TITLE	ENGLISH TRANSLATION
<i>Xixue fan</i> 西學凡	An overview of Western learning
<i>Tang jingjiao bei</i> 唐景教碑	The Nestorian stele from the Tang [dynasty]
<i>Jiren shipian</i> 畸人十篇	Ten essays on an eccentric
<i>Jiaoyou lun</i> 交友論	Discourse on friendship
<i>Ershiwu yan</i> 二十五言	Twenty-five sayings
<i>Tianzhu shiyi</i> 天主實義	The true meaning of the Lord of Heaven
<i>Bianxue yidu</i> 辯學遺牘	Posthumous refutations [of Buddhism]
<i>Qike</i> 七克	Seven victories
<i>Lingyan lishao</i> 靈言蠡勺	Treatise on the soul
<i>Zhifang waiji</i> 職方外紀	Records of [lands] outside [the purview] of the imperial geographer

Table 2. Titles in the second part of *Tianxue chuhan*, the “instrument section” (*qibian* 器編)

ORIGINAL TITLE	ENGLISH TRANSLATION
<i>Taixi shuifa</i> 泰西水法	Water methods of the Great West
<i>Hungai tongxian tushuo</i> 渾蓋通憲圖說	Illustrated explanations of the [celestial] sphere and the astrolabe
<i>Jihe yuanben</i> 幾何原本	Elements of geometry
<i>Biaodu shuo</i> 表度說	Explanations on the measurements of the gnomon
<i>Tianwen lue</i> 天問略	Summary of questions concerning the heavens
<i>Jian pingyi</i> 簡平儀	A simple flat device [for measuring the projection of the sun’s movement]
<i>Tongwen suanzhi: Qian tong bian</i> 同文算指— —前·通編	Rules of arithmetic common across cultures: Parts one and two [of three]

<i>Yuanrong jiaoyi</i> 圓容較義	The meaning of compared [figures] inscribed in a circle
<i>Celiang fayi</i> 測量法義	The meaning of measurement methods
<i>Gougu yi</i> 勾股義	The meaning of the base and altitude

The second title of the first part, *Tang jingjiao bei* 唐景教碑 (“The Nestorian stele from the Tang [dynasty]”) consists of a one-sheet printed reproduction of a stele from 781, unearthed in the outskirts of modern-day Xi’an in the 1620s, that recounts the history of the Nestorian Church in China during the early years of the Tang 唐 Dynasty (618–907).¹²⁶ It was often published together with the first title *Xixue han* 西學凡 (“An overview of Western learning”), written by Italian missionary Giulio Aleni (1582–1649), known in Chinese as Ai Rulue 艾儒略.¹²⁷ Aleni also published, in collaboration with convert Yang Tingyun 楊廷筠 (1562–1627), the geographical work *Zhifang waiji* 職方外紀 (Records of [lands] outside [the purview] of the imperial geographer”), the last title of the first section, in which he offers descriptions of various countries that would be unknown to readers in China, hence the title.

The division between the “moral” and “practical” categories was quite porous. In *Zhifang waiji*, technical geographical knowledge is intertwined with moral judgments about the Christian values and virtues of different lands such as Italy, Abyssinia, and Judea. The presence of abundant Christian elements would explain the shogunal decision to prohibit all titles listed in *Tianxue chuhan*, despite containing several titles that could be of practical use in Japan. That being said, the fact that the compilation was proscribed still did not prevent the circulation of some of its titles among Japanese scholars, especially in Nagasaki.

Another compelling example of both the porosity between “moral” and “practical” writings and the circulation of such titles in Japan is *Taixi shuifa* 泰西水法 (“Water methods of the Great West”), written by Italian Jesuit Sabatino de Ursis (1575–1620) – Xiong Sanba 熊三拔 in Chinese – together with the scholar Xu Guangqi, who also worked closely with Ricci. Although ostensibly about practical matters, this book contains references to God as the creator of everything and presents the argument that knowledge about the workings of the four elements according to Jesuit natural philosophy can lead to knowledge about all of God’s

¹²⁶ On the Nestorian stele and how it was perceived by Europeans missionaries and scholars, see Mungello, *Curious Land*, 164–72.

¹²⁷ Ōba Osamu 大庭脩, *Nitchū kōryū shiwa: Edo jidai no nitchū kankei o yomu* 日中交流史話—江戸時代の日中關係を読む (Osaka: Nenshōsha, 2003).

creation.¹²⁸ De Ursis reached Beijing in 1607 after Ricci had specifically requested someone well-versed in astronomy and hydraulics to come to the city.¹²⁹ This indicates that there was a deliberate strategy of showcasing the expertise of Jesuits in “technical” matters as a way of aiding their religious project.

Such instances demonstrate that the shogunal decision to ban even “technical” works was justified as a way to eradicate all mentions of the religion. *Taixi shuifa*, while still proscribed, could reach Japanese scholars by other means, as it was reprinted in the compilation *Nongzheng quanshu* 農政全書 (“Complete writings on agricultural management”) published in 1639 by Xu Guangqi, which did not fall under the ban. Another possibility is that, despite the ban, titles like *Taixi shuifa* could circulate outside these compilations and be copied and read in manuscript form. Such books informed the cosmological views of Nagasaki scholars like Nishikawa Joken, who, besides utilizing both *Zhifang waiji* and *Taixi shuifa*, also referred to different versions of the Ricci world maps, namely the second and fourth editions, *Shanghai yudi quantu* and *Liangyi xuanlan tu*, as demonstrated in the subsequent parts of the present study.

4.4. *Forbidden titles*

The list of books proscribed by the shogunate, which evolved over time, can be reconstructed based on later sources that specify when each title was added or removed from the list. For the very first list issued in 1630, the earliest and most reliable source is *Kōsho koji* 好書故事 (“Tales of bibliophilia”), written by Kondō Jūzō 近藤重藏 (1771–1829), also known as Seisai 正齋. Jūzō served as an official librarian (*shomotsu bugyō* 書物奉行) to the shogunate between 1808 and 1819, and was able to access the archives pertaining to the inspection of Chinese books in Nagasaki during his two-year stay there between 1795 and 1797.¹³⁰ He writes:

From the old records of the Nagasaki inspector of writings (in the section written by Mukai Genchū): Starting in the seventh year of the Kan’ei era [1630], that of the Horse, it was

¹²⁸ Peterson, “Learning from Heaven: The Introduction of Christianity and Other Western Ideas into Late Ming China,” 105–6.

¹²⁹ Hsia, *A Jesuit in the Forbidden City*, 276.

¹³⁰ Ōba, *Nitchū kōryū shiwa: Edo jidai no nitchū kankei o yomu*, 49–50; Wakaki, “*Shomotsu aratame: Shuntokuji to nagasaki seidō*,” 364.

ordered that thirty-two books written by the European Li Madou and others, as well as writings that proselytize the heretical sect [of Christianity], be banned. Other works [already in circulation], in which there are tales about the heretical sect, and passages about the customs and manners of [Christian] countries, were ordered to be sold as such.¹³¹

長物¹³²書物改ノ舊記（向井元仲ナルモノノ録上スル所ナリ）寛永七午年より、歐羅巴人利瑪竇等が作三拾貳種之書并邪宗門教化之書は御禁書に被仰付候。尤其外の書中に邪宗門之噂、國俗風儀等之儀書入候分は其儘にて商賣被仰付候。¹³³

TABLE 3. List of forbidden titles as compiled by Kondō Jūzō¹³⁴

ORIGINAL TITLE	ENGLISH TRANSLATION
<i>Tianxue chuhan yibu</i> 天學初函壹部	First collection of celestial scholarship, one set
<i>Jiren</i> 畸人*	An eccentric
<i>Shipian</i> 十篇	Ten essays
<i>Xixue fan</i> 西學凡	An overview of Western learning
<i>Bianxue yidu</i> 辯學遺牘*	Posthumous refutations [of Buddhism]
<i>Qike</i> 七克*	Seven victories
<i>Misa jiyi</i> 彌撒祭義	Liturgy of the mass
<i>Daiyipian</i> 代疑篇	Essays for replacing doubts
<i>Sanshanlun xueji</i> 三山論學記	Study notes from the three-mountain discourse
<i>Jiaoyao jielüe</i> 教要解略	Abridged explanation of religious principles
<i>Tang jingjiao bei</i> 唐景教碑*	The Nestorian stele from the Tang [dynasty]
<i>Shengji baiyan</i> 聖記百言	One hundred sayings of the holy records
<i>Tianzhu shiyi</i> 天主實義*	The true meaning of the Lord of Heaven
<i>Tianzhu xupian</i> 天主續篇	Further essays on the Lord of Heaven

¹³¹ This translation, with some modifications, is based on Osamu Ōba, *Books and Boats: Sino-Japanese Relations in the Seventeenth and Eighteenth Centuries*, trans. Joshua A. Fogel (Portland: Merwin Asia, 2012), 46. This is a translation of Ōba Osamu 大庭脩, *Edo jidai no nitchū hiwa* 江戸時代の日中秘話 (Tokyo: Tōhō Shoten, 1980), later republished with minor modifications as Ōba, *Nitchū kōryū shūwa: Edo jidai no nitchū kankei o yomu*.

¹³² The correct character should be 崎

¹³³ Kokusho kankōkai 國書刊行會, ed., *Kondō Seisai zenshū* 近藤正齋全集, vol. 3 (Kokusho kankōkai, 1905), 215.

¹³⁴ Kokusho kankōkai, 3:215–16. For the translations, I use, with some modifications, the list found in Ōba, *Books and Boats*, 46–47.

<i>Ershiwu yan</i> 二十五言*	Twenty-five sayings
<i>Lingyan lishao</i> 靈言蠡勺*	Treatise on the soul
<i>Kuangyi</i> 況義	Parables
<i>Wanwu zhenyuan</i> 萬物真源	The true origins of the myriad things
<i>Dizui zhengji</i> 滌罪正記 ¹³⁵	Correct records of washing away sin
<i>Diping yiji</i> 滌平儀記	Record of a flat device for cleaning [sic]
<i>Biaodu shuo</i> 表度說**	Explanations on the measurements of the gnomon
<i>Celiang fayi</i> 測量法義**	The meaning of measurement methods
<i>Celiang fayi yitong</i> 測量法義異同	Differences and similarities in the meaning of measurement methods
<i>Jian pingyi</i> 簡平儀說**	Explanations on a simple flat device [for measuring the projection of the sun's movement]
<i>Zhifang waiji</i> 職方外紀*	Records of [lands] outside [the purview] of the imperial geographer
<i>Tianwen lue</i> 天問略**	Summary of questions concerning the heavens
<i>Gougu yi</i> 勾股義**	The meaning of the base and altitude
<i>Jihe yuanben</i> 幾何原本**	Elements of geometry
<i>Jiaoyou lun</i> 交友論*	Discourse on friendship
<i>Taixi shuifa</i> 泰西水法**	Water methods of the Great West
<i>Hungai tongxian tushuo</i> 渾蓋通憲圖說**	Illustrated explanations of the [celestial] sphere and the astrolabe
<i>Yuanrong jiaoyi</i> 圓容較義**	The meaning of compared [figures] inscribed in a circle
<i>Tongwen suanzhi: Qian tong bian</i> 同文算指— —前·通編**	Rules of arithmetic common across cultures: Parts one and two [of three]

¹³⁵ The actual title for this work is *Dizui zhenggui* 滌罪正規 (“Proper rules for washing away sin”).

* Titles contained in the first section of *Tianxue chuhan*

** Titles contained in the second section of *Tianxue chuhan*

It is clear from a quick comparison with the twenty titles of *Tianxue chuhan* that the majority of banned works were part of the collection. Indeed, the title of the whole compilation appears at the top, and all of its twenty titles are listed separately. The purpose of having each title listed individually was likely so that the books could be identified even if they reached Nagasaki as individual publications.

4.5. *Targeting specific figures*

As demonstrated by previous research, Jūzō's list, based on the records of the fourth-generation “inspector of writings” Mukai Genchū 向井元仲 (1712–1789), is not without its problems.¹³⁶ Several lists with slightly different titles appear in an incomplete manuscript of *Kōsho koji* held at the National Archives of Japan.¹³⁷ The first and second titles, listed separately as *Jiren* 畸人 and *Shipian* 十篇, are likely a single book titled *Jiren shipian* 畸人十篇 (“Ten essays on an eccentric”), which was written by Matteo Ricci toward the end of his life,¹³⁸ and compiled under this title in *Tianxue chuhan*. A different possibility is that *Shipian* is a mistranscription of yet another title, *Shiwei* 十慰 (“Ten consolations”),¹³⁹ written by Italian Jesuit Alfonso Vagnoni (1568–1640) – Gao Yizhi in Chinese 高一志 – who also wrote *Jiaoyao jielie* 教要解略 (“Abridged explanation of religious principles”).

The title *Dizui zhengji* 滌罪正記 (“Correct records of washing away sin”) is in all likelihood *Dizui zhenggui* 滌罪正規 (“Proper rules for washing away sin”), written by Giulio Aleni, while the title that follows it, *Diping yiji* 滌平儀記 (“Record of a flat device for

¹³⁶ Besides Ōba's research, the main references for the proscribed books are Ebisawa Arimichi 海老澤有道, *Kirishitan no kenkyū* 切支丹史の研究, *Nihon shūkyōshi meicho sōsho* 日本宗教史名著叢書 (Tokyo: Shin jinbutsu ōraisha, 1971), 310–28; Itō Tasaburō 伊東多三郎, “*Kūsho no kenkyū*” 禁書の研究, in *Kūseishi no kenkyū* 近世史の研究, vol. 1, 5 vols. (Tokyo: Yoshikawa Kōbunkan, 1981).

¹³⁷ Kondō Jūzō 近藤重藏, “*Kōsho koji*” 好書故事 (Manuscript, 1826), vol. 2, Naikaku bunko, National Archives of Japan, <https://www.digital.archives.go.jp/file/1234372>.

¹³⁸ On Ricci's final years and Ricci's final years, see Hsia, *A Jesuit in the Forbidden City*, chap. 12.

¹³⁹ This is the title attested in a catalog of the proscribed titles (*gokinsho mokuroku* 御禁書目錄) that was compiled in 1841 and contains the name of the Nagasaki magistrate at the time. Wakaki, “*Shomotsu aratame: Shuntokuji to nagasaki seidō*,” 355–56. It appears in one of the lists from the *Kōsho koji* manuscript kept in the National Archives, while other lists in the same document list *Jiren shipian* instead.

cleaning [sic]”), might not refer to any actual work.¹⁴⁰ The remaining titles are either from Jesuits and converts whose works were already compiled in *Tianxue chuhan* or from other missionaries and close collaborators. *Misa jiyi* 彌撒祭義 (“Liturgy of the mass”), *Sanshanlun xueji* 三山論學記 (“Study notes from the three-mountain discourse”), and *Wanwu zhenyuan* 萬物真源 (“The true origins of the myriad things”) were all written by Aleni, and *Daiyipian* 代疑篇 (“Essays for replacing doubts”) was composed by Yang Tingyun, who collaborated with Aleni in the aforementioned geographical work *Zhifang waiji*.

Tianzhu xupian 天主續篇 (“Further essays on the Lord of Heaven”) is the continuation of Ricci’s *Tianzhu shiyi* 天主實義 (“The true meaning of the Lord of Heaven”) contained in the collection and was written by Spanish Jesuit Diego de Pantoja (1571–1618) – known in Chinese as Pang Diwo 龐迪我 – who also wrote *Qike* 七克 (“Seven victories”). The translation of Aesop’s fables known as *Kuangyi* 況義 (“Fables”) was made by French Jesuit Nicolas Trigault (1577–1628) – Jin Nige 金尼閣 in Chinese – together with convert Zhang Geng 張賡 (c.1570–1646). *Shengji baiyan* 聖記百言 (“One hundred sayings of the holy records”) was composed by Italian Jesuit Giacomo Rho 1593–1638 – Luo Yagu 羅雅谷 in Chinese – who in the 1630s was appointed to work in the reform the calendar in Beijing together with Johann Adam Schall von Bell (1591–1666) – known as Tang Ruowang 湯若望. Schall von Bell had a close relationship with Xu Guangqi, who was put in charge of the calendar reform.¹⁴¹ Xu Guangqi’s work is well represented in *Tianxue chuhan*. He wrote both *Celiang fayi* 測量法義 (“The meaning of measurement methods”) and its sequel *Celiang fayi yitong* 測量法義異同 (“Differences and similarities in the meaning of measurement methods”) besides contributing to other works contained therein.

Considering all banned titles and their authors,¹⁴² the name that appears the most is, expectedly, that of Matteo Ricci, whose works are listed eight times. Next to him, Aleni and Xu Guangqi are the authors or co-authors of six works each. Li Zhizao, besides being the editor of the entirety of *Tianxue chuhan*, is the author of three individual titles. De Ursis, De Pantoja, and Yang Tingyun each appear twice. Rho, Vagnoni, Trigault, and Zhang Geng

¹⁴⁰ The title for this work is cryptic, and it is unclear whether there was such a book or not. Ebisawa argues that it is in fact a made-up title. Ebisawa Arimichi 海老澤有道, “*Kinshorei ni kansuru sho mondai*” 禁書令に関する諸問題, *Rekishi kyōiku* 歴史教育 4, no. 11 (1956): 25–28.

¹⁴¹ Gregory Blue, “Xu Guangqi in the West: Early Jesuit Sources and the Construction of an Identity,” in *Statecraft and Intellectual Renewal in Late Ming China: The Cross-Cultural Synthesis of Xu Guangqi (1562-1633)*, ed. Catherine Jami, Peter Mark Engelfriet, and Gregory Blue, *Sinica Leidensia* 50 (Leiden: Brill, 2001), 42–43.

¹⁴² See Appendix A for a list of the proscribed books with their respective authors.

appear once each.¹⁴³ The Portuguese Manuel Dias (1574–1659) – known as Yang Manuo 陽瑪諾 – who wrote *Tian wen lue* 天問略 (“Summary of questions concerning the heavens”) also appears once, and so does the Italian Francesco Sambiasi (1582–1649) – or Bi Fangji 畢方濟 in Chinese – co-author of *Lingyan lishao* 靈言蠡勺 (“Treatise on the soul”) with Xu Guangqi.

As this list demonstrates, the initial prohibition had a well-defined target. It concerned a limited number of titles that dealt more or less directly with Christian ideas, even when the main theme of the work could revolve around more practical matters. However, merely banning the titles was not enough. It was necessary to curate books coming into Nagasaki to see whether they contained useful information for the regime. As described in the next chapter, this was to be accomplished by someone other than the monks of Shuntokuji.

Conclusion

The complex environment of Nagasaki – a nodal point in transnational networks that connected the Japanese archipelago to other regions near and far – offered commercial opportunities as well as political risks for its residents. In an attempt to tighten its control over the trade that passed through the city, the central shogunal authorities went to great lengths to suppress any seditious elements, notably those associated with Christianity. As part of its strategies, the shogunate executed Catholic converts and missionaries, dismantled churches, expelled Portuguese merchants, and promoted the construction of Buddhist temples, including those that served the rapidly expanding Chinese population of Nagasaki.

Although there was not necessarily a well-established orthodoxy associated with the Tokugawa regime, Christianity was clearly perceived as a heretical sect to be eradicated. Alongside the increased importance of the Chinese trade in Nagasaki, so-called Chinese interpreters acquired a pivotal position in mediating between local authorities and merchants who spoke different languages and came from various ports in East and Southeast Asia. The Chinese interpreters, together with the interpreters for the Dutch East India Company, provided valuable intelligence to the shogunate that they acquired with their respective interlocutors.

Once the Ming dynasty started to crumble in the continent, and the Qing conquerors finally took over the whole empire after much protracted fighting on land and sea, the

¹⁴³ If one considers *Shiyi* as part of the list, then there are two works by Vagnoni.

position of China as the symbolic center of civilization in East Asia started to shift. Authorities and scholars in Japan no longer recognized the venerable Chinese culture of old in the new Manchu rulers. Nagasaki was the epicenter of the transformations undergone by Japan's trade with China in the wake of the Ming-Qing transition.

The sudden influx of Qing seafarers in the 1680s caused the shogunate to take drastic regulatory measures that ranged from the implementation of monetary caps and trade permits to the construction of the "Chinese quarters," which the traders were not able to leave unless officially authorized. While such policies intensified over time, the constantly renegotiated restrictions imposed on Nagasaki's Chinese population were partly due to the Tokugawa regime's wariness of the infiltration of the "sect of Jesus" promoted by Catholic missionaries in their territories.

One consequential aspect of the shogunal campaign against the religion that directly impacted cosmological thought in Nagasaki was the ban on Sinitic works written by Jesuits and their associates in China. As such books and pamphlets could reach Japan via the Chinese junks that arrived in the city, this decision was of primary concern for Chinese interpreters and local authorities who mediated the trade. The writings of Jesuit missionary Matteo Ricci – identified by his Chinese name Li Madou – as well as other titles compiled by Li Zhizao in the collection *Tianxue chuhan* were initially the main targets of the prohibition. Despite the strict regulations, Ricci's world maps and Jesuit cosmological ideas circulated under a variety of forms.

As demonstrated in the next chapter, the proscription of writings related to Christianity helped crystallize a discourse around orthodoxy in Nagasaki. Paradoxical as it may seem, local scholars who promoted a type of orthodox scholarship firmly grounded on Neo-Confucian views drew from an array of eclectic sources and even incorporated Jesuit elements into their paradigms.

CHAPTER TWO: ESTABLISHING A TRADITION OF SCHOLARSHIP

In the previous chapter, we have seen how Nagasaki was a diverse environment under constant surveillance, at the forefront of shogunal policies against the perceived menace of Christian infiltration. Such an approach shaped the social, religious, and intellectual landscape of the city, ensuring that knowledge concerning the “sect of Jesus” could be quickly identified and eradicated. So far, I have described the “repressive” or “privative” aspects of censorship efforts by Tokugawa’s authorities, but there were also “productive” facets. If the monks employed at Shuntokuji to inspect writings for traces of Catholic ideology were mainly concerned with effacing the traces of the forbidden religion, not long after members of the Mukai clan at the head of the local Confucian academy would be employed to sort through Jesuit knowledge for potentially valuable information for the regime.

This expanded task of the “inspection of writings” (*shomotsu aratame* 書物改) reveals the “formative” dimensions of censorship, for the inspectors were required to engage with Jesuit cosmologies at a deeper level, curating the information they found, and subsuming useful elements into their own epistemic systems. In consequence, the contours of localized scholarly practices started to be delineated, combining older forms of knowledge with incoming transnational trends reflective of developments in the continent, particularly in the wake of the Ming-Qing transition. A highly sinified tradition of local scholarship is crystallized around figures memorialized in *Nagasaki senmin den* 長崎先民傳 (“Biographies of Nagasaki’s ancient notables”), a key document for understanding how scholars of Nagasaki presented their intellectual assets to the rest of the archipelago.

The present chapter is divided into five sections. It starts with the figure of Mukai Genshō 向井元升 (1609–1677), a scholar-physician who made his career in Nagasaki before settling in Kyoto in the latter half of his life. He is the first member of the Mukai clan to be appointed to work alongside the Shuntokuji monks in censoring Jesuit-adjacent writing in Sinitic, and his contribution significantly reshaped the task. I present how his defense of medical and scholarly orthodoxy reflects similar concerns of shogunal anti-Christian policies but belies more complex entanglements with Jesuit cosmological knowledge.

In the second section, I introduce the Confucian academy Nagasaki Seidō 長崎聖堂, founded by Genshō, and demonstrate how Genshō's son Mukai Gensei 向井元成 (1656–1727) expanded on the functions of his father. As rector of the Nagasaki Seidō and inspector of writings, Gensei consolidated a symbiotic relationship between Nagasaki scholars and the shogunate, concomitantly establishing meaningful connections with the continent and keeping the looming threat of Christianity at bay.

In the third section, I engage with a central source on the city's local scholarship, namely the compilation of biographies *Nagasaki senmin den*. I argue that the Chinese interpreter Ro Sōsetsu 盧草拙 (1675–1729) and his adoptive son Ro Senri 盧千里 (1707–1755), responsible for compiling the book, strove – and ultimately succeeded – to present a cohesive picture of a transnational and transregional scholarly community that was not only deeply rooted in China but also recognized by the shogunal power. This narrative became the basis for later accounts of Nagasaki scholars and determined how both local figures and other communities around the archipelago perceived the city's contribution to the intellectual landscape of Edo Japan.

The fourth section concerns cosmological knowledge more specifically, turning to the heritage of astronomical, navigational, and geographical techniques associated with European seafarers and missionaries. By looking at *Nagasaki senmin den* and other primary sources linked with Ro Sōsetsu, I analyze how “barbarian” traditions were assimilated into local forms of knowledge that caught the attention of shogunal authorities, becoming subject to suppression and, conversely, intense interest.

In the fifth and final section of this chapter, I delve into the Ro family's transnational networks. I start with the figure of Nanbu Sōju 南部草壽 (1637–1688), the second rector of the Nagasaki Seidō who embraced an eclectic approach to Confucian scholarship that would become representative of the city's distinctive intellectual milieu. I examine how Sōju's mindset, shared by Sōsetsu, is reflective of similar developments in Ming China, with continental ties being prolonged and even strengthened after the transition into the Qing dynasty. I conclude the chapter with the reign of the eighth shogun Tokugawa Yoshimune 徳川吉宗 (1684–1751, r. 1716–1745), which represented the culmination of political efforts to gather information from a wide range of places and people – particularly concerning cosmological knowledge.

1. The scholar-physician Mukai Genshō (1609–1677)

While the task of inspecting writings brought by Chinese junks for traces of Christianity was initially the responsibility of the Buddhist monks at Shuntokuji, the position acquired other dimensions once scholar-physician Mukai Genshō 向井元升¹ (1609–1677) was also appointed to perform this duty in 1639. Genshō was born in the Saga 佐賀 domain, adjacent to Nagasaki, and moved to the city as a child, receiving his education and making his fame as a physician there. During his time in the city, he had a great number of students in both medicine and Confucian classics, teaching at his private school and at the Nagasaki Seidō 長崎聖堂, a Confucian academy he founded in 1647. Genshō eventually left for Kyoto in 1658, and remained in the imperial capital for the rest of his life, continuing to practice his medical profession.

Genshō's earliest biographical account was written in the form of an epitaph in 1694 by Kaibara Ekiken 貝原益軒 (1630–1714),² a prolific scholar from the Fukuoka domain in northern Kyushu with a wide range of interests.³ Ekiken is known to have written, among numerous other titles, a popular health manual titled *Yōjōkun* 養生訓 (“Precepts for nourishing life”) and the comprehensive book on materia medica *Yamato honzō* 大和本草 (“Pharmacopeia of Japan”).⁴ Throughout his life, he visited Nagasaki on different occasions, where he could procure new Chinese books⁵ and consort with scholars like Genshō.⁶

¹ During his time in Nagasaki, Genshō used the characters 元松 (pronounced the same way) for his name, changing it to 元升 later in his life.

² Wolfgang Michel, “*Jūi Mukai Genshō to seiyō igaku/yakugaku no juyō ni tsuite*” 儒医向井元升と西洋医学・薬学の受容について, in *Nagasaki: tōzai bunka kōshōshi no sutōji* 長崎・東西文化交渉史の舞台, ed. Taichi Wakaki 若木太一, vol. 2 (Bensei shuppan, 2013), 162.

³ On Ekiken, see Mary Evelyn Tucker, *Moral and Spiritual Cultivation in Japanese Neo-Confucianism: The Life and Thought of Kaibara Ekken, 1630-1714*, SUNY Series in Philosophy (Albany: State University of New York Press, 1989).

⁴ On Ekiken's importance to the study of *honzō* 本草 (literally “essential herbs” or “roots and herbs”), which encompassed fields ranging from materia medica to natural history, see Marcon, *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan*, 87–101.

⁵ Inoue Tadashi 井上忠, *Kaibara Ekiken 貝原益軒*, Jinbun sōsho 人物叢書 103 (Yoshikawa Kōbunkan, 1963), 15–21.

⁶ It is not clear whether Ekiken and Genshō became acquainted while the latter was still living in Nagasaki or only after Genshō relocated to Kyoto in 1658, as Ekiken also had opportunities to visit the imperial capital.

Ekiken reports in the biography that Mukai Genshō “started reading the [Confucian classic] books” (始讀書)⁷ at age twenty-two, i.e., around 1630, the year the first list of banned titles was issued. Genshō’s dedication “eventually led him to become a physician” (遂為醫), implying that he concentrated on medical knowledge in his studies. Nine years later, he would be employed in the inspection of writings alongside the Shuntokuji monks, a fact that raises the question of what qualified him for this specific position in the first place.

Genshō’s life encapsulated the contradictions of a transnational city undergoing major transformations. He is reported to have learned the “study of the celestial signs” (*tenmongaku* 天文學)⁸ – i.e., cosmology – from a certain Hayashi Kichiemon 林吉右衛門 (?–1646), an elusive but important figure in the early cosmological scholarship of Nagasaki who was sentenced to death for his Catholic associations. While Genshō could have received this kind of education before or during his formal training in medicine and Confucian orthodoxy, his exposure to Jesuit cosmological thought through someone like Hayashi Kichiemon would make him an ideal candidate for looking for Christian references in Sinitic texts.

According to the genealogical records of the Mukai clan (*Mukai shi keifu* 向井氏系譜), Genshō’s official duties as an inspector, instead of merely censoring Christian books as the Shuntokuji monks did, consisted in “organizing for the shogunal collection writings brought [to Nagasaki] aboard Chinese ships” (從唐船持渡御書物御文庫納).⁹ In other words, he was responsible for curating a library for the shogunate, selecting those titles that might be of practical, political, or moral interest. The “shogunal collection” in question refers to the Momijiyama 紅葉山 library within Edo Castle, established the same year as Genshō’s appointment.¹⁰ Despite the scarcity of sources, previous research indicates that Genshō was

⁷ The entire text is found in Kaibara Ekiken 貝原益軒, *Ekiken zenshū* 益軒全集, ed. Ekikenkai 益軒会, vol. 2 (Kokusho kankōkai, 1973), 309–11; Watanabe, *Kinsei Nihon tenmongakushi.*, 1:30–31; Komoguchi Isao 菰口治, “向井元升の「知恥篇」素描—神道・仏教・キリシタン観,” 中国哲学論集, 1993, 55–56.

⁸ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 130.

⁹ Watanabe Kurasuke 渡邊庫輔, “*Kyorai to sono ichizoku*” 去來とその一族, in *Mukai Kyorai* 向井去來, ed. Mainichi shinbunsha tosho henshūbu 毎日新聞社圖書編集部 (Nagasaki: Kyorai kenshō kai, 1954), 366.

¹⁰ Ōba Osamu argues that a document known as “Index of the Shogunal Collection” (*obunko mokuroku* 御文庫目録), currently kept at the Kanō Bunko 狩野文庫 collection of Tohoku University, reflects some of the books selected by Genshō for the shogunate. As the index is divided by year starting from the sixteenth year of the Kan’ei 寛永 era (1639), when the library was founded, the documents grouped together before that year were the ones already held by the shogunate, and those acquired subsequently were added at the time they entered the collection. Ōba Osamu 大庭脩, “*Tōhoku daigaku Kanō bunko kazō no gobunko mokuroku*” 東北大学狩野文庫架蔵の御文庫目録, *Kansai daigaku tōzai gakujutsu kenkyūjo kijō* 関西大学東西学術研究所紀要 3 (1970): 9–90.

required to fulfill this function whenever the occasion arose rather than being employed in a full-time capacity.¹¹ This is consistent with ad hoc policies of the shogunate to try and eradicate Christianity from the archipelago.

1.1. *Medical and moral orthodoxy*

Kaibara Ekiken's biography of Genshō emphasizes his medical knowledge as the main reason for his ultimate recognition, claiming that “the master [Genshō] was without fail identified as the leading figure among those considered the great physicians of their time” (稱當世之良醫、必以先生為巨擘). He goes on to claim that Genshō had “always revered Confucian scholarship, firmly believing in the sages [of ancient China]; and, whether he devoted himself to [Confucian] classics or read medical books, he was equally exacting in his endeavors” (素崇儒術、篤信聖人、其治經籍看醫書、皆為工夫精密). Ekiken dresses the picture of an ideal Confucian “scholar-physician” (*ju* 儒醫) who does not neglect orthodox Confucian teachings while still fulfilling his more mundane occupation of treating people.

Continuing in this line, Ekiken concludes that Genshō “pursued in most depth the [study of] the [Classic of] Changes and the flows of qi, and did not enjoy browsing through miscellanies” (最深究於易及運氣、不好泛觀雜書). The teachings from the canonical divination manual *Iijing* 易經, or the “Classic of Changes,” and theory known as “flows of qi” (Ch. *yunqi*, Jp. *unki* 運氣), based on the ancient medical text *Huangdi neijing* 黃帝內經 (“Inner classic of the Yellow Emperor”), are taken to be the basis of the proper practice of medicine in Edo Japan with its deep roots in Chinese cosmology.

Genshō's presumed lack of interest in “miscellanies” (*zassho* 雜書) – likely referring to popular books on divinatory techniques – reinforces his commitment to Confucian orthodoxy. A proper scholar-physician was expected to treat his patients according to the well-established cosmic correspondence between heaven, earth, and humans (Ch. *tiandiren*, Jp. *tenchijin* 天地人), the “three powers” (Ch. *sancai*, Jp. *sansai* 三才).¹² Despite the discourse articulated by Ekiken, Genshō's activities in Nagasaki, his contacts, and the books he read belie this idealized vision of someone solely focused on mainstream Confucian traditions.

¹¹ Watanabe, “*Kyorai to sono ichizoku*,” 377–78.

¹² On the three powers and their cosmic correspondences, see John B. Henderson, *The Development and Decline of Chinese Cosmology*, Neo-Confucian Studies (New York: Columbia University Press, 1984), 1–53.

Genshō's position as a scholar-physician was not unusual in Edo Japan. It was a profession that guaranteed a source of income for otherwise unpaid literati. However, the fact that he had grown up, been educated, and started his career in Nagasaki is noteworthy. Besides his training in local medical traditions, he was in close contact with people, objects, and information from abroad. Residing in Nagasaki meant that Genshō had access to a plethora of knowledge that reached the city, either via books or direct observation.

While the hyperbolic tone of Ekiken's biographical account can be ascribed to the nature of such hagiographies, it raises important questions about how learning and scholarship were viewed at the beginning of the Edo period. Genshō is depicted both as a bastion of Confucian orthodoxy and as someone highly well-versed in medicine and materia medica. In Ekiken's preface to his own *Yamato honzō*, he acknowledges his indebtedness to Genshō's earlier pharmacopeia titled *Hōchū biyō wamyō honzō* 庖厨備用倭名本草 ("Japanese names of materia medica for use in the kitchen").¹³ In this book, Genshō describes how "when in Nagasaki, [he] could see birds that people from Great Ming [China] brought with them, and their shape and color were such as noted in *Bencao [gangmu]*" (余長崎ニヲイテ大明人持來シ鳥ヲミルコトアリシニ、形色本草註ノ如キアリ),¹⁴ which would, in turn, inform his own conclusions and later writings. The compendium *Bencao gangmu* 本草綱目 ("Systematic pharmacopeia") by the late Ming scholar Li Shizhen 李時珍 (1518–1593) to which Genshō refers was first printed in Nanjing in 1596, brought to Japan in 1607, and published there in 1637.¹⁵ It quickly became the standard reference on materia medica, providing the basis for Genshō's and Ekiken's works on the subject.

1.2. *The Changes and the five agents*

The theory of *yunqi* 運氣, or "flows of qi" – identified by Ekiken as the marker of a proper orthodox physician like Genshō – is based on the Neo-Confucian cosmological thought of the Song 宋 dynasty (960–1279). In the tradition of Zhu Xi 朱熹 (1130–1200), the main synthesizer of Neo-Confucianism, the material force of qi (Jp. *ki* 氣) manifests the

¹³ Watanabe, "*Kyorai to sono ichizoku*," 374.

¹⁴ Cited in Watanabe, 368.

¹⁵ Cf. Benjamin Elman, "Collecting and Classifying: Ming Dynasty Compendia and Encyclopedias (Leishu)," *Extrême-Orient Extrême-Occident*, 2007, 131–57; Carla Nappi, *The Monkey and the Inkpot: Natural History and Its Transformations in Early Modern China* (Cambridge: Harvard University Press, 2009). On its impact in Tokugawa Japan see Marcon, *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan*.

immaterial principle (Ch. *li*, Jp. *ri* 理) that underlies everything in heaven and on earth and supports existence; the two entities are inseparable. The primordial qi (Ch. *yuanqi*, Jp. *genki* 元氣) that makes up the world can be divided into the two categories of yin and yang (Jp. *on'yō*, *onmyō*, or *in'yō* 陰陽), which exist in a continuum and complement each other. Generally speaking, yang represents brightness, lightness, and clarity; and yin represents darkness, heaviness, and opacity. Things exist by combining traits of yin or yang, instead of being divided into either.¹⁶ Absolute yin and absolute yang are the two modes (Ch. *liangyi*, Jp. *ryōgi* 兩儀) that define existence. These two modes are themselves derived from the great ultimate (Ch. *taiji*, Jp. *taikyoku* 太極). These concepts are as enunciated in the *Xici zhuan* 繫辭傳 (“Commentary on the appended phrases”) section of the *Yijing*:

Therefore, in change there is the great ultimate. This is what generates the two modes [the yin and yang]. The two basic modes generate the four basic images, and the four basic images generate the eight trigrams. The eight trigrams determine good fortune and misfortune, and good fortune and misfortune generate the great enterprise.¹⁷

是故易有太極。是生兩儀。兩儀生四象。四象生八卦。八卦定吉凶。吉凶生大業。¹⁸

In the *Yijing*, the two modes are expressed visually as the broken and unbroken lines that represent yin and yang respectively. These lines can be associated with one another as the four pairs of yin-yin, yin-yang, yang-yang, and yang-yin that make up the four images (Ch. *sixiang*, Jp. *shishō* 四象). By adding to each of these four images an extra broken or unbroken line, one obtains the eight trigrams (Ch. *bagua*, Jp. *hakke* 八卦), which are then made up of a combination of either yin (broken) or yang (unbroken) lines. The divinatory techniques of the *Yijing* are established according to these trigrams that are paired with each other to make up the sixty-four hexagrams described in the book.

The first hexagram, called *qian* (Jp. *ken* 乾), is composed of two trigrams also named *qian*, each with three unbroken lines that represent pure yang. The pure-yang hexagram *qian* is physically manifested as the heavens (Ch. *tian*, Jp. *ten* 天). The second hexagram, called *kun* (Jp. *kon* 坤), is likewise composed of two trigrams named *kun*, containing three broken lines that represent pure yin. The pure-yin hexagram *kun* is physically manifested as the earth (Ch.

¹⁶ cf. Anne Cheng, *Histoire de la pensée chinoise* (Paris: Seuil, 1997), chap. 10.

¹⁷ Here I follow the translation of Richard John Lynn, *The Classic of Changes: A New Translation of the I Ching as Interpreted by Wang Bi*, Translations from the Asian Classics (New York: Columbia University Press, 2004), sec. 11. I omit the interspersed translation of the commentary by Wang Bi 王弼 (226–249).

¹⁸ Honda Wataru 本田濟, *Eki* 易, Chūgoku koten sen 中国古典選 10 (Asahi shinbunsha, 1997), 560.

di, Jp. *chi* 地). This is why the terms *liangyi/ryōgi* 兩儀 – the two modes of yin and yang – and *qiankun/kenkon* 乾坤 – the two hexagrams that represent pure yang and pure yin respectively – are often used interchangeably in cosmological treatises and world maps to designate the whole cosmos, or *tiandi/tenchi* 天地 (“heaven-and-earth”).

In the heavens and on earth, the principles of yin and yang enunciated in the *Yijing* are immaterial, but they manifest themselves in the physical form of five phases (Ch. *wuxing*, Jp. *gogyō* 五行) – metal, wood, water, fire, and earth – that interact with one another. Each phase contains an essential quality (Ch. *xing*, Jp. *sei* 性) associated with it but, unlike the four elements of Aristotelian cosmology, these phases are not static. They represent dynamic cycles, as the term *xing* (Jp. *gyō* 行) evokes in this context the notion of circulation. Interactions between the five phases throughout the year have seasonal patterns that are considered regular, whereas unusual changes in these patterns are seen as anomalous.¹⁹ Correlated to the five phases, there are other pentads such as the five visible planets in the sky (Ch. *wuxing*, Jp. *gosei* 五星) and the five viscera of the human body (Ch. *wuzang*, Jp. *gozō* 五臟), so that heaven, earth, and humans are all interconnected by the movements of qi.

1.3. *Flows of qi*

Besides the notion of qi as the material substrate for all cosmological phenomena, the theory of *yunqi* posits the existence of other variations throughout the year that can be identified under the form of “five flows and six qi” (Ch. *wuyun liuqi*, Jp. *goun rokki* 五運六氣) that directly affect human health.²⁰ Physicians like Mukai Genshō, who subscribed to this understanding of reality, were supposed to take such seasonal changes into account when diagnosing and treating their patients.

Although *yunqi* was consolidated as part of medical theory and practice in the Song dynasty, it has its origins in the ancient text *Huangdi neijing* – more specifically, in seven chapters of the section of the classic titled *Suwen* 素問 (“Basic questions”).²¹ One of the Song

¹⁹ Yamada, *Ki no shizenzō*, 32–33.

²⁰ cf. Catherine Despeux, “The System of the Five Circulatory Phases and the Six Seasonal Influences,” in *Innovation in Chinese Medicine*, ed. Elisabeth Hsu, Needham Research Institute Studies 3 (Cambridge: Cambridge University Press, 2001), 121–65.

²¹ These seven chapters, known as the “comprehensive discourses” (*dulun* 大論) are thought to have been written considerably later than the rest of *Suwen*. While the earliest sections of the book are dated to the Han dynasty

commentaries on *Huangdi nei jing* that established the theory of *yunqi* and had a lasting impact well into 17th-century Japan is *Su wen rushi yunqi lun'ao* 素問入式運氣論奧 (“Introduction to the depths of theory of *yunqi* in the ‘Basic Questions’”), by Liu Wenshu 劉溫舒 (dates unknown), whose preface is dated 1099.

Writing over thirty years after Genshō’s death, Nishikawa Joken laments that this precise interpretation of cosmological and medical phenomena based on the writings of Liu Wenshu was no longer widespread among physicians around him.

In the past, it was seen that, even among the group of so-called barbarian-style *yunqi* specialists of Nagasaki, there was no one who did not subscribe to the *yunqi* theory of Liu Wenshu.

Today, by using China’s (*chūka*) explanation of *yunqi*, one administers treatments for diseases of the five viscera, the six organs, and the meridians of the human body that are based on the methods of the five qi and the six flows; and [these treatments] tally perfectly with [the diseases] because of the unity between heaven and human. That being the case, there is no doubt about the evidence that the *yunqi* of China resonates with heaven and earth. If [*yunqi*] did not tally perfectly with the principle of heaven and earth, how could it be that there is resonance with the human body? Yet, in current times, even among physicians, there is no one who subscribes to the study of *yunqi*. This is most bewildering!

往昔長崎蠻流ノ運氣者ト號スル輩モ劉溫舒之運氣論ヲ信學セスト云者無ト見エタリ。今中華ノ運氣ノ說ヲ以テ、人身ノ五臟六腑經絡ノ疾病を五運六氣ノ法ニ因テ治療ヲ施スニ符節ヲ合シタルカ如キハ、天ト人ト一體ナレハ也。然ラハ唐土ノ運氣天地ニ合應セシ事驗證無疑者也。若其天地ノ理ニ符合スルコト無ンハ何ソ人ノ身ニ合應スル事有ン哉。然ルニ今時ニ至テハ醫家トイヘトモ、運氣ヲ信學スル人ナシ。最不審シ。²²

What Joken describes as the “barbarian-style of *yunqi* specialists” (*banryū no unkisha* 蠻流ノ運氣者) refers to people with expertise in two interconnected domains, namely medicine and cosmology. Genshō’s life and work reflect how medical and cosmological knowledge were intimately connected. Within the scholarship of Nagasaki, the explanations surrounding *yunqi* were used as a tool to make sense of Jesuit cosmology, in particular the workings of the

(202 BC–220 AD), the seven chapters are likely from 8th century at the earliest. Paul U. Unschuld, *Huang Di Nei Jing Su Wen: Nature, Knowledge, Imagery in an Ancient Chinese Medical Text, with an Appendix, The Doctrine of the Five Periods and Six Qi in the Huang Di Nei Jing Su Wen* (Berkeley: University of California Press, 2003), 393.

²² Nishikawa Joken 西川如見, “*Tenmon giron*” 天文義論 (Woodblock print, Kyoto, 1712), vol. 2, fols. 33b–34a, Kanō bunko, Tohoku University Library; Nishikawa Joken 西川如見, *Tenmon giron* 天文義論, ed. Nishikawa Tadasuke 西川忠亮, vol. 2, Nishikawa Joken isho 西川如見遺書 2 (Tokyo, 1899), fols. 33b–34a.

four elements, which conflicted with the theory of the five agents. This adaptation of Jesuit cosmology was designated as *nanban unki* 南蠻運氣, or “*yunqi* of the ‘southern barbarians’ (i.e., Iberians).” In fact, the Jesuits themselves who were active in Japan enabled this approximation between their understanding of natural philosophy and the Sino-Japanese notion of *yunqi*.

1.4. *A peculiar book on Jesuit cosmology*

Mukai Genshō engaged directly with Jesuit cosmology when he was required to provide the commentary for the work of the Portuguese apostate Christovão Ferreira (1580–1650), known in Japanese as Sawano Chūan 澤野忠庵. The resulting book was titled *Kenkon bensetsu* 乾坤辨說 (“Discerning explanations on the heaven and earth”),²³ which contains a preface from 1650, the year of Ferreira’s death. This unusual treatise, with its accompanying commentary completed around 1659,²⁴ demonstrates the limitations as well as the potential of overlapping cosmologies. Ferreira was a controversial figure in the Japan mission of the Society of Jesus. After proselytizing in the country for over twenty years, he apostatized in 1633 under severe torture.²⁵ Once he renounced his faith, he collaborated closely with shogunal authorities to erase the impact of the very religious worldview that he used to profess.

According to the account provided in Genshō’s preface,²⁶ Ferreira wrote the original text in Japanese using Latin letters. By order of the then Nagasaki magistrate Kainoshō Masanobu 甲斐庄正述 (?–1660), this text was read aloud by the interpreter Nishi Genpo 西

²³ A somewhat unwieldy English translation of the whole book is available in José Miguel Pinto dos Santos, “A Study in Cross-Cultural Transmission of Natural Philosophy: The Kenkon Bensetsu” (Ph.D. dissertation, Lisbon, Universidade Nova de Lisboa, 2011), 311–702.

²⁴ The dating is uncertain due to Genshō’s preface being ambiguously dated as “the year of the Yin Earth Boar of the Meireki era” (明曆己亥), which should correspond to 1659, except that the year corresponding to the “yin earth” (*tsuchinoto* 己) and “boar” (*i* 亥) combination belongs to the next era, Manji 萬治. It is not unreasonable to assume that the era name was miswritten, in which case the preface would be dated to 1659. If this is the correct year, Genshō would by then have already moved to Kyoto, but returned temporarily to Nagasaki where he wrote the preface. See Hubert Cieslik, “The Case of Christovão Ferreira,” *Monumenta Nipponica* 29, no. 1 (1974): 41; Pinto dos Santos, “A Study in Cross-Cultural Transmission of Natural Philosophy,” 307–8.

²⁵ On Ferreira’s apostasy, see Cieslik, “The Case of Christovão Ferreira,” 5–16.

²⁶ See Mukai Genshō 向井元松, and Sawano Chūan 澤野忠庵. “Kenkon bensetsu” 乾坤辨說. In Bunmei genryū sōsho 文明源流叢書 2, p. 1-3

玄甫 (?–1684) and then Genshō transcribed it into native Japanese writing systems.²⁷ Genshō claims that Ferreira’s treatise was the translation of a “book on celestial signs” (*tenmonsho* 天文書) presented to the official Inoue Masashige 井上政重 (1585–1661) by a senior Catholic priest “with knowledge of the celestial signs” (有精天文者) who had been caught trying to enter Japan in 1643.²⁸ Inoue Masashige is notorious for having played a crucial role in the suppression of Christianity, devising elaborate torture ploys so converts and missionaries alike would apostatize.²⁹ In 1640, after the revolt of Shimabara-Amakusa during which he distinguished himself in quelling the insurgents, he was nominated the first “inspector of sects” (*shūmon aratame yaku* 宗門改役),³⁰ and continued to work on the eradication of the “Sect of Jesus.”

There is also a completely different explanation for the origins of the text found in letters that the Chinese interpreter Ro Sōsetsu 盧草拙 (1675–1729) sent to a certain Watanabe Gunzō 渡邊軍藏 (dates unknown), who was by all indications a representative of the shogun dispatched to Nagasaki in 1726.³¹ Sōsetsu writes that a physician from Edo called Asano Chōtaku 淺野長澤 (dates unknown) requested that Ferreira “compose a book on the subject of the study of celestial signs in the West” (西洋の天文の學の趣を被為書),³² which was then transcribed into Japanese by a monk named Shōgin 松吟 (dates unknown). This book was first circulated in two volumes (*satsu* 冊) known under three different names: *Kana tenmon shō* 假名天文鈔 (“Notes in *kana* about the celestial signs”), *Sankoku unki tsūyō shō* 三國運氣通要鈔 (“Notes on the common points of *yunqi* in the three lands (Japan, China, and Europe)”), and lastly *Kōgenji tenmonsho* 光源寺天文書 (“Writings on the celestial signs from Kōgenji [temple]”) after the temple with which Shōgin was associated. According to Sōsetsu’s

²⁷ Most extant copies of this work are written in a combination of the *katakana* syllabary with Chinese characters (*kanji* 漢字).

²⁸ This likely refers to the second group of missionaries headed by Italian Jesuit Giovanni Antonio Rubino (1578–1643) who were attempting to establish contact with Ferreira after hearing about his apostasy. Cieslik, “The Case of Christovão Ferreira,” 40–41; Pinto dos Santos, “A Study in Cross-Cultural Transmission of Natural Philosophy,” 232–33.

²⁹ Cieslik, “The Case of Christovão Ferreira,” 15–16.

³⁰ Leonard Blussé, “The Grand Inquisitor Inoue Chikugono Kami Masashige, Spin Doctor of the Tokugawa Bakufu,” *Bulletin of Portuguese-Japanese Studies* 7 (2003): 23–43.

³¹ Hiraoka, *Nanbankei uchūron no gententeki kenkyū*, 152–55.

³² Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 96.

version, once Genshō's commentary was added, the book grew to four volumes and was named *Kenkon bensetsu*.³³

Regardless of which account is the most accurate, both reveal the involvement of a great number of individuals in the making of the final version of this book. Whether it started with another book brought to Japan by a Jesuit or with a request by a physician from Edo, it was the product of a collective effort. Genshō's account highlights how the interplay between the scholarship of Nagasaki and Jesuit cosmological knowledge was heavily mediated by local authorities.

According to Genshō, it was the powerful official Inoue Masashige who prompted Ferreira to translate the text. Ferreira himself was by then a shogunal employee working closely with Inoue. The text was then transcribed and commented on by order of the Nagasaki magistrate Kainoshō Masanobu. Through the interactions between Nagasaki scholars and authorities, Jesuit cosmology became consolidated as one of the components of the scholarship that was produced in the city. Such cosmological knowledge was then circulated to other parts of Japan in the form of books like *Kenkon bensetsu* and with the movement of people like Genshō.

By the time *Kenkon bensetsu* acquired its final form, Jesuit cosmology was no longer closely associated with the languages used by missionaries – Latin, Portuguese, and, to a lesser extent, Spanish. It was a book to be read by Japanese scholars who were not expected to have any previous acquaintance with Jesuit natural philosophy, the so-called *nanban unki* 南蠻運氣. As Genshō contributed with his own “discerning explanations” (*bensetsu* 辨説), the book offered both a presentation and a rebuttal of Jesuit cosmological ideas. This approach could in turn reinforce the combat against the spread of Christianity.

1.5. *Refuting the barbarian views*

Genshō's commentary of Ferreira's texts, commissioned by shogunal authorities, could be seen as an extension of his activities as “inspector of writings.” Besides preventing books with Christian ideas from entering the country, and selecting those that could contain useful information for the shogunate, Genshō was also requested to use his writing to counter Jesuit theories already in circulation within Japan. As he writes in the preface to *Kenkon*

³³ Hiraoka and Hibi, 96; Hiraoka, *Nanbankei uchūron no gententeki kenkyū*, 152.

bensetsu, “all of my appended commentaries are solely for refuting the errors of barbarian scholarship” (凡所加考辨、關蠻學之非而已).³⁴ He does admit that those who follow this “barbarian scholarship” (*bangaku* 蠻學), i.e., Jesuit cosmology, might have an accurate understanding of what pertains to “physical and applicable matters” (形器之下) such as “the form and constitution of heaven and earth, the size of the sun and the moon, the numeric values of their trajectories, and the division between daytime and nighttime” (天地之形體、日月之大小、運行之度數、晝夜之際限). His final argument, however, is that “in what concerns the significance [of things] beyond physical forms, [the “barbarians”] are blind and uncomprehending” (而形而上之義、則晦盲不明).³⁵

This qualification of Jesuit cosmological views as limited to the material world, and therefore completely erroneous about metaphysical truths, reappears in later Nagasaki scholars such as Nishikawa Joken. It was a way of subsuming the practical knowledge found in Jesuit texts – which, as demonstrated by the second part of *Tianxue chuhan* 天學初函 (“First collection of celestial scholarship”), often emphasized their applicability or “instrumentality” (Ch. *qi*, Jp. *ki* 器) – into an orthodox Neo-Confucian epistemological framework. Genshō, and later Joken, could thus recognize the technical benefits of such a paradigm without having to acknowledge its central tenets.

His main claim is that Jesuit cosmology disregards the very foundations of reality as understood by Neo-Confucian scholars: “[they] have never heard of the principle and *qi*, or yin and yang, and are confused about the doctrine of the five agents” (未曾知理氣陰陽、惑五行之說).³⁶ In Genshō’s understanding, even if the Jesuits and their followers accurately described the way things appear in the world, they failed to grasp the underlying patterns that make things the way they truly are. He reinforces such criticism throughout his commentary, arguing that Christovão Ferreira misappropriates the notion of *yunqi* without knowing its actual meaning.

When [Ferreira] says “*yunqi* is nothing else than this [that I have just explained],” although his theory might appear to be the same, in reality, it is not the proper theory of the five flows and six *qi*. [Proper] *yunqi* discusses the transformations of yin and yang and the five agents. *Nanban*

³⁴ Mukai Genshō 向井元松 and Sawano Chūan 澤野忠庵, “*Kenkon bensetsu*” 乾坤辨說, in *Bunmei genryū sōsho* 文明源流叢書, vol. 2 (Tokyo: Kokusho kankō kai, 1914), 2.

³⁵ Mukai and Sawano, 2.

³⁶ Mukai and Sawano, 2.

(Jesuit) scholars, ignorant of yin and yang, are in the dark about the principle of the five agents and are essentially unaware of the proper doctrine of five flows and six qi.

其曰、運氣即是也と、其論は同きに似て、實は五運六氣の正論に非ず、夫れ運氣は陰陽五行の化を論ず。南蠻士は陰陽を不知、五行の理に昧し、本より五運六氣の正説を不知。³⁷

As a Neo-Confucian scholar, Genshō represented orthodoxy. His discourse was for upholding the “proper doctrines” (*seisetsu* 正説) in Nagasaki, where the “heretical sect” (*jashū* 邪宗) of the Jesuits had their strongest impact and continued to be perceived as a threat even after their expulsion. He was active in the combat against heretical ideas on at least two fronts. First, as an inspector for the shogunate, he filtered out pernicious writings that entered the country via Chinese merchants. Secondly, he refuted Jesuit cosmology in his writings, as in his commentary on *Kenkon bensetsu*. Since countering heretical teachings also meant promoting orthodox views, Genshō felt the need to establish a center where Neo-Confucian scholarship could flourish.

2. A Confucian center sanctioned by the regime

In 1647, Mukai Genshō founded the Nagasaki Seidō and became its first rector or “libationer” (*saishu* 祭酒). It functioned as a Confucian temple and academy and counted among the first such institutions to be established in Tokugawa Japan, although there seems to be no surviving document attesting to the moment of its foundation.³⁸ Genshō had the full support of local authorities and remained in his post as rector for twelve years until he left for Kyoto in 1658. There is little information on how the academy functioned following his departure, but after five years, in 1663, the building burned down, and until 1674 it operated in the residence of Kafuku Kichizaemon 加福吉左衛門 (dates unknown), who was an interpreter for the Dutch.

The fact that the academy operated in the residence of Kafuku Kichizaemon reveals the complex dynamics within Nagasaki scholarly circles, especially in the early formative years. The presence of Chinese interpreters in the Nagasaki Seidō was to be expected, as they

³⁷ Mukai and Sawano, 9–10.

³⁸ For an overview of the Nagasaki Seidō over time, see the online exhibition organized by Hiraoka Ryūji: <http://hiraoka.zinbun.kyoto-u.ac.jp/seido.html>

were in a privileged position to bridge the gap between Confucian scholarship in Japan and its counterpart in Ming (and later Qing) China. On the other hand, the existence of someone like Kafuku demonstrates that interpreters of European languages were also an integral part of these networks and frequented the same spaces.

It was a Nagasaki magistrate who had the initiative to reestablish the academy after its first premises were destroyed. Ushigome Chūzaemon 牛込忠左衛門 (1621–1688)³⁹ was crucial in promoting the scholarship of Nagasaki during his ten-year tenure from 1671 to 1681. He maintained a wide network of personal and professional relations, patronizing and often participating in scholarly and literary activities. One source reports that, during the Kanbun 寛文 era (1661–1673), Ushigome “ordered a certain interpreter named Sakaki to establish a Confucian temple” (命舌人彭城某、創建文廟).⁴⁰ This probably refers to the senior interpreter Sakaki Sengi 彭城宣義 (1633–1695), also known as Nizaemon 仁左衛門, and the “Confucian temple” (*bunbyō* 文廟) to the re-establishment of the Nagasaki Seidō sometime between Ushigome’s arrival in 1671 and the end of the Kanbun era in 1673.⁴¹

Sakaki Sengi and fellow interpreter Hayashi Dōei 林道榮 (1640–1708) – unrelated to the clan of Hayashi Razan 林羅山 (1583–1657) – were prominent figures in the literary scene of the city, besides fulfilling their main occupation translating “the Fuzhou tongue” (*Fukushū-guchi* 福州口),⁴² i.e., Eastern Min. They were both on good terms with Ushigome, who invited them for poetry readings at his residence-cum-office.⁴³ Other sources do not mention anyone named Sakaki who Ushigome might have requested to reestablish the Confucian academy, so it is generally accepted that the Nagasaki Seidō was only officially rebuilt in 1676.⁴⁴ This is the year Ushigome appointed Kyoto scholar Nanbu Sōju as its second rector.

While it is not entirely clear where the original facilities were located, both Kafuku Kichizaemon’s house and the permanent venue after 1676 were located in a hilly part of

³⁹ He was also known by the names Shigenori 重忝 and Katsunari 勝登, and his original family name was Fujiwara 藤原.

⁴⁰ Watanabe, “*Kyorai to sono ichizoku*,” 465.

⁴¹ Watanabe, 466; Ōba, *Nitchū kōryū shūwa: Edo jidai no nitchū kankei o yomu*, 56.

⁴² Kitada, “*Tōtsūji no chūgokugo ni tsuite*,” 15.

⁴³ Hayashi, *Nagasaki tōtsūji: Daitōji Hayashi Dōei to sono shūhen*, 72–83.

⁴⁴ Sakaki Sengi is absent from the list of rectors provided in Yabuta Yutaka 藪田貫 and Wakaki Taiichi 若木太一, *Nagasaki Seidō saishu nikki* 長崎聖堂祭酒日記 (Suita: Kansai Daigaku Shuppanbu, 2010), 505–6; Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, 2:748. These two references are written by Wakaki Taiichi, and the text about the Nagasaki Seidō is essentially the same in both of them. While Wakaki recognizes that Kafuku and Sakaki ran the academy after Genshō’s departure, he does not count them among the rectors. See Yabuta and Wakaki, *Nagasaki Seidō saishu nikki*, 494.

town known as Tateyama, so the Nagasaki Seidō was also referred to as the Tateyama Academy (*Tateyama shoin* 立山書院).⁴⁵ This location was no coincidence. The residence-cum-office of the Nagasaki magistrates was built in the Tateyama area in 1674 and the physical proximity between these venues reflected the close relationship that representatives of the shogunal power in the city had with local scholars.

Nanbu Sōju remained at the Nagasaki Seidō for only four years, returning to Kyoto in 1680 due to illness. After Sōju, it was Mukai Gensei, the third son of Genshō, who took the position of rector. Gensei's tenure was the longest in the history of the academy, lasting from 1680 until 1726. After Gensei, it became a hereditary position, so all subsequent rectors belonged to the Mukai clan. As for the venue, the academy was relocated one last time in 1711 after the old building became too small for its growing activities. Its new location, outside Tateyama, became known as Nakashima Seidō 中島聖堂 and remained in the same place until its definitive closure in the fourth year of the Meiji 明治 era (1871).

The Nagasaki Seidō, despite its ostensible status as a center for promoting orthodox Confucian thought, was also a place where eclectic scholars could gather. There was an underlying tension between a strong foundation in ancient Chinese thought – as interpreted by Song scholars centered around Zhu Xi – and the tacit incorporation of elements from a variety of sources, including European ones. This dialectical relationship between disparate forms of knowledge was one defining trait of the cosmological scholarship that emerged in Nagasaki. The composite or hybridized nature of this local scholarship is certainly present in Genshō and continues, or rather intensifies, with successive rectors.

2.1. *Mukai Gensei (1656–1727), serving the shogun to all posterity*

In the spring of 1680, it was once again Nagasaki magistrate Ushigome Chūzaemon who appointed Mukai Gensei to replace Nanbu Sōju at the helm of the Nagasaki Seidō. Gensei was by then back in the city where he was born after having moved with his father to Kyoto and lived in various other locations during his youth.⁴⁶ Only a few months later, during the summer of that same year, Gensei was granted another position. He was employed in the “inspection of writings,” a task that his father used to perform alongside the monks of Shuntokuji temple. Although the monks continued to perform this task uninterruptedly, it

⁴⁵ Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, 2:745.

⁴⁶ Watanabe, “*Kyorai to sono ichizoku*,” 461.

was under Gensei that the function was fully institutionalized. By heading the center of Neo-Confucian scholarship in the city and inspecting written materials coming in from China, Gensei fulfilled the same roles inaugurated by his father. He prevented the heretical teachings of the Jesuits from entering the country and championed Confucian orthodoxy backed by the Tokugawa shogunate.

The definitive recognition of Gensei's contribution to the regime came five years after his appointment to these two roles. In 1685, a junk arriving from Nanjing brought to Nagasaki a book that, upon inspection, “contained prohibited passages about the teachings of Jesus, the Lord of Heaven” (書中二天主耶蘇教御制禁ノ文句有之).⁴⁷ This book was *Huanyou quan* 寰有詮 (“Explanations about the cosmos”), a work jointly composed by Portuguese Jesuit Francisco Furtado (1589–1653) – known in Chinese as Fu Fanji 傅汎際 – and the prominent convert Li Zhizao 李之藻 (1565–1630), the editor of *Tianxue chuhan*.

Huanyou quan had all the markings of a pernicious Jesuit work by the standards of the shogunate. It was an adaptation of the Coimbra commentaries to Aristotle's *De Caelo*, first published in 1592, with explicit references to the Christian God – the Lord of Heaven (Ch. *tianzhu*, Jp. *tenshu* 天主) – as the creator of the cosmos.⁴⁸ Li Zhizao sets the tone of the work in the first sentences of his preface dated 1628.

In the beginning, Heaven and Earth, the Numinous and the Human, and the Myriad Things were all in stillness. The Numinous supported the Human and the Myriad Things nurtured the Human. The Creator's capabilities and grace were bestowed upon Humans in the first place.

權輿天地・神人・萬物森焉。神佑人、萬物養人。造物主之用恩固特厚於人矣。⁴⁹

Mukai Gensei had only to leaf through the first pages or look at the table of contents to know that it was a work of Jesuit cosmology. The first fascicle (*juan* 卷), on cosmogony, has for instance a section titled “On the Lord of Heaven's capacity to bring things into existence out of absolute nothingness” (天主能以全無肇物有義).⁵⁰ Such mentions left no room for

⁴⁷ Koga, *Nagasaki shi seihen*, 383.

⁴⁸ See Qi Han, “F. Furtado (1587-1653) S.J. and His Chinese Translation of Aristotle's Cosmology,” in *História Das Ciências Matemáticas: Portugal e o Oriente* (Lisbon: Fundação Oriente, 2000), 169–79; Hashimoto Keizō 橋本敬造, “*Ri Shisō / Fu Hansai dōyaku 'Kan'yūsen' josetsu*” 李之藻・傅汎際同譯『寰有詮』序説, *Kansai Daigaku tōzai gakujutsu kenkyūjo kiyō* 関西大学東西学術研究所紀要 38 (2005): 79–95.

⁴⁹ Fu Fanji 傅汎際 and Li Zhizao 李之藻, “*Huanyou quan*” 寰有詮 (Print, undated), fol. 1a, Chinois 3384, Bibliothèque nationale de France, <https://archivesetmanuscrits.bnf.fr/ark:/12148/cc26572z>.

⁵⁰ Fu and Li, sec. Mulu 目錄, fol. 1a.

ambiguity. The book contained the proscribed heretical teachings of the Jesuits and the consequences for those who transported it to Nagasaki were severe.

The image shows a page from a traditional Chinese book, likely a table of contents, written in vertical columns from right to left. The text is in black ink on aged paper. At the top right, the title '寰有詮目錄' (Table of Contents of Huanyou quan) is written. Below it, '卷之一' (Volume 1) is indicated. The main list of chapters includes: '萬物共一最初者義第一' (The first meaning of 'All things are one' at the beginning), '天主能以全無肇物有義第二' (The second meaning of 'God can create all things from nothing'), '他物莫能肇有義第三' (The third meaning of 'No other thing can create'), '天主自主化成義第四' (The fourth meaning of 'God's self-governing creation'), and '原天地之始第五' (The fifth meaning of 'The beginning of heaven and earth'). To the left, '卷之二' (Volume 2) is mentioned, followed by '圓滿篇第一' (Chapter 1 of the 'Complete Circle' section) and '隨論一' (A follow-up discussion). A red seal is visible in the bottom right corner, and the page number '六一卅四' (61/34) is written in the bottom left.

Figure 2.1. Table of contents for the first fascicle of *Huanyou quan* (Library of Congress)

The person in possession of the book was identified by name and banned from returning to Japan ever again. The same punishment was applied to the captains of two ships, presumably in the same fleet, for having transported the banned book. The copy of the book in question, containing six bound volumes, was burned before their eyes, and one of the ships – no doubt the one that carried the passenger with the book – was prevented from selling its goods, having to sail back with full cargo.⁵¹ While this event represented a great commercial loss for the merchants involved, it was a consequential achievement for Gensei. He was elevated to the rank of *fudai* 譜代 (“hereditary [service to the shogun]”), which meant that his position as inspector of writings was to be transmitted in perpetuity to his descendants. From that point onward, the function became a prerogative of the Mukai clan.⁵² This significant

⁵¹ Ōba, *Nitchū kōryū shūwa: Edo jidai no nitchū kankei o yomu*, 56–57.

⁵² Ōba, 57.

shift created the opportunity for the head of Nagasaki Seidō to curate information for the regime, drawing the line between licit and illicit forms of knowledge as they arrive in Nagasaki in the form of Sinitic writings.

Before Mukai Gensei, it was mainly the responsibility of the monks at Shuntokuji to scrutinize the writings brought aboard Chinese junks. Until 1685, written materials were separated from the rest of the cargo, stored at the harbor, and promptly transported to Shuntokuji for inspection. After Gensei's recognition that year, writings started being taken first to the Nagasaki Seidō instead of Shuntokuji and Gensei consolidated his role as the chief inspector.⁵³

Gensei – building on the legacy of his father Genshō – while fulfilling his duties in combatting the spread of Christian ideas, also incorporated elements of Jesuit cosmology in his own discourse. Due to his official functions, he had access to books and knowledge in Nagasaki beyond the reach of anyone else in Japan at the time. His strategic role was not lost on the shogunal authorities, who ensured that the most useful materials were brought directly to Edo. Despite – or perhaps due to – the increasing number of Jesuit titles banned during the 17th and early 18th centuries, the knowledge that they contained still circulated among Nagasaki scholars. The complex interplay between knowledge from abroad and the central shogunal power culminated in the reign of Tokugawa Yoshimune, who, from his accession to the throne in 1716, often relied on Nagasaki censors to tap into the pool of eclectic scholarship developed in that contact zone.

The confiscation of *Huanyou quan* prompted ever stricter control of imported Chinese books, and sixteen more titles were added to the growing list of proscribed writings between 1685 and 1712.⁵⁴ The next book to be apprehended was *Diwei* 地緯 (“Meridians of the earth”), a geographical work first published in 1638 by Xiong Renlin 熊人霖 (1604–1666) – the son of Xiong Mingyu 熊明遇 (1579–1649), who frequently consorted with the Jesuits, propagating the world maps of Matteo Ricci (1552–1611). *Diwei* was published in a combined volume titled *Hanyu tong* 函宇通 (“Treatise on the cosmos”) together with Xiong Mingyu's

⁵³ Ōba, *Nitchū kōryū shūwa: Edo jidai no nitchū kankei o yomu*, 72.

⁵⁴ Ōba Osamu 大庭脩, *Edo jidai ni okeru chūgoku bunka juyō no kenkyū* 江戸時代における中国文化受容の研究 (Dōhōsha shuppan, 1984), 60–61; Wakaki, “*Shomotsu aratame: Shuntokuji to nagasaki seidō*,” 362–68. See Appendix A for a complete list of the titles.

Gezhi cao 格致草 (“Notes on the investigation of things”), but neither of these titles appears to have been censored.⁵⁵ Confiscating *Diwei* in 1686, Gensei provides the following description:

Upon inspection of this book, [I found that] it is a work describing the geography of multiple lands in the world. Although it reports on lands [that have] the Sect of Jesus as their national doctrine, it is not a book that promotes the religion.

右之書吟味仕候處、世界中諸國之土地を書載申候書物ニ而御座候。尤耶蘇宗門國法之儀記出申候得共、宗門勤之書ニ而無御座候。⁵⁶

This demonstrates that books on Christianity or Jesuit cosmology were not the only ones to be confiscated. Even a mere description of Christian lands could justify burning and banning the book and punishing those responsible for bringing it to Nagasaki. After Gensei’s meteoric promotion for having found *Huanyou quan*, it is not difficult to imagine that he had an extra incentive to censor as many titles as he could. A closer look at *Diwei*, however, reveals elements that could justify its censoring. The geographical descriptions described therein draw heavily on *Zhifang waiji* 職方外紀 (Records of [lands] outside [the purview] of the imperial geographer”) by Giulio Aleni (1582–1649) and Yang Tingyun 楊廷筠 (1562–1627). As noted, this geographical work was part of *Tianxue chuhan* 天學初函 (“First collection of celestial scholarship”).

While Xiong Renlin omits in *Diwei* a great portion of the religious references that appear in *Zhifang waiji*, there are still some nods to Christianity, such as in the passage about Judea, where “a temple to the Sovereign on High” (*Shangdi zhi dian* 上帝之殿) is mentioned.⁵⁷ This would fall squarely within Gensei’s definition of a “land with the Sect of Jesus as its national doctrine” (蘇宗門國法) to explain his burning of the entire book. This act of censoring demonstrates that, as Gensei performed his duty to draw the line between licit and illicit works, he and those around him also acquired the very types of prohibited knowledge that he was employed to suppress. This later would become an asset that Nagasaki’s scholars could use in their interactions with shogunal authorities. While *Diwei* remained a censored

⁵⁵ On Xiong Mingyu and Xiong Renlin, see Zhang, *Making the New World Their Own*, 332–41; Hsu Kuang-Tai 徐光台, “Mingmo Qingchu xifang shijie ditu de zaidihua: Xiong Mingyu ‘Kunyu wanguo’ yu Xiong Renlin ‘Yudi quantu’ kaoxi” 明末清初西方世界地圖的在地化：熊明遇「坤輿萬國全圖」與熊人霖「輿地全圖」考析, *Qinghua xuebao* 清華學報 46, no. 2 (2016): 319–58, [https://doi.org/10.6503/THJCS.2016.46\(2\).04](https://doi.org/10.6503/THJCS.2016.46(2).04).

⁵⁶ This passage comes from a document belonging to the archives of Shuntokuji. Cited in Watanabe, “*Kyorai to sono ichizoku*,” 469; Wakaki, “*Shomotsu aratame: Shuntokuji to nagasaki seido*,” 352.

⁵⁷ Zhang, *Making the New World Their Own*, 337–38.

title, *Zhifang waiji* was among the works unbanned after 1720 by order of Tokugawa Yoshimune.

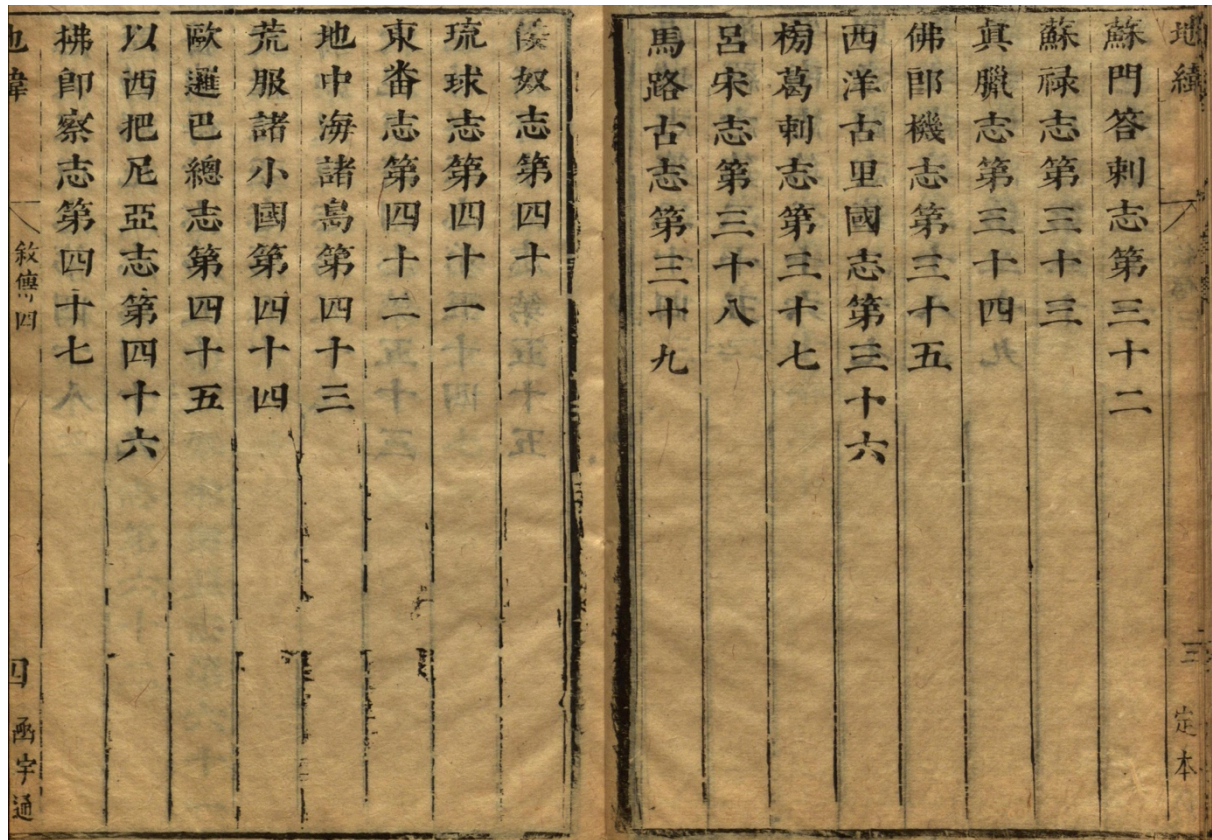


Figure 2.2. Section from the table of contents of *Diwei* with the names of various lands, including Luzon (*lüsong* 呂宋), Europe (*ouluoba* 歐邏巴), Hispania (*yixibaniya* 以西把尼亞), France (*folangcha* 佛郎刺), and Japan designated with the derogatory term *wonu* 倭奴 (Library of Congress)

2.2. Confiscating and banning new titles

The fate of confiscated books varied depending on the content. While both *Huanyou quan* and *Diwei* were burned and the captain of the ship was prohibited from returning to Japan, *Tianjing huowen houji* 天經或問後集 (“Latter collection of questions on the meridians of heaven”) – a title that was confiscated a year later, in 1687 – was only partially blotted out (*sumikeshi* 墨消) and then returned (*sashikaeshi* 差返し).⁵⁸ This means that controversial sections were likely censored but that the book as a whole was considered to contain useful information.

⁵⁸ Ōba, *Edo jidai ni okeru chūgoku bunka juyō no kenkyū*, 60.

Tianjing huowen houji is the second part of *Tianjing huowen* 天經或問 (“Questions on the meridians of heaven”), both by Fujianese scholar You Yi 游藝 (ca. late 17th century). The preface for the first part is dated 1675,⁵⁹ while the second part has a preface from 1681. Unlike the second part, *Tianjing huowen* did not fall under the shogunal ban and had a lasting impact on cosmological thought in Japan way beyond Nagasaki throughout the Edo period.

The Fujian connection between *Tianjing huowen* and interpreters of Chinese in Nagasaki like Ro Sōsetsu cannot be overemphasized. You Yi was from Jianyang 建陽, a region known for its publishing industry located in the prefecture (Ch. and Jp. *fū* 府) of Funing 福寧, which neighbored that of Yanping 延平, the ancestral home of the Ro clan. You Yi’s work, which did not seem to have enjoyed much circulation in China proper, had a considerable impact on Japanese scholars throughout the Tokugawa period.⁶⁰

The title of *Tianjing huowen* appears in a catalog of books owned by scholar Kaibara Ekiken 貝原益軒 (1630–1714), who recorded obtaining it in 1685,⁶¹ indicating that it reached Japan not long after its publication in China. Kyoto scholar Nakamura Tekisai 中村惕齋 (1629–1702) – known for having compiled the largely popular and extensive compendium *Kinmō zui* 訓蒙圖彙 (“Illustrated collection for instructing the ignorant”) in 1666 – mentions *Tianjing huowen* in his undated manuscript *Tenmon kōyō* 天文考要 (“Summary Investigation into the celestial signs”) in connection with the teachings of Matteo Ricci. Tekisai’s manuscript, which seems to survive in no more than seven or eight copies,⁶² quotes

⁵⁹ The first part is sometimes referred to as *Tianjing huowen qianji* 天經或問前集 (“Former collection of questions on the meridians of heaven”) in order to distinguish it from the second one, but this title does not appear in the original editions. See Hiraoka Ryūji 平岡隆二, “*Tenkei wakumon’ no kanpon to shahon*” 『天經或問』の刊本と写本, *Kagakushi kenkyū* 科学史研究 58, no. 289 (2019): 2–21; Ryuji Hiraoka, “Printed Editions and Manuscripts of Tianjing Huowen,” *Historia Scientiarum* 29, no. 1 (2019): 80–111.

⁶⁰ See Yoshida Tadashi 吉田忠, “*Tenkei wakumon’ no juyō*” 「天經或問」の受容, *Kagakushi kenkyū* 科学史研究 24, no. 156 (1985): 215–24.

⁶¹ Kyūshū shiryō kankōkai 九州資料刊行会, *Ekiken shiryō* 益軒資料, vol. 7 (Fukuoka: Kyūshū shiryō kankōkai, 1955), 26.

⁶² Based on a search in the Union Catalog Database of Japanese Texts (*kokusho dētabēsu* 國書データベース) provided by the National Institute of Japanese Literature (<https://kokusho.nijl.ac.jp/work/1069450>). Two of the copies listed are respectively from the collection of Imoto Susumu 井本進, whose current existence is unknown, and from the collection known as Rekisen Bunko 礪川文庫, which burned down (<https://kokusho.nijl.ac.jp/page/kokusho.html>).

I have consulted a posthumous copy from 1720 found at the Waseda University Library (https://www.wul.waseda.ac.jp/kotenseki/html/ni05/ni05_02436/index.html), not included in the Union Catalog. A copy listed in the Union Catalog and held at the Tohoku University Library is available online. (<https://kokusho.nijl.ac.jp/biblio/100256588/>). This copy is erroneously dated 1628 (the fifth year of the Kan’ei 寛永 era), while the correct year found in the manuscript is 1708 (the fifth year of the Hōei 寶永 era), also from after Tekisai’s death.

heavily not only from *Tianjing huowen* but also other Sinitic sources of Jesuit knowledge such as *Tushu bian* 圖書編 (“Compilation of images and writings”), which as seen in the previous chapter, contains a depiction of the oldest known version of Ricci’s world map.

Tekisai discusses the arrival of *Tianjing huowen* in Nagasaki within the context of the repression of Christian teachings and the ban on Jesuit writings in the aftermath of the Christian-inspired revolts of the Kan’ei 寛永 era (1624–1644).

Concomitantly [to their arrival in China], these [Western] barbarians also came to his country, bringing about great misfortune. As there were once revolts [stirred by] Westerners during Kan’ei, they were deemed enemies to the regime, and a strict and lasting ban [on them entering the country] was enforced. The magistrate’s office in Nagasaki carries out an inspection every year of images and writings brought aboard commercial ships. If there is anything that deals with the wicked doctrine [of Christianity], [the ship] is immediately expelled from the port and denied entry. At one point, Kyoto scholar-physician Nanbu Sōju was stationed in Nagasaki and given this task [of inspecting documents]; when *Tianjing* [*huowen*] first arrived, it was because he authorized its importation as the book concerned the heavens. After traveling widely, Sōju returned to Kyoto and showed this book to me.

同時此夷亦來本國、流禍甚深。西裔嘗有寛永之騷擾、故稱為朝敵、而禁防峻嚴遏絕既久。長崎治所每歲檢察商船所載來圖書。若有涉妖法者、則逐港不入。往歲洛儒醫南部草壽在崎給其役。天經始來、以其繫天書許留。遂行四方草壽還洛示其書於余。⁶³

Tekisai’s account is meaningful in three ways. First, it implies that Nanbu Sōju performed, during his time in Nagasaki between 1672 and 1680, the function of “inspection of writings” that Gensei would later take over. This piece of information is absent from other sources, which simply note that Sōju was the rector of Nagasaki Seidō from 1676, but not that he was also employed as inspector. Second, Tekisai clearly emphasizes that it was Sōju himself who, while carrying out this task, authorized *Tianjing huowen* to enter Japan. If accurate, this means that You Yi’s book reached Nagasaki in 1680 at the latest, around five years after its publication and also five years before Ekiken’s record. Third, it suggests Sōju played a pivotal role in first circulating the text around the archipelago, particularly in the cultural capital of Kyoto, where he personally showed it to Tekisai.

⁶³ Nakamura Tekisai 中村惕齋, “*Tenmon kōyō*” 天文考要 (Manuscript, vol. 1, 5 vols., Kyoto, 1720), sec. *Kyūjūten* 九重天, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/ni05/ni05_02436/index.html. See also Watanabe, *Kinsei Nihon tenmongakushi*, 1:39.

The second part of *Tianjing huowen*, or *houji* 後集, seems to have reached Japan just as quickly following its publication in China. Gensei found it only six years after the preface was written. Its content was more technical than that of the first part.⁶⁴ Astronomical values such as the length of the tropical year (Ch. *suishi*, Jp. *saijitsu* 歲實) – useful for producing the calendar in both China and Japan – are more precise in the second part than the first one,⁶⁵ indicating that it was aimed at a more specialized readership. The reasoning behind the banning of *Tianjing huowen houji*, according to Gensei’s assessment, was “for it contained numerous instances in which the explanation of yin and yang and the five phases are taken to be a heretical doctrine” (陰陽五行之說邪法ニ相拘リ候儀多有之付).⁶⁶ In other words, its author, You Yi, rejects traditional Chinese paradigms and proposes instead the model of Jesuit natural philosophy based on the four elements. He inverts the order of which theories should be considered “proper” or “orthodox” (Ch. *zheng*, Jp. *sei* or *shō* 正) and which ones are “wicked” or “heretical” (Ch. *xie*, Jp. *ja* 邪) according to Neo-Confucian thought.

It was likely such passages, challenging the primacy of Confucian cosmology and its foundations on the theories of yin and yang and the five phases, that Gensei blotted out before returning the book to circulation. Gensei was true to his father’s legacy as a bulwark against the pernicious ideas associated with the “Sect of Jesus.” The only way to engage with Jesuit knowledge was to relegate it to the rank of “heretical teachings” that might contribute with technical expertise, subsumed under a Confucian paradigm. The question remains as to why the first part of *Tianjing huowen* remained unbanned, despite its description of the four elements from Jesuit cosmology and mentions of “cosmologists from Western regions” (*xiyu tianxuejia* 西域天學家) by name.

⁶⁴ For an overview of the book, see Nakayama Shigeru 中山茂, “*Tenkei wakumon kōhen’ ni tsuite*” 『天経或問後集』について, in *Tōyō no kagaku to gijyutsu: Yabuuchi Kiyoshi Sensei shōju kinen ronbunshū* 東洋の科学と技術—藪内清先生頌寿記念論文集 (Dōhōsha shuppan, 1982), 199–208.

⁶⁵ Nakayama, 204.

⁶⁶ Wakaki, “*Shomotsu aratame: Shuntokuji to nagasaki seidō*,” 358.

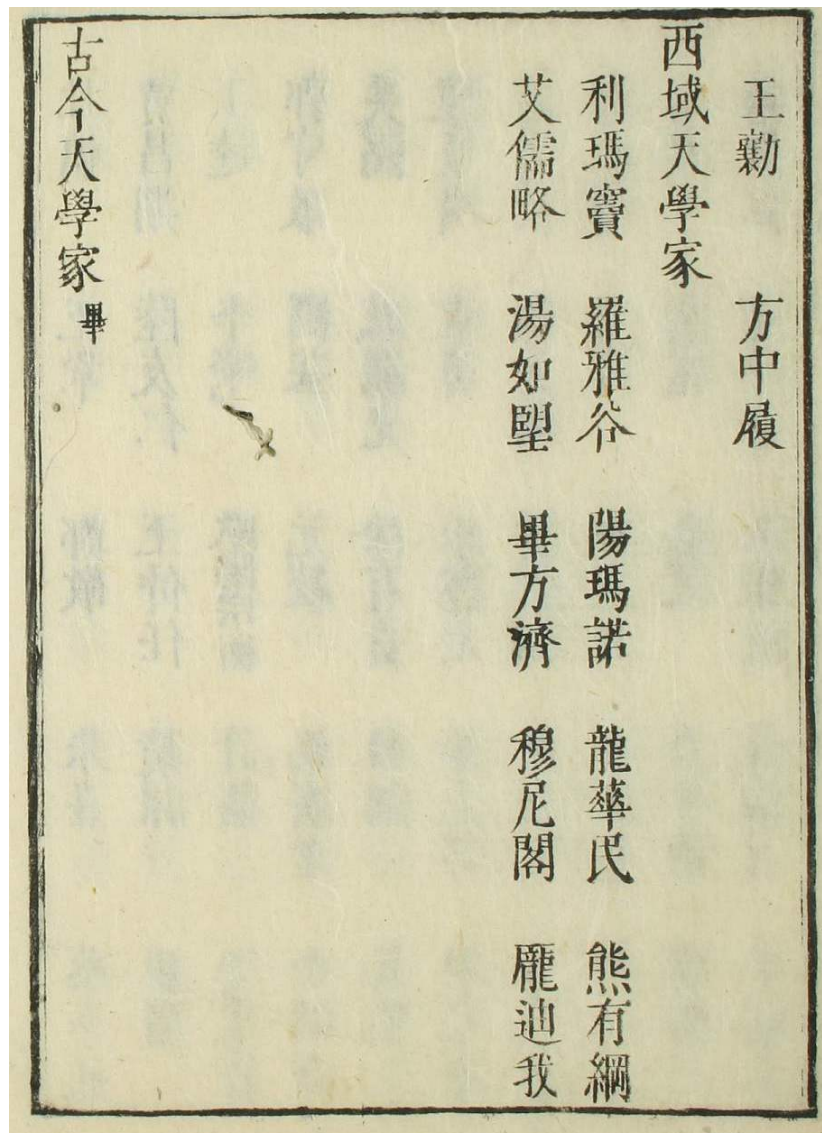


Figure 2.3. Chinese names of Jesuit missionaries recognized for their cosmological knowledge as depicted in the Japanese edition of *Tianjing huowen* (Waseda University Library)⁶⁷

Tekisai's explanation in *Tenmon kōyō* might clarify this seeming contradiction. If Sōju had already authorized and even promoted the circulation of the first part of *Tianjing huowen* before 1680, it was perhaps beyond Gensei's purview to revoke his predecessor's decision later. At any rate, the fate of *Tianjing huowen houji*, partially censored but not destroyed, was representative of the works that Gensei banned during his time in office. Out of the 16 books

⁶⁷ They are Matteo Ricci (Li Madou 利瑪竇), Giacomo Rho (Luo Yagu 羅雅谷), Manuel Dias (Yang Manuo 陽瑪諾), Nicolò Longobardo (Long Huamin 龍華民), Sabatino de Ursis (Xiong Yougang 熊有綱, better known as Xiong Sanba 熊三拔), Giulio Aleni (Ai Rulüe 艾儒略), Johann Adam Schall von Bell (Tang Ruwang 湯如望, better known as Tang Ruowang 湯若望), Francesco Smbiasi (Bi Fangji 畢方濟), Jan Mikotaj Smogulecki (Mu Nige 穆尼閣), and Diego de Pantoja (Pang Diwo 龐迪我).

that he confiscated in almost two decades, only two more were burned besides *Huanyou quan* and *Diwei*, the rest of the titles were all blotted out and then returned, except for two literary collections that were returned without blotting but prohibited from being sold (*shōbai kinshi* 商賣禁止).⁶⁸

The first book to be burned after *Diwei* was *Fujian tongzhi* 福建通志 (“Gazetteer of Fujian”), a massive compilation of 64 fascicles with geographical information on the Fujian province – including the newly incorporated Taiwan – published in 1684 and confiscated only two years later. The second one was the guide to monuments in Beijing *Dijing jingwu lue* 帝京景物略 (“Summary of scenic sights at the imperial capital”) by Liu Tong 劉侗 (c. 1593–1637), written 1635 and confiscated in 1695.

At first glance, it might be surprising that such seemingly innocuous titles would be destroyed and banned. If anything, local gazetteers such as *Fujian tongzhi* could provide valuable information about contemporary Qing China – a fact that explains it being among the titles that Yoshimune unbanned after 1720. While there is hardly any information on what led to the destruction of *Fujian tongzhi*, the gazetteer might have contained descriptions of local Catholic communities or certain missionary activities in parts of the province.⁶⁹ Conversely, the reasons for burning *Dijing jingwu lue* are well documented and illustrate the complex dynamics between Chinese merchants, local interpreters, and shogunal authorities in Nagasaki, as explored in the following section.

2.3. *The last burned book*

Dijing jingwu lue was the next book to be confiscated after *Tianjing huowen houji*, following an interval of eight to nine years. During this time between 1687 and 1695, the number of Qing merchants increased considerably. With the construction of the Chinese quarters in Nagasaki in 1689, incoming sailors were no longer allowed to roam the city and had to be lodged in the newly designated area.

⁶⁸ A list of all the titles is available in Ōba, *Edo jidai ni okeru chūgoku bunka juyō no kenkyū*, 60–61; Wakaki, “*Shomotsu aratame: Shuntokujū to nagasaki seidō*,” 358–59 and 368–69. Ōba lists only one book that was banned from sale but returned without being blotted out. See also Appendix A.

⁶⁹ More research is required to identify a specific passage among the many sections of *Fujian tongzhi* that could justify its being confiscated. On the local Catholic communities of Fujian, particularly in Fuan 福安 county, in the 17th century see Eugenio Menegon, *Ancestors, Virgins, & Friars: Christianity as a Local Religion in Late Imperial China*, Harvard-Yenching Institute Monograph Series 69 (Cambridge: Harvard University Press, 2009), chap. 1.

The Beijing guidebook *Dijing jingwu lie* was first published in 1635 as an account of notable buildings and gardens in and around the northern Ming capital before it surrendered to Manchu troops. Although at first glance the content seems innocuous enough, in a document signed by monks of Shuntokuji, one reads that the book was apprehended because it contained descriptions of a Catholic church (*tenshudō* 天主堂) and the tomb of Matteo Ricci,⁷⁰ the man who embodied the prohibited “Sect of Jesus” in China.

Similar to what happened to the ship that brought *Huanyou quan* ten years prior, the owner of the book and the captain of this ship – also coming from Nanjing – were both interrogated in the office of the Nagasaki magistrates, together with the ship’s bookkeeper (Ch. *caifu*; Jp. *zaijuku* 財副) and seven other crew members.⁷¹ In this process, the owner of the book was required to “tread on [religious] images” (*fumie* 踏繪) as proof that he was not a Catholic, a practice was not limited to missionaries and Japanese converts but carried out among all the Chinese who disembarked in the port.

Besides these regular procedures, the two Nagasaki magistrates stationed in the city at the time also ordered the two aforementioned senior interpreters Sakaki Sengi and Hayashi Dōei to evaluate the content of the book. As noted, they were both interpreters of Eastern Min close to power since at least the 1670s, when the Nagasaki Seidō was re-established by the initiative of Ushigome Chūzaemon. In their joint report, Sengi and Dōei recognized that one of the chapters of the book offered “a written description of a Hall of the Lord of Heaven” (天主堂之様子を書) – i.e., the Jesuit church in Beijing – and another chapter “reported on the aspect of the burial grounds of the heretic Li Madou (Matteo Ricci) after his death” (邪教之利瑪竇死後墳墓之有様を記し).⁷²

⁷⁰ Ōba, *Edo jidai ni okeru chūgoku bunka juyō no kenkyū*, 75.

⁷¹ I follow here the account of the events and supporting documents provided in Ōba, 72–80.

⁷² Ōba, 76.

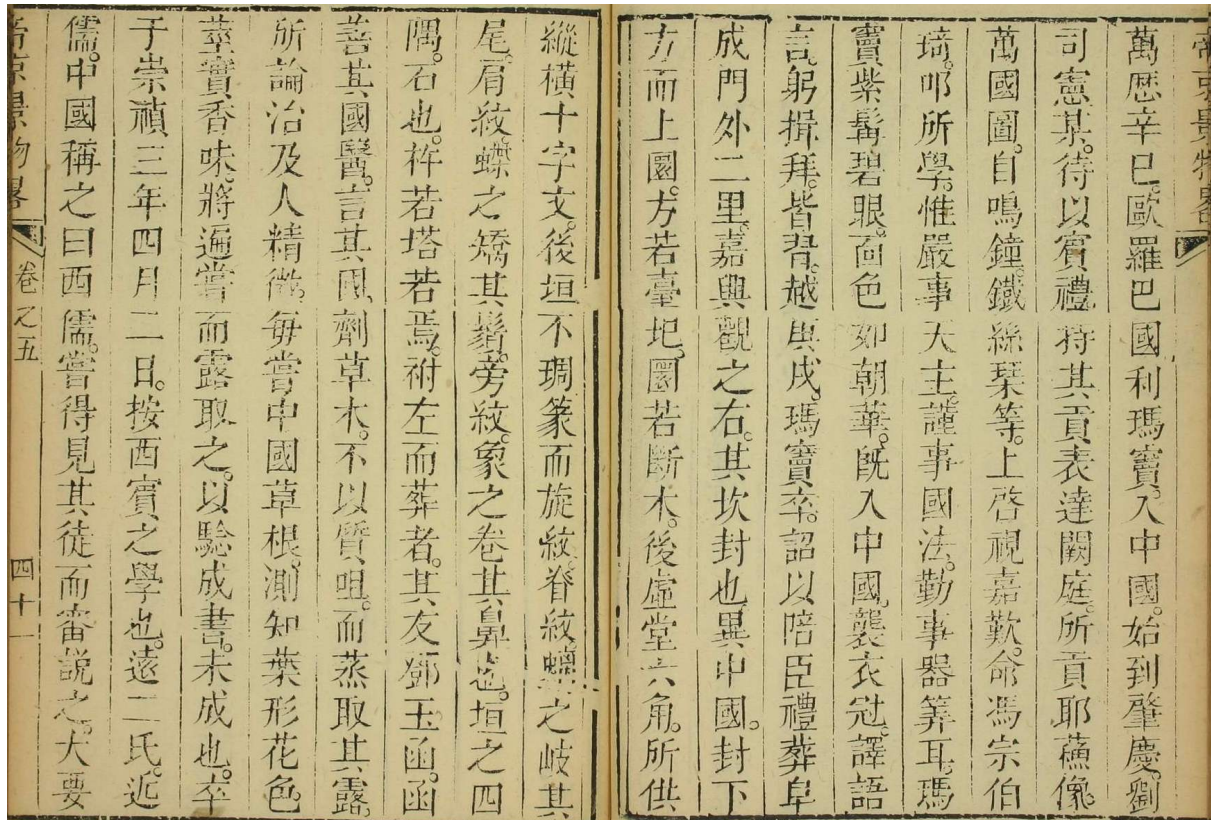


Figure 2.4. Section from the description of Matteo Ricci's grave (*Li Madou fen* 利瑪竇墳) in *Dijing jingwu lue*, mentioning how Ricci presented various objects such as an image of Jesus (*yesu xiang* 耶穌像), a world map (*wanguo tu* 萬國圖), and a mechanical clock (*ziming zhong* 自鳴鐘) to local officials when he first arrived in the southern Chinese city of Zhaoqing 肇慶 (Waseda University Library)

Nevertheless, their conclusion was that “except for these two fascicles, there is no other mention of the heretical sect to be found” (右兩卷之外邪教之名目無御座候), and therefore *Dijing jingwu lue* was “like [any other] local gazetteer” (風土記如き之書に御座候).⁷³ This carefully worded document reflects the delicate balance that the interpreters strove to maintain. They had to defend the interests of the Chinese community they represented and also be loyal to their superiors within the hierarchy of the regime. All those involved were well aware of the ramifications of possessing and transporting Christian writings in Nagasaki.

Attesting to the gravity of the matter, the two Nagasaki magistrates in the city corresponded with a third one stationed at Edo. This third magistrate consulted with the senior councilors (*rōjū* 老中) of the shogunate, who might have also notified the shogun himself.⁷⁴ After much consultation, the final decision was reached that both the owner of the

⁷³ Ōba, 77.

⁷⁴ Ōba, 79.

book and the captain of the ship were to be prohibited from returning to Japan. Like before, the copy of the book was burned before their eyes and the title was banned. Despite the intervention by the interpreters attempting to mitigate the situation, the shogunate upheld its strict policies, and the cargo of the ship could not be sold.

If Nagasaki was a city of commercial opportunity, in which all kinds of knowledge from around the world could circulate, it was also, for the same reasons, under heavy surveillance. Shogunal authorities were not taking any chances when it came to the spread of certain unorthodox ideas. As the 17th century came to an end, the perception of the Jesuit threat began to subside and the discourse around Neo-Confucian orthodoxy gradually crystallized around the Nagasaki Seidō. *Dijing jingwu lüe* was the last title burned under the tenure of Mukai Gensei, who became more and more like a curator of incoming knowledge in his father's tradition.

2.4. *A venue for worship and scholarship*

There are meaningful parallels between the “inspection of writings” performed by the Mukai and the “inspection of sects” carried out by the notorious Inoue Masashige. The Nagasaki Seidō and its rectors who performed the duty of censoring and curating Chinese books worked as safeguards against Christian ideas in a similar vein to the temples and shrines at which people had to be registered. While Christianity was perceived as a menace from the outside, associated with the “barbarians” of the distant West, classical Chinese culture was, on the contrary, a mark of civilization.

The risk was that books written in Sinitic arriving from the continent could also contain references to Western heretical ideas, justifying the necessity of having them inspected. It was only natural that the methods used for interrogating potential converts in Japan were equally applied to those who brought Christian writings from China. The inspection of books also ensured that Genshō and Gensei could curate a library for the shogun and be themselves aware of useful information contained in Sinitic books. The rectors of the Nagasaki Seidō performed the dual function of promoting Neo-Confucian orthodoxy and suppressing the perceived dangers associated with Christian views.

Confucian academies like the Nagasaki Seidō combined religious and scholarly functions. The title of the rectors being that of “libationer” (*saishu* 祭酒) denoted their role in presenting offerings to ancestral sagely figures, including Confucius (551–479 BCE). As the

academy became an established institution in the intellectual landscape of Nagasaki, rites of Chinese origin started being performed on its grounds, such as offerings known as *sekisai* (Ch. *shicai* 釋菜) or *sekiten* (Ch. *shidian* 釋奠).⁷⁵ These rites began in 1711 and continued sporadically until the whole academy was dismantled in the late 19th century.

The religious functions of the Nagasaki Seidō were complemented by lectures on canonical texts such as the *Analects* of Confucius (Ch. *Lunyu* 論語) or the book of *Mencius* (Ch. *Mengzi* 孟子). These were organized within its halls as well as in private academies. Not long after founding the academy, Mukai Genshō established sometime during the Keian 慶安 era (1648–1652) a “provincial school” (*shagaku* 社學) named Hojindō 輔仁堂 that remained active until his left for Kyoto in 1658.⁷⁶ There he would “lecture on the [Confucian] classics and show, for the first time, the proper path to the common people lost in their confusion” (經を講じ、迷妄の民をして初めて正路を示し).⁷⁷ Gensei also taught at his own private academy, while lecturing for a more scholarly audience in the main lecture hall of the Nagasaki Seidō, named Meirindō 明倫堂.⁷⁸

His journal from the early 18th century demonstrates that, besides being busy with the activities of the Nagasaki Seidō, he would lecture at the residence of the magistrates in Tateyama. There is an extant copy of a short portion of his journal covering the period from the eighth day of the twelfth month of the first year of the Kyōhō 享保 era (January 20, 1717) until the ninth day of the first month in the second year of the same era (February 19, 1717).⁷⁹ In several of these entries, Gensei recounts having lectured on the *Mencius* at the residence of the Nagasaki magistrate Ishiko Masasato 石河政郷 (1660–1743) in the Tateyama area,⁸⁰ where he was often joined by another powerful figure, Kusakabe Hirosada 日下部博貞

⁷⁵ On the importance of these rites for Confucian scholars in the first century of Tokugawa Japan, see Sudō Toshio 須藤敏夫, *Kinsei Nihon sekiten no kenkyū* 近世日本釈奠の研究 (Kyoto: Shibunkaku shuppan, 2001), pt. 1, chap. 1–2; James McMullen, *The Worship of Confucius in Japan*, Harvard East Asian Monographs 421 (Cambridge: Harvard University Asia Center, 2020), chap. 8.

⁷⁶ Watanabe, “*Kyorai to sono ichizoku*,” 385.

⁷⁷ Passage from the 1820 guidebook *Nagasaki meisshō zue* 長崎名勝圖繪 (“Illustrations of famous sceneries of Nagasaki”) cited in Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, 2:752–54.

⁷⁸ The name of this main hall within the Nagasaki Seidō appears in descriptions of the latest building occupied by the academy, i.e., the one known as Nakashima Seidō. It is not clear whether it existed as such in the previous venues during the time of Genshō and Sōju.

⁷⁹ This document belongs to the archives of the academy known as Seidō Bunko 聖堂文庫, and is currently housed at the Nagasaki Museum of History and Culture. It appears that the journal continued for longer but the rest has been lost. The extant portions of the journal are reproduced in Yabuta and Wakaki, *Nagasaki Seidō saishu nikki*, 5–8.

⁸⁰ Yabuta and Wakaki, 5.

(1658–1734), at the time serving as a shogunal inspector (*ometsukeyaku* 御目付役)⁸¹ and soon to become Nagasaki magistrate himself.⁸² Since the passages from the journal are brief, they offer no more than a glimpse into the daily activities of Gensei as rector of the Nagasaki Seidō.

For instance, in the entry for the thirteenth day of the twelfth month (January 25, 1717), Gensei writes: “As usual, I left for [the residence of the magistrate in] Tateyama before noon. [Kusakabe] Sakujūrō-sama [Hirosada] came, and I lectured on Mencius.” (如例晝前より立山ニ罷出、作十良様御出、孟子講演)⁸³ The next day, he mentions going again to Tateyama and then visiting the residence of Kusakabe, where they were joined by the magistrate Ishiko. That day Gensei also lectured on Mencius. Two days later, on the sixteenth day (January 28, 1717), there is a similar entry that goes: “I went to Tateyama from noon, and lectured on Mencius twice. [Kusakabe] Sakujūrō-sama came to Tateyama, and I was told that [Ro] Sōsetsu returned home before nightfall.” (晝より立山ニ參、孟子二度講ス、作十良様立山ニ御出、草拙夜前歸リ候由)⁸⁴ These passages illustrate with concrete examples the symbiotic relationship between local scholars, the Nagasaki magistrates, and interpreters as part of the very fabric of the intellectual landscape of the city.

The period between the foundation of the Nagasaki Seidō in 1647 and Mukai Gensei’s retirement in 1726 saw the consolidation of the discourse for Neo-Confucian orthodoxy and against the menace of Christianity. It also coincides with the development of a distinctive type of cosmology in the city that drew from both orthodox and unorthodox sources. It was during this time that local cosmological knowledge spread beyond its immediate surroundings and circulated further in the archipelago due in great part to the works of Nishikawa Joken.

The Nagasaki Seidō was a venue of knowledge production and circulation with strong backing from the Tokugawa regime since its inception. Local figures who frequented the place engaged not only with each other and the shogunal authorities but also with books and scholars from the continent via the mediation of the Chinese interpreters. The academy served simultaneously as a stronghold of Confucian scholarship and a venue for circulating a wide range of eclectic information.

⁸¹ Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, 2:751.

⁸² Yabuta and Wakaki, *Nagasaki Seidō saishu nikki*, 483.

⁸³ Yabuta and Wakaki, 5.

⁸⁴ Yabuta and Wakaki, 5.

3. The consolidation of a scholarly tradition

While the Nagasaki Seidō was the venue where scholars gathered, one written source organized the diverse scholarly endeavors of the city into a cohesive local tradition. A book titled *Nagasaki senmin den* contains short biographical accounts of central figures in Nagasaki's intellectual landscape, underscoring transregional and transnational connections. Since most of later historical accounts rely on this source, the narrative it outlines has arguably become the dominant one.

Chinese interpreter Ro Sōsetsu 盧草拙 (1675–1729) was the one who, late in his life, initiated the project of compiling the biographies that came to compose *Nagasaki senmin den*. His adoptive son Ro Senri 盧千里 (1707–1755) finished the compilation in 1731, two years after Sōsetsu's death. Sōsetsu and Senri were an integral part of the local community of physicians and Chinese interpreters and closely connected with the Nagasaki Seidō and what it represented.

As noted, the culture of Nagasaki was more intimately linked with China than anywhere else in early modern Japan. The emphasis on Chinese connections, evoking a certain cosmopolitan spirit unique to the city, is reflected both in the choice of language and the carefully selected prefaces for *Nagasaki senmin den*. Not only was the entire book written in Sinitic but also two of its three original prefaces, not to mention one of the postfaces, were commissioned to continental scholars.

Senri had three prefaces written for his *Nagasaki senmin den*: one dated 1739 by Takeda Shun'an 竹田春庵 (1661–1745), a scholar from Fukuoka who studied under Kaibara Ekiken; another by Qing physician Zhou Qilai 周岐來 (dates unknown), a native of Jiangsu; and the third one by Qing scholar Shen Xie'an 沈燮庵 (dates unknown) from Hangzhou. Both Zhou Qilai and Shen Xie'an belonged to the same cultural and linguistic region of Jiangnan and had visited Nagasaki before. Senri was their student during their time in the city. Zhou Qilai came to Nagasaki on three occasions, first in 1725, while Ro Sōsetsu was still alive, then again in 1731, and finally in 1733, the year of his preface.⁸⁵ Shen Xie'an also visited the city thrice, in 1728, 1730, and 1736, the last being the one when he wrote the preface.⁸⁶

⁸⁵ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kūsei nagasaki no bun'en to gakugei*, 13–14.

⁸⁶ Wakaki, Takahashi, and Kawahira, 10–12.

The presence of Qing physicians and scholars in mid-Edo Nagasaki reveals that interactions between local scholarship and the continent did not cease despite tight shogunal control over the Chinese trade. Zhou Qilai, alongside three other physicians and a pharmacist, was even able to leave his lodging in the Chinese quarters and stay at an interpreter's residence during his visit in 1725, which lasted for almost two years.⁸⁷ The same is true for Shen Xie'an who remained in the Chinese quarters his first time in the city but was hosted by an interpreter the second time around in 1730, during a year-long stay.⁸⁸

Ro Senri explains in his postface dated 1731 how the book came about and details the Fujianese roots of the Ro clan.⁸⁹ The second postface was written by Kenkō Jakutai 謙光寂泰 (1678–1746), a monk from a branch of Sōfukuji – the “Fuzhou temple,” by that time belonging to the Ōbaku sect – under whom Senri had also studied during the 1720s.⁹⁰ The third postface was by yet another Qing scholar, Jiang Pu 蔣溥 (1708–1761), who hailed from Jiangsu but never set foot in Nagasaki. Jiang Pu signed his contribution as “imperial professor at the Hanlin Academy” (翰林院侍講學士),⁹¹ signifying his affiliation with the highest official scholarly institution in Qing China. He writes that it was Shen Xie'an who mailed him a copy of the book and asked for a postface, concluding with the high praise that “[this book] contains almost the same spirit passed down from [Sima] Qian's History” (其殆有史遷遺意乎),⁹² in reference to *Shiji* 史記 (“Records of the Historian”), the great classic on early Chinese history written by Sima Qian 司馬遷 (c. 145–86 BCE).

In *Nagasaki senmin den*, Sōsetsu and Senri attempted to capture a sense of a cross-border shared heritage between East Asian literati. They spared no effort to present testimonies from Japanese and Chinese figures who could vouch for the eminence of Nagasaki scholars and extol Sōsetsu's and Senri's efforts to immortalize their achievements. As the book became the main reference for the city's intellectual history during this period, they were arguably quite successful in perpetuating their narrative.

While *Nagasaki senmin den* was not printed until the first half of the 19th century, it circulated as a manuscript not long after its completion in the 1730s. Its first print edition was edited by Hara Nensai 原念齋 (1774–1820), who also wrote a new preface and had it

⁸⁷ Wakaki, Takahashi, and Kawahira, 11.

⁸⁸ Wakaki, Takahashi, and Kawahira, 14.

⁸⁹ Wakaki, Takahashi, and Kawahira, 153–58.

⁹⁰ Wakaki, Takahashi, and Kawahira, 246.

⁹¹ Wakaki, Takahashi, and Kawahira, 161.

⁹² Wakaki, Takahashi, and Kawahira, 161.

published in Edo in 1819.⁹³ Nensai had already written his biographical compilation titled *Sentetsu sōdan* 先哲叢談 (“Collected accounts of past learned men”) three years earlier. *Sentetsu sōdan* would, throughout the 19th century, be expanded into a second (*kōhen* 後編) and third volumes (*zokuhen* 續編) that included Nagasaki figures like Ro Sōsetsu and Mukai Genshō.

Besides contributing to establishing the scholarship of Nagasaki as part of larger country-wide traditions, *Nagasaki senmin den* also underscored how local scholars bridged the gap between Japan and the continent and were recognized even by the highest-ranking officials in Qing China.

3.1. *Determining the notable figures of Nagasaki*

Highlighting different types of specialized knowledge unique to the city, *Nagasaki senmin den* is organized into thirteen categories, each with a varying number of entries and names, in the following order.

Table 4. Sections of the biographies contained in *Nagasaki senmin den*

Categories		Entries	Names	
1	<i>Gakujutsu</i> 學術	Scholarship	14	15
2	<i>Danten</i> 談天	Discussing the heavens	6	10
3	<i>Zenki</i> 善耆	Virtuous elders	2	2
4	<i>Chūkō</i> 忠孝	Loyalty and filial piety	7	9
5	<i>Teiretsu</i> 貞烈	Chastity	2	2
6	<i>Shoshi</i> 處士	Hermit	1	1
7	<i>In'itsu</i> 隱逸	Reclusive scholar	1	1
8	<i>Ninkyō</i> 任俠	Military valor	1	1
9	<i>Ijutsu</i> 醫術	Medicine	19	25
10	<i>Tsūyaku</i> 通譯	Interpretation and translation	3	18
11	<i>Gigei</i> 技藝	Arts	14	22
12	<i>Shirin</i> 緇林	Monks	10	10

⁹³ Wakaki, Takahashi, and Kawahira, 3–7.

13	<i>Ryūgū</i> 流寓	Temporary residents	27	31
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Notably, the category with the most entries and names is the last one, that of “temporary residents” (*ryūgū* 流寓). When compiling the biographies, Sōsetsu and Senri, besides showcasing the range of local scholarship, made sure to present Nagasaki as a hub that attracted scholars from various regions of the archipelago. These temporary residents are described as “essentially all those who, being called the bright notables of their generation, came to sojourn [in Nagasaki]” (要皆世之所謂賢豪、而來寓者也).⁹⁴ This final section of the book underscores the notion that the city connected literati across the archipelago to transnational trends, as illustrated by the prefaces of Qing scholars.

The section starts with an entry on Hayashi Razan, the first and foremost shogunal scholar who attempted to fashion an official orthodox discourse early in the Tokugawa regime.⁹⁵ Razan, originally from Kyoto, went to Nagasaki on different occasions, where he was exposed to Jesuit thought and recorded one of his visits in *Nagasaki itsuji* 長崎逸事 (“Nagasaki anecdotes”), written in 1610.⁹⁶ Later, he would incorporate attacks on Christianity as an important aspect of his promotion of Confucian orthodoxy.⁹⁷

Considering Razan as the first “temporary resident” of Nagasaki suggests that the city played a central role in the promotion of Confucian thought in Japan. After a brief entry on Razan’s younger brother Hayashi Tōshū 林東舟 (1585–1636), the third name to appear is that of Mukai Genshō, a successful example of how the scholarship produced locally circulated far beyond its regional sphere of influence. The parallel between Mukai Genshō and Hayashi Razan is not fortuitous. Before Genshō founded the Nagasaki Seidō, Razan had already established, in 1632, an analogous institution in Edo, with the support of the ninth son of Tokugawa Ieyasu and first lord of the Owari 尾張 domain Tokugawa Yoshinao 徳川義直 (1601–1650). At his Confucian academy, Razan would perform Chinese rites such as

⁹⁴ Wakaki, Takahashi, and Kawahira, 128.

⁹⁵ On the role of Razan in building a “legitimizing ideology” for the Tokugawa regime, see Herman Ooms, *Tokugawa Ideology: Early Constructs, 1570-1680*, Michigan Classics in Japanese Studies 18 (Ann Arbor: The University of Michigan Press, 1998), 72–96.

⁹⁶ For a biography of Razan, see Hori Isao 堀勇雄, *Hayashi Razan* 林羅山, Jinbutsu sōsho 人物叢書 (Tokyo: Yoshikawa kōbunkan, 1990).

⁹⁷ Kiri Paramore, “Hayashi Razan’s Redeployment of Anti-Christian Discourse: The Fabrication of *Haiyaso*,” *Japan Forum* 18, no. 2 (2006): 185–206; Paramore, *Ideology and Christianity in Japan*, 66–77.

sekiten offerings that, as seen previously, were also practiced by Mukai Gensei in the early 18th century.⁹⁸

The entry following Genshō's is that of Nanbu Sōju, who also occupied the post of rector or "libationer" at the Nagasaki Seidō, continuing the symbolic connection between the Hayashi lineage of Confucian orthodoxy and its local manifestation in Nagasaki. Like Razan, Sōju was a scholar from Kyoto who came to the city to be closer to the Chinese knowledge that circulated there, as explained further down in the present chapter.

The Mukai clan is represented across various categories in *Nagasaki senmin den*. Gensei's biography is listed under "scholarship" (*gakujutsu* 學術), and that of his elder brother, the poet Mukai Kyorai 向井去來 (1651–1701), appears under the "arts" (*gigei* 技藝). Next to Confucian scholarship, medical theory and practice were also essential components of Nagasaki's diverse intellectual circles. Genshō's first son, Mukai Gentan 向井元端 (1649–1704), who continued the medical lineage of his father, appears unsurprisingly under "medicine" (*ijutsu* 醫術), the category with the second most entries and names.

Another name listed under the same rubric of medicine is that of Nishi Genpo, the interpreter who, according to Genshō's account, deciphered Christovão Ferreira's manuscript that became the basis of *Kenkon bensetsu*. Genpo's biographical entry begins with the statement that "in his youth, he was proficient in barbarian languages and was appointed as a senior interpreter in the Dutch residence" (少善蕃語、任黃毛館大譯).⁹⁹ This refers to the fact that he was employed to work as an interpreter for the Portuguese and, once they were gone, he succeeded his father as an interpreter for the Dutch, starting in 1653.¹⁰⁰

In the domain of medicine, Genpo's biography also contains the information that he "was interested in surgery and learned the craft from the barbarian Sawano Chūan" (好外科、從蕃人澤野忠菴者受業焉),¹⁰¹ i.e., he acquired his knowledge of European medical techniques by studying under Ferreira. This previous connection with Ferreira explains why Genpo could read the apostate's handwriting and reveals once again the overlap between cosmology and medicine.

⁹⁸ On these see rites in Razan's academy, cf. McMullen, *The Worship of Confucius in Japan*, 171–79.

⁹⁹ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun'en to gakugei*, 92.

¹⁰⁰ Katagiri Kazuo 片桐一男, "Oranda tsūji Nishi Kichibee fushi ni tsuite: Nanban-Oranda tsūji to igaku kenshū/kyōju" 阿蘭陀通詞西吉兵衛父子について—南蛮・阿蘭陀通詞と医学兼修・教授, in *Sakoku Nihon to kokusai kōryū* 鎖国日本と国際交流, ed. Yanai Kenji 箭内健次 (Tokyo: Yoshikawa kōbunkan, 1988), 197–217.

¹⁰¹ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun'en to gakugei*, 92.

Genpo's biographical notice represents the valuable types of knowledge that Nagasaki scholars acquired through a wide network that included, initially at least, Iberian sailors and Jesuit missionaries. As the measures against Christianity became stricter, and Catholics were no longer allowed in the country, Dutch merchants replaced the Portuguese in this complex ecosystem. Although cosmological knowledge informed the views of figures like Mukai Gensei, Ro Sōsetsu, and Nishikawa Joken, the core of Nagasaki's intellectual heritage, at least in the way it is presented in *Nagasaki senmin den*, was elsewhere.

3.2. *The Ro clan and its network*

More than the interpreters for the Portuguese and the Dutch, it is the Chinese interpreters who occupy a leading position in the *Nagasaki senmin den*'s narrative. The families of Chinese interpreters claimed to have deep roots in the continent. Their ancestors had, in the greater part, emigrated to Kyushu sometime in the 17th century. Spoken Chinese languages were divided according to each family's ancestral home located in the regions of Fujian or Jiangnan.¹⁰² Once they had established themselves in Japan, families often adopted local surnames besides their original clan name or kept their Chinese names with a Japanese reading.

Ro Sōsetsu was from a family of “inner interpreters” (*naitōji* 内通事), not a hereditary position in itself, but one which his grandfather had performed. His Chinese ancestry went back to his great-grandfather Lu Junyu 盧君玉 (?–1631), a native of Yanping 延平 in northern Fujian. Lu Junyu went to Nagasaki in 1612 and received a permit to become a “resident Chinese” (*jūtaku tōjin* 住宅唐人) in 1628 but eventually returned to Ming China, where he died in 1631.¹⁰³ While in Nagasaki, Lu Junyu married a Japanese woman with whom he had Sōsetsu's grandfather Ro Shōzaemon 盧莊左衛門 (1622–1686). Shōzaemon kept the Chinese ancestral surname – read as Ro in Japanese – but used a Japanese given

¹⁰² Ri Kenschō divides the Nagasaki Chinese community into three cultural groups (Ch. *bang* 幫): the Sanjiang 三江 group, representing the Mandarin-speakers of the Jiangnan region; the Zhangquan 漳泉 group, corresponding to the Southern Min area around Zhangzhou and Quanzhou; and the Fuzhou 福州 group of Eastern Min speakers. Ri Kenschō 李獻璋, *Nagasaki tōjin no kenkyū* 長崎唐人の研究 (Shinwa Ginkō furusato shinkō kikin, 1991), 195.

¹⁰³ Miyata Yasushi 宮田安, *Tōtsūji kakei ronkō* 唐通事家系論攷 (Nagasaki: Nagasaki bunkensha, 1979), 643; Ri, *Nagasaki tōjin no kenkyū*, 227–28; Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 2.

name instead, and, despite still being a child when his father left for China, he was, according to Ro Senri, “proficient in spoken Chinese from a young age” (幼善華音).¹⁰⁴

One would expect that the Chinese language Shōzaemon spoke was that of his father’s place of origin Yanping, that is, Northern Min. However, as seen previously, this was not one of the languages represented by the Fujianese community of Nagasaki, largely divided into the coastal varieties of Eastern and Southern Min that were more prevalent among seafarers. It is not unlikely that Lu Junyu himself, and Shōzaemon after him, spoke one of these other two Fujianese languages – most likely Eastern Min if he sailed out of Fuzhou to reach Japan.¹⁰⁵ It was thus, by all evidence, for translating a Fujianese language that Shōzaemon was appointed “inner interpreter” quite late in his life, in 1666.¹⁰⁶

Shōzaemon’s son Ro Sōseki 盧草碩 (1647–1688), Sōsetsu’s father, made a career as a physician. There is no record that he held the position of Chinese interpreter at any point. In his medical profession, Sōsetsu was a student of Ono Shōseki 小野昌碩 (1610–1667), who, like Mukai Genshō, also studied cosmology under the aforementioned Hayashi Kichiemon.¹⁰⁷ Ro Sōseki too was familiar with cosmological knowledge, having himself trained under Kobayashi Kentei 小林謙貞 (1601–1683), Hayashi’s main disciple. Both Kobayashi Kentei and Ono Shōseki were close friends of Shōzaemon, so it was natural that his son and grandson would learn from these figures. Shōzaemon, Kentei, and Shōseki were so close that, after the latter’s death, the other two raised his son Ono Kagehira 小野景衡 (1658–1712). Kagehira was later adopted by his master Nanbu Sōju, the second rector of the Nagasaki Seidō, and changed his name to Nanbu Nanzan 南部南山.

Ro Senri writes in his postface to *Nagasaki senmin den* that, as a disciple of Kentei, his grandfather Sōseki “trained in the study of the celestial signs, the earth, as well as *yunqi*” (修天文輿地、及運氣之學).¹⁰⁸ As evidenced by not only Ro Sōseki and his master Ono Shōseki but also Nishi Genpo and Mukai Genshō, medicine, and cosmology of both Chinese and European origin often intersected. The concept of *yunqi* encapsulated this amalgamation of diverse types of knowledge. *Yunqi*, as discussed above, was a versatile, all-encompassing

¹⁰⁴ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 157.

¹⁰⁵ In Ri Kenshō’s division of the Chinese community, the Lu/Ro clan is considered part of the Fuzhou group. Ri, *Nagasaki tōjin no kenkyū*, 227.

¹⁰⁶ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 4.

¹⁰⁷ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 47–48.

¹⁰⁸ Wakaki, Takahashi, and Kawahira, 157.

explanation of heaven, earth, and the human body, useful for interpreting all sorts of cosmological phenomena, diagnosing diseases, and prescribing treatments.

While Ro Sōsetsu was not a physician, he was surrounded by medical theories and practices that had a considerable impact on his cosmological views. Sōsetsu maintained a variety of interests and fulfilled several official duties, particularly toward the end of his life. He was on good terms with Sakaki Soken 彭城素軒 (?–1740), son of the influential Chinese interpreter Sakaki Sengi mentioned previously. Soken, like his father, also reached the position of senior interpreter and worked closely with the shogunal authorities.

Besides his work as an interpreter, Ro Sōsetsu's first official appointment was to the position of head of studies (*gakutō* 學頭) at the Nagasaki Seidō in 1713, during Mukai Gensei's tenure. In 1715, he acquired yet another role to assist Gensei. Sakaki Soken chose him to work in the distribution of trade permits (*shinpai* 信牌) for the Chinese junks in the wake of the new regulations of the Shōtoku era (*Shōtoku shinrei* 正徳新例) implemented that same year. This is significant for these permits represent coveted documents that enabled a restricted number of Chinese junks to come trade in the strictly monitored port of Nagasaki. Without them, ships would be forced to return to their places of origin without being able to unload their cargo.¹⁰⁹ Gensei and Soken were the ones who drafted the sample copy for the first *shinpai*,¹¹⁰ which demonstrates their deep involvement in official duties.¹¹¹ They had thus considerable leverage over the transient population of traders flowing in from Qing China.

One year after the implementation of the new commercial rules, in 1716, the aforementioned Ishiko Masasato became the new Nagasaki magistrate and appointed Ro Sōsetsu to assist Gensei in yet a third task, namely the “inspection of writings” in which Gensei had proved himself so useful to the regime. This task provided them with privileged access to the whole gamut of orthodox and unorthodox books coming in from China. Sōsetsu's three different positions are indicative of how, next to Gensei, he was privy to sensitive information from abroad.

¹⁰⁹ Peng, *Trade Relations between Qing China and Tokugawa Japan*, chap. 3.

¹¹⁰ Peng, 45. Peng cites the original document and offers a modern Japanese translation in Peng, *Kinsei Nisshin tsūshō kankeishi*, 31–33.

¹¹¹ There is evidence from the archives of the Nagasaki Seidō that Mukai Gensei had been involved in issuing trade permits from as early as 1699. Wakaki mentions one document written by Gensei, and dated to the tenth month of the thirteenth year of the Genroku era (between November and December 1700), that attests to the function of distributing *shinpai* being Gensei's responsibility, which eventually led to it becoming a permanent duty of the Seidō. Yabuta and Wakaki, *Nagasaki Seidō saishu nikki*, 497.

3.3. *Using one's position to write history*

Due to his official functions and connections with the authorities, as well as his proximity to the Chinese trade, Ro Sōsetsu was in a strategic position to access banned Sinitic sources on European cosmology. His employment at the Nagasaki Seidō, the main scholarly venue in the city, along with his ties with other Chinese interpreters, provided him with an insider's perspective. Sōsetsu started the project to document and preserve what he considered the intellectual heritage of his hometown only a few years before his death. His intentions are made clear in Senri's postface to *Nagasaki senmin den*.

In the year of the Yin Fire Sheep [of the Kyōhō era] (1727), my late father [Sōsetsu] admonished me by saying: “Our family, although not very illustrious, has since our great ancestor [Lu Junyu] been renowned in the Arts.¹¹² I have now grown old without accomplishing any worthy deeds. As the ancient saying goes: ‘[Scholarly] achievements are consummated through diligence but ruined by amusements. [Deeds] come to fruition through deliberation but are wrecked by indulgence.’¹¹³ You strive to live by that! Nagasaki may be a small town, but for over one hundred and sixty years since the Genki era (1570–1573), there were not few faithful vassals, pious children, and scholars skilled in letters and crafts. Thinking that those who have not heard of their names cannot learn from their examples, I am afraid they might sink into oblivion. I am grateful for my humble [occupation] managing writings. By collecting [documents about Nagasaki] I would like to pass on [their achievements] to [future] generations, but I am entangled in my official duties [toward the shogunate]. I immensely regret that I have not yet accomplished my intention. You take this into consideration!”

丁未歲先君驥¹¹⁴曰：余家自高祖以來、雖不甚顯、以藝知名。今余老矣、功業無所就。古稱「業精于勤、荒于嬉。成于思、毀于隨。」汝其勗哉。夫崎雖小邑自元龜以來、一百六十餘歲、忠臣・孝子・文學技能之士、不為不多。想其姓字無聞者、不觸

¹¹² The Arts (Ch. *yi*, Jp. *gei* 藝) refers in this case to knowledge of the six ancient Chinese classics: *Odes* (Ch. *Shi*, Jp. *Shi* 詩), *Documents* (Ch. *Shu*, Jp. *Sho* 書), *Rites* (Ch. *Li*, Jp. *Rai* 禮), *Music* (Ch. *Yue*, Jp. *Gaku* 樂), *Changes* (Ch. *Yi*, Jp. *Eki* 易), and *Spring and Autumn* (Ch. *Chunqiu*, Jp. *Shunjū* 春秋). These were called the Six Classics (Ch. *liujing*, Jp. *rikukei* 六經) or Six Arts (Ch. *liuyi*, Jp. *rikugei* 六藝).

¹¹³ This is a quotation from *Jinxue jie* 進學解 (“Explanation [on how to] progress [in one's] studies”) by the Tang scholar Han Yu 韓愈 (768–824).

¹¹⁴ The character *ki* 驥, part of Senri's “true name” (*imina* 諱) Genki 元驥, is a pun on his adult name (*azana* 字) Senri 千里 — which literally means “one thousand *li*” (around 300 miles) — as it signifies “a horse that runs a thousand *li* in one day.”

類而足。恐歸泯滅乎。余忝掌書。蒐緝欲以傳諸世、而綢繆 公務。未遂其志、余甚惜焉。汝其念哉。¹¹⁵

Sōsetsu presents this project as his lifework, something he hoped his adoptive son would bring to fruition. It would be a way to use his position to immortalize what he understood to be the intellectual history of Nagasaki. The relationship between Sōsetsu and Senri was representative of the types of adoption practiced in early modern Japan. After Sōsetsu's eldest son died of illness, and while his younger son was still a child, Senri married Sōsetsu's daughter in 1724 and, instead of having her leave the family, Senri took up the family name as Sōsetsu's adoptive son-in-law.¹¹⁶

Senri originally came from a family of Nagasaki physicians, the Kurisaki 栗崎, that established its own medical lineage with reputed origins in Western-style surgical techniques.¹¹⁷ One of the most notable members of the family was Kurisaki Dōu Seiu 栗崎道有正羽 (1664?–1726), featured in *Nagasaki senmin den's* “medicine” category. Dōu was appointed shogunal physician (*ikan* 醫官) in 1691 and also learned from the German surgeon Engelbert Kaempfer (1651–1716)¹¹⁸ during the latter's stay in Japan with the VOC between 1690 and 1692.¹¹⁹ The connection between Senri's biological father Kurisaki Dōi 栗崎道意 (?–1697?) unknown) and Dōu is unclear, but there is the possibility that he was a disciple of Dōu's father Kurisaki Dōu Seika 栗崎道有正家 (?–1681).¹²⁰

Before joining the Ro family, Senri was a disciple of Mukai Gensei, thus already inside Sōsetsu's scholarly circles. In Senri's postface, Ro Sōsetsu's mention that he was in charge of “managing writings” (*shōsho* 掌書) was no doubt a reference to his position as an assistant inspector of books next to Mukai Gensei. The aforementioned Qing physician Zhou Qilai writes in his preface that, during his first visit to Nagasaki in 1725, he “saw how [Sōsetsu] enlightened people about the old [Confucian] ways, and in his employment inspecting writings, there was no work he had not browsed” (見其古道照人、職在按書、已無書不

¹¹⁵ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 157.

¹¹⁶ Wakaki, Takahashi, and Kawahira, 245.

¹¹⁷ Koga Jūjirō 古賀十二郎, *Nagasaki yōgakushi* 長崎洋学史, ed. Nagasaki Gakkai 長崎学会, vol. 2 (Nagasaki: Nagasaki bunkensha, 1966), 147–57.

¹¹⁸ On Kaempfer, see Beatrice M. Bodart-Bailey and Derek Massarella, eds., *The Furthest Goal: Engelbert Kaempfer's Encounter with Tokugawa Japan* (Sandgate: Japan Library, 1995).

¹¹⁹ Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, 2:797; Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 90.

¹²⁰ Koga, *Nagasaki yōgakushi*, 1966, 2:153–54.

覽).¹²¹ Sōsetsu, like Gensei, established his erudition and reputation as an orthodox Confucian scholar precisely because of his unique access to a variety of writings that were brought aboard Chinese junks. For both Gensei and Sōsetsu, the ultimate consolidation of orthodoxy passed through the appraisal of a wide variety of materials, including potentially heretical ones.

The existence of someone like Sōsetsu – employed in a stronghold of Confucian orthodoxy while still being relatively open to a wide range of unorthodox writings – was meaningful. He applied the same eclectic mindset to cosmological knowledge. For him, true scholarship presupposed a deeper understanding of reality beyond the received interpretations of the Song Neo-Confucians. The origins of his scholarly inclinations, like his own familial ancestry, can be partly traced back to Ming China.

3.4. *The Fujianese scholar-interpreters*

The very first biographical rubric of *Nagasaki senmin den*, “scholarship,” starts with three scholar-interpreters who had much in common with Ro Sōsetsu. The first two entries are from the two aforementioned senior interpreters, Sakaki Sengi and Hayashi Dōei, who enjoyed the patronage of Nagasaki magistrate Ushigome Chūzaemon and were active in literary circles. Sengi’s son Soken, besides being close to Mukai Gensei and Ro Sōsetsu, had also familial links to Nishikawa Joken – his eldest son Sakaki Shunmei 彭城俊明 (1695–1752) was married to Joken’s daughter.¹²² Soken, who also reached the position of senior interpreter like his father, contributed with prefaces to two books by Joken – *Ryōgi shūsetsu* 兩儀集說 (“Collected explanation on heaven and earth”) and *Shijūnikoku jinbutsu zu* 四十二國人物圖 (“Illustrations of the peoples of forty-two lands”). This shows that well-connected scholar-interpreters played a notable role in the local scholarly scene, for such prefaces conferred some authority to the works in which they were featured. Hayashi Dōei, despite not being directly connected with Joken, is the author of a book that greatly informed Joken’s geographical descriptions of the world – his manuscript *Ikoku fudoki* 異國風土記 (“Gazetteer of foreign lands”) from 1688 would be reworked into Joken’s *Ka’i tsūshōkō* 華夷通商考 (“Investigation into commerce among civilized and barbarians”), appearing in print seven

¹²¹ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun’en to gakugei*, 12.

¹²² Koga Jūjirō 古賀十二郎, *Nagasaki yōgakushi* 長崎洋学史, ed. Nagasaki Gakkai 長崎学会, vol. 1 (Nagasaki: Nagasaki bunkensha, 1966), 257.

years later.¹²³ The third entry belongs to the interpreter Fukami Gentai 深見玄岱 (1648–1722), a pivotal figure in establishing and maintaining the connections between Nagasaki and Edo, corresponding extensively with Sōsetsu.¹²⁴ Gentai’s son Fukami Arichika 深見有隣 (1693–1773), who maintained constant correspondence with Sōsetsu, was a shogunal scholar after his father. Among his functions, Arichika interacted with VOC merchants to obtain technical knowledge for Yoshimune, eventually reaching the position of shogunal librarian (*shomotsu bugyō* 書物奉行) in 1734.¹²⁵

Individual interpreters could be identified by both their Japanese and their Chinese names.¹²⁶ They were highly involved in bringing monks and scholars from the continent to Japan, and their connections with China were often highlighted in their official duties as well as their scholarly endeavors. The three figures above had their ancestral homes located in Fujian, the birth province of Ro Sōsetsu’s great-grandfather. While the Sakaki 彭城 or Ryū (Ch. Liu 劉) clan and the Hayashi or Rin (Ch. Lin 林) clan traced their ancestry to the Eastern Min linguistic and cultural region surrounding Fuzhou, the Fukami 深見 or Kō (Ch. Gao 高) family was from the Southern Min region between Zhangzhou and Quanzhou.

Sakaki Sengi’s father, Liu Yishui 劉一水 (?–1658) was originally from Changle 長樂, next to Fuzhou.¹²⁷ He arrived in Nagasaki in 1618 and is known to have been close to the monk Yinyuan Longqi 隱元隆琦 (1592–1673), with whom he exchanged letters while Yinyuan was still in Fujian.¹²⁸ It was most likely due to Liu Yishui’s previous connection with Yinyuan Longqi that his son Sengi also established a relationship with the monk when the latter reached Nagasaki in 1654. In *Nagasaki senmin den*, one reads that Sengi was “proficient in spoken Chinese” (能華音) and that there were “no local dialects he did not comprehend” (方

¹²³ Ayuzawa Shintarō 鮎沢信太郎, “*Ikoku fudoki ni tsuite: Ka’i tsūshōkō to no kankei*” 異国風土記について—華夷通商考との関係, *Rekishū chiri* 歴史地理 83, no. 2 (1952): 50–59.

¹²⁴ See Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*.

¹²⁵ Cf. Imamura Hideaki 今村英明, “*Tokugawa Yoshimune to ‘Oranda mondō’*” 徳川吉宗と『和蘭問答』—オランダ商館長日誌を通して, in *Nichiran kōryūshi: Sono hito, mono, jōhō* 日蘭交流史—その人・物・情報, ed. Katagiri Kazuo 片桐一男 (Kyoto: Shibunkaku shuppan, 2002), 123–42.

¹²⁶ It was not uncommon in early modern Japan, like other places in East Asia, for scholars to have various appellations such as their “art names” (Ch. *hao*, Jp. *gō* 號) and “true names” (Ch. *hui*, Jp. *imina* 諱). In the case of Chinese interpreters, this tendency was further complicated by their dual (Chinese and Japanese) surnames.

¹²⁷cf. Li Doushi 李斗石, *Minji tangtongshi yanjiu* 閩籍唐通事研究 (Beijing: Shehui kexue wenxian chubanshe, 2019), chap. 5.

¹²⁸ Miyata, *Tōtsūji kakei ronkō*, 158–60.

言土語無不通曉).¹²⁹ This indicates that he was probably capable of communicating in more than one Fujianese language and perhaps even Mandarin.

According to *Nagasaki senmin den*, Sengi accompanied Yinyuan as his interpreter when the monk relocated to a temple known as Fumonji 普門寺 between Kyoto and Osaka in 1655.¹³⁰ One can surmise that they communicated in an Eastern Min dialect – Yinyuan hailed from Fuqing 福清, not far south of Fuzhou. Sengi did not stay with Yinyuan for long, soon returning to Nagasaki where he would make a career as an interpreter and literati. He would eventually reach the position of a senior interpreter of the “Fuzhou tongue” (*Fukushū guchi* 福州口), the native language of his father.¹³¹

Next to Sengi was Hayashi Dōei, seven years his junior. Dōei’s father Lin Gongyan 林公琰 (1598–1683), like Yinyuan, was also a native of Fuqing, arriving in Kyushu in 1623. He first lived in the Ōmura 大村 domain near Nagasaki and moved to the city five years later. It was still in Ōmura that Lin Gongyan married Dōei’s mother. She was from a family in the service of the local lord, which might explain why Dōei was later favored by the fourth *daimyō* Ōmura Suminaga 大村純長 (1636–1706). Suminaga would even bestow Dōei with a considerable plot of land by the sea, where the Hayashi established a residence.¹³²

When Lin Gongyan lived in Nagasaki, rather than working as an interpreter, he was appointed as one of the seven “Chinese administrators” (*tōnengyōji* 唐年行司).¹³³ The function was created in 1635, the year when all Chinese commerce was limited to the city. The duties of these administrators consisted of “being able to judge right from wrong if Chinese individuals in the [Nagasaki] harbor violated the prohibitions of the land or in times of disputes” (在津ノ唐人國禁ヲ犯シ、或ハ諍論等ノ節、是非ヲ可裁斷旨).¹³⁴ The “prohibitions of the land” (*kokkin* 國禁) should bring to mind the “prohibited sect of Jesus” that was propagated by the Jesuits, but they could refer to smuggling activities that the shogunate was also trying to curb. Restrictive economic policies for regulating the

¹²⁹ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun'en to gakugei*, 22.

¹³⁰ Wakaki, Takahashi, and Kawahira, 21–22. On Yinyuan’s move to the imperial capital region, see Wu, *Leaving for the Rising Sun*, 113–17.

¹³¹ Kitada, “*Tōtsūji no chūgokugo ni tsuite*,” 15.

¹³² Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 88–92; Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun'en to gakugei*, 23–25.

¹³³ Miyata, *Tōtsūji kakei ronkō*, 346–47; Ri, *Nagasaki tōjin no kenkyū*, 247–48.

¹³⁴ Koga, *Nagasaki shi seihen*, 361. Quoted in Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 23.

transnational commerce of Nagasaki went hand in hand with the inspection of goods and writings for illicit objects and ideas.

As noted, the infiltration of Catholic converts or even missionaries aboard Chinese junks was a major concern of the shogunate, alongside the risk of Christian writings being smuggled. Chinese administrators and Chinese interpreters alike were employed, among other reasons, to ensure the enforcement of the laws that strictly regulated the Nagasaki trade – including shogunal efforts to curb the spread of Christianity. In this context, Buddhist temples, Chinese or otherwise, were important allies in the combat against the religion.

3.5. *Buddhist milieus*

Both Lin Gongyan and Hayashi Dōei had close ties with the local Chinese Buddhist community, whose members often traced their origins to Fujian. Although Lin Gongyan was not one of the signatories of the letter of invitation sent to Yinyuan Longqi, he was in contact with the monk after his arrival and became a regular at Sōfukuji, the Fuzhou temple. Lin Gongyan seems to have been especially intimate with Yinyuan’s disciple Jifei Ruyi 即非如一 (1616–1671), another monk from Fuqing. Jifei reached Nagasaki in 1657 to be the head of Sōfukuji after Yinyuan had already moved east, where he would eventually settle in the Kyoto area.¹³⁵

Due to Lin Gongyan’s connections, his son Hayashi Dōei grew up in a Buddhist milieu of Fujianese expatriates. Despite the original affiliations of the three Chinese temples with the aforementioned regional groups from Jiangnan, eastern and southern Fujian, such distinctions became blurrier with the arrival of the Ōbaku monks. While still maintaining previous syncretic traditions like the cult of the sea goddess Mazu, the three institutions were gradually integrated as part of the new Buddhist sect.

Another Chinese disciple of Yinyuan Longqi, Mu’an Xingtao 木庵性瑫 (1611–1684) – a native of Quanzhou in southern Fujian – was summoned to be the abbot of Fukusaiji, the original temple for the Southern Min community, where he stayed between 1655 and 1660. He then joined his master at Fumonji and moved in 1661 to Manpukuji, the newly-founded head temple of the sect on the outskirts of Kyoto.¹³⁶ By the time the fourth “Chinese temple” Shōfukuji 聖福寺 was established in Nagasaki in 1671 by Tesshin Dōhan 鐵心道胖 (1641–

¹³⁵ Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 25–26.

¹³⁶ Hayashi, 27; Wu, *Leaving for the Rising Sun*, 132.

1710)¹³⁷ – a disciple of Mu’an born in the city to a Chinese father and a Japanese mother – it was as an Ōbaku institution from the very beginning. From the second half of the 17th century, the sect started to dominate the local Buddhist landscape of the Chinese diaspora.¹³⁸

In 1655, one year after Yinyuan Longqi reached Nagasaki, Hayashi Dōei, then aged sixteen, joined the Fuzhou temple Sōfukuji.¹³⁹ Although Yinyuan stayed in this temple for only a couple of months, he was impressed by the young Dōei’s devotion, even writing some verses in his praise.¹⁴⁰ The image of Dōei as a talented scholar is reinforced in *Nagasaki senmin den*. His biography starts as follows:

[Dōei] was [fond of] reading [the Confucian classics] from a young age. With one glance at a five-line [stanza], he [could] read it and recite it out loud [on the spot]; moreover, he was skilled in calligraphy, mastering all the regular, cursive, semi-cursive, and clerical scripts. Whether composing poetry or prose, he would, without effort or hesitation, put his brush down and promptly produce [a text].

幼[好]讀書。一目五行讀則成誦。又字學、凡真草行隸無所不能。所著詩文不務構思、下筆立就。¹⁴¹

While this account surely embellishes his achievements, there is evidence that his talents were also recognized by contemporary notable figures. One such figure who supported Dōei in his intellectual pursuits was the renowned scholar and Ming loyalist Zhu Shunshui 朱舜水 (1600–1682), a Zhejiang native who late in his life settled in Japan and was employed from 1665 as a teacher of Tokugawa Mitsukuni 德川光圀 (1628–1701), grandson of Tokugawa Ieyasu and second lord of the Mito 水戸 domain.¹⁴² Before his definitive move to Edo, Zhu Shunshui was active in Nagasaki, often making the trip between Japan and the continent as he tried to garner support for the collapsing Ming dynasty. Zhu Shunshui reports being impressed with Dōei’s skills when he first saw the future interpreter as a child during his

¹³⁷ Tesshin Dōhan is one of the ten monks whose biographies are compiled in *Nagasaki senmin den*. Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun’en to gakugei*, 119–21.

¹³⁸ Helen J. Baroni, *Obaku Zen: The Emergence of the Third Sect of Zen in Tokugawa Japan* (Honolulu: University of Hawai’i Press, 2000), 144–45.

¹³⁹ Miyata, *Tōtsūji kakei ronkō*, 350.

¹⁴⁰ Miyata, 350; Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 45–46.

¹⁴¹ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun’en to gakugei*, 24.

¹⁴² For an overview of Zhu Shunshui’s life, see Julia Ching, “Chu Shun-Shui, 1600-82: A Chinese Confucian Scholar in Tokugawa Japan,” *Monumenta Nipponica* 30, no. 2 (1975): 177–91, <https://doi.org/10.2307/2383841>. For a more recent, comprehensive study, cf. Xu Xingqing 徐興慶, *Zhu Shunshui yu Dongya wenhua chuanbo de shijie* 朱舜水與東亞文化傳播的世界 (Guoli Taiwan daxue chuban zhongxin, 2008).

multiple visits to the city. Zhu recounts how he requested a thirteen-year-old Dōei to write a letter for him due to the boy's remarkable calligraphy.¹⁴³

Zhu Shunshui was not the only one who believed in Dōei's potential. Nagasaki magistrate Tsumagi Shigenao 妻木重直 (1604–1683) chose Dōei – alongside other promising local scholars including Dōei's father Lin Gongyan – to accompany him as he returned to Edo at the end of his assignment in the city.¹⁴⁴ Zhu Shunshui, himself in Nagasaki, writes some words for the young man with the title *Song Lin Daorong zhi Dongwu xu* 送林道榮之東武序 (“Valedictory for Hayashi Dōei[’s trip] to the Eastern Capital”). In this text, he explains how “when the magistrate Tsumagi came [to Nagasaki] to administer this town (1660–1662), he was able to select the bright and talented literati and sift those to be taken to the shogunal [capital], honing [their skills] day and night (妻木鎮公來鎮茲土、能遴才好士、羅致幕下、朝夕刮磨之).¹⁴⁵

One learns from Dōei's biographical entry in *Nagasaki senmin den* that, while in Edo, “his name enjoyed great fame, for no one compared to him” (名聲大振、舉無與比).¹⁴⁶ Dōei's talents are reported to have been so impressive that “he was eventually envied by many and became at risk of being harmed; so he returned to Nagasaki, running for his life” (遂為衆忌、殆將害之、故亡走回崎).¹⁴⁷ This description of a dedicated young man who was beyond compare even in Edo is echoed in later descriptions of Dōei's life, such as the one in *Sentetsu sōdan zokuhen* 先哲叢談續編 (“Continuation to the collected accounts of past learned men”), published in 1884 as the third and final part to the aforementioned *Sentetsu sōdan*.¹⁴⁸

The afterlife of Dōei's biography illustrates how *Nagasaki senmin den* set the tone or rather became the standard for all later accounts concerning the vast majority of local interpreters and scholars. They are presented as pivotal figures, bridging the gap between the continent's classical culture and the shogunate's political power in the archipelago. Once Dōei came back to his hometown, he became the first official interpreter of his lineage in 1663. Like Sengi, he eventually reached the position of senior interpreter of the “Fuzhou tongue,” being promoted in 1675. While his stint in Edo was brief and ultimately

¹⁴³ Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 46–47.

¹⁴⁴ Miyata, *Tōtsūji kakei ronkō*, 346–47; Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 48–49.

¹⁴⁵ Quoted in Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 58.

¹⁴⁶ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 23–24.

¹⁴⁷ Wakaki, Takahashi, and Kawahira, 23–24.

¹⁴⁸ Hayashi, *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen*, 50–53.

unsuccessful, other Nagasaki scholars were able to better assimilate into the intellectual landscape of the shogunal capital.

3.6. *From Nagasaki to Edo*

The path of the third scholar-interpreter Fukami Gentai and his family is slightly different from the previous two. While Dōei went to try his luck in Edo during his youth but eventually settled in Nagasaki as an interpreter, Gentai's career was the opposite, establishing himself as an interpreter in his native city first and then being employed as a shogunal scholar late in his life. His son Arichika continued his legacy and maintained the bonds between the shogunal capital and Nagasaki.

Gentai's grandfather Gao Shoujue 高壽覺 (dates unknown) was a physician from Zhangzhou who moved in 1596 to the province of Satsuma in southern Kyushu.¹⁴⁹ There, he adopted Gentai's father Kō Taishō 高大誦 (1603–1666), who had been born into a local warrior family.¹⁵⁰ During his teens, Taishō moved to Ming China in 1617, probably at the same time as his adoptive father Gao Shoujue went back to his homeland. However, it seems that Taishō did not spend much time with his father, who died soon after returning.

During his time on the continent, Taishō was employed in the official bureaucracy (Jp. *kanga*, Ch. *guanya* 官衙) and traveled across different Chinese provinces.¹⁵¹ While his father Gao Shoujue was most likely a speaker of the Zhangzhou dialect of Southern Min, the fact that Taishō served as a bureaucrat and lived in various parts of China suggests a mastery of Nanjing Mandarin, the lingua franca of officialdom.

After remaining in Ming China for over a decade, Taishō sailed back from Fuzhou to Nagasaki in 1629 and then returned to Satsuma.¹⁵² There he served the local domanical lord of the Shimazu 島津 clan, presumably because of the warrior origins of his biological

¹⁴⁹ On Gentai's ancestry, see Ishimura Kiei 石村喜英, *Fukami Gentai no kenkyū: Hinaka bunka kōryū-jō ni okeru Gentai den to Ōbaku Dokuryū zenji den* 深見玄岱の研究—日中文化交流上における玄岱伝と黄檗独立禅師伝 (Tokyo: Yūzankaku, 1973), 1–56. Cf. also Shu Zenan 朱全安, “*Fukami gentai ni tsuite: kinsei nihon ni okeru chūgokugo no juyō ni kansuru ichikōsatsu*” 深見玄岱について—近世日本における中国語の受容に関する一考察, *Chiba Shōdai kiyō* 千葉商大紀要 41, no. 4 (2004): 69–92.

¹⁵⁰ Taishō's original family name was Kamata 鎌田 on his biological father's side, while his mother is reported to have belonged to a certain Kan 韓 clan, which could indicate Korean or Chinese origins. Ishimura, *Fukami Gentai no kenkyū*, 9–11.

¹⁵¹ Ishimura, 12.

¹⁵² Ishimura, 13.

family.¹⁵³ In 1638, three years after the Chinese trade was restricted to Nagasaki, Taishō was appointed a Chinese interpreter and moved to the city. He was recommended to the Nagasaki magistrate by a Mandarin-speaking physician from Hangzhou named Chen Mingde 陳明德 (1596–1674), who had come in 1627¹⁵⁴ and adopted the Japanese name Egawa Nyūtoku 穎川入徳 after the fall of Ming.¹⁵⁵ It was around the time of Taishō’s appointment that he changed the family name from Kō (Gao) to Fukami, written initially with the characters 渤海 and then 深見, and also started using the Japanese given name Kyūbē 久兵衛.¹⁵⁶

Fukami Gentai was born in 1649 as the fourth son of Taishō, who was by then a senior interpreter. In his youth, Gentai studied under Dai Mangong 戴曼公 (1596–1672), a physician from Hangzhou who later became a disciple of Yinyuan Longqi and changed his name to Duli Xingyi 獨立性易 once he was ordained a monk of the Ōbaku. Dai Mangong, upon arriving in Nagasaki, was hosted at Chen Mingde’s home together with Zhu Shunshui,¹⁵⁷ revealing yet another connection within the tight-knit community of Chinese expatriates and interpreters.

In Fukami Gentai’s biographical entry from *Nagasaki senmin den*, one reads that “[Dai] Man[gong] excelled in calligraphy and was equally knowledgeable of medicine; [Gen]tai was proficient at both of these arts” (曼善書兼精醫學、岱兼通其藝).¹⁵⁸ Like Hayashi Dōei – and also Mukai Genshō in the case of medicine – the biography emphasizes literary talents as well as practical skills. One also learns that Gentai then moved to Kyoto, where he presented the sitting emperor with a health manual titled “Notes on preserving life” (*Yōjō hen* 養生編), and later made a living as a physician in Satsuma.

Although working as an interpreter was not his primary occupation, there is a description in Gentai’s biographical entry of his service to the Nagasaki magistrate when a certain physician from the Xihu 西湖 area of Hangzhou named Lu Wenzhai 陸文齋 (dates unknown) came to town in 1703. Gentai is lauded as having “a resoundingly clear voice, [so]

¹⁵³ Ishimura, 14.

¹⁵⁴ Ishimura, 15.

¹⁵⁵ Chen Mingde’s biography is featured under the rubric “temporary residents” of *Nagasaki senmin den*. Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun’en to gakugei*, 143–44.

¹⁵⁶ Shu, “*Fukami gentai ni tsuite: kīnsei nihon ni okeru chūgokugo no juyō ni kansuru ichikōsatsu*,” 79.

¹⁵⁷ Ishimura, *Fukami Gentai no kenkyū*, 15.

¹⁵⁸ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun’en to gakugei*, 27.

no skilled interpreter could contend with him”(聲音宏亮、善譯者不能與抗衡).¹⁵⁹ Among the diverse community of Nagasaki interpreters, the mastery of the “proper pronunciation” of the prestige variety of spoken Chinese – namely, Nanjing Mandarin – was presented as a point of great distinction.

The very next sentence in his biography, perhaps implying a certain correlation, adds that “later, [Gentai] was summoned to Edo due to his erudition and scholarship” (後以文學應 徵江府).¹⁶⁰ Indeed, after 1710, Fukami Gentai was employed as an official scholar of the shogunate by recommendation of Arai Hakuseki, achieving the ultimate recognition that Hayashi Dōei failed to obtain during his short stint in the political center of Tokugawa Japan.

Fukami Gentai enjoyed an exceptionally close relationship with Ro Sōsetsu despite being almost thirty years his senior. For instance, Sōsetsu visited him during his trip to Edo alongside Nishikawa Joken. Out of the 87 letters related to Sōsetsu preserved in the archives of the Ro clan (*Roshi monjo* 盧氏文書),¹⁶¹ 20 of them are correspondence with Fukami Gentai and 17 are from Gentai’s son Arichika, who took his father’s position in the Edo court and eventually served as one of the official shogunal librarians (*shomotsu bugyō* 書物奉行). These 37 letters from Gentai and Arichika – almost half of the correspondence involving Sōsetsu – are the most numerous from any two individuals, which attests to the closeness between them.¹⁶²

Sōsetsu’s relationship with the two Fukami, father and son, represented one important channel of communication between Nagasaki and Edo. The Fukami clan was the consummate example of how knowledge from the continent – mediated by the community of Chinese interpreters – came to be valued in the shogunal capital. The cross-border biographies of the first members of the Sakaki, Hayashi, and Fukami families shed light on the decisive role of their cultural and linguistic groups.

The strong affiliation with Chinese lineages is reflected in the titles of their biographies. Although both Sakaki Sengi and Fukami Gentai possessed ancestral Chinese family names as well as Japanese ones, their entries contain only their Chinese surnames, namely Ryū (Ch. Liu) for Sengi and Kō (Ch. Gao) for Gentai. In the case of Hayashi Dōei, whose name appears in the book as Hayashi Ōsai 林應棗, the connection to the continent was more recent since his father was born in Fujian. His Chinese family name also happened

¹⁵⁹ Wakaki, Takahashi, and Kawahira, 27.

¹⁶⁰ Wakaki, Takahashi, and Kawahira, 27.

¹⁶¹ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 108.

¹⁶² Kawahira, 108.

to be a Japanese surname, so it could be read either as Hayashi in the vernacular or in Japanese Sinitic as Rin (Ch. Lin).

The readings of their names might seem somewhat arbitrary, but they reveal the sense of pride in their Chinese ancestry that Ro Sōsetsu and Senri infused in the book. Sōsetsu himself, despite being the third generation born in Japan – all of them to Japanese mothers – did not adopt a Japanese surname like other interpreters, keeping his ancestor’s name Ro (Ch. Lu), which he transmitted to his adopted son-in-law Ro Senri.

4. The heritage of cosmology in Nagasaki

Two years after starting *Nagasaki senmin den*, Ro Sōsetsu died and left Senri to continue the work of “obtaining [information] from the elders and drawing from family archives” (或得於故老、或採於家乘).¹⁶³ Senri would finish this project three years later, in 1731. In the process of compiling the biographies, one of the archives that he must have consulted was that of their own family. The archives of the Ro clan contain two genealogies, a list of books owned by Sōsetsu and his father Sōseki, a variety of letters Sōsetsu exchanged with notable figures both in Nagasaki and in the two capitals of Kyoto and Edo, as well as other miscellaneous documents related to the activities of the family in the city.¹⁶⁴ Besides, letters that Ro Sōsetsu and Mukai Gensei sent to the shogunal official Watanabe tō are compiled in a different source that circulated under the title *Sokuryō higen* 測量秘言 (“Confidential information on [land] surveying”).¹⁶⁵

The biographies of *Nagasaki senmin den*, together with the documents of the Ro archives and the information from the letters found in *Sokuryō higen*, provide a more or less cohesive picture of the different actors that shaped the cosmological knowledge that circulated from Nagasaki in the 17th and early 18th centuries. The fact that these three sources are intimately linked to Sōsetsu makes him a central figure for understanding the impact of knowledge from Nagasaki on the cosmological views of scholars around the country, connecting them to

¹⁶³ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 157.

¹⁶⁴ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 104–8.

¹⁶⁵ For an overview and transcription of this text, see Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen’*”; Urakawa, “*Hosoi Kōtaku hen ‘Sokuryō higen.’*”

larger trends in East Asia and beyond. The letters compiled in *Sokuryō higen*, in particular, elucidate this process of circulation and transformation of knowledge.

The manuscript of *Sokuryō higen* was organized shortly before the deaths of Mukai Gensei and Ro Sōsetsu by someone they never met, Edo scholar Hosoi Kōtaku 細井廣澤 (1658–1735). Kōtaku, besides organizing the letters into a short volume, also wrote a preface in 1727. In this preface, he explains that in 1726 Watanabe Gunzō went with the Nagasaki magistrate Kusakabe Hirosada to the city of Nagasaki and there he “corresponded with Mukai Gensei and Ro Sōsetsu” (向井元成・盧草拙と筆語往來し).¹⁶⁶ Upon his return to Edo, Gunzō showed the letters he received from them to another scholar, Miwa Shissai 三輪執齋 (1669–1744), who in turn presented them to Kōtaku. Since the letters contained cosmological information, or what Kōtaku called “matters of lands and the celestial signs” (地域天文の事), he obtained permission from Gunzō to have them copied into a single volume.

Kōtaku further clarifies that he omitted half of the letters, as they were discussions of different Confucian schools (孔孟程朱陸王の學を論し)¹⁶⁷ – from Confucius and Mencius, through the Neo-Confucian teachings of Cheng Hao 程顥 (1032–1085), Cheng Yi 程頤 (1033–1107), and Zhu Xi 朱熹 (1130–1200), and finally Zhu Xi’s main opponent Lu Jiuyuan 陸九淵 (1139–1192) and his legacy championed by Ming scholar Wang Yangming 王陽明 (1472–1528). Kōtaku adds that he also omitted parts of the letters that criticized the teachings of Ogyū Sorai 荻生徂徠 (1666–1728), an influential Edo scholar belonging to the warrior class who refused Neo-Confucian orthodoxy and proposed instead a return to the “original meaning” of the ancient Chinese classics from before the Han 漢 dynasty (202 BCE–220 CE).¹⁶⁸

The fact that these omitted discussions took place is indicative of the position of cosmological issues as part of a larger body of scholarly knowledge based on a Confucian substratum. Moreover, it illustrates the range of Neo-Confucian thought in Tokugawa Japan and the negotiations surrounding a perceived orthodoxy promoted by shogunal scholars in both Edo and Nagasaki. For Kōtaku, however, the interest lay in the unique contribution of Nagasaki’s scholars to his field of interest, i.e., geographical techniques of land surveying

¹⁶⁶ Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 95.

¹⁶⁷ Hiraoka and Hibi, 95.

¹⁶⁸ For a brief overview of Ogyū Sorai, see, for instance, W. J. Boot, “Introduction,” in *Tetsugaku Companion to Ogyū Sorai*, ed. Daiki Takayama and W. J. Boot, *Tetsugaku Companions to Japanese Philosophy 2* (Cham: Springer, 2019), 1–8.

(*sokuryōjutsu* 測量術); so he “sorted and transcribed [the relevant letters] without leaving out a single word” (一言を略せず備へ繕寫し).¹⁶⁹ Strikingly, the product was a book focused on technical discussions about world geography and cartographical traditions that flourished in Nagasaki rather than land surveying per se.¹⁷⁰

This document is classified as “confidential information” (*higen* 秘言) – Kōtaku even had to ask Gunzō’s permission to transcribe them – probably because the letters were part of an official request by the shogun Tokugawa Yoshimune to obtain technical information from Nagasaki scholars as well as Dutch merchants.¹⁷¹ Besides the letters by Gensei and Sōsetsu, constituting the majority of the text, *Sokuryō higen* also reproduces a letter by the interpreter for the Dutch Imamura Eisei 今村英生 (1671–1736). As these writings were by all evidence part of a response to an official shogunal request, the level of specialized knowledge that they contained and the prompt responses on the part of Gensei and Sōsetsu should come as no surprise.¹⁷² As explored throughout this study, it was neither the first nor the last time that Yoshimune showed interest in the different types of knowledge that could be gathered in Nagasaki.

4.1. *Finding the origins*

The first letter in *Sokuryō higen* is the one mentioned previously in which Ro Sōsetsu explains the origin of Christovão Ferreira’s cosmological treatise *Kenkon benseitsu*, which is dated the twenty-fifth of the seventh month of the eleventh year of Kyōhō (August 22, 1726). It comes as a response to an earlier letter signed by Watanabe Gunzō, preserved in the Ro archives, dated the same day, demonstrating the swiftness of Sōsetsu’s response.¹⁷³ There are specific questions about Ferreira and *Kenkon benseitsu* as well as an inquiry concerning the possibility of borrowing “maps and diagrams” (*ezu* 繪圖) in Sōsetsu’s possession. Gunzō asks how the “southern barbarian” Sawano Chūan – i.e., Ferreira – came to reach the position of

¹⁶⁹ Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 95.

¹⁷⁰ On the different extant manuscripts of this short book, see Hiraoka Ryūji 平岡隆二, “‘*Sokuryō higen’ no shahon ni tsuite*” 「測量秘言」の写本について, *Kenkyū kiyō / Nagasaki rekishi bunka hakubutsukan* 研究紀要／長崎歴史文化博物館 6 (2012): 43–56.

¹⁷¹ cf. Imamura Hideaki 今村英明, “‘*Sokuryō higen’ seiritsu no haikai ni tsuite*” 『測量秘言』成立の背景について, *Yōgakushi kenkyū* 洋学史研究 28 (2011): 1–15.

¹⁷² Hiraoka, “‘*Sokuryō higen’ no shahon ni tsuite,*” 44.

¹⁷³ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 39–40. See Appendix I for Watanabe Gunzō’s entire letter.

“inspector” (澤野忠庵、及承所は南蠻人之由に御座候。如何仕たる譯を以、目付と申に相成候哉). He also requires some clarification on whether Kobayashi Kentei came after Chūan’s time or was one of his disciples, questioning if he might have been originally a Confucian scholar. (小林謙貞は澤野忠庵時代已後に候哉。是又忠庵門付に御座候哉。本儒者などにて御座候哉). The letter ends with a postscript requesting Sōsetsu’s opinion on *Tianjing huowen*, a book he describes as apparently having errors in some places but with up-to-date cosmological knowledge (天經或問と申書所々誤有之候書之様にも申候。天學近代之書共申候。如何被思召候哉).

In his reply, Sōsetsu introduces first the significance of Kobayashi Kentei before talking about Ferreira. He explains that his father and grandfather – that is, Ro Sōseki and Ro Shōzaemon – were “old friends with Kentei, and there were many things that he taught them” (舊友にて諸事相傳申候儀も御座候). He continues by saying that “the basis of [Kentei’s cosmological] scholarship was transmitted [orally] from Western navigators, so there were charts [on the subject] but nothing that could be considered an entire book” (此學の根本は西洋按針役の者より相傳いたし來り申候付、圖は御座候て書物と申て全部の物は無御座候). Sōsetsu then concludes the first part of his letter with the assertion that “although the written works Kentei [produced] in his lifetime were enough to fill up his family’s collection, in the end, there was no book that he wrote to which he gave a title [to be published]” (一生の筆力は家藏に満申候こと御座候へとも終に題號を付申候て撰申書は無御座候).¹⁷⁴

Sōsetsu’s account that Kentei neither relied on written materials nor wrote anything indicates that the books ascribed to him were probably compiled by his disciples.¹⁷⁵ Kentei is the author of one of the central works on Jesuit cosmology written in Nagasaki and in vernacular Japanese, which in turn was largely based on a Latin textbook known simply as *Compendia*, written by the Jesuits in Japan around 1593 and conventionally attributed to

¹⁷⁴ Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 95. The character 傳 is mistranscribed repeatedly as 傳 in Hiraoka and Hibi. This issue is indicated in the errata that appears in Hiraoka, “‘*Sokuryō higen’ no shahon ni tsuite,*” 54. I have thus used the correct character 傳 for all relevant instances.

¹⁷⁵ Ebisawa, *Nanban gakutō no kenkyū*, 175.

Spanish missionary Pedro Gomez (1533/35–1600).¹⁷⁶ Kentei’s book, titled *Nigi ryakusetsu* 二儀略説 (“Succinct explanations on the heaven and earth”) survives only in two manuscripts,¹⁷⁷ and there is no evidence that it was ever printed, which might explain why Sōsetsu claims that Kentei did not publish anything.

The main manuscript of *Nigi ryakusetsu*, housed at the National Archives of Japan, contains a brief afterword (*okugaki* 奥書) from 1715 signed by Ōe Hirotaka 大江宏隆 (1669–1729), a Shintō scholar close to Sōsetsu, who makes it clear that “this is a book composed by the Nagasaki cosmologist Kobayashi Kentei” (此書長崎天文士小林謙貞述作也).¹⁷⁸ He claims that the copy in question is from Kentei’s own hand (自筆之草藁),¹⁷⁹ which “makes it a rare and precious book; something to be secretly stored, kept at the bottom of [one’s] collection” (為希有之珍書、納函底秘藏者也).¹⁸⁰ While Ōe Hirotaka stresses that the motive for concealing such a book was that it was extremely rare, it is not unreasonable to assume that its sensitive content was another major factor, if not the main issue.

A remarkable feature of *Nigi ryakusetsu* is that it presents Jesuit cosmology without any reference to Christianity. In other words, Kentei attempts to distill only the practical knowledge of the Jesuits without any of its moral and spiritual implications. The date of the composition is unclear, but it is safe to assume that it was written after Kentei had spent over twenty years in prison for his connection with Hayashi Kichimon, his master executed for being Christian. It is not hard to imagine why, in writing *Nigi ryakusetsu*, Kentei would try to distance it as much as possible from the prohibited “sect of Jesus.”

¹⁷⁶ New evidence of a Japanese translation of the *De Sphaera* section of the *Compendia* suggests that it was written by the another Spanish Jesuit, Pedro Morejón (1562–1639?). Ryuji Hiraoka, “The Discovery and Significance of *Sufera No Nukigaki* (Selection on the Sphere), a Jesuit Cosmology Textbook in Japanese Translation,” *Historia Scientiarum* 32, no. 2 (2023): 88–116; Sven Osterkamp, “The Textual History of the Jesuit *Compendia* in Latin and Japanese as Seen from the Newly Identified Manuscript at Herzog August Bibliothek, Wolfenbüttel,” *Historia Scientiarum* 32, no. 2 (2023): 63–87.

¹⁷⁷ The first undated manuscript is housed as part of the Cabinet Collection (*naikaku bunko* 内閣文庫) at the National Archives of Japan – which is almost entirely composed of works that used to belong to the shogunate – and it has been the main reference text for research on this work. The second one, dated 1792, is held at the Tsu City Library. Unno Kazutaka 海野一隆, “Edo jidai ni okeru ‘Nigi ryakusetsu’ no rifu” 江戸時代における『二儀略説』の流布, in *Tōyō chūrigakushi kenkyū* 東洋地理学史研究, vol. Nihon hen 日本篇, 2005, 48–61; Hiraoka, *Nanbankei uchūron no gententeki kenkyū*, 105–7.

¹⁷⁸ The content of the afterword is reproduced almost verbatim in the 1792 manuscript. However, it omits the name of Ōe Hirotaka. See Hiraoka, *Nanbankei uchūron no gententeki kenkyū*, 107.

¹⁷⁹ Even the earlier manuscript held at National Archives was, by all accounts, not written by Kentei himself. cf. Hirose, Nakayama, and Ōtsuka, *Kinsei kagaku shisō*, 2:466; Hiraoka, *Nanbankei uchūron no gententeki kenkyū*, 106.

¹⁸⁰ Kobayashi Kentei 小林謙貞, “*Nigi ryakusetsu*” 二儀略説 (Manuscript, undated), fol. 102b, Naikaku bunko, National Archives of Japan, <https://www.digital.archives.go.jp/img/1237250>. Reproduced in Hirose, Nakayama, and Ōtsuka, *Kinsei kagaku shisō*, 2:107.

Nevertheless, it was still a book that discusses essentially Jesuit ideas that could be considered unorthodox, even heretical – such as Aristotelian natural philosophy based on the four elements, identified as the “four greats” (*shidai* 四大). The first section of the book starts with a description of the properties of the heavens (*tenshitsu* 天質), in which Kentei explains that “the tiers of heaven are not something composed out of the four greats; their substance is perfectly strong and perfectly hard, so no metal or stone can compare to it” (天層ハ四大和合ノ物ニ非ス、其體至剛至堅ニシテ鐵石等ノ可及モノニアラス).¹⁸¹ This assertion leads him to the conclusion that “the heavens are called the fifth great” (諸天ヲ五大ト名ク), i.e., their nature is that of the quintessence, a concept entirely foreign to Neo-Confucian cosmology.

Kentei’s explanation reflects the Aristotelian division of the cosmos into the two supralunar and sublunar realms, whose nature is entirely separate from each other. *Nigi ryakusetsu* closely follows the structure of the cosmological portion of *Compendia Catholicae Veritatis*, itself titled *De Sphaera*. The first section of *Nigi ryakusetsu* “on the properties of the heavens” (*tenshitsu no koto* 天質ノコト) corresponds to the chapter “on the nature of celestial bodies” (*de natura caelestium corporum*) of the Latin text.¹⁸² Even divested of *De Sphaera*’s Catholic core, Kentei’s adaptation still promoted an exotic Jesuit worldview that could raise eyebrows or even lead to investigations.

Sōsetsu must have been well aware of the existence of this book, especially if one considers his proximity with Ōe Hirotaka, whose name appears in seven letters from the Ro archives, including two written by Ōe himself. Senri also names Ōe in his postface to *Nagasaki senmin den* as someone who was a “good friend” (友善)¹⁸³ of his father Sōsetsu. As for the intended purpose of *Nigi ryakusetsu*, Kobayashi Kentei clarifies in the preface that, considering the difficulty of the subject, he “cursorily made a selection of writings for the sake of common people” (為俗人略拔書スル也).¹⁸⁴ There was, by all evidence, a deliberate effort to publicize such cosmological knowledge that could be traced back to the Jesuits in Japan. Hiraoka Ryūji demonstrates that *Nigi ryakusetsu* was referenced continuously throughout the Edo period, and used in tandem with Dutch knowledge, arguing that it had a broader impact over a longer

¹⁸¹ Kobayashi, “*Nigi ryakusetsu*,” fol. 3a; Hirose, Nakayama, and Ōtsuka, *Kinsei kagaku shisō*, 2:16.

¹⁸² See Obara Satoru 尾原悟, “A Comparative Table of Contents for the Latin and Japanese MSS,” in *Compendium catholicae veritatis: Kaisetsu* 解説, ed. Jōchi Daigaku Kirishitan Bunko 上智大学キリシタン文庫, vol. 3, 3 vols. (Tokyo: Ōzorasha, 1997), 73–126.

¹⁸³ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 157.

¹⁸⁴ Kobayashi, “*Nigi ryakusetsu*,” fol. 1a; Hirose, Nakayama, and Ōtsuka, *Kinsei kagaku shisō*, 2:10.

period than previously thought.¹⁸⁵ Sōsetsu, however, found it prudent not to mention any written materials related to Kentei in his 1726 letter to the shogunal official Watanabe Gunzō, focusing instead on oral traditions.

4.2. *A living cosmological lineage*

Sōsetsu saw in the schools of both Christovão Ferreira and Kobayashi Kentei the “source for those who [studied] the celestial signs in Nagasaki” (長崎天文者ノ由來),¹⁸⁶ as he goes on to explain in his letter to Gunzō. The origins of cosmological scholarship in the city were firmly rooted in Jesuit knowledge – a fact that Sōsetsu does not bring to the forefront but which cannot be effaced. Although Sōsetsu calls Ferreira by the Japanese name, Sawano Chūan, he still identifies him as a “southern barbarian inspector” (*nanban no metsuke* 南蠻の目付). This designation is somewhat ambiguous, for Ferreira was both considered a “southern barbarian” himself and someone employed by the shogunate to investigate possible Christian activities that were associated with “southern barbarian” missionaries.

Further down in the letter, Sōsetsu clarifies that “Sawano Chūan was originally a southern barbarian but, upon being naturalized into Japan, he has become ‘japanified’” (澤野忠庵町は本南蠻人ニて日本へ歸化仕候て日本形ニ成申候) – after his apostasy, Ferreira adopted the local dress and customs, even abandoning his celibacy and marrying a Japanese woman – and that he occupied the position of “inspector of sects” (*shūmon no metsuke* 宗門の目付). This should attest to Ferreira’s credentials as someone who rejected his previous “heretical” views and even worked in combating them – he was living proof that such foreigners and their ideas could conform to and be assimilated into an idealized Japanese (anti-Christian) orthodoxy. Sōsetsu explains that Ferreira “ultimately did not have any disciples in [the study of] the celestial signs” (終に天文の弟子ハ無御座候), as opposed to his teaching of surgical techniques, which became a medical tradition with several followers.

As for Kobayashi Kentei, Sōsetsu recounts that he did not have any descendants to keep his family name but had numerous students in cosmological subjects. Sōsetsu singles out

¹⁸⁵ Hiraoka, *Nanbankei uchūron no gententeki kenkyū*, chap. 4.

¹⁸⁶ Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 96. All other quotes in this section are from this same page, unless otherwise noted. See Appendix E for the entire letter.

Seki Shōzaburō 關莊三郎 (1633?–1711) as “number one among his disciples” (此弟子ノ隨一) but adds that “despite [Shōzaburō] having descendants, his scholarship was not transmitted [within the family]” (子孫御座候へとも學文ハ傳り不申候). The cosmological lineage of Kentei was instead taken up by Nishikawa Joken. Sōsetsu explains that “recently, Nishikawa Joken has been composing various books [on cosmology], and they are extremely valuable” (近來ハ西川恕¹⁸⁷見様々の書物を撰被申候て尤重寶之至ニ御座候). Indeed, more than half of Joken’s books on astronomical topics were written or published in the 1710s, in particular after he was summoned to advise the shogun Tokugawa Yoshimune on astronomical matters. Sōsetsu presents Joken as the scholar who synthesized all the different strands of cosmological knowledge emerging from Nagasaki – an image that is corroborated by Joken’s eclectic publications.

In response to Gunzō’s query about *Tianjing huowen*, Sōsetsu writes that among the books recently brought by the Chinese merchants, there is no other astronomical work that compares to it (近年來唐の書物ノ内天文の書ニて是程の書ハ無御座候) – indeed, as discussed in the fourth chapter of this study, it was one of Joken’s main references. According to him, it has the virtue of incorporating Western astronomical to clarify for the first time issues that had remained unresolved for a thousand years in pre-Ming astronomy (中華ノ天文モ明朝以前ハ殊外不分明の事共ニテ、西洋の天文を承申候て始て千歳ノ疑ヲ開申候事ニ御座候). He goes as far as saying that he is not aware of the occasional errors that Gunzō mentioned existing in the book (然ルニ此内ニ所々誤御座候儀ハ不存候), which reveals to some extent the limitations of his own understanding of cosmological matters.

Sōsetsu’s study of cosmology began under Seki Shōzaburō, although he does not explicitly say so in this letter – Senri mentions it in his postface to *Nagasaki senmin den*.¹⁸⁸ However, Sōsetsu does mention to Watanabe Gunzō that he “possesses a variety of charts passed down [in his family]” (圖の類は持傳居申候), probably astronomical and geographical maps, and that “they could all be made available for [shogunal officials] to peruse in case they are of use” (御用ニ御座候ハ、何ニても可奉懸御目候). These claims are meaningful in two ways. First, it shows that Nagasaki cosmological scholars could procure maps and books unavailable to even the shogunal authorities – not to mention scholars in

¹⁸⁷ Here Sōsetsu uses a different character for the first syllable of Joken’s name instead of the usual 如.

¹⁸⁸ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun’en to gakuhei*, 157.

Edo. Second, it suggests that Sōsetsu's collection of charts might have previously belonged to Seki Shōzaburō or Kobayashi Kentei.

Seki Shōzaburō, Kentei's foremost follower, appears in *Nagasaki senmin den* as the main representative of an older type of European-style cosmology that was based on practical knowledge, having first “learned the study of the celestial signs of western barbarians from elders who had traveled to Macau and Luzon” (從長老之遊阿媽・呂宋者、傳西蕃天文學).¹⁸⁹ This places him squarely in an Iberian tradition that, besides being related to the Jesuits, also emphasized astronomical and geographical skills necessary for navigation. It is no coincidence that Shōzaburō learned his craft from older seafarers who had been able to travel to Portuguese Macau and Spanish Philippines before the travel restrictions of the 1630s. These two locations were emblematic of the Iberian presence in East Asia, inextricably linked with the heretical “Sect of Jesus” that was inseparable from Portugal and Spain, powers that the Tokugawa regime identified as highly inimical to their interests. While the sources themselves were not religious, under shogunal regulations former seafarers who interacted with the “southern barbarians” could inspire suspicion.

Catholic (and particularly Jesuit) connections to this early form of cosmological knowledge in Nagasaki could not be overemphasized, and yet the bans on the religion made it necessary to conceal them. The lack of bookish knowledge for this tradition is also underscored in Shōzaburō's biography in *Nagasaki senmin den*, in which one reads that “although he had not read the [Confucian classic] books, there was nothing about its principle that he did not penetrate” (雖未嘗讀書、然於理無所不通). In other words, Seki's lineage was essentially based on oral transmission with the support of maps and charts – a convenient explanation that also served the purpose of obfuscating its Iberian dimensions. The contribution from “western barbarians” (*seiban* 西蕃) was framed as merely technical, devoid of any moral significance.

From Seki's biography, one also learns that he was “already particularly knowledgeable about the celestial signs” (既專精天文) when he decided to study under Kentei, whose technical expertise impressed him. It was Kentei who, in the early 1670s, recommended Seki to Nagasaki magistrate Ushigome Chūzaemon. Ushigome favored Seki the same way he did Kentei. After Ushigome's departure, however, Seki did not receive the same level of attention from subsequent magistrates, so he “aged in his home, collecting

¹⁸⁹ Wakaki, Takahashi, and Kawahira, 51. All subsequent references to this biography in this section come from the same page.

various books and [astronomical] charts that were not brought out once again” (老於家、書傳圖象藏諸、亦不復出). It is quite possible that some of these charts were the ones Sōsetsu was willing to display to the authorities.

4.3. Confidential theories

In another letter from 1726 reproduced in *Sokuryō higen*, Sōsetsu describes to his shogunal interlocutor three old theories (*setsu* 説) that were transmitted among Nagasaki scholars about degrees (Ch. *du*, Jp. *do* 度) to be adopted for navigational, geographical, and astronomical purposes. He explains them as follows:

I am writing what has been transmitted to me so that I can present it to you. Today these have become especially confidential theories. Since there is no one who knows about such old matters, I have kept them hidden. Among the three theories [described] below, the one I utilize is the theory of [Kobayashi] Kentei’s school.

私方へ相傳仕候儀書付候て進上申候。只今にてハ殊外秘説ニ罷成候。古來ノ事を存候者無御座候ニ付秘密ニ致申候。右之三説之内私方へ用來り申候は乾¹⁹⁰貞家の説にて御座候。¹⁹¹

Sōsetsu presents his knowledge of Nagasaki’s “old matters” (*korai no koto* 古來ノ事) concerning “confidential theories” (*hisetsu* 秘説) – associated in particular with a time when European sailors and Catholic missionaries roamed more freely in the city – as an asset in his service to the shogunate. Moreover, he claims that “in recent years, the new theories of [Nishikawa] Joken and [Mukai] Gensei have been transmitted to a larger audience” (近年は恕¹⁹²見之新説又ハ元成流之説大抵世間へ傳ハリ申候), while “there is no one who knows about the old theories” (古説を存候者も無御座候). Although Sōsetsu claims it is difficult for him to evaluate whether the new or the old theories are better, for he lacks the necessary mathematical knowledge (新古ノ説何れ可然候哉算數不案内御座候故難斗奉存候得共), in all of these theories, “the degrees [on earth] are derived from the stellar degrees so that the

¹⁹⁰ The first character used in Kentei’s name is normally 謙 instead of 乾 found in this letter.

¹⁹¹ All passages from Sōsetsu’s letter quoted in this section and the next are found in Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 101. In the instances that the character *migi* 右 (“right” or “aforementioned”) appears, it should be read as *hidari* 左 (“left” or “mentioned below”). Sōsetsu’s four letters sent to Watanabe Gunzō are reproduced in Appendix E.

¹⁹² The first character commonly used for Joken’s name is 如 instead of 恕 found in this letter.

fundamental method [for calculating the distance on earth] is to examine this” (度と申は星度ヨリ起り申候ニ付是にて相考相知り申候法を本法と奉存候).

The “stellar degree” (*seido* 星度) evoked by Sōsetsu refers to a unit of distance used in traditional East Asian astronomy for situating celestial objects on the celestial sphere according to a system of coordinate points.¹⁹³ The celestial equator, or “red path” (Ch. *chidao*, Jp. *sekidō* 赤道), and the ecliptic, or “yellow path” (Ch. *huangdao*, Jp. *kōdō* 黃道), can thus be measured in “degrees” (*do*), which have corresponding distances on earth measurable in “leagues” (Ch. *li*, Jp. *ri* 里) that differed slightly in China and Japan. Although calculations of the *do* in heaven and its relation to distances on earth were part of ancient Chinese cosmology,¹⁹⁴ the conception of heaven and earth as two concentric spheres was inextricably linked with knowledge from European seafarers and missionaries.

The different ways of calculating the corresponding length of the graduation (*do*) on earth – measured in Japanese leagues (*ri*) – had evident practical applications for sailors, mapmakers, and astronomical specialists alike and were preserved within various lineages of Nagasaki cosmologists as trade secrets. Before providing the values of *do* in each of the three “old theories” of which he is aware, Sōsetsu writes that “the [theories] derived from these Westerners [presented below], who were pilots between the Keichō and Genna eras (1596–1624), are found in private documents” (右の西洋人ハ慶長元和の間のピロウトにて候之出私書ニ御座候). Not too many people had access to these “private documents” (*shisho* 私書), and Sōsetsu writes that “what [he] has written and presented [in the letter] is what he found in the confidential boxes previously requested [by the shogunate]” (先任御尋秘匣ノ内にて見出申候まゝ書付進之申候), implying that it is not the first time that such a shogunal inquiry took place.

¹⁹³ Daniel P. Morgan, in his study of ancient Chinese cosmology, provides the following definition of *du* (Jp. *do*): “a linear measure, convertible with terrestrial distances, used in the context of the astral sciences (and that context only) as a measure of the circumference of a great circle whereby one *du* equals the distance travelled by the mean sun in one day, and the ‘circuit of heaven’ thus equals the length in days of the tropical year (*su*).” Daniel Patrick Morgan, *Astral Sciences in Early Imperial China: Observation, Sagehood and the Individual* (Cambridge: Cambridge University Press, 2017), 60.

¹⁹⁴ cf. Nakayama, *A History of Japanese Astronomy*, chap. 4; Christopher Cullen, *Astronomy and Mathematics in Ancient China: The Zhou Bi Suan Jing*, Needham Research Institute Studies 1 (Cambridge: Cambridge University Press, 1996), chaps. 1–2.

4.4. *Pilots of old Nagasaki*

Sōsetsu identifies the first of the “three theories” as that of *Maneigosaru* マネイゴサル. This is probably a corrupted reading of the name of a certain Manoel Gonçalo (dates unknown) mentioned in the sailing manual *Genna kōkai ki* 元和航海記 (“Notes on navigation from the Genna era”) by Ikeda Kō’un 池田好運 (dates unknown).¹⁹⁵ The identity of Gonçalo is unclear and even the original form of his name is uncertain. Kō’un writes in his preface to the manual that “he received the transmission of the way of the navigators in the second year of Genna era (1616) from the southerner *Manoerugonsaru*” (夫行師之道、日本元和二丙辰歳、從萬能惠留權佐呂南人傳受).¹⁹⁶ The designation of “southerner” (*nanjin* 南人) – probably short for “southern barbarian” (*nanbanjin* 南蠻人) – signifies that *Manoerugonsaru* was an Iberian seafarer. While the closest reading for the Japanese transliteration is the Portuguese name Manoel Gonçalo, it is also possible that he was a Spanish captain by the name of Manuel González, who is recorded as having brought missionaries into Nagasaki on a ship from Manila in 1616.¹⁹⁷

The second theory, Sōsetsu explains, is that of *Anji* アンジ, the same word for “navigator” (*anji* 行師) used in Kō’un’s preface. While this term could potentially refer to any “barbarian” pilot who taught navigation techniques in Japan in the late 16th and early 17th centuries,¹⁹⁸ in this case, it designates specifically the English seafarer William Adams (1564–1620). Sōsetsu writes that “*Anji* was originally from the West, and came [to Japan] during the Genna era (1615–1624)¹⁹⁹ together with a certain *Yayōsu* in a southern ship; he later resided in Edo and was conferred the name of Miura Anjin” (アンジハ本西洋ノ者ニテ元和年中ニヤヨウスト云者ト南船ニテ来リ。後ハ江戸ニ住シ三浦按針ト名被下候). *Yayōsu* was how the Dutch merchant Jan Joosten van Lodensteyn (1557?–1623) was known in Japanese at the

¹⁹⁵ On this manual and its impact on early Nagasaki cosmological thought, see Ebisawa, *Nanban gakutō no kenkyū*, 65–73. The values that appear in the manual and possible Portuguese written sources are discussed Yamada Yoshihiro 山田義裕, “*Genna kōkai sho to nanban no kyori: gurau to regua*” 元和航海書と南蛮の距離—グラウとレグア, *Kaijishi kenkyū* 海事史研究 60 (2003): 23–33; Yamada Yoshihiro 山田義裕, “*Genna kōkai sho’ no taiyō sekū hyō no genten*” 『元和航海書』の太陽赤緯表の原典, *Kaijishi kenkyū* 海事史研究 63 (2006): 113–31.

¹⁹⁶ Ikeda Kō’un 池田好運, “*Genna kōkai ki*” 元和航海記 (Manuscript, 1618), fol. 1a, Kyoto University Library, <https://rmda.kulib.kyoto-u.ac.jp/item/rb00013334>.

¹⁹⁷ Ebisawa, *Nanban gakutō no kenkyū*, 65.

¹⁹⁸ Ebisawa, 74–75 n. 7.

¹⁹⁹ In fact, the ship, called *Liefde*, arrived in Kyushu in 1600, during the Keichō 慶長 era.

time. Both men – considered the first of their respective countries ever recorded to have reached Japan – were eventually granted residences in Edo and received private domains from the first shogun Tokugawa Ieyasu 徳川家康 (1543–1616). Adams was called Miura Anjin 三浦按針 (“the pilot of Miura”) after the location of his domain in the Miura peninsula south of the shogunal capital.²⁰⁰

The third theory Sōsetsu mentions is the one transmitted by his former teacher Seki Shōzaburō, and based on the measurements used by the *pirōto* ヒロウト (“pilots”) – another term for European captains derived from the Portuguese *piloto*. As Sōsetsu puts it, “all those who [studied] the celestial signs in the past used this measurement of forty-two *ri* as the first common method [for calculating distances]” (惣シテ昔ノ天文者ハ何れも四十二里ニ用申候先通法ニ候).

Sōsetsu also tells Gunzō that “recently there has been another theory [promoted] by Nishikawa Joken” (近來恕見ノ一説モ御座候). This information sheds some light on what might have led Joken to have been summoned alongside Sōsetsu to advise the shogun six years prior. By the time Sōsetsu was writing his reply to Gunzō, however, Joken had already been dead for two years. It was thus Sōsetsu’s task to transmit the trade secrets of Nagasaki’s cosmological scholars upon shogunal request, together with the aging Mukai Gensei, who also exchanged letters with the official.

In the last section of the letter, Sōsetsu explains that “all these [measures] are considered estimations” (皆々臆説と被存候). Since they are based on the “stellar graduation” (*seido*) – i.e., calculated from celestial coordinates instead of “terrestrial dimensions” (*chi no shakusun* 地ノ尺寸), he “believes the figures to be quite difficult to employ consistently” (數ハ慥ニ候テモ難用奉存候). The interest of the shogunate in these figures was for both mapmaking²⁰¹ and calendrical purposes, as Yoshimune continued to push for various technical and political reforms.

²⁰⁰ For a brief overview of these two figures and their arrival in Japan, see, for instance, Derek Massarella, *A World Elsewhere: Europe’s Encounter with Japan in the Sixteenth and Seventeenth Centuries* (New Haven: Yale University Press, 1990), 71–88. See also Cryns Frederik, *Wiriāmu Adamusu: Ieyasu ni aisareta otoko, Miura Anjin* ウィリアム・アダムスー家康に愛された男・三浦按針, Chikuma shinsho ちくま新書 1552 (Tokyo: Chikuma shobō, 2021).

²⁰¹ On shogunal efforts to chart the lands of the archipelago and their interplay with commercial maps see Marcia Yonemoto, *Mapping Early Modern Japan: Space, Place, and Culture in the Tokugawa Period, 1603-1868* (Berkeley: University of California Press, 2003), chap. 1.

4.5. *Master Hayashi and his disciples*

Before turning to the implications of the circulation of Nagasaki's cosmological knowledge in Edo – discussed in the second part of this study – it is worth looking at how key actors are presented in *Nagasaki senmin den*. The “barbarian school” of cosmology in Nagasaki revolved chiefly around Hayashi Kichiemon and his main disciple Kobayashi Kentei. Strikingly, Hayashi himself is not listed under the “discussing the heavens” (*danten* 談天) category, but elements about his life are incorporated under Kentei's biography – the first of six entries to appear in this section of the book.

One reads that “Hayashi was knowledgeable about the scholarship of the celestial signs, the terrestrial principle, the stars and lodges, and the calendrical methods” (林精通天文地理星宿曆法之學),²⁰² but “due to his connection to the nationally prohibited [Christianity], he had nowhere to be employed” (因係 203國禁無所容身). In a sense, he was the personification of a type of knowledge that was still valued but whose associations with Jesuit views had fallen out of favor. As a result, Kentei's father decided to “shelter [Hayashi] clandestinely at his home and make him the instructor of [Kentei]” (竊養之於家以為信師). Although the timeline of events is not entirely clear, this most likely refers to the period around the first anti-Christian edicts of 1614, when Kentei would be in his teenage years.

Between the first measures against Catholic missionaries and converts in the 1610s and the all-out campaign carried out in the aftermath of the Shimabara-Amakusa rebellion that ended in 1638, Hayashi was able to “give lectures in town, with his disciples gradually increasing” (講授于郷、弟子稍多) during a time when “the bans had been lifted for a while” (頃之禁解). Difficult as it might be to identify precisely when this interval could have been, it must not have lasted for long, especially considering the establishment of Shuntokuji and the first ban on Jesuit-associated books in 1630. It was probably during a short period in the 1620s that Hayashi's disciples listed in *Nagasaki senmin den*, including Mukai Genshō, were able to study under him.

²⁰² All citations from Kentei's biography are found in Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kōsei nagasaki no bun'en to gakugei*, 46.

²⁰³ The blank space appears in the original text, indicating that these were shogunal bans, following the East Asian tradition of skipping a character when referring to affairs of the sovereign.

Besides Kobayashi Kentei, whose name is the first to appear under “discussing the heavens,” seven others of Hayashi’s disciples are named in the book. The name that follows Kentei’s entry is that of Ono Shōseki, the physician under whom Ro Sōsetsu’s father Sōseki trained. Besides him, the only other disciple who gets an individual biography entry is Yoshimura Chōzō 吉村長藏 (?–1673), reported to have “received the transmission of doctrines on the celestial signs and *yunqi* from Master Hayashi” (從林氏傳天文運氣之說).²⁰⁴ As discussed previously, the notion of *yunqi* was often applied to Jesuit natural philosophy beyond its original meaning, and that is probably the type of doctrine Chōzō learned from his teacher.

Hayashi was eventually convicted for his Catholic associations. It is recorded in Kentei’s biography that, when the religious inspector Inoue Masashige “searched Nagasaki to chase the followers of the Teachings of the Lord of Heaven away, [Hayashi’s] name was listed in the records of such a group” (監崎驅天主教之徒、生名列黨籍), and was executed in 1646. The names of both Kentei and Chōzō also appeared in the records, but each disciple had very different fates. Kentei, whose “name was at the top” (名在第一), was “implicated and sent to jail” (連坐下獄), where he would remain for twenty-one years, pardoned only in 1667. Chōzō’s name, on the other hand, “was at the end [of the list] and, because of that, he was able to escape” (在其後以故得脫) – which implies that he avoided punishment but it is not clear if he was imprisoned at all.

The remaining six disciples of Hayashi are listed in one single entry of *Nagasaki senminden* with very little biographical information about each one of them. The last two entries under the rubric of “discussing the heavens” are those of Seki Shōzaburō and Nishikawa Joken, both of whom studied under Kentei rather than Hayashi himself. More precisely, Joken’s biography does not list Kentei personally as his master but rather Nanbu Sōju, who had a particularly strong connection with Kentei. Chōzō, Kentei, and Sōju were all favored by the Nagasaki magistrate Ushigome Chūzaemon, who took office in 1671. The magistrate’s personal connection with these local scholars indicates that the shogunal official was instrumental in fostering an eclectic community ranging from Chinese interpreters to “barbarian-style” cosmologists.

Hayashi’s identity can be somewhat elucidated by looking into sources that identify him as Hayashi Sensei 林先生. Although the term *sensei* (Ch. *xiansheng* 先生) was not unusual

²⁰⁴ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun’en to gakugei*, 49.

for designating the master of a certain school, or even as a sign of respect toward older scholars, it seems to be used with an entirely distinct meaning in this case. As already noted in previous research,²⁰⁵ the characters 先生 are glossed in *katakana* with the reading *shinsusai* シンスサイ in *Sokuryō higen*, and might suggest a Chinese connection. In a private letter written in 1719, the high-ranking shogunal scholar Muro Kyūsō 室鳩巢 (1658–1734) describes a certain “Shansui” (sic) Kin’emon 先生金右衛門 who was involved in smuggling activities in Nagasaki before being eventually caught by the authorities. He explains that “among Chinese pirates, their chief is said to be called *sensei*, which is pronounced as *shansui* in the speech of Fuzhou” (唐人の海賊ども首魁をば先生と號申候、福州音にてチャンスイと唱申候).²⁰⁶ In light of this information, the characters 先生 could thus refer to Hayashi’s sobriquet in a similar capacity. Given the practical dimensions of Nagasaki’s cosmological traditions and their roots in navigational techniques, it would not be surprising if Hayashi Kichiemon were a sailor or ship’s captain.

There is also another source that provides further clues on Hayashi’s activities. *Nagasaki sakkī* 長崎劄記 (“Official records of Nagasaki”), a document produced in the 1670s, contains the following entry:

Shinsai (sic) was a [Catholic] brother.²⁰⁷ After apostatizing, he was still [considered] a suspicious person, so once he was investigated [by shogunal authorities] and Christian objects were found in his possession, he was hanged [from his foot].

シンサイハ、ユルマン也。コロヒ候テヨリ後。トカク、ウサンナル者トテ、御センサク被成候へハ、キリシタンノ道具有之候、下ツリニ被成候由。²⁰⁸

²⁰⁵ Ebisawa, *Nanban gakutō no kenkyū*, 173; Hiraoka Ryūji 平岡隆二, “*Kobayashi Kentei den: Nagasaki no shiryō o chūshin ni*” 小林謙貞伝—長崎の史料を中心に, *Nagasaki gaku* 長崎学 2 (2018): 29.

²⁰⁶ Takimoto Seiichi 瀧本誠一, ed., “*Kenzan hisaku*” 兼山秘策, in *Nihon keizai sōsho* 日本經濟叢書 (Tokyo: Daitōkaku, 1914), 394. Quoted in Ebisawa, *Nanban gakutō no kenkyū*, 173; Hiraoka, “*Kobayashi Kentei den: Nagasaki no shiryō o chūshin ni*,” 29.

²⁰⁷ The Japanese term for “brother” in this instance, *yuruman*, is probably a variation of *iruman*, a phonetic rendering of the Portuguese *irmão*.

²⁰⁸ Nakanishi Kei 中西啓, *Nagasaki sakkī*, *Gensei nikki*, *Genchū nikki* 長崎劄記・元成日記・元仲日記, *Nagasaki gakkai sōsho* 長崎学会叢書 9 (Nagasaki: Nagasaki gakkai, 1964), 17–18. Quoted in Hiraoka, “*Kobayashi Kentei den: Nagasaki no shiryō o chūshin ni*,” 29.

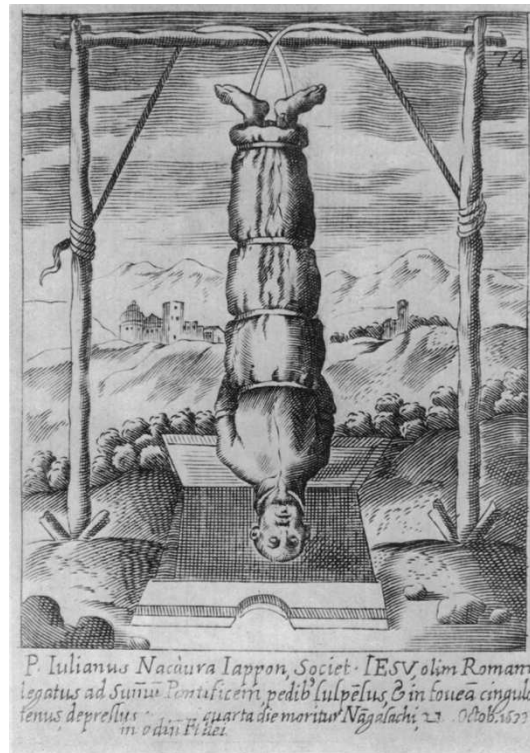


Figure 2.5. The convert Julião Nakaura (1568–1633) – tortured alongside Christovão Ferreira – being hanged upside down as depicted *Fasciculus e Iapponicus Floribus* by Antonio Francisco Cardim (1596–1659).²⁰⁹ Hayashi was probably executed in a similar manner.

This description is consistent with the information about Hayashi in Kentei’s biography and further clarifies both the reason for his conviction and the fact that he was once a member of a Catholic missionary order in the city – in all likelihood the Society of Jesus. This does not exclude, however, the possibility that he was at first a sailor or pirate, perhaps even born in the continent, who later became a religious man. The many readings for his name might be explained by the difficulty of transcribing the sounds of a Fujianese spoken language such as Eastern Min into the Japanese syllabaries.

Besides the uncertainties surrounding Hayashi, Kentei’s identity has also been subject to speculation. He is often thought to be the same person as Higuchi Gon’emon 樋口権右衛門, a specialist of land surveying associated with Dutch techniques reported to have learned his skills from a certain Caspar – who might or might not have been the aforementioned German physician Caspar Schamberger.²¹⁰ In a recent article, however, Hiraoka Ryūji has

²⁰⁹ Reproduction from Cieslik, “The Case of Christovão Ferreira.”

²¹⁰ Ebisawa, *Nanban gakutō no kenkyū*, 180–217; Unno Kazutaka 海野一隆, “Shōhō-kan ‘Bankoku sōzu’ no seiritsu to nifu” 正保刊『万国総図』の成立と流布, in *Tōzai chizu bunka kōshōshi kenkyū* 東西地図文化交渉史研究 (Seibundō shuppan, 2003), 344–45.

argued that a closer look at primary sources does not necessarily corroborate this hypothesis, proposing a more cautious approach instead.²¹¹ Whether justified or not, the conflation between Kobayashi Kentei and Higuchi Gon'emon can be explained by the deep connections between cosmological thought and navigational and surveying traditions in Nagasaki, as exemplified by *Sokuryō higen*.

5. The Ro clan, Chinese knowledge, and the shogunate

In addition to transnational ties established by the Chinese community and cosmological traditions based on navigational skills and European techniques, Nagasaki's intellectual landscape was also impacted by the presence of scholars from other regions within Japan. One such pivotal figure was Nanbu Sōju, who spent eight years in the city between 1672 and 1680, the last three as rector of the Nagasaki Seidō. Sōju strengthened intellectual networks that connected Nagasaki with the imperial capital of Kyoto, actively contributing to the development of hybridized forms of knowledge that transcended rigid Confucian orthodoxies.

His biographical entry is the fifth to appear under the “temporary residents” (*ryūgū* 流寓) rubric in *Nagasaki senmin den*. It follows that of Andō Seian 安東省庵 (1622–1701), a scholar of warrior background from the Yanagawa 柳河 domain in northern Kyushu who spent time in Nagasaki so he could study under Zhu Shunshui, during the time the Ming loyalist was in the city in the early 1660s.²¹² Sōju, on the other hand, although “traveling to Nagasaki for scholarly purposes” (以儒遊於長崎),²¹³ did not follow one specific master but rather established his own school. It is not difficult to imagine that his decision to move was arguably motivated by the possibility of accessing books and scholars arriving from the continent while also promoting his ideas.

Nagasaki magistrate Ushigome Chūzaemon, whose enthusiasm for the local scholarly scene is well attested, was one of Sōju's students. As noted, Ushigome was the one who appointed Sōju to the position of rector of the Nagasaki Seidō. Sōju was already established in Tateyama – in the environs of the residence of the magistrate – in the four years between his

²¹¹ Hiraoka, “*Kobayashi Kentei den: Nagasaki no shiryō o chūshin ni.*”

²¹² Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 130–31.

²¹³ Wakaki, Takahashi, and Kawahira, 132.

arrival in 1672 and the re-establishment of the Nagasaki Seidō in 1676, attracting local scholars to come study under him there. The Nagasaki magistrates likely hosted Sōju in their residence, given the proximity.

Nishikawa Joken, a prominent student of Sōju, frequented the Kyoto scholar in his late twenties and early thirties, both before and after Sōju's tenure at the Nagasaki Seidō. Ono Kagehira – son of Ono Shōseki introduced previously – became Sōju's adoptive son under the name Nanbu Nanzan and carried forward Sōju's legacy. These figures grounded Nagasaki as a center of scholarship simultaneously connected to the imperial capital and possessing its own strong lineages and traditions. In the “scholarship” category of *Nagasaki senmin den*, Nanzan's biography is the fourth entry. One learns that Nanzan (still called Kagehira) was raised by Kobayashi Kentei and Ro Sōsetsu's grandfather Shōzaemon (莊與貞養之於家) after his father's death.²¹⁴ Before Sōju's arrival, Nanzan had already “studied poetry” (學詩) from two Chinese masters (二子乃華人也), which indicates the diverse intellectual landscape of the city, where cosmologists, interpreters, and Chinese literati mingled.

As Nanzan was, in his youth, virtually part of the Ro family, and Ro “Shō[zaemon] was also on good terms with [Sō]ju, he sent [Nanzan] to apprentice with [Sō]ju” (莊亦與壽善、遣衡事壽). This led Nanzan to be “called [Sōju's] foremost disciples and, as [Sō]ju highly valued his talents, he changed his surname to Nanbu” (衡於弟中稱最焉、壽深器之、更姓南部). The connection between Sōju and Chinese scholarship undoubtedly passed through Nanzan and his personal ties to the Ro clan. In Sōju's biographical entry, we find that once Ushigome “elevated Sōju to the position of libationer (i.e., rector of the Nagasaki Seidō), he devoted himself to teaching, with his disciples increasing daily; the fact that there are schools and scholarship in Nagasaki has its inception here” (舉草壽祭酒、立為塾師、弟子日盛。崎有塾學權輿于此).²¹⁵ The figure of Sōju, presented as a respected Kyoto scholar who came to teach at Nagasaki, consolidates a certain vision for the local intellectual community that is both eclectic and grounded in traditional, authoritative forms of knowledge.

Another account of Sōju's life, written by Nanzan in the form of an epitaph, echoes this sentiment of his presence as an edifying force. Nanzan describes that before his master

²¹⁴ Nanzan's biography is found in Wakaki, Takahashi, and Kawahira, 28–30.

²¹⁵ Wakaki, Takahashi, and Kawahira, 132.

came to the city, “Nagasaki was a place where civilized and barbarians rubbed shoulders, lacking the teachings of ritual propriety and vision for literary composition” (長崎華夷輻湊之地、非禮讓之教、文章之觀).²¹⁶ He goes on to claim that “with little that one could boast abroad, the establishment of a [Confucian] temple and academy was lacking for a truly long time” (不足以夸耀乎外國、而聖廟學塾之設實久而猶闕焉). The second foundation of the Nagasaki Seidō, spearheaded by Ushigome and Sōju, is depicted as a transformational moment, “after which the Chinese who came by would gaze at [the academy] and say ‘How splendid! This is the revered Way of the East. It is indeed most magnificent!’” (然後華人之往來者矚目曰、「美哉東方之尚道也。其亦泱泱乎大也」). The newly rebuilt Confucian academy became a mark of civilization in a contact zone with the Eurasian continent.

Ironically, the “civilizing” influence of Sōju was in great part enabled by his friendship with Kobayashi Kentei, who represented the opposite end of the spectrum, with his “barbarian” knowledge of Catholic origin. In Kentei’s biography, one reads that “[Kentei] and [Sō]ju were already very fond of each other” (信雅與壽相愛)²¹⁷ before he was appointed to head the Confucian academy, but it is not clear under what circumstances the two had met. Their previous connection, however, led Kentei to “recommend [Sōju] to His Lordship [Ushigome], who was extremely pleased to see him and let both [Sō]ju and [Kentei] come in and out of the magistrate’s office [as they pleased]” (薦之使君、召見甚驩、於是壽與信出入府署).²¹⁸ These three figures – Kentei, Sōju, and Ushigome – embodied the intellectual community of Nagasaki in the second half of the 17th century, centered around the Nagasaki Seidō. They represented not only knowledge of European and Chinese origin but also the profound interest that shogunal authorities showed in the hybridized scholarship that was emerging in the port city.

5.1. *Nanbu Sōju’s vernacularization projects*

²¹⁶ Nanbu Kagehira 南部景衡, “*Kanki mansō*” 喚起漫草 (Manuscript, vol. 4, 4 vols., undated), sec. Rikuchin sensei boketsu 陸沈先生墓碣, Osaka Prefectural Nakanoshima Library, https://e-library2.gprime.jp/lib_pref_osaka/da/detail?tilcod=0000000005-00165582.

The entire epitaph is transcribed in Kawahira Toshifumi 川平敏文, *Tsurezuregusa no jūnana seiki: kinsei bungei shichō no keisei* 徒然草の十七世紀—近世文芸思潮の形成 (Tokyo: Iwanami shoten, 2015), 290–92.

²¹⁷ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun’en to gakugei*, 46.

²¹⁸ Wakaki, Takahashi, and Kawahira, 46.

Nanbu Sōju was a Confucian scholar who believed in an eclectic education. Although there appears to be no surviving work on cosmology that he wrote, two titles are revealing of his scholarship and pedagogy. In 1680, the year he left Nagasaki, Sōju wrote while still in the city a Japanese vernacular commentary to the Daoist classic *Taishang ganying pian* 太上感應篇 (“Writings on the supreme correspondences”). Composed in the Song dynasty and attributed to a lower-rank literati named Li Changling 李昌齡 (937–1008), this text is considered one of the oldest examples of Chinese didactic books (Ch. *shanshu* 善書), a genre whose main goal was to provide practical advice for commoners to “promote goodness” (Ch. *quanshan* 勸善), relying on the idea that the cosmos would then “resonate” (Ch. *ganying* 感應) with one’s behavior.²¹⁹

In Kyoto, Sōju had already produced a similar work on a different book, namely a commentary on the widely popular collection of essays *Tsurezure gusa* 徒然草 (“Idle Notes”) by Japanese monk Yoshida Kenkō 吉田兼好 (ca. 1283–1350). This earlier book by Sōju, with a preface dated 1669, shares a similar title with his commentary of the Daoist work, each being respectively called *Tsurezure gusa genkai* 徒然草諺解 (“Colloquial explanations on the Idle Notes”) and *Taijō kan’ō hen zokkai* 太上感應篇俗解 (“Vernacular explanations of the writings on the supreme correspondences”). Sōju was by no means the only one to comment on *Tsurezure gusa*, which enjoyed considerable popularity in 17th-century Japan.²²⁰ As it is made clear in *Tsurezure gusa genkai*’s preface, Sōju’s contribution was one of three commentaries to the text composed by Kyoto scholars around the same time, the other two written by Kitamura Kigin 北村季吟 (1624–1705) and Yamaoka Genrin 山岡元隣 (1631–1672). According to the preface, Sōju’s “‘colloquial explanations’ are the only [commentaries] that are not overwrought but simple and straightforward, most helpful for beginners” (獨諺解は穿鑿ならず易直にして、尤初學の助となるべし).²²¹

A similar spirit pervades *Taijō kan’ō hen zokkai*, which also aims at providing plain explanations to a wide range of readers. The purpose of Sōju’s commentaries on both books,

²¹⁹ Sakai Hideo 酒井忠夫, *Chūgoku zensho no kenkyū* 中国善書の研究, Expanded edition, vol. 1 (Kokusho kankōkai, 1999), 10–13.

²²⁰ See Linda H. Chance, *Formless in Form: Kenkō, Tsurezuregusa, and the Rhetoric of Japanese Fragmentary Prose* (Stanford: Stanford University Press, 1997), chap. 3; Kawahira, *Tsurezuregusa no jūnana seiki: kinsei bungei shichō no keisei*.

²²¹ Nanbu Sōju 南部草壽, “*Tsurezure gusa genkai*” 徒然草諺解 (Woodblock print, Kyoto, 1677), sec. Preface, fol. 2b, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/bunko30/bunko30_e0112/index.html.

despite each text's very different nature, is presented similarly. From a purely Confucian perspective, both *Tsurezure gusa* and *Taishang ganying pian* should be deemed unorthodox writings, but that does not stop Sōju from incorporating them into his teaching. By presenting non-Confucian texts in a simplified manner to a wider audience, Sōju follows an approach that is more reflective of late Ming scholarship than orthodox Neo-Confucian views in Japan, emphasizing the unity of the three teachings (*sankyō itchi* 三教一致), i.e., Confucianism, Buddhism, and Daoism.²²²

Taijō kan'ō hen zokkai is divided into nine chapters and begins with one titled “On the clear allotment of good and evil” (善惡昭報). The very first citation comes from *Zuozhuan* 左傳 (“Zuo tradition”), the canonical commentary to the ancient Chinese classic *Chunqiu* 春秋 (“Spring and autumn [annals]”): “Disaster and good fortune have no special gate whereby they enter: they are precisely what people bring upon themselves” (禍福無門、唯人所召).²²³ Sōju further clarifies its meaning as follows:

Although it is the case that every fortune and misfortune come down from heaven, it is not as if there is a predetermined gateway from which misfortune befalls someone and fortune is granted to someone else. It is solely following someone's beckoning that heaven allots [fortune and misfortune].

をよそ禍も福も天より降し給事なれとも、たれには如此の禍を降し、かれには如此の福をあたふへきと、定まりたる門はなきなり。只此方よりまねくに随て天よりあたへたまふ事なり。²²⁴

The passage, besides emphasizing a sense of agency and personal responsibility in determining one's fate, introduces an important element of cosmic causation, a principle of action and reaction. Within the local scholarship of Nagasaki, the idea that heaven responds, somewhat mechanistically, to the effects of human action plays a significant role in the understanding of cosmological phenomena. Instead of predetermination, which implies the possibility of prognostication based on certain signs from heaven and earth, this worldview allows for other types of correlative explanations. Moreover, the emphasis on heterodox

²²² See Kawahira, *Tsurezuregusa no jūnana seiki: kinsei bungei shichō no keisei*, 302.

²²³ Translation from Stephen W. Durrant, Wai-ye Li, and David Schaberg, eds., *Zuo Tradition / Zuozhuan: Commentary on the “Spring and Autumn Annals,”* vol. 1, Classics of Chinese Thought (Seattle: University of Washington Press, 2016), 1114–15.

²²⁴ Nanbu Sōju 南部草壽, “*Taijō kan'ō hen zokkai*” 太上感應篇俗解 (Woodblock print, Osaka, 1680), fol. 1a-b, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/ro13/ro13_03062/index.html. The text is transcribed in Yagi Ichio 八木意知男, *Wagebon zensho no shiryō to kenkyū* 和解本善書の資料と研究, Kyōto joshi daigaku kenkyū sōkan 京都女子大学研究叢刊 46 (Kyoto: Kyōto joshi daigaku, 2007), 222.

forms of knowledge signals an eclectic tendency that might accommodate even elements of “heretical teachings” like those of the Jesuits.

Sōju’s eclecticism is manifested in the writings of Nishikawa Joken and Ro Sōsetsu, who were both very close to the Kyoto scholar. In the Ro clan archives, two undated letters reveal Joken’s relationship with Sōsetsu and their acquaintance with *Taishang ganying pian*. The first one, by an unknown figure named Matajūrō 又十郎, mentions Joken coming to his house to borrow Sōsetsu’s copy of *Taishang ganying pian*.²²⁵ The other letter is written by senior interpreter Sakaki Soken, who chose Ro Sōsetsu to assist Mukai Gensei in the distribution of trade permits to Chinese merchants.

From Soken’s letter to Sōsetsu, one learns that Joken was involved in a project for a Japanese translation (*wage* 和解) of *Taishang ganying pian* and that he had borrowed Sōsetsu’s copy of the book through Soken’s son – and Joken’s son-in-law – Sakaki Shunmei, then called Genzaburō 源三郎.²²⁶ Indeed, Joken wrote a eulogy (*keisan* 敬讚) to a vernacular rendering of *Taishang ganying pian* by the interpreter of Eastern Min Kawama Yaheiji 河間八平次 (?–1731), which was titled *Yakugo taijō kan’ō hen* 譯語太上感應篇 (“Translated writings on the supreme correspondences”) and published in 1718.²²⁷ Soken’s letter probably refers to this project, in which case the letter should be dated not too long before the year of the book’s publication.

5.2. *The scholarship of Ro Sōsetsu*

Ro Sōsetsu’s eclectic approach toward scholarship is reflected in a short book that he wrote at the end of his life – the preface dates from 1724 – but which was published over twenty years later by his son Senri. Titled *Gangei roku* 吟嚀錄 (“Sleep-talking records”), it promotes the reconciliation of the three teachings. The main text, excluding the preface and the postface, covers only eighteen folios and is written entirely in Sinitic, with abundant citations from Chinese Neo-Confucian scholars. It appears to be the sole extant work by Sōsetsu besides *Nagasaki senmin den*.

Senri wrote the postface to the book in 1747, likely the year of publication, and he explains his decision to edit Sōsetsu’s notes so that “those who read these records shall

²²⁵ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 84.

²²⁶ Kawahira, 91.

²²⁷ Sakai Hideo 酒井忠夫, *Chūgoku zensho no kenkyū* 中国善書の研究, Expanded edition, vol. 2 (Kokusho kankōkai, 2000), 364–74. The eulogy is reproduced in Sakai, 2:367–68.

thereby know from whence my late father's spirit came, and to where his aspirations were directed" (讀是錄者可以知先君子心思之所自、與志氣之所向也).²²⁸ Although the book does not seem to have circulated widely,²²⁹ it reflects the broader environment of scholars in Nagasaki, where constant encounters with unorthodox or even heretical teachings were inevitable. Sōsetsu's openness contrasted with mainstream approaches to Confucian scholarship around Japan during his time but is consistent with Nanbu Sōju's receptive approach toward heterodox materials. To explain his position, Sōsetsu starts his preface with the following claim:

So-called [Confucian] scholars today all [belong] to the [Neo-Confucian] lineage transmitted from the Song [dynasty]. They ignore that before that there were the scholars of the Han and Tang [dynasties], and afterward there were the Ming scholars. Therefore, in their biased limitation to Song [Confucian] scholars, they consider it to be the pith and marrow of [the teachings] of [the Duke of] Zhou and Confucius.

今之稱儒者、皆宋傳之流。不知前有漢唐諸儒、後有明儒。而偏囿於宋儒、將謂得周孔之骨髓。²³⁰

Sōsetsu argues that Song Neo-Confucianism is not the same as the original teachings of Confucius and his role model the Duke of Zhou (Ch. Zhou Gong, Jp. Shū Kō 周公; c. 1100–1032 BCE). This understanding was present in other contemporary scholars such as Ogyū Sorai, who advocated doing away with later commentaries altogether. Unlike the situation in the continent, Confucian orthodoxy in Tokugawa Japan was not institutionalized around imperial examinations and official rituals. Despite some shogunal support for the establishment of Confucian academies such as the Nagasaki Seidō, Neo-Confucianism was not the only type of scholarship sponsored by the regime – which was just as (if not more) invested in the promotion of Buddhist institutions. Instead of springing from the shogunate itself, the process of consolidation of Neo-Confucian doctrines as orthodoxy was spearheaded by Hayashi Razan and his descendants, who were eager to present their teachings as the proper ones to be followed – or, as Herman Ooms puts it, “to secure the power to produce official knowledge.”²³¹

²²⁸ Reproduced in Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 178.

²²⁹ Only three printed copies and one manuscript from 1781 are catalogued in the Union Catalogue of Early Japanese Books organized by the National Institute of Japanese Literature.

²³⁰ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 167.

²³¹ Ooms, *Tokugawa Ideology*, 85.

Unlike Sorai's "return to the sources," Sōsetsu proposed – in Sōju's tradition – a more inclusive type of Confucian scholarship, recognizing and incorporating Buddhist doctrines and their parallels with Neo-Confucian thought. The goal was to educate his pupils – and readers – to have an open mind and embrace the different ways one may learn about the cosmos and cultivate oneself.

Students might know the notion of the three teachings, but they do not know its meaning. Turning the three teachings into one single doctrine is only possible in the great vision of masters. For those [still] learning, this is beyond one's reach. As a subscriber to this view, I do not feel compelled to combine the three teachings into one at all costs. However, I do wish that those [who are still] learning will, without fail, read books with an open mind to grasp their truth. If they are not open-minded, they will not get rid of their partiality [against non-Confucian works].

徒知三教之名、而不知三教之旨。蓋以三教為一家者、獨在達人大觀之上而能之。在學者所不及也。吾為此說者、不必強會三教為一。蓋欲使學者務必虛心讀書。以得其真焉耳。苟不虛心、則未免偏頗。²³²

This understanding of the three teachings as partaking in the same values echoes Sōju, who also proposed edifying the readers of his vernacular commentaries. In the preface to his annotated version of *Taishang ganying pian*, Sōju bemoans that "in general, those who study Confucianism, despite discussing the works of Confucius and Mencius with their mouths, have not yet grasped them in their minds nor put it in practice with their whole bodies" (大概儒ヲ學者口ニハ孔孟ノ書ヲ説トモ、心ニ得、身ニ行事ハ未ダシ).²³³ Both Sōju and Sōsetsu believed that the average student had only a superficial comprehension of scholarship, Confucian and otherwise, and saw in themselves the role to "promptly correct this behavior among the ignorant and inexperienced [while still] in their infancy" (童蒙幼稚ノ者早ク其行ヲ直フシ),²³⁴ as Sōju puts it. Their desire to enlighten the general population on proper conduct – the "promotion of goodness" – combined with a belief in the ultimate unity of the three teachings reflects late Ming intellectual tendencies, as exemplified by the works of Li Zhi 李贄 (1527–1602).²³⁵ Given their background, it is not surprising that both

²³² Wakaki, Takahashi, and Kawahira, *Nagasaki senmin den chūkai: Kinsei nagasaki no bun'en to gakugei*, 168.

²³³ Nanbu, "Taijō kan'ō hen zokkai," sec. Preface, fol. 1a.

²³⁴ Nanbu, sec. Preface, fol. 1a.

²³⁵ cf. Sakai, *Chūgoku zensho no kenkyū*, 1999, 1:299–304. For various perspectives on Li Zhi, see Rivi Handler-Spitz, Pauline C. Lee, and Haun Saussy, eds., *The Objectionable Li Zhi: Fiction, Criticism, and Dissent in Late Ming China* (Seattle: University of Washington Press, 2020).

Sōju and Sōsetsu – not to mention Joken – were very eager to learn from a variety of sources coming in from the continent.

5.3. *A diversified collection*

A list of books that belonged to Sōsetsu and his father Sōseki is found in the Ro archives and reveals the breadth of the family’s scholarly interests and the diversity of knowledge that circulated in Nagasaki. The list, titled “Index of books composed by Hoan (Sōseki) and Sōsetsu, etc.” (葆菴及び草拙自撰書目其他), is somewhat misleading, as it could read as if all books were written by either Sōsetsu or Sōseki. It means that the index itself was composed by them, instead of each book listed therein.²³⁶

The list contains 85 titles²³⁷ on a variety of topics, from history and cosmology to translation and Sinitic poetry, including one book titled *Hoan zuihitsu* 葆菴隨筆 (“Casual notes by Hoan”), i.e., essays written by Ro Sōseki,²³⁸ and *Setsu zonshū* 拙存集 (“A humble collection of extant [works]”), which could be a compilation of miscellaneous writings by Sōsetsu. There are also seven other titles attributed to Seiso 清素 – Sōsetsu’s art name (*gō* 號) – indicating that he was quite prolific, even dabbling in more literary pursuits like poetry. The name of senior interpreter Sakaki Soken, whose letter was discussed above, appears in a collection of writings (*bunshū* 文集) and another one of poems (*shi* 詩). Besides Soken, two more Nagasaki figures have their writings represented in the index in the same way, namely Fukami Gentai, whose proximity to Sōsetsu is well attested, and Koku Shisei 國思靖 (1661–1713), also known as Ueno Gentei 上野玄貞, a local scholar-physician who studied under Chinese masters in the city.

Ten titles from the list refer specifically to astronomical and geographical subjects: *Yochi gaiki* 輿地外記 (“Outer records on the earth”), *Tenmon kōsaku* 天文考索 (“Inquiry into the celestial signs”), *Yochi teikō* 輿地提綱 (“General outline of the earth”), *Tenmon kenkō* 天文權衡 (“Balancing [explanations on] the celestial signs”), *Tenmon hikatsu* 天文秘括 (“Confidential overview of the celestial signs”), *Rekika hikatsu* 曆家秘括 (“Confidential overview of

²³⁶ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 244–45; Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 4–5.

²³⁷ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 244; Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 4. See Appendix H for a complete list of the titles.

²³⁸ Hoan 葆菴 was Sōseki’s art name. Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 5.

astronomical specialists”), *Rekihō nyūshiki* 曆法入式 (“Introduction to calendrical methods”), *Suiho ki* 推歩記 (“Records of astronomical predictions”), *Ido rekiho* 緯度曆補 (“Calendrical supplements on the meridians”), and *Konten shōsū* 渾天象數 (“Images and numbers of the celestial sphere”). While it is difficult to identify the nature and origin of each text, and whether any of them are still extant, the titles are indicative of the type of technicality that could be expected from Nagasaki scholars. Besides, one finds Buddhist works, titles referencing the three teachings, and also one title about Dutch-Japanese translation listed as *Kōmō yakuzwa* 紅毛譯和 (“Rendering the [language of the] red-haired into Japanese”).²³⁹

The last title to appear on the list, *Kōkai roku* 航海錄 (“Records on navigation”), reinforces the notion that the cosmological scholarship of Nagasaki promoted by Ro Sōsetsu and those around him was firmly rooted in the traditional sailing know-how associated with the city. Sōsetsu himself points out that the school of Kobayashi Kentei, whom he identifies alongside Christovão Ferreira as the originator of Nagasaki cosmology, had its roots in navigational techniques used by foreign sailors.

Other titles from the index shed light on the activities of the interpreters, such as *Nankin tōwa* 南京唐話 (“The Chinese speech of Nanjing”) and *Shōshū tōwa* 漳州唐話 (“The Chinese speech of Zhangzhou”). They refer respectively to two of the three main Chinese languages spoken in Nagasaki, that is, Nanjing Mandarin and Southern Min (Hokkien). The presence of these two books in this catalog demonstrates once again that even interpreters for one of the Fujianese languages could also be familiar with the prestige variety of Mandarin spoken in Nanjing and its surroundings. With the movement of Mandarin-speaking monks and scholars from Ming and Qing who reached Nagasaki, even non-interpreters were often interested in learning the languages of China.

The scholar-physician Koku Shisei was one such figure. He trained in the medical profession under Chengyi Daoliang 澄一道亮 (1608–1691) – a native of Hangzhou who settled in Nagasaki as a monk of Kōfukuji (the Nanjing temple) – and was also “instructed in the Classics” (*kei o uku* 受經) by a certain Jiang Meishan 蔣眉山 (dates unknown) who also hailed from the Hangzhou region.²⁴⁰ Shisei no doubt had to communicate with his masters in Mandarin, eventually becoming proficient in the language. He even established a private school (*shagaku* 社學) where he taught “Chinese conversation” (*tōwa* 唐話) – by all evidence, a

²³⁹ Kawahira, 4.

²⁴⁰ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kīnsei nagasaki no bun'en to gakugei*, 31–32.

Nanjing-based Mandarin variety with influences from the speech patterns of his Hangzhou masters.²⁴¹

In the index from the Ro archives, besides these clear references to Chinese languages, there are other noteworthy titles such as *Ongi roku* 音義錄 (“Records on sounds and meanings”), *Ingaku tsūshi* 韻學通旨 (“General gist of the study of rhymes”), and *Inkyō kuketsu* 韻鏡口訣 (“Oral transmission on the Mirror of Rhymes”).²⁴² These could be useful both for the composition of Sinitic poems and for having a better understanding of the sounds of Chinese languages in general. In Nagasaki, the boundaries between one’s profession as an interpreter and one’s activities as part of the local literary community were quite porous, and proficiency in one or more Chinese languages went hand-in-hand with one’s ability to produce both prose and poetry in Sinitic. Another advantage of mastering a spoken Chinese language was that it facilitated the comprehension of written materials closer to the vernacular that were otherwise inaccessible to even highly literate Japanese who read and wrote Sinitic.

5.4. *Learning from contemporary China*

In 1721, Tokugawa Yoshimune ordered a vernacular Chinese text titled *Liuyu yanyi* 六諭演義 (“Elaborations on the meaning of the six instructions”) to be translated by Muro Kyūsō into vernacular Japanese. At the same time, Yoshimune also had Ogyū Sorai produce an annotated version of the original text with added reading marks (*kunten* 訓點).²⁴³ Although both Sorai and Kyūsō considered *Liuyu yanyi* a Qing book – as its date of composition is probably from early Qing – it consisted of a Chinese vernacular exposition of precepts first issued by the first Ming emperor in the late 14th century.²⁴⁴ Its dissemination in Japan was a

²⁴¹ cf. Wakaki Taiichi 若木太一, “Amenomori Hōshū shōkō: Tōwa no shi Koku Shisei” 雨森芳洲小考—唐話の師國思靖, *Gazoku* 雅俗 7 (2000): 211–20; Wakaki Taiichi 若木太一, “Tōwa jisho, Tonkingo jisho, Chōsenko jisho” 唐話辭書・東京語辭書・朝鮮語辭書, in *Jisho yūho: Nagasaki de jisho o yomu* 辭書遊歩—長崎で辭書を読む, ed. Sonoda Naohiro 園田尚弘 and Wakaki Taiichi 若木太一 (Fukuoka: Kyūshū daigaku shuppankai, 2004), 3–16.

²⁴² *Yunjing* 韻鏡 (“Mirror of rhymes”) is a classic Chinese book of unknown date of composition that provides rhyme tables useful for writing Sinitic poetry.

²⁴³ For an account of the importation and adaptation of this particular text see Peter Kornicki, “From *Liuyu Yanyi* to *Rikyu Engi Taii*: Turning a Vernacular Chinese Text into a Moral Textbook in Edo-Period Japan,” in *Listen, Copy, Read: Popular Learning in Early Modern Japan*, ed. Matthias Hayek and Annick Horiuchi (Leiden: Brill, 2014), 205–25, https://doi.org/10.1163/9789004279728_009.

²⁴⁴ Kornicki, 205–6.

rare case of a textbook to be distributed to the populace that was personally commissioned by the shogun.

Muro Kyūsō was, like Arai Hakuseki, a notable disciple of Kyoto scholar Kinoshita Jun'an 木下順庵 (1621–1699), a figure under whom Fukami Gentai had also studied. From Kyūsō's private correspondence, one learns that when Yoshimune consulted him about annotating *Liuyu yanyi*, he suggested the name of Gentai together with Okajima Kanzan 岡島冠山 (1674–1728), both of whom he considered better suited for the task than Sorai.²⁴⁵ Kanzan, also from Nagasaki, was a student of the aforementioned Koku Shisei. In Nagasaki, he served as a “Nanjing inner interpreter” (*Nankin naitōji* 南京内通事), i.e., an interpreter of Nanjing Mandarin who did not belong to one of the hereditary families. In 1711, Kanzan was invited to teach at a “translation society” (*yakusha* 譯社) associated with Ogyū Sorai's school in Edo. The language taught at the school was the Nanjing Mandarin Kanzan had learned from his master Shisei.²⁴⁶

Kanzan is known for having compiled various dictionaries of Mandarin that were used as a textbook not only to those who worked as interpreters in Nagasaki but also to scholars and dilettanti in other parts of the country.²⁴⁷ While at first scholars from Kyoto and Edo would come to the port city to learn spoken Chinese languages under local teachers, the learning and teaching of “Chinese conversation” soon spread to the capitals. The career of Nagasaki teachers of Mandarin in Edo demonstrates that there was a demand for literature produced in Chinese vernaculars (Ch. *baihua* 白話), which was encouraged by the shogun himself.

Ironically, the burgeoning study of Chinese vernaculars in Nagasaki and the demand for instructors like Kanzan and Koku Shisei before him also attest to the growing gap between local interpreters and the languages they were supposed to represent. As members of the hereditary families became increasingly removed from their ancestors, their proficiency in Min or Mandarin varieties was no longer that of native speakers.

After the initial generations, the interpreters were more likely to acquire proficiency in Chinese languages through formal instruction, while their language of everyday use was

²⁴⁵ Kornicki, 211.

²⁴⁶ Ishizaki Matazō 石崎又造, *Kinsei Nihon ni okeru Shina zokugo bungaku shi* 近世日本に於ける支那俗語文學史 (Tokyo: Kōbundō shobō, 1940), 95; Wakaki, “*Tōwa jisho, Tonkingo jisho, Chōsenko jisho*,” 9.

²⁴⁷ For a detailed presentation of the texts he produced, see Okumura Kayoko 奥村佳代子, *Edo jidai no tōwa ni kansuru kiso kenkyū* 江戸時代の唐話に関する基礎研究 (Suita: Kansai daigaku shuppanbu, 2007), 21–152.

Japanese. This phenomenon is attested in the 18th-century textbook for Chinese interpreters *Tangtongshi xinde* 唐通事心得 (“Instructions for Chinese interpreters”), already mentioned in the previous chapter. The very first text from this book, written in a vernacular Chinese register, reproduces an admonition to train interpreters to work harder on their language skills. One reads that “the younger generations in Nagasaki hold the empty title of interpreters without performing its essential [tasks.] (...) Not only are they incapable of writing verses, but also they cannot even speak in Chinese” (長崎の後生家、擔了個通事的虛名、不去務本。[...] 不但賦詩做文打不來、連唐話竟不會講).²⁴⁸ The passage continues with the claim that these young interpreters are only concerned with having a lavish lifestyle, “wearing long robes and wielding fine swords” (穿領長衣、插把好刀) – clear signs of an elevated position associated with the warrior class at the top of the social hierarchy.

There are records of “gatherings for the study of spoken Chinese” (*tōon kingaku kai* 唐音勤學會) held sporadically in the main hall of the Nagasaki Seidō starting from 1716, during the tenure of Mukai Gensei. At these events, interpreters in training would be supervised by junior and senior interpreters to improve on their shortcomings in spoken and written Chinese languages.²⁴⁹ While there is little information on the very first event of this kind, there are records of a “gathering for Chinese conversation among Nagasaki interpreters” (*Nagasaki tsūji tōwa kai* 長崎通事唐話會) that also took place at the Nagasaki Seidō that same year. Out of the 17 participants, 12 of them were practicing Nanjing Mandarin, 3 were speakers of Southern Min, and only 2 were Eastern Min speakers – namely, the eldest son of Kawama Yaheiji, author of the vernacular translation of *Taishang ganying pian*, and the second son of Sakaki Sengi.²⁵⁰ The overwhelming majority of Nanjing magistrates illustrate the growing prominence of the Jiangnan region in the Chinese trade that passed through Nagasaki in the early 18th century, as opposed to the Fujianese-dominated scenario of the first half of the 17th century.

While the interpreters’ command of their respective ancestral languages might not have been at the same level as previous generations, that did not necessarily prevent them

²⁴⁸ Quoted in Kizu, “‘Tōtsūji kokoroe’ yakuchū kō,” 6.

²⁴⁹ Wakaki, “Tōwa jisho, Tonkingo jisho, Chōsenko jisho,” 7–8; Nagasaki shishi hensan iinkai, *Shin Nagasaki shishi*, 2:757.

²⁵⁰ For a description of this gathering, its participants, and examples of their conversations, see Yō Ryū 楊柳, “*Nagasaki tōtsūji shūdan no kenkyū*” 長崎唐通事集團の研究 (Doctoral dissertation, Nagoya, Nagoya University, 2017), 16–21.

from having successful careers or putting on airs of refinement that did not necessarily correspond to their social class of origin. Working directly under the shogunal authorities, Chinese interpreters enjoyed considerable prestige from their position, and could even be summoned to Edo for their specialized skills, as was the case of Fukami Gentai.

Even if those who mastered spoken varieties of Chinese languages were not numerous in Edo – or perhaps because of it – there was a demand for contemporary Chinese texts to be translated into the Japanese vernacular. *Liuyu yanyi* might have been intended for a more general audience, but Yoshimune also promoted the importation, translation, and annotation of more technical books that ran the gamut of contemporary Chinese knowledge. Qing China, just like Ming, was recognized as a source of information that could be useful for scholars and authorities alike.

5.5. *The shogun's quest for new knowledge*

Arguably the most significant translation of a contemporary Chinese text was that of the massive *Daqing huidian* 大清會典 (“Legal code of the Great Qing”), the regulations for the new Chinese dynasty first completed in 1690, comprising 162 fascicles (Ch. *juan*, Jp. *maki* 卷) divided into 141 volumes (Ch. *ce*, Jp. *satsu* 冊).²⁵¹ A printed copy of this voluminous compendium was first imported via Nagasaki in 1719, and it entered the shogunal library the next year, at which point Tokugawa Yoshimune was able to see it and order another copy from Chinese merchants. The second copy, this time a manuscript, entered the collection in 1722 and was soon taken to Nagasaki to be translated – i.e., most likely annotated with reading glosses²⁵² – returning to Edo only five years later.²⁵³ In the meantime, several Nagasaki interpreters and even Qing scholars were enlisted to help with the project.

At Edo, Fukami Gentai and his son Arichika were the ones responsible for overseeing the translation, presumably for their command of vernacular Chinese languages. Although Japanese scholars were generally familiar with Sinitic and could produce translations if necessary, Chinese texts that incorporated more vernacular elements such as *Daqing huidian*

²⁵¹ Ōba Osamu 大庭脩, “Tokugawa Yoshimune to Daishin kaiten: Kyōho jidai ni okeru nisshin kōshō no ippan” 徳川吉宗と大清会典—享保時代における日清交渉の一斑, *Hōseishi kenkyū* 法制史研究 21 (1971): 65.

²⁵² On the interplay between translations and annotations of Chinese texts in early modern Japan, see Rebekah Clements, *A Cultural History of Translation in Early Modern Japan* (Cambridge: Cambridge University Press, 2015), chap. 3.

²⁵³ Ōba, “Tokugawa Yoshimune to Daishin kaiten: Kyōho jidai ni okeru nisshin kōshō no ippan,” 67.

were not easily accessible. Besides, considering the nature of such a legal text, its sheer volume, and highly technical content, even those who mastered Chinese vernaculars had difficulty fully understanding its nuances, hence the necessity to mobilize the Chinese community in Nagasaki and their connections to the continent. In the archives of the Ro clan, a short document titled *Daishin kaiten waten no koto* 大清會典和點のこと (“On the Japanese annotation of *Daqing huidian*”) lists the names of Ro Sōsetsu, appearing first, and three other interpreters who were assigned to the task, including Sakaki Shunmei, the son of Sakaki Soken.²⁵⁴

In the more detailed genealogy of the Ro clan (*Roshi kafu* 盧氏家譜) – from the two contained in the family archives – four major achievements in Sōsetsu’s life are listed before his involvement with the translation project. They reflect his growing involvement with the shogunal government: first “being appointed head of studies of the [Nagasaki] Seidō and serving for three years” (聖堂學頭被仰付、三年相勤) from 1713; then, two years later, working in the distribution of trade permits with Mukai Gensei; thirdly, in 1716, the first year of the reign of Yoshimune, “being appointed assistant to the inspection of writings” (御書物改添役被仰付候) still next to Gensei; and finally, in 1719, receiving the summons from Edo to advise the shogun on “matters of the bureau on celestial signs” (天文方御用)²⁵⁵ together with Nishikawa Joken – the details of which are presented in the second part of this study.

The fact that Sōsetsu was required to help Gensei in the task of inspecting books coming in from the continent through Nagasaki is particularly meaningful for it shows the shogun’s heightened demand for Chinese books. Sōsetsu was already known in Edo when in 1722 he “was enlisted to work in the in the annotation of *Daqing huidian* by the mediation of Fukami Shinbē-sama (Gentai)” (深見新兵衛様御取次を以、大清會典點付被仰付相勤申候).²⁵⁶ His relationship with Gentai and Arichika also allowed him to be closer to shogunal power and, therefore, work on this official task. During Arichika’s stay in Nagasaki, he had the opportunity to interact extensively with the local scholarly community and with figures coming from Qing China.

One figure requested to answer questions about the Qing code was a certain Sun Fuzhai 孫輔齋 (dates unknown), who is said to have brought a collection of illustrated

²⁵⁴ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 43.

²⁵⁵ Kawahira, 5.

²⁵⁶ Kawahira, 5.

materials to Nagasaki and is also described as a physician.²⁵⁷ In a letter that Sun Fuzhai sent to the office of the Nagasaki magistrates, he claimed, upon being questioned about *Daqing huidian*, that it was “difficult to answer on the spot for those who have scholarly talents but no firsthand experience serving in public administration ” (有才學未曾親歷衙門事務者一時難以應答).²⁵⁸ Instead, he proposed bringing a relative of his who was a provincial official (Ch. *juren* 舉人) and would be able to assist them.

When Sun Fuzhai came back to the city, it was not with the relative he promised but rather with Shen Xie’an, the scholar under whom Ro Senri studied and who ultimately contributed with one of the prefaces to *Nagasaki senmin den*. However, by the time they reached Nagasaki in 1728, Fukami Arichika had already returned to Edo with the copy of *Daqing huidian*, so Shen Xie’an was not involved in the translation process.²⁵⁹

Sun Fuzhai was one of the links between Nagasaki and Qing scholars from the Jiangnan region, interacting often with the local Chinese interpreters as well as the shogunal authorities. He had first come to the city on the same boat as the aforementioned physician Zhou Qilai,²⁶⁰ who also wrote a preface to *Nagasaki senmin den*. Both of them were hosted at the home of the Nanjing interpreter Yanagiya Jirōzaemon 柳屋治郎左衛門 (?–1742),²⁶¹ instead of being confined to the Chinese quarters as was the norm. By shogunal orders, Zhou Qilai was asked – together with another physician named Zhu Laizhang 朱來章 (dates unknown), who came from Fujian – to provide the Chinese terms for a variety of animals and plants, and their answers were recorded in writing.²⁶²

The massive enterprise of translating *Daqing huidian* demonstrates that there was still a strong interest on the part of shogunal authorities in China’s culture and political institutions even after the transition into the Qing dynasty. The Qing code itself was, after all, updated from the Ming code, in the dynasty’s effort to preserve Chinese institutions that represented the legitimacy of the new rule as that of a civilized land. The shogun displayed an interest in a variety of subjects, gathering knowledge not only from scholars of different parts of the archipelago but also beyond its borders, as evidenced by the contribution of figures like Zhou Qilai and Sun Fuzhai.

²⁵⁷ Ōba, “Tokugawa Yoshimune to Daishin kaiten: Kyōho jidai ni okeru nisshin kōshō no ippan,” 78.

²⁵⁸ Quoted in Ōba, 79.

²⁵⁹ Ōba, 82.

²⁶⁰ Ōba, 80.

²⁶¹ On this interpreter see Miyata, *Tōtsūji kakei ronkō*, 303–4.

²⁶² Ōba, “Tokugawa Yoshimune to Daishin kaiten: Kyōho jidai ni okeru nisshin kōshō no ippan,” 81.

Conclusion

The censorship of Sinitic books that contained any references to Christianity, primarily enforced by Mukai Genshō and his descendants, reveals Nagasaki's strategic role in the restrictive policies of the Tokugawa regime. Genshō himself embodied the disparate elements that constituted the intellectual landscape of the closely surveilled city – deeply connected to the scholarship continent centered around Confucian orthodoxy and yet also largely impacted by the “barbarian” knowledge of European sailors and missionaries.

The foundation of the Nagasaki Seidō, and later the promotion of Mukai Gensei to the roles of rector and chief inspector of writings, reinforced the city's status as a privileged contact zone in which both orthodox and unorthodox scholarship was produced, consumed, and circulated. On the one hand, the Confucian academy was a place for local scholars to congregate and interact with a variety of transregional and transnational intellectual trends, regardless of the ostensible focus on “proper” Neo-Confucian ideas. On the other hand, Gensei's task of censoring books could itself be considered a productive force for filtering and assimilating heterodox forms of knowledge, while still serving the shogunate's call to combat the threat of Christianity in the archipelago.

For Ro Sōsetsu, who worked closely alongside Gensei, preserving the intellectual history of Nagasaki was paramount, hence his compilation of local biographies in *Nagasaki senmin den*. By completing this book after Sōsetsu's death, Ro Senri was able to achieve his father's goal of shaping the historical narrative surrounding the city's scholars, blending regional specificity with cosmopolitan refinement and cross-border recognition. The Chinese scholar-interpreters featured in the book are representative of this amalgamation, symbolizing the contributions of their community to both the shogunate and the broader intellectual landscape of Tokugawa Japan.

Sōsetsu's decision to place his own lineage at the center of his narrative could have very concrete benefits, as demonstrated by his exchanges with the shogunal official Watanabe Gunzō. The heritage of Nagasaki cosmologists, embodied in navigational techniques that could be traced back to European pilots, was of strategic interest in the early 18th century. Nagasaki provided old and new knowledge that suited Yoshimune's project of gathering as much information as possible from both local and transnational actors.

Together with *Nagasaki senmin den*, the documents of the Ro archives and the letters preserved in *Sokuryō higen* provide a clearer picture of the various concerns of early modern Nagasaki scholars, defining their place in transnational networks connecting Japan to Eurasia. The archives of the Ro family confirm that Yoshimune and his advisors in Edo had good reasons to turn to Nagasaki scholars for astronomical and geographical knowledge. As shall become clear in the next chapter, Sōsetsu was deeply involved not only in Nishikawa Joken's trip to Edo to advise the shogun, but also in the concomitant journey that Dutch merchants made to the shogunal court to pay their respects.

Yoshimune's change in policy marks the end of the transitional phase in Nagasaki's cosmological scholarship and delimits the present study's general scope. As the looming threat of Christianity diminished in the eyes of the regime in the early 18th century, Nagasaki scholars gradually moved away from the memory of Jesuit cosmology and became more reliant on the knowledge of the Dutch of Dejima, which was also incorporated into a substratum of Confucian epistemologies. Sōsetsu and Joken – both of whom were greatly impacted by the eclectic tendencies of Nanbu Sōju as well as Ming-Qing scholars – are two central figures in understanding this process of transition and assimilation of different cosmologies.

CHAPTER THREE: TRANSREGIONAL AND TRANSNATIONAL NETWORKS OF A SCHOLARLY NAGASAKI TOWNSMAN

Now that we have looked at the intellectual milieu of Nagasaki in early modern Japan – and its strategic interest for the shogunate – we turn to the milieu and connections of Nishikawa Joken 西川如見 (1648–1724), arguably one of the city’s most representative scholars in the late 17th and early 18th centuries. The present chapter delves into Joken’s life, his reputation, and the process that led both Joken and Ro Sōsetsu 蘆草拙 (1675–1729) to advise the eighth shogun Tokugawa Yoshimune 徳川吉宗 (1684–1751, r. 1716–1745) in astronomical matters. Focusing on the years leading up to and following their summons to the shogunal court, I clarify the nature of Joken’s and Sōsetsu’s journey to Edo, their respective roles, the types of questions they were asked, and, most importantly, the significance of this event for the circulation of cosmological knowledge in mid-Tokugawa Japan.

Letters written by Sōsetsu and Mukai Gensei 向井元成 (1656–1727) – the rector of the Nagasaki Seidō 長崎聖堂 – suggest that Sōsetsu was in charge of the organizational and practical aspects of the trip between Nagasaki and the shogunal capital, whereas Joken, more advanced in age, was perceived as an authoritative figure who possessed maps and charts that had been transmitted among Nagasaki cosmologists. Sōsetsu writes about coordinating the annual court visit that the head (*opperhoofd*) of the Nagasaki factory of the Dutch East India Company (VOC) and his entourage made to Edo.

This chapter is divided into five sections. The first section concerns the different accounts of Joken’s life and family lineage, highlighting his transnational connections by virtue of his position as a Nagasaki merchant. It critiques a certain tendency prevalent since the late 19th century to depict Joken as a pioneer astronomer-geographer who promoted Western scholarship despite the limitations imposed by the shogunal regime. It argues instead that Joken’s activities and associations with “barbarian” (i.e., European) knowledge were symbolic of a city whose residents had to constantly renegotiate their relative openness to the world as both an asset and a potential danger in the face of the strict prohibitions of anything that might be perceived as Christian and Jesuit-inspired.

The second section provides an in-depth analysis of Japanese and Dutch sources that demonstrate how Sōsetsu's and Joken's summons to the shogunal court in Edo was planned in tandem with that year's court journey by VOC delegates. The fact that their stay in the capital overlapped with that of the Dutch officers, far from being coincidental, reinforces the notion that Yoshimune was intent on obtaining concrete technical knowledge from Nagasaki figures – be they local scholars, interpreters for the Dutch and the Chinese, or VOC merchants. Starting with the different stakeholders involved in the two scholars' indirect interview with the shogun, we see what role the Dutch might have played in assisting them, and conclude with Yoshimune's decision to unban certain Jesuit-adjacent works that could contain useful information for the regime.

The third section frames Yoshimune's consultation of Sōsetsu and Joken within broader shogunal efforts toward calendrical reform and its significance for consolidating political authority over the land. It looks at how the shogun distinguished himself from predecessors while also tapping into traditional symbols of power, and how Joken's legacy was recognized in the figure of his son Nishikawa Seikyū 西川正休 (1693–1756), who was appointed to collaborate with scholars in Edo and Kyoto to correct the calendar.

In the fourth section, we return to Dutch sources to unravel the ways that Yoshimune's disparate requests for information on exotic animals, world geography, and astronomical and cartographical techniques were all connected to larger projects to gather and systematize a wide array of knowledge. It contends that, although Yoshimune's purported curiosity for “foreign science” seems contrary to his strict control of transnational commerce via Nagasaki, such tension represents the complexity of his rule, in which diverse epistemological systems coexisted.

The fifth section reconstructs the general content of the questions that Yoshimune asked Sōsetsu and Joken by examining the letters that the shogunal official Watanabe Gunzō 邊部軍藏 (dates unknown) received in 1726 from Sōsetsu and Gensei, and which are compiled in the manuscript titled *Sokuryō higen* 測量秘言 (“Confidential information on land surveying”). It concludes that Yoshimune was most likely attempting to gather information on how to utilize instruments he had built in Edo – some of them attributed to his own design – to determine astronomical coordinates such as the altitude of the sun or one's latitude along the meridian that could be used for rectifying calendrical calculations.

1. Biographical accounts of Nishikawa Joken (1648–1724)

Nishikawa Joken is known for his astronomical and geographical knowledge, which led him to be consulted by Tokugawa Yoshimune, and as a popular author who published on a wide range of topics. He was born into a merchant family in Nagasaki in 1648, eighteen years after the first ban on Jesuit-inspired books. He lived during a transitional period in the city when Nagasaki was moving further away from its connections with Iberian merchants and Catholic missionaries. Joken is representative of the liminal space he occupied; he was closely associated with the communities of Chinese interpreters, the Confucian scholarship promoted at the Nagasaki Seidō, and a certain heritage of “barbarian” cosmology that was shifting from its Portuguese and Jesuit origins to the technical knowledge associated with the VOC.

Joken had three sons and one daughter, who married Sakaki Shunmei 彭城俊明 (1695–1752), the eldest son of Sakaki Soken 彭城素軒 (?–1740).¹ Soken, as seen previously, was a notable local figure who reached the position of senior Chinese interpreter and was close with Sōsetsu; he would compose the preface for two of Joken’s works, the cosmological compendium *Ryōgi shūsetsu* 兩儀集說 (“Collected explanation on heaven and earth”) and the more popular work *Shijūnikoku jinbutsu zu* 四十二國人物圖 (“Illustrations of the peoples of forty-two lands”).

Joken’s eldest son, who took over the family business, was called Nishikawa Seishō 西川正昌 (?–1766). His name appears in his father’s book *Nagasaki yawagusa* 長崎夜話草 (“Notes of Nagasaki night-time stories”), to which he wrote the postface, but not much else is known about him. There is also very little information on Joken’s second son and his daughter, whose names do not seem to have been recorded. It was Joken’s third son Nishikawa Seikyū who served as his main disciple and was eventually employed as a shogunal scholar at Edo.

The most comprehensive modern edition of Joken’s extant writings was first published with moveable type under the title *Nishikawa Joken isho* 西川如見遺書 (“The bequeathed works of Nishikawa Joken”) between 1898 and 1907.² This project, composed of 18 volumes (*hen* 篇), was the initiative of his descendant, the industrialist Nishikawa Tadasuke 西川忠亮

¹ Koga, *Nagasaki yōgakushi*, 1966, 1:257.

² See Appendix B for the table of contents with all the titles that were included.

(1855–1912), and although it leaves out some of Joken’s titles and includes some written by his son Seikyū, it became the standard reference for subsequent studies. Besides making Joken’s works more easily accessible, the collection is also significant for the texts reproduced at the start of all of the volumes.³

The first text is a laudatory preface (*jo* 序) by the Meiji statesman and Nagasaki native Itō Miyoji 伊東巳代治 (1857–1934), who wrote it entirely in Sinitic, as it was expected from the formal genre. The second text is a short biography (*den* 傳) written by the scholar and government official Hosokawa Junjirō 細川潤次郎 (1834–1924) in a mixture of *katakana* and Chinese characters – a style less formal than pure Sinitic but still associated with scholarly materials. The third text is the entirety of Joken’s biographical entry from *Nagasaki senmin den* 長崎先民傳 (“Biographies of Nagasaki’s ancient notables”), the foundational book on the city’s scholarship written by Ro Sōsetsu and his son Ro Senri 盧千里 (1707–1755) discussed in the second chapter. The fourth text, containing Joken’s “achievements” (*itsuji* 逸事), is an excerpt from *Taihei nenpyō* 泰平年表 (“Chronology of the Great Peace”) – a historical compilation published in 1841 concerning official events from the first shogun Tokugawa Ieyasu 徳川家康 (1543–1616) until the eleventh shogun Tokugawa Ienari 徳川家齊 (1773–1841). The fifth and last text is an introduction (*shogen* 緒言) by Nishikawa Tadasuke himself, composed in the same mixture of *katakana* and Chinese characters as Hosokawa’s biography.

The earliest and most reliable source of information on Joken’s life is the account from *Nagasaki senmin den*. His biography⁴ is the last to appear under the *danten* 談天 (“discussing the heavens”) category in the book.⁵ *Nagasaki senmin den*, rather than emphasizing Joken’s connection to the “barbarian” cosmology that made his fame, begins with his devotion to Neo-Confucian orthodoxy. The first sentence about Joken’s scholarship is that when he was “a little over twenty years old, he began to set his heart on learning” (年二十餘、始志于學)⁶ – a rather belated start, especially if compared to contemporary local scholars such as the interpreter Hayashi Dōei 林道榮 (1640–1708), who showed exceptional promise early in his teens. In the following sentence, one reads that “in the twelfth year of the Kanbun era [1672], Nanbu Sōju came [to Nagasaki], attracting many students to read the [Confucian classic]

³ See Appendix C for a reproduction of these texts.

⁴ The entire entry is reproduced and translated in Appendix D.

⁵ In a different edition of *Nagasaki senmin den*, this category appears as *shōi* 象緯 (“images and meridians”), referring to the celestial objects such as stars and planets that are subject of study of these “cosmologists.” See Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kōsei nagasaki no bun’en to gakugei*, 45.

⁶ All citations from Joken’s biography in *Nagasaki senmin den* are from Wakaki, Takahashi, and Kawahira, 52–54.

books at Tateyama” (寛文十二年、南部草壽來此、招諸生讀書立山). This juxtaposition implies that Joken started his Confucian studies for the first time under Nanbu Sōju 南部草壽 (1637–1688), for Joken would have been around twenty-five by the time the Kyoto scholar came to teach around the area of the Nagasaki magistrates’ office in Tateyama.

The biography goes on to emphasize Joken’s devotion to his master. One learns that he “accompanied [his master Sōju] in outings at times” (於時忠英從之遊) and “firmly believed in the scholarship of the Song masters” (篤信濂洛關閩⁷之學). This description of Joken as someone thoroughly devoted to orthodox Neo-Confucian thought – who “looked up to their deeds in order to follow in their footsteps” (仰希其行事、而步趨焉) – is hardly surprising. Senri is clear in his postface about the intent to carry on with his father’s project of celebrating and preserving the traditional Sinitic scholarly culture of Nagasaki, putting their own family at the center. Nagasaki is portrayed first and foremost as a city where the civilization passed down from the ancient sages of China took root and flourished.

Unswerving commitment to Confucian orthodoxy, especially as espoused by the followers of Zhu Xi, was a continuous preoccupation of Nagasaki scholars – starting with the Mukai clan at the head of the Nagasaki Seidō. In addition, Joken’s master Nanbu Sōju shaped the city’s intellectual landscape in the 1670s and early 1680s and represented another important trend. Sōju was a man of eclectic views who had come to the city to be closer to books and knowledge from the continent, not all of which were completely orthodox. As Sōju was a close friend of Kobayashi Kentei 小林謙貞 (1601–1683) – the main disciple of the notorious cosmologist Hayashi Kichiemon 林吉右衛門 (?–1646), both of whom convicted for their Christian associations – the division between “civilized” Confucian scholarship and “barbarian” Jesuit-inspired cosmology was quite porous. By all indications, it was precisely due to these blurred lines that Joken acquired cosmological knowledge as he studied under Sōju, becoming part of a network that included not only Kentei but also the influential Nagasaki magistrate Ushigome Chūzaemon 牛込忠左衛門 (1621–1688), who promoted all types of local scholarship.

⁷ This is a collective designation for the five major figures of Song Neo-Confucianism, with each character corresponding to their place of origin. They are Zhou Dunyi 周敦頤 (1017-1073) – who took the name Lianxi 濂溪 after a creek in his hometown in Hunan – the two brothers Cheng Hao 程顥 (1032-1085) and Cheng Yi 程頤 (1033-1107) – both born in the ancient capital of Luoyang 洛陽 – Zhang Zai 張載 (1020-1077) – who lived in the Guanzhong 關中 region of Shaanxi province – and Zhu Xi 朱熹 (1130-1200) – hailing from Fujian province, the Min 閩 cultural region.

In the account from *Nagasaki senmin den*, Joken’s knowledge that enabled him to “also lecture on the celestial signs and the calendrical calculations” (又講於天文曆數) comes as a corollary of his main activities as a Confucian scholar. To clarify things regarding the workings of the cosmos, he turned first to the Chinese classics and then incorporated new elements: “relying on the ancient sagely books as well as the various doctrines of past [Confucian] scholars and putting it side by side with what barbarians and elders transmitted, he clarified many things” (由古聖書暨先儒諸說、並戎蠻故老之所傳、多所發明). This description of Joken’s scholarly contributions – grounded in Chinese antiquity but also open to novel ideas – would be taken up as one of his defining traits in later biographies and studies.

1.1. *Pioneer of Western scholarship?*

The texts compiled in Joken’s “bequeathed works” reveal a certain perspective that, despite reflecting first and foremost the priorities of scholars from the Meiji 明治 era (1868–1912), has become the standard interpretation of most subsequent research on the subject. Setting the tone for the collection, Itō Miyoji explains in his preface that Joken lived during a time when the “shogunate strictly prohibited all foreign contact, limiting the experience of people in the land to the scope of Japanese and Chinese things only” (幕府嚴禁海外通交、國內土庶所見聞局於和漢事物之範域矣).⁸ He then rephrases the information from *Nagasaki senmin den* about Joken’s engagement with Chinese classics, claiming that “after toiling for years studying the doctrines of Japanese and Chinese ancient scholars, [Joken] finally explored the scientific disciplines of the Great West” (研苦累年涉臘和漢先儒諸說、窺泰西理學之門).⁹

Hosokawa Junjirō¹⁰ paraphrases the same passages from the book, writing that “Joken joined [Nanbu Sōju’s] school, training in the scholarship of the Song masters, and also

⁸ Itō Miyoji 伊東巳代治, “*Nishikawa Joken isho jo*” 西川如見遺書序, in *Gusho rekishō zokkai* 虞書曆象俗解, vol. 1, Nishikawa Joken isho 西川如見遺書 1 (Tokyo, 1899), fol. 1a.

⁹ Itō, fol. 1a.

¹⁰ Hosokawa was, in the words of Daniel Botsman, “no minor figure” in Japan at the turn of the 19th century, establishing his reputation in the 1860s as “an expert on the West.” He advocated, among other things, for Western-style enslavement of Black and Chinese persons to perform menial labor in Japan – and “eventually serv[ed] as personal tutor to the Taishō emperor (r. 1912–1926).” Daniel V. Botsman, “Freedom without Slavery? ‘Coolies,’ Prostitutes, and Outcasts in Meiji Japan’s ‘Emancipation Moment,’” *The American Historical Review* 116, no. 5 (2011): 1328.

lectured on the study of astronomy and calendrical calculations; by pondering the various doctrines of the ancient sages and explanations from foreign countries, he made many clarifications” (如見其門ニ入り、濂洛關閩ノ學ヲ修メ、又天文曆算ノ學ヲ講シ、先儒ノ諸説及外國ノ説ヲ參酌シテ發明スル所多シ). He concludes that “although one cannot escape the existence of frequent errors when one reads [Joken’s] extant works today, the fact that scientific inquiry was not yet developed at the time is inescapable for anyone” (今其ノ遺書ヲ閱スルニ往々誤謬アル免レスト雖モ、當時學術ノ講究未タ盡サ、ル所アルハ何人ニモ免レサル所ナルヘシ).¹¹ Like Itō, Hosokawa’s high regard for Joken was mainly due to the latter’s familiarity with Western rather than Chinese sources. Hosokawa is clear about his intentions in presenting Joken’s legacy as that of a pioneer whose distinction of having transmitted Western scholarship to Japan preceded that of the renowned scholar Arai Hakuseki 新井白石 (1657–1725) (世ニ西洋學術ノ我邦ニ傳ハリシハ、新井君美ニ始マレリト謂フト雖モ、如見カ西洋學術ヲ傳ヘタルハ其前ニ在リテ、創闢ノ功自ラ掩フヘカラサル者ナリトス).¹²

The notion that Joken was an early proponent of Western knowledge continued to hold sway over subsequent research produced well into the second half of the twentieth century, particularly within the field of history of science.¹³ This perspective of a pioneer of sorts, although somewhat nuanced, continues strong among those who study Joken’s place in early modern Japanese intellectual history.¹⁴ Conversely, some regard Joken as not being invested enough in Western knowledge due to his devotion to Confucian orthodoxy. Koga Jūjirō depicts Joken’s scholarship as much more rooted in China than in the West – negatively attributing it to Joken’s “worship of Chinese cultural production” (*shina bunbutsu sūhai* 支那文物崇拜) – contrasting him with Ro Sōsetsu, whom Koga considers more receptive to Western ideas.¹⁵ There is, nevertheless, little evidence from Sōsetsu’s writings that his perspective on the contribution of the European merchants and missionaries to cosmological knowledge in Nagasaki was much different from Joken’s.

In his letters to the shogunal official Watanabe Gunzō compiled in *Sokuryō higen*, Sōsetsu identifies Joken as a representative of the cosmological schools that flourished in the

¹¹ Hosokawa Junjirō 細川潤次郎, “Nishikawa Joken den” 西川如見傳, in *Gusho rekishō zokkai* 虞書曆象俗解, vol. 1, Nishikawa Joken isho 西川如見遺書 1 (Tokyo, 1899), fol. 3b.

¹² Hosokawa, fol. 3b.

¹³ See, for instance, Nakayama, *A History of Japanese Astronomy*, 110–15.

¹⁴ Cf. Ebisawa, *Nanban gakutō no kenkyū*, 130–40; Kawamura, *Kinsei Nihon no sekaizō*, 93–107.

¹⁵ Koga, *Nagasaki yōgakushi*, 1966, 1:258–59.

city, combining old and new theories. “Chinese” and “Western” cultural elements were often inextricably linked in Nagasaki, so the effort of distinguishing separate “camps” seems both anachronistic and futile. What one can do instead is to analyze how actors like Joken and Sōsetsu, and also authority figures like the shogun Tokugawa Yoshimune himself, incorporated elements from a variety of sources – such as VOC merchants or Jesuit-adjacent Sinitic books – into existing epistemological paradigms.

1.2. *A seafaring merchant family*

When writing Joken’s biography, Hosokawa had access to the documents passed down in the Nishikawa family and, besides reproducing some of the information from *Nagasaki senmin den*, he added unconfirmed stories about Joken’s ancestors. He explains that the family’s genealogical registry (*fuchō* 譜牒) before Joken’s great-grandfather Seichū 正忠 (dates unknown) has not survived, but that family lore tells of Joken’s great-great-grandfather Seikō 正幸 (dates unknown), also called Chūemon 忠右衛門. Seikō was reportedly a retainer of the lord of the Kumamoto 熊本 domain Katō Kiyomasa 加藤清正 (1562–1611), but he later gave up his warrior status and “resided in Tsushima, taking up commerce as his profession and going back and forth to Korea” (貿易ヲ業トシテ朝鮮ニ往來シ對島ニ家ス). Not having any sons of his own, he adopted Seichū, Joken’s great-grandfather, to continue his lineage.

According to Hosokawa, Seichū was originally the second son of a certain Yoshihiro Uemon 吉弘右衛門, a retainer of the Ōtomo 大友 clan, a powerful feudal family in Kyushu. Seichū, having been adopted into the Nishikawa family, left Tsushima for Nagasaki once the family’s business was disrupted by the first Japanese invasion of the Korean Peninsula during the Bunroku 文祿 era (1592–1596). In Nagasaki, he is said to have established a successful blacksmith business, but apparently this was not continued in the following generations.

This putative genealogy introduces two important elements. First, it evokes the supposed connections of the Nishikawa with the warrior class; second, it highlights the family’s long experience with transnational trade – first through Tsushima and then Nagasaki. It is not hard to see that for the Nishikawa, whose most famous member would become Joken himself, it might have been meaningful to emphasize – or even fabricate – a history of loyal service to domanial lords and the family’s strategic position as mediators between Japan and the rest of the world.

Hosokawa recounts that Seichū's son Chūsei 忠政 (1601–1669) – Joken's grandfather – is thought to have sailed to Cambodia (*kanbojia* 柬埔寨) in 1636, a trip from which he supposedly “obtained a great amount of profit” (利ヲ獲ルコト甚多シ).¹⁶ However, as noted in the first part of this study, the Tokugawa shogunate had prohibited Japanese merchants from leaving the country one year prior, abolishing the system of issuing “vermilion seals” (*shuin* 朱印) for authorized ships that had existed since the early years of the Tokugawa regime. Therefore, if Chūsei's journey did occur it would have to be before 1634.¹⁷ In any case, the emphasis on the family's nautical experience is significant, as navigational skills were closely connected with cosmological knowledge.

Hosokawa writes that Chūsei, besides sailing abroad, “built commercial ships as his regular profession; the family's profits were abundant and [he had] numerous children” (常ニ商船ヲ造ルヲ以テ業トス、家益饒富ナリ、數子アリ).¹⁸ As Chūsei's first son died at an early age, his second son Chūeki 忠益 (1628–1665), Joken's father, continued the family lineage. There is no mention of Chūeki being involved in either transnational commerce or ship-making. Instead, Hosokawa writes somewhat bewilderingly that “Chūeki lectured on a variety of martial arts, and was also well-versed in the classics and historical documents” (忠益諸般ノ武技ヲ講シ、又書史ニ渉ル)¹⁹ – perhaps to explain Joken's scholarly inclinations.

After a fire in the house in 1663, when Joken was around sixteen years old, the family lost all its fortune, and not long afterward Chūeki died at the age of thirty-eight.²⁰ Koga identifies the year of Chūeki's death as 1665, based on the tombstone of Nishikawa Joken's lineage located on the grounds of the temple Chōshōji 長照寺.²¹ Nishikawa Joken's grandfather Chūsei would only die four years later in 1669,²² when Joken was in his early twenties. This means that, even after his father's death, Joken could have still spent time with his grandfather, who supposedly had plenty of experience sailing and trading abroad. Such stories about Joken's grandfather illustrate the types of knowledge that was valued in the port

¹⁶ Hosokawa, “*Nishikawa Joken den*,” fol. 2a.

¹⁷ cf. Koga, *Nagasaki yōgakushi*, 1966, 1:256–57.

¹⁸ Hosokawa, “*Nishikawa Joken den*,” fol. 2a.

¹⁹ Hosokawa, fol. 2a.

²⁰ Hosokawa, fol. 2a-b.

²¹ Koga also indicates Joken's mother's death as 1713, when Joken was around sixty-six. Koga, *Nagasaki yōgakushi*, 1966, 1:257.

²² This date is also provided in the family's tombstone. See Sakuma, “*Nishikawa Joken no gakumon to shisō*,” 335, n. 5.

city of Nagasaki and how belonging to a family with a seafaring background could be an asset even in subsequent generations when sailors were no longer allowed to leave the archipelago.

1.3. *Association with “barbarian” cosmology*

The previous openness of Nagasaki for trade with Iberian merchants in the late 16th and early 17th centuries meant that older generations could have had the opportunity to interact directly with sailors and missionaries from Europe, not to mention enslaved attendants from various parts of Africa and Asia. During Joken’s grandfather Chūsei’s youth in the early 1600s, the presence of Portuguese seafarers and Jesuits who came in their ships – designated generally as the “southern barbarians” (*nanban* 南蠻) – was still stronger than that of the Chinese merchants – named the “Tang people” (*tōjin* 唐人). Nagasaki merchants who sailed abroad like Chūsei would have encountered even other types of “southern barbarians,” such as Spanish colonizers in the Philippines – one of the destinations where Chūsei was supposed to have traded – as well as other populations beyond the Sinosphere.

In *Nagasaki senmin den*, one reads that Joken put Confucian doctrines “side-by-side with what barbarians and elders transmitted” (並戎蠻故老之所傳) to build his cosmological discourse. This refers to the common heritage of local and transnational sailors active in the city not long before Joken was born in 1648, when commerce was already restricted to Dutch and Chinese merchants. As Sōsetsu elucidates in his letter to Watanabe Gunzō discussed in the previous chapter, Nagasaki's cosmological knowledge was a combination of old navigational techniques and astronomical schools developed notably by the apostate Christovão Ferreira (1580–1650), after he became “japanified” as Sawano Chūan 澤野忠庵, and the convicted Christian Kobayashi Kentei.²³ Joken is depicted as someone who could tap into this peculiar tradition while also preserving his credentials as a true, orthodox Neo-Confucian scholar.

In his writings, Joken does not cite one of the most representative titles associated with Jesuit cosmology in Nagasaki, namely, Ferreira’s *Kenkon bensetsu* 乾坤辨說 (“Discerning explanations on the heaven and earth”) with the accompanying commentary by Mukai Genshō 向井元升 (1609–1677), the book that Ro Sōsetsu identified in his letter as one of the

²³ Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 95–96.

sources of the study of the “celestial signs” (*tenmon* 天文) in the city.²⁴ As Koga Jūjirō accurately observes, Joken’s personal connection with Mukai Genshō is highly improbable, as he was only around eleven years old when Genshō left Nagasaki for Kyoto in 1658.²⁵ It is far more likely that he acquired knowledge about cosmological matters either through his Confucian master Sōju or directly from Kentei, whose title *Nigi ryakusetsu* 二儀略說 (“General explanations on heaven and earth”) is echoed in Joken’s own *Ryōgi shūsetsu* 兩儀集說 (“Collected explanations on heaven and earth”) – his longest book and most detailed cosmological treatise.

Joken’s connection to practical astronomical knowledge acquired from “elders” and “barbarians” parallels that of Kentei’s main disciple Seki Shōzaburō 關莊三郎 (1633?–1711), under whom Sōsetsu studied. As noted in the previous chapter, Seki is reported to have “learned the study of the celestial signs of western barbarians from elders who had traveled to Macau and Luzon” (從長老之遊阿媽・呂宋者、傳西蕃天文學)²⁶ – perhaps Joken’s grandfather Chūsei among them. Considering Joken’s relationship with Sōsetsu, his travel companion to Edo, one can surmise that Joken was also close to Seki Shōzaburō, or at least frequented the same circles around Sōju and Kentei.

Unlike Seki, whose cosmology was placed squarely within the old theories from past seafarers, Joken’s cosmological views reflect a transitional period, in which elements of Iberian and Jesuit origin intersected with new knowledge coming in through Chinese books and acquired from Dutch merchants. After the Portuguese were expelled from Japan, their outpost on the artificial island of Dejima in the bay of Nagasaki was occupied by VOC officers, who would make annual journeys to Edo to demonstrate their fealty to the shogunate. These men became an important source for Japanese scholars and authorities alike to gather information on a range of topics – from animal husbandry to astronomy – and the input from the Dutch gradually replaced the former Portuguese presence in the city.

2. Making it to the shogunal court

²⁴ Hiraoka and Hibi, 96.

²⁵ Koga, *Nagasaki yōgakushi*, 1966, 1:258.

²⁶ Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 51.

The ultimate recognition of Joken's scholarly achievements happened over twenty years after he "entrusted, at the age of fifty, the [family] business to his eldest son, and of his own accord carried out his plan of retirement, engaging in other activities in his mountain cottage, finding pleasure in dedicating himself to gardening, deciding merely to grow old." (年五十屬業長子、自為退隱計、營別業于山、娛志林泉、殆將老矣).²⁷ The nature of the family's business that was taken by his eldest son Seishō is difficult to determine but the fruits of Joken's scholarly achievements would later be reaped by his other son Seikyū.

After Joken's retirement, he "did not slacken in the least when it came to his scholarship" (然於學不少廢). Indeed, the vast majority of his written production is from after 1697 – presumably the year he moved out to his country villa. Only two of his books – the moralizing *Chōnin bukuro* 町人囊 ("The townspeople's bag"), which contains a preface from 1692, and the geographical work *Ka'i tsūshōkō* 華夷通商考 ("Investigation into commerce among civilized and barbarians"), first printed in 1695 – seem to have been written before his retirement. It was late in his retired life, around 1719, that Joken would be summoned by Tokugawa Yoshimune to come to Edo, where he would advise the eighth shogun on cosmological matters. By then, nearly all of his printed works were in circulation, including notable titles on cosmology that found readers far beyond Nagasaki – such as *Tenmon giron* 天文義論 (Discourse on the meaning of celestial signs") and *Kyōdō rekidan* 教童曆談 ("Astronomical discussions for instructing children"), published respectively in 1712 and 1714. We can conclude that he had by then established a reputation as a specialist in geographical and astronomical subjects.

Different sources record Joken's trip to Edo and they contain slightly divergent information. The account from *Nagasaki senmin den* does not provide the precise date of the summons or his arrival in Edo. Instead, it simply notes that "in the year of the Yin Earth Pig of the Kyōhō 享保 era (1719), there was an official summons [from the shogun], due to [Joken's] competence in the scholarship of celestial signs" (享保己亥 徵辟有加、以其能天文學也), i.e., Joken was chosen because of his astronomical knowledge, well attested in his publications. The same passage also clarifies that Joken, "already seventy-two, then proceeded to the Eastern Court (Edo), where he was consulted on several tens of issues and especially rewarded" (英已七十二、乃至東府、承 顧問者數十條、特蒙賜賚) – the questions that he might have been asked, however, are not specified. The passage concludes

²⁷ Wakaki, Takahashi, and Kawahira, 54.

with the statement that “upon returning to his hometown, [Joken] received the official order to present his writings on the celestial signs and the terrestrial principle [to the shogun]” (歸郷奉 旨録呈所著天文地理之書).

While the titles that Joken presented are not identified, there are four manuscripts of his cosmological works currently held at the Cabinet Library (*naikaku bunko* 内閣文庫) of the National Archives of Japan that could plausibly be the books offered to Yoshimune. The Cabinet Library consists largely of works that used to belong to the shogunal library known as Momijiyama 紅葉山 – considerably expanded during Yoshimune’s reign.

Joken’s books held there are five: two highly specialized manuscripts written entirely in Sinitic, titled 1) *Usen benron* 右旋辨論 (“Discourse on the rightward rotation”) and 2) *Tenjin gogyō kai* 天人五行解 (“Explanations on the celestial, the human, and the five phases); 3) a manuscript copy of *Gusho rekishō zokkai* 虞書曆象俗解 (‘Vernacular explanation of astronomical images in the Book of Yu’), which was also printed in 1720 and provides a Japanese commentary on one of the foundational texts of East Asian cosmology, namely the first book of the *Shujing* 書經 (“Classic of documents”); 4) the aforementioned *Ryōgi shūsetsu*, Joken’s longest cosmological treatise, comprising of nine bound volumes that were never printed, but containing the preface by the interpreter Sakaki Soken; and 5) *Tenmon giron* which appears as an appendix to *Ryōgi shūsetsu*, presenting its theories in a condensed question-and-answer format. These works, discussed in more detail in the next chapter, displayed the range of Joken’s scholarship, showcasing what he could have contributed to the shogunate.

Concerning Joken’s summons to Edo, Hosokawa provides more information, including a different date.

In Joken’s later years, the shogun Yūtoku [Yoshimune], who was fond of the study of astronomy and calendrical calculations, having heard the name of Joken, summoned him in the seventh month of the third year of the Kyōhō era [1718] to go to Edo, and consulted him then. However, due to hierarchical disparity, the shogun ordered a high official to convey his messages, and Joken would also limit himself to expressing his views to this high official; so Joken sojourned in Edo and, once dismissed, returned home to Nagasaki.

如見ノ晩年、將軍有徳公天文曆算ノ學ヲ好マレタルヲ以テ、如見ノ名ヲ聞及ハレ、享保三年七月如見ヲ召シテ江戸に至ラシメ、時ニ諮詢スル所アリタリ。然レトモ尊卑懸隔セルヲ以テ、將軍ハ大吏ニ命シテ、其意ヲ傳ヘシメ、如見モ亦大吏ニ對シ

テ、其ノ見ル所ヲ述フルノミナリキ、如見江戸ニ留ルコトシテ、辭シテ長崎ニ歸ル。²⁸

As noted, Hosokawa's main sources were the archives of the Nishikawa family, made available to him by Joken's descendant Nishikawa Tadasuke. Instead of the fourth year of the Kyōhō era (1719), Hosokawa indicates that Joken was summoned in the seventh month of the previous year (between July and August 1718). He also clarifies that Joken did not have a personal audience with the shogun, communicating instead through an official. This is significant because it shows that, despite Joken's recognition as a cosmological specialist, the fact that he was a merchant from Nagasaki meant that he would not interact directly with the shogun due to his lower status.

The same year of 1718 appears in *Nagasaki jitsuroku taisei* 長崎實錄大成 (“Great compendium of the veritable records of Nagasaki”) – a multi-volume historical record first compiled by Tanabe Mokei 田邊茂啓 (1688–1768), a disciple of Mukai Gensei and scribe (*shokiyaku* 書記役) at the Nagasaki Seidō, and presented to the Nagasaki magistrates in 1764.²⁹ In the chronology found in this source, one reads the following in the entry for the third year of Kyōhō (1718).

This year [1718], following a confidential demand from the Edo court, Nishikawa Joken and Ro Sōsetsu from Nagasaki were required to offer their advice to the shogunate. Joken departed in the eleventh month of that year, and Sōsetsu departed the next year, that of the Pig, in the first month. There were comprehensive questions [from the shogun] and both promptly returned home [to Nagasaki] together.

一、當年從江府御内々御問合之儀有之由ニテ、長崎西川如見、盧草拙出府可仕旨被仰付。如見ハ當十一月出達シ、草拙ハ翌亥正月出達ス。一通リ御尋之事有之、頓テ兩人共ニ歸宅ス。³⁰

These disparate accounts can be supplemented by other documents. The precise dates of Sōsetsu's arrival and their departure, as well as the amount of their reward, are found in the archives of the Ro family, which contain letters written by Sōsetsu once he reached Edo, and later in Kyoto on his way back to Nagasaki.

2.1. *An official trip with numerous stakeholders*

²⁸ Hosokawa, “*Nishikawa Joken den*,” fol. 3a-b.

²⁹ Koga, *Nagasaki shi seihen*, 5–10.

³⁰ Koga, 558.

From Edo, Sōsetsu sent a letter dated the twentieth of the second month – presumably of the fourth year of Kyōhō (April 9, 1719) – to a certain Miyaji Kihachirō 宮地喜八郎 (dates unknown), who took care of his house and affairs in Nagasaki during his absence. In this first letter, Sōsetsu writes that he safely arrived in Edo on the seventh hour – either four in the morning or, more likely, in the afternoon – of the seventeenth of the second month (April 6, 1719) in a group of five people (此元五人共に無事に道中無恙、二月十七日七つ時に江戸に入申候).³¹

It is not clear whether Joken arrived in this same group, but if we take into account the information from *Nagasaki jitsuroku taisei*, it is possible that he was already in the city, considering his earlier departure. In the same letter, Sōsetsu describes his rented lodgings and recounts that, on the same day of his arrival, he paid a visit to Nagasaki magistrate Kusakabe Hirosada 日下部博貞 (1658–1734), visiting the other Nagasaki magistrate Ishiko Masasato 石河政郷 (1660–1743)³² and then Kusakabe once more on the next day (十七日に、早速丹波守様へ参り御届申上候。十八日に土佐守様へ参り、又丹波守様へ参り御届申上候).³³

As evidenced by Sōsetsu’s letter, their visit to the political capital involved several authorities and intermediaries between them and the shogun. Both Sōsetsu and Joken had to report to a numerous stakeholders, for they were there in official business as representatives of the cosmological traditions of Nagasaki. Sōsetsu continues the letter by writing that, on the nineteenth (April 8th), his third day in Edo, he was summoned by Ōshima Unpei 大島雲平 (?–1746), who arranged the indirect interviews with the shogun, asking both him and Joken several questions (十九日に大島雲平様御方へ被召出候て、段々御尋 (／西川怒見老も一同に御出候て) 共御座候).³⁴ This is the high official (*tairi* 大吏) mentioned by Hosokawa which shows that there was indeed an interlocutor between them and Yoshimune.

On the way back from their audience with Unpei, they went to visit the aging scholar Fukami Gentai 深見玄岱 (1649–1722) and his son Fukami Arichika 深見有隣 (1691–1773), with whom Sōsetsu was in good terms. As discussed in the previous chapter, the Fukami or Kō (Ch. Gao 高) family of Fujianese interpreters successfully consolidated the link between

³¹ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 40.

³² These were the two magistrates in office at the time. Ishiko, known as “governor of Tosa” (*Tosa no kami* 土佐守), occupied the position between 1716 and 1726; Kusakabe, “governor of Tanba” (*Tanba no kami* 丹波守), occupied it between 1717 and 1727.

³³ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 40–41.

³⁴ Kawahira, 41.

Nagasaki and Edo and were deeply involved in Yoshimune's project for gathering knowledge from China and beyond.

One of the letters from Gentai to Sōsetsu – dated the nineteenth of the eighth month, plausibly in the third year of Kyōhō (September 13, 1718) – contains valuable information about the preparations for the Edo trip. In it, Gentai mentions the Nagasaki magistrate Ishiko Masasato, and congratulates Sōsetsu for being summoned to Edo, adding that Joken is to leave in the first month of the new year (late February to mid-March 1719), and surmising that it should be the same for Sōsetsu (如硯老は正月出府之由、貴様も御同道之筈に候歟).³⁵ According to *Nagasaki jitsuroku taisei*, however, Joken seems to have left earlier than Sōsetsu. Gentai writes that Joken was to be hosted by Imai Genshō 今井元昌 (1658–1718), also known as Junsai 順齋, a physician and seal carver originally from Nagasaki, who in 1715 became a court doctor (*jū* 侍醫) for the shogunate.³⁶ Considering Imai Genshō's death in 1718, he could not have hosted Joken the next year, but it is not clear where Joken sojourned instead.

In a subsequent letter Sōsetsu sent Kihachirō upon their arrival in Kyoto on the twenty-sixth of the third month (May 15, 1719), already on their journey back to Nagasaki, he recounts that, on the seventh day of that month (April 26, 1719), they were dismissed from the service of the shogun; two days later, he and Joken alike received the reward of five pieces of silver, to which he was extremely grateful (以江戸表首尾能御用相濟、三月七日に御暇被仰付候。同九日怒見老一同に、白銀五枚宛拜領被仰付候て、冥加至極有難(マヽ)仕合、無此上儀共に御座候).³⁷ They left Edo on the fifteenth (May 4, 1719) and made their way to Kyoto, from where he was writing. The information about the amount received for their service is also recorded in Sōsetsu's biography from the family's genealogy (*Roshi kafu* 廬氏家譜), which contains the following description:

In the first year of the Kyōhō era (1716), that of the Monkey, during the time Ishiko [Masasato] the governor of Tosa was in office, [Sōsetsu] was appointed assistant inspector of writings.

In the fourth year of the same era (1719), that of the Pig, during the time the same [magistrate] was in office, [Sōsetsu] was summoned to the Edo court in connection with an official task of the astronomical bureau (*tenmonkata*), and he performed that task having

³⁵ Kawahira, 49.

³⁶ His short biographical entry is listed under “medicine” (*ijutsu* 醫術) in *Nagasaki senmin den*. Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun'en to gakugei*, 82–83.

³⁷ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 41.

Ōshima [Unpei], governor of Ōmi, as an intermediary. He remained [in Edo] serving the court for several months, and once dismissed he was granted five pieces of silver as a reward. 享保元申年、石河土佐守様御在勤之節、御書物改添役被仰付候。

同四亥年、御同所様御在勤之節、天文方御用に付、江府え被為召、大島近江守様御取次を以、御用相勤。數月滯府仕候て、御暇被下置候節、為御褒御銀五枚拜領仕候。³⁸

This source emphasizes Sōsetsu's connection with the official authorities through the figure of the Nagasaki magistrate Ishiko Masasato, who besides employing him as assistant to Mukai Gensei in the latter's duties as "inspector of writings," (*shomotsu aratame yaku* 書物改役) was deeply involved in Sōsetsu's and Joken's summons to Edo. Ōshima Unpei, the "governor of Ōmi" (*Ōmi no kami* 近江守), appears once again as the mediator in their interactions with the shogun, further reinforcing the information from Sōsetsu's letter.

2.2. *Accompanying, accommodating, and consulting the Dutch merchants*

Joken's and Sōsetsu's stay in Edo overlapped with that year's regular journey made by the VOC merchants to the shogunal court, which lasted from April 11 to 28, 1719.

Converting the dates provided in Sōsetsu's letters into the Gregorian calendar, we find that Sōsetsu and Joken were in Edo between April 6 and May 4, 1719, with Joken possibly having arrived earlier.

The Dutch merchants are mentioned in a letter that Sōsetsu wrote to Miyaji Kihachirō on his way to Edo, while he was still in the port of Kokura 小倉 in northern Kyushu, dated the seventeenth of the first month of, by all evidence, the fourth year of Kyōhō (March 7, 1719). He explains in the letter that he will board a ship on the eighteenth (十八日出船仕候様相極申候) – to cross the Kanmon 關門 Straits into Shimonoseki 下關, located on the main island of the Japanese archipelago – and that the Dutch should arrive the day after, on the nineteenth (March 9, 1719), but are to be lodged in a different place from where he was, which was crowded (おらんだ人は十九日に着可申由にて、爰元取込御座候付(カ)、別宿仕候).³⁹ This information is confirmed by Dutch records. In the official journal (*dagregister*) that each *opperhoofd* kept during their time in Japan, that year's *opperhoofd* Johan Aouwer indicates in an entry from March 9, 1719, that he and his colleagues had reached

³⁸ Kawahira, 5.

³⁹ Kawahira, 43.

Kokura, where they spent the night, also noting their arrival at Shimonoseki the next day.⁴⁰ They would be in Edo a month later.

This was the usual route taken by the VOC officers between Nagasaki and Edo, with several intermediary stops. Engelbert Kaempfer (1651–1716), who made the trip twice in 1691 and 1692 as the general surgeon for the Company, detailed the same itinerary with Kokura as one of the main stops in his account of the Japanese archipelago published in 1727 as *The History of Japan*.⁴¹ As illustrated below, Kaempfer’s book even contains maps for different sections of the journey, demonstrating that the circulation of knowledge between scholars, interpreters, and authorities and the members of the VOC went both ways. His interactions with the interpreter Imamura Eisei 今村英生 (1671–1736) are well-documented, and Eisei was able to achieve a high level of proficiency in Dutch due to his relationship with Kaempfer, whom he also taught Japanese.⁴² Eisei would continue to work closely as a mediator between the Dutch merchants and the shogunal authorities throughout his life, becoming particularly useful in Yoshimune’s multiple consultations with the *opperhoofden*.

⁴⁰ Johan Aouwer, “Dagregister (1718 oktober 13 - 1719 oktober 31)” (Manuscript, 1718–1719), 90, Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860, Nationaal Archief, https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/129/file/NL-HaNA_1.04.21_129_0001. See also Bachofner and Velde, *The Deshima Diaries*, 232. A Japanese translation for some of the journal entries for this period can be found in Imamura Hideaki 今村英明, *Oranda shōkan nissshi to Imamura Eisei / Imamura Meisei: Nichiran bōeki ya yōgaku no hatten ni kōhen shita Oranda tsūji no kiroku* オランダ商館日誌と今村英生・今村明生 — 日蘭貿易や洋学の発展に貢献した阿蘭陀通詞の記録 (Tokyo: Bukkomu, 2007).

⁴¹ Bodart-Bailey, *Kaempfer’s Japan*, bk. 5.

⁴² Katagiri Kazuo 片桐一男, *Oranda tsūji Imamura Gen’emon Eisei: Totsukuni no kotoba o wagamono toshite* 阿蘭陀通詞 今村源右衛門英生 — 外つ国の言葉をわがものとして (Tokyo: Maruzen, 1995), chap. 2; Paul Van der Velde, “The Interpreter Interpreted: Kaempfer’s Japanese Collaborator Imamura Genemon Eisei,” in *The Furthest Goal: Engelbert Kaempfer’s Encounter with Tokugawa Japan*, ed. Beatrice M. Bodart-Bailey and Derek Massarella (Sandgate: Japan Library, 1995), 44–58.

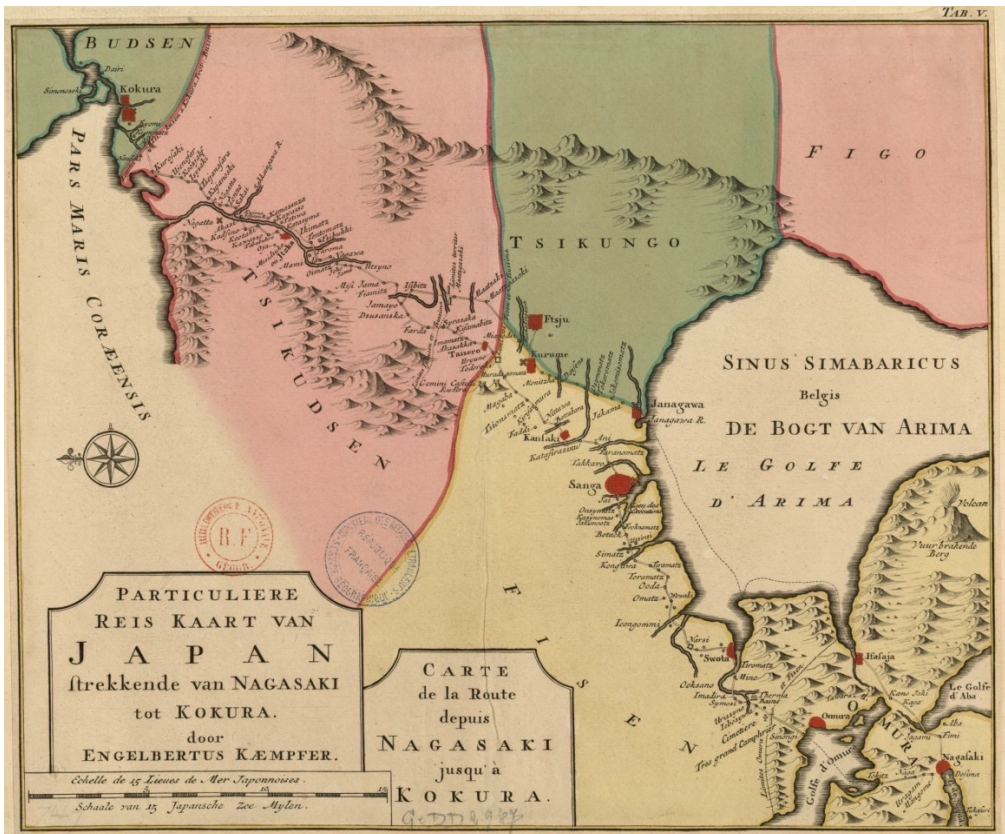


Figure 3.1. Route from Nagasaki to Kokura as depicted in the 1732 French edition of Engelbert Kaempfer's *Histoire naturelle, civile et ecclésiastique de l'Empire du Japon* (Bibliothèque nationale de France)



Figure 3.2. Detail of the map showing Kokura across from Shimonoseki

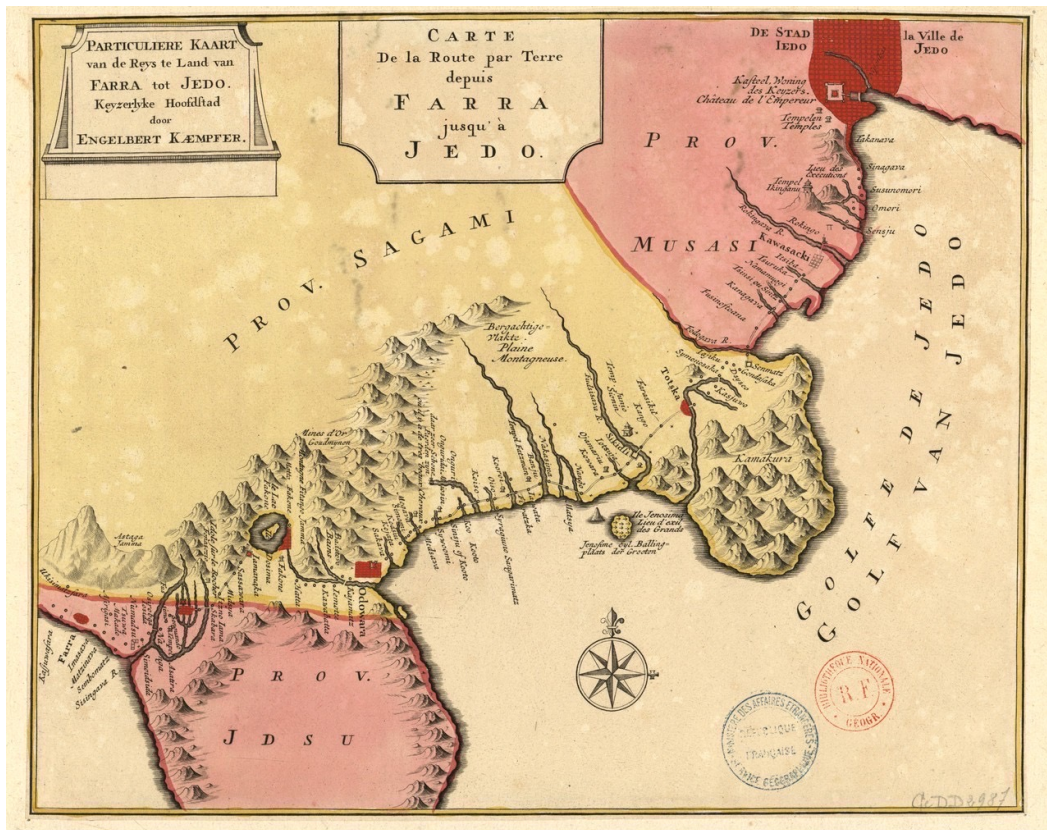


Figure 3.3. Route from Hara 原 (present-day Numazu City) to Edo as depicted in Kaempfer's *Histoire naturelle, civile et ecclésiastique de l'Empire du Japon* (Bibliothèque nationale de France)

Writing from Edo, Sōsetsu mentions in his letter to Kihachirō dated the twenty-sixth of the second month (April 15, 1719) that the Dutch had arrived on the twenty-second (おらんだ人も廿二日當〈ママ〉着仕候),⁴³ April 11, 1719. Similarly, *opperhoofd* Aouwer records in his journal on this same date, that after passing “through once again burned-down Edo suburb of Shinagawa” (*door die t' eenemaal weder afgebrande Jedoose voorstad Sinagawa*), they came to “the shogunal capital Edo” (*Keijzerlijke*⁴⁴ *Hooft Stad Jedo*) and their senior interpreter Narabayashi Ryōemon 榎林量右衛門 announced their arrival to the shogunal authorities.⁴⁵ The fire that burned through the Shinagawa area refers in all likelihood to the same event that Sōsetsu mentions in his first letter to Kihachirō from April 9, 1719, in which he reports

⁴³ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 66.

⁴⁴ The title of *keizer* was consistently used by Dutch sources to refer to shogun. When it was necessary to draw a clear distinction with the emperor (*tennō* 天皇) in Kyoto, the shogun could be designated as *wereldelijk keizer* (“worldly emperor”) in opposition to the “spiritual” authority of the *tennō*. Cf. Matsukata Fuyuko 松方冬子 et al., eds., *Jūkyū seiki no Oranda shōkan 一九世紀のオランダ商館*, vol. 2 (Tōkyō daigaku shuppankai, 2021), 496–97.

⁴⁵ Aouwer, “Dagregister (1718 oktober 13 - 1719 oktober 31),” 144; Bachofner and Velde, *The Deshima Diaries*, 233.

having learned that, on the fourteenth day of the second month of the third year of Kyōhō (April 3rd, 1719) – that is, merely three days before his arrival – a great fire had burned up to the vicinities of his rented lodgings (十四日に大火事にて、私の借宅の隣当たり迄焼申候由).⁴⁶

Sōsetsu's letters demonstrate his high involvement in the logistics of the VOC journey to Edo, which is understandable given his proximity to the Nagasaki magistrates and his other official functions. Joken, already in his seventies, is unlikely to have had the same duties as Sōsetsu, then in his mid-forties. As far as we can tell from the sources, Joken's role in their journey was simply to be consulted by the shogun. Sōsetsu, on the other hand, was at least partially responsible for lodging the Dutch and ensuring that they reached the shogunal capital as planned.

In his journal entry from April 11, 1719, *opperhoofd* Aouwer also notes that, on the day of their arrival, attendants to the “commissioners” (*commissarisen*)⁴⁷ and to the Nagasaki magistrate Kusakabe Hirotsada came toward the evening to their lodgings to welcome the Dutch delegates on behalf of their masters (*tegens den avond quamen de bediendens van de heeren commissarisen, en gouverneur Tamba Sa ons uijt de naem hunnen meester te wellekomen*).⁴⁸ While Sōsetsu was not necessarily one of these attendants, he must have been in close contact with them to coordinate the communication with the VOC officers during their journey. It was in Sōsetsu's and Joken's interest to obtain valuable information from the Dutch merchants that they then could relay to the shogun via appropriate channels.

Sōsetsu reports in his letter from April 15, 1719, right after mentioning the arrival of the Dutch, that on the twenty-eighth (April 17, 1719), he was to go “receive their gifts” (廿八日に御禮と承申候).⁴⁹ This information matches Aouwer's journal, in which he records sending gifts to the shogunal castle early in the morning and heading there soon after (*heel vroeg wierden de schenckagie goederen na 't casteel gesonden, wij volgden daer op*).⁵⁰ Such “gifts” (*schenckagie goederen*) were customary in the VOC interactions with local authorities not only in Japan but throughout their outposts in Asia and constituted an expected expense in their yearly journey

⁴⁶ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 41.

⁴⁷ These could be high-ranking officials such as the “commissioner of the temples” (*jisha bugyō* 寺社奉行) or the “commissioner of the foreigners” (*commissaris der vreemdelingen*). The latter, rather than belonging to a fixed position, oversaw the affair of the Dutch during their time in Edo and were named among established ranks such as “commissioner of constructions” (*sakujū bugyō* 作事奉行) or “inspector of sects” (*shūmon aratame yaku* 宗門改役). Cf. Bachofner and Velde, *The Deshima Diaries*, 562 and 564.

⁴⁸ Aouwer, “Dagregister (1718 oktober 13 - 1719 oktober 31),” 114.

⁴⁹ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 66.

⁵⁰ Aouwer, “Dagregister (1718 oktober 13 - 1719 oktober 31),” 119.

to Edo. Likely, Sōsetsu was there to receive the presents in the name of figures like the Nagasaki magistrates and the different commissioners. His familiarity with VOC affairs indicates that he was in an ideal position to consult them.

In an entry from April 22, 1719, Aouwer records that “the only thing that happened [that day] was that they received a visit from a doctor and two astronomers” (*anders niets gepassert als dat vandaag het bezoek hadden van een doctor en twee sterrekundige*).⁵¹ According to the *opperhoofd*, these three individuals were there “by order of the [shogunal] court, asking a lot of miscellaneous [questions], particularly concerning heaven’s movement” (*onder correctie van’t hof die een partij misselijke vragende den vooral die hemelsloop verstandige*).⁵² Although not identified by name, these “astronomers” (*sterrenkundige*) were no doubt close to the shogun, employed to answer similar technical cosmological questions for which Sōsetsu and Joken were also summoned.

Although more research is necessary to determine the identity of these “astronomers”, they might have been figures such as the young Shibukawa Hirotada 澀川敬尹 (1696–1726), who had inherited four years earlier the position of head of the shogunal astronomical bureau (*tenmonkata* 天文方) started by his uncle Shibukawa Harumi⁵³ 澀川春海 (1639–1715) after Harumi’s son Hisatada 昔尹 (1683–1715) died without heirs, or yet the more experienced Endō Moritoshi 遠藤盛俊 (1672–1734), one of Harumi’s main disciples.

Aouwer concludes his entry in the journal by claiming that the “gentlemen were all satisfied with a suitable answer, and furthermore being rewarded with good wine and candied fruits, the fellows returned very contented to the shogunal castle” (*mess^{ts} gesamentlijk met een daerop applicerend antwoord wierden gepaijt, en voorts wacker met goete wijn en confituren gedefroijeerd zijnde te trocken die bloeden heel vergenoegd weder na de keijzerlijke burt*).⁵⁴ This encounter concretely demonstrates how Sōsetsu and Joken might have acted as knowledge brokers between the Dutch and the shogunate even when the two Nagasaki scholars were already in Edo.

The fact that the “two astronomers” who consulted the VOC merchants were particularly concerned with “heaven’s movement” (*hemelsloop*) defines how Sōsetsu and Joken’s contribution would be perceived by the shogunate. As representatives of the cosmological scholarship of Nagasaki, they were in a position, together with interpreters for the Dutch such

⁵¹ Aouwer, 125. See also Bachofner and Velde, *The Deshima Diaries*, 234.

⁵² Aouwer, 125. See also Bachofner and Velde, *The Deshima Diaries*, 234. The term *misselijke* is translated as “sickening” (the more current meaning in modern Dutch) in Bachofner and Velde, which seems to suggest annoyance on the part of the VOC merchants, but from context “miscellaneous” is more appropriate.

⁵³ His given name can also be read as Shunkai.

⁵⁴ Aouwer, “Dagregister (1718 oktober 13 - 1719 oktober 31).”

as Imamura Eisei, to translate astronomical information provided by VOC merchants and turn it into useful knowledge for the regime. This function, which had gotten them into the shogunal capital in the first place, would be explored repeatedly by Yoshimune and his advisors.

2.3. *Unbanned books*

In 1720, in the aftermath of Sōsetsu's and Joken's visit to Edo, Yoshimune partially lifted the ban on Jesuit-associated titles that had been effective since 1630 and reinforced through Mukai Gensei's efforts from 1685. The reasons often evoked for the relaxation are the shogun's awareness of new cosmological books written in Sinitic that contained more advanced technical knowledge, including information from Jesuit sources, such as the writings of the early Qing scholar Mei Wending 梅文鼎 (1633–1721).⁵⁵

The new regulation allowed for the purchase and circulation of all ten titles from the “instrument section” (*qibian* 器編) of *Tianxue chuhan* 天學初函 (“First collection of celestial scholarship”), and also two titles from the “principle section” (*libian* 理編), namely *Jiaoyou lun* 交友論 (“Discourses on friendship”) by Matteo Ricci (1552–1610) and *Zhifang waiji* 職方外紀 (Records of [lands] outside [the purview] of the imperial geographer”) by Giulio Aleni (1582–1649) and Yang Tingyun 楊廷筠 (1562–1627). A majority of books that had been confiscated after 1685 but which did not concern Catholic doctrines were also unbanned.⁵⁶

One of the main sources of information on this shogunal decision is *Kōsho koji* 好書故事 (“Tales of bibliophilia”), the compilation finished in 1826 by Kondō Jūzō 近藤重藏 (1771–1829), who had worked as a shogunal librarian and spent considerable time poring over the archives of the “inspector of writings” in Nagasaki, i.e., the records of the Mukai clan. In two sections of the book, the first on “calendrical calculations” (*rekihō* 曆法) and the second on the “forbidden writings” (*kinsho* 禁書), Jūzō cites a document sent to the Nagasaki magistrates in the first month of the fifth year of the Kyōhō era, i.e., 1720 (五年正月長崎奉行江被仰渡候御書付) – to which he had access during his time in the city – that clarifies how the instructions for the inspectors changed after that year.

⁵⁵ Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, 221–31. On Mei Wending see Jami, *The Emperor's New Mathematics*, chap. 4; Catherine Jami, “La carrière de Mei Wending (1633-1721) et le statut des sciences mathématiques dans le savoir lettré,” *Extrême-Orient, Extrême-Occident*, no. 36 (2013): 19–47.

⁵⁶ See Appendix A.

Among the documents brought aboard Chinese ships, it was the case that writings containing even the slightest information on the heretical sect [of Jesus] have been completely barred since the second year of Jōkyō (1685). Henceforth, however, any passages or such that might pertain to the doctrine of the named sect shall be barred even further, but writings that contain passages that are no more than mere mentions [of the religion] shall be allowed to be sold to the public, not to mention be used for the benefit of the shogun. Upon inspection [of the documents], utmost care should be taken so there is no confusion.

唐船持渡候書籍ノ内邪宗門ノ儀聊モ書載候書物ハ貞享二年以来一切停止之事ニ候へ共、向後ハ右法儀ニ可用類ノ文句等ハ彌停止可致候、噂迄ニ不障文句書入候分ハ御用物ハ勿論世間へ賣買為致候テモ不苦候。尤吟味之節隨分入念紛敷無之様可致以上。⁵⁷

The partial relaxation of the ban reflects the original scope of the prohibition, which concerned solely books written in Sinitic that reached Nagasaki via Chinese junks. Although there is an emphasis on the fact that books not promoting the “heretical sect” (*jashūmon* 邪宗門) – that is, Christianity, or more specifically the Roman Catholicism that Jesuits proselytized in China – were allowed to circulate, this relaxation came with the commitment to reinforce the strict control over possible Christian works. As discussed, the inspectors of writings from the Mukai clan fulfilled a crucial curatorial role for the shogunate, simultaneously ensuring that prohibited titles did not enter Japan and keeping an eye out for potentially useful information for the regime. Yoshimune’s new rule reinforced both aspects of their function.

The information from the document Jūzō cites is echoed in a 19th-century source from the Mukai clan’s archives currently held at the Nagasaki Museum of History and Culture, reflecting the prohibition’s development up to 1841. This source contains three parts, respectively titled 1) “Index of officially banned writings” (*gokinsho mokuroku* 御禁書目錄), 2) “Index of unbanned writings among the officially banned writings” (*Gokinshojū gomensho mokuroku* 御禁書中御免書目錄), and finally 3) “Explanatory document on books officially banned and unbanned” (*Goseikin gomen shoseki yakusho* 御制禁御免書籍譯書). The first part contains the signature and seal of the eighth and penultimate rector of the Nagasaki Seidō Mukai Masajirō 向井雅次郎 (1792–1867), who was the last to confiscate any document coming in from China. Thanks to the second and third parts of this source, we can reconstruct the list of books unbanned by Yoshimune, consisting of 19 titles in total.

⁵⁷ Kokusho kankōkai, *Kōdō Seisai zenshū*, 3:146 and 214.

The third part clarifies the reasons behind the confiscation of each title from 1685 until 1841, when *Tianfang zhisheng shilu nianpu* 天方至聖實錄年譜 (“Chronology of the holiest and veritable records of the directions of heaven”), written by Qing Muslim author Liu Zhi 劉智 (ca. 1660–ca. 1730), was burned at the Nagasaki Seidō.⁵⁸ It is interesting to notice that the last book to be confiscated did not concern Christianity at all but rather Islam. This suggests that even as late as 1841 the inspectors lacked a thorough knowledge of the religion they were supposed to suppress, but were still wary of any writings on religious-sounding doctrines that came their way. The description concerning Yoshimune’s decision to relax the prohibition in the third part closely resembles the texts from *Kōsho koji*, and is by all evidence based on the same document cited by Jūzō that was held in the archives of the Mukai clan.⁵⁹

While the 19th-century index does not contain any commentary as to why Yoshimune unbanned previously prohibited titles, Jūzō, in his section on “calendrical methods” from *Kōsho koji*, ascribes the motivation for the unbanning of certain titles to the shogun’s interest in cosmological matters as a whole: “the prohibition of Western books on the heavens was relaxed due to the [shogun’s] pursuit [of knowledge] on the celestial signs and calendrical calculations” (天文曆數ノコト穿鑿ニ依テ、西洋天書ノ禁ヲ弛ラルル).⁶⁰ This passage contributes to the image of Yoshimune as an enlightened ruler deeply interested in the sciences, spearheading what historians identify as the Kyōhō reforms (*Kyōhō kaikaku* 享保改革), named after the era during which he ascended to the throne.⁶¹ This pursuit of knowledge, far from disinterested, aligned with the shogun’s projects for strengthening his authority soon after he came to power.

Jūzō explains in the same section of the book that the main practical purpose of Yoshimune’s astronomical interests was to enable the reform of the so-called Jōkyō 貞享 calendar. After listing different measures taken by the shogun to improve astronomical calculations, Jūzō writes:

One hears that all [these measures] were for the sole purpose of rectifying the discrepancies in the Jōkyō calendar. At the time, there were instructions [by the shogun] that, even among forbidden writings, those beneficial to studying the celestial signs were to be brought [into Japan].

⁵⁸ Wakaki, “*Shomotsu aratame: Shuntokuji to nagasaki seidō*,” 355–60.

⁵⁹ Ebisawa, *Nanban gakutō no kenkyū*, 142–43.

⁶⁰ Kokusho kankōkai, *Kondō Seisai zenshū*, 3:146.

⁶¹ Cf. Kasaya Kazuhiko 笠谷和比古, *Tokugawa Yoshimune* 徳川吉宗, Chikuma shinsho ちくま新書 44 (Tokyo: Chikuma shobō, 1995).

皆貞享曆ノ差ヲ改正セラントノ微意ナリト聞ク。當時禁書ノ中タリトモ、天文學ニ益アルモノハ舶來スベキトノ御沙汰アリ。⁶²

The timing of the unbanning of books in 1720 leads one to believe that Joken's advice directly impacted the outcome, perhaps informing the shogun about the newest Sinitic cosmological books passing through Nagasaki.⁶³ However, rather than Joken, Sōsetsu, who worked alongside Mukai Gensei on the inspection of the writings in question, was the one who could have acquired firsthand information on the content of writings coming in via Chinese junks. Although Joken's and Sōsetsu's indirect audiences with the shogun might have contributed significantly to Yoshimune's decision to allow the importation of certain Jesuit-adjacent Sinitic books, particularly those on cosmology, it marked just the beginning of the shogun's projects for calendrical reform and can be framed within a larger systematization of knowledge by the regime. Rather than attempting to determine a single reason behind the shogun's decision to relax the ban, it is more fruitful to analyze it in the larger context of his policies for technical improvements of the calendar and control over transnational commerce.

3. Shogunal astronomers

Joken's contribution to Yoshimune's projects of calendrical reform greatly benefitted his son Nishikawa Seikyū – also known by the given name Chūjirō 忠次郎 – who made his career thanks in great part to his father's reputation. Seikyū continued Joken's lineage as an expert in cosmological matters and was able to move to Edo, where he lectured on the cosmological text *Tianjing huowen* 天經或問 (“Questions on the meridians of heaven”).⁶⁴ This book, originally published in Fujian in 1675, was not devised for a specialized audience – especially compared to its second part *Tianjing huowen houji* 天經或問後集 (“Later collection of questions on the meridians of heaven”) – which contained more precise figures. As noted, *Tianjing huowen houji* was censored by Mukai Gensei as early as 1687, with sections being blotted out before it was returned to circulation. The first part of *Tianjing huowen*, on the other hand, remained uncensored and, according to Kyoto scholar Nakamura Tekisai 中村惕齋 (1629–1702), its importation was first authorized by none other than Joken's Confucian

⁶² Kokusho kankōkai, *Kondō Seisai zenshū*, 3:146.

⁶³ Ebisawa, *Nanban gakutō no kenkyū*, 144.

⁶⁴ See Koga, *Nagasaki yōgakushi*, 1966, 1:276.

master Nanbu Sōju during his time at the Nagasaki Seidō between 1676 and 1680.⁶⁵ Joken's and, by consequence, Seikyū's familiarity with the text should come as no surprise.

Seikyū, despite not being as prolific as Joken, edited and provided the reading notations for *Tianjing huowen* and had it published in 1730 together with one of his books, *Tairyaku tengaku meimoku shō* 大略天學名目鈔 (“Summary annotations on the nomenclature of celestial scholarship”), in which he distills some of his father's core ideas.⁶⁶ One can infer that he was residing in the shogunal capital by then and might have been in the circles around Yoshimune, which would explain the shogun's later decision to employ Seikyū in his service as a technical cosmological adviser.

One of the earliest mentions of Seikyū's activities at the shogunal court is found in Kondō Jūzō's work. In *Kōsho koji*, Jūzō writes that Seikyū was remunerated yearly for his services in Edo concerning “official matters of the celestial signs” since 1735 (忠次郎ハ享保二十年ヨリ天文御用年々銀子被下) and, gradually rising in the bureaucratic hierarchy of the regime, he worked in “matters of calendrical rectification” directly under the *wakadoshiyori* 若年寄 (“junior elders”) from 1746 (延享三寅年十月補曆御用若年寄支配), before being finally appointed the next year as an official astronomer of the shogunate (*tenmonkata*), for which he was rewarded with an extra pension of two hundred sacks of rice (同四卯年正月二十日天文方被仰付、新規御切米二百俵被下).⁶⁷ It was no doubt due both to Joken's recognition and Seikyū's own distinction of lecturing on *Tianjing huowen* that Seikyū reached such a high position in the shogunal bureaucracy.

Seikyū is also mentioned in Jūzō's earlier work *Yūbun koji* 右文故事 (“Tales of erudition”), finished in 1817, in a passage containing a reference to Joken. Jūzō's words are repeated almost verbatim in the passage from *Taihei nenpyō* that is reproduced in Joken's “bequeathed works.” The excerpt consists of an entry concerning the second year of the Enkyō 延享 era (1745), i.e., the year Yoshimune retired from power. It reads as follows:

On the fourteenth day of the tenth month of that same year (1745), there were discrepancies in the Jōkyō calendar and, due to that, Nishikawa Chūjirō (Seikyū) was summoned for the purpose of rectifying the calendar. The note says: The shogun [Yoshimune], already before his ascension to the throne, had been applying his exceptional mind to [the study of] celestial signs and calendrical calculations. At the beginning of his reign, he would personally ask

⁶⁵ Nakamura, “*Tenmon kōyō*,” sec. *Kyūjūten* 九重天. Also quoted in Watanabe, *Kinsei Nihon tenmongakushi*, 1:39.

⁶⁶ See chapter four of the present study.

⁶⁷ Kokusho kankōkai, *Kondō Seisai zenshū*, 3:149. Also quoted in Koga, *Nagasaki yōgakushi*, 1966, 1:273–74.

questions to the bannerman (*yoriat*) Takebe Hikojirō [Katahiro] and also have Nakane Bun'emō [Genkei] from the Kyoto silver guild questioned. He had a certain skillful carpenter named Katō from Kii Province build a large armillary sphere. In the third year of the Kyōhō era (1718), a noon-measuring gnomon of [the shogun's own] creation was installed for the public at Fukiage [within the grounds of Edo castle]. That same year, [Yoshimune] summoned Nishikawa Joken from Nagasaki and had him present his writings; in the first year of the Enkyō era (1744), [Yoshimune] made a simplified armillary sphere by himself. That year, the simplified armillary sphere was placed in an observatory built in the neighborhood of Kanda Sakuma [in the area surrounding the Edo castle].

同年十月十四日貞享曆違ヒ有、之仍テ補曆之事西川忠次郎へ被仰付、注ニ曰ク。公潜邸ヨリ既ニ英意ヲ天文曆算ニ用ヒサセラレ、即位ノ始、寄合建部彦次郎へ親問セラレ、又京ノ銀座中根文右衛門へモ下問アリ。紀州良工加藤某へ大渾天儀ヲ作ラシメラル。享保三年御作ノ測午表ヲ吹上御表へ設ラル。同年西川如見ヲ長崎ヨリ召テ其著述ヲ呈進セシメ、延享元年簡天儀ヲ御親製アリ。此年神田佐久間町へ天文臺ヲ設ケ簡天儀ヲ置ル。⁶⁸

Yoshimune is depicted as a proactive ruler directly involved in the technical issues that interested him – reportedly conceiving his own astronomical instruments to make the necessary measurements for correcting the calendar. The shogun surrounded himself with specialists like Seikyū and also kept a handful of close advisors such as Takebe Katahiro 建部賢弘 (1664–1739), an expert in mathematics who aided him not only in astronomical and calendrical matters but also in cartographical calculations and land surveying.⁶⁹

3.1. *The first calendrical reform*

The Jōkyō calendar, which Seikyū was in charge of correcting, was implemented in 1685 (the second year of the Jōkyō era) and emerged from the calculations of Shibukawa Harumi, originally named Yasui Santetsu 安井算哲 after his father, from whom he had inherited the position of go player in the shogunal court. Harumi based his proposal on the Chinese Shoushi 授時 calendar from early in the Yuan 元 dynasty (1271–1368), and the reform marked the first time the imperial court at Kyoto adopted a new official calendar since

⁶⁸ “Nishikawa Joken itsuji” 西川如見逸事, in *Gusho rekishō zokkai* 虞書曆象俗解, vol. 1, 2 vols., Nishikawa Joken isho 西川如見遺書 1 (Tokyo, 1899).

⁶⁹ For an account of Takebe's role as Yoshimune's advisor see Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, chap. 7.

862.⁷⁰ The fact the imperial court did not carry out a comprehensive calendrical reform for over eight centuries was not necessarily a sign of scientific stagnation in the intervening period – the conventional interpretation of historians of science in Japan.⁷¹ Instead, more recent research on the subject reinforces that it can be more accurately ascribed to political circumstances not requiring a complete change in the system, especially as local calendars proliferated.⁷² With that in mind, one might ask what created the conditions in the early Tokugawa period that favored an overhaul of the calendrical system in the first place.

There was a long process that led to the calendrical reform five years into the reign of the fifth shogun Tokugawa Tsunayoshi 徳川綱吉 (1646–1709), more than a decade after Harumi first proposed a new calendar in 1673.⁷³ The decision to adopt a new calendar or not was ultimately a prerogative of the imperial court in Kyoto rather than the shogunate in Edo. The initiative for the Jōkyō calendrical reform, however, originated in the shogunal capital, where Hoshina Masayuki 保科正之 (1611–1673) – lord of the Aizu 會津 domain, half-brother of the third shogun Tokugawa Iemitsu 徳川家光 (1604–1651) and regent to his son, the fourth shogun Tokugawa Ietsuna 徳川家綱 (1641–1680) – showed a keen interest in the subject.⁷⁴ Masayuki appointed Shibukawa Harumi, together with the Confucian scholar Yamazaki Ansai 山崎闇齋 (1619–1682), to oversee the reform, having first held an audience with Harumi on the subject in 1667.⁷⁵

Harumi, besides being a disciple of Ansai, had also studied under Tsuchimikado Yasutomi 土御門泰福 (1655–1717), who in 1682 would take the position of “head of yin and

⁷⁰ While acknowledging Nathan Sivin’s argument for translating term *gaili* (Jp. *kaireki* 改曆) as “astronomical reform” for it refer to a change in what he calls “astronomical systems” (Ch. *li*, Jp. *reki*), i.e., “a step-by-step sequence of computations that generates such forecasts and assembles them to make a complete ephemeris,” I maintain the more familiar notion of “calendrical reform” throughout this study – without implying that it is equivalent to what is meant by the Gregorian reform in the European context. Nathan Sivin, *Granting the Seasons: The Chinese Astronomical Reform of 1280, with a Study of Its Many Dimensions and a Translation of Its Records*, Sources in the History of Mathematics and Physical Sciences (New York: Springer, 2009), 39. See also Frumer, *Making Time*, 61–67.

⁷¹ cf. Sugimoto and Swain, *Science and Culture in Traditional Japan, A.D. 600-1854*, 51–52. Nakayama Shigeru, while recognizing the undeniable political dimensions of the calendrical reform, depicts the intervening period between 862 and 1685 as a hiatus in the history of Japanese calendrical and astronomical sciences. Nakayama, *A History of Japanese Astronomy*, 69–73; Nakayama, *Nihon no tenmongaku*, 41–46.

⁷² Buhman, “Knowledge of Nature and Craft,” 369–73. On the disputes over different calendars in early medieval Japan, see Kristina Buhman, “The Stars and the State: Astronomy, Astrology, and the Politics of Natural Knowledge in Early Medieval Japan” (Ph.D. dissertation, Los Angeles, University of Southern California, 2012), chap. 6.

⁷³ A detailed account of Shibukawa Harumi’s role in the calendrical reform and his networks is given in Wei Yu Wayne Tan, “Science, Politics and Networks: Shibukawa Harumi and the Birth of the New Almanac in Seventeenth-Century Japan,” *Annals of Science* 71, no. 2 (2014): 1–30.

⁷⁴ See, for instance, Tan, 259; Kazu, *Tenmongakusha tachi no edo jidai*, 31; Frumer, *Making Time*, 61.

⁷⁵ Tan, “Science, Politics and Networks,” 258–59.

yang” (*on'yō no kami* 陰陽頭) at the imperial capital. This position meant that Yasutomi was the director of the “bureau of yin and yang” (*on'yōryō* 陰陽寮) responsible for astronomical and calendrical calculations, as well as timekeeping and prognostication. The existence of the bureau can be traced back to the end of the 7th century, with the establishment of the *ritsuryō* 律令 legal and administrative system that was adopted from the Sui 隋 (581–618) and Tang 唐 dynasties (618–907).⁷⁶ Its functions, varied at first, became gradually concentrated around prognostication, or “the way of yin and yang” (*on'yōdō* 陰陽道) so that by the 12th century the other divisions of the office had all disappeared.⁷⁷ During the Tokugawa period, the Tsuchimikado clan served chiefly as “yin and yang specialists” for the daily needs of the imperial family, occasionally performing ceremonies for the shogun as well.⁷⁸

Yasutomi belonged to one of the two hereditary families that dominated the practices surrounding “the way of yin and yang” since the Heian era. These families had their origins in the lineage of Abe no Seimei 安倍晴明 (921–1005) – the Abe family later becoming the Tsuchimikado – and the lineage of Seimei’s teacher Kamo no Yasunori 賀茂保憲 (917–977), whose descendants were later known as the Kōtōkui 幸徳井 family.⁷⁹ Before Yasutomi became “head of yin and yang,” the position had been occupied by members of the Kōtōkui clan, who were also in charge of producing the calendar since 1615.⁸⁰ It was thus a strategic move for Yasutomi to promote the reform of the calendar together with Harumi as the disputes between the Tsuchimikado and the Kōtōkui continued.

3.2. *Symbols of a virtuous ruler*

By the time Tokugawa Tsunayoshi came to power in 1680, the movement toward calendrical reform was well underway. Hoshina Masayuki was no longer alive, but Shibukawa Harumi kept working on the calculations for the new calendar in collaboration with Tsuchimikado Yasutomi, whose connections with the imperial court in Kyoto contributed to its final implementation. When Harumi presented his calendar to the

⁷⁶ See Sugimoto and Swain, *Science and Culture in Traditional Japan, A.D. 600-1854*, 31–42.

⁷⁷ Hayashi Makoto 林淳, *Kinsei onmyōdō no kenkyū* 近世陰陽道の研究 (Tokyo: Yoshikawa kōbunkan, 2005), 52.

⁷⁸ Hayashi, 62; Matthias Hayek, *Les mutations du yin et du yang: divination, société et représentations au Japon, du VI^e au XIX^e siècle*, Bibliothèque de l’Institut des hautes études japonaises (Paris: Collège de France, Institut des hautes études japonaises, 2021), 238.

⁷⁹ See Hayek, *Les mutations du yin et du yang*, 72–76 and 236–38.

⁸⁰ Tan, “Science, Politics and Networks,” 262; Hayek, *Les mutations du yin et du yang*, 238.

shogunate once again in 1683, ten years after his first proposal, he already had the support of the new shogun, who no doubt saw in this occasion a way of affirming the preeminence of his regime.⁸¹

As discussed, the 1680s marked the definitive end of the Ming dynasty in the continent, including the capitulation of scattered loyalists in southern China and Taiwan. The protracted conflict between Manchu forces and Ming loyalists had started over sixty years prior with the Jurchen incursions in northern China. The reign of Tsunayoshi emerged as the Kangxi 康熙 Emperor (1654–1722, r. 1661–1722) consolidated the Qing as the ruling dynasty of all of China. Adopting a new, locally developed calendar in Japan might have been understood as one of the many elements that distanced the Tokugawa regime from the “barbarians” that dominated the mainland.

Tsunayoshi promoted during his reign the ideal of a “humane governance” (*jimsei* 仁政), attempting to elevate the livelihood of commoners and even implementing measures to protect animal lives.⁸² The “humane governance” of a virtuous ruler preoccupied with improving the condition of his subjects was compatible with the adoption of a new, more accurate calendar to guide the people. Tsunayoshi started employing aides and scholars based on talent rather than birth, a practice that continued and was expanded under Yoshimune.⁸³

Due in part to the initiative of authority figures like Tsunayoshi and later Yoshimune, the center of gravity of scholarly production in 17th-century Japan was gradually distributed between Kyoto to Edo, although the former retained its prestige as the cultural capital. After the successful implementation of the Jōkyō calendar in 1685, the shogunate employed Shibukawa Harumi as its first official astronomer (*tenmonkata*), effectively installing a parallel bureau of “yin and yang specialists” in Edo. While this shift has traditionally been interpreted as the imperial court being usurped of its authority over calendar-making, recent research suggests that collaboration rather than competition was necessary between the imperial and shogunal courts to accomplish the Jōkyō reform.⁸⁴

The political expediency of the calendar reform under Tsunayoshi also applies to the one that was eventually accomplished in 1755, ten years after Yoshimune abdicated and four

⁸¹ Tan, “Science, Politics and Networks,” 264–65.

⁸² Beatrice Bodart-Bailey explains that this ideal “led to the paradox of new norms of nonviolence being enforced by traditionally violent forms of punishment,” so that mistreating animals could be punishable by death. Beatrice M. Bodart-Bailey, *The Dog Shogun: The Personality and Policies of Tokugawa Tsunayoshi* (Honolulu: University of Hawai'i Press, 2006), 245.

⁸³ Bodart-Bailey, 103.

⁸⁴ Kodama Shōgo 児玉祥吾, “*Jōkyō kaireki no jittai*” 貞享改暦の実態, in *Shin onmyōdō sōsho* 新陰陽道叢書, ed. Umeda Chihiro 梅田千尋, vol. 3 (Kadoma: Meicho shuppan, 2021).

after his death, known as the Hōryaku 寶曆 calendar.⁸⁵ As Yoshimune adjusted his grip on power, presenting an accurate calendar continued to be regarded as a priority and stood as a symbol of good governance.

The Jōkyō reform showed that adopting a new calendrical system was a lengthy process involving constant renegotiations between actors in the shogunal and imperial capitals of Edo and Kyoto respectively. Although the foundation of the office of the *tenmonkata* offered more leverage for the shogunate in subsequent discussions about the calendar, those employed there – such as the descendants of Shibukawa Harumi and Nishikawa Seikyū – still had to interact with the members of the Tsuchimikado family in Kyoto.⁸⁶ As the shogunate attempted to assemble a strong team of specialists on a variety of subjects that could serve the regime – including highly strategic astronomical and calendrical calculations – Nagasaki scholars were regarded as particularly useful sources of technical knowledge.

3.3. *Rectifying the calendar*

After Nishikawa Seikyū was appointed to work on the calendrical reform, he worked closely with the head of the bureau of yin and yang (*on'yō no kami*) in Kyoto, in the same way that Shibukawa Harumi had done more than sixty years before him. By 1745, the Shibukawa line in the shogunal astronomical bureau was represented by Harumi's still inexperienced grandnephew Shibukawa Noriyoshi 澀川則休 (1717–1750), so Seikyū took the lead in the project. Their counterpart in the imperial capital was Tsuchimikado Yasukuni 土御門泰邦 (1711–1784), the youngest son of Tsuchimikado Yasutomi, Harumi's teacher and collaborator in the reform that led to the Jōkyō calendar. The lineages involved in calendrical calculations remained the same, except for Seikyū, who belonged to a new generation of experts hired by Yoshimune. This fact is revealing of the changing political dynamics in mid-Tokugawa Japan, as the shogun asserted his position in relation to traditional symbols.

Purely technical reasons for a calendrical reform were not at the core of Yoshimune's project to amend the Jōkyō calendar implemented in 1685.⁸⁷ Even more than the Jōkyō calendrical reform – also largely determined by political factors – what came to be known as

⁸⁵ The name of the calendar is generally pronounced *hōryaku*, while the name of the era after which it is named, although written with the same characters, is known as *hōreki*.

⁸⁶ Cf. Frumer, *Making Time*, 70–74.

⁸⁷ Cf. Hirose Hideo 広瀬秀雄, “*Hōreki no kaireki ni tsuite*” 宝暦の改暦について, in *Onmyōdō sōsho* 陰陽道叢書, ed. Murayama Shūichi 村山修一, vol. 3 (Tokyo: Meicho shuppan, 1994), 369–89.

the Hōryaku calendar was part of large projects to consolidate Yoshimune's authority that included cosmological knowledge as one of their main components.

In the intervening period between the two calendrical reforms, political conditions changed considerably. After the nearly three-decade-long reign of Tsunayoshi since 1680, his nephew Tokugawa Ienobu 徳川家宣 (1662–1712) ascended to the throne in 1709 but died less than three years later. Ienobu was then succeeded by his four-year-old son Tokugawa Ietsugu 徳川家継 (1709–1716), who died four years later. Arai Hakuseki, employed as the main political advisor to Ienobu, became the *de facto* regent during Ietsugu's brief rule. In the few years that the child was nominally in power, Hakuseki was able to pass a number of economic reforms, including the so-called *Shōtoku shinrei* 正徳新例 (“New ordinances of the Shōtoku era”) that heavily regulated commerce with Chinese and Dutch merchants in Nagasaki, discussed in the first chapter of this study.

The political situation changed considerably after Yoshimune was appointed the successor to Ietsugu, ending the direct line of male heirs from the main Tokugawa branch. Yoshimune, a member of a cadet branch of the family and serving as lord of the Kii 紀伊 domain at the time of his appointment, was somewhat of an outsider in Edo. Once he came to power, he replaced Ietsugu's personal attendants with his own trusted men from Kii. Among those replaced was Hakuseki who, despite not losing his title and remaining in Edo for a few more years, would fade away from political decisions, eventually retiring to the outskirts of the shogunal capital and focusing on his writing.⁸⁸ The aforementioned Takebe Katahiro was one of the few scholars who, despite serving Ienobu, was continuously requested during Yoshimune's reign.

Although Hakuseki was no longer close to power, his “new ordinances” were not only maintained but also reinforced under Yoshimune.⁸⁹ These policies represented an enhanced focus on economic self-sufficiency and stability that also translated into shogunal approaches to knowledge and scholarship. The drive to reform the calendar can be understood as a way to ensure that the shogunate had full control of timekeeping, proving that he was a worthy ruler who took care of his people.

⁸⁸ See Kate Wildman Nakai, *Shogunal Politics: Arai Hakuseki and the Premises of Tokugawa Rule*, Harvard East Asian Monographs 134 (Cambridge: Harvard University Press, 1988), 76–78.

⁸⁹ Nakai, 109–14; Kasaya Kazuhiko 笠谷和比古, “Arai Hakuseki to Tokugawa Yoshimune: Tokugawa jūdai no seiji to honzō” 新井白石と徳川吉宗—徳川時代の政治と本草, in *Mono no imēji: honzō to hakubutsugaku e no shōtai* 物のイメージ・本草と博物学への招待, ed. Yamada Keiji 山田慶兒 (Tokyo: Asahi shinbunsha, 1994), 319–35.

3.4. *New books from the continent*

One passage that is often cited to corroborate the idea that the shogunal reform of the calendar was a way to display the sovereign's concern for his subjects is found in the semi-official shogunal history *Tokugawa jikki* 徳川實紀 (“Veritable records of the Tokugawa”), from the appendix (*furoku* 附録) to Yoshimune's section.

Since the study of celestial signs and the calendar is the essential duty of granting the seasons to the people, [Yoshimune] put all his heart into it. His inquiries extended naturally to Chinese and Japanese calendrical writings, and even to explanations from the Dutch, but the calendrical methods used at the time were largely defective with not a few errors.

天文曆學は民に時を授くるの要務なればとて、これに専ら御心を用ひ給ひ、和漢の曆書はさらなり、阿蘭の説までひろく御穿鑿有けるが、當時用らるゝ貞享の曆法疎脱多く、誤も又少からざるにやと。⁹⁰

As the *Tokugawa jikki* was written almost a century after the end of Yoshimune's rule, its author arguably projected back an idealized view of the shogun as a “benevolent ruler” in the tradition of the ancient Chinese classic *Shujing* – according to which the sovereign is supposed to “reverently grant the seasons to the people” (敬授人時) in the model of the mythical emperor Yao 堯.⁹¹ The passage from *Tokugawa jikki*, despite not necessarily reflecting Yoshimune's own stated intentions, captures the issues at stake pertaining to the significance of calendar-making. An inaccurate calendar – failing to predict eclipses for instance – could be construed as a sign of bad governance, or failure to effectively order a central aspect of the populace's livelihood. One way to better master the calendar, as the passage suggests, was to expand the sources of information available to the shogun and his advisors.

The rest of the passage states that, to rectify the calendar, Yoshimune consulted a disciple of Shibukawa Harumi named Ikai Seiichi 猪飼正一 (?–1741), also known as Hōjirō 豊次郎⁹² – who would later be appointed to the position of *tenmonkata* in 1736 – but the official was unable to satisfactorily respond to the shogun's requests for lack of technical knowledge. Yoshimune then turned to his advisor Takebe Katahiro, who recommended the Kyoto scholar Nakane Genkei 中根元圭 (1662–1733).

⁹⁰ Kuroita, *Tokugawa jikki*, 9:292. The punctuation in all passages cited from this edition have been adjusted for better readability.

⁹¹ Cf. Sivin, *Granting the Seasons*, 56.

⁹² His given name appears as Bunjirō 文次郎 in the passage.

According to this account, Genkei was not only able to answer Yoshimune's questions but also appointed to translate – i.e., provide the reading notations for – a compilation of technical works by Mei Wending titled *Lisuan quanshu* 曆算全書 (“Complete writings on calendrical calculations”), which had been brought aboard a Chinese junk around that time. The passage continues with the information that this book was part of an even larger collection titled *Xiyang lijing* 西洋曆經 (“Calendrical classics from the West”) – taken to refer to the massive compilation *Xiyang xinfa lishu* 西洋新法曆書 (Calendrical writings on the new methods from the West),⁹³ a revised and renamed edition from 1644 of the earlier compendium of Jesuit technical knowledge titled *Chongzheng lishu* 崇禎曆書 (“Calendrical writings of the Chongzheng era”), originally started by the convert Xu Guangqi 徐光啓 (1562–1633) and later reviewed by the Jesuit Johann Adam Schall von Bell (1591–1666).⁹⁴

The passage concludes that it was Genkei who told Yoshimune that, to make the study of calendrical calculations more accurate in Japan, it was first necessary to relax the strict ban on writings related to the “Lord of Heaven” or Matteo Ricci for there were not enough books available that served that purpose (本邦には耶蘇宗を厳しく禁じ給ふにより、天主また利瑪竇などの文字ある書は、ことごとく長崎にて焼捨るをきてなれば、曆學のたよりとする書甚だ乏し。本邦の曆學を精微にいたらしめむとの御旨ならば、まづこの嚴禁をゆるべ給ふべしと建議せしといへり).⁹⁵

There are, however, a couple of issues with this account, a point that has been explored in some detail in previous studies.⁹⁶ First, the passage implies that Mei Wending's works in *Lisuan quanshu* were “extracted” (*shōroku* 抄録) from *Xiyang lijing* – that is, *Xiyang xinfa lishu* – justifying the need to import the whole compilation (曆算全書は西洋歴經の書本のうちより抄録せしものなりしかば、西洋歴經の書本をもて参りぬ).⁹⁷ While this could be interpreted to mean that the works in *Xiyang xinfa lishu* constituted the scholarly basis necessary to understand Mei Wending's works,⁹⁸ hence the suggestion to have the whole collection imported, the passage makes it sound as if *Lisuan quanshu*, itself a compilation, were

⁹³ This identification is established in Ebisawa, *Nanban gakutō no kenkyū*, 147.

⁹⁴ On this compendium, see Pingyi Chu, “Archiving Knowledge: A Life History of the *Calendrical Treatises of the Chongzhen Reign (Chongzhen Lishu)*,” *Extrême-Orient, Extrême-Occident*, no. Hors série (2007): 159–84, <https://doi.org/10.3406/oroc.2007.1074>.

⁹⁵ Kuroita, *Tokugawa jikki*, 9:292.

⁹⁶ For a translation of the whole passage from *Tokugawa jikki* and a discussion of the main issues, see Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, 221–27. The issues are addressed earlier in Ebisawa, *Nanban gakutō no kenkyū*, 141–52.

⁹⁷ Kuroita, *Tokugawa jikki*, 9:292.

⁹⁸ Ebisawa, *Nanban gakutō no kenkyū*, 147; Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, 224.

part of *Xiyang xinfa lishu*, which predates Mei's collection by over eighty years. Second, *Lisuan quanshu* was organized posthumously, being published only in 1726 – there are records of it reaching Japan that year – six years before Yoshimune partially lifted the ban on Jesuit-associated titles. Although the collection was eventually glossed by Genkei and published with a preface from Takebe,⁹⁹ entering the shogunal collection in 1733, it is chronologically impossible for it to have motivated Yoshimune's decision in 1720.

It has been identified that early in Yoshimune's reign the shogunal library contained another compilation of works by Mei Wending, similarly titled *Lixue quanshu* 曆學全書 (“Complete writings on calendrical studies”), which can be dated to 1706.¹⁰⁰ One could speculate that this collection might have been available in Japan before 1720 and could thus be the one first translated by Genkei, who then requested that more of Mei's writings be brought to Edo, contributing to the relaxation of the ban that eventually led to *Lisuan quanshu* being imported in 1726.¹⁰¹ This hypothesis, albeit intriguing, still does not explain how either collection of Mei Wending's works could be considered part of an even larger compilation titled *Xiyang lijing* – even if one assumes that this is not the same as *Xiyang xinfa lishu* – nor does it completely clarify the contradictions in *Tokugawa jikki*'s account about the timing of *Lisuan quanshu* reaching Japan. At any rate, the fact that Yoshimune was willing to cast a wide net to obtain technical cosmological knowledge is abundantly clear – and Sinitic texts were not his only sources of information.

4. Gathering knowledge from the Dutch

Yoshimune's overall policies prioritized political and economic reform, with particular emphasis on regulating commerce and stabilizing the finances of his government. A key strategy for achieving these goals was to reduce the country's reliance on imports, promoting instead the local production of goods. It may seem contradictory that a shogun intent on boosting local production would turn to knowledge from abroad to build a more self-reliant state, but this tension was at the core of Yoshimune's strategies. Acquiring botanical

⁹⁹ A translation of the entire preface is available in Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, 225–26.

¹⁰⁰ Kobayashi Tatsuhiko 小林龍彦, “Momijiyama bunko ni shūzō sareru Bai Buntei no chosaku ni tsuite” 紅葉山文庫に収蔵される梅文鼎の著作について, *Kagakushi kenkyū* 科学史研究 41, no. 221 (2002): 26–34.

¹⁰¹ Kobayashi, 28.

knowledge from a variety of sources – Dutch, Chinese, Japanese, or otherwise – went hand in hand with projects to reduce the country’s reliance on expensive imported goods such as ginseng and sugar.¹⁰² A similar logic applies to his cartographical, astronomical, and calendrical practices. In order to strengthen his government with a reliable calendar, Yoshimune was willing to look wherever he could for old and new knowledge that could be put to good use.

Besides working on a calendrical reform, another reason for obtaining astronomical knowledge was to produce a new map of the entire Japanese archipelago, improving on the last map from 1697, finished during Tsunayoshi’s reign. The technical responsibility for Yoshimune’s map, completed in 1723, eventually fell on his trusted advisor Takebe Katahiro, appointed in 1719 to the task of supervising the necessary measurements, two years after they had already begun.¹⁰³ Takebe also continued to be highly involved in the reform of the calendar on which Nishikawa Joken and Seikyū were consulted.

As a reformer, Yoshimune set to build on the legacy of his predecessors while making some significant changes in personnel – the new proposed calendar and map being the prime examples. Before Joken and Sōsetsu were summoned to Edo in 1719, shogunal authorities and the shogun himself were already scouring books, looking for instruments, making new measurements, and consulting VOC merchants to obtain as much astronomical and geographical information as possible to bring his projects to fruition.

In late December 1716 – only a few months after Yoshimune had ascended to the throne – *opperhoofd* Johan Aouwer recorded some meaningful encounters in his official journal. He writes that on December 21, 1716, a group of senior administrators (*otona* 乙名) and “overseers” (*dwarstkijkers*),¹⁰⁴ together with the two senior interpreters Namura Hachizaemon 名村八左衛門 (1670–1725)¹⁰⁵ and Imamura Eisei, brought with them to Dejima an “old

¹⁰² Kazuhiko Kasaya, “The Tokugawa Bakufu’s Policies for the National Production of Medicines and Dodonæus’ *Cruydeboek*,” in *Dodonæus in Japan: Translation and the Scientific Mind in the Tokugawa Period*, ed. Willy vande Walle and Kazuhiko Kasaya (Leuven: Leuven University Press, 2001), 167–84; Marcon, *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan*, 120–24.

¹⁰³ Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, 209–14.

¹⁰⁴ The term *dwarstkijker* (“spy”) referred in general to shogunal “inspectors” (*metsuke* 目付) who provided the regime with different types of intelligence. In this case, the position probably refers to *tsūji metsuke* 通詞目付 (“interpreter-inspectors”) who were in charge of overseeing the group of interpreters, especially in such visits to Dejima. See Bachofner and Velde, *The Deshima Diaries*, 563; Matsukata et al., *Jūkyū seiki no Oranda shōkan*, 2:498.

¹⁰⁵ His ancestor of the same name, Namura Hachizaemon 名村八左衛門 (?–1674), appears in *Nagasaki senmin den* as one of the original interpreters for the Dutch while they were still in Hirado, i.e., before 1641. Wakaki, Takahashi, and Kawahira, *Nagasaki senminden chūkai: Kinsei nagasaki no bun’en to gakugei*, 104–5.

man” (*oudman*), whom they described as a “learned scholar of his craft” (*geleerd student van zijn ambagt*).¹⁰⁶

Per request of the *machi doshiyori* 町年寄 (“city elder”) Takagi Sakuemon Chūei 高木作右衛門忠榮 (1687–1723), the VOC merchants were to “provide this old fellow with the names of the main cities and places in Europe so that he could then render them into Japanese in a map that he had brought along for that purpose” (*aan desen ouden gast op te willen laten geven de namen van de principaalste steden en plaatsen van Europa, die hij dan vervolgens in de landkaart, door hem ten dien eijnde mede gebracht, in het Japans zoude setten*).¹⁰⁷ Aouwer recounts accepting the request and entrusting him and his clerks (*schrijvers*) to bookkeeper Van der Werff, deemed to be the most suited to assist them (*de bequaamste daar toe zijnde*).¹⁰⁸ As the activities of the scholar and the clerks extended over a few days, on December 24, 1716, the VOC merchants received a visit from Sakuemon himself, who came to observe the task being performed for that day. According to Aouwer’s account, he and Sakuemon were on friendly terms and exchanged pleasantries via the interpreters.¹⁰⁹

Aouwer, who referred to Sakuemon Chūei as the shogun’s “steward” or “bailiff” (*ʼs keijzers rentmeester*),¹¹⁰ was aware of his elevated status and proximity to the central authorities and made sure that Sakuemon Chūei was contented with the contribution of the VOC. Aouwer led Sakuemon Chūei into the chamber of the bookkeeper van der Werff, where the “old scholar” was busy with his clerks transcribing the names of countries into Japanese on the map in the presence of the aforementioned grand interpreters, the overseers, and the *otona*. As Sakuemon sat in the room watching over the task, he explained that he was going to bring the map with him when he left for Edo the next month to present himself to the new shogun. Aouwer writes that Sakuemon, through the interpreters, expressed his “utmost gratitude” (*gantsch vriendelijk bedanken*) toward Aouwer for agreeing to help the “old scholar” (*den*

¹⁰⁶ Johan Aouwer, “Dagregister (1716 november 3 - 1717 oktober 24)” (Manuscript, 1716–1717), 31, Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860, Nationaal Archief, https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/127/file/NL-HaNA_1.04.21_127_0001. The English translation of the journal’s marginalia offers the ambiguous term “scientist.” Bachofner and Velde, *The Deshima Diaries*, 206.

¹⁰⁷ Aouwer, “Dagregister (1716 november 3 - 1717 oktober 24),” 31.

¹⁰⁸ Aouwer, 31; Bachofner and Velde, *The Deshima Diaries*, 206.

¹⁰⁹ Aouwer, “Dagregister (1716 november 3 - 1717 oktober 24),” 31.

¹¹⁰ Aouwer, 32. *Rentmeester* refers normally to the position of *daikan* 代官 (“acting administrator”), who represented the highest shogunal authority in the city next to the *bugyō* 奉行 (“magistrate”). In the case of Nagasaki, this position was occupied by one of the *machi doshiyori* such as Takagi Sakuemon. Cf. Bachofner and Velde, *The Deshima Diaries*, 567; Matsukata et al., *Jūkyū seiki no Oranda shōkan*, 2:500.

ouden studiosen), as he would offer the map to “his Japanese majesty” (*zijn Japance majesteit*) himself, i.e., Yoshimune.¹¹¹

As Aouwer’s account shows, interactions between local scholars and VOC merchants were not a private matter, quite the opposite. The process of consulting the Dutch involved a large number of stakeholders, ranging from interpreters to various Nagasaki officials in close connection with the shogunal power. This episode demonstrates that scholars who possessed cosmological knowledge and had access to maps could indirectly consult the Dutch to update the information they had, especially if the ultimate purpose was to fulfill a shogunal request.

The identity of the “old man” required to work on the maps is difficult to determine. The timing suggests that it could be someone like Nishikawa Joken – by this time already in his late sixties – who was to receive the shogunal summons three years later. It is also possible that Ro Sōsetsu – almost thirty years younger than Joken – was among the clerks accompanying the old scholar. Sōsetsu was an interpreter and, although he translated for the Chinese rather than for the Dutch, there was considerable interaction between the two groups. Moreover, one of the books listed in the Ro archives – titled *Kōmō yakuwa* 紅毛譯和 (“Rendering the [language of the] red-haired into Japanese”)¹¹² – suggests that Sōsetsu might have also learned some Dutch. In any case, these events preceding Joken’s and Sōsetsu’s trip to Edo by a couple of years already signal Yoshimune’s interest in cosmological knowledge from Nagasaki since the very beginning of his rule.

4.1. *The shogun’s many requests*

In his journal entry from April 9, 1717, *opperhoofd* Aouwer records his first visit to Edo after Yoshimune came to power. He writes that, while in the shogunal castle, he and the other delegates were greeted by the Nagasaki magistrate Ōoka Kiyosuke 大岡清相 (1679–1717), who brought with him a damaged astrolabe, asking whether there was a way to fix it (*quam de Heer Bizeen*¹¹³ *en bragt een astrolabium t’ eenemaal ontramponneert, mijn vragende of daar mede omkonden gaan*). Aouwer replied that none of them – he was accompanied by two other VOC men – knew anything about it (*ik liet antwoorden geen van ons drien sig daar op verstond*).¹¹⁴ This was

¹¹¹ Aouwer, “Dagregister (1716 november 3 - 1717 oktober 24),” 33.

¹¹² Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 4. See Appendix H.

¹¹³ This refers to the Nagasaki magistrate’s title as Lord of Bizen (*Bizen no kami* 備前守).

¹¹⁴ Aouwer, “Dagregister (1716 november 3 - 1717 oktober 24),” 122; Bachofner and Velde, *The Deshima Diaries*, 209.

immediately followed by several other questions on behalf of the shogun, concerning such disparate topics as whether falconry was practiced in the Netherlands and the possibility of bringing Dutch horses to Japan.

The astrolabe was eventually sent to Dejima, where on October 13, 1717, it was shown to two skippers and the factory's bookkeeper, who "was an engineer in the fatherland" (*in 't vaderland ingenieur geweest ist*). Although none of them knew how to make it work (*geen van haar drien wist daar mede om te gaan*), they concluded that "it was not an astrolabe but rather an instrument used for something else, which they did not understand" (*het geen Astrolabium was, maar een werktuig dat dat ijts anders gebruikt wierd, daar zij haar niet op verstonden*).¹¹⁵ These two episodes concerning a puzzling "copper instrument" appearing to be an astrolabe but which the Dutch could not quite identify are emblematic of the tentative responses that VOC employees gave to shogunal requests early in the reign of Yoshimune. Despite the merchants' willingness to collaborate and provide useful information on a range of topics, more often than not they lacked the necessary knowledge to answer all the questions.

Unlike the strategy of the Jesuits – who, particularly after the success of Matteo Ricci in China, would specifically ask their superiors to send missionaries well-versed in astronomy or other subjects that could interest their interlocutors in East Asia – VOC directives were clear about dispatching to Japan officers without any knowledge of the local language who focused on trade rather than scholarly pursuits.¹¹⁶ This "business-only" approach was often evoked by the *opperhoofden* in their interactions with interpreters and authorities to reiterate their commitment not to meddle in Japanese political affairs – or worse, engage in proselytism like the Iberians before them.

Nevertheless, requests to collaborate on a wide range of activities such as repairing clocks and astronomical instruments, or aiding in the translation of maps and books would only increase. Aouwer records that on April 11, 1717, two days after they were shown the astrolabe-like instrument, senior interpreter Nakayama Kizaemon 中山喜左衛門 came once again in the name of Nagasaki magistrate Ōoka Kiyosuke and produced a printed book "from the shogun's cabinet of curiosities" (*uijt 's keijzers raritejtkamer*) that had been offered in 1663 by *opperhoofd* Hendrick Indijck to the fourth shogun Tokugawa Ietsuna.¹¹⁷ This book was

¹¹⁵ Aouwer, "Dagregister (1716 november 3 - 1717 oktober 24)," 322.

¹¹⁶ Leonard Blussé, "A Glimpse behind the Screens: Some Remarks on the Significance of the Deshima Dagregisters for the Study of Tokugawa Japan," in *The Deshima Diaries: Marginalia 1700-1740*, ed. Rudolf Bachofner and Paul van der Velde, Nichi-Ran Gakkai Gakujutsu Sōsho 12 (Tokyo: Japan-Netherlands Institute, 1992), xv–xxiii.

¹¹⁷ Aouwer, "Dagregister (1716 november 3 - 1717 oktober 24)," 126–27; Bachofner and Velde, *The Deshima Diaries*, 209.

Naukeurige Beschryving Van de Natuur der Vier-voetige Dieren, Vissen en Bloedlooze Water-Dieren, Vogelen, Kronkel-Dieren, Slangen en Draken (“Accurate description of the nature of four-footed creatures, fish and bloodless water creatures, birds, writhing creatures, snakes and dragons”), a 1660 Dutch edition of a work originally written in Latin by Polish naturalist Jan Jonston (1603–1675). Aouwer was asked whether they could provide the name of the animals described in the book so they could be written in Japanese (*of wij de namen der dieren die daar in stonden niet konden afgeven, omme in de Japance taal afgeschreven te werden*).¹¹⁸

Aouwer replied that while it was possible to do so, that would require a long time given its considerable length, so the book was returned to the magistrate and the Dutch were told it might be sent to Nagasaki for them to work on the translation. This request by Yoshimune marked a first step toward the possibility of having Dutch books translated, which had not been done until this point. This unusual request was only the beginning of the VOC visit to Edo that year. The next day, April 12, 1717, the delegates had a six-hour audience with close shogunal advisors and Yoshimune himself, who had broken protocol and decided to see them in person. Among the Dutch merchants was senior physician Willem Wagemans, who had made the trip to Edo several times and had the opportunity to interact with Japanese physicians, being able to acquire some level of proficiency in the language. Yoshimune was amused by Wagemans’s knowledge of spoken Japanese, asking him to say a few phrases and having him and another delegate sing, dance, and even fence.¹¹⁹

After their long audience with the shogun, Aouwer and his colleagues were asked whether they could repair a large clock (*groot horlogie*) that was made in The Hague and had “the hours on its face engraved in Dutch and Japanese numerals” (*bij het uurwijzer was het uur getal in ’t hollands en japans cijffer gegraveerd*).¹²⁰ As they were not able to open the clock, the VOC officers returned to their residence in Edo without being able to fix it, but *opperhoofd* Aouwer expressed his embarrassment and apologized profusely in his interaction with the Nagasaki magistrate the next day. By all evidence, the VOC delegates were neither unwilling to cooperate nor annoyed by the interactions. Despite many of the requests going far beyond their competence, the records of the *opperhoofden* attest to their attempt to fulfill them as much as possible.

¹¹⁸ Aouwer, “Dagregister (1716 november 3 - 1717 oktober 24),” 126–27; Bachofner and Velde, *The Deshima Diaries*, 209.

¹¹⁹ Bachofner and Velde, *The Deshima Diaries*, 209.

¹²⁰ Aouwer, “Dagregister (1716 november 3 - 1717 oktober 24),” 142; Bachofner and Velde, *The Deshima Diaries*, 210.

4.2. *A peculiar Dutch book*

In the second court journey of the VOC during Yoshimune's rule, the shogun did not have the delegates repeat the performances of the previous year, but the technical questions only intensified. On March 28, 1718, *opperhoofd* Christiaen van Vrijeberghe, taking Aouwer's place for that year, starts his journal entry reporting from Edo that "senior interpreter (Namura) Hachizaemon was called by a servant of the shogun, toward whom His Majesty showed great affection, and, coming back in toward noon, said that [the servant] had asked him many curious questions regarding Dutch horses, strange animals, etc., and finally also about Dutch commercial affairs" (*werd den oppertolk Fatsizemon geroepen bij en lijff dienaar van den Keijser, dien Sijn Majt veel geneegentheit toe dragt, en na den middag te rug koomende, zeyde, dat hem veel curiuse vragen hadde gedaan, wegens hollandse paarden, vreemde gediertens etc en eijndelijk ook wegens de Hollandse negotie zaak*).¹²¹

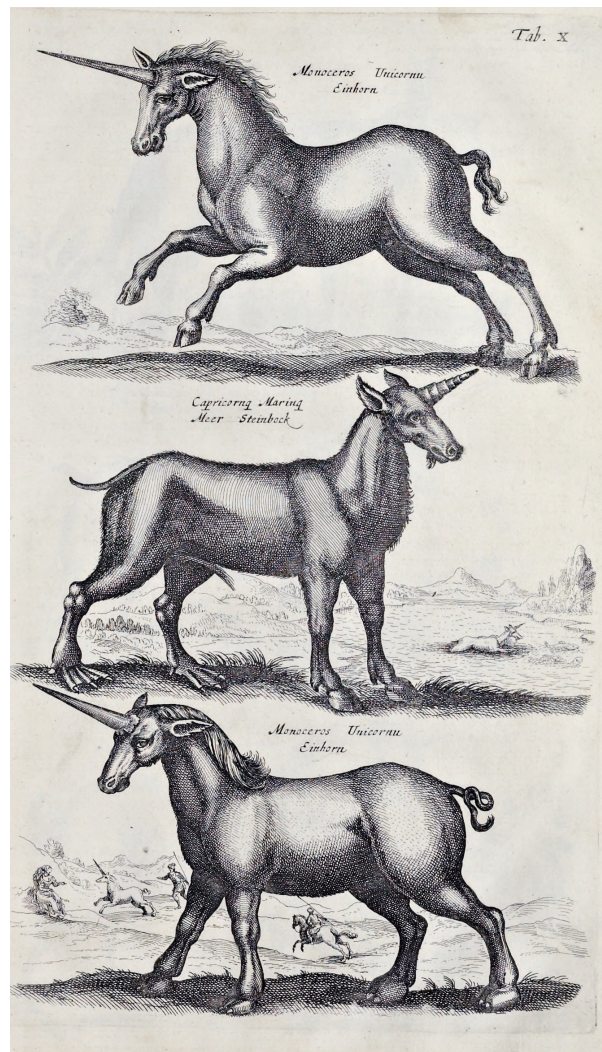
These questions show how Yoshimune and his entourage started to focus less on the commercial contribution of the VOC than on their potential as informants – or even technical advisors. Such an approach is consistent with the shogun's economic reforms. As noted, when it came to transnational commerce, Yoshimune continued in the lines of Arai Hakuseki, who strove to prevent the outflow of precious materials such as gold and silver from the archipelago. Instead of overly relying on the Dutch or the Chinese for imported goods, Yoshimune's policies strictly regulated commercial transactions but offered the means for knowledge to circulate more easily by relaxing the ban on Jesuit-adjacent writings or ordering the translation of Dutch books.

On March 29, 1718, Van Vrijeberghe and his colleagues went to the castle and prostrated themselves in front of the shogun but did not see him in person. The next day, March 30, 1719, senior interpreter Hachizaemon brought out Jonston's book that Aouwer had been shown the previous year and asked once again whether the Dutch could aid in the translation. They were asked to give the names of the creatures depicted, as well as in what lands they were to be found, and if any of them had ever seen these animals (*hare namen op te geven, als mede in wat landen gevonden wierden, en off imand van ons die gezien hadden*); the *opperhoofd*

¹²¹ Christiaen Vrijeberghe, "Dagregister (1717 oktober 24 - 1718 oktober 13)" (Manuscript, 1717–1718), 116–17, Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860, Nationaal Archief, https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/128/file/NL-HaNA_1.04.21_128_0001.

declares that they fulfilled this task as much they could (*dat na vermoogen wierd volbragt*) for the translation was to be presented to the shogun (*om aan den keijzer over gegeven te werden*).¹²²

As the VOC merchants themselves did not master the Japanese language, the translation of the names would doubtlessly be performed by the interpreters. Although there is ample evidence that interpreters were by this point quite capable of reading Dutch and pronouncing Dutch words, it is the Dutch officers themselves who are required to provide the names of the animals. As Van Vrijeberghe indicates, the purpose was not merely to have the names of strange creatures rendered into Japanese; VOC officers were expected to confirm the existence of these animals and corroborate the veracity of the accounts. By doing so, the Dutch delegates played an active role in redefining epistemological boundaries in Tokugawa Japan as somewhat unwitting knowledge brokers to the regime.



¹²² Vrijeberghe, 128.

Figure 3.4. Two unicorns (top and bottom) and a “sea ibex” (middle) as depicted in *Naeukeurige Beschryving Van de Natuur der Vier-voetige Dieren, Vissen en Bloedlooze Water-Dieren, Vogelen, Kronkel-Dieren, Slangen en Draken* (Getty Research Institute)

The intermittent and mediated reading of Jonston’s book with assistance from the Dutch continued for several years. Entries as late as 1723 and 1729 mention requests for providing the names of animals so that they could be transcribed into Japanese. This work, together with *Cruydeboeck* (“Herbal”), written in 1554 by Rembert Dodoens (1517–1585),¹²³ was later studied by the shogunal scholar Noro Genjō 野呂元丈 (1694–1761), who in 1741 produced a short work titled *Oranda kinjū chūgyo zu waga* 阿蘭陀禽獸蟲魚圖和解 (“Japanese explanations of Dutch illustrations of birds, beasts, bugs, and fish”) after many encounters with the VOC delegates and much assistance from interpreters.¹²⁴

In both visits to Edo by Aouwer in 1717 and Van Vrijeberghe in 1718, besides answering the questions that Yoshimune asked via the interpreters, the VOC delegates also received visits from Kurisaki Dōu 栗崎道有 (1664?–1726), a court doctor from Nagasaki to whose family Ro Senri’s biological father belonged. Dōu, employed in Edo since 1691, had been calling in at the VOC officers during their trip to the shogunal capital since at least 1698, when he first appears in the *opperhoofden*’s journals.

Between 1698 and his death in 1726, Dōu’s name was mentioned thirty times in the Dutch journals.¹²⁵ The fact there was always a physician (*chirurgijn*) at Dejima who would make the trip to the shogunal capital – such as Willem Wagemans, who entertained Yoshimune with his language skills – meant that there was a constant stream of knowledge exchanged between these physicians and Japanese scholars. Medical fields, notably surgery, were closely associated with “barbarian” knowledge in Nagasaki, and the Kurisaki clan was a representative example of these interactions. In both Nagasaki and Edo, there were considerable overlaps between medical and cosmological knowledge and those who possessed it. As noted, the two shogunal astronomers who went to see the VOC delegates in 1719 were accompanied by a physician. While there is the possibility that the doctor mentioned in *opperhoofd* Aouwer’s journal entry from April 1719 might have been Kurisaki Dōu himself, this

¹²³ On the impact of this work in Europe and Japan, see Willy vande Walle and Kazuhiko Kasaya, eds., *Dodonaeus in Japan: Translation and the Scientific Mind in the Tokugawa Period* (Leuven: Leuven University Press, 2001).

¹²⁴ Regarding the impact of these two books on Edo scholars, see Marcon, *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan*, 127–39.

¹²⁵ Ōtori Ranzaburō 大鳥蘭三郎, “Kurisaki Dōu den hoi” 栗崎道有伝補遺, *Nihon ishigaku zasshi* 日本医史学雑誌 15, no. 1 (1969): 1–5.

seems unlikely since he was identified by name the two previous years, including during Aouwer's tenure in 1717.

4.3. *Continuous questioning*

After aiding in the translation of *Naeukeurige Beschryving Van de Natuur der Vier-voetige Dieren, Vissen en Bloedlooze Water-Dieren, Vogelen, Kronkel-Dieren, Slangen en Draken* and having the usual visit by the physician Dōu, Van Vrijeberghe and his men still received more demands from Yoshimune. In his journal entry for March 31, 1718, the *opperhoofd* records receiving a piece of paper with different questions they had to answer – the responses were to be reported to the shogun himself (*aan de Keijzer vertond te werden*).¹²⁶ They were similar to the questions posed to Aouwer but even more specific.

Van Vrijeberghe wrote down seven questions in total. The first three concerned horses, one of the shogun's recurrent interests – whether Dutch horses were sturdier than Japanese ones (yes); whether they could be brought to Japan (no, for it was too long of a journey); whether horses in Batavia were sturdier and better than Japanese ones (not particularly). The fourth question was whether the VOC merchants, “who traveled around the whole world, could bring any strange animals to his majesty” (*off wij die de gantsche weereelt door reijdsden, geen vreemde gediertens voor sijn majesteijt konde mede brengen*); to which the *opperhoofd* replied that, when they encountered any unusual beasts, they would have them sent there (*als wij zeld saame beesten ontmoeten, die herwaarts aan zouden voeren*).¹²⁷ The fifth question was whether they could bring any cassowaries with them, and the answer was that they could.

The sixth and seventh questions are the most meaningful for the purposes of this study, even though the merchants' replies were hardly satisfactory. The sixth question was two-in-one: if any of them understood land surveying (*off nimand van ons het land meten verstonde*) and if they had instruments for measuring the altitude of the sun (*en off wij daar toe, en om de sons hoogte te pijlen geen instrumente hadden*).¹²⁸ The *opperhoofd*'s answer was negative to both queries. The last question was “at what latitude can one see the Southern Star” (*op wat breete men de Zuidster konde sien*), to which Van Vrijeberghe replied that he was no astronomer, so he was unable to answer – besides, there are so many stars in the south, they did not know which one they meant (*ik zeijde geen starre kundige te weesen in daarom dit niet konde se antwoorde, te meer er soo*

¹²⁶ Vrijeberghe, “Dagregister (1717 oktober 24 - 1718 oktober 13),” 131.

¹²⁷ Vrijeberghe, 132.

¹²⁸ Vrijeberghe, 133.

veel starren om de zuijd waren wij ook niet verstonen welke gemeente wierd). The *opperhoofd* concludes after this statement that “thus came this wretched interrogation to an end” (*en hier mede was dese verdrietige interrogatie ten eijnde*),¹²⁹ suggesting a certain bewilderment with all the requests from Yoshimune.

Despite the seeming arbitrariness of the shogun’s questioning, they reveal specific strategies for consolidating his authority – namely, mastering the patterns of heaven and earth, and possessing horses and exotic animals from around the world that could symbolize his power. Yoshimune would even have an elephant brought to Edo at some point. In 1727, he ordered a male and a female specimen from Tonkin merchants, and, although the female died three months after arriving in Nagasaki in 1728, the male one would be paraded to the shogunal court, stopping at Kyoto to be displayed before the emperor.¹³⁰ It has been misreported that the elephants were brought by the VOC,¹³¹ but that information is not corroborated by the sources.¹³² Although elephants are mentioned in the *opperhoofden*’s journals as early as 1717, when Aouwer was asked about their size,¹³³ the VOC officers themselves record first in 1727 being told by Imamura Eisei that the “Chinese”¹³⁴ were going to import an elephant,¹³⁵ and in 1729 that the captain of the Chinese junk (*wankang*) was rewarded 1200 chests of copper while the two keepers each received 50 chests of coppers for their services.¹³⁶

The numerous interactions recorded in VOC sources amply demonstrate that shogunal projects for knowledge acquisition spanned a variety of subjects that were inextricably intertwined. As the demands for exotic animals illustrate, Yoshimune’s projects had very concrete, material dimensions that extended to Dutch and Chinese merchants alike.

¹²⁹ Vrijeberghe, 132.

¹³⁰ See Ōba Osamu 大庭脩, “*Kyōhō-ban ‘zō’ no subete*” 享保版「象」のすべて, in *Mono no imēji: honzō to hakubutsugaku e no shōtai* 物のイメージ・本草と博物学への招待, ed. Yamada Keiji 山田慶兒 (Tokyo: Asahi shinbunsha, 1994), 92–114.

¹³¹ Cf. Timon Screech, *The Lens Within the Heart: The Western Scientific Gaze and Popular Imagery in Later Edo Japan* (University of Hawaii Press, 2002), 39. Screech goes as far as ascribing all the agency to the Dutch, arguing that “elephant-shipping was a self-ingratiating European ploy designed to curry favour with regional panjandrums.”

¹³² For an overview of primary sources concerning how the Vietnamese elephants were brought to Japan, see Phan Hài Linh, “*Zenkindai Betonamu ni okeru zō no kokkateki kanri to zō bōeki*” 前近代ベトナムにおける象の国家的管理と象貿易, *Senshū daigaku shakai chisei kaihatsu sentā Higashi Yūrashia kenkyū sentā nenpō* 専修大学社会知性開発研究センター古代東ユーラシア研究センター年報 4 (2018): 143–59.

¹³³ Bachofner and Velde, *The Deshima Diaries*, 210.

¹³⁴ As indicated previously in this study, trading vessels that came to Nagasaki from Southeast Asia had a largely Chinese-speaking crew and were grouped together under the general term of “Chinese junk” (*tōsen* 唐船) or *wankang* in VOC sources.

¹³⁵ Bachofner and Velde, *The Deshima Diaries*, 321.

¹³⁶ Bachofner and Velde, 353.

The shogun kept his pool of purveyors – of information, goods, and even living beings – as large as possible.

For achieving his political goals, astronomical expertise was paramount. Its significance was twofold: it contributed both to Yoshimune’s plan to redraw a general map of Japan and to his desire to rectify the Jōkyō calendar. His questions concerning land-surveying instruments and the latitude from where one could see southern polar stars fitted into this larger framework. As the responses from the VOC merchants were not always satisfactory, the shogun did not hesitate to consult as many sources as he could – hence Sōsetsu’s and Joken’s trip to Edo.

5. Piecing the questions together

Although the exact questions Yoshimune asked Joken and Sōsetsu in 1719 have not been recorded, their overall content can be extrapolated from the queries addressed to the VOC merchants and the letters that Sōsetsu, Mukai Gensei, and the interpreter Imamura Eisei sent to the shogunal official Watanabe Gunzō in 1726.

Mukai Gensei explains in his first letter to Gunzō – dated the twenty-eighth of the seventh month (August 25, 1726) – that, during Joken’s and Sōsetsu’s visit to Edo, the two men were asked about how to determine the “altitude of the heavens” (*ten no takasa tsumori* 天之高さ積り) but replied that they were not aware of any methods of calculation (怒見・草拙江戸へ參上仕候時分兩人に御尋御座候へとも何も算法ハ不存候由申上候).¹³⁷ This line of questioning is consistent with what Van Vrijeberghe was asked in 1718, a year prior to their visit, regarding the height of the sun. One can surmise that since the *opperhoofd* was unable to provide an answer, Yoshimune decided to summon both Sōsetsu and Joken to Edo the next year around the same time as the VOC delegates. As evidenced by Gensei’s letter, however, the issue remained unresolved seven years later – which would justify Gunzō making the trip to Nagasaki to consult Sōsetsu, Gensei, and the interpreter Eisei.

The letter continues by reporting that Sōsetsu had stated that Gensei devised his own calculations, which he was then requested to write down and present to Gunzō (草拙申上候

¹³⁷ See Appendix F for all of Gensei’s letters. They are reproduced from Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen.’*” See Appendix F for all of Gensei’s letters.

は此算法は元成工夫仕候由申上候ニ付、右之算法書付候て指上様ニと御事故算法を書付指上申候).¹³⁸ Gensei, who lived in Kyoto during his youth after his father Genshō moved there in 1658, had received mathematical training under Sawaguchi Kazuyuki 澤口一之 (dates unknown), author of *Kokon sanpōki* 古今算法記 (“Records of ancient and current calculating methods”) – a manual published in 1671 that systematically utilizes the Chinese algebraic technique known as *tianyuan* (Jp. *tengen* 天元) for solving problems and contains the first appearance of the term *enri* 圓理 (“principle of the circle”) to designate the relations between the circumference of a circle and its diameter or an arc and a chord, both of which would become important concepts for Japanese mathematics throughout the late 17th and 18th centuries.¹³⁹ Gensei mentions his connection to Sawaguchi in his letter to Gunzō dated the thirteenth day of the eighth month (September 8, 1726), identifying him as his “teacher in mathematics” (*watakushi no sanshi* 私算師).¹⁴⁰

Gensei, with his Kyoto education, combined elements of two worlds. On the one hand, he drew from the mathematical rigor of scholars trained around the imperial capital – like his master Sawaguchi, Yoshimune’s advisor Takebe Katahiro, and Takebe’s renowned master Seki Takakazu 關孝和 (?–1708).¹⁴¹ On the other hand, he also represented Nagasaki’s traditions of land surveying and astronomical measurements based on navigational skills that were deeply imbricated in a history of frequent contact with European seafarers. Gensei’s position as “inspector of writings” granted him access to the whole gamut of licit and illicit Sinitic works coming from the continent, further complicating his outlook on cosmological knowledge.

In his first letter to Gunzō, Gensei explains the following:

The altitude of the heavens means that, when one looks up, there are nine heavens – that of the sun, the moon, [each of] the five planets, the multitude of stars, and the primum mobile – combined into tiers, so it is difficult to take them all as one. The aforementioned [calculation] refers to the altitude up to the heaven of the sun. Its method consists in measuring how many degrees south from the present location the sun is on the day of the summer solstice, setting up an eight-foot gnomon, and measuring how many feet long the shadow is so that the gnomon becomes the altitude [of a square triangle]. The shadow becomes the base [of the triangle].

With this calculating method, one prolongs the corresponding height from the gnomon until

¹³⁸ Hiraoka and Hibi, 97.

¹³⁹ See Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, chap. 4.

¹⁴⁰ Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 98.

¹⁴¹ For an overview of Seki Takakazu, cf. Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, chap. 5.

the center of the earth. Correspondingly, with the shadow, one finds the larger base [of the triangle], and from there one has the calculating method for obtaining the value [of the altitude of the sun].

天之高サと申候ハ如仰九天と申候へハ日月五星衆星之天惣動天と合テ申候段ニ御座候ニ付一樣ニ難申候。先ハ日輪天迄を積り申候て其高サヲ申候。其法ハ日輪夏至之日ニ此地ノ南ニ幾度に在と相考候て、八尺之表を立申候て其影幾尺と考へ候へハ表ハ股に成候。影ハ鉤に成申候。此算法相應に表より地心迄合テ股と仕候。相應ニ影ニテ此大鉤を求候て自是積出候算法にて御座候。¹⁴²

Gensei works with the premise of a geocentric cosmography in which the terrestrial globe (*chikyū* 地球) is surrounded by nine tiers of heaven that revolve around it. Determining the distance between the earth and all of these tiers is, according to him, not only difficult but also not what is meant when one discusses the “altitude of the heavens” (*ten no takasa* 天之高サ). The measurement used for navigational and calendrical purposes refers thus to the distance to “the heaven of the sun” (*nichirin ten* 日輪天). The question of how to calculate this value – which Van Vrijeberghe was unable to answer in 1718, and likewise Sōsetsu and Joken in 1719 – is one of the main issues Gensei attempts to resolve in his letters.

As Gensei clarifies in his next letter from the tenth of the eighth month (September 5, 1726), he relies on the so-called method of the “hook, thigh, and bowstring” (*kōkogen* 勾股弦), that is, the Pythagorean relationship between the three sides of the square triangle. In the traditions of Japanese mathematics, this method had its locus classicus in the ancient Chinese text *Zhoubi suanjing* 周髀算經 (“Mathematical classic of the gnomon of Zhou”),¹⁴³ traditionally attributed to the sagely Duke of Zhou, which Gensei cites in yet another letter he writes to Gunzō on the sixteenth of the eighth month (September 11, 1726). In this later letter, he reports having done his measurements of the gnomon’s shadow at noon during the summer solstice of the first day of the fifth month of the ninth year of Kyōhō (June 21, 1724) in Nagasaki (享保九年甲五月朔日夏至午測之)¹⁴⁴ and also lists the values of the length of the gnomon’s shadow on the summer and winter solstice from various Chinese sources.¹⁴⁵

¹⁴² Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 97.

¹⁴³ For a mathematical description of how this principle appears in the *Zhoubi suanjing*, cf. Cullen, *Astronomy and Mathematics in Ancient China*, 77–82.

¹⁴⁴ Hiraoka and Hibi, “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 99.

¹⁴⁵ See Appendix F.

5.1. *Instruments and measurements*

Gensei's letters reveal that Yoshimune's cosmological questions were fairly specialized, and aimed at resolving specific issues of geographical and astronomical calculations. It was in such areas of technical expertise that knowledge from VOC merchants and Nagasaki scholars could come in useful. As noted previously, the shogun had instruments such as a large armillary sphere (*kontengi* 渾天儀) built by a carpenter from his original Kii domain and a “noon-measuring gnomon” (*sokugohyō* 測午表) he reportedly designed himself installed on the grounds of Edo castle. In 1718, the same year that the gnomon was set up, the shogun questioned *opperhoofd* Vrijeberghe and sent out the summons for Joken and Sōsetsu, who would come to the palace the following year. Presumably, the two scholars were shown Yoshimune's device and then asked how to calculate the sun's altitude using it. Gensei's detailed responses to Watanabe Gunzō concerning calculating methods suggest that Gunzō was attempting to collect information that could help the shogun use his own device to make the necessary measurements.

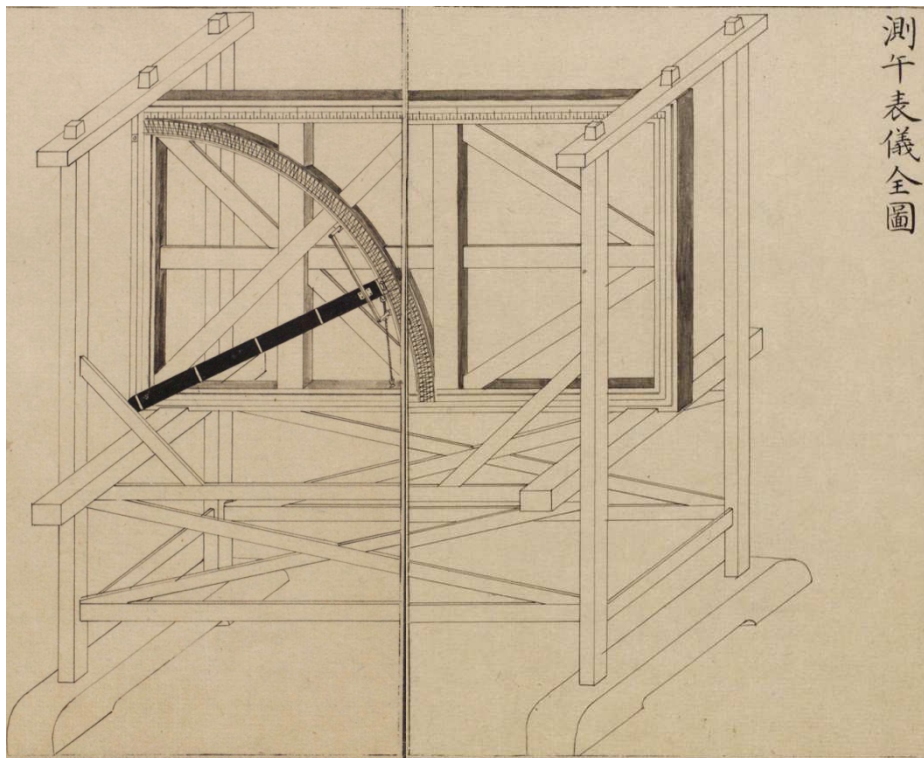


Figure 3.5. The “noon-measuring gnomon” (*sokugohyō* 測午表) presumably devised by Yoshimune as depicted in the manuscript of *Kansei rekisho* 寛政曆書 (“Writings on the Kansei calendar”) by shogunal astronomer Shibukawa Kagesuke 澁川景佑 (1787–1856) (National Archives of Japan)

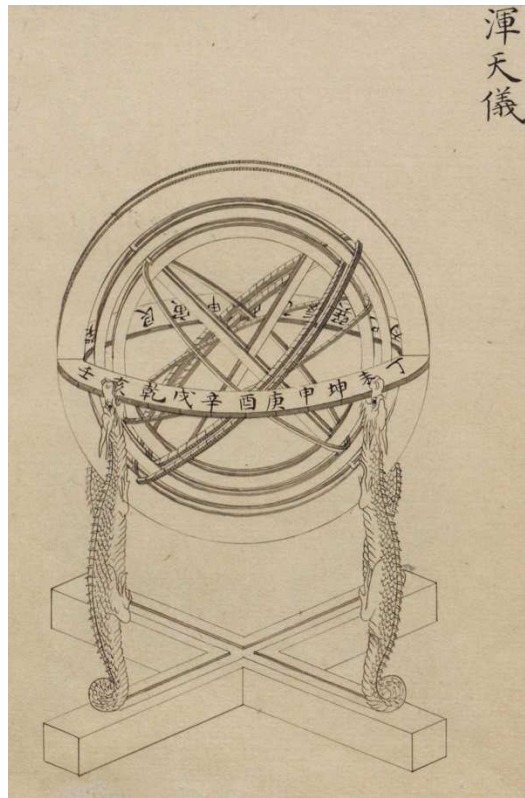


Figure 3.6. Model of an armillary spere (*kontengi* 渾天儀) in *Kansei rekisho* (National Archives of Japan)

Since the map of Japan ordered by Yoshimune and ultimately overseen by Takebe Katahiro was completed in 1723, the measurements mentioned by Gensei in 1726 were no doubt chiefly to reform the calendar. That said, as Takebe himself indicates, the finished map was far from perfect and could benefit from more accurate values of latitude and longitude in the future.¹⁴⁶ The methods for obtaining such values consisted of observing lunar eclipses and measuring the position of the northern star.¹⁴⁷

In a letter preserved in the Ro archives that Fukami Gentai sent to Sōsetsu, the aging scholar asks specifically about calculating one’s latitude from the North Pole, i.e., how many degrees (*do* 度) along the meridian one’s current location is (北極出地こと、何度此度数いづれより推出候や), a piece of information he could not find in books such as *Tianjing huowen* (天經或問などとりしめ見候隙も無之).¹⁴⁸ Gentai writes that even though he heard that those “who [study] the celestial signs” (*tenmonsha* 天文者) – referring perhaps to the official

¹⁴⁶ See Horiuchi, *Japanese Mathematics in the Edo Period (1600-1868)*, 209–14.

¹⁴⁷ Horiuchi, 214.

¹⁴⁸ Kawahira, *Roshi monjo: Ro Sōsetsu shiryōshū*, 68. See Appendix I.

astronomers of the shogun in Edo, the astronomical specialists responsible for the calendar at the imperial court, or even Nagasaki cosmologists in the tradition of Kobayashi Kentei – kept such information as part of their secret oral transmission (*himitsu kuden* 秘密口傳), Sōsetsu, who occupied a different function, could perhaps answer him (天文者は秘密口傳とやらんばかり申候よし、貴様御事は各別之御事候間、定て御書付可被下候嘉と存、はる々御たづね申上候).¹⁴⁹ Although the year for this letter is unknown, it cannot be later than 1722, the year of Gentai’s death. If it was written before Sōsetsu and Joken went to Edo in 1720, one could surmise that this exchange played a part in having them summoned in the first place. At any rate, it reinforces the notion that Gentai – and later his son Arichika – was an important link between the shogunal court and Nagasaki, including but not limited to cosmological matters.

Although Sōsetsu’s reply does not seem to have been recorded, Gensei’s letters to Gunzō provide clues about the nature of the knowledge that scholars from Nagasaki possessed. As we have seen, when it came to the specifics of measuring the sun’s altitude in the sky, Sōsetsu referred to Gensei, who also made his measurements of the stars’ positions. For Gensei, the “methods for observing the heaven of the stars” (*seiten kikō jutsu* 星天窺候術) are the same as the ones for “observing the heaven of the sun” (日天を窺候術と同前二御座候),¹⁵⁰ namely those based on the laws of the square triangle (*kōkogen*). In the letter from September 11, 1726, besides reporting his measurement of the gnomon’s shadow at noon and citing the different values that appear in Chinese sources, he offers a fairly detailed explanation of how to make and operate a measuring device (*sokki* 測器) to determine the position of stars with the same techniques that he described for measuring the altitude of the sun. He also provides the pronunciation of the names of the day of the week in Dutch and Latin (phonetically transcribed into *katakana*), the twelve signs of the European zodiac with their corresponding symbol and pronunciation in Dutch (*kōmō jūni kyū* 紅毛十二宮), and the Dutch names of the months. This type of information could appear in astronomical instruments of Dutch origin such as compasses and astrolabes, but it is unclear how much anyone in Nagasaki other than the interpreters for the Dutch could read Latin letters.

Nishikawa Joken, in his description of the Netherlands in the geographical work *Ka’i tsūshō kō* 華夷通商考 (“Investigation into the commerce between civilized and barbarians”),

¹⁴⁹ Kawahira, 68.

¹⁵⁰ Hiraoka and Hibi, “*Shūryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 100.

writes that their “language is distinct from those of India and other lands, but close to the tongue of the barbarians” (詞ハ天竺其外ノ國トハ各別ニテ蠻人ノ語ニ近シ)¹⁵¹ – with “barbarians” (*banjin* 蠻人) likely referring to Portuguese. He explains that Dutch is written in “twenty-four horizontal characters” (横文字二十四字アリ), with each character further divided into two characters (一字ヲ二字宛二分ツ),¹⁵² no doubt referring to upper- and lower-case letters. While this is hardly proof that Joken mastered the language, it shows that knowledge of European languages might have transcended the realm of the interpreters, at least at a very elementary level.

5.2. *Converting Dutch values*

Gensei equates the surveying methods that have been transmitted in Nagasaki, known as *chōken jutsu* 町見術 (“yard-gazing techniques”) with the same mathematical principles that have been transmitted from the ancient Chinese sages. He claims that there are no other “confidential techniques” (*hijutsu* 秘術) that have been transmitted in Nagasaki, so his surveying skills are none other than the methods involving the correspondence between the three sides of the rectangular triangle (別て秘術も無御座候。即町見之術、勾股弦之相應之術にて御座候).¹⁵³ These are also the same techniques that Dutch seafarers relied on, so it should not be too difficult to adopt their instruments and navigational calculations for geographical and astronomical purposes.

The main problem in using these methods of the correlation between square triangles (*kōkogen no sō no jutsu* 勾股弦之相應之術) for measuring terrestrial and celestial distances, as Gensei saw it, was to convert from the scale of *sunshaku* 寸尺 (“inches and feet”) to the scale of *ri* 里 (“leagues”). There was little consensus on how many *ri* were in a degree (*do*) of the meridian, making it difficult to decide on which measure to adopt from the various conflicting schools (其理數之儀家々之一反説不同に候故一己ニ相極候て).¹⁵⁴ Besides, to fully utilize the instruments brought by the Dutch and incorporate their technical expertise, it was necessary to convert their units of measure.

¹⁵¹ Nishikawa Joken 西川如見, “*Ka’i tsūshō kō*” 華夷通商考 (Woodblock print, 1695), vol. 4, fol. 2b, Tsukuba University Library.

¹⁵² Nishikawa, vol. 4, fol. 2b.

¹⁵³ Hiraoka and Hibi, “*Shūryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,*” 100.

¹⁵⁴ Hiraoka and Hibi, 97.

Imamura Eisei provides at the end of his letter to Gunzō a conversion table of the “red-haired distances” (*kōmō rihō* 紅毛里法), containing the equivalent of a Dutch *voet* (“foot”) and a “red-haired league” (*kōmō ri* 紅毛里) – the Dutch *mijl* (“mile”) – in their respective Japanese measures. Notably, he also provides the value for one “red-haired degree” (*kōmō ichido* 紅毛一度), which measured fifteen *mijlen*, with each *mijl* corresponding to twenty-two thousand and eight hundred *voeten* (二萬二千八百フウト).¹⁵⁵ These values – useful for performing the calculations with the gnomon – are taken up by Gensei in his letters, in which he claims several times that he was able to personally confirm the information with the Dutch. In his interactions with the VOC officers, Gensei had to rely on interpreters like Eisei, whom he implies were not specialists in mathematical questions and therefore did not necessarily understand more technical aspects (通辨之人算学無之候得は難通所御座候).¹⁵⁶

Gensei is mentioned by name twice in the VOC journals. *Opperhoofd* Hendrik Durven records that the scholar visited Dejima on two occasions at the end of 1721. Gensei’s first appearance is on December 12, when Namura Hachizaemon announced that “Sir Mukai Gensei in the service of the shogun as a professor in medicine, knowledgeable in astronomy and geometry, should come by around noon to ask a variety of questions” (*den Heer Moucaij Gincei Samma, zijnde in dienst van den Keijser in qualitie als Professor in de medicijne, kennder van de astronomie en Geometrie, tegen den middagh bij mij soude quamen, om diverse vragen ann mij te doen*).¹⁵⁷

Besides asking Durven to identify “dried herbs” (*drooge cruiden*) Gensei had with him, he also brought a portable compass (*compasje*) and sundial (*sonnewijsertje*) inside a presumably round or oval “small Nuremberg copper box” (*cleijne koper Neurenbergs doosje*).¹⁵⁸ He asked to have a circle drawn on a piece of paper with the same shape as the box and have the compass reproduced on it (*begerigh zijnde om op het papier een dergelijks ronde circul te hebben, en daarin het compasje te conterfeijten*); and requested that the symbols on the compass be transcribed in Dutch on the paper, so that they could be rendered in Japanese (*mitsgaders alle de cijffer letters in het Hollands daarbij te schrijven, om het in’t Japans daarnevens te kunnen stellen*).¹⁵⁹ Gensei returned once

¹⁵⁵ Hiraoka and Hibi, 98. See Appendix G for Eisei’s letter.

¹⁵⁶ Hiraoka and Hibi, 98.

¹⁵⁷ Hendrik Durven, “Dagregister (1721 november 9 - 1722 oktober 28)” (Manuscript, 1721–1722), 26, Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860, Nationaal Archief, https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/132/file/NL-HaNA_1.04.21_132_0001.

¹⁵⁸ Durven, 27.

¹⁵⁹ Durven, 28.

again on December 23, 1721, to ask more questions concerning the compass, and was assisted once again by Eisei to have his questions answered.¹⁶⁰



Figure 3.7. Model of a compass (*rakyō* 羅經) with the “thirty-two directions of the Dutch” (*kōmō sanjūni hō* 紅毛三十二方) as depicted in Nishikawa Joken’s *Ryōgi shūsetsu* (National Archives of Japan)

These encounters reveal that Gensei was a key figure in obtaining technical information from VOC officers, but was dependent on the interpreters, notably Imamura Eisei, for rendering Dutch knowledge into Japanese. Also assisted by Eisei, Watanabe Gunzō appears in the VOC journals as the *opperbongiois*¹⁶¹ (“senior inspector”) who accompanied the Dutch delegates to Edo in 1724. In that year, there was yet another highly mediated interrogation in the name of the shogun, in which several of Yoshimune’s personal attendants (*okubōzu* 奥坊主) were able to participate. Their interactions that year were translated and recorded by Eisei and Namura Hachizaemon in a document titled *Oranda mondō* 和蘭問答

¹⁶⁰ Durven, 33–34; Bachofner and Velde, *The Deshima Diaries*, 260.

¹⁶¹ The function called *bongiois* in Dutch sources referred to appointed officials of various ranks who escorted the VOC delegates on their way to Edo. While the etymology is unclear, it could be derived from *bugyō shū* 奉行衆, referring to assistants of the Nagasaki magistrates. Bachofner and Velde, *The Deshima Diaries*, 561.

(“Questions and answers with the Dutch”) that contained topics ranging from medical treatments and units of measure to dragons and giant fish.¹⁶²

Gunzō’s activities in Nagasaki two years later – questioning Gensei, Sōsetsu, and Eisei on cosmological matters – can be seen as an extension of his interactions with the Dutch but with a more specific focus. As Joken had already died when Gunzō went to Nagasaki, the shogunal official could not have consulted the scholar in 1726, but Joken does appear in both Gensei’s and Sōsetsu’s letters as an authoritative figure when it came to astronomical practices.

Gensei mentions talking with Joken in 1724 about his calculations based on the length of the gnomon at noon and about Nagasaki’s latitude along the meridian (*hokkyoku shutchi* 北極出地). As Gensei made his measurements at the time of the summer solstice, and Joken died in the ninth month of the ninth year of Kyōhō (from mid-October to mid-November 1724), they had the opportunity to talk about the results only a few months before Joken’s death. Gensei writes in his letter from September 11, 1726, that he told Joken about his measurements differing from the explanations in ancient Chinese books (*kosho no setsu* 古書之説) due to Nagasaki’s latitude, to which he replied that it was due to the “mathematical correspondences” of the square triangles (其節如見ニも説を物語申候所成程算數相應之由申候).¹⁶³

As for Sōsetsu, he writes in his second letter – written the twenty-fifth of the seventh month (August 22, 1726) – about maps, diagrams, and instruments that Nishikawa Joken possessed. He claims that Gunzō – and by extension, the shogunal authorities as a whole – had already been able to see materials such as astronomical charts and armillary spheres that Joken presented to the shogunate (十二會圖渾天儀の類は先年も西川氏より御覽被成候と奉存候).¹⁶⁴ He also reports that Joken did not have as many documents concerning the “study of the earth” (*yochi no gaku* 輿地の學) as those of the “celestial signs” (*tenmon* 天文), so the geographical maps were not as good (輿地の學の儀ハ西川氏も天文程ニハ無御座候ニ付地圖ハ不宜所も相見へ申候); that said, Sōsetsu continues by saying that a small map of the earth had been offered to the shogunate so it could be copied, containing added place names (先輿地ノ小圖を進上申候間御寫可被成候。所ノ名は此方ニて書付可進上仕

¹⁶² See Imamura, “Tokugawa Yoshimune to ‘Waran mondō.’”

¹⁶³ Hiraoka and Hibi, “*Shūryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen,’*” 98–99.

¹⁶⁴ Hiraoka and Hibi, 96.

候).¹⁶⁵ This valuable piece of information further corroborates the hypothesis that it was indeed Joken who visited Dejima almost ten years earlier to write place names on a map that was going to be presented to Yoshimune. Gensei, Sōsetsu, and Joken were the mediators between knowledge from around the world and the astronomical practices that could aid in Yoshimune's many political projects.

Conclusion

By collating different Japanese and Dutch sources, we arrive at a clearer picture of the Joken and Sōsetsu's journey to Edo and its significance for Yoshimune's various political projects. The two scholars from Nagasaki were both summoned in the seventh month of the third Kyōhō era – around July and August 1718. Joken then left for Edo in the eleventh month of that same year – corresponding to either late December 1718 or early January 1719. He was joined later by Sōsetsu, who left in the first month of the following year of the Kyōhō era, i.e., late February or early March 1719. They spent close to a month in Edo, where they had the opportunity to meet Fukami Gentai and Arichika and most likely consult the Dutch merchants who arrived shortly after Sōsetsu. The overlap of their summons with the VOC annual journey to Edo was no mere coincidence, as Sōsetsu himself made at least some of the arrangements for the accommodations of the Dutch on their way there.

Joken's summons to Edo was the ultimate recognition of his reputation as a scholar well-versed in cosmological subjects – someone who could potentially help translate the information relayed by the Dutch on astronomical calculations. The summons and the concomitant journey of the VOC delegates to Edo were part of a larger web of knowledge circulation involving numerous stakeholders. Networks of seafarers, traders, scholars, interpreters, and authorities became particularly significant in light of Yoshimune's political, economic, and societal reforms.

Many factors might have led to Yoshimune's order in 1720 to partially lift the ban on the Sinitic books that could be associated with Jesuit doctrines. His decision came in tandem not only with his growing concern for astronomical and calendrical matters but also his expanding interest in a wide array of Sinitic and European sources that could be instrumentalized for political purposes, specifically cosmological works that could aid in reforming the calendar. The fact that the shogun was unable to obtain all the answers to his

¹⁶⁵ Hiraoka and Hibi, 96.

technical astronomical questions from either the VOC *opperhoofden* or advisors like Sōsetsu and Joken is among these factors.

Yoshimune's relaxation of the ban on certain Sinitic books has been often conflated with his concomitant promotion of the study of Dutch books like the aforementioned *Naeukeurige Beschryving* and *Cruijdeboeck*. Although these two initiatives are related, they should be understood separately. The anti-Christian policies that inspired the 1630 ban in the first place did not represent a general "anti-Western" sentiment among Tokugawa authorities, and shogunal measures against Christianity should not be misconstrued as a general antagonism toward Europeans. VOC officials were the first to emphasize a fundamental schism between themselves and the Catholic "papists," and this distinction was not entirely lost in the eyes of the shogunate.

For Yoshimune, the role of the Dutch in the Tokugawa political world seems to have been less that of fulfilling specific commercial needs than supplying the regime with intelligence and technical information. This approach marks a significant shift toward what has been interpreted as the emergence of "Dutch studies" (*rangaku* 蘭學) as an organized discipline in the 18th century. In view of the sources analyzed in the present chapter, it is difficult to claim that Yoshimune's reign marked the beginning of *rangaku* as any systematic form of learning. There was, to be sure, some considerable linguistic and cultural know-how amassed by interpreters such as Imamura Eisei. However, despite his prominent role as an epistemological mediator between the VOC and the shogunate, Eisei did not portray himself as a proponent of "Dutch studies" (*rangakusha* 蘭學者) as later Edo scholars would do.¹⁶⁶ Even Joken – who, we have seen, would be consistently described as a pioneer of Western scholarship starting in the late 19th century – was far from being a proponent of *rangaku* in any form; if anything, VOC merchants were consistently portrayed as in his works as "red-haired barbarians" who possessed useful navigational instruments. As will become clearer in the next chapter, the cosmological scholarship of Nagasaki scholars like Joken was a composite of disparate elements, rearranged and recombined to conform to idealized epistemologies from ancient China.

¹⁶⁶ On how *rangakusha* at Edo distanced themselves from Nagasaki interpreters, see Annick Horiuchi, "When Science Develops Outside State Patronage: Dutch Studies in Japan at the Turn of the Nineteenth Century," *Early Science and Medicine* 8, no. 2 (2003): 148–72.

CHAPTER FOUR: THE MAKING OF HYBRIDIZED COSMOLOGIES

The previous chapters have developed interactions between several stakeholders that defined the conditions for the circulation of Nagasaki's scholarship throughout Tokugawa Japan. We have seen that authorities, ranging from "city elders" to the Nagasaki magistrates, were particularly interested in tapping into the knowledge and skills that local interpreters and scholars possessed, mediating between Chinese and Dutch interlocutors to open new windows into the rest of the globe. Such activities intensified under the reign of the eighth shogun Tokugawa Yoshimune 徳川吉宗 (1684–1751, r. 1716–1745), leading to the summons of Ro Sōsetsu 蘆草拙 (1675–1729) and Nishikawa Joken 西川如見 (1648–1724) in conjunction with the annual trip of VOC representatives to Edo.

As we have acquired a clearer idea of the types of knowledge and the specific technical answers that Yoshimune sought from his growing pool of advisors, we now turn to the form, content, and impact of Joken's written production. This chapter is in large part dedicated to elucidating the nature of the hybridized forms of cosmological knowledge that he could contribute to the shogun's projects of obtaining more accurate astronomical and geographical measurements with the ultimate goal of calendrical reform. We will see how Joken negotiated shifting notions of "civilization" and "barbarity" to produce a hybridized discourse in which Japan – and its own Sinitic traditions – remained at the center of a reconceptualized world order.

In the first section of this chapter, we will look at the range of Joken's writings across different registers and styles to clarify the different strategies he adopted – alongside his publishers – to reach different strata of the hierarchical Tokugawa society. Starting with the fruitful relationship between Joken and the bookseller and de facto publishing house Ryūshiken 柳枝軒, I will analyze what titles got published, when they appeared, and the kind of audience they targeted. Following a bibliographical methodology and focusing on the materiality of printed and manuscript copies of different titles, I bring forth valuable information from title pages, colophons, prefaces, and postfaces written by Joken himself and his publishers. Finally, I engage with his more technical works that survive only in print, are written entirely in Sinitic, or both, highlighting the titles he might have presented to Yoshimune during his summons in 1719.

In the second section, we turn to Joken's descriptions of the "myriad lands in the world" (*sekai bankoku* 世界萬國) and discuss how his descriptions of world geography fit into broader cosmological traditions associated with the transnational port of Nagasaki. Joken begins with the fundamental distinction between "civilization" as defined by the cultural order of the Sinosphere – including the Qing empire and surrounding states under its political influence – and the "barbarity" of any land outside of it, whether they have "horizontal letters" or no writing systems at all. Drawing from a wide range of sources, Joken uses this framework to build a veritable palimpsest of knowledge and languages, combining descriptions gleaned from Jesuit texts produced in China with newer information obtained from the merchants of the Dutch East India Company.

The third section tackles another fundamental aspect of the cosmological discourses found in Joken's works, namely, the reverence for the knowledge passed down from ancient China combined with a heightened sense of the importance of empirical observation and textual verification. I show that Joken instrumentalized ancient Chinese sources for two main purposes: to validate contemporary astronomical practices in Japan as belonging to a venerable tradition and to promote the education of commoners throughout the country by exposing them to Sinitic texts.

The fourth section is the culmination of this study, delving into how the composite elements of the cosmological scholarship of Nagasaki were manifested in Joken's writings. I demonstrate how Joken incorporated cosmologies found in the world maps of Matteo Ricci (1552–1610) alongside their variations featured in the already hybridized writings of late Ming literati such as Feng Yingjing 馮應京 (1555–1606) and You Yi 游藝 (ca. late 17th century). I analyze Joken's strategies for recasting the hybrid nature of his sources into a discourse that places Sinitic knowledge as the foundation and "barbarian" contributions as mere technical improvements. Despite being aware of the hybridity of the cosmological knowledge that he presents, Joken upholds the primacy of a Sinocentric epistemic system, in which all new information can be subsumed into the time-tested traditions of the ancient classics.

1. Writing across the literacy spectrum

The writings of Nishikawa Joken, representative of the confluence of different cosmological traditions that flourished in Nagasaki, are diverse in their themes but generally permeated by an edifying streak. Joken follows in the footsteps of his eclectic teacher Nanbu Sōju 南部草壽 (1637–1688) – who produced a vernacular commentary (*zokkai* 俗解) of the Daoist classic *Taishang ganying pian* 太上感應篇 (“Writings on the supreme correspondences”) – and builds a more or less defined project of rendering cosmological knowledge from various sources accessible to a larger audience.

Depending on the subject’s complexity and the targeted readership, the written style, register, and language of Joken’s works can vary widely, ranging from highly technical Sinitic (*kanbun* 漢文) to plain vernacular Japanese (*wabun* 和文). In early modern Japan, vernacular texts were written in a combination of Chinese characters (*kanji* 漢字) and one of the two derived syllabaries of *katakana* 片假名 and *hiragana* 平假名 – with *katakana* also being used for glossing texts produced entirely in Sinitic.¹ Sinitic texts, regardless of where they were originally produced, could be read in Japanese with the aid of glosses known as *kunten* 訓點 (“instructional marks”).

The most elementary form of *kunten* for early modern texts is known as *kaeriten* 返點 (“reversing marks”), as it “reverses” the order of Sinitic into Japanese syntax.² In other words, *kaeriten* serves the purpose of rendering the subject-verb-object word order of Chinese into the Japanese subject-object-verb word order through numbers or other symbols that indicate which parts of the sentence should be read first.³ Other forms of *kunten* include pronunciation glosses called *furigana* 振り仮名 and glosses for grammatical particles and inflections called

¹ The combination of the three scripts continues in Japan to this day, but *katakana* has a much more limited usage, and the Roman alphabet is also used in some specific contexts. See Kornicki, *Languages, Scripts, and Chinese Texts in East Asia*, 65.

² Laura Moretti uses the term *kunten* to refer specifically to *kaeriten*. This is not the definition adopted for the purpose of this study. In order to avoid confusion, I refer to all reading marks as *kunten*, including *kaeriten*, as well as *okurigana* and *furigana*. Laura Moretti, *Pleasure in Profit: Popular Prose in Seventeenth-Century Japan* (New York: Columbia University Press, 2021), 54–57. In recent research published in Japanese, *kunten* seems to be used as a loose term for reading marks used in Sinitic texts in general, which are different from punctuation (*kutōten* 句讀點), but it is not clear whether *furigana* and *okurigana* are systematically included as *kunten*. Cf. Horikawa Takashi 堀川貴司, *Shoshigaku nyūmon: Kotenseki o miru, shiru, yomu* 書誌学入門 – 古典籍を見る・知る・読む (Bensei shuppan, 2010), 21, 75, 133; Hashiguchi, *Wahon nyūmon*, 229–39.

³ For an account of vernacular reading of Sinitic in Japan and its connection with reading practices in Korea, see Kornicki, *Languages, Scripts, and Chinese Texts in East Asia*, 162–82.

okurigana 送り假名, with *furigana* also being used in vernacular texts to gloss the reading of *kanji*. The final product of these glosses is what Peter Kornicki calls a “bound translation,”⁴ that is, a vernacular Japanese reading of the Sinitic text as determined by the glosses.

The variation of registers in the works of Joken and other Tokugawa scholars is reflective of what Laura Moretti identifies as the “spectrum of multiple literacies in early modern Japan.”⁵ Even writings dealing with similar subjects could have styles at opposite ends of the spectrum, reflecting their different intended audiences. The ability to read Sinitic (*kanbun* literacy) and vernacular (*wabun* literacy) ranged from expert to novice readers.⁶ In classifying Joken’s books, I follow, with minor modifications, the spectrum developed by Moretti, who distinguishes five degrees of *kanbun* and *wabun* literacy respectively.⁷

Moretti’s literacy spectrum focuses on the capacity of readers to comprehend such texts, but the various degrees within the spectrum are easily transferable to the texts themselves, classified according to their proximity to Sinitic, as in the table below. I numbered the degrees from 10 to 1, with 10 as “pure Sinitic” (visually indistinguishable from Sinitic texts produced in other parts of East Asia) and 1 as the furthest from Sinitic, i.e., Japanese vernacular written primarily in *hiragana* that requires the lowest level of literacy.

Sinitic (<i>kanbun</i> 漢文)	10	No reading glosses (<i>hakubun</i>)
	9	Minimal glosses (<i>kaeriten</i> only)
	8	Moderate glosses (<i>kaeriten</i> and <i>okurigana</i>)
	7	Maximal glosses (<i>kaeriten</i> , <i>okurigana</i> and <i>furigana</i>)
	6	Maximal glosses (<i>kaeriten</i> , <i>okurigana</i> and <i>furigana</i> in Japanese order)
Vernacular (<i>wabun</i> 和文)	5	<i>Kanji-katakana</i> (without <i>furigana</i>)
	4	<i>Kanji-katakana</i> (with <i>furigana</i>)
	3	<i>Kanji-hiragana</i> (without <i>furigana</i>)
	2	<i>Kanji-hiragana</i> (with <i>furigana</i>)
	1	Only or mainly <i>hiragana</i>

⁴ Kornicki, 177.

⁵ Moretti, *Pleasure in Profit*, 53–64, especially figure 1.17 on p. 60.

⁶ Moretti, 60–66.

⁷ The other spectrum of literacy in *sōrōbun* and *mairase-sōrōbun* is not relevant for the present study, as it refers primarily to the ability to decode letters and official documents. Unlike Moretti, I use the more specific term *kaeriten* instead of the general *kunten* to refer to the specific marks that refer to the syntactic order to be followed. See Moretti, 60–62.

Following this adaptation of Moretti’s model, at the most literate end of the spectrum (degree 10) we can locate Sinitic texts written without any glosses, a style known as *hakubun* 白文 (“blank text”). Next to that comes degree 9 with minimal notations – only *kaeriten* but neither *okurigana* nor *furigana*. Degree 8 covers Sinitic texts with moderate notations, i.e., *kaeriten* and *okurigana* but no *furigana*. Degrees 7 and 6 display maximal notations (*kaeriten*, *okurigana*, and *furigana*), with degree 6 being the one closest to the vernacular for its use of *furigana* in the Japanese order – meaning that reading glosses spell out how characters are read in a vernacular sentence (e.g., *shira-zu* ^{シラズ} 不知) rather than being placed next to the corresponding character in the original Sinitic sequence (e.g., *zu-shira* ^{ズシラ} 不知).

Within the realm of the vernacular, the style closest to Sinitic is degree 5, covering texts with a combination of *kanji* and *katakana* but without *furigana*. Next to that is degree 4 for the same style but with *furigana* appended to the *kanji* to facilitate the reading. These two degrees represent a mixed scholarly style that, albeit vernacular, is best understood as the product of rendering Sinitic phrasal structures into Japanese.⁸ It was particularly suited for technical texts, and it is prominent in Joken’s more specialized works. Degrees 3 to 1 correspond to a writing style that requires the lowest level of familiarity with Sinitic, although some acquaintance with Chinese characters might be necessary in the absence of pronunciation glosses.

The original figure by Moretti – presented horizontally and focusing on the literacy level of those who consumed such works rather than on the texts themselves – does not imply a clear hierarchy of registers. When one converts this literacy spectrum into one of written styles, especially as it concerns Joken’s works, different registers can be understood hierarchically, with “pure Sinitic” occupying the top position. The spectrum should still be understood as a continuum; seldom do entire books fit perfectly in one of these degrees. In Joken’s case, texts in *kanji-katakana* are often interspersed with *kanbun* citations containing minimal notations. Furthermore, prefaces to early modern Japanese books were conventionally written in Sinitic and published without the addition of any reading aids, regardless of the style of the book.⁹

⁸ In modern Japanese, it is designated as *kanbun kundoku tai* 漢文訓讀體 (“Sinitic reading form”) or *kakikudashi bun* 書き下し文 (“[Sinitic] text written down”), denoting its close association with non-vernacular modes of expression.

⁹ This practice continued even throughout the Meiji era, as evidenced by the introductory texts for the Joken’s “bequeathed works” discussed previously.

In Joken's works, there are five main relevant levels: Sinitic with minimal (degree 9) or moderate notations (degree 8), vernacular in *kanji-katakana* with (degree 4) or without *furigana* (degree 5), and finally vernacular in *kanji-hiragana* with *furigana* (degree 2).¹⁰ One could thus categorize Joken's written styles ranging from "highbrow" to "lowbrow" titles. Those in *kanbun* are then the most scholarly and those mainly in *hiragana* are aimed at a less specialized readership. The works that fall toward the highbrow end of the spectrum tend to have a more formulaic approach. They are often organized either as compilations of extensively cited classical sources or in the format of questions and answers, following well-established Confucian models, notably the writings of Zhu Xi 朱熹 (1130–1200).

The goals of each of Joken's written works become clearer as we consider them within this literacy and style spectrum. Texts close to the vernacular were more easily accessible to a wider readership and, as such, generally enjoyed wider circulation. More technical works, such as the ones Joken might have presented to Tokugawa Yoshimune, were written in either pure Sinitic or in the vernacular forms closest to the Sinitic (*kanji-katakana*) and tend to have circulated mostly as manuscripts.

1.1. *The written production of Nishikawa Joken*

Across styles and registers, Joken attempted to popularize the content of ancient Chinese classics and also utilize them for grounding astronomical practices of his day – focusing notably on the applicability of canonical texts to the purposes of calendrical production. The calendar, and the cosmological knowledge behind it, connected not only the celestial, terrestrial, and human planes of existence but also the sovereign to the populace. For Joken, people of all classes should have a strong interest in matters pertaining to the calendar, for it was crucial for essential activities such as agriculture and rituals.

Despite Joken's reputation, cosmological works were not necessarily his most sought-after titles in the book market. They enjoyed different levels of popularity depending on their content, style, and register. Both Joken and his editors were well aware of this fact, as they tried to include lofty concerns about society and the cosmos into more accessible books aimed at a large audience. Even in works seemingly disconnected from cosmological concerns, Joken alludes to key concepts of qi, yin and yang, and the five phases (*gogyō* 五行), highlighting their

¹⁰ Joken's writings within the lowest register might be classified as closer to degree 3 in the spectrum, as *furigana* is not consistently used for all *kanji*.

significance within an epistemological framework firmly grounded on Neo-Confucian ideas. Joken's cosmological views, even if not brought up explicitly, pervade and inform his writing across genres.

A total of 19 titles can be unambiguously attributed to him, as seen in the table below, featuring the approximate number of manuscript and print copies in Japanese collections listed in the Union Catalogue Database of Japanese Texts (*kokusho dētābēsu* 國書データベース) organized by the National Institute of Japanese Literature (*kokubungaku kenkyū shiryōkan* 國文學研究資料館).¹¹

¹¹ <https://kokusho.nijl.ac.jp>

TITLE	CLOSEST DEGREE ON THE LITERACY SPECTRUM	PREFACE / POSTFACE YEAR	COLOPHON YEAR	FASCICLES (<i>MAKI</i> 卷)	MANUSCRIPT COPIES	PRINT COPIES
<i>Chōnin bukuro</i> 町人囊 (“The townspeople’s pouch”)	<i>wabun</i> 2	1692	1719	5	4	74
<i>Usen benron</i> 右旋辯論 (“Debates on the rightward rotation”)	<i>kanbun</i> 9	-	1700	1	3	0
<i>Tenjin gogyō kai</i> 天人五行解 (“Explanation of heaven, humans, and the five phases”)	<i>kanbun</i> 9	-	-	1	2	0
<i>Nihon suido kō</i> 日本水土考 (“Investigation into Japan’s environment”)	<i>kanbun</i> 8	1700	1720	1	6	45
<i>Ryōiki jinsū kō</i> 兩域人數考 (“Investigation into the population of two regions”)	<i>kanbun</i> 8	-	1720	1	6	10
<i>Suido kaiben</i> 水土解辨 (“Explanations on the environment”)	<i>wabun</i> 2	-	-	2	0	19
<i>Gusho rekishō zokkai</i> 虞書曆象俗解 (“Vernacular explanation of astronomical images in the Book of Yu”)	<i>wabun</i> 5	1720	1720	5	2	21

<i>Ka'i tsūshō kō</i> 華夷通商考 ("Investigation into commerce between civilized and barbarians")	<i>wabun</i> 2	1708 (expanded edition)	1708 (expanded edition)	5	8	143
<i>Tenmon giron</i> 天文義論 ("Discourse on the meaning of celestial signs")	<i>wabun</i> 5	1712	-	2	1	22
<i>Ka'ii bendan</i> 怪異辨斷 ("Discernment of anomalies")	<i>wabun</i> 5	1714	1714 / 1715	8	1	51
<i>Ka'ii ruisan</i> 怪異類纂 ("Compilation of anomalies")	<i>wabun</i> 5	-	-	4	1	0
<i>Ryōgi shūsetsu</i> 兩儀集說 ("Collected theories on heaven and earth")	<i>wabun</i> 5	1714	-	7	2	0
<i>Shijūnikoku jinbutsu zu</i> 四十二國人物圖 ("Illustrations of the peoples of forty-two countries")	<i>wabun</i> 2	1714	1720	2	17	23
<i>Kyōdō rekidan</i> 教童曆談 ("Astronomical discussions for instructing children")	<i>wabun</i> 2	1714		1	0	4
<i>Unki shūnan kōhen</i> 運氣指南後篇 ("Latter edition of the guidelines on flows of qi")	<i>wabun</i> 2	1726	1716 / 1726	1	2	9
<i>Tenmon kyōdō waka chū</i> 天文教導倭歌註 ("Commentary of Japanese poems for teaching the celestial signs")	<i>wabun</i> 2	-	1719	1	2	7

<i>Jūnikyū kashō</i> 十二宮歌抄 ("Extracts of songs on the twelve houses")	<i>wabun</i> 2	-	1719	1	1	3
<i>Nagasaki yawa gusa</i> 長崎夜話草 ("Notes on the night stories of Nagasaki")	<i>wabun</i> 2	1719	1720	5	8	53
<i>Hyakushō bukuro</i> 百姓囊 ("The peasants' pouch")	<i>wabun</i> 2	1721	1731	5	4	35

The majority of Joken's books were first published by a lineage of Kyoto booksellers called Ogawa Tazaemon 小川多左衛門, who also used their other surname Ibaragi 茨木 (alternatively written as 茨城), the business name (*yagō* 屋號) Ogawaya 小河屋, and the artistic name (*kengō* 軒號) Ryūshiken 柳枝軒 to designate the bookstore that also worked as a publishing house. The first Ryūshiken was Ogawa Hōshuku 小川方淑 (1643–1689) and had the given or common name (*tsūshō* 通稱) Tazaemon – after him, the descendants would continue to use the same *kengō* and take the name Tazaemon.¹ Since Joken's writings are all dated after the death of Hōshuku, it is safe to assume that they were published either by Hōshuku's brother Ogawa Hōdō 小川方道 (dates unknown) or Hōshuku's son Ogawa Hōkyō 小川方教 (dates unknown), who continued the family lineage.²

Before working with Joken, Ryūshiken already enjoyed the patronage of the lords of the Mito 水戸 domain, in particular Tokugawa Mitsukuni 德川光圀 (1628–1701), who commissioned the guidebook *Shinpen Kamakura shi* 新編鎌倉志 (“Newly compiled gazetteer of Kamakura”) and had it published in Kyoto by Ogawa Hōshuku in 1685.³ Not long after Hōshuku's death, Kaibara Ekiken 貝原益軒 (1630–1714) came to the Ryūshiken bookstore during one of his visits from Fukuoka to the imperial capital in 1692, leading to a fruitful collaboration between the Fukuoka scholar and the Kyoto bookseller, who would publish a great number of Ekiken's work afterward.⁴

Some later copies of Joken's *Chōnin bukuro* and *Hyakushō bukuro* were attributed to Ekiken, demonstrating that there was a significant overlap between the targeted audience of the two authors from Kyushu originally published by Ryūshiken. Reprinting these two works under Ekiken's name enabled booksellers who later acquired the woodblocks from Ryūshiken to capitalize on the fame of the renowned Fukuoka scholar to sell Joken's works.

¹ See Munemasa Isō 宗政五十緒, *Kinsei Kyōto shuppan bunka no kenkyū* 近世京都出版文化の研究 (Dōhōsha shuppan, 1982), 231–35.

² Yokota Fuyuhiko 横田冬彦, *Nihon kinsei shomotsu bunkashi no kenkyū* 日本近世書物文化史の研究 (Tokyo: Iwanami shoten, 2018), 441–43.

³ Munemasa, *Kinsei Kyōto shuppan bunka no kenkyū*, 231; Yokota, *Nihon kinsei shomotsu bunkashi no kenkyū*, 440.

⁴ Cf. Yokota, *Nihon kinsei shomotsu bunkashi no kenkyū*, 437–55.



Figure 4.1. On the left, the title page for an edition of *Chōnin bukuro* correctly identifying Nishikawa Joken as its author (University of Tokyo Library), on the right, the title page for another edition that erroneously attributes it to Kaibara Ekiken on the right (National Archives of Japan)

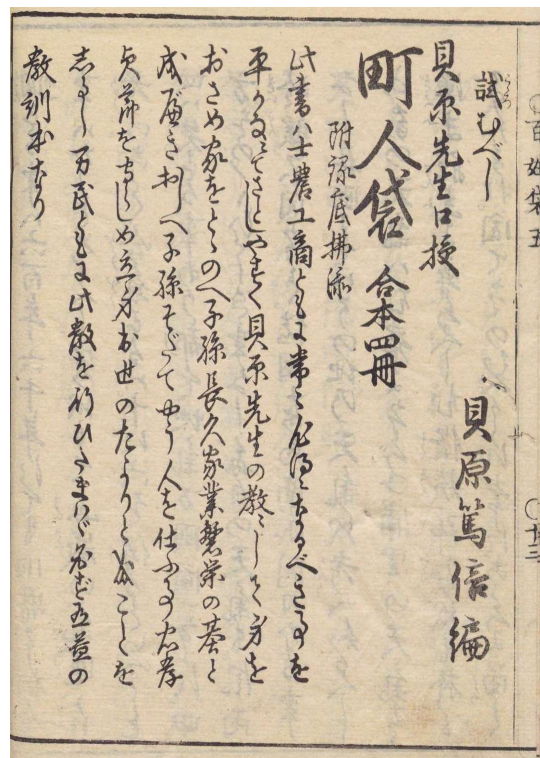


Figure 4.2. Added page at the end of the same edition of *Hyakushō bukuro* advertising *Chōnin bukuro* as a work composed by Kaibara Ekiken (National Archives of Japan)

Among other works published by Ryūshiken were those of Ming émigré Zhu Shunshui 朱舜水 (1600–1682) – employed by Tokugawa Mitsukuni in the second half of his life – whose *Shunsui sensei bunshū* 舜水先生文集 (“Collected writings of Master Shunshui”) was compiled by Mitsukuni himself, edited by the third lord of Mito and Mitsukuni’s adoptive son Tokugawa Tsunaeda 徳川綱條 (1656–1718), and printed posthumously in 1715.⁵ While further research is necessary to understand the precise nature of the relationship between scholars who came from the continent through Nagasaki, the intellectual milieus in Fukuoka and Kyoto, and the promotion of Confucian scholarship around Mitsukuni and the so-called Mito school, it seems clear enough at this point that Ryūshiken played a prominent role in fostering these connections. Even though Joken did not stay at the bookseller’s during his trip, we know from Ryūshiken’s account that the publisher – probably Hōdō or Hōkyō – met with the Nagasaki scholar during the latter’s stop at Kyoto in 1718 on his way to Edo.

久世舞	同	拾遺大成	小本百共番	同	假名誼	虞書管榮	天門和歌注	水七解辨	日本水土考	大和女訓	慶乃道	野中九清	古押譜	同	花押教	舜水文集	舜水朱氏談話	日本逸史	
全二冊	全六冊	全七冊	全七冊	全七冊	全七冊	全三冊	全二冊	全三冊	全一冊	全三冊	全三冊	全四冊	全七冊	全七冊	全七冊	全七冊	全四冊	全七冊	
傷寒擇註	食療正要	短尺百人一首	瀧本真跡百人一首	繪本朝日山	天瓊牙記	元亨釈書抄	土佐國式社考	新用文章	異制庭訓	同三卷抄	長崎夜話草	論草	家内用心集	會津孝子傳	會津物語	怪異辨斷	奇異雜談	大和怪異記	
十冊	全三冊	全一冊	全一冊	全三冊	全二冊	全一冊	全一冊	全一冊	全一冊	全三冊	全三冊	全三冊	全三冊	全五冊	全七冊	全八冊	全六冊	全七冊	
豐年記	醫術家傳集	神代盟士傳	篆學入門	洪武正韻	尺牘奇賞	同	燕南記譚	本朝怪談故事	古梅園墨譜	天門義論	曆鑑輯要	詭解	同	算學啓蒙	清納言春曙抄	諸茶譜	百姓衣袋	商人夜話	町人夜話
全三冊	全一冊	全五冊	全一冊	全七冊	全四冊	全二冊	全四冊	全四冊	全四冊	全三冊	全一冊	全七冊	全六冊	全三冊	全十二冊	全三冊	全三冊	全三冊	全七冊

Figure 4.3. Advertisement page at the end of *Hyakushō bukuro* showing works authored by Nishikawa Joken, Kaibara Ekiken, and Zhu Shunshui, among others, that were published by Ryūshiken (University of Tokyo Library)

⁵ Cf. Munemasa, *Kinsei Kyōto shuppan bunka no kenkyū*, 234.

1.2. *Printed books and publishing houses*

At the end of Joken's *Chōnin bukuro*, after an appendix titled *Chōnin bukuro sokobarai* 町人囊底拂 (“Scraping the bottom of the townspeople’s pouch”), one finds the following description by Ryūshiken, dated the fourth year of the Kyōhō 享保 era (1719):

The preceding two works – “The townspeople’s pouch” and “Scraping the bottom” – have been organized by the old retired master Kyūrinsei Nishikawa [Joken]. The master, when traveling down east last year’s winter, stopped his carriage briefly in the [imperial] capital. As I deal with books, I made my way to his inn, and while talking about publications, a person there brought up the subject of this book. Despite my having requested obstinately upon hearing about it, the master would not relent. Therefore, following the advice of his fellow scholar from the same hometown, I kept begging repeatedly until I finally obtained this book from Nagasaki. Giving it the title “The merchant’s pouch” must have been an expression of modesty by the master. My intention to have it carved into woodblocks was to propagate it among the public for a long time so that it becomes a pouch of treasures for scholars, farmers, artisans, and merchants alike.

右町人囊同底拂の二書は、長崎の隠翁求林齋西川老先生編集し給ふ所也。先生去年の冬東に下り給ふ時、暫く駕を都にとどめらる。我書をひさぐを以て、彼逆旅に造り、書籍物がたりの次手、かたへの人此書の事に及。我聞て懇に求といへども、先生ゆるし給はず。因て同郷の學友某にしたがひ乞事再三に及て、遂に此書を崎陽より得たり。其町人囊と題するは先生の謙の辭成べし。思ふに早く櫻木にちりばめ、永く世に廣めば、士農工商の寶袋とも成なんといふことしかり。⁶

Ryūshiken refers to Joken’s trip to Edo when he was accompanied by an unnamed “fellow scholar from the same hometown” (*dōkyō no gakuyū* 同郷の學友). As seen in the previous chapter, this could not have been Ro Sōsetsu, for the interpreter would only leave for Edo the next year – Ryūshiken’s account further confirming that Joken had left earlier, around December 1718. The publisher is convinced that *Chōnin bukuro* and its accompanying appendix have universal value and should be read by people from all classes. According to him, it was only because of much insistence that Joken allowed his writings to be published in Kyoto. This piece of information – no doubt part of a marketing strategy for enhancing the appeal of the book – implies that Joken’s writings already circulated in some form before the publisher acquired the rights to carve them on woodblocks. Indeed, the date for Joken’s

⁶ Nakamura Yukihiro 中村幸彦, ed., *Kinsei chōnin shisō* 近世町人思想, *Nihon shisō taikai* 日本思想大系 59 (Tokyo: Iwanami shoten, 1975), 173; Nishikawa, *Chōnin bukuro*, *Hyakushō bukuro*, *Nagasaki yawa gusa*, 152. See image below for the original print.

preface to *Chōnin bukuro* is 1692, more than twenty-five years before its eventual publication. Besides *Chōnin bukuro*, Ryūshiken was able to secure many other titles he would print, as evidenced by the lists reproduced in the images below.

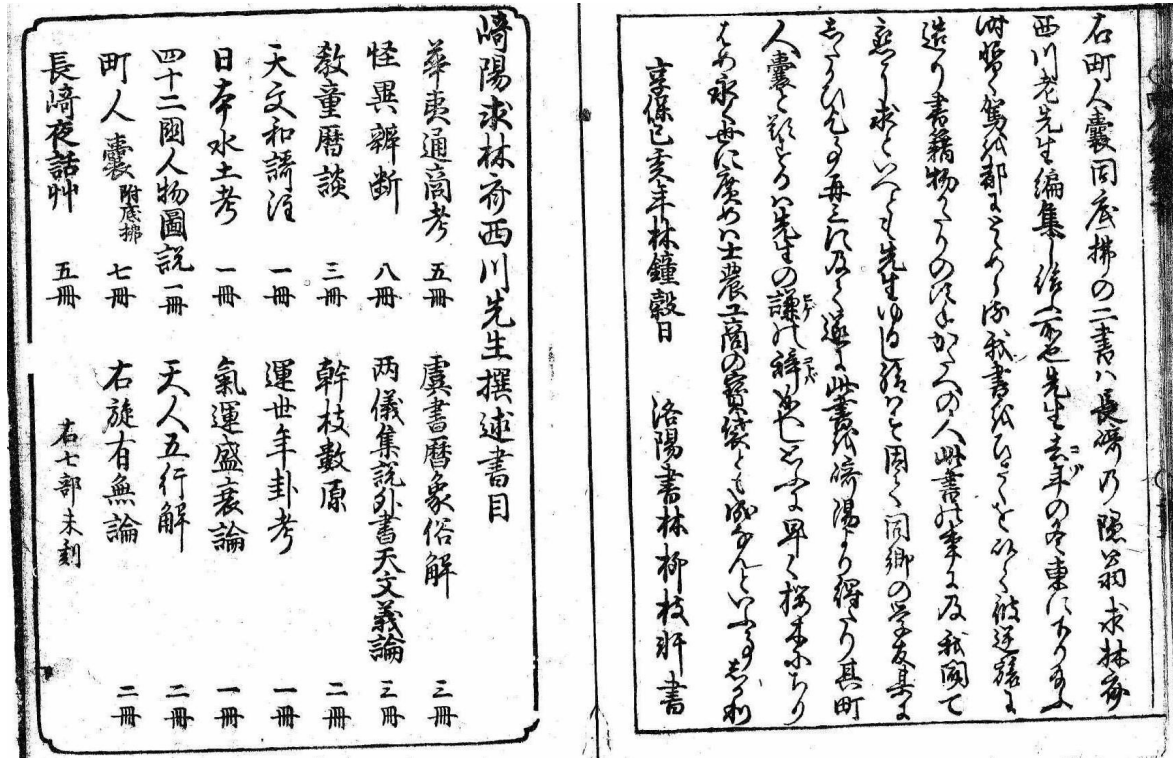


Figure 4.4. Colophon of *Chōnin bukuro*, published in 1719 (National Institute of Japanese Literature); on the right, there is Ryūshiken’s postface quoted above and, on the left, an “index of books written by Master Kyūrisan Nishikawa from Nagasaki” (崎陽求林齋西川先生撰述書目), i.e., Joken’s writings

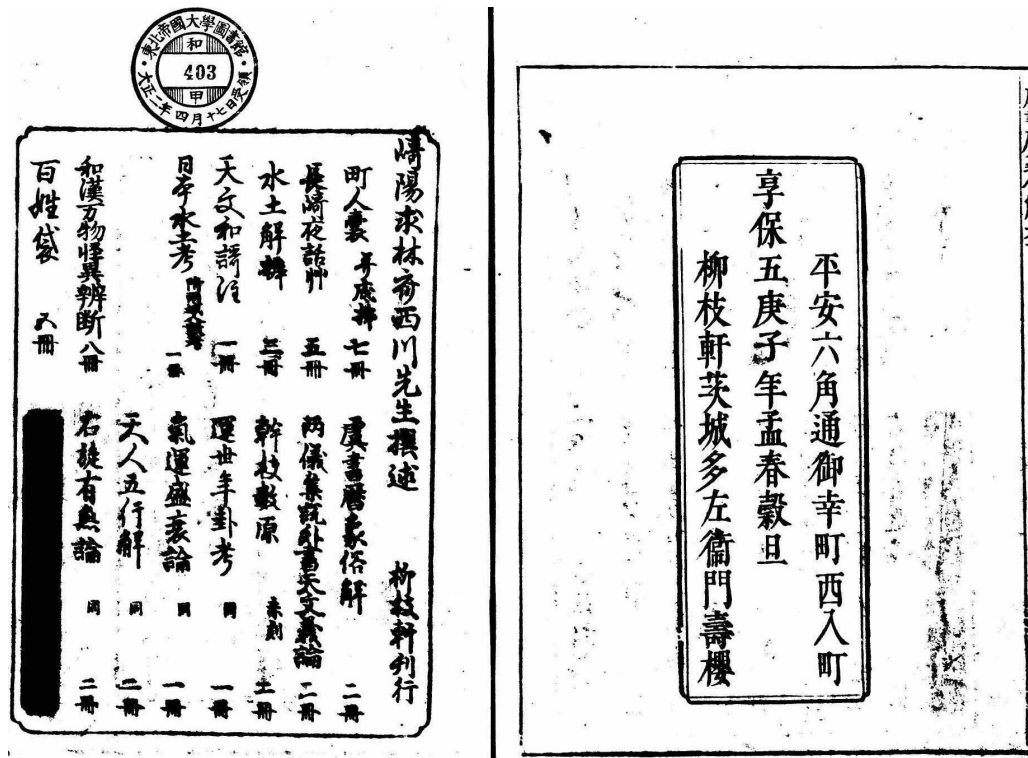


Figure 4.5. Colophon of *Gusho rekishō zokkai*, published in 1720 (Tohoku University Library) containing a similar index of Joken's writings with the additional information that these are the titles published by Ryūshiken (柳枝軒刊行)

These two lists provide meaningful clues about Ryūshiken's acquisition and publication of the scholar's writings. Comparing the top row of the two indexes, one cannot help but notice that some of the titles change. The world descriptions *Ka'i tsūshō kō* and *Shijūnikoku jinbutsu zusetsu* as well as the vernacular cosmological work *Kyōdō rekidan* disappear from the second index, as they were not published by Ryūshiken. Instead, two other titles are added, *Suido kaiben* and *Hyakushō bukuro*, suggesting that they were published before 1720 – unless the index page was added in subsequent reprints of *Gusho rekishō zokkai*. Extant copies of *Hyakushō bukuro*, when dated, have the colophon year of 1731. This means that there was either an earlier version of *Hyakushō bukuro* that has not survived or, more likely, that the index page in *Gusho rekishō zokkai* was indeed a later addition.

The latter hypothesis is corroborated by the preface of *Hyakushō bukuro*, which ends with the explanation that “around the beginning of winter, in the year of the yin metal ox of Kyōhō (1721), in response to a request from the Kyoto bookseller Ryūshiken, Kyūrinsei (Joken) of Nagasaki cursorily wrote this down” (于時享保かのと丑初冬の頃、京師書林

柳枝軒の求めに應じて、假初に崎江の求林齋に筆を澣ぎ侍りぬ。⁷ Therefore, *Hyakushō bukuro* cannot have been published before *Gusho rekishō zokkai*, since Joken had not yet written it in 1720. As woodblocks circulated among booksellers, the colophon and other added pages at the end were easily replaced by new ones with updated information. In fact, in later editions that attribute *Hyakushō bukuro* to Ekiken instead of Joken, not only were the colophon and title pages replaced – as shown above – but also the last page of the preface was edited, changing Joken’s name to Ekiken’s.

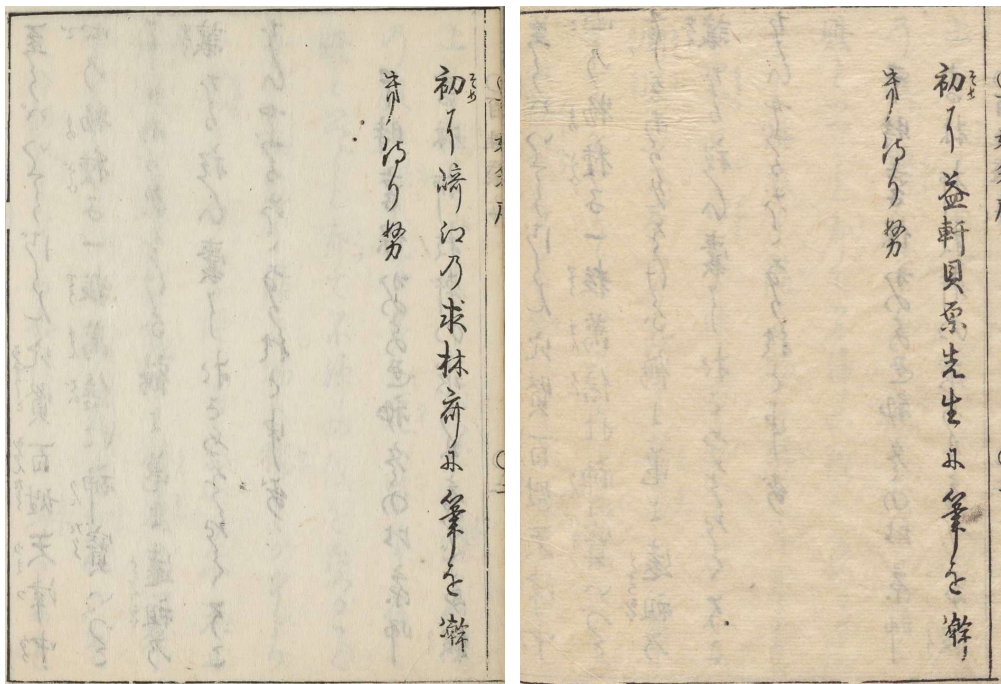


Figure 4.6. Last page of the preface of two prints of *Hyakushō bukuro*: on the lefthand copy (University of Tokyo Library), Joken’s name appears as “Kyūrin-sai of Nagasaki” (崎江の求林齋), whereas on the righthand copy (National Archives of Japan), his name is replaced by the designation “Master Ekiken Kaibara” (益軒貝原先生); the characters’ matching shapes and positions indicate that the two copies were likely made from the same woodblock with only the portion containing Joken’s name being modified.

The bottom row of both indexes above, despite displaying the same titles, has significant differences. As indicated in the notation on the bottom left corner of the first image, the seven titles to its right are still unpublished (右七部未刻), i.e., the entire bottom row starting with *Gusho rekishō zokkai*. In the second image, the bottom row contains the same

⁷ Nishikawa, *Chōnin bukuro*, *Hyakushō bukuro*, *Nagasaki yawa gusa*, 155–56.

titles, but the last line is omitted – instead, the term “unpublished” (*mikoku* 未刻) appears under the third title *Kanshi sūgen* 幹枝數原 (“The numeric origin of the stems and branches”) and the four titles to its left are all marked “ditto” (*dō* 同). The two titles published in the meantime are *Gusho rekishō zokkai*, from which the index is reproduced, and *Tenmon giron*, listed as *Ryōgi shūsetsu gaisho tenmon giron* 兩儀集說外書天文義論 (“Outer book of the collected explanations on heaven and earth: Discussion on the meaning of the celestial signs”).

The last of these five unpublished books, *Tenjin gogyō kai* survives in manuscript form with the same title. The penultimate title, *Usen umu ron* 右旋有無論 (“Discussion on the existence of a rightward rotation”), is in all likelihood the same text as *Usen benron*. There seem to be no extant printed editions of either work, but the manuscripts count among those Joken might have presented to Tokugawa Yoshimune – alongside *Tenmon giron* and *Ryōgi shūsetsu*. The third title from the left, *Kūn seisui ron* 氣運盛衰論 (“Discussion on the intensification and deterioration of qi flows”), is almost the same as *Kūn seisui ben* 氣運盛衰辨 (“Discourse on the intensification and deterioration of flows of qi”), one of the sections of Joken’s *Suido kaiben*. It is possible that Ryūshiken intended to publish *Kūn seisui ron* independently but ended up incorporating it into the latter book.

The two remaining unpublished titles, *Kanshi sūgen* and *Unsei nenka kō* 運世年卦考 (“Investigation into the yearly hexagrams of the flows of this world”) seem to have been lost, as there are no cataloged manuscripts or print copies. Interestingly, these two titles – together with *Ryōgi shūsetsu*, *Kaii ruisan*, *Usen umu ron*, *Tenmon gogyō kai*, and *Kūn seisui ron* – all appear in Joken’s biographical entry from *Nagasaki senmin den*, in which they are described as being preserved in the family (*ie ni zōsu* 藏家), i.e., as manuscripts, as opposed to other twelve titles that “circulated among the public” (*yo ni okonawaru* 行世) once they were printed.⁸

Later in the 18th century, Joken’s works were republished in Osaka by the bookseller Morimoto Tasuke 森本太助, whose business name was Kawachiya 河内屋 and the bookstore called Bunkindō 文金堂. This publisher seems to have acquired the Ryūshiken woodblocks and reprinted them at different times. Apart from the editions that contain specific mentions of Tasuke, such as a list of other books sold at Bunkindō or other booksellers, it is difficult to tell whether the books were printed by Ryūshiken during Joken’s lifetime or are later reprints. As the image below illustrates, the information on Ryūshiken as

⁸ *Nagasaki senmin den* 52-53.

the first carver of the book's woodblocks coexists with an added last page containing the names of bookstores that published (*hakkō* 發行) Joken's work again later as part of a guild.⁹



Figure 4.7. Copy of *Tenmon giron* containing the address and name of Ibaragi Tazaemon (i.e., Ryūshiken) as the one who produced the woodblocks alongside the name of nine publishers in Edo and one in Osaka, namely Kawachiya (i.e., Morimoto) Tasuke (Tohoku University Library)

Editions with lists at the end advertising books sold by Ryūshiken were presumably printed before the woodblocks were sold to later publishers. Advertisement pages were the first to be removed once the book rights were acquired by a new store. This change in advertised titles can be seen in two different prints of Joken's *Gusho rekishō zokkai* held at the National Astronomical Observatory of Japan reproduced below. Although the colophons of both books contain the same information about Ryūshiken as the original publisher who made the "woodblocks for posterity" (*juō* 壽櫻) in 1720, the first print reproduces Ryūshiken's book catalog (*zōsho mokuroku* 藏書目錄), whereas the reprint contains instead a different catalog of woodblocks concerning calendrical works (*zōhan rekisan shomoku* 藏板曆算書目) held by a bookseller called Tennōjiya Ichirōbē 天王寺屋市郎兵衛 or Suigyokudō 水玉堂. These types of bibliographical information suggest that the popularity of Joken's works was greatly

⁹ On booksellers' guilds and the reselling of woodblocks, see Kornicki, *The Book in Japan*, 179–83.

boosted by the Nagasaki scholar's association with Ryūshiken, a publishing house that quickly became a fixture in the literary and scholarly circles of Kyoto. Once the woodblocks were further circulated, Joken's cosmological books could then reach an even larger audience, being advertised alongside other similar titles.

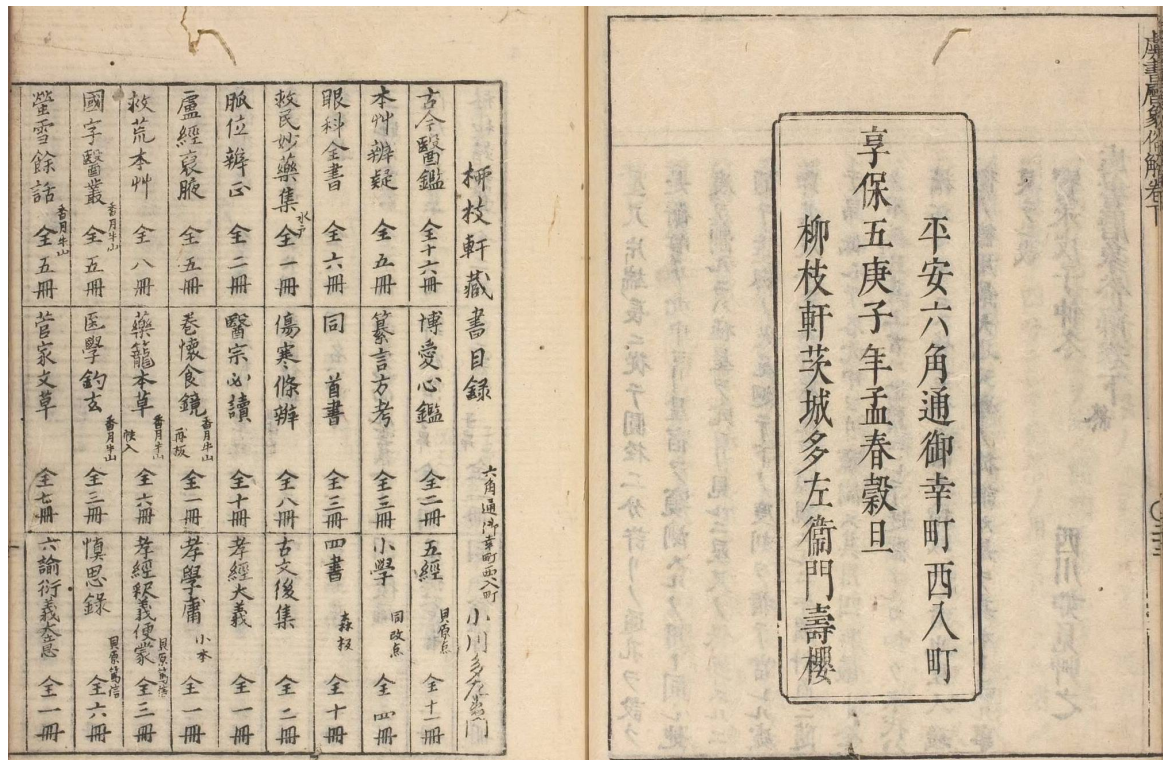


Figure 4.8. Copy of *Gusho rekishō zokkai* with the catalog of books from Ryūshiken (National Astronomical Observatory of Japan)

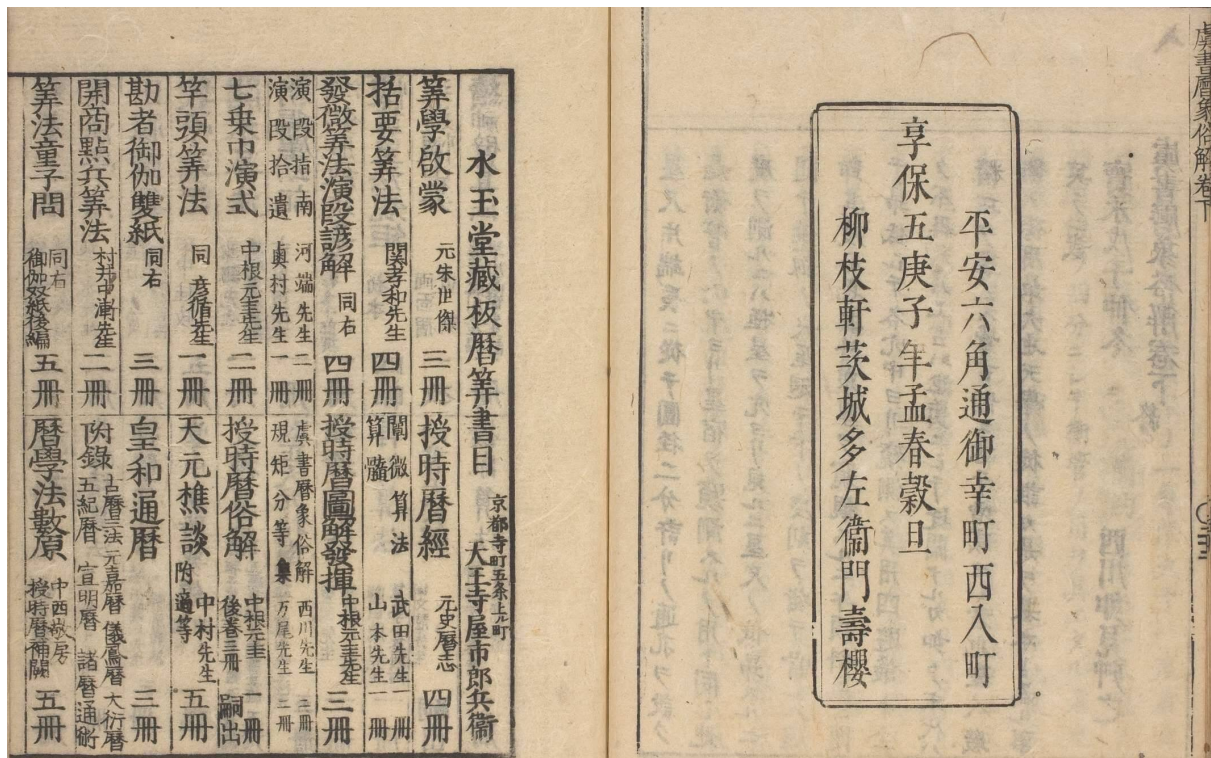


Figure 4.9. Copy of *Gusho rekishō zokkai* with a different catalog of books from Suigyokudō (National Astronomical Observatory of Japan)

1.3. *Ladders for the people*

Let us now look at the content and goals of some of Joken's popular titles published by Ryūshiken. In *Gusho rekishō zokkai*, first printed in 1720, Joken glosses key sections from *Yushu* 虞書 (“Book of Yu”), the first book of *Shujing* 書經 (“Classic of documents”), also known as *Shangshu* 尚書. The texts comprising the *Shujing* date from different periods, and some of them are considered the earliest among the Chinese canonical books. It is one of the Five Classics (Ch. *wujing*, Jp. *gokyō* 五經) of the Confucian canon, and it constitutes a central work for the development of political discourse in East Asia, having spawned a long tradition over two millennia of commentary and philological debate.¹⁰

The section most relevant for Joken's purposes, namely *Yaodian* 堯典 (“Canon of Yao”), the first chapter of *Yushu*, is estimated to date to the Spring and Autumn period (770–476 BCE).¹¹ Regardless of when the *Shujing* was produced, it was a long-established classic in

¹⁰ cf. Michael Loewe, ed., *Early Chinese Texts: A Bibliographical Guide*, Early China Special Monograph Series 2 (Berkeley: Society for the Study of Early China, 1993), 376.

¹¹ Loewe, 378.

mid-Tokugawa Japan, and the *Yaodian* 堯典 chapter was considered the ultimate point of reference for the origins of astronomy in China – a tradition in which Japanese cosmologists placed themselves. Joken aims to facilitate access to the revered ancient knowledge that this canonical text holds. In the preface featured in the printed editions, Joken writes:

I am ashamed [to confess] that my knowledge is meager and stuck in its ways. It does not suffice to look into the profundity of the ancients. Nevertheless, I have been frequently requested by my colleagues to lecture on the astronomical images [recorded in the] Book of Yu. Hence, I have compiled what I said in my talks and written it into one volume. As I am incapable of fully expounding the content [of the original text], when the inexperienced and ignorant peruse this [book], they shall hopefully use it as a ladder to elevate themselves from their humble [state].

愧知識固陋、不足以窺古人之奧。雖然每為同志之所請、講論虞書曆象。乃綴所講之語、著成一卷。余不能曲暢其旨趣、而童蒙者或閱之、則庶乎為其升高自卑之階梯矣。¹²

It is a common trope in such prefaces to feign modesty, as Joken does by downplaying his ability to shed light on the classics of antiquity. His statements nevertheless clarify what he – and his publisher Ryūshiken – aimed to achieve with such a publication. Unlike his more arcane works that had a smaller circulation as manuscripts, Joken’s printed books were written to attract more interest from a variety of readers. The inclusion of the preface itself – absent from the manuscript held in the former shogunal collection – is significant insofar as it defines more clearly what it means to write to a broader spectrum of readers. Works such as *Gusho rekishō zokkai* bridged the gap between technical works aimed at a specialized audience, written entirely in Sinitic, and popular works produced mostly in *hiragana* that reached a wider audience.

The passage above is also meaningful for providing a concrete example of the content of Joken’s “lectures on the celestial signs” that made his fame in Nagasaki. The manuscript of *Gusho rekishō zokkai* is thus presented as a transcription of the scholars’ oral expositions on a canonical text that is particularly pertinent to cosmological knowledge. As discussed in previous chapters, a privileged place for such lectures on Confucian classics was the Confucian academy Nagasaki Seidō, headed by Joken’s master Nanbu Sōju before it was taken over by Mukai Gensei, whose journal entries attest to precisely these activities around the interpretation of ancient Sinitic books.

¹² Nishikawa Joken 西川如見, “*Gusho rekishō zokkai*” 虞書曆象俗解 (Woodblock print, Kyoto, 1720), vol. 1, fol. 1a, Kanō bunko, Tohoku University Library.

In the last sentence of the preface, Joken demonstrates being aware of the difficulty of the original text. Presenting passages in their original form, he claims, will nonetheless encourage those who are “inexperienced and ignorant” (*dōmō* 童蒙) to improve themselves through the study of these authoritative sources. The glosses or reading notations, more than just aiding comprehension, also guide the reader toward specific interpretations deemed correct or orthodox, anticipating the explanation that follows in the commentary. Joken’s vernacular commentary thus imposes a particular interpretation of the classics, effectively working as translations and removing ambiguities in the original.

Enlightening his readers is the main objective of other works by Joken, especially his compendium on extraordinary phenomena *Kaii bendan*, first printed in 1714. Consisting of a series of citations from different Chinese sources (mostly official dynastic histories, but also ancient and recent books on natural and supernatural phenomena) as well as some Japanese historical documents such as the *Nihon shoki* 日本書紀 (“Records of Japan”), *Kaii bendan* is Joken’s longest book to be printed. The whole book is organized topically, and a “discerning commentary” (*bendan* 辯斷) is added after each series of quotations to determine their accuracy. While the commentaries are written in a mixed style of *katakana* and *kanji*, the book as a whole is largely composed of cited passages in Sinitic. Joken explains how his book is to be used:

This book is made up of two sections: celestial anomalies and terrestrial anomalies. Together they [consist of] four fascicles in a total of one hundred and seventeen entries and fifty headings. The sequence is not fixed in the least. It is possible to follow it as one pleases. 此書天異地異二篇トス。共ニ四卷都テ一百十七條并目五十。次第強テ不定。宜キニ從テ可也。¹³

Kaii bendan is distinctive for being one of the few works by Joken to feature a preface (*jō* 叙) by another scholar, namely Kon Ransai 金蘭齋 (1653–1732), who hailed from the northern domain of Akita 秋田. Ransai studied and taught in Kyoto, and is best known for having written *Rōshikyō kokujikai* 老子經國字解 (“Explanation of the Classic of Laozi in the letters of [our] country”), a Japanese vernacular commentary on the canonical text *Daodejing* 道德經 (“Classic of the way and its virtue”) that was published posthumously in 1761. In Ransai’s preface, dated 1714, the scholar writes that “a certain old bookseller from the capital, desiring to carve this [work] into woodblocks to circulate it widely, entrusted its

¹³ Nishikawa Joken 西川如見, “*Kaii bendan*” 怪異辨斷 (Woodblock print, 1715), vol. 1, sec. *hanrei*, fols. 1b–2a, Naikaku bunko, National Archives of Japan.

preface to me” (洛賣書翁某欲剗諸版以廣其傳以敘屬余).¹⁴ This assertion reiterates the central role that book traders performed as publishing houses that connected scholars around the archipelago. One of the nodal points in the scholarly networks of Tokugawa Japan could thus be located in the bookstores of Kyoto – and also increasingly Edo.

Since Ransai does not identify the bookseller by name, it is difficult to know precisely who the first publisher might have been. However, if we consider the information from *Chōnin bukuro*'s postface, in which Ryūshiken recounts obtaining the rights to Joken's books in 1719, it is very unlikely that the first woodblocks for *Kaii bendan* were made by Ryūshiken. Indeed, even though a number of extant copies of *Kaii bendan* contain Ryūshiken's name on the title cover, his name is absent from the colophons. Instead, when there is information on the publishers available, one normally finds the names of Furukawa Saburōbē 古川三郎兵衛 and Furukawa Shinshichi 古川進七 – whose business name was Fujiya 藤屋 – located in Kyoto and Edo respectively. The Furukawa seemed to have been the ones who carved Joken's earlier works, some of which, like *Kaii bendan* were acquired by Ryūshiken later.



Figure 4.10. Title pages of two different prints of *Kaii bendan* (both held by Waseda University Library); on the left, the edition printed by the Furukawa and, on the right, Ryūshiken's edition

¹⁴ Kin Ransai 金蘭齋, “*Rōshikyō kokujikai*” 老子經國字解 (Woodblock print, Osaka, 1809), vol. 1, sec. *jō*, 4b-5a, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/ro13/ro13_03062/index.html.

Although it is not clear whether Joken and Ransai were previously acquainted, their interests converged. Both scholars wrote books with the intent of making ancient Chinese texts more accessible to a wider audience in Japan through vernacular glossing. Ransai's *Rōshi kei kokujikai* parallels Joken's *Gusho rekishō zokkai*, in which the original Sinitic text is followed by a commentary mixing *kanji* and *katakana*. As discussed, Joken's commentaries echoed his master Sōju's approach. Sōju, like Ransai, was also a Kyoto scholar who provided commentaries to Daoist texts, perhaps frequenting the same circles as Ransai in the imperial capital.

1.4. *Cosmological knowledge for beginners*

Joken's works originally printed by the Furukawa that were not acquired by Ryūshiken continued to circulate in different forms. Among them, *Kyōdō rekidan* and *Unki shinan kōhen* are significant for presenting complex cosmological ideas in an even more accessible format; rather than using a combination of *kanji* and *katakana*, these books are written in cursive *hiragana* with a few *kanji* accompanied by reading notations, falling toward the bottom of the literacy spectrum. While *Kyōdō rekidan* and *Unki shinan kōhen* did not seem to have enjoyed as wide a circulation as *Kaii bendan* or even *Gusho rekishō zokkai* – perhaps precisely because they were not republished later by Ryūshiken and other subsequent booksellers – they reveal the range of Joken's intended readers and their variegated reading abilities.

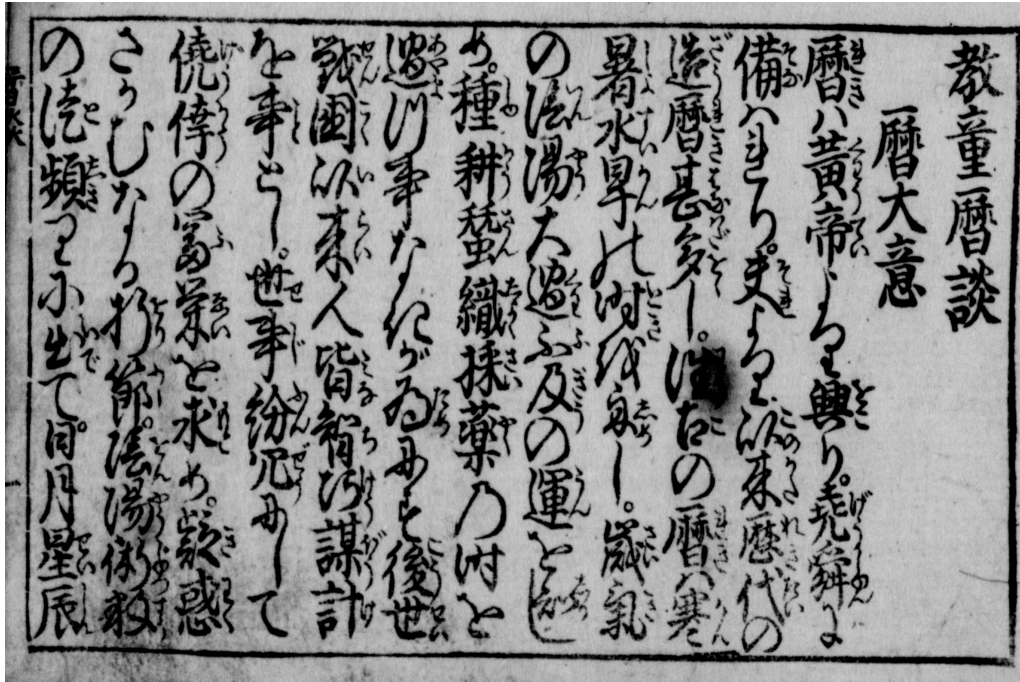


Figure 4.11. First page of *Kyōdō rekidan* with a mixture of *hiragana* and *kanji* with reading notations
(Tohoku University Library)

Kyōdō rekidan and *Unki shinan kōhen* are, in fact, two editions of the same book. Joken explains it in his foreword (*hanrei* 凡例) to the latter edition:

I had called my rough draft “Teaching the calendar to children” (*Kyōdō reki*), and it had been circulating among the public. However, to reduce the numerous incomplete portions, by request of the current bookseller, I have supplemented what was lacking and changed its name, calling it “Japanese and Chinese calendrical explanations on the flows of qi” (*Wakan unki rekisetsu*).

Sections added after proofreading serve as supplements, with corresponding letters inscribed alphabetically at the top and appended to the passages in the previous woodblock so they would be easily visible.

一、予の草稿に教童曆を號して、世に流布せしむといへとも、往々に不足のところ少しとせ、次に今書林の求めによりて闕たるを増益し名を改めて、和漢運氣曆説と號す。

一、校合之後追加の所々は増補と致し、其かしらにイロハの相紋をしるし、前板の文段に附會し、見易安からむ為なり。¹⁵

¹⁵ Nishikawa Joken 西川如見, “*Wakan unki shinan kōhen*” 和漢運氣指南後編 (Woodblock print, Kyoto, 1726), fol. 1a-b, Shimoura bunko, Museum of Science, Tokyo University of Science, <https://doi.org/10.20730/100228189>.

As Joken clarifies, the new edition did not constitute an overhaul of the previous text. The vast majority of the printing blocks remain the same. The supplemented sections (*zōho* 増補) are added at the end of the book as final notes. The places where these new sections are to be inserted in the original text are marked sequentially with *katakana* – i.e., following the traditional *iroha* いろは sequence of the Japanese syllabary, the equivalent of the alphabetical order in the Latin script. There were evident practical reasons for this approach.

Interposing the supplemented portions between two sections of the original text would require replacing several woodblocks and potentially reorganizing the pagination for the entire book. By adding them as final notes, the publisher could retain the same woodblocks used for the original text instead of having to carve entirely new ones for the text to be edited. The only modifications would be the carving of one extra character for each endnote at the top of each old woodblock, and a few new ones added to the end of the book.

The decision to republish the book under a different title also reveals editorial strategies to increase sales. As Joken notes, it was his publisher who requested the title change from *Kyōdō rekidan* to *Wakan unki rekisetsu* 和漢運氣曆說 (“Japanese and Chinese calendrical explanations on the flows of qi”). Interestingly, this new title that Joken announces in his foreword is not the one found in most extant copies; instead, the vast majority of them have the title *Unki shinan kōhen*.¹⁶ It is unclear when this final title was adopted or what the term *kōhen* 後編 (“latter part”) denotes. It might be that, as the book had already been published before under the titles *Kyōdō rekidan* and *Wakan unki rekisetsu*, this “latter part” (*kōhen*) referred simply to its latest edition.

At first glance, *Wakan unki rekisetsu* or *Unki shinan kōhen* could appear as completely new books, especially as not all prints included Joken’s introductory remarks about it merely being an expansion of his previous *Kyōdō rekidan*. Three copies held at the Kanō Collection of Tohoku University – namely *Kyōdō rekidan*, *Wakan unki rekisetsu*, and *Unki shinan kōhen* – all list Furukawa Saburōbē and Shinshichi as the publishers, and represent the three editorial stages of this text.

¹⁶ I have been able to identify only one copy that contains the title *Wakan unki rekisetsu*, currently held at Tohoku University Library. There is also only one surviving copy of *Kyōdō rekidan* that can be consulted, also housed at Tohoku University, for the other two listed in the Union Catalogue of Japanese Books are from collections that have been lost. Nishikawa Joken 西川如見, “*Kyōdō rekidan*” 教童曆談 (Woodblock print, Kyoto, 1714), Kanō bunko, Tohoku University Library, <https://doi.org/10.20730/100330361>; Nishikawa Joken 西川如見, “*Wakan unki rekisetsu*” 和漢運氣曆說 (Woodblock print, Kyoto, 1716), Kanō bunko, Tohoku University Library, <https://doi.org/10.20730/100330480>.

While the *Kyōdō rekidan* print's colophon contains the information that it appeared in the fourth year of the Shōtoku 正徳 era (1714), the copy of *Wakan unki rekisetsu* is undated. On the other hand, the colophon of certain editions of *Unki shinan kōhen* indicates that the woodblocks were first produced (*kaihan* 開板) in the first year of the Kyōhō era (1716) and corrections (*kōsei* 校正) were made ten years later, in the eleventh year of the same era (1726). The preface that appears in some editions written by an unidentified Buddhist practitioner (*shamon bō* 沙門某) also dates from 1726, which suggests editions lacking this later preface – such as *Wakan unki rekisetsu* – can be dated to the first 1716 printing.

In all these different iterations of *Kyōdō rekidan*, Joken, despite drawing heavily from both old and new Sinitic texts, prefers not to quote his sources directly, rephrasing them in the vernacular. This strategy reflects an effort to facilitate the comprehension of the text, less encumbered by impenetrable Sinitic passages.

In addition to these three editions of the same book, there are two other booklets usually published together that also contain brief explanations on cosmology aimed at readers with the lowest type of literacy. *Tenmon kyōdō wakachū* explains astronomical concepts in the form of Japanese poems or songs (*waka* 和歌) using very plain language. The accompanying *Jūnikyū kashō*, less than three folios long, also contains such “songs” (*uta* 歌) and is remarkable for providing the names of the “twelve houses” (*jūnikyū* 十二宮) – the signs of the zodiac – in Chinese characters as well as their names in Dutch (*orandago* 紅毛語) transcribed phonetically in *katakana* and their corresponding month in the Western calendar.

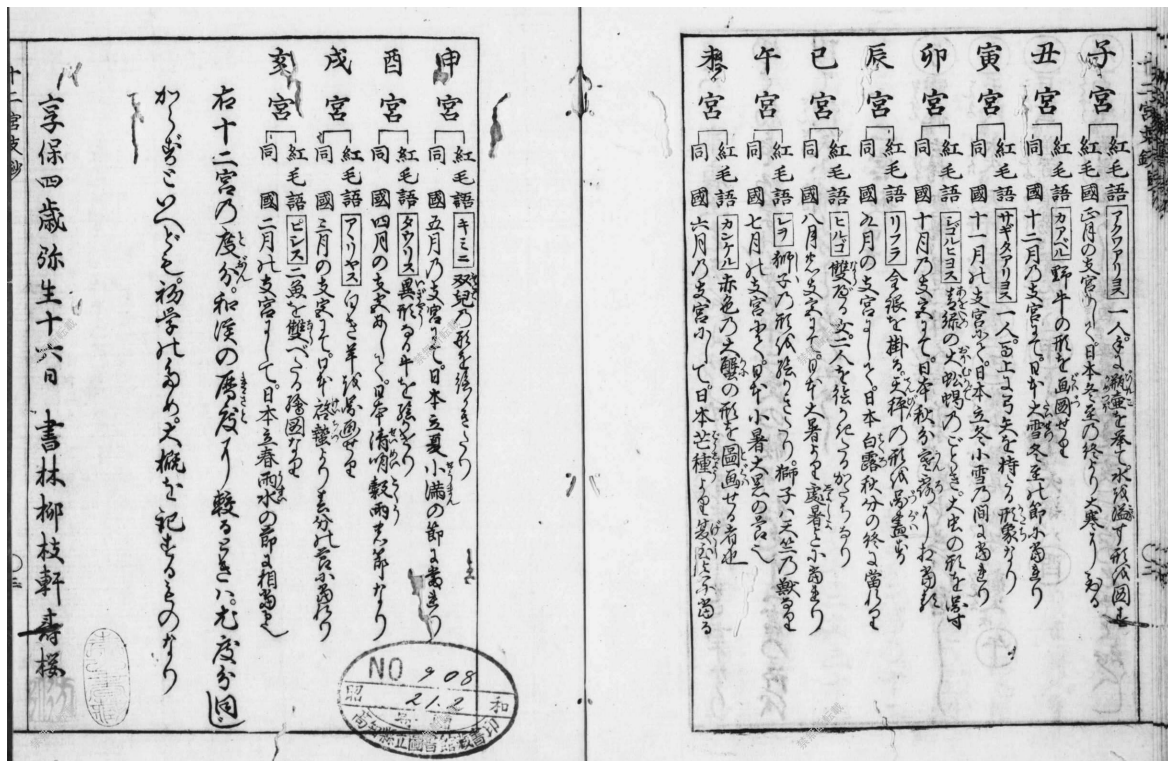


Figure 4.12. Last two pages of *Kyōdō rekidan* showing the Sinitic names for the sign of the zodiac and their equivalent Dutch names and usage (Kochi Castle Museum of History)

The printed editions of these two works appear in the same cursive style as *Kyōdō rekidan* and its following editions, with abundant *hiragana* and reading notations, which reinforces their appeal as works for popularizing astronomical knowledge. The Dutch names for the signs of the zodiac most likely serve to satiate the curiosity of readers rather than as an invitation to delve more deeply into European cosmologies, which do not get developed in these very short titles. As seen in the previous chapter, however, phonetically transcribed Dutch terms were provided by Mukai Gensei in his letter to the shogunal official Watanabe Gunzō, suggesting that they could appear in Japanese astronomical instruments.

1.5. *An elusive manuscript*

Particularly noteworthy among Joken's eclectic writings is *Kaii ruisan*, an understudied companion work to *Kaii bendan*. Unlike *Kaii bendan*, *Kaii ruisan* is composed almost entirely of citations in Sinitic, without any accompanying explanatory sections, and contains very few comments from Joken himself. There is only one extant manuscript copy of this work, currently held at the Institute of Oriental Classics (*Shidō bunko* 斯道文庫) at Keio University.

The provenance of this book from the Tokugawa period until today is not entirely known. The Keio copy contains five seals on the page of the table of contents of each volume. Besides the seal indicating its current location, there are two indicating that it once belonged to the scholar Kurokawa Mayori 黒川眞頼 (1829–1906), one indicating that it belonged to his son Kurokawa Mamichi 黒川眞道 (1866–1925), and one that marks it as part of the library of British book collector Frank Hawley (1906–1961) (*hōrei bunko* 寶玲文庫).¹⁷

The manuscript comprises four fascicles (*maki* 卷) that are also separate bound volumes (*satsu* 冊), and its roughly a third of the length of *Kaii bendan*. Each fascicle has the mention “section on human anomalies” (*jin’ihen* 人異編) in its table of contents and on the first page of the main text. These elements all point to the possibility that *Kaii ruisan* was envisioned as the third and final part of a set with *Kaii bendan*. The tripartite division into celestial, terrestrial, and human anomalies was well established in pre-modern East Asia. Heaven, earth, and humanity (*tenchijin* 天地人) constitute the three powers (*sansai* 三才) that define existence. The unified project would then clarify different sorts of anomalous events concerning these three realms. *Kaii ruisan* contains one single part on human anomalies (*jin’ihen* 人異編) that range from portentous birthmarks (生時有瑞異 *seiji zuii ari*) and mysterious diseases (*kibyō kaishitsu* 奇病怪疾) to sorcery (*yōjutsu* 妖術) and resurrection (*saisei* 再生).¹⁸

It is possible that printed copies of this title were made. This hypothesis is corroborated by a list of works by Joken that appears in the colophon of another printed book, namely the aforementioned copy of *Wakan unki rekisetsu* preserved at Tohoku University Library. As one can see in the image below, right before the names and addresses of the Furukawa booksellers in Kyoto and Edo who engraved this book, there is a catalog of five titles by Joken. The three in the middle are the two sections of *Kaii bendan* on celestial and terrestrial anomalies, and the single section of *Kaii ruisan* on human anomalies. Each section (*hen* 編) contains four *maki*, corresponding to the books that survive today under this title.

¹⁷ According to the Keio Institute of Oriental Classics, this title is listed on the catalog of books belonging to the Kurokawa family (*Kurokawa bunko mokuroku* 黒川文庫目録) at the very end of the category “24, tales” (廿四 物語 *nijūyon monogatari*), and contains the note “Tsutsui clan” (*Tsutsui shi* 筒井氏). This might signify that the book was acquired personally by a certain Tsutsui Kyūtarō 筒井久太郎, who mediated the purchase of the *monogatari* titles of the Kurokawa collection through the bookstore Isseidō 一誠堂, when they were split between Jissen Women’s University and Notre Dame Seishin University. *Kaii ruisan* then made its way to the collection of Frank Hawley and eventually back to Isseidō, where it was purchased by Keiō University. It is not clear how Kurokawa Mayori obtained the book in the first place. See Keiō gijuku daigaku fuzoku kenkyūjo Shidō bunko 慶応義塾大学附属研究所斯道文庫, *Zusetsu shoshigaku: Kotenseki o manabu* 図説書誌学—古典籍を学ぶ (Tokyo: Bensei shuppan, 2010), 35.

¹⁸ Nishikawa Joken 西川如見, “*Kaii ruisan*” 怪異類纂 (Manuscript, Keio Institute of Oriental Classics, Undated).

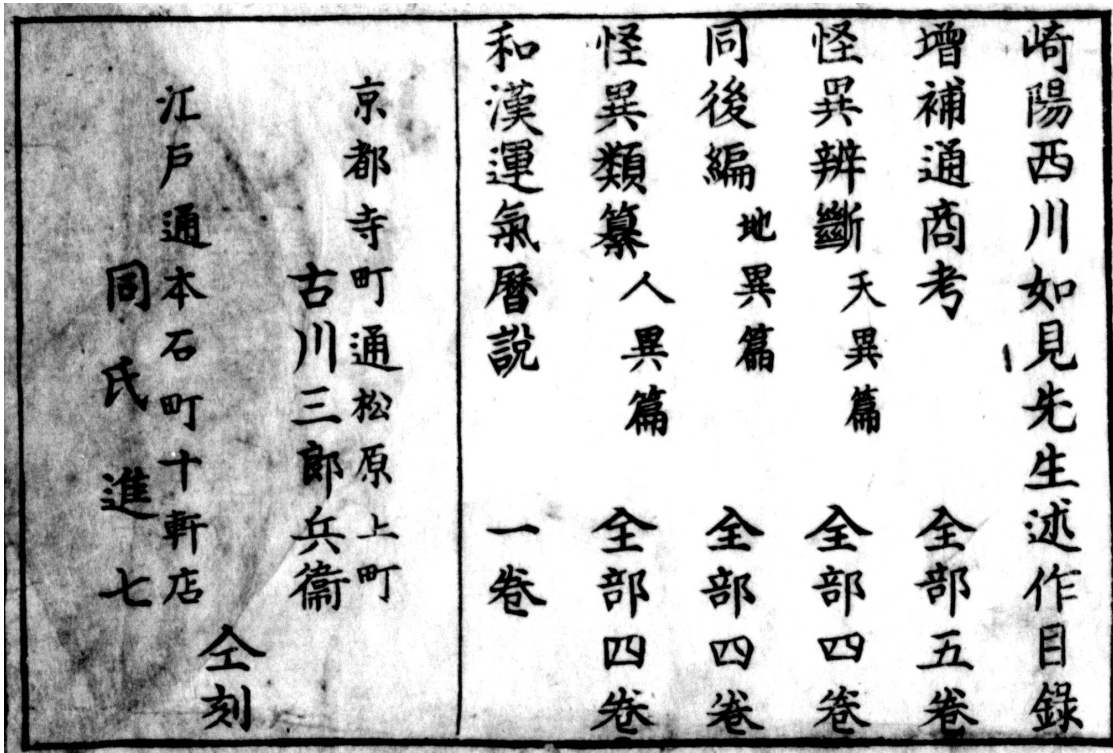


Figure 4.13. Colophon of *Wakan unki rekisetsu* published by the Furukawa featuring the titles of both *Kaii bendan* and *Kaii ruisan* (Tohoku University Library)

Despite this piece of evidence suggesting that *Kaii ruisan* might have been printed at some point – or at least considered for publication – there is no guarantee that this was indeed the case until such printed copies are found. The catalogs of books sometimes included on colophons functioned mainly as advertisements. As evidenced by the list of Joken’s books in his other publications, it was not uncommon for unpublished or forthcoming titles to appear in such catalogs.

1.6. *Books in the shogunal collection*

As mentioned, there are five manuscripts currently held at the Cabinet Library (*naikaku bunko* 内閣文庫) of the National Archives of Japan that are plausibly the ones Joken offered to Tokugawa Yoshimune. The most important one is *Ryōgi shūsetsu*, containing the essential components of Nagasaki’s hybridized cosmologies embodied by Joken. This is Joken’s most extensive description of celestial and terrestrial phenomena and how they are adequately explained by the theory of the five phases – as opposed to the four elements in the

Aristotelian tradition upheld by the Jesuits. The complex content and the sheer scope of this work, Joken's longest, made it less accessible to a larger audience, which would explain why it was never printed.

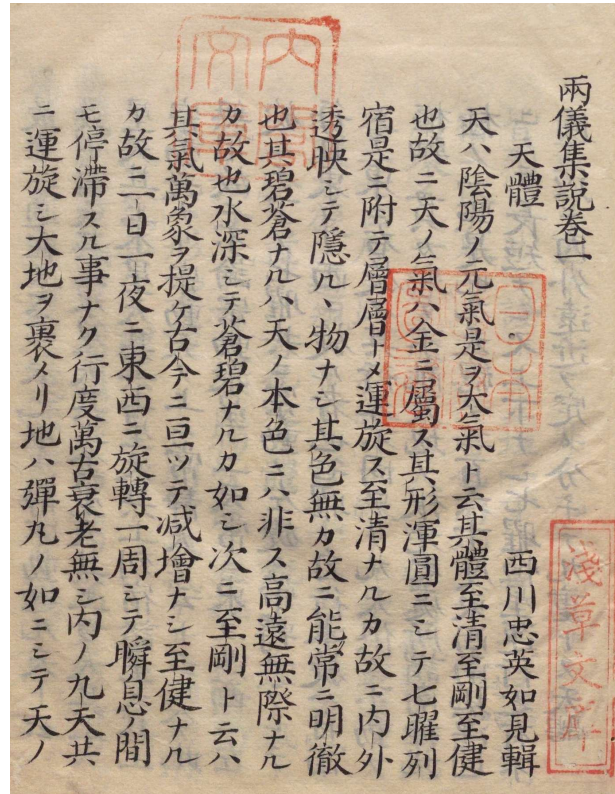


Figure 4.14. First page of the first section of *Ryōgi shūsetsu* (National Archives of Japan)

The manuscript at the National Archives is carefully prepared and reflects the type of work that would have been appropriate to present to the shogun. The book is organized thematically in sections, and each section is generally divided into three parts: 1) a brief exposition of the topic written in a mixture of *katakana* and *kanji*, 2) several quotations from Sinitic texts, especially Confucian and Neo-Confucian canonical texts and 3) a varying number of questions and answers written in the scholarly register of the vernacular (*katakana* and *kanji*). At the end of each section, one can find several color illustrations explaining the notions under discussion, such as the dynamics of the five phases or the location of each of the nine layers of heaven, including movable diagrams with multiple pieces of paper.

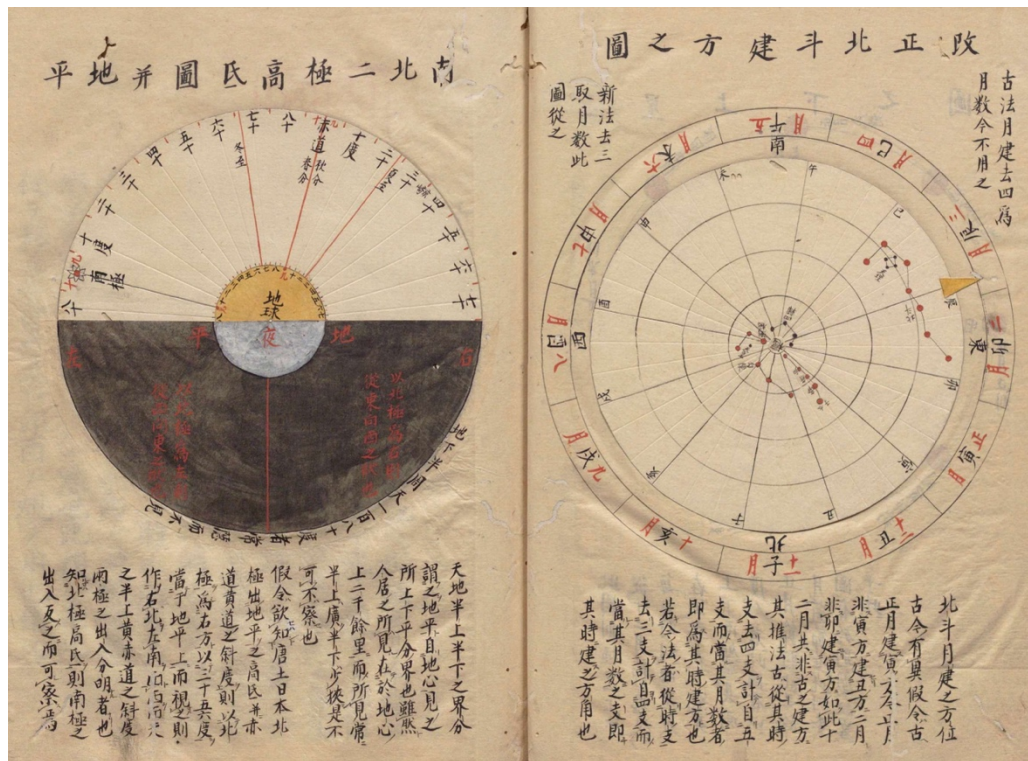


Figure 4.15. Movable diagrams from the first section of the *Ryōgi shūsetsu* manuscript; on the left, a “diagram of the height of the north and south poles and the line of the horizon” (南北二極高低圖并地平) and, on the right, a “diagram for correcting the position of the big dipper” (改正北斗建方之圖) (National Archives of Japan)

Next to *Ryōgi shūsetsu* is *Tenmon giron*, containing a condensed version of the same themes but organized as a conventional Confucian dialogue, in which the master answers a disciple’s questions. As indicated by its subtitle – *Ryōgi shūsetsu gaiki* 兩儀集說外記 (“Outer record of the collected theories on heaven and earth”) – it works as a summary of *Ryōgi shūsetsu* intended for wider circulation. Besides a single manuscript copy in the National Archives presumably belonging to the shogunal collection, there are also a few extant printed copies. The number of prints, as well as its style, is similar to *Gusho rekishō zokkai*. It is probable that they first circulated in the same circles and were aimed at a similar audience before being published by Ryūshiken; in other words, both *Tenmon giron* and *Gusho rekishō zokkai* were likely used as written support for Joken’s cosmological lectures in Nagasaki.

It is not clear, however, when *Tenmon giron* was first printed. The only date the printed editions contain is 1712, the year of the postface – absent in the manuscript version – by a mysterious figure from the Satsuma 薩摩 domain who claims having sojourned in Nagasaki and listened to Joken talk about the “celestial signs and the terrestrial principles” (*tenmon chiri* 天

文地理). This person signs his name as “Satsu[ma] Kyakuno Gennō Zanmu” (薩客野源翁殘夢), which could suggest a Buddhist background, but I have not been able to confirm his identity. After the postface, one finds on the same page the name and address of the publisher Ryūshiken, identified as Ibaragi Tazaemon, which suggests that the Kyoto bookseller was probably able to secure the rights to this book around the same time as *Gusho rekishō zokkai*, that is, after his encounter with Joken in the capital in 1718.

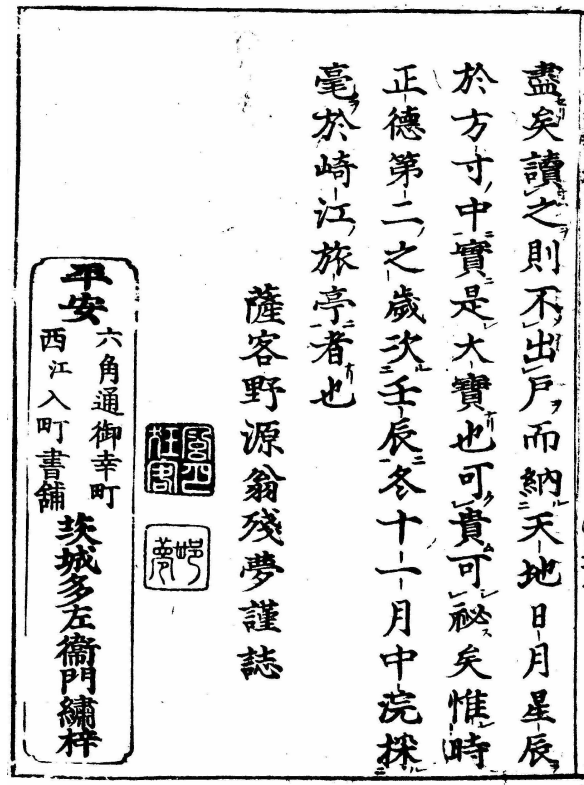


Figure 4.16. Last page of the printed edition of *Tenmon giron* (Tohoku University Library)

The two remaining texts in the National Archives of Japan that possibly belonged to Yoshimune are *Usen benron* and *Tenjin gogyō kai*. *Usen benron* is a short book written entirely in Sinitic that deals with a highly specialized topic. It concerns the movement of the “seven luminaries” (*shichiyō* 七曜) – the sun, the moon, and the five visible planets – and presents different explanations about their “rightward rotation” (*usen* 右旋) as opposed to the “leftward rotation” (*sasen* 左旋) of the upper heavens. It survives in the form of three manuscripts, only the one at the National Archives written during Joken’s lifetime. The earliest dated colophon of any of Joken’s books is found in the manuscript of *Usen benron*, in which one finds the information that it was “redrafted in midsummer of the year of the metal dragon of the

Genroku era” (元祿庚辰仲夏復艸之), i.e., around June 1700. The notation that it was “redrafted” (*mata kore o sōsu* 復艸之) in 1700 is meaningful, as it indicates that the text existed before under some other form, possibly as notes from Joken’s lectures on the subject.

Tenjūn gogyō kai is no different in its presentation and the relative complexity of its content, but its manuscript copies are undated. Writing in Sinitic, Joken delves into the technicalities of the theory of the five phases while evoking the theories of the four elements from Europe and India. The editions of *Usen benron* and *Tenjūn gogyō kai* held at the National Archives are carefully prepared in the same manner as the *Ryōgi shūsetsu* and *Tenmon giron* manuscripts. Considering the technical nature of these texts, one can infer that both texts were originally conceived for limited circulation among Joken’s students.

The content of *Usen benron* is in itself revealing. The discussion centered around the question of whether the “seven luminaries” move in the same direction as the heavens, despite being mentioned in Joken’s more popular writings, was fairly technical. It is difficult to imagine that a detailed account of this debate would have been a primary concern for those with only a superficial interest in cosmology.

1.7. *Sinitic treatises on Japan’s place in the world*

More significant titles written in Sinitic with wider circulation were *Nihon suido kō* and *Ryōiki jinsū kō*, which appear together in a single bound volume, both in print and as manuscripts. Some printed editions, such as the one reproduced below, contained two title pages with Joken’s name and that of his publisher Ryūshiken. The first title page is located on the backside of the outer cover, right before the preface, and contains the title *Nihon suido kō*; the second one appears in the middle of the book, also containing the name of Joken and the publisher, and the title *Ryōiki jinsū kō*. These first printed editions are dated 1720, the year after Ryūshiken secured the rights to a great number of Joken’s writings.



Figure 4.17. Title pages of *Nihon suido kō* and *Ryōiki jinsū kō* found respectively at the beginning and the middle of the printed book (National Institute of Japanese Literature)

Similarly, there are two identical colophons with the publisher's address and the publication date, one in the middle of the book, right after the end of the first text, and one at the very end of the book, the latter being the most common location. These unusual elements could lead us to believe that the two texts were originally intended for publishing as two stand-alone short books. Nevertheless, the surviving copies listed in the Union Catalogue Database of Japanese Texts seem to all be bound together as one single volume.¹⁹

The combined print format is also reflected in the manuscripts, which also have both texts together in one bound volume. This suggests that they are most likely handwritten reproductions of earlier printed editions. This hypothesis is corroborated by a manuscript copy housed at the Tohoku University Library, which although undated, reproduces the editorial information of the printed edition, namely the publication date, the name and address of the bookseller Ryūshiken and even the list of books written by Joken that appears in printed editions.

¹⁹ Despite the two titles being listed independently in the catalog, the copies correspond to the combined publication that contains both titles. For the purpose of this study, I considered the copies listed under *Ryōiki jinsū kō* as duplicates of the ones listed under *Nihon suido kō*, which contains more copies.

或林藪川澤江湖海濱而其較田者在於其十分之一
 乎是以一里之內其平田町畝之數通計不過凡一百三
 十町故天下之米較倍於人數則得安泰不當米較人數
 則為凶禍也蓋此測總天下之境土而通計之者也偏觀
 兩域人數考畢

崎陽求林存西川先生撰述
 町人囊裏 五冊
 長崎救時 二冊
 水工解評 二冊
 天文和譯 二冊
 日本水工考 二冊
 四十二人地圖 二冊
 兩儀集流外 二冊

慶長曆原 未訂三冊
 軒枝教原 未訂三冊
 運世年卦考 二冊
 右健右樂 二冊

平安二年通御辛酉西八町
 享保五年五春穀止
 柳枝軒於城多左衛門花殿

Figure 4.18. Last page of a manuscript of *Nihon suido kō* reproducing the editorial information from the printed edition from which it was transcribed (Tohoku University Library)

Later manuscript reproductions of printed books point to the afterlife of Joken's publications that continued to have an impact throughout the Tokugawa period. *Nihon suido kō* and *Ryōiki jinsū kō* are significant for their distinctive scholarly style. They are treatises written in Sinitic – a transnational language that evokes the shared civilization of East Asian literati – that use “universal” and “empirical” criteria for establishing Japan's position in the world.²⁰ They both refer to the division of the globe into degrees (*do* 度) combined with the notion of the natural distribution of yin and yang around the earth to explain a land's environment (*suido* 水土) and even the size of its population (*jinsū* 人數).

In *Nihon suido kō*, Joken discusses the earth's three great zones (*sandaikai* 三大界) and its five continents (*godai shū* 五大洲) following what he calls in his preface, dated 1700, the “maps of the myriad countries in the globe that are produced in foreign countries” (渾地萬國圖者

²⁰ For a discussion of *Nihon suidō kō* as a treatise extolling Japan and “Japaneseness,” see Horiuchi, “Eloges du Japon et de la japonité au seuil du XVIIIe siècle : Nishikawa Joken (1648-1724) et la culture de Nagasaki.”

異邦所著).²¹ Right after the preface, there are two maps: one simplified version of a world map centered on Asia, with the Americas omitted, and another map of the Japanese archipelago featuring the main island Honshu as well as Shikoku and Kyushu. In both maps, there is particular emphasis on the points of the compass as designated by the twelve branches of the East Asian zodiac in addition to four trigrams – *qian* (Jp. *ken* 乾), *kun* (Jp. *kon* 坤), *gen* (Jp. *gon* 艮), and *xun* 巽 (Jp. *son*) – corresponding respectively to the directions of northwest, southwest, northeast, and southeast.

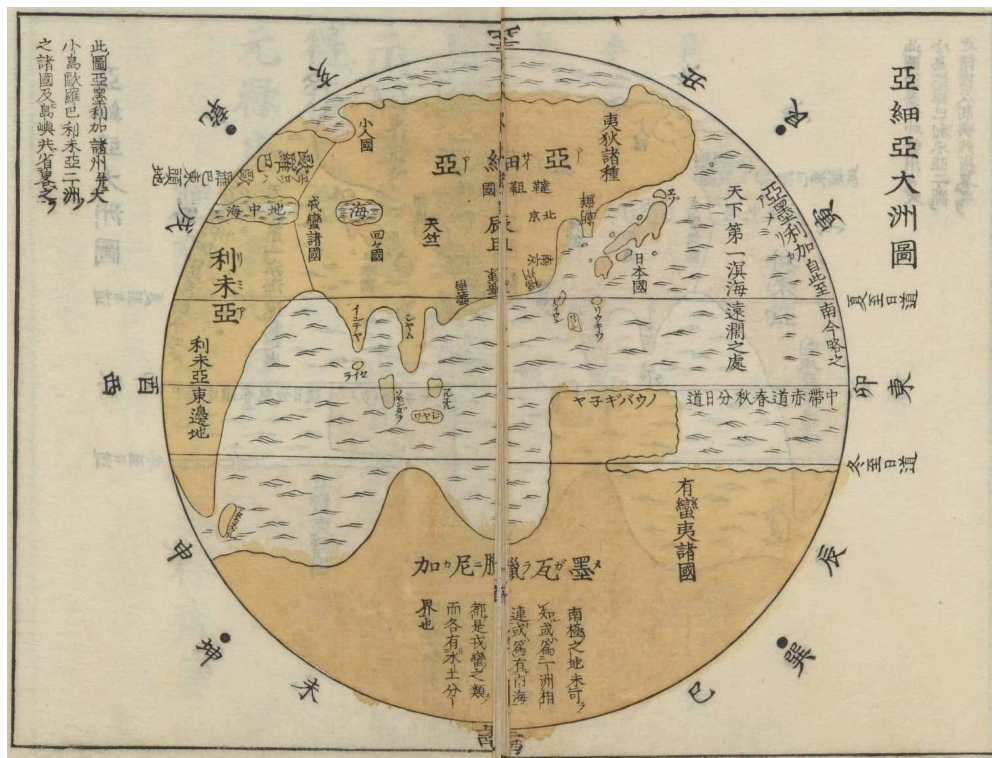


Figure 4.19. The earth represented as a perfect sphere in a colored version of the “map of the Asian continent” (亞細亞大洲圖) from *Nihon suido kō* (National Institute of Japanese Literature)

²¹ Nishikawa Joken 西川如見, “*Nihon suido kō*” 日本水土考 (Woodblock print, 1720), sec. *jo*, fol. 1a, Waseda University Library.

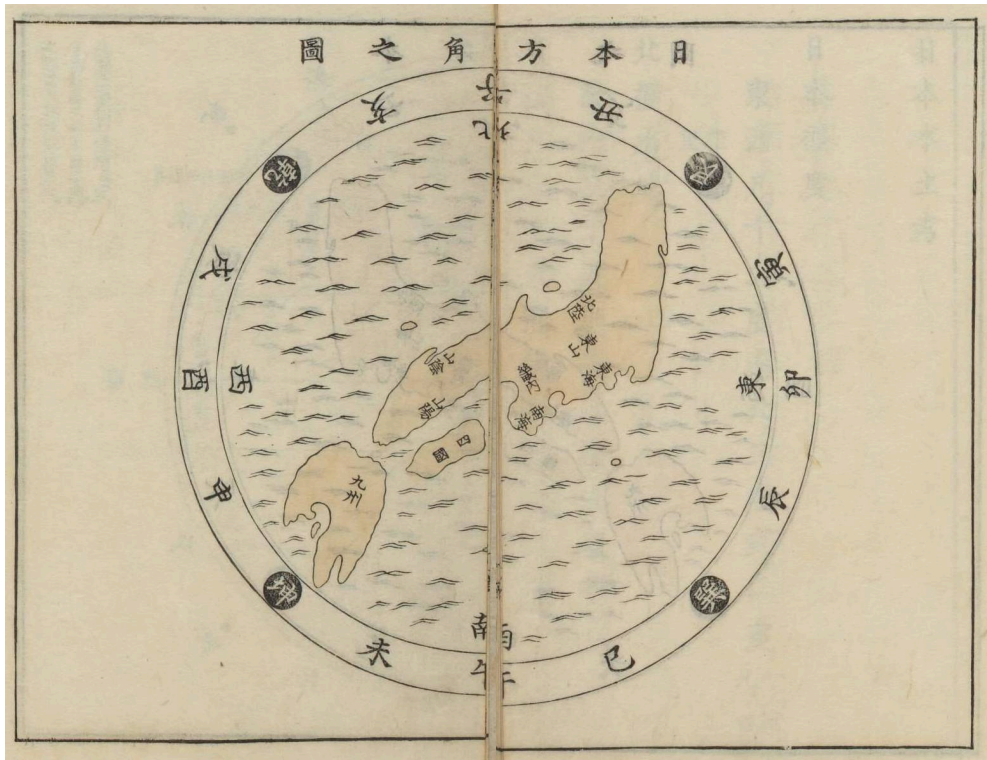


Figure 4.20. Colored “map of Japan with directions” (日本方角之圖) from *Nihon suido kō* (National Institute of Japanese Literature)

The “three great zones” define the hierarchical position of different countries according to an understanding of the distribution of all-pervading qi in accordance with the balance of yin and yang represented by the trigrams. This division reflects the climate or environment of each region, expressed by the notion of *suido*, literally “water and soil.” The first zone contains the three continents of Asia, Europe, and Lybia (Africa), with Asia occupying the top of the hierarchy. Since these zones are unrelated to the latitudes of each landmass, both North and South America belong to the second zone as a single continent, whereas the purported fifth continent of Magellanica (*megaranika* 墨瓦臘尼加) in the Antarctic regions belongs to the third and lowest zone.

Joken claims that Asia is the “first among the first” (第一中之第一) of the three continents in the top zone; China is at its center (亞細亞洲之中央為辰旦), India is west of China (辰旦之西為天竺), India’s western regions are among “various kinds of barbarians” (其西邊在戎蠻之諸種) and, finally, “China’s eastern extremity lies in Japan” (辰旦之東頭在日本國).²² This description emphasizes the Japanese archipelago’s geographical connection

²² Nishikawa, fol. 2b.

with the continent, which Joken justifies by arguing that “east of Japan is the location of the world’s vastest ocean, so land masses are cut off from one another” (日本之東溟海遠闊世界第一之處而地勢相絕).²³ Japan is thus the eastern extremity of the center of the world that is China.

Joken’s conclusion is thus that “although the American continent is positioned to the east on the map, its geographical affiliation is still linked to the western direction, so its environment (*suido*) is murky (yin) and vile, with lands of unbalanced qi” (故圖上雖以亞墨利加洲置于東、地系還接於西方、而其水土陰惡偏氣國也).²⁴ The apparent contradictions of assigning arbitrary positions of east and west to a spherical earth is quickly addressed to justify America’s position in the “western extremity” (*seikyoku* 西極) of a hierarchical globe. Joken writes:

Despite the earth’s spherical form – essentially without any fixed positions of east and west – by virtue of each material thing [containing] one *ken* [pole] (pure yang) and one *kon* [pole] (pure yin), it follows that there is nothing that does not possess individual supreme ultimates (*taikyoku*); it is through this principle that one can determine [absolute] directions.

地體渾圓本雖無東西之定處、以一物一乾坤之義、則莫不具箇箇一太極、以此理可定方位矣。²⁵

The structure of land formations around the earth provides evidence for the principles of yin and yang – emerging from the supreme ultimate (*taikyoku* 太極) – as they are manifested in the distribution of qi. Everything that exists, including the terrestrial sphere itself, comes out of the supreme ultimate and is made up of a combination of qi that has yang and yin properties, represented respectively by the trigrams *ken* and *kon*. This means that, although there is a balance of yin and yang qi in the entire globe, it is not uniformly distributed. This interpretation allows for Joken’s definition of absolute geographical directions (*hōi* 方位) and the existence of lands with “balanced qi” (*seiki* 正氣) and “unbalanced qi” (*henki* 偏氣), hence the hierarchical division of the continents into three zones according to their *suido* or distribution of qi.

These elements clarify the necessity of including the four trigrams in the northwest, southwest, northeast, and southeast of both maps, for they signify the balance of yin and yang according to the directions on the globe. *Nihon suidō* – alongside *Ryōiki jinsū kō*, which applies a

²³ Nishikawa, fols. 2b–3a.

²⁴ Nishikawa, fol. 3a.

²⁵ Nishikawa, fol. 3a.

similar logic to regions of China and Japan segmented into degrees – epitomizes Joken’s hybridized forms of cosmological knowledge that combine “Western” or “barbarian” maps divided into meridians or degrees (*do*) and geographical descriptions with Sinitic conceptions of *qi* as a manifestation of the dynamics between yin and yang. It is this composite understanding of heaven and earth that Joken presents as universal and empirical ways of conceptualizing Japan’s place in the world.

2. Myriad lands on a spherical earth

Despite Ryūshiken securing the rights to print the majority of Joken’s titles, the Nagasaki scholar’s most popular work was not published by the Kyoto bookseller. *Ka’i tsūshō kō*, first published in 1695 and then re-edited into an expanded edition (*zōho* 増補) in 1708, is the second longest of Joken’s printed books, right after the cosmological compilation *Ka’i bendan*. It has the highest number of Joken’s cataloged surviving copies today, totaling at least 143 listed in the Union Catalogue Database of Japanese Texts, a significant indicator of its considerable commercial success throughout the Tokugawa period.

Containing descriptions of the different lands of the world divided into “civilized” (*ka* 華) and “barbarian” (*i* 夷) lands, *Ka’i tsūshō kō* starts by drawing a clear distinction between Ming and Qing China, moving on to other countries within the Sinosphere, listed as “outer countries” (*gaikoku* 外國), and finally categorizing the rest of the globe as “outer barbarians” (*gaii* 外夷). Another title by Joken, namely *Shijūnikoku jinbutsu zu*, functions as a sort of companion work, published in 1720 with a preface from 1714. This work and its illustrations belong to a Nagasaki tradition of depicting different “peoples of the world” as a man and a woman side-by-side in different garments.

Among the world descriptions that circulated in Nagasaki in the mid-17th century and which could have informed Joken’s account, there was one titled *Shokoku dosan sho* 諸國土産書 (“Notes on products of various countries”),²⁶ written in 1669 by Nishi Genpo 西玄甫 (?–1684), the physician who worked as an interpreter for the Portuguese and the Dutch and was

²⁶ On the possible sources of geographical information for Joken, see Ayuzawa Shintarō 鮎沢信太郎, “Nishikawa Joken no ‘Ka’i tsūshō kō’ ni tsuite” 西川如見の「華夷通商考」について, *Rekishi chiri* 歴史地理 77, no. 1 (1941): 17–34, reprinted in Ayuzawa Shintarō 鮎沢信太郎, *Sakoku jidai no sekai chirigaku* 鎖国時代の世界地理学 (Hara shobō, 1980).

also Christovão Ferreira's (1580–1650) disciple. As demonstrated by Ayuzawa Shintarō, the content of Joken's book relies mostly on a manuscript titled *Ikoku fudoki* 異國風土記 (“Gazetteer of foreign lands”) written in 1688 by Chinese interpreter Hayashi Dōei 林道榮 (1640–1708),²⁷ highlighting Joken's connections with prominent members of the local community of interpreters.

In two-paneled drawings of the globe and its inhabitants produced in mid-17th-century Nagasaki, depictions of humans accompanied a vertical planisphere modeled after the world maps that Matteo Ricci produced in China, specifically the 1603 edition *Kunyu wanguo quantu* 坤輿萬國全圖 (“Complete map of the myriad lands of the earth”), but with the east at the top of the map rather than the north. Such works were published first in Nagasaki starting around 1645 under the title of *Bankoku sōzu* 萬國總圖 (“General map of the myriad lands”) and set the benchmark for the type of cosmological knowledge produced in the city.²⁸

²⁷ Ayuzawa, “*Ikoku fudoki ni tsuite: Ka'i tsūshōkō to no kankei.*”

²⁸ See Unno, “*Shōhō-kan 'Bankoku sōzu' no seiritsu to rifu.*”



Figure 4.21. Colored print of a 1645 edition of *Bankoku sōzu* with its accompanying illustrations of 40 “peoples” of the world (Kyushu University Library)

Unno Kazutaka – who wrote extensively on the circulation of geographical and astronomical knowledge in early modern Japan – argues that maps from the *Bankoku sōzu* series were used alongside portolan charts as materials transmitted within secretive cartographical traditions that flourished in Nagasaki. He supports his arguments with evidence from *Hiden chiiki zuhō taizensho* 秘傳地域圖法大全書 (“Great compilation of secret cartographical traditions”) written by Hosoi Kōtaku 細井廣澤 (1658–1735) in 1717.²⁹ As seen before, Kōtaku was the one who compiled and transcribed the letters that Ro Sōsetsu, Mukai

²⁹ See Kazutaka Unno, “Cartography in Japan,” in *Cartography in the Traditional East and Southeast Asian Societies*, ed. J. B. Harley and David Woodward, vol. 2, *The History of Cartography 2* (Chicago: University of Chicago Press, 1994), 405–7; Unno, “*Shōhō-kan 'Bankoku sōzu' no seiritsu to rufu*,” 341–47.

Gensei, and Imamura Eisei 今村英生 (1671–1736) sent to the shogunal official Watanabe Gunzō in 1726 concerning astronomical and geographical technical information.

Kobayashi Kentei, whom Sōsetsu identifies in his letter to Gunzō as one of the founding fathers of astronomical practice in Nagasaki, created his own world map in the tradition of *Bankoku sōzu* but used a different perspective from Ricci's *Kunyu wanguo quantu*. Instead of reproducing the oval model with Europe and Africa in the western extremity and the Americas on the east, Kentei's map – titled *Sekai bankoku chikyū zu* 世界萬國地球圖 (“Spherical map of the myriad lands in the world”) and printed in 1708 by the initiative of his disciple Inagaki Kōrō 稻垣光郎 (dates unknown) – reproduces the globe as seen from its northern and southern poles.

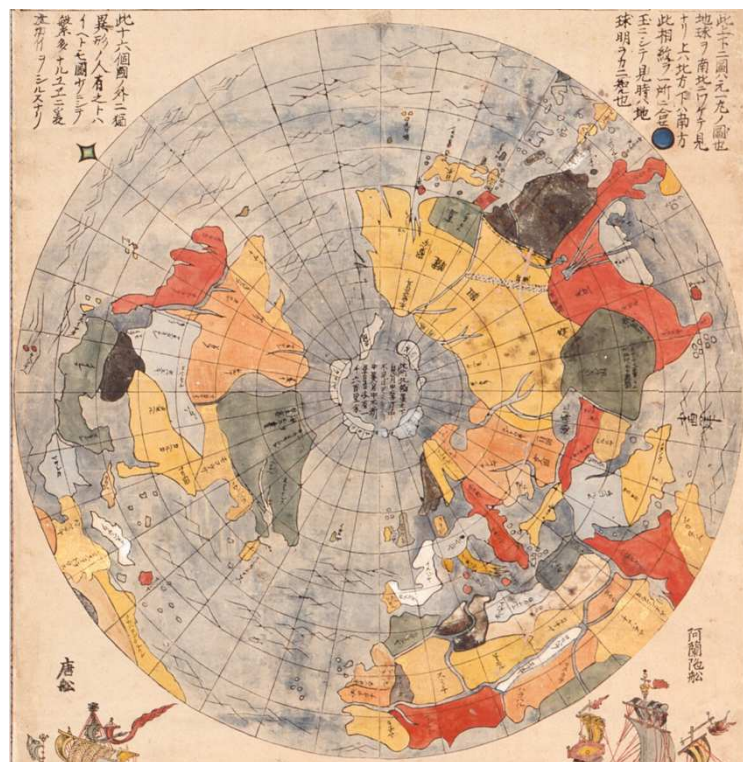


Figure 4.22. Kobayashi Kentei's *Sekai bankoku chikyū zu* on the left and detail of the northern hemisphere on the right (Kobe City Museum)

These depictions of the earth as seen from atop the northern and southern hemispheres – found around the margin of Ricci's world map – also appear in *Zhifang waiji* 職方外紀 (Records of [lands] outside [the purview] of the imperial geographer") by Giulio Aleni (1582–1649) and Yang Tingyun 楊廷筠 (1562–1627). As seen in the first chapter, this was the last title of the first section of *Tianxue chuhan* 天學初函 (“First collection of celestial scholarship”). *Zhifang waiji*, together with the whole collection, was originally prohibited in 1630 but unbanned after 1720 by Yoshimune's order before being confiscated once again in 1795.³⁰ Joken's description of lands beyond the Sinosphere derives largely from this work, particularly the regions added in the expanded edition.³¹ This familiarity with *Zhifang waiji* shows how proximity to the people responsible for the inspection of writings at the Nagasaki Seidō – i.e., Ro Sōsetsu and Mukai Gensei – put Joken in a position to consult books that others could not. It is not surprising that, after Yoshimune consulted both Joken and Sōsetsu in 1719, *Zhifang waiji* was among the titles allowed to circulate, despite belonging to the moral section of *Tianxue chuhan*, that of the “principle” (Ch. *li* 理) rather than the “instrumental” (Ch. *qi* 器) one.

³⁰ Ōba, *Edo jidai ni okeru chūgoku bunka juyō no kenkyū*, 84; Wakaki, “*Shomotsu aratame: Shuntokuji to nagasaki seidō*,” 362.

³¹ Ayuzawa Shintarō 鮎沢信太郎, “*Nishikawa Joken no ‘Kai tsūshō kō’ ni tsuite*” 西川如見の「華夷通商考」について, *Rekishū chiri* 歴史地理 77, no. 1 (1941): 17–34; Ayuzawa, *Sakoku jidai no sekai chūrigaku*; Yachi Aya 谷地彩, “*Nishikawa Joken to ‘Shokuhō gaiki’*: ‘*Zōho ka’i tsūshō kō’ o chūshin ni*” 西川如見と『職方外紀』—『増補華夷通商考』を中心に, *Jōchi daigaku bunka kōshōgaku kenkyū* 上智大学文化交渉学研究 6 (2018): 11–23.

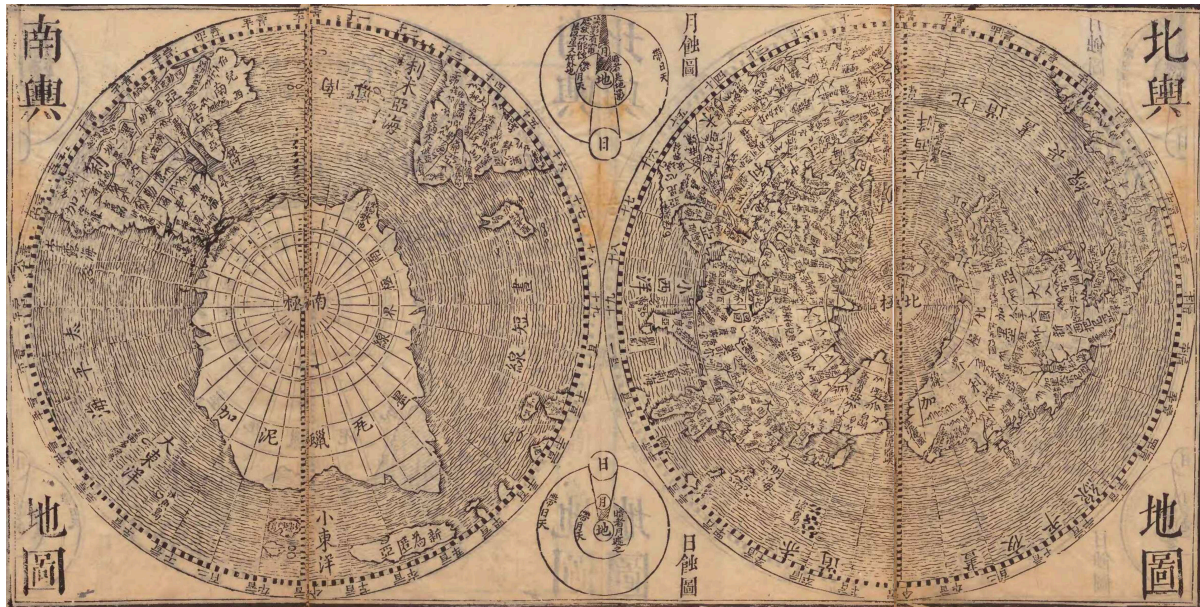


Figure 4.23. Maps of the southern hemisphere (*nanyu ditu* 南輿地圖) and northern hemisphere (*beiyu ditu* 北輿地圖) as depicted in *Zhifang waiji* (National Archives of Japan)

Japan is conspicuously absent from Joken's *Ka'i tsūshō kō* and *Shijūnikoku jinbutsu zu*, making it unclear where the country would fit in such a Sinocentric conception of the world. This is in stark contrast with the tradition of *Bankoku sōzu*, whose depiction of forty different “peoples” of the world would begin with a man and a woman from Japan dressed in garments associated with the ruling classes. Kobayashi Kentei's map, despite having a much smaller number of couples depicted, also starts with an image of a male and female from Japan in outfits befitting members of the warrior class.



Figure 4.24. Detail of *Bankoku sōzu* showing a couple from Japan (*Nihon* 日本) on the right, next to one from Great Ming [China] (*Daimin* 大明) in the middle, and another from Korea (*Kōrai* かうらい) on the left (Kyushu University Library)



Figure 4.25. Detail of *Sekai bankoku chikyū zu* depicting men and women from 16 different lands including “Great Japan” (*Dai Nihon* 大日本), the “Great Land of Ming” (*Daiminkoku* 大明國), America (*Amerika* アメリカ), India (*tenjiku* 天竺), a “land of Black people” (*kokujinkoku* 黒人國), the Netherlands (*Oranda* 阿蘭陔), and a “land of cannibals” (*shokujinkoku* 食人國).

2.1. *Defining the contours of civilization*

As discussed in the first chapter of this study, Nagasaki was at the forefront of Tokugawa Japan’s interactions with China, being deeply affected by the transition from the Ming to the Qing dynasty. Even after the two capitals of the Ming empire had fallen to the Manchu in the 1640s, merchants who reached the city mostly came from southern China, under the control of the loyalist lineage of Zheng Chenggong 鄭成功 (1624–1662). After the fall of the Zheng regime in Taiwan to Qing troops in 1683, Chinese seafarers calling in at the Nagasaki port no longer looked like those who came during the Ming but rather took on the clothes and style of the Manchu conquerors.

In Joken’s works, the subjects of the new Qing looked so different from previous Ming merchants that they required a completely separate illustration, leading to the coexistence of two Chinas: the current “barbarized” Qing and the memory of bygone Ming times. “In terms of appearance,” writes Joken matter-of-factly in *Ka’i tsūshō kō*, “the Chinese who now come to Nagasaki all have the appearance of the northern barbarian Tartars, not the age-old features of China” (今長崎ニ來ル唐人ノ姿ハ皆北狄鞞韃ノ姿ニシテ、中華往古ヨリノ風俗ニ非ス).³² In *Shijūnikoku jinbutsu zu* the “Tartars” (*dattan* 鞞韃) get a description and illustration

³² Nishikawa Joken 西川如見, “*Zōho ka’i tsūshō kō*” 増補華夷通商考 (Woodblock print, 1708), vol. 1, fol. 4a, Naikaku bunko, National Archives of Japan; Nishikawa Joken 西川如見, *Nihon suido kō, suido kaiben, zōho ka’i*

besides that of the Great Ming (*Daimin* 大明) and the Great Qing (*Daisei* 大清).³³ The Qing merchants who came to Nagasaki were perceived as these northern barbarians (Ch. *beidi*, Jp. *hokuteki* 北狄) who, by taking over the civilizational center of China (Ch. *zhonghua*, Jp. *chūka* 中華) became Sinicized in the process. They were neither fully Tartar nor classically Chinese. This meant that, even though the Chinese territory was conquered by “barbarians,” these conquerors were in turn “civilized” by Sinitic culture.



Figure 4.26. Illustration of the people of Ming (right) and Qing (left) from the 1708 expanded edition of *Ka'i tsūshō kō* (University of Tokyo Library)

tsūshō kō 日本水土考・水土解弁・増補華夷通商考, ed. Iijima Tadao 飯島忠夫 and Nishikawa Tadayuki 西川忠幸 (Iwanami Shoten, 1944), 74.

³³ This is the reading found in the Edo print edition. The current reading of the character for Qing 清 in modern Japanese is *shin* when referring specifically to the dynasty.



Figure 4.27. “Tartars” depicted in *Shijūnikoku jinbutsu zu* (National Astronomical Observatory of Japan)

In *Ka'i tsūshō kō* the contemporary Qing rule is unambiguously identified as *chūka*, the traditional name for the Chinese rule in the continent, which suggests that Joken and other Nagasaki scholars did not think that China had been completely dethroned from its position as the center of civilization as they knew it. Joken does not fail to remind his readers, however, that the very structure of the Chinese state had its roots in the Ming dynasty. According to him, the Qing simply continued with the existing organization of the Chinese territory into thirteen provinces (Ch. *sheng*, Jp. *shō* 省) and the two capital regions of Beijing and Nanjing.³⁴ After listing the names of the administrative divisions, Joken writes:

These listed above are called the fifteen provinces of China (*chūka*). They were first divided in the reign of the founder of Great Ming, when the designations for each of these lands were reestablished. During Japan's Shōhō era (1644–1648), the dynasty of Great Ming was overthrown by the Tartars, who renamed the land of Great Ming, calling it Great Qing instead. This is the denomination used today.

³⁴ This is not entirely accurate, as Shengjing 盛京 (present-day Shenyang 瀋陽) replaces Nanjing as the secondary capital.

已上是ヲ中華十五省ト云リ。大明太祖ノ時初テ十五省ニ分チ、各國號ヲ改定ム。日本正保ノ比、韃靼ヨリ大明ノ代ヲ亡シ、大明國ノ號ヲ改メ、大清ト號ス。今此號ヲ用ユ。³⁵

A summary definition of *chūka*, and its equation with Chinese territories, appears at the end of the second fascicle (*maki*) of *Ka'i tsūshō kō*, after the descriptions of each province and its products. Joken repeats the expression “fifteen provinces of China” (*chūka jūgo shō* 中華十五省) before clarifying that they correspond to what in Japan is collectively designated as *tō* 唐, literally “the Tang [dynasty]” (日本ニテ唐ト號スルハ此十五省ヲ總テ云ル也). “All of these regions,” Joken goes on to explain, “are lands in which the scholarship of the Sages makes up the basis [of society], and the three teachings are commonly accepted” (右ノ國々何レモ聖人ノ學文ヲ本トシテ、三教通用ノ國也).³⁶

Here Joken refers to the shared East Asian cultural heritage based on the sages (Ch. *shengren*, Jp. *seijin* 聖人) of ancient China and centered around the three teachings (Ch. *sanjiao*, Jp. *sankyō* 三教) of Buddhism, Confucianism, and Daoism. As we have seen, unifying these philosophies was a major concern of scholars in Nagasaki, particularly Joken’s master Nanbu Sōju and the interpreter Ro Sōsetsu, both of whom were keenly aware of such debates among Ming. Preserving the cultural heritage of the ancient sages was another essential aspect of local scholarship, as embodied in the Nagasaki Seidō and the figures associated with it. In this sense, Nagasaki was a city in which the classical civilization represented by the Ming dynasty, imperiled in the continent after the arrival of the Manchu, could thrive once again.

Adhering to these principles, although certainly signs of “civilized culture,” did not necessarily mean that a country was part of China proper. In the division of the world presented in *Ka'i tsūshō kō*, there are two other types of regions. The first type, culturally and politically close to China, consists of five “outer lands” (*gaikoku* 外國)³⁷ belonging to the same Sinitic heritage. The other type is the “outer barbarians” (*gaii* 外夷), numbering fifty in

³⁵ I follow the text from the Edo edition of 1708. Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 1, fol. 1b. See also Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 72.

³⁶ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 2, fol. 14b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 105.

³⁷ The term *gaikoku* (Ch. *waiguo* 外國) is often translated as “foreign country,” as this is also the most common use in modern East Asia languages. While this meaning is not completely absent from early modern Japanese sources, in Joken’s Sinocentric conception of the world, it designates rather the “outer lands” he defines as following China culturally and politically without belonging to the territories of the Qing empire.

Joken's account. The five *gaikoku* are the Ryukyu Kingdom (*ryūkyū* 琉球),³⁸ Chosŏn Korea (*chōsen* 朝鮮), Taiwan (written as *taiwan* 大宛), and the southern and northern polities of Đại Việt – respectively Đàng Trong, identified as Cochinchina (*kōchi* 交趾), and Đàng Ngoài, designated as Tonkin (*tonkin* 東京).

Joken claims that “although falling outside Chinese territories, these are lands that follow China's mandate, utilize China's letters, and in which the Three Teachings are widespread” (唐土ノ外ナリト云トモ、中華ノ命ニ從ヒ、中華ノ文字ヲ用、三教通達ノ國也).³⁹ Since this is a description of lands beyond Japan itself – an account of the archipelago is completely absent from the book – it is difficult to say where Joken would place his own country in such a world order. On the one hand, Japan partook of the cultural heritage of the Sinosphere, utilizing a Sinitic writing system (*chūka no moji* 中華ノ文字) and subscribing to the three teachings. On the other hand, Japanese rulers did not see themselves as politically subordinate to any Chinese rule, either Ming or Qing. As such, unlike the other five countries, it did not obey “the mandate of China” (*chūka no mei* 中華ノ命). In other words, Japan did not recognize the power of the emperor of China as the “son of heaven” (Ch. *tianzi*, Jp. *tenshi* 天子) who carried out “heaven's mandate” (Ch. *tianming*, Jp. *tenmei* 天命)⁴⁰ on earth. Rather, Japan had its own “son of heaven” in the form of the emperor (*tennō* 天皇), who was recognized as a direct descendant of autochthonous deities.

2.2. *The outer barbarians*

All other regions in the world not subject to China's rule or civilizational influence were grouped under the category of “outer barbarians.” These included diverse places like Siam (*shamu* or *shamurō* 暹羅), the Mughal Empire (*mōru* 莫臥爾), and the Netherlands (*oranda* 阿蘭陀) – which “unlike Chinese territories, are all lands with horizontal letters” (唐土ト差ヒテ皆横文字ノ國也).⁴¹ The last fascicle of *Ka'i tsūshō kō*, contains an appendix (*furoku* 附錄)

³⁸ Ronald Toby cites Joken's work to demonstrate that Ryukyu was considered a “foreign country” (*gaikoku* 外國), which does not seem to be a relevant interpretation here. Cf. Ronald P. Toby, *Engaging the Other: “Japan” and Its Alter Egos, 1550-1850*, Brill's Japanese Studies Library 65 (Leiden: Brill, 2019), 49–51.

³⁹ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 3, fol. 1a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 113.

⁴⁰ On the uses of this concept in ancient China, cf. Michael Puett, “Following the Command of Heaven: The Notion of Ming in Early China,” in *The Magnitude of Ming*, ed. Christopher Lupke (Honolulu: University of Hawaii Press, 2005), 49–69.

⁴¹ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 3, fol. 1a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 113.

with a list of more barbarian regions besides the original fifty. This list starts with Tartary (*dattan koku* 韃靼國) – which contains the description that “the original land of the current emperor⁴² of Great Qing is western Tartary” (今大清の天子の本國は西韃靼也)⁴³ – and ends with the elusive austral continent of Magellanica, where “the existence of [inhabited] lands is uncertain since there are no paths going through its depths” (其奥通路ナキ故ニ、國ノ有無ノ事不詳),⁴⁴ a description that echoes those found in the maps of Matteo Ricci.

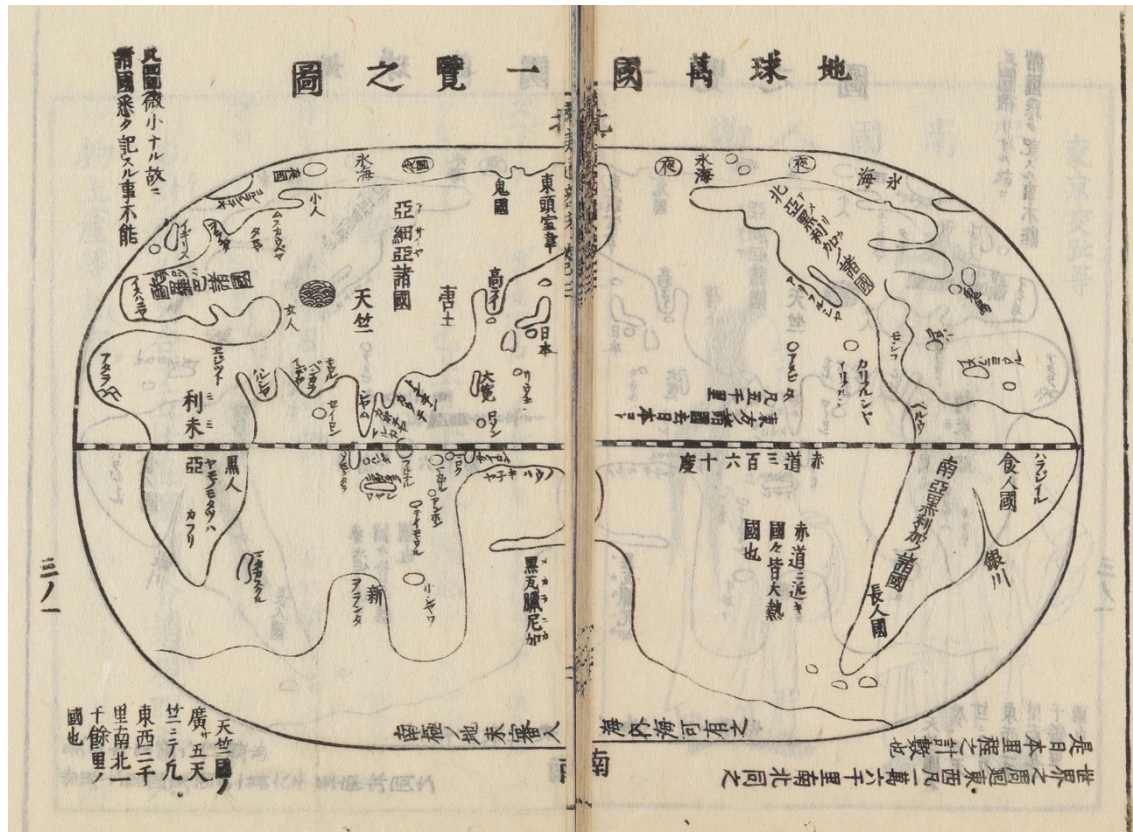


Figure 4.28. Schematic world map from the 1708 expanded edition of *Ka'i tsūshō kō* (University of Tokyo Library)

A few regions of the world could fall entirely outside the parameters of “civilization” defined by Sinitic culture, such as Brazil (*barajiru* ハラジイル), a vaguely defined “large land” (*taikoku* 大國) containing a silver river (*ginga* 銀河)⁴⁵ that is considered the “largest river in the

⁴² Remarkably, the term used for emperor in this case is the ideologically charged *tenshi* 天子 (“son of heaven”) instead of the more neutral *kōtei* (Ch. *huangdi* 皇帝). This is yet another indication that Joken fully recognized the legitimacy of the Qing as *zhonghua*, at least in relation to countries other than Japan.

⁴³ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 5, fol. 3a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 171.

⁴⁴ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 5, fol. 28a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 186.

⁴⁵ Incidentally, this is the same name used in East Asian languages to refer to the Milky Way.

world” (*sekai daiichi no taiga* 世界第一ノ大河)⁴⁶ – in all likelihood a conflation of the Amazon River and the Río de la Plata. In *Shifang waiji*, two separate rivers are identified to the south and the north of the country, respectively the “silver river [that has] sweet-tasting water” (銀河水味甘美) and a large river named *Alelian* and also named *Maliangwen* (大河名阿勒戀、亦名馬良溫).⁴⁷ While I have not been able to identify the origin of the first term, *Maliangwen* is probably a transliteration of Marañón, used to designate the whole extent of the Amazon River.

Joken describes Brazil as a place “without a sovereign and without letters” (國主ナク文字ナシ) whose inhabitants “gladly eat human flesh” (好ンデ人ノ肉ヲ喰フ).⁴⁸ In *Shijūnikoku jinbutsu zu*, Brazil (spelled as *barajiru* 伯刺西爾) is also included as one of the depictions of men and women from around the world. It appears again as a place where “there are no laws to guide human relations, and humans are unscrupulously killed and roasted to be eaten” (人倫の作法にあらず、奸勇にして人を殺し炙り食ふ).⁴⁹ This discourse surrounding Brazil as a cannibal land echoes Portuguese, Jesuit, and Dutch accounts of “uncivilized” practices on the American continent.⁵⁰

In Joken’s writings, depictions of “barbarity” serve the purpose of presenting the literal and metaphorical antipodes of Sinitic civilization, consolidating a Sinocentric hierarchical categorization of the “myriad lands of the world” (*sekai bankoku*). China’s place at the very center, even if somewhat shaken after the Ming-Qing transition, was not entirely out of the question. It remained the benchmark of civilization against which all other countries were measured.

Joken concludes his appraisal of barbarian lands in *Kai tsūshō kō* as follows:

These outer barbarian lands [listed above] do not have traffic with Japan, but I have recorded what has been recounted in the stories of the Dutch, the Indians,⁵¹ and the Chinese. One

⁴⁶ Nishikawa, “*Zōho ka’i tsūshō kō*,” vol. 5, fols. 21a–22b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 184–85.

⁴⁷ “*Shifang waiji*” 職方外紀 (Print, 1626), vol. 4, fol. 8a, Naikaku bunko, National Archives of Japan, <https://www.digital.archives.go.jp/file/3602548>.

⁴⁸ Nishikawa, “*Zōho ka’i tsūshō kō*,” vol. 5, fol. 21b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 184.

⁴⁹ Nishikawa Joken 西川如見, “*Shijūnikoku jinbutsu zusetzu*” 四十二國人物圖說 (Print, 1720), fol. 42, National Astronomical Observatory of Japan.

⁵⁰ On how accounts of anthropophagy in Brazil might have made their way into Japan, see Radu Leca, “Brazilian Cannibals in Sixteenth-Century Europe and Seventeenth-Century Japan,” *Comparative Critical Studies Electronic Supplement*, no. 11 (2014): 109–30. For an interpretation of the connections between Joken’s description of Brazil and Jesuit discourses, cf. Rômulo da Silva Ehalt, “Gândavo na China, Índios no Japão: A leitura de um confucionista japonês sobre a colonização do Brasil (s. XVII e XVIII),” in *Diversos orientes*, ed. André Bueno et al. (Rio de Janeiro: Sobreontens, 2018), 91–102.

⁵¹ For a brief overview of Joken’s conception of a broadly defined “India” (*tenjiku* 天竺) and its relation with other regions in South and Southeast Asia, see Ishizaki Takahiko 石崎貴比古, “Nishikawa Joken no Indo ninshiki” 西川如見のインド認識, *Indogaku bukkyōgaku kenkyū* 印度學佛教學研究 59, no. 1 (2010): 502–499 (sic).

cannot have exhaustive knowledge of all the myriad countries in the world, but simply [have] general notions [about them].

右外夷ノ諸國、日本ニハ往來無之ト云トモ、紅毛・天竺・或唐人ノ說話聞傳フル處ヲ以テ記之者ナリ。世界萬國悉クハ不能識、只其大略已而。⁵²

Once the merchants of the Dutch East India Company (VOC) replaced the Portuguese in the artificial island of Dejima in the bay of Nagasaki, they became the main source of information about Europe and all the other lands around the world where European voyagers had set foot, or about which they fantasized. One example of a fantastical land represented in *Ka'i tsūshō kō* is *Amasanī* 亞媽作擲, a country that is listed in the appendix, allegedly located “west of Tartary, near the Mediterranean Sea” (韃靼ノ西、地中海⁵³ニ近キ國), inhabited by “an entire population of women” (人民總テ女人ナリ), who were “fierce and skilled in battles” (勇強ニシテ、善合戦スル).⁵⁴ According to the laws of this country, men were brought from other lands in the spring – presumably, the season to procreate – and the male offspring were killed as soon as they were born (國法ニテ春月ノ間ニ男子ヲ他國ヨリ入ルトソ、子ヲ産スル事アルニ、男子ナレハ則殺之ト云).⁵⁵

This is a clear iteration of the Greek myth of the Amazons, warrior women supposed to inhabit the region of Scythia around the Black Sea. While more research is necessary to trace this specific reference to a Dutch source, the pronunciation of this imagined land of Amazonia as *Amasanī* – also possibly read as *Amazonī* – could come from the Dutch *Amazonië*. The VOC merchants, together with other “barbarian” and “civilized” sources of geographical knowledge, contributed to a growing pool of information about the world at large that combined various elements from different periods.

⁵² Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 5, fol. 29b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 190.

⁵³ The term *chichūkai* 地中海 is still used in modern Japan to refer to the Mediterranean Sea. Joken does not specify the geographical location of this sea in *Ka'i tsūshō kō*, and the name is absent from the world map provided in the book. It does appear as such, and in the expected location south of Europe, in the world map featured in *Nihon suido kō*.

⁵⁴ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 5, fol. 4a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 172.

⁵⁵ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 5, fol. 4a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 172.

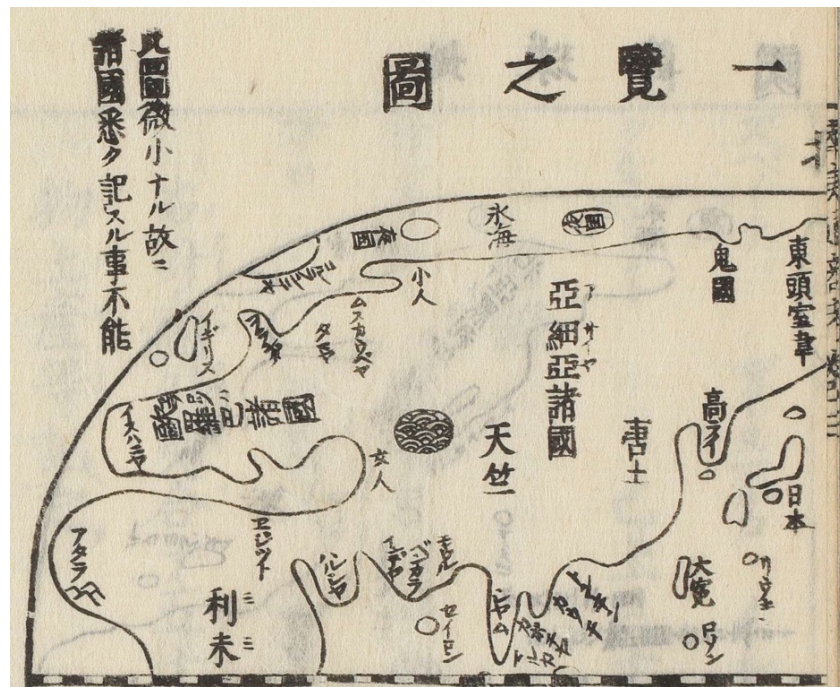


Figure 4.29. Detail of the section of the northern hemisphere west of Japan in the world map from the 1708 expanded edition of *Ka'i tsūshō kō*. *Ispaniya* is depicted at the leftmost corner, next to the designation “lands of Europe” (*Europa shokoku* 歐羅巴諸國), where the names *Oranda* フランダ and *Iginisu* イギリス are also visible. Luzon (*Roson* ロソン) is depicted as a small island south of Taiwan, and the presumed location of *Amasanī* 亞媽作擲 is marked with the word “women” (*nyonin* 女人).



Figure 4.30. Detail of the same map, containing the section of the northern hemisphere east of Japan. It encompasses North America and Central America – the latter identified as *Moshiko* モシコ

(“Mexico”) – and a few Caribbean islands, such as *Isupaniyōru* イスハニヨウル (“Hispaniola”) and *Kūba* クウバ (“Cuba”).

2.3. *Vanishing Iberia, emerging Netherlands*

As it has become clear throughout this study, by the second half of the 17th century, the Dutch were the main reference in Nagasaki – and increasingly throughout the archipelago – for what Europeans looked like. The Netherlands were generally designated as *Oranda* 阿蘭陀 in Japanese – probably after the Portuguese *Holanda* – which could also be the reading glossed to the characters *kōmō* 紅毛 (“red-haired”), an epithet that emphasized their status as barbarians.⁵⁶ The Dutch appear as the first among the “outer barbarians” depicted in *Ka’i tsūshō kō*, and the other peoples of Europe and elsewhere are presented according to their similarity and proximity (or not) to the “red-haired” Dutch.

While the Netherlands had become more familiar to Joken and his readers, the memory of the Iberians – designated as “southern barbarians” (*nanban* 南蠻) – had all but faded away. Their cultural and political particularities were no longer of much interest by the time Joken’s books were printed. This was surely reinforced by the fact that a considerable amount of information about foreign lands beyond the reach of Chinese merchants was relayed from VOC merchants, their maps, instruments, and books. Concerning Portugal and Spain, the *nanban* countries, Joken writes that, in terms of appearance, “the people are all similar to the Dutch” (人物何レモ阿蘭陀ニ似タリトゾ),⁵⁷ demonstrating that the point of comparison for anything European was decidedly the Netherlands and its inhabitants.

⁵⁶ Ronald Toby argues that contrary to other more pejorative representations of “hairy barbarians,” the use of the term *kōmō* was used in a descriptive manner to distinguish the English and Dutch from the Iberians who came before them. The focus of on their foreign appearance did nevertheless contribute to presenting them as “others” in a similar way to the Iberians and their exaggerated features. See Toby, *Engaging the Other*, 141 and 197.

⁵⁷ Nishikawa, “*Zōho ka’i tsūshō kō*,” vols. 4, 18a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 162.



Figure 4.31. Illustration of a Dutch couple from *Ka'i tsūshō kō* (University of Tokyo Library)

Despite the perceived similarity in appearance, VOC merchants tried to draw a clear line between themselves and the *nanban*. The VOC factory in Dejima was, after all, the literal replacement of the Portuguese, who used to occupy the same land. VOC representatives in East Asia, predominantly Dutch-speaking Protestants, had little reason to be friendly or sympathetic toward Iberians and Catholics in general, whom they designated as “papists.” The distinction between Netherlandish Protestants and Iberian Catholics was not completely lost to Nagasaki scholars, even if not necessarily framed within a religious perspective.

In *Ka'i tsūshō kō*, Joken presents different regions among the people who were denied entry to Japan. These include Hispania (*Ispaniya* イスパニヤ) – encompassing both Portugal (*Porutogaru* ポルトガル) and Castille (*Kasutera* カステラ) – and the colonies of Macau and the Philippines. Joken explains that *Ispaniya* refers to the “Christian lands of the southern barbarians” (是則南蠻切支丹國也), corresponding to “countries located west of China and Japan when one looks at a map of the world” (此國世界ノ繪圖ヲ持以見ルトキハ、唐土・日本ヨリハ西方ニ當レル國也).⁵⁸ He further clarifies that their “designation as southern barbarians is due to their dominions of Macao, Luzon, etc. being located south of China and

⁵⁸ Nishikawa, “*Zōho ka'i tsūshō kō*,” vols. 4, 18a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 161–62.

Japan” (手下亞媽港・呂宋等、唐土日本ノ南方ニ當レル故ニ南蠻ト號スル者也), and not because their ships arrived in Japan from the southern seas, as some explanations go.⁵⁹



Figure 4.32. A couple from Macau (*Amakō* 亞媽港) dressed in *nanban*-style garments depicted in *Shijūnikoku jinbutsu zu* (Kobe University Library). The book does not contain any illustrations of Portuguese or Spanish individuals.

He also vaguely refers to the Iberian colonial expansion in the Americas, writing that “it is said that, among these lands’ dependencies, there are [places] like Hispaniola and New Spain” (此國ノ類國ニ、イスハニヨウ⁶⁰・ノウハイスハニヤ等有之由聞傳フ).⁶¹ It is meaningful that the name for New Spain (*Nōwa Ispaniya* ノウハイスハニヤ) is probably derived from either Latin *Nova Hispania* or Portuguese *Nova Espanha*, indicating that previous knowledge from the Iberians overlapped with newer information provided by the Dutch.⁶²

⁵⁹ Nishikawa, “*Zōho ka’i tsūshō kō*,” vols. 4, 18a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 162.

⁶⁰ Hispaniola appears as *Ispaniyōru* イスハニヨウル in other parts of the book. See map above.

⁶¹ Nishikawa, “*Zōho ka’i tsūshō kō*,” vols. 4, 18a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 162. Nishikawa, 162.

⁶² Even the pronunciation of *Hispania*, starting with an unaspirated sound – rendered in Japanese as *Ispaniya* – might also be reflective of a Portuguese (or Spanish) origin, rather than Dutch, a language in which the letter h is consistently pronounced.

2.4. *Protestants vs. Catholics*

As demonstrated by numerous instances of collaboration during Yoshimune's rule, Dutch merchants played their part as loyal servants to the shogunate and attempted to prove themselves useful whenever possible – even if the constant questioning could be oftentimes trying. The cooperation of VOC officers with the regime long preceded Yoshimune's accession to the throne, dating back to the Company's active role in bombarding the insurgents of Shimabara-Amakusa 島原天草 in 1637–38. Since then, an unambiguous way to reaffirm their allegiance was to display animosity toward Catholic enemies. These dynamics are clear from their encounters with the Italian Catholic priest Giovanni Battista Sidotti (1668–1714), which happened throughout the last years of Tsunayoshi and the short reigns of Ienobu and Ietsugu between 1708 and 1714.

Sidotti is known for having entered the Japanese archipelago under cover intending to convert the shogun to Catholicism. He was interrogated for a few days in 1709 and 1710 by Arai Hakuseki 新井白石 (1657–1725), assisted by the interpreter Imamura Eisei.⁶³ The result of their interactions is set down on paper in Hakuseki's *Seiyō kibun* 西洋紀聞 (“Observations on the West”), which had its final version completed either in 1724 or 1725 and then circulated in manuscript form until the late 19th century.⁶⁴ Before Hakuseki's interrogation and its aftermath leading to Sidotti dying in a prison in Edo known as *kirishitan yashiki* 切支丹屋敷 (literally the “Christian residence”), Sidotti was questioned in Nagasaki, where VOC officials saw him for the first time, showing little empathy toward him. The Dutch were presented in 1714 during the final condemnation of Sidotti, who was the last person to be imprisoned in the *kirishitan yashiki* for his religious beliefs.

The first mention of Sidotti in Dutch sources is from October 31, 1708, when *opperhoofd* Hermanus Messingh records that a strange man, whose language could not be identified by the Japanese, had been found around Satsuma.⁶⁵ This refers to Sidotti's

⁶³ Katagiri, *Oranda tsūji Imamura Gen'emon Eisei*, chap. 4.

⁶⁴ On Hakuseki's encounter with the Sidotti and his reactions to what he heard from him, especially as it relates to Christianity, see Elison, *Deus Destroyed*, 237–42; Paramore, *Ideology and Christianity in Japan*, 105–11. On the composition of *Seiyō kibun*, cf. Arai Hakuseki 新井白石, *Seiyō kibun* 西洋紀聞, ed. Miyazaki Michio 宮崎道生, Tōyō bunko 東洋文庫 113 (Tokyo: Heibonsha, 1968), 420–31; Miyazaki Michio 宮崎道生, *Arai Hakuseki no kenkyū* 新井白石の研究 (Tokyo: Yoshikawa kōbunkan, 1969), 203–63.

⁶⁵ Hermanus Messingh, “Dagregister (1707 oktober 15 - 1708 november 2)” (Manuscript, 1707–1708), Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860, Nationaal Archief, https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/119/file/NL-HaNA_1.04.21_119_0001; Bachofner and Velde, *The Deshima Diaries*, 103.

disembarking on the island of Yakushima 屋久島, located around 60 kilometers from the coast of the domain of Satsuma in southern Kyushu. On the following day, Messingh is replaced by the next *opperhoofd*, Jasper van Mansdale, who receives more news about the stranger a week later. In an entry from November 8, 1708, van Mansdale writes that interpreters, including Namura Hachizaemon, reported further details about the appearance of the stranger, who “might as well be a Portuguese” (*het wel een Portugees mogt wesen*).⁶⁶

On November 17, the *opperhoofd* and other merchants were escorted out of Dejima to go to the residence of the Nagasaki magistrates, where they were shown pieces of paper written by Sidotti and asked questions about how the priest could have reached Japan, which they could not answer.⁶⁷ This marks the beginning of the VOC’s role in helping to investigate the Italian priest.

Two days later, van Mansdale records that, according to the interpreter Shizuki Magobei 志築孫平, the Nagasaki magistrate’s secretary⁶⁸ had claimed that “the Portuguese and Dutch were of the same religion” (*de Hollanders en Portugeesen al van een religie waren*).⁶⁹ Magobei reports countering that such could not be the case, “for the shoguns would not have granted the Dutch such advantageous [trade] permits in the past” (*want de Keijzers dan zoodanige voordeelige passe in oude tijden niet aende Hollanders zoude hebben verleend*) – that is to say, if these merchants were also members of the heretic “sect of Jesus” like the Iberians, they should have been expelled long ago. Messingh expresses his approval for the interpreters’ answer, adding that should the secretary bring up the subject again, Magobei was to tell him that “the difference regarding religion is so great that [the Dutch] are called unbelievers by the Portuguese and other papist heretics” (*het verschil omtrent de religie zoo groot is, door de Portugeesen en andere papisten kettters op ongelovige werden genoemd*).⁷⁰

These passages illustrate three important points. First, it shows that, even at the beginning of the 18th century, the framework of reference used by Nagasaki authorities to

⁶⁶ Jasper van Mansdale, “Dagregister (1708 november 2 - 1709 oktober 22)” (Manuscript, 1707–1708), Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860, Nationaal Archief, https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/120/file/NL-HaNA_1.04.21_120_0001; Bachofner and Velde, *The Deshima Diaries*, 104.

⁶⁷ van Mansdale, “Dagregister (1708 november 2 - 1709 oktober 22)””; Bachofner and Velde, *The Deshima Diaries*, 104.

⁶⁸ The role of what the Dutch call *secretaris* normally refers to Nagasaki magistrates’ attendants belonging to the ranks of *karō* 家老 or *yōnin* 用人 who received guests and took care of correspondence. See Bachofner and Velde, *The Deshima Diaries*, 568; Matsukata et al., *Jūkyū seiki no Oranda shōkan*, 2:500.

⁶⁹ van Mansdale, “Dagregister (1708 november 2 - 1709 oktober 22)””; Bachofner and Velde, *The Deshima Diaries*, 104.

⁷⁰ van Mansdale, “Dagregister (1708 november 2 - 1709 oktober 22)””; Bachofner and Velde, *The Deshima Diaries*, 104.

categorize incoming foreigners from Europe was still largely centered around the opposition between the “southern barbarian” Portuguese and the “red-haired” Dutch. Second, it highlights the fact that these same authorities were aware of the shared Christian heritage of the Portuguese and Dutch, which the latter tried to minimize as much as possible. VOC merchants did not display any signs of identifying Roman Catholics as fellow “Westerners” or “Europeans” – quite the opposite, they tried to distance themselves as much as possible from the religious views of those “papist heretics” (*papisten kettlers*). The interaction between Magobei and the magistrate’s secretary also reveals the delicate position of the interpreters, who had to constantly mediate between the interests of their Dutch interlocutors and the shogunal authorities.

2.5. *The many names of England and France*

In *Ka’i tsūshō kō*, Besides the Iberian lands and their colonies, England also is listed as one of the banned countries. The many names used to describe it are revealing of the palimpsest of information circulating in Nagasaki, as it appears alternately as *Egeresu* エゲレス, no doubt after the Dutch *Engels* (“English”), *Ingiriya*, from the rendering of Latin *Anglia* into Chinese characters (Ch. *An’eliya* 諳厄利亞), and *Igisu* イギリス, likely from the Portuguese *inglês* (“English”). The English are said to resemble the Dutch – once again the main point of reference among all European nations. Although Joken identifies England as one of the four countries that used to trade with Japan in the past but which did not anymore, he reports having heard that it is “yet a different kind [of place] from *nanban* countries” (南蠻國等トハ又別種ナル由聞傳フ). He would have learned such things from the Dutch, or perhaps even in his youth from older people who were alive when English merchants still came to Japan.

England – and then the United Kingdom after the union with Scotland in 1707 – was a powerful naval adversary to the Dutch Republic (1588–1795), as attested by the three Anglo-Dutch Wars in the 17th century alone. With their own East India Company, English merchants were in direct competition against the Dutch in their maritime endeavors.⁷¹ English sailors who reached Japan initially traded at the same port of Hirado 平戸 where the

⁷¹ For an early example of Anglo-Dutch conflicts in Asia, and the implications for multiple stakeholders, see Adam Clulow, *Amboina, 1623: Fear and Conspiracy on the Edge of Empire* (New York: Columbia University Press, 2019).

first VOC factory was located. Just like with their perception of the Iberians, the Dutch had little incentive to be particularly kind toward the English. In their perspective, it was more beneficial for Japan to be inimical to both Iberian and English traders, as it provided them with a monopoly over European commerce with the archipelago.

The expanded edition of *Ka'i tsūshō kō* is particularly illustrative of how new and old knowledge about the world could overlap inside the same book. While in the case of England, the various names for the country are identified as referring to the same place, France is mentioned in two separate instances in the book. The first mention appears as one of the “outer barbarian” lands in the third and fourth fascicles, listed as *Furankareki* フランカレキ – in all likelihood reproducing the Dutch name for the country, *Frankrijk*. The description is limited to stating that it is a place where “there is a sovereign, and [the law] is carried out” (國主在テ仕置ス) – markers of minimal civilization beyond the Sinosphere – and its “people resemble the Dutch” (人物ヲランダニ似リ), concluding that “it has four seasons, but it is a cold country” (四季ハアリテモ寒キ國也).⁷²

The second instance is found in the appendix, in which the name listed is *Furansu* フランス. This term, although closer to the French pronunciation, is possibly derived from the Dutch word *Frans* (“French”). This second description is more laudatory, but the reference point is still the Netherlands. France is designated instead as a “large country south of the Netherlands” (ランダ國ノ南大國也), reported as “having fecund soil and being a land that gives primacy to martial valor” (土地豊饒ニテ武勇ヲ專トスル國ナルヨシ).⁷³ It seems evident that it is not merely a repetition of the same country, rather, *Furankareki* and *Furansu* are perceived as two separate places.

One reason for this separation into “two Frances” is that Joken’s description of *Furansu* partially echoes information contained in *Zhifang waiji*, which depicts France (*folangcha* 佛朗察) as a land of plentiful resources (國土極膏腴物力豊富),⁷⁴ where the saintly king Louis had once organized a crusade against the Muslims occupying the land of Judea (中古有一聖王名類斯者、惡回回佔據如德亞地初興兵伐).⁷⁵ This anecdote serves the purpose of explaining the origin of the charged term *folangji* 佛郎機 (“Franks”) – used in Ming China as a vague but

⁷² Nishikawa, “*Zōho ka’i tsūshō kō*,” vol. 4, fol. 19a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 154.

⁷³ Nishikawa, “*Zōho ka’i tsūshō kō*,” vol. 5, fol. 10a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 176.

⁷⁴ “*Zhifang waiji*,” vol. 2, fol. 15a.

⁷⁵ “*Zhifang waiji*,” vol. 2, fol. 15a. Also quoted in Zhang, *Making the New World Their Own*, 319.

evocative designation of Europeans as greedy barbarians after Muslim usage⁷⁶ – and presenting France instead as a land of peace, piety, and valor.⁷⁷ In his succinct account of *Furansu*, Joken is, as expected, careful to omit all reference to Christian elements found in *Zhifang waiji*, such as the assertion that the Lord of Heaven has bestowed all kings of this country with the miraculous gift to cure people from boils and swellings with their royal touch (是國之王天主特賜寵異自古迄今之主皆賜一神能以撫人癩瘡應手而愈).⁷⁸

The French (designated as *Furansu* 佛郎察) are also depicted in *Shijūnikoku jinbutsu zu*. The textual description of the country resembles that of the appendix in *Ka'i tsūshō kō*. France is once again identified as being close to the Netherlands, and “prioritizing martial valor and military tactics” (武勇軍法に長して). Although there was an increased interest from Nagasaki scholars, and their readers, in peoples that inhabited lands beyond their vicinity, including European countries like France and England, it is difficult to affirm that they displayed a real engagement with societies beyond the Sinosphere and even less assimilation of their culture. The information found in textual sources or provided by the Dutch about their European neighbors was transformed, stripped of its Christian elements, and consumed as curious anecdotes about distant places that had very little to do with Japan and its shared traditions with the rest of East Asia.

⁷⁶ See Zhang, *Making the New World Their Own*, chap. 6.

⁷⁷ Zhang, 319.

⁷⁸ “*Zhifang waiji*,” vol. 2, fol. 14b. Also mentioned in Zhang, *Making the New World Their Own*, 319.



Figure 4.33. A French couple depicted in *Shijūnikoku jinbutsu zu* (Kobe University Library) and the accompanying brief explanation.

2.6. *Italy, land of wonders*

The combination of factual and fantastic dimensions to faraway lands, together with the centrality of presenting them as curiosities, is exemplified by Joken's description of Italy in the appendix to *Ka'i tsūshō kō*. Italy (*Itariya* イタリヤ), featured right after France, appears as “a land south of the Netherlands, with many dependencies, the first of which is called Rome” (紅毛國ノ南方也、屬甚多シ、其第一ナル者ロウマト云), and it is also said to be a “land of numerous oddities” (奇怪多キ國也ト云). The overall tone is rather positive, as its soil is described as being fertile and its people prosperous – it is a land whence a great number of intelligent individuals come (土地豊厚ニシテ、人民富饒ニ人品賢智ノ者多出ル國).⁷⁹

There is also a brief reference to the Roman Empire, as Joken mentions a “large palace built by a king two thousand years ago” (二千年前國王一ノ大殿ヲ造レリ)⁸⁰ that still exists to this day. Besides, there are other wonders (*kikai* 奇怪) that extend beyond the human realm; it is a place with volcanos as well as springs hot and cold that have healing

⁷⁹ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 5, fol. 10a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 176.

⁸⁰ Nishikawa, “*Zōho ka'i tsūshō kō*,” vol. 5, fol. 10a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 176.

properties. Like in his account of France, Joken largely draws from *Zhifang waiji* while omitting some essential information on the significance of Rome for the Catholic faith, such as the fact that the pope resides there as a representative of the Lord of Heaven's reign on earth (教皇即居於此以代天主在世).⁸¹

A considerable section of Joken's description of Italy focuses on Sicily (*Suseriya* スセリヤ), one of the Italian "dependencies" (*zokkoku* 屬國). Joken writes: "The people of this country are skilled exclusively in the study of the celestial signs. Instruments for measuring the sun's shadow and [different] types of clocks are said to have originated in this country; there are also several other [forms of] fine craftwork" (此國ノ人、天文ノ學ニ純ラ精ク、日影ヲ計ルノ道具土圭ノ類ハ此國ヨリ始レルヨシ、此外絶妙ノ細工多シト云).⁸² In the domain of astronomy, which Joken identifies as "the study of the celestial signs" (*tenmon no gaku* 天文ノ學), "barbarian" knowledge from European countries, is normally correlated with technical aspects related to observation and the production of measuring instruments. This account of Sicily encapsulates the craftsmanship and precision that are lauded in European astronomical techniques.

Here, Joken reflects the description of the island of Sicily (*xiqiliya* 西齊里亞) found in *Zhifang waiji*, according to which "it is from this place that most skilled astronomical production and methods for measuring the sun's shadow have emerged" (最精天文造日晷法自此地始).⁸³ Still paraphrasing *Zhifang waiji*, Joken illustrates the technical prowess of the Sicilians by recounting an anecdote normally attributed to Archimedes of Syracuse, but – unlike the tale of an astronomer named *Ya'erjimode* (天文師名亞而幾墨得), a transliteration of Archimedes in Chinese characters in *Zhifang waiji* – he does not mention his name.

In this country [of Sicily], once upon a time, when there were several hundred enemy ships that came to attack the island, multiple fire-catching mirrors of over one *jō* (around 10 feet) in width were brought out and [set up] high on a hill to receive sunlight from the clear sky and reflect it onto the enemy ships, [so that] the radiance [caused] a fire to erupt suddenly and the several hundred ships to burn down instantly.

⁸¹ "*Zhifang waiji*," vol. 2, fol. 16a.

⁸² Nishikawa, "*Zōho ka'i tsūshō kō*," vol. 5, fol. 11a-b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 177.

⁸³ "*Zhifang waiji*," vol. 2, fol. 20a.

此國或時、敵船數百艘來テ、此嶋ヲ襲ヘリ時、徑丈餘ナル火取鏡ヲ數多出シテ、高キ岡ヨリ晴天ニ日影ヲ稟テ、敵船ニ映射セシカバ、光輝忽ニ火ヲ發シテ、數百艘一時ニ燒却スト云。⁸⁴

Joken's rendering of Archimedes's story serves to present a wondrous demonstration of resourcefulness by the Sicilians, who could perhaps represent Europeans or Western "barbarians" in general. It is also noteworthy that Joken's account includes information that is absent from *Zhifang waiji*, showing that he supplemented it with other sources of knowledge concerning Europe.

While the name for Europe (Ch. *ouluoba*, Jp. *europpe*⁸⁵ 歐羅巴) appears in early modern Japanese world maps and Joken's geographical descriptions – such as in the map from *Kaii tsūshō kō* reproduced above – it was hardly seen as a discrete cultural entity, consisting instead in a chiefly geographical designation. That said, in Joken's account of the Netherlands, one finds the following approbatory description "[The people] in this country are adept at a myriad of craftworks, full of ingenuity, and the number one in the skills of circumnavigating the oceans of the world" (此國萬細工巧ミニテ、工夫厚ク、世界ノ大海ニ船ヲ乘廻ル事第一ノ上手也).⁸⁶ Joken appears to subscribe to the discourse that European technical expertise and world exploration went hand in hand.

2.7. *Overlapping forms of knowledge*

The wonders and oddities of Europeans were not only technical. The most fantastical aspect of the description of Italy appears toward the end, with the statement that "women of the lands of Italy all have long breasts and breastfeed their infants while carrying them on their backs" (イタリヤ國ノ女人ハ總テ乳房長シ、後ロニ負ナカラ、兒ニ乳ヲ吞シムトゾ).⁸⁷ Joken even goes on to state that "in the past, women are said to have come to Nagasaki aboard Dutch ships" (此以前ヲランダ船ヨリ長崎ニ女人來リシ事アリシト云),⁸⁸

⁸⁴ Nishikawa, "*Zōho ka'i tsūshō kō*," vol. 5, fol. 11b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 177.

⁸⁵ This is the reading that appears in Joken's works and other early modern sources, as opposed to the modern reading *yōroppa*.

⁸⁶ Nishikawa, "*Zōho ka'i tsūshō kō*," vol. 4, fol. 3a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 140.

⁸⁷ Nishikawa, "*Zōho ka'i tsūshō kō*," vol. 5, fols. 11b–12a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 177.

⁸⁸ Nishikawa, "*Zōho ka'i tsūshō kō*," vol. 5, fols. 11b–12a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka'i tsūshō kō*, 177.

implying but not quite making the claim that one of these long-breasted women might have reached Japan.

In the early and mid-Edo period, Nagasaki was the most likely place to encounter people from distant places who could look very different from what local residents expected. However, those who reached Japanese shores belonged to a male-dominated world of merchants, sailors, pirates, and missionaries. While Nagasaki residents might have been exposed to men from abroad, their knowledge of foreign women was largely limited to hearsay. The likelihood of anyone in late 17th-century Japan, even well-connected scholars in the considerably transnational port of Nagasaki, to have encountered a non-Japanese woman was extremely slim, not to say nil.

The imaginary associated with distant lands populated by giants and pygmies was thus exacerbated when it came to women. There were the women of *Amasanī*, who killed off all of their male progeny, and the women of *Itariya* who, just as strangely, could use their extended breasts to feed their children on their backs. Such gendered reports of strangeness extended into the seas, where there were mermaids (*kainyo* 海女) whose “top half is exactly that of a woman, and the bottom half the body of a fish” (半身已上ハ直ニ女人ニシテ、半身以下ハ魚體ナリ).⁸⁹ Their bones were supposed to have healing properties that could stop bleeding (其骨功能アリ、下血ヲ止ル妙薬ナリ).⁹⁰

Besides adding to the perceived allure of foreign women, accounts of mermaids illustrate the different types of knowledge in circulation in Nagasaki. They define the contours of translatability across disparate languages and cultures. Joken wonders whether these “sea women” or *kainyo* could be the same as the “human fish” (*ningyo* 人魚) of Japanese lore (世ニ人魚ト云者歟), but does not offer a definitive answer. He states that these mermaids are what is called *peishimureru* in the “barbarian language” (蠻語ニテペイシムレルト云者也トゾ),⁹¹ most likely derived from the Portuguese words *peixe-mulher* (“woman-fish”). Although it is not specified whether “barbarian language” (*bango* 蠻語) refers exclusively to the language of the *nanban*, i.e., Portuguese or Spanish, it does suggest that Nagasaki scholars like Joken were aware of the difference between knowledge obtained from the Iberians and the Dutch.

⁸⁹ Nishikawa, “*Zōho ka’i tsūshō kō*,” vol. 5, fol. 33b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 193.

⁹⁰ Nishikawa, “*Zōho ka’i tsūshō kō*,” vol. 5, fol. 33b; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 193.

⁹¹ Nishikawa, “*Zōho ka’i tsūshō kō*,” vol. 5, fols. 33b–34a; Nishikawa, *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō*, 193.



Figure 4.34. An Italian couple depicted in *Shijūnikoku jinbutsu zu* (Kobe University Library)

The accompanying explanation to the illustration of an Italian couple in *Shijūnikoku jinbutsu zu* reads: “Italy, Hispania, these two lands are [located] inside Europe and they are large countries. They are said to have four seasons. Italy’s capital is a country called Rome. One hears that they are both countries of the heretical doctrine.” (意太利亞 以西把尼亞、此二國歐羅巴の内にて大國也。四季ありといふ。意太利亞の都を羅馬といへり一國なり。いつれも邪法國也と聞傳ふ). This shows that, to some extent, there is a conflation of the Italian and Iberian Peninsulas, especially due to the understanding that they are regions that equally follow the “heretical doctrine” (*jahō* 邪法) of Catholicism. Indeed, this conflation appears as early as the illustrations of *Bankoku sōzu*, in which the same couple represents Italy and Hispania as the same.



Figure 4.35. Detail from *Bankoku sōzu* that reads *Isubaniya* いすぱにや (“Hispania”) and *Itariya onaji* いたりや同 (“Italy, same”)

The opposition between the two types of “barbarians” associated with Nagasaki – the Dutch and the Iberians – is indicative of two major aspects of early modern Japan. First, it suggests that, while both local scholars and political authorities subscribed to a worldview based on the opposition between the Sinosphere and the rest of the world, even clearly “uncivilized” groups like the VOC merchants could be subsumed under shogunal rule. Second, it demonstrates that rather than a generalized opposition to anything foreign or “Western,” it was the threat of instability inspired by Christian ideas that functioned as a driving force behind the Tokugawa regime’s reaction to populations outside the scope of Sinitic civilization. Anti-Christian policies – or, more precisely, measures to counter Jesuit proselytizing efforts – defined how the movement of people, goods, books, and knowledge was controlled and regulated.

3. Revering antiquity and adapting to the present

Ancient Chinese knowledge occupied a preponderant role in the cosmological discourse of Nishikawa Joken. It had two main functions: 1) to validate the astronomical practice of Japan during his time by framing it in a revered tradition that could be traced back to the ancient Chinese sages; 2) to make this tradition more accessible to a wider audience, “enlightening” common readers of all classes. The validation brought by the ancient texts of China allows Joken to construct his argument about the development of

cosmological knowledge in his time, and to define the duties of those involved in astronomical and calendrical practices.

Joken lays the foundation for cosmological inquiries – or what he calls “celestial scholarship” (Ch. *tianxue*, Jp. *tengaku* 天學) – by emphasizing an empirical approach largely based on Sinitic textual traditions. As discussed above, Joken’s *Gusho rekishō zokkai* consists of several passages from the *Yushu* section of the *Shujing* with an accompanying commentary in Japanese. The first citation from the *Yaodian* chapter of *Yushu* to appear in the book is the locus classicus for the origin of astronomy in East Asia. In this passage, the mythical emperor Yao 堯 entrusts the two brothers Xi 羲 and He 和 to observe heaven and thereby regulate the passage of time.

[Yao] ordered then Xi and He, by reverently according to the sun, the moon, and the astral markers of the astronomical images in the vast heaven, to respectfully grant the seasons of the people.

乃命羲和、欽若昊天曆象日月星辰、敬授人⁹²時。

[乃シ羲和ニ命ジテ、欽ンテ昊天ノ曆象ノ日月星辰ニ若ツテ、敬テ人ノ時ヲ授ク。⁹³

The importance of this foundational text for Confucian traditions has been compared to that of the beginning of the Book of Genesis in the Judeo-Christian context.⁹⁴ The comparison also applies to its religious dimensions – passages from the *Yaodian* could be recited in Confucian rituals performed in Tokugawa Japan, such as during the first visit of the third shogun Tokugawa Iemitsu to the recently founded Confucian temple of Hayashi Razan 林羅山 (1583–1657) in 1633.⁹⁵ This should explain why a scholar such as Joken would choose to render it more accessible to a wider public. If there is one place in ancient Chinese literature where the student of celestial scholarship should start, this is the one.

⁹² The two modern Japanese editions cited reproduce the character 民 (Ch. *min*, Jp. *tami*) for “people” instead of 人 (Ch. *ren*, Jp. *hito*). Ikeda Suetoshi 池田末利, *Shōsho* 尚書, Zenshaku kanbun taikai 全積漢文大系 11 (Tokyo: Shūeisha, 1976), 54; Katō Jōken 加藤常賢, *Shōkyō* 書經, vol. 1, Shinshaku kanbun taikai 新積漢文大系 25 (Meiji shoin, 1983), 21.

⁹³ The top text is the original Chinese text reproduced in the book, and the one in brackets corresponds to the transcription into Japanese of what the reading notations suggest in the manuscript. Nishikawa, “*Gusho rekishō zokkai*,” fol. 1b. A more standard translation is found in Christopher Cullen, *Heavenly Numbers: Astronomy and Authority in Early Imperial China* (Oxford: Oxford University Press, 2017), 22. “Accord reverently with august Heaven, sequence and delineate the sun, the moon and the stellar markers, and thus respectfully bestow the seasons on the people.”

⁹⁴ Christopher Cullen calls it the “foundation charter of Chinese astronomy.” Cullen, *Astronomy and Mathematics in Ancient China*, 3–4.

⁹⁵ McMullen, *The Worship of Confucius in Japan*, 179.

My translation of the passage reflects the reading notations in *Gusho rekishō zokkai*, and therefore the meaning understood by Joken.⁹⁶ Two aspects should be highlighted in Joken's interpretation of the text. Firstly his understanding of the term *rekishō* 曆象 (“astronomical images”), and secondly his reading of the last part as “to respectfully grant the seasons of the people” (敬授人時) instead of “to the people.” His conception of what *rekishō* means in this passage lies at the core of his definition of “celestial scholarship” (*tengaku*) as an all-encompassing cosmology that includes not only astronomical but also geographical knowledge.

3.1. *Vernacularizing ancient cosmological knowledge*

Considering Joken's writings in the literacy spectrum evoked above, *Gusho rekishō zokkai* falls toward the middle – it is written in the vernacular in a combination of Chinese characters and *katakana* but with minimal reading glosses. The ideas Joken puts forth in his vernacular explanation are by and large derived from previous commentaries, notably that of Song scholar Cai Shen 蔡沈 (1167–1230), a disciple of Zhu Xi who transmitted his master's interpretation of the text.⁹⁷ In general, Joken does not reproduce all of Cai's commentary verbatim; instead, he quotes some sections by paraphrasing the content in Japanese, adding his own explanation when relevant. It is simultaneously a translation of previous Chinese scholarship and an adaptation to the purposes of his time and readership with supplementary information.

Joken does not hide his indebtedness, clearly stating that the annotation (*chū* 註) is “the one written by the son-in-law of Master Zhu, Cai Shen” (朱子ノ婿蔡沈之所著也).⁹⁸ One could say that his book is as much a commentary on Cai's annotations as it is on the *Shujing*'s original text. Joken's role is to render the knowledge of Neo-Confucian orthodoxy into more accessible Japanese while also presenting the relevance of its central message for his contemporaries. He writes:

Using this [book], as opposed to [addressing] those who are capable of learning [Confucian] scholarship, [I] select from this chapter [of the *Shujing*] the sections on the celestial signs, and

⁹⁶ For other translations see also James Legge, *The Sacred Books of China: The Texts of Confucianism*, vol. 1, *The Sacred Books of the East* 3 (Oxford: Clarendon Press, 1879), 32; Bernhard Karlgren, *The Book of Documents* (Stockholm: Museum of Far Eastern Antiquities, 1950), 3.

⁹⁷ Loewe, *Early Chinese Texts*, 386.

⁹⁸ Nishikawa, “*Gusho rekishō zokkai*,” vol. 1, fol. 3a.

add explanatory commentaries in plain language, intending it to come in handy for beginners [in the study of] the celestial signs.

是ヲ以テ儒ヲ學バル人ニ對シ、此篇ノ天文一節ヲ摘テ、俚語ノ抄解ヲ加ヘテ、天文初心ニ便アラント欲ス。⁹⁹

The emphasis here is on the plain language (*rigo* 俚語) used to elucidate an otherwise inaccessible form of knowledge, the study of the “celestial signs” (Ch. *tianwen*, Jp. *tenmon* 天文). This pedagogical project of simplifying abstruse knowledge into comprehensible Japanese is pervasive throughout the writings of Joken. As discussed, his books were written in a variety of styles and registers, but many of them served the purpose of instructing a broader audience.

The manuscript of *Gusho rekishō zokkai* held at National Archives of Japan is, as evoked previously, in all likelihood one of the titles that Joken presented to Tokugawa Yoshimune after his summons to Edo. While the manuscript consists of one uninterrupted volume and lacks any introduction, the printed edition is divided into two fascicles (*maki*) and contains a preface (*jo* 序) by Joken. In the first part of the book, Joken cites an important portion of *Yaodian*, dividing it into six passages, each followed by his vernacular commentary. The second part, on the other hand, contains a single short citation from *Shundian* 舜典 (“Canon of Shun”), the second chapter of *Yushu* succeeding *Yaodian*.

He examined the pearl-adorned turning sphere, with its transverse tube of jade, and reduced to a harmonious system (the movements of) the Seven Directors.¹⁰⁰

在璿璣玉衡以齊七政。¹⁰¹

The citation is followed by Joken’s glossing of this passage and explanations about the elusive astronomical instrument identified as *xuanji yuheng* (Jp. *senki gyokkō* 璿璣玉衡)¹⁰² – the so-called “pearl-adorned turning sphere, with its transverse tube of jade” – as well as quotations and commentaries about the development of other subsequent astronomical instruments. Joken remarks that, although Cai’s commentary indicates that the “seven directors” (Ch. *qizheng*, Jp. *shichisei* 七政) refer to the “seven luminaries” (*shichiyō* 七曜) – the sun, the moon, and the five visible planets – in Sima Qian’s *Shiji* 史記 (“Records of the Historian”) they are correlated

⁹⁹ Nishikawa, vol. 1, fol. 1a.

¹⁰⁰ This is the translation from Legge, *The Sacred Books of China*, 1:38–39.

¹⁰¹ Nishikawa, “*Gusho rekishō zokkai*,” vol. 2, fol. 1a.

¹⁰² For the complex history of this device, the variants for how it is written, and the difficulty of determining its nature with precision see Christopher Cullen and Anne S. L. Farrer, “On the Term ‘Hsüan Chi’ and the Flanged Trilobate Jade Discs,” *Bulletin of the School of Oriental and African Studies, University of London* 46, no. 1 (1983): 52–76.

with the seven stars of the Big Dipper (Ch. *beidou*, Jp. *hokuto* 北斗), concluding that “it is unknown which [interpretation] is correct” (何レカ是ナル事ヲ不知).¹⁰³

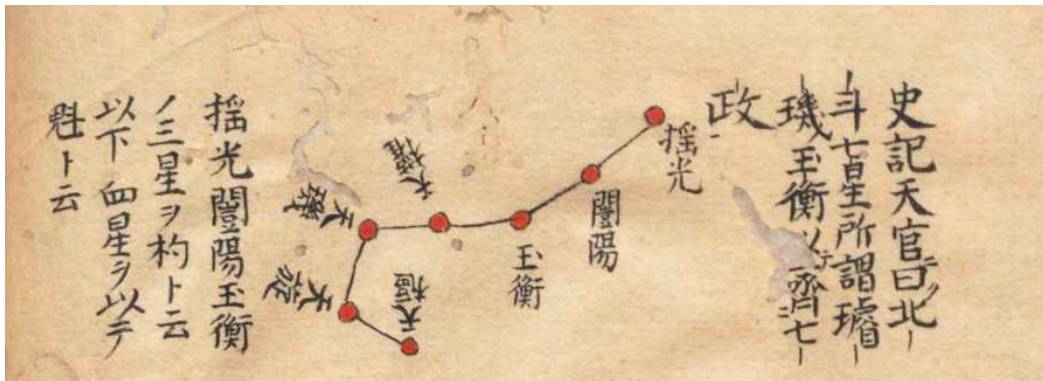


Figure 4.36. Diagram of the “Seven Directors” as the Big Dipper depicted in the manuscript of *Gusho rekishō zokkai* (National Archives of Japan)

One thing that Joken takes as certain is that the astronomical instrument identified in the passage corresponds to the ancestor of modern-day armillary spheres, or “spherical-heaven devices” (Ch. *huntianyi*, Jp. *kontengi* 渾天儀). He quotes Cai’s annotation that *xuanji yuheng* “is the same as today’s armillary spheres” (猶今之渾天儀) followed by his own commentary:

The likes of Zhang Heng (78–139) from Later Han and Li Chunfeng (602–670) from Tang all built celestial spheres. Since then, it has been transmitted widely in subsequent ages, peaking in the Song, Yuan, and Ming. Today in Japan it is called an armillary sphere (*kontengi*), and [the devices] stored by [Japanese] astronomers are merely simplified designs built to emulate the designs brought from China. They are all from the same methods inherited from the *xuanji yuheng*.

後漢張衡・李淳風ノ輩皆渾天儀ヲ造ル。是等ヨリ後世遍ク傳ヘテ宋元明最モ盛也。今日日本ニ於テ渾天儀ト號シテ、天文家貯ル者ハ唐土傳來ノ圖制ヲ擬シテ造レル處ノ省略ノ圖也。皆璿璣玉衡ノ遺法也。¹⁰⁴

Considering *xuanji yuheng* to be a type of armillary sphere was a notion first introduced by commentators around the second century CE such as Ma Rong 馬融 (79–166). Although quite far removed from what was meant in the original text of *Yushu* at the time of its

¹⁰³ Nishikawa, “*Gusho rekishō zokkai*,” vol. 2, fol. 1b.

¹⁰⁴ Nishikawa, vol. 2, fol. 2a-b.

compilation, this became a standard interpretation of the term that was continuously adopted by later versions.¹⁰⁵ Joken placed himself squarely within this tradition, insisting that one should remain true to the “inherited methods” (*ihō* 遺法) that could be traced back to Yao and Shun.

3.2. *The ancestry of the armillary sphere*

Even though Joken recognizes that contemporary astronomical instruments have their origin in the tradition started by Shun, he argues that present-day armillary spheres (*kontengi*) are not exactly the same device as the *xuanji yuheng*. He explains his views in his cosmological treatise *Tenmon giron*, the condensed version of his longer *Ryōgi shūsetsu*.

What is called *kontengi* in Japan resembles a simplification of the designs of Zhang Heng. The production methods of Li Chunfeng correspond to devices called *sengi gyokkō* (*xuanji yuheng*) in Japan today. These devices have three outer and inner tiers, one named the “six conjunctions,” another named the “three astral markers,” and a third one named the “four displacements.”

日本ニ於テ渾天儀ト號スル者ハ張衡カ圖法ノ略ト見エタリ。李淳風ガ製法ハ日本に於テ今ノ璿璣玉衡ト稱スル圖ナリ。其圖、表裏三重ニシテ曰六合儀、曰三辰儀、曰四游儀ト云リ。¹⁰⁶

A fairly detailed illustration of the *xuanji yuheng* as an armillary sphere traversed by a “jade beam” (Ch. *yuheng*, Jp. *gyokkō* 玉衡) appears in a book predating Joken’s works, namely *Tenmon zukai* 天文圖解 (“Illustrated explanations on the celestial signs”) written by Kyoto physician Iguchi Jōhan 井口常範¹⁰⁷ (dates unknown) in 1688 and printed the next year. This illustration contains the “three tiers” (*sanjū* 三重) identified by Joken in his description of Li Chunfeng’s model. The first of these “tiers” is the outermost fixed circle of “six conjunctions” (*rikugōgi* 六合儀), referring to the six meeting points of the horizon, the celestial meridian (*tenkei* 天經), and the prime vertical (*ten’i* 天緯) intersecting each other. The second layer is the middle moveable circle of the “three astral markers” (*sanshingi* 三辰儀), which denotes the sun, the moon, and the stars, and their respecting paths in the sky, namely the ecliptic or

¹⁰⁵ See Cullen and Farrer, “On the Term ‘Hsüan Chi’ and the Flanged Trilobate Jade Discs,” 58–59; Cullen, *Heavenly Numbers*, 250–51.

¹⁰⁶ Nishikawa, “*Tenmon giron*,” 1712, vol. 1, fol. 5a.

¹⁰⁷ His given name can also be read as Tsunenori.

“yellow path” (*kōdō* 黃道), the orbit of the moon or “white path” (*hakudō* 白道), and the equator or “red path” (*sekidō* 赤道). The last layer is the innermost circle of the “four displacements” (*shiyūgi* 四遊儀) – named after a purported oscillation of the earth throughout the year, with each of the “displacement” happening in the solstices and equinoxes¹⁰⁸ – and this component is traversed by an observing tube fixed on the poles.¹⁰⁹

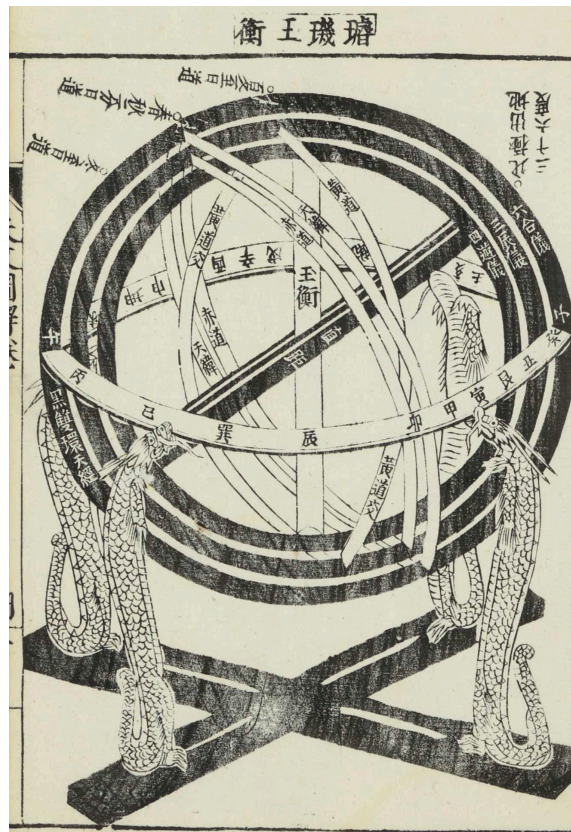


Figure 4.37. *Xuanji yuheng* depicted as an armillary sphere with a “jade beam” in the middle that reads *gyokkō* 玉衡 in Iguchi Jōhan’s *Tenmon zukai* (Waseda University Library).

¹⁰⁸ Joseph Needham, *Science and Civilisation in China*, vol. 3 (Cambridge: Cambridge University Press, 1959), 224.

¹⁰⁹ See Needham, 3:343–50.

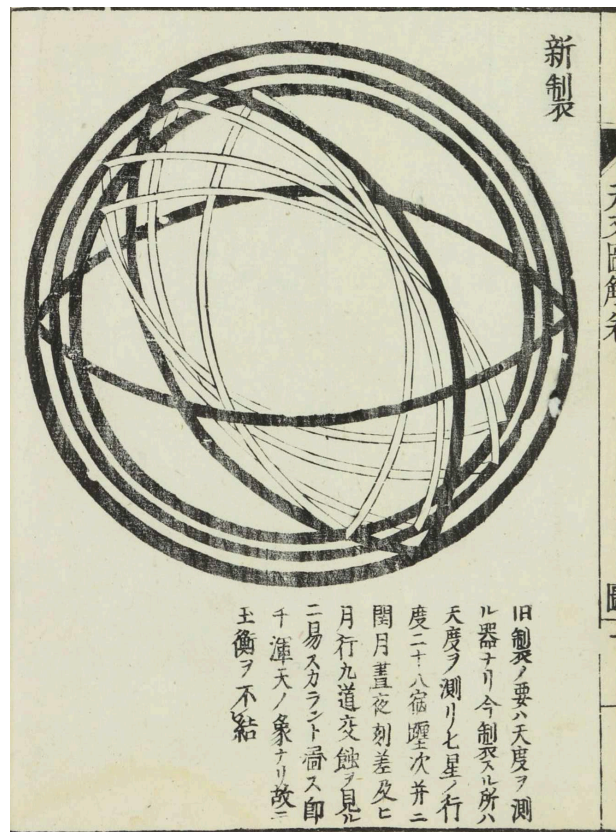


Figure 4.38. A “new model” (*shinsei* 新製) of an armillary sphere as depicted in Iguchi Jōhan’s *Tenmon zukai* (Waseda University Library)

These images should correspond to the models of the armillary spheres that Joken had in mind. Unno Kazutaka goes as far as evoking the possibility that Iguchi Jōhan went to Nagasaki to see cosmological works and diagrams, and singles out Nishikawa Joken as an example of a scholar who held this type of knowledge.¹¹⁰ Although there is no concrete evidence of such an encounter, and little is known about Jōhan himself, the content of *Tenmon zukai* shares some similarities with the cosmologies circulated in Nagasaki.

3.3. *Celestial images and astronomical measures*

The “astronomical images” from *Gusho rekishō zokkai*’s title – appearing in the very beginning of *Yaodian* – can be understood as two separate verbs in the original Sinitic text: *li* 曆 (Jp. *rekū*) and *xiang* 象 (Jp. *shō*), which James Legge translates as “to calculate” and “to delineate” respectively, referring to “(the movements and appearances of) the sun, the moon,

¹¹⁰ Unno, *Nihonjin no daichizō: seiyō chikyūsetsu no juyō o megutte*, 140.

the stars, and the zodiacal spaces.”¹¹¹ In a recent study of ancient Chinese cosmology, Daniel Morgan refrains from translating these two verbs altogether,¹¹² providing instead a more detailed explanation of their meaning and origin. According to Morgan, “written variously as 曆, 歷, 厯 and 麻, the word *li* [...] appears to derive from a root meaning of ‘sequence,’” while “*xiang* 象 (‘signs’ or ‘simulacra’) [are] celestial objects whose forms mirror the myriad things of earth [and] both *resemble* and *resonate with* their earthly counterparts.”¹¹³ It is important to keep these meanings in mind, as *li* can also refer to the calendar in general, the methods of astronomical calculations (Ch. *lifa*, Jp. *rekihō* 曆法), and ephemerides, to name a few examples; whereas *xiang* are the physical manifestations one sees in heaven that have correspondences on earth.¹¹⁴

In Joken’s book, the two terms are read together as a noun, referring to “astronomical images.”¹¹⁵ Although not necessarily unusual, this reading does not reflect a consensual practice throughout the Tokugawa period. The two characters could be read as a verb. As one sees in different Japanese editions of the text annotated by Cai Shen, it remained largely open to interpretation. For instance, in a 1663 edition of a book titled *Shokyō shitchū* 書經集註 (“Compiled annotations of the *Shujing*”), one finds the reading “according to the vast heaven, to calculate and delineate for the sun, the moon, and the astral markers” (昊天ニ若ツテ、日月星辰ニ曆象シ),¹¹⁶ whereas in an 1801 reprint of a 1664 edition of the same, the slightly different reading goes “according to the vast heaven, to calculate and delineate the astral markers of the sun and the moon” (昊天ニ若ツテ、日月ノ星辰ヲ曆象シテ).¹¹⁷

¹¹¹ Legge, *The Sacred Books of China*, 1:32.

¹¹² Daniel Morgan provides the following translation for this same passage: “And so [Yao] charged Xi and He: ‘In reverent accordance with prodigious heaven, [thou shalt] *li* and *xiang* [defined in Section 1.1.3 below] the sun, moon and stars and respectfully grant human seasons/time.” Morgan, *Astral Sciences in Early Imperial China*, 15.

¹¹³ Morgan, 21. Emphasis in the original.

¹¹⁴ For a discussion of the notion of *li* in ancient China, see Cullen, *Heavenly Numbers*, chap. 2. On the significance of this term and the complexity of translating it, cf. Sivin, *Granting the Seasons*, 38–40; Cullen, *Heavenly Numbers*, 24.

¹¹⁵ Cullen, who also reads *li* and *xiang* as a single term, translates it as “successive phenomena,” likely referring to the alternative character for *li* 歷 (“succession”). Cullen, *Astronomy and Mathematics in Ancient China*, 3. This translation is taken up in Jami, *The Emperor’s New Mathematics*, 371. More recently, however, Cullen switches the translation to “sequence and delineate” as noted above, interpreting each character as a separate verb. Cullen, *Heavenly Numbers*, 22.

¹¹⁶ Sai Shin 蔡沈, “*Shokyō shitchū*” 書經集註 (Woodblock print, Kyoto, 1663), fol. 3a, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/ro12/ro12_00559/.

¹¹⁷ Sai Shin 蔡沈, “*Shokyō shitchū*” 書經集註 (Woodblock print, Kyoto, 1801), fol. 2b, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/ro12/ro12_03114/.

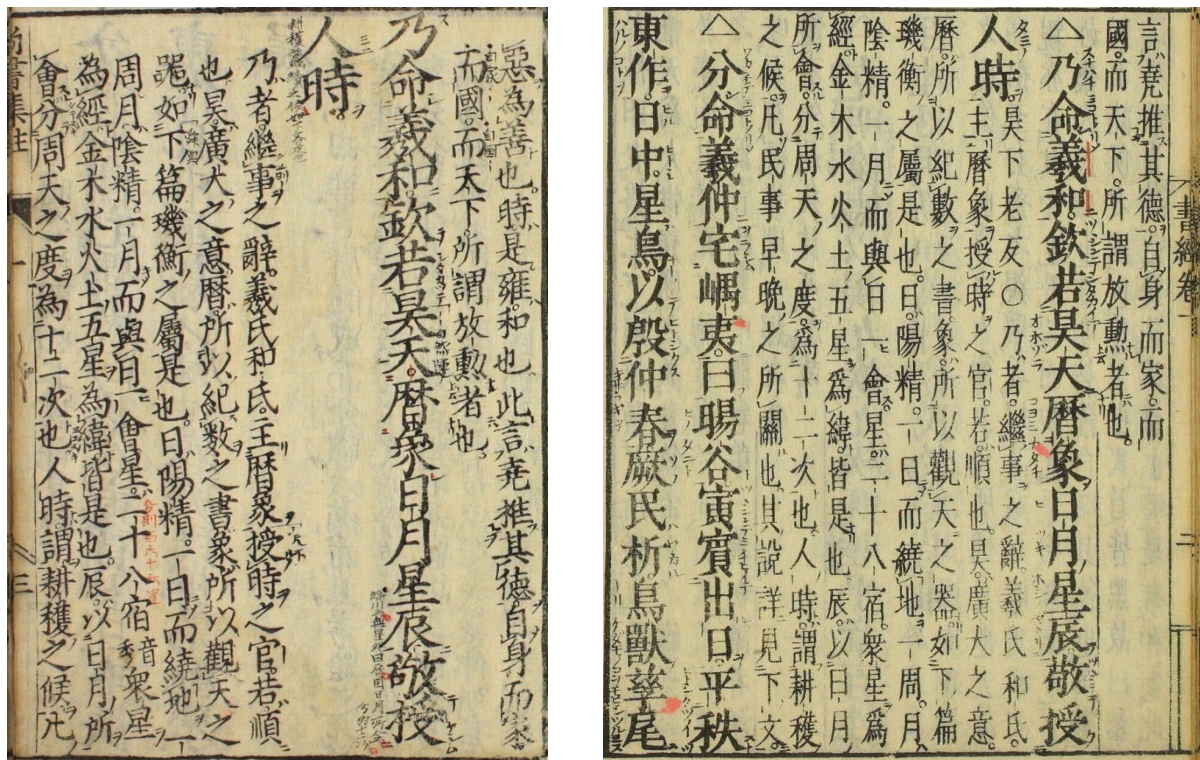


Figure 4.39. Different reading glosses for the same passage from the *Shijing* in a 1663 edition (left) and a 1664 edition (right) of its annotated text *Shokyō shitchū* (Waseda University Library)

In both cases, *reki* and *shō* are combined into a single verb that has the two meanings of “calculating and delineating.” The reading provided in modern Japanese editions also follows this interpretation of *lixiang/rekishō* as a single verb.¹¹⁸ Nevertheless, the nominalization of this verb is central to Joken’s interpretation of the text. In his commentary, he defines the terms more precisely:

Astronomical images (*rekishō*) are the celestial images (*tenshō*) and the astronomical measures (*rekido*). Celestial images are the sun, the moon, and the astral markers; astronomical measures are the divisions of the twelve houses and the two paths red and yellow (equator and ecliptic), and the measured values of the movement of the seven luminaries.

曆象ハ天象曆度也。天象ハ則日月星辰ニシテ、曆度ハ十二宮・赤黃二道ノ紀分、七曜運行之度数也。¹¹⁹

¹¹⁸ Ikeda, *Shōsho*, 54; Katō, *Shokyō*, 1:21.

¹¹⁹ Nishikawa, “*Gusho rekishō zokkai*,” vol. 1, fol. 1b.

The term *li/reki* is, according to Joken, to be understood as what he calls “astronomical measures” (*rekido* 曆度). These measures (Ch. *du*, Jp. *do* 度)¹²⁰ refer to a system used for dividing the celestial sphere into $365\frac{1}{4}$ degrees that are used for locating celestial objects. The equator and the ecliptic can be measured accordingly in degrees (*do*); and the “twelve houses” are the zodiacal subdivisions of the ecliptic, each measuring a little over 30 *do*. “Astronomical measures” also refer to the numeric values obtained from measuring the sun, the moon, and the five visible planets as they move on the ecliptic. In the cosmology espoused by Joken, all of these “seven luminaries” orbit the earth following the “yellow path” that is the ecliptic, each located at different concentric tiers of heaven. He writes in his long cosmological work *Ryōgi shūsetsu*:

The route of the movement of the seven luminaries, a line of three hundred and sixty-five-odd degrees (*do*), is called the yellow path. This yellow path is divided into twelve according to the twelve branches, and every [section] referring to thirty-odd degrees (*do*) is called a house.

七曜運行ノ道路三百六十五度有奇ノ一線ヲ黃道ト云フ。此黃道ヲ十二支ニ配シテ十二二分チ、各三十度有奇宛ヲ一宮ト號ス。¹²¹

The division of the ecliptic into twelve houses correlates to the twelve branches (Ch. *shierzhi*, Jp. *jūnishi* 十二支) that define the signs of the Sinitic zodiac. Joken also draws a correspondence between the twelve houses and the twelve signs of the Western zodiac, establishing a point of contact and commensurability between the East Asian astronomical traditions and the cosmological knowledge transmitted by Jesuit missionaries as well as Iberian and Dutch seafarers. As evidenced by Gensei’s letter to Gunzō, and corroborated by the official journal entries of the *opperhoofden*, by the early 18th century there was a demonstrated interest in acquiring from VOC merchants the names of the signs of the zodiac used in Europe.

Joken interprets the term *xiang/shō* in the passage from *Yaodian* as “celestial images” (Ch. *tenshō* 天象), referring to astral bodies that are used as reference points in the sky for determining the calendrical calculations, namely the “seven luminaries” and the stars. The term “astral markers” (Ch. *xingchen*, Jp. *seishin* 星辰)¹²² denotes these two aspects of physical

¹²⁰ Morgan provides the following definition for *du*: “a linear measure, convertible with terrestrial distances, used in the context of the astral sciences (and that context only) as a measure of the circumference of a great circle whereby one *du* equals the distance travelled by the mean sun in one day, and the ‘circuit of heaven’ thus equals the length in days of the tropical year (*su*).” Morgan, *Astral Sciences in Early Imperial China*, 60.

¹²¹ Nishikawa Joken 西川如見, *Ryōgi shūsetsu* 兩儀集說, ed. Nishikawa Tadasuke 西川忠亮, Nishikawa Joken isho 西川如見遺書 15 (Tokyo, 1907), fol. 41a.

¹²² I am indebted to Cullen’s translation of *xingchen* as “stellar markers.” Cullen, *Astronomy and Mathematics in Ancient China*, 3.

manifestations in the sky, namely the visible celestial bodies and the invisible coordinates determined by them. As a compound word, *seishin* most commonly denotes the stars in general, being synonymous with the first character *xing* 星 (Jp. *hoshi*; *sei*). However, the term *chen* 辰 (Jp. *shin*) also designates what Legge calls “zodiacal spaces” – twelve divisions of the celestial equator¹²³ that are not visible like stars, but which correspond to separate portions of the sky determined by the position of constellations. The twelve *chen/shin*, like the twelve houses, are each correlated to one of the twelve branches that define the Chinese zodiac. According to Joken’s interpretation of *seishin* as “celestial images” (*tenshō*), i.e., stars and constellations, these are visible astral markers in the sky used for determining the invisible “celestial measures” (*rekido*) calculated in degrees that section the celestial sphere.¹²⁴

3.4. *Knowing the human calendar*

For Joken, besides the celestial dimension of *li/reki* and *xiang/shō*, these terms contain an extra semantic layer related to humanity, or the “human way” (*jindō* 人道). When referring to the practice of astronomy on earth by humans, these terms refer to specific concrete objects.

When one talks [about *li/reki* and *xiang/shō*] pertaining to humanity, *li/reki* is the document in which the number of days are recorded and *xiang/shō* are the instruments for observing heaven, like the armillary sphere *jiheng* [mentioned] below.

人道ニ屬テ謂トキハ、曆ハ日數ヲ紀スルノ書、象ハ天ヲ窺觀スルノ器、下ノ璣衡渾天儀ノ類也。¹²⁵

This supplementary meaning for each of the two terms is almost a word-for-word Japanese rendering of Cai Shen’s commentary (曆所以紀數之書。象所以觀天之器、如下篇璣衡之屬是也).¹²⁶ *Li/reki*, in the human sense, is that of a calendar – or, more precisely in this case, ephemerides – while *xiang/shō* refers to astronomical devices. As discussed, Joken follows Cai and equates the ancient instrument known as *xuanji yuheng*, abbreviated as *jiheng*

¹²³ As opposed to the twelve houses, which are divisions of the ecliptic. See Nishikawa, *Ryōgi shūsetsu*, fols. 15a–16a.

¹²⁴ Another interpretation of *chen* in the *Shujing* is that it designates a syzygy. It is found in the commentary from the Tang edition by Kong Yingda 孔穎達 (574–648), where the term is glossed as “the meeting of the sun and the moon” (日月所會). Kō Eitatsu 孔穎達, “*Shōsho chūso*” 尚書註疏 (Woodblock print, Kyoto, 1777), vol. 2, fols. 11a–12b, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/ro12/ro12_00559/.

¹²⁵ Nishikawa, “*Gusho rekishō zokkai*,” vol. 1, fol. 1b.

¹²⁶ cf. Sai, “*Shokyō shitchū*,” 1663, vol. 1, fol. 3a.

(Jp. *kikō* 機衡), with the armillary sphere of his day (*kontengi*), arguing that this legendary device is the source and archetype of all armillary spheres.

The meanings of *li/reki* and *xiang/shō* as human-made objects echo the opposition between invisible and visible astronomical phenomena. *Li/reki* – in the sense of calendar or ephemerides – is the recording of abstract values of the movements of celestial bodies through the invisible parameters determined by the divisions of their orbit. *Xiang/shō* – understood as an astronomical device – denotes the instruments used for observing visible celestial bodies in the sky that are used for establishing invisible parameters. Joken further clarifies the ambiguity of *li/reki* in his introduction to *Ryōgi shūsetsu*:

There are two meanings to the calendar. There is the celestial calendar and the human calendar. The alternate revolutions of the seven luminaries and the multiple stars circulating in the sky are its astronomical images. Due to the circular movement of the astronomical images in the sky, [phenomena] such as day and night, cold and heat, lunar cycles, waning and waxing, wind and rain exist on earth as terrestrial *qi* and [pertain to] the calendar of humans. In heaven, day and night, cold and heat, lunar cycles, waning and waxing, wind and rain do not exist. Therefore, despite there being no difference in the sky's astronomical images among the myriad lands of the world, it is impossible not to have differences in human calendrical methods. This leads to dissimilarities between each method for [calculating] the start of the month and of the year and the methods for [keeping] time. These [pertain to] the calendar of humans.

曆ト云ニ二義有リ。天曆ト人曆ト也。七曜・衆星ノ天ニ循環シテ、易々行ハルハ、天ノ曆象也。天ノ曆象運行ニ由テ、地ニ晝夜・寒暑・晦朔・弦望・風雨ノ類アルハ、地氣ニシテ人之曆也。天ニハ晝夜・寒暑・晦朔・弦望・風雨無シ。此故ニ天ノ曆象ハ世界萬國無異ト云トモ、人之曆法不可無異。是以正朔年月ノ法ト辰刻ノ法ト皆各有不同。是人ノ曆也。¹²⁷

As Joken explains at length, the polysemy of *li* has its roots in the dichotomy of the phenomena this term describes, namely the “celestial calendar” (Ch. *tianli*, Jp. *tenreki* 天曆) and the “human calendar” (Ch. *renli*, Jp. *jinreki* 人曆). There is a fundamental division between things that take place in heaven (*ten* 天) and on earth (*chi* 地) – the latter directly affecting human affairs. This dichotomy also contains the tripartite epistemological classification of all phenomena into three categories – celestial, terrestrial, and human –

¹²⁷ Nishikawa, *Ryōgi shūsetsu*, vol. 1, fol. 6b.

already encountered in Joken's books on anomalous phenomena, namely *Kaii bendan* and *Kaii ruisan*.

Joken argues that his understanding of cosmology or “celestial scholarship” embraces all these “three powers.” It refers to a macrocosmic scale; there is a fundamental unity in the object of investigation of all astronomical practices, regardless of their cultural origin. This object of investigation that all “myriad lands of the world” have in common is precisely the “sky’s astronomical images” (*ten no rekishō* 天ノ曆象) that are universal and empirically observable. As Morgan puts it, *xiang/shō* are “celestial objects whose forms mirror the myriad things of earth [and] both resemble and resonate with their earthly counterparts.”¹²⁸ For Joken it is only natural that celestial scholarship should comprise terrestrial phenomena, as heaven and earth are correlated.

3.5. *Granting the seasons of the people*

The fundamental correlation between heaven and earth is particularly relevant for the production of the calendar. The ultimate origin of East Asian calendrical practices is found in Yao's order to “respectfully grant people the seasons” (敬授人時), or as Joken interprets it, “respectfully grant the seasons of the people” (敬テ人ノ時ヲ授ク). He clarifies his reading:

The [expression] “to grant people the seasons” does not mean “to grant the seasons of heaven,” rather it has mainly the sense of “granting the seasons of the people.” In heaven, there are no four seasons, no day and night. The solar terms,¹²⁹ morning and evening, all occur due to the earth. Humans and the myriad things rely on the earth to grow, which can be observed in detail in the next sections [of *Yaodian*].

授人時ハ、天ノ時ヲ授ト不云シテ、人ノ時ト云ニ主意アルヘシ。天ニハ四時無ク晝夜ナシ。節氣・早晚皆地ニ由テ行ハル。人ト萬物トハ憑地生々シテ、是ニ關ル委クハ後章ニテ可察。¹³⁰

Joken emphasizes in this passage the distinction between the “seasons of heaven” or “celestial seasons” (*ten no toki* 天ノ時) and the “seasons of the people” or “human seasons” (*hito/tami no toki* 人ノ時). It is the same logic behind the division between the celestial calendar

¹²⁸ Morgan, *Astral Sciences in Early Imperial China*, 21.

¹²⁹ Solar terms, or more literally “qi segmentations” (Ch. *jieqi*, Jp. *sekki* 節氣), are twenty-four sections of the ecliptic, each measuring a little over 15 degrees (*do*), corresponding to seasonal periods of the path of the sun throughout the year. Every season contains six solar terms. The winter and summer solstices, together with the spring and autumn equinoxes, are the terms that mark the middle of each respective season.

¹³⁰ Nishikawa, “*Gusho rekishō zokkai*,” vol. 1, fols. 1b–2a.

(*tenreki*) and the human calendar (*jinreki*) expounded in *Ryōgi shūsetsu*. While he is not completely clear on what the seasons of heaven might be, he is clear about what it is not. It is not the same as the seasons of people, which correspond to terrestrial time. The passing of the seasons and the changes in light throughout the day – albeit caused by the movement of the sun in heaven – are terrestrial phenomena and therefore relate to human timekeeping. Joken’s arguments echo the opposition between sublunar and supralunar realms of the cosmos in Jesuit cosmology, but the basis for his reasoning is found in the classics from Chinese antiquity.

Joken finds in antiquity the justification for an empirical practice of astronomy and the foundations for incorporating exogenous knowledge seemingly at odds with certain cosmological notions inherited from Sinitic canonical texts. This does not mean changing the structure of prevailing cosmological models and their epistemological framework. Rather, Joken reinforces the bases that sustain his argumentation by referring to ancient Chinese cosmology and incorporates other elements to prove the strength of his original point.

The grounding in antiquity contains strong moral and political dimensions. His interpretation of the *Yaodian* lays out the goals of mastering astronomical knowledge and its ultimate purpose of producing the calendar for the populace. The reading notation for the phrase “respectfully grant the seasons of the people” (敬テ人ノ時ヲ授ク) is meaningful in two ways. First, unlike some other possible Japanese readings – such as the 1663 edition of *Shokyō shitchū*, which renders the phrase as “grant the seasons *to* the people,” (人ニ時ヲ授ケシム)¹³¹ – Joken interprets it as “grant the seasons *of* the people” (人ノ時ヲ授ク)¹³² for the reasons stated above, namely to contrast it with the ostensible celestial seasons. Second, the character for people (Ch. *ren*, Jp. *hito* or *jin* 人) is read as *tami*. This is consistent between Joken’s texts and the two aforementioned versions of *Shokyō shitchū*. The term *tami* generally designates the populace and is normally written with the character 民, which is the one that appears in the two cited modern editions.¹³³ Being glossed as *tami*, “the people” (人) designates here the subjects of a sovereign as a political entity. In his commentary, Joken further emphasizes the political connotation of this passage as he annotates in the vernacular.

This previous paragraph is from the starting section of this classic. Emperor Yao, being supremely sage, and whose splendor of his virtuous essence comes out spontaneously, is said

¹³¹ Sai, “*Shokyō shitchū*,” 1663, vol. 1, fol. 3a; Ikeda, *Shōsho*, 54.

¹³² This reading is also adopted in other Japanese versions. Sai, “*Shokyō shitchū*,” 1801, vol. 1, fol. 2b; Katō, *Shokyō*, 1:21.

¹³³ Ikeda, *Shōsho*, 54; Katō, *Shokyō*, 1:21.

to be [a] miraculous [being]. It follows thus that, revering the astronomical images of the vast heaven, he granted the seasons; it has the meaning that it is from this [moment] that governing affairs of all under heaven began. Through this, the sages revering the astronomical images of the celestial signs, one can contemplate the humane rule of the unity between heaven and sagemess.

此前ノ章此經ノ發端ニテ、帝堯至聖ニシテ、徳性ノ美皆自然ニ出テ、神妙ナル謂テ、次ニ即昊天ノ曆象ヲ欽ミ、時ヲ授ケ給ヒテ、天下ノ政事自是始レル趣ヲ述タリ。是ヲ以テ聖人天文曆象ヲ欽ミ、天ト聖ト一體ノ仁政ヲ可察也。¹³⁴

The concept of “all under heaven” (Ch. *tianxia*, Jp. *tenka* 天下) is particularly important in this context, for it underscores the notion of a polity ruled by a sovereign who is supposed to carry out a “humane rule” (*jinsi* 仁政). This model of governance, far from being a relic from a bygone past, is very much part of the official discourse that legitimized not only the dynasties in China but also the rule of the Tokugawa regime in Japan. As we have seen, calendrical reform was a major concern of Yoshimune and went hand-in-hand with other political reforms and symbolic gestures to consolidate his authority, including strict control of commerce passing through Nagasaki and the importation of exotic plants and animals to be brought to his court. Ensuring a “humane” or “benevolent” rule was also a defining trait of the fifth shogun Tokugawa Tsunayoshi 徳川綱吉 (1646–1709), during whose reign the Jōkyō calendrical reform was carried out and the first country-wide map of Tokugawa Japan was produced, laying the foundations for Yoshimune’s improvement projects.

3.6. *New ways to visualize old notions*

To accurately present the seasons of the people, in Joken’s readings of *Yaodian*, it was necessary to have astronomical models and devices that confirmed the information found in the ancient texts. The justification for inspecting the heavens by empirical means is found in *Shundian*, in which Shun builds upon Yao’s contribution by observing celestial phenomena through the elusive instrument *xuanji yuheng* – considered in mid-Tokugawa Japan to be a prototype of the armillary sphere that local Japanese cosmologists used.

The illustrations that appear in *Gusho rekishō zokkai* reinforce the material link between cosmological traditions described in the *Shujing* and its applicability to astronomical and

¹³⁴ Nishikawa, “*Gusho rekishō zokkai*,” vol. 1, fol. 1b.

calendrical practices of Joken's time. The first diagram to be featured contains the position of the “centered stars” (*chūsei* 中星) and the “twelve houses” at the time of the purported reign of Yao as well as the changing locations of the “solar lodges” (*nisshuku* 日宿) throughout time.

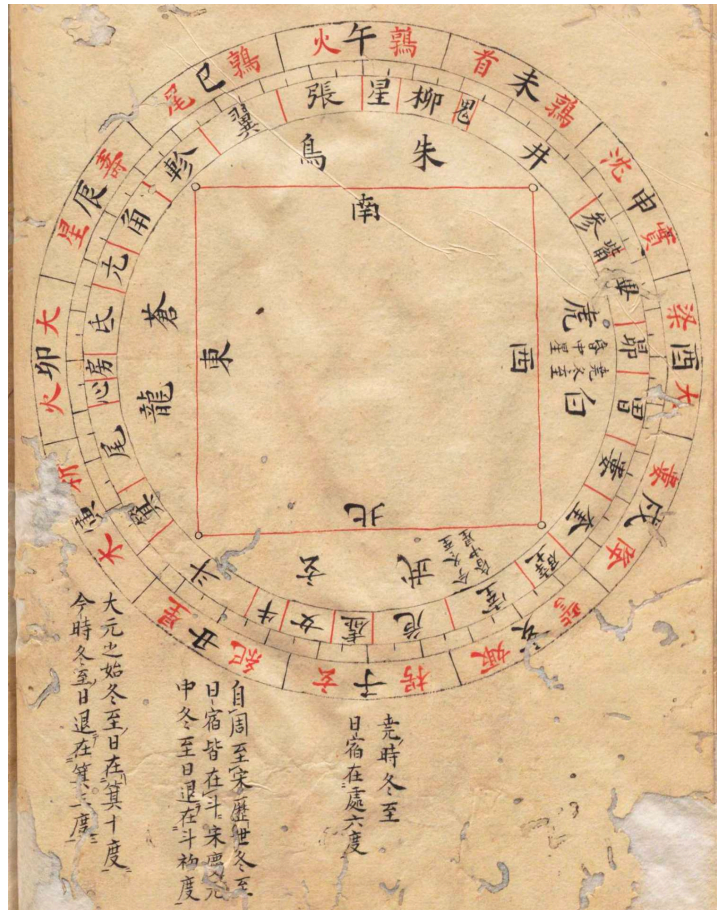


Figure 4.40. A “diagram for observing the position of the centered stars and the twelve houses and the solar lodges through successive ages” (中星十二宮方位窺觀之圖并歷世日宿) as depicted in the manuscript of *Gusho rekishō zokkai* (National Archives of Japan)

“Centered stars” are, as the name suggests, stars centered on the meridian, i.e., crossing a circle that passes through the north and south celestial poles and the zenith of one’s position on earth. They are usually observed at dusk or dawn and used as seasonal markers for the position of the sun in relation to the twenty-eight lodges (*shuku* 宿) throughout the year.¹³⁵ The twenty-eight lodges are constellations dividing the sky to determine the position of the sun in its daily path in the sky from sunrise to sunset, corresponding to the notion of

¹³⁵ See Sivin, *Granting the Seasons*, 487–96.

right ascension in modern astronomy. The lodges are therefore determined along the equator.¹³⁶

Due to the precession of the equinoxes, the position of the centered stars varied throughout history. This is why there are also variations in the location of the “solar lodges” that represent the position of the sun in its daily path (right ascension) in relation to the twenty-eight lodges.¹³⁷ In East Asian astronomical practices this phenomenon was expressed as the “annual difference” (Ch. *suicha*, Jp. *saisa* 歲差) between the tropical and the sidereal years.¹³⁸ According to Joken, if one considered this difference and corrected for the variation in the position of the “centered stars,” it was possible to use this model from ancient China to make astronomical instruments and produce the calendar in his contemporary Japan.

This is consistent with the approach proposed by Mukai Gensei in his letters to Watanabe Gunzō. Both Joken and Gensei subscribed to a geocentric model in which the outermost layer of heaven moves everything below it and around a static spherical earth at the center. They conceptualized *saisa* as being expressed in the gradual change of the position of polar stars over time, ascribing its cause to the general motion of the celestial spheres.

The second volume of *Gusho rekishō zokkai* contains more diagrams and illustrations that should be useful for Joken’s contemporaries interested in cosmology – including Yoshimune and his advisors. There are two illustrations of a perfectly spherical heaven (*tentai* 天體) and a perfectly spherical earth (*daichi* 大地) both divided into five zones and crossed by the line of the horizon as seen from Mount Song (Ch. *songshan*, Jp. *sūzan* 嵩山) in China. The five zones of the earth are defined as the “hot belt” (*nettai* 熱帶) between the tropics, two “temperate belts” (*seitai* 正帶) north and south of the tropics, and two polar cold belts (*kantai* 寒帶). The five lines of heaven reflect this division, corresponding to the projection of the equator, the two tropics, and the two polar circles onto the celestial sphere.

¹³⁶ Sivin, 90–94.

¹³⁷ See Cullen, *Astronomy and Mathematics in Ancient China*, 17–20; Cullen, *Heavenly Numbers*, 186–93.

¹³⁸ Sivin, *Granting the Seasons*, 99–101.

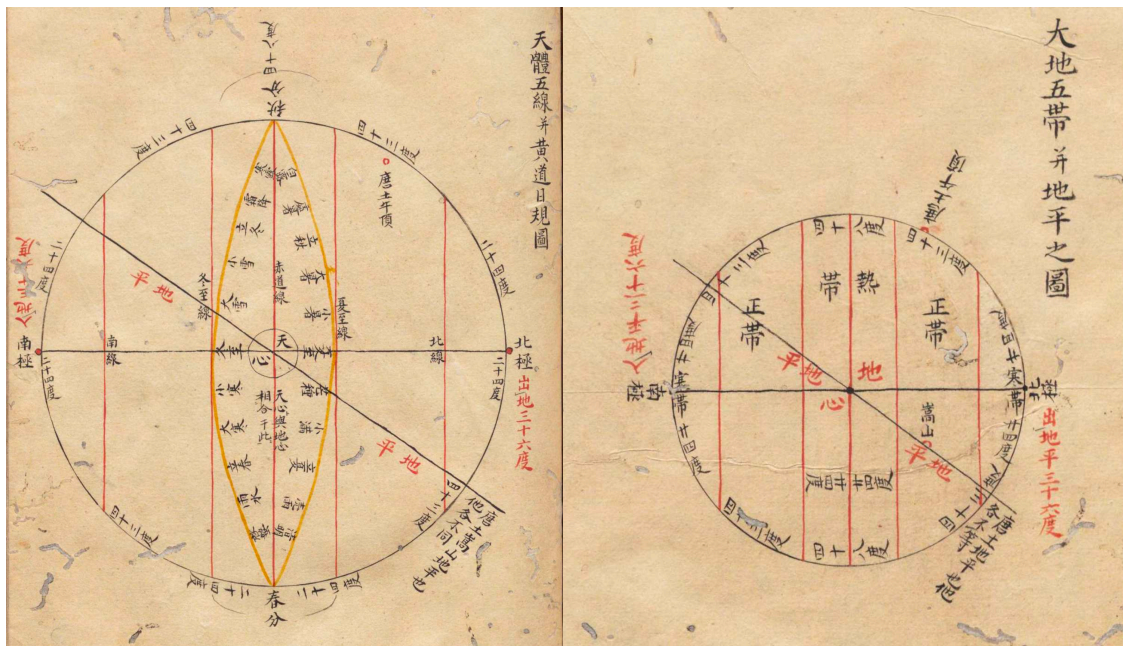


Figure 4.41. On the left, a “diagram of the five lines of heaven and the solar circle of the yellow path” (天體五線并黃道日規圖); on the right, a “diagram of the five belts of the earth and the horizon” (大地五帶并地平之圖), both from *Gusho rekishō zokkai* (National Archives of Japan)

As these images illustrate, even though Joken sets out to gloss the astronomical knowledge preserved in ancient Sinitic classical texts, he refers to hybrid cosmographical models that hint at his eclectic sources. The division of the earth into five climatic zones according to their latitudes, as well as the representation of the cosmos as perfectly concentric celestial and terrestrial spheres, can be traced back to Jesuit sources, notably the illustrations on the margins of Ricci’s world maps.¹³⁹ Finally, *Gusho rekishō zokkai* ends with complementary explanations (*tsukai* 追解) on two other diagrams. The first one is a variation on the diagram that appears in the first volume for determining the position of the centered stars in each of the four seasons, and the second one is an illustration of a quadrant – an instrument intimately connected with European navigational astronomy.

¹³⁹ Cf. Zhang, *Making the New World Their Own*, 47–39.

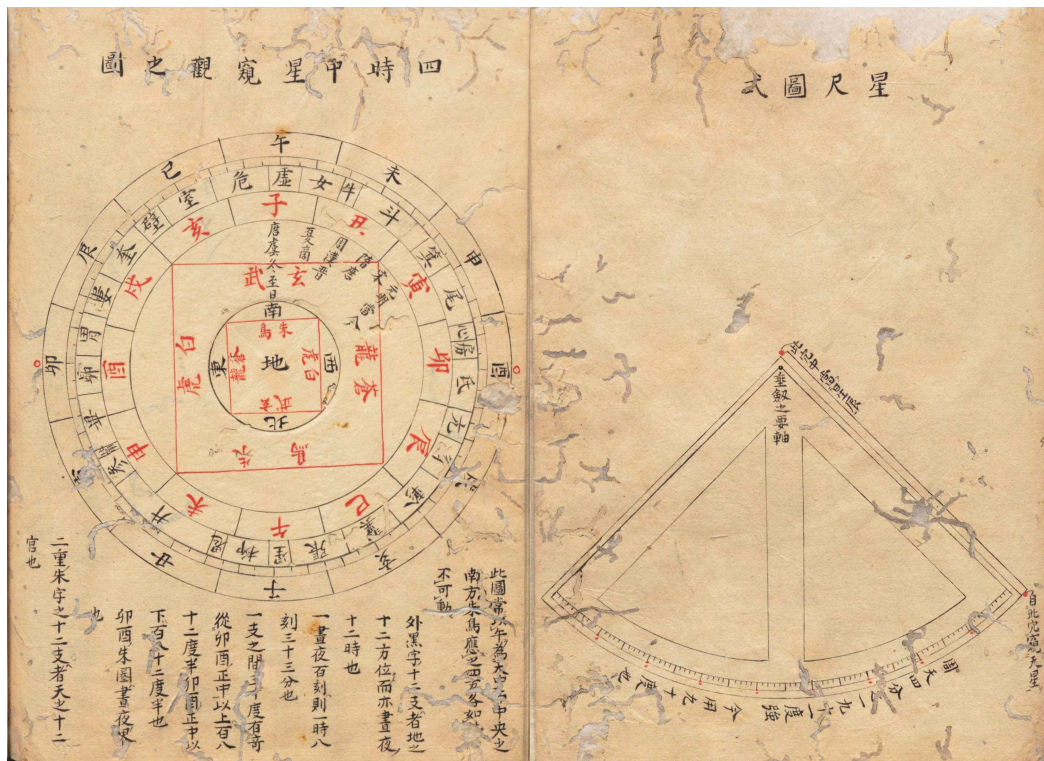


Figure 4.42. On the left, a “diagram for observing the centered stars in each of the four seasons” (四時中星窺觀之圖); on the right, a “model of the quadrant” (星尺圖式), from *Gusho rekishō zokkai* (National Archives of Japan)

The image of the quadrant epitomizes the appeal of Nagasaki’s cosmological scholarship to a broader audience around the archipelago and notably to Yoshimune and his entourage. It simultaneously represents the practical, applicable dimensions of astronomical expertise, well-grounded in nautical traditions, and emphasizes the connection of Nagasaki scholars to forms of “barbarian” knowledge that shifted from its Iberian sources to more contemporary Dutch elements.

3.7. *Universal astronomical practices*

Joken’s works, in their attempt to reconcile ancient traditions and current practices, contain an underlying tension between a purported universality of cosmological models and the local specificity of calendrical and astronomical measurements and calculations. His son Nishikawa Seikyū 西川正休 (1693–1756) reinforces these dynamics, clarifying some of his father’s core ideas. In *Tairyaku tengaku meimoku shō* 大略天學名目鈔 (“Summary annotations

on the nomenclature of celestial scholarship”), written in 1729 and republished alongside his 1730 edition of *Tianjing huowen*, Seikyū writes:

Between heaven and earth, among the numerous scholarly endeavors in each of the myriad countries, [celestial scholarship] in these myriad countries of the world is a single one, there being no two currents. There might be differences in precision between old and new [explanations], but the one single immutable current from times of yore is celestial scholarship.

天地ノ間、萬國各々學業多キ中ニ、世界萬國皆一流ニシテ二流ト無ク、古今ニ精粗ノ差ヒハ有リト雖ドモ、萬古一流不易ナルハ天學ノミ。¹⁴⁰

Here Seikyū follows the same reasoning as his father. He argues that the techniques related to what Joken names the “human calendar” might be various, but ultimately there is one sole type of celestial scholarship – regardless of where in the world it takes place, and whether it is produced in antiquity or in current times. This is the universal dimension of the discourse developed by Joken and further refined by Seikyū.

On the other hand, this discourse also has a localized component. The supposed universality of cosmology does not mean that each type of knowledge occupies the same position vis-à-vis one another. The assimilation of devices and techniques from Western “barbarian lands” by scholars in the Sinosphere implies the latter’s superiority in a hierarchical world order. Despite claiming that there is one single current of celestial scholarship, Seikyū underscores the shared heritage of Japanese and Sinitic cosmology, which is fundamentally different from that of Westerners.

The celestial scholarship of Japan and China is entirely [derived from] the methods bequeathed by Yao and Shun, it is the single current of the *huntian* [model].

和漢ノ天學、皆堯舜ノ遺法、渾天ノ一流ナリ。¹⁴¹

This passage from the same section of Seikyū’s work quoted previously seems to assert the opposite of what he just said. It implies that other forms of celestial scholarship that do not trace their origin lie outside the “single current,” which is supposed to be as universal as the phenomena it describes.

In the view of Joken and Seikyū, astronomical practices in East Asia derive their validity from the long tradition of Yao and Shun, whose epoch-making feats are described in

¹⁴⁰ Nishikawa Seikyū 西川正休, *Tairyaku tengaku meimoku shō* 大略天學名目鈔, ed. Nishikawa Tadasuke 西川忠亮, Nishikawa Joken issho 西川如見遺書 11 (Tokyo, 1891), fol. 3a-b.

¹⁴¹ Nishikawa, fol. 3b.

their respective canons inside *Yushu* – Yao organized the “astronomical images” while Shun established the device for performing the necessary astronomical observations. This is what they call the tradition of the “spherical heaven” (Ch. *huntian*, Jp. *konten* 渾天).

4. Composite cosmologies

Nishikawa Joken identifies eight cosmological schools from ancient China and singles out two models as the ones to be followed by those who wish to pursue cosmological studies. They are the model of the “covering heaven” (Ch. *gaitian*, Jp. *gaiten* 蓋天) and the *huntian* model evoked by Seikyū, i.e., what they perceive as the tradition of the armillary sphere.¹⁴² According to Joken, the *huntian* model, as the direct lineage of Yao and Shun, provided the basis for astronomical practices in both China and Japan for several generations. On the other hand, only one element of the *gaitian* model is worth retaining – the analogy between the movement of celestial bodies and the path of an ant on a millstone to explain the clockwise movement (*usen*) of the seven luminaries and the celestial sphere in the opposite direction (*sasen*). This is the question he tackles in his highly specialized treatise *Usen benron*, an issue that Mukai Gensei also raises in his letter to Watanabe Gunzō.

¹⁴² For an overview of these two cosmographical models see Nakayama, *A History of Japanese Astronomy*, 24–39. The *gaitian* model has its locus classicus in the *Zhoubi suanjing* 周髀算經 (“Mathematical classic of the gnomon of Zhou”), cf. Cullen, *Astronomy and Mathematics in Ancient China*, chap. 2.

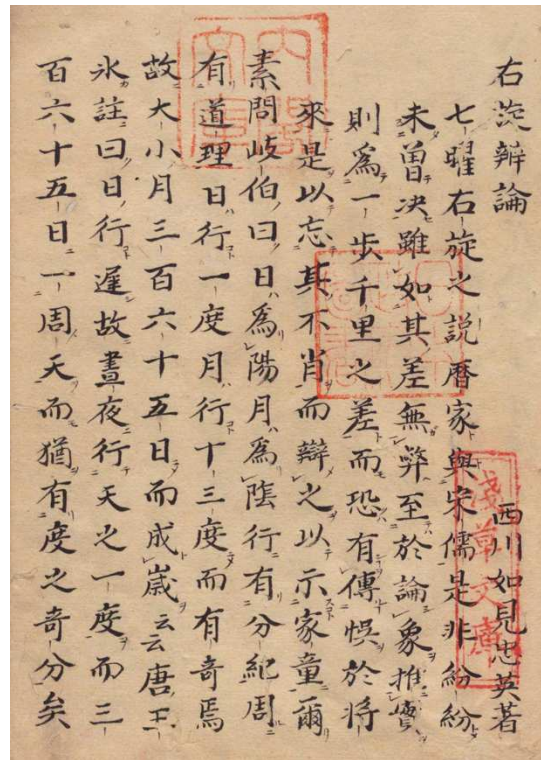


Figure 4.43. First page of *Usen benron* (National Archives of Japan)

In *Tenmon giron*, Joken responds to the question of how to distinguish right from wrong among the various astronomical schools from antiquity (天文諸家ノ説其是非如何) as follows:

All of the eight schools mentioned above are ancient theories, but the two schools of *gaitian* and *huntian* are superior among them. The analogy from *gaitian* of an ant walking on a millstone is the main explanation by astronomical specialists past and present when discussing the rightward and leftward rotations. However, all other explanations from this model are unsatisfactory. Only *huntian* is superior to all other schools. The designs of armillary spheres and their methods consist of subtle devices [to be used] for myriad generations, for they are a treasure passed down from the sages. Students of celestial scholarship must venerate them. As for explanations concerning the designs, there are numerous errors from later generations. 已上ノ八家何レモ古説ナリトイヘトモ、其中蓋天渾天二家の説勝レリトス。蓋天ノ磨上蟻行ノ譬ヘノ如キハ古今曆家右旋左旋ヲ論スルノ主説ナリ。然レドモ其餘悉クハ不好ノ説アリ。唯渾天ノ説最モ諸家ニ勝レル者也。其璿衡渾儀ノ圖、其法萬世ノ

妙器ニシテ聖人ノ遺寶也。天學ノ徒是ヲ尊敬セスンバ不可有。但其圖說ニ於テ後人ノ誤リ多シ。¹⁴³

Joken introduces the problem of the great variety of cosmological models that can be traced to antiquity. Once one recognizes that the foundation of Sinitic cosmology is located in the ancient classics, one must also confront the fact that many of the explanations in canonical sources contradict each other. It is therefore necessary to supplement the information found in these texts with one's own empirical measurements. He concludes his arguments by claiming that “those who set their hearts on celestial scholarship must hold the armillary sphere as a canonical model, make use of the words of the ancient sages as explanatory comments, and learn from sorting out the explanation of past scholars.” (天學ニ志アラン人ハ璿衡渾儀ヲ經典トシ、古聖ノ語ヲ註解トシ、先哲ノ說ヲ撰ンテ可學之).¹⁴⁴ Once again, Joken is clear about equating the *xuanji yuheng* device with a primeval celestial sphere as he combines them into the characters *senkō kongi* 璿衡渾儀. The legacy of this instrument is what enables those conducting astronomical measurements in his time to verify their finding against textual sources. He finishes his answer by admonishing his readers: “do not make the mistake of blindly adhering to ancient explanations” (妄ニ古說ヲ執テ誤ル事勿レ).¹⁴⁵

Joken reinforces here a central aspect of his cosmology. He admonishes his students to venerate ancient Sinitic knowledge while also maintaining a critical approach toward the sources. Explanations that appear in revered classical texts are to be subjected to empirical examination. In fact, the justification for a practical, empirical understanding of “celestial scholarship” as a whole can be found within ancient traditions that foreground instruments such as the *senkō kongi* – here understood unambiguously as an armillary sphere. This “subtle device” (*myōki* 妙器) and its methods are thus the great treasure that the ancient sages bequeathed to subsequent generations (*seijin no ihō* 聖人ノ遺寶).

4.1. *Two ancient models*

¹⁴³ Nishikawa, “*Tenmon giron*,” 1712, vol. 1, fol. 6a-b.

¹⁴⁴ Nishikawa, vol. 1, fol. 6b.

¹⁴⁵ Nishikawa, vol. 1, fol. 6b.

Concerning the *gaitian* model, that of the “covering heaven,” Joken traces its origin to the mythical emperor Fu Xi 伏羲, claiming that it was the Duke of Zhou who passed it onward from the Yin 殷 – i.e., Shang 商 – dynasty (蓋天ノ説ハ包羲氏ヨリ出テ周公是ヲ殷ニ授リ玉ヒタリ).¹⁴⁶ This is the reason, according to him, for the “people of Zhou calling it the gnomon of Zhou” (故ニ周人は是ヲ周髀ト號セリトゾ).¹⁴⁷ He then explains that this cosmological explanation appears in the *Zhoubi suanjing* 周髀算經 (“Mathematical classic of the gnomon of Zhou”) – which, as seen in Mukai Gensei’s letter to Watanabe Gunzō, is the main reference for measuring the position of celestial bodies according to the Pythagorean relation between square triangles, the method of the “hook, thigh, and bowstring” (*kōkogen* 勾股弦). Joken also clarifies this relationship, writing that “the [character] *bi* means *gu* (“thigh”), and *gu* refers to the gnomon used for measuring the shadow of the sun” (髀ハ股也、股ハ日晷ヲ測ルノ表ナリ).¹⁴⁸ Just like the *huntian* model, *gaitian* is also anchored to an ancient instrument and correlated with a specific canonical text.

To explain the main ideas of the *gaitian* model, Joken quotes a passage from the astronomical section (Ch. *tianwenzhi*, Jp. *tenmonshi* 天文志) of the *Jinshu* 晉書 (“Book of Jin”), which was compiled in 648. The text reads: “heaven resembles a conical bamboo lid, and earth is structured as a covered basin; both heaven and earth are elevated at the center and lowered around the edges, and the center of heaven and earth is located under the North Pole” (天似蓋笠、地法覆盤、天地皆中高外下、北極之下爲天地之中云云).¹⁴⁹

This model offers the framework for calculating latitudes as explained by Gensei, i.e., the distance between one’s location and the North Pole along the meridian, measured from the horizon (*hokkyoku shutchi* 北極出地). Joken maintains this definition while also focusing on another significant aspect of *gaitian*, namely how it explains the movement of the sun and the moon in relation to the heavens. He continues the citation from *Jinshu*:

The school of the gnomon of Zhou asserts that heaven is round like an extended lid and earth is flat like a chessboard; heaven’s rotation resembles a millstone pushed leftward, and the sun and the moon move to the right while following heaven’s leftward rotation. Therefore, while the sun and the moon have an eastward motion, they are dragged by heaven and set in the west. It can be compared to an ant walking atop a millstone. The millstone rotates leftward,

¹⁴⁶ Nishikawa, vol. 1, fol. 2b.

¹⁴⁷ Nishikawa, vol. 1, fol. 3a.

¹⁴⁸ Nishikawa, vol. 1, fol. 3a.

¹⁴⁹ Nishikawa, vol. 1, fol. 3a.

while the ant goes toward the right. As the millstone goes faster than the ant, the ant cannot help but follow the millstone in its leftward rotation.

周髀家云天圓如張蓋、地方如碁局。天旁轉如推磨而左行、日月右行隨天左轉。故日月實東行、而天牽之以西沒。譬之於蟻行磨石之上。磨左旋而蟻右去。磨疾而蟻遲、故不得不隨磨以左廻焉云云。¹⁵⁰

Ancient cosmographical models serve, in great measure, to provide the moral and epistemological foundations to an otherwise empirical understanding of cosmology. To grasp the ultimate reality of the cosmos, one must rely on the instruments devised by the ancient sages, who comprehended the underlying patterns of reality. In *Tenmon giron*, Joken reinforces the ideas expressed in *Gusho rekishō zokkai* – later taken up by Seikyū – that the *huntian* model is no other than the inherited methods of the ancient armillary sphere *xuanji yuheng* (渾天ノ説ハ即璿璣玉衡ノ遺法). He then quotes Wang Fan 王蕃 (228–266), who explains that, according to this model, “heaven’s shape resembles that of a bird’s egg, with the earth located at the center; heaven envelops the earth on the outside in the same way as an egg encloses the yolk, round like a pellet; therefore, it is called the spherical heaven (*huntian*) because its shape and form is perfectly round” (天形狀似鳥卵、地居其中、天包地外、猶卵之裹黃圓、如彈丸。故曰渾天言其形體渾渾然也云云).¹⁵¹

It is significant that Joken chooses to take this passage as the authoritative description of the *huntian* model, for it closely resembles the cosmography described in Matteo Ricci’s preface to the different versions of his world map. As discussed previously, both the preface and the map reached Japan in multiple forms, and Joken incorporated several elements of these cosmologies into his own composite worldview.

4.2. *Intersecting epistemic systems*

One important reference cited by Nishikawa Joken is *Yueling guangyi* 月令廣義 (“Broad meaning of the monthly ordinances”), a book compiled by the Ming scholar Feng Yingjing in 1602. This work reveals the complexity of cosmological knowledge in early modern East Asia and the different levels of hybridity with which Joken engages. It is at the same time steeped in the literary culture of late Ming China and representative of how Jesuit cosmology could be seamlessly assimilated into existing epistemic systems. Feng Yingjing was a prominent scholar

¹⁵⁰ Nishikawa, vol. 1, fol. 3a.

¹⁵¹ Nishikawa, vol. 1, fol. 4a.

and official, who, having opposed a powerful eunuch, was imprisoned by the Wanli 萬曆 Emperor (1563–1620). While in prison, Feng Yingjing was visited by Ricci and showed enthusiasm for the missionary’s knowledge, even writing the preface for two of his works, the theological treatise *Tianzhu shiyi* 天主實義 (“The true meaning of the Lord of Heaven”) and *Jiaoyou lun* 交友論 (“Discourses in friendship”).¹⁵²

As we have seen, Ricci’s defense of Christianity in *Tianzhu shiyi* fell under the shogunal ban on Jesuit writings, while *Jiaoyou lun* was only unbanned after 1720 by Yoshimune’s orders. Feng’s *Yueling guangyi*, on the other hand, does not seem to have been confiscated at any point and had a more direct impact on Japanese scholars. This book – purportedly a commentary on the “monthly ordinances” (Ch. *yueling* 月令) section of the canonical text *Liji* 禮記 (“Records of rites”) – contains a reproduction of *Shanghai yudi quantu* 山海輿地全圖 (“Complete map of lands and seas on the earth”), the second edition of Ricci’s world map first printed in 1600. As such, it became one of the main sources of hybridized cosmologies from the continent connected with Matteo Ricci that spread in Japan via textual means. Records show that Kaibara Ekiken – who, as we have seen, enjoyed a close relationship with Mukai Genshō 向井元升 (1609–1677), even writing the latter’s epitaph – was able to procure, by all evidence in Nagasaki, a copy of *Yueling guangyi* in 1666, indicating that this was in circulation in the mid-17th century, during Joken’s formative years.¹⁵³

¹⁵² Hsia, *A Jesuit in the Forbidden City*, 221–22.

¹⁵³ Kyūshū shiryō kankōkai, *Ekiken shiryō*, 7:8.



Figure 4.44. *Shanghai yudi quantu* as reproduced in *Yueling guangyi* (National Astronomical Observatory of Japan)

Another book containing the same reproduction of *Shanghai yudi quantu* is the 1609 compendium *Sancai tuhui* 三才圖會 (“Illustrations of the three powers”), which provided the model for *Wakan sansai zue* 和漢三才圖會 (“Japanese and Chinese illustrations of the three powers”), finished in 1712 by Terajima Ryōan 寺島良安 (1654–?). In both *Yueling guangyi* and *Sancai tuhui*, Ricci’s map is followed by an explanation (Ch. *shuo*, Jp. *setsu* 說) of the structure of the earth and the surrounding heavens. The explanation – also appearing with some small differences in the earliest version of Ricci’s map in the *Tushu bian* 圖書編 (“Compilation of images and writings”) by Zhang Huang 章潢 (1527–1608)¹⁵⁴ – would be the basis for the one found in later versions of the map, i.e., *Kunyu wanguo quantu* and *Liangyi xuanlan tu*. Ricci’s text, in the form it appears in *Yueling guangyi*, is cited by Joken in *Ryōgi shūsetsu*.

In *Sancai tuhui*, Ricci’s text is truncated and not attributed to him at all; instead, the knowledge that the Jesuit missionary presents based on his own experience circumnavigating the world is incorporated into existing epistemic frameworks without any mention of its

¹⁵⁴ For a discussion of the explanation reproduced in *Tushu bian*, see Akin, *East Asian Cartographic Print Culture*, 168–72.

origins.¹⁵⁵ Joken, in his citation of *Yueling guangyi*, follows an analogous approach and attributes the explanation not to Ricci himself but rather to Wu Zhongming 吳中明 (dates unknown), the high official who commissioned the map and wrote its preface. In the original passage from Feng’s book, however, the explanation is clearly identified as Ricci’s – so-called “Li Madou, a scholar from the Great Western Lands” (大西國山人利瑪竇) – a line that is omitted from *Ryōgi shūsetsu* altogether.

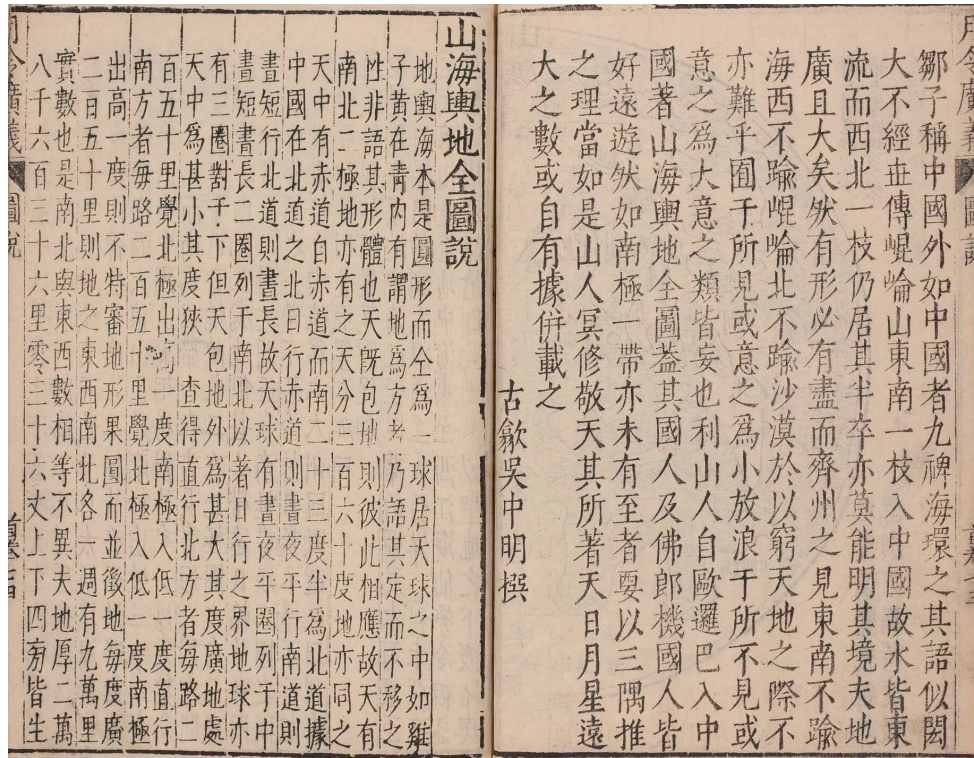


Figure 4.45. Ricci’s explanation (*shuo* 說) for *Shanghai yudi quantu* following Wu Zhongming’s preface in *Yueling guangyi* (National Astronomical Observatory of Japan)

The section quoted by Joken begins from the top of Ricci’s text with the statement that “the earth and the seas are essentially spherical, forming together one single globe located at the center of the celestial orb, like the yolk inside the white of a chicken egg” (地輿海本是圓形、而全為一球居天球之中、如雞子黃在青內).¹⁵⁶ Such a cosmographical description is evocative of Wang Fan’s passage on the *huntian* model that Joken cites in *Tenmongiron*. Ricci’s reference to *huntian* is not fortuitous, as it constitutes a precedent within canonical traditions that supports his worldview.

¹⁵⁵ See Akin, 172–77.

¹⁵⁶ Nishikawa, *Ryōgi shūsetsu*, vol. 1, fol. 11b. See Appendix J for the full citation.

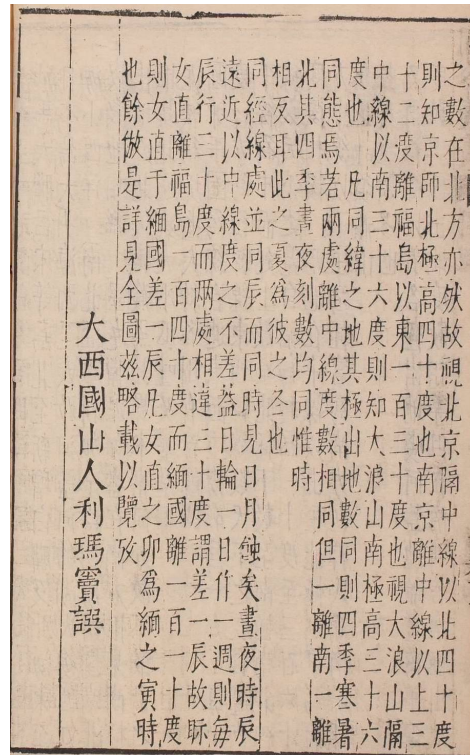


Figure 4.46. Ricci's Chinese name at the end of his explanation for *Shanghai yudi quantu* in *Yueling guangyi* (National Astronomical Observatory of Japan)

The next sentence clarifies that “when it is said that the earth is level, it refers to its fixed and immobile nature – it does not refer to its shape and form” (有謂地為方者、乃語其定而不移之性、非語其形體也).¹⁵⁷ Ricci is in dialogue here with the classical notion that heaven – associated with yang properties – is considered round (Ch. *yuan*, Jp. *en* 圓), while the earth – expressing yin qualities – is considered square or flat (Ch. *fang*, Jp. *hō* 方),¹⁵⁸ an idea that appears early on in canonical texts such as *Zhoubi suanjing*.¹⁵⁹ One of the main purposes of Ricci's map and its accompanying explanations and diagrams is precisely to demonstrate, based on both empirical and canonical evidence, that the earth is a perfectly round globe surrounded by an equally spherical multi-tiered heaven.

¹⁵⁷ Nishikawa, vol. 1, fol. 11b.

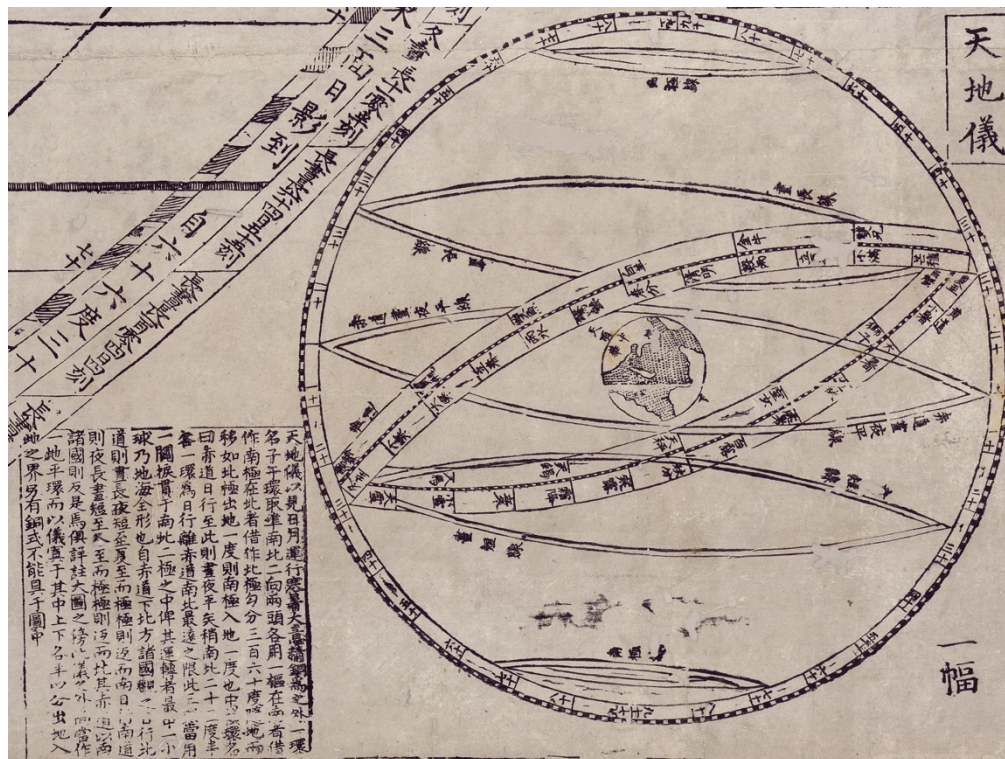
¹⁵⁸ In order to preserve the ambiguity of Ricci's sentence, I translate *fang* 方 as “level,” which does not imply a certain form or shape.

¹⁵⁹ On Ricci's engagement with this idea and the debates over the shape of heaven and earth, see Pingyi Chu, “Trust, Instruments, and Cross-Cultural Scientific Exchanges: Chinese Debate over the Shape of the Earth, 1600–1800,” *Science in Context* 12, no. 3 (1999): 385–412, <https://doi.org/10.1017/S0269889700003501>; Zhang, *Making the New World Their Own*, 56–63.

4.3. *Firsthand experience of the earth's dimensions*

Developing on the notion of heaven and earth as two concentric spheres, Ricci stipulates, like Wang Fan, that “heaven envelops the earth” (天既包地), and so it follows “that the former and the latter correlate to one another” (則彼此相應). The fundamental correspondence between heaven and earth – a through line in the cosmological thought from ancient China to early modern Japan – is expressed in terms of the geocentric Ptolemaic model, in which the celestial sphere and the terrestrial globe mirror each other.

The citation continues to underscore the manifestations of this correspondence in how both heaven and earth have north and south polar regions, are divided into 360 degrees, bisected at the equator, and crossed by northern and southern tropics that “are used to mark the bounds of the sun’s path” (以著日行之界). Ricci then establishes that the length of each terrestrial degree (*du* 度) is 250 *li*, and postulates that the earth is perfectly spherical, with a circumference of 90,000 *li* (一週有九萬里) and a diameter of 28636 *li* and 26 *zhang* (地厚二萬八千六百三十六里零二十六丈).¹⁶⁰



¹⁶⁰ Nishikawa, *Ryōgi shūsetsu*, vol. 1, fol. 12a.

Figure 4.47. An armillary sphere or “model of heaven and earth” (*tiandiyi* 天地儀) depicted in *Kūnyu wanguo quantu*, indicating five divisions of heaven: 1) the equator, or the line for when day and night are the same lengths (赤道晝夜平線), 2) the northern tropic, or line of long days (晝長線), 3) the southern tropic, or line of short days (晝短線), 4) the northern polar line, and the 5) southern polar line. It also contains the ecliptic with the 24 solar terms and Sinitic names for the 12 signs of the Western zodiac (Miyagi Prefectural Library)

As Mukai Gensei discusses in some detail in his letter to Watanabe Gunzō, determining the size of the earth and the length of each of its degrees was paramount for cartographical, astronomical, and calendrical calculations. Part of the problem was the existence of competing theories of varying origins concerning the most precise values. Gensei notes that Joken was particularly interested in these values, recounting that the two men discussed the measurements that Gensei performed in 1721 for determining the latitude of Nagasaki. In this sense, Ricci’s text reproduced in *Yueling guangyi* was an important resource to consider and compare to other sources that circulated in the city.

Joken ends the quotation not long after Ricci discusses the earth’s dimensions, reproducing a few sentences that describe how people live in all four corners of the earth, which, as a perfect sphere entirely surrounded by the heavens, has no absolute top or bottom. The following section in Feng’s book, edited out of Joken’s *Ryōgi shūsetsū*, contains some crucial information. Ricci provides a brief account of his personal experience of crossing the equator and then traversing the Cape of Good Hope – designated as *dalangshan* 大浪山 (“Mountain of Great Waves”) – on his way from Europe to China.

Sailing through the seas from the Far West into China, I reached the line for when day and night are the same [lengths] (i.e., the equator), and saw that the north and south poles were both on the horizon without the slightest [difference in] altitude. Steering the course south, I passed by the Mountain of Great Waves and saw that the distance to the south pole (its latitude) was thirty-two degrees. Therefore, the Mountain of Great Waves and China are opposite to one another above and below [the equator].

予自太西浮海入中國、至晝夜平線、已見南北二極皆在平地、略無高低。道轉而南過大浪山、已見南極出地三十二度。則大浪山與中國上下相為對待矣。¹⁶¹

¹⁶¹ Feng Yingjing 馮應京, “*Yueling guangyi*” 月令廣義 (Woodblock print, 1602), vol. 1, fol. 74a, Naikaku bunko, National Archives of Japan.

This type of firsthand experience is what Joken and fellow Nagasaki scholars qualified as the advantage that Western “barbarian” seafarers had over Chinese and Japanese scholars. As Ro Sōsetsu makes clear in his letter to Gunzō, Joken was perceived both locally and later in the shogunal capital as one of the main exponents of the cosmological knowledge of Nagasaki and its foundations in practical, navigational skills. It is meaningful, if unsurprising, that Joken should stop his citation of Ricci’s explanation right before this passage, in which the Jesuit speaks in the first person (yu 予) and designates his country of origin as “the Far West” (*taixi* 太西).

Once Joken has stripped the citation of any Jesuit associations, he is free to praise its accuracy and usefulness for cosmologists of his day. He qualifies the description he just provided as the most “accurate explanation of celestial scholarship to date” (今來天學細密之說也).¹⁶² The idea that such a description is “accurate” (*saimitsu* 細密) refers no doubt both to the underlying cosmographical model and, more specifically, the values provided for the length of one degree and the circumference and diameter of the earth.

4.4. *Engagement with late Ming scholarship*

Another significant source on “celestial scholarship” for Joken is You Yi’s *Tianjing huowen*. When Nishikawa Seikyū used it as a textbook for his lectures in Edo, he was building on the legacy of his father, who relied on it to synthesize the hybridized cosmologies that defined the intellectual landscape of Nagasaki. Joken, in turn, most likely familiarized himself with the text while studying under his Confucian master Nanbu Sōju. As discussed in the first chapter, according to the account of Kyoto scholar Nakamura Tekisai 中村惕齋 (1629–1702), Sōju was the one responsible for first importing the book and circulating it in the imperial capital, where Tekisai was able to read it.

Tekisai’s manuscript book *Tenmon kōyō* 天文考要 (“Summary notes on the celestial signs”), in which he offers his account of Sōju’s role, relies heavily on the information found in *Tianjing huowen*. When one compares the table of contents from *Tianjing huowen*, *Tenmon kōyō*, and Joken’s *Ryōgi shūsetsu*, there are several overlapping themes, even sections with identical titles.¹⁶³ Besides describing cosmographical models and astronomical phenomena, all three

¹⁶² Nishikawa, *Ryōgi shūsetsu*, vol. 1, fol. 12b.

¹⁶³ See Appendix K.

titles also deal with meteorological activities and even terrestrial occurrences such as earthquakes and hot springs.

Tianjing huowen, as it is presented in the Japanese edition overseen by Seikyū, is divided into three parts. The first fascicle (*shou zhi juan* 首之卷) is composed of 22 diagrams (*tu* 圖) ranging from depictions of the structure of the heavens and the armillary sphere to maps of constellations and illustrations of lunar and solar eclipses. It also contains six original prefaces (*xu* 序) from the Chinese edition in addition to Seikyū's foreword (*hanrei*) and the preface that he wrote for his *Tairyaku tengaku meimoku shō*. The two other parts are the “fascicle on heaven” (*tian zhi juan* 天之卷) and the “fascicle on earth” (*di zhi juan* 地之卷).¹⁶⁴ As with Ricci's explanation from his world maps, the heaven and earth binomial (*tian di* 天地) – naturally present in Tekisai's and Joken's writings as well – is, at the same time, deeply rooted in Chinese cosmological traditions and perfectly adapted for the geocentric model.

A particularly noteworthy element from the first fascicle is the inclusion of a list of “past and current cosmologists” (*gujin tianxuejia* 古今天學家) and an index of cited works (*yinyong shumu* 引用書目). As evoked in the second chapter, the names of eight Jesuit missionaries appear at the end of the first list, under the designation of “cosmologists from Western regions” (*xiyu tianxuejia* 西域天學家). Among the cited works, one finds a wide range of titles, from the ancient canonical text *Huangdi neijing* 黃帝內經 (“Inner classic of the Yellow Emperor”) and the Song Neo-Confucian writings of Zhu Xi to more recent Jesuit cosmological works – including those banned in Japan, such as the titles from *Tianxue chuhan* or Matteo Ricci's *Qiankun tiyi* 乾坤體義 (On the constitution of heaven and earth).

The books of late Ming scholars who transformed and assimilated Jesuit knowledge into their worldviews are equally well represented, like Feng Yingjing's *Yueling guangyi* discussed above, *Wuli xiaozhi* 物理小識 (“Short records on the principle of things”) by Fang Yizhi 方以智 (1611–1671), and *Gezhicao* 格致草 (“Notes on the investigation of things”) by Xiong Mingyu 熊明遇 (1579–1649) – the last two being scholars under whom You Yi is reported to have studied. Fang Yizhi even writes one of the prefaces for *Tianjing huowen*. Xiong

¹⁶⁴ Interestingly, certain typically celestial phenomena such as constellations (*xingzuo* 星座) or the lengths of day and night (*zhouye changduan* 晝夜長短) are listed under the earth section. While the latter is arguably a phenomenon perceived from earth, it is difficult to justify how constellations might pertain to the terrestrial realm. Another noteworthy fact is that the sections listed in the table of contents in the second part concerning the earth do not correspond to how the fascicle is actually divided. It might be that heaven and earth are mere designations for the top (“heaven”) and bottom (“earth”) sections of the book.

Mingyu was the father of Xiong Renlin 熊人霖 (1604–1666), author of *Diwei* 地緯 (“Latitudes of the earth”), one of the early titles confiscated and burned by Mukai Gensei. *Gezhicao* would later be published alongside *Diwei* under the collective title *Hanyu tong* 函宇通 (“Treatise on the cosmos”). You Yi was therefore immersed in the milieu of late Ming scholars who were quite inclined to dialogue with the writings of Jesuits and Catholic converts.

Unlike Joken, You Yi makes no effort to conceal his (indirect) connections with the “Western cosmologists” he cites, a fact that partly explains why Seikyū’s edition of *Tianjing huowen* would only be published ten years after Yoshimune’s order to unban certain Jesuit-associated titles. Since the main surviving manuscript of *Ryōgi shūsetsu* is, in all likelihood, the copy Joken presented to Yoshimune after his summons to Edo, one would expect that references to Matteo Ricci or other missionaries as sources of information are omitted. Tekisai’s manuscript *Tenmon kōyō*, on the other hand, is quite explicit on this point.

4.5. *Probing the celestial and terrestrial spheres*

In the same section concerning the “nine-tiered heavens” (*kyūjūten* 九重天) in which Tekisai explains how *Tianjing huowen* entered Nagasaki thanks to Nanbu Sōju’s intervention, he also quotes a section from Fang Yizhi’s *Tongya* 通雅 (“Penetrating meanings”) stating that “the names of the nine heavens are dissected in *Taixuan*, discussed in detail by Wu Caolu, and probed by Li Xijiang” (九天之名、分析於太玄、詳論于吳草廬、竅¹⁶⁵實於利西江).¹⁶⁶ Tekisai immediately glosses the name Li Xijiang as “the Western barbarian called Madou, also styled as Xitai” (西夷人名瑪竇又號西泰), making the reference to Matteo Ricci completely unambiguous. The cosmology to which Fang Yizhi subscribes, taken up by Tekisai, follows a seemingly linear development from the Han divination book *Taixuanjing* 太玄經 (“Classic on the supreme mysteries”) by Yang Xiong 揚雄 (53 BCE–18 CE) through the writings of Wu Cheng 吳澄 (1249–1333), also known as Wu Caolu 吳草廬, and culminates with Ricci, who “probes the actuality” (*heshi* 覈實) of the nine heavens by empirical means, providing concrete information such as their distances to earth.

¹⁶⁵ Here I read the character *qiao* 竅 (“orifice”) as *he* 覈 (“to probe”), following <https://ctext.org/library.pl?if=gb&file=60186&page=43>

¹⁶⁶ All passages quoted in this section are from Nakamura, “*Tenmon kōyō*,” vol. 1, sec. *Kyūjūten* 九重天.

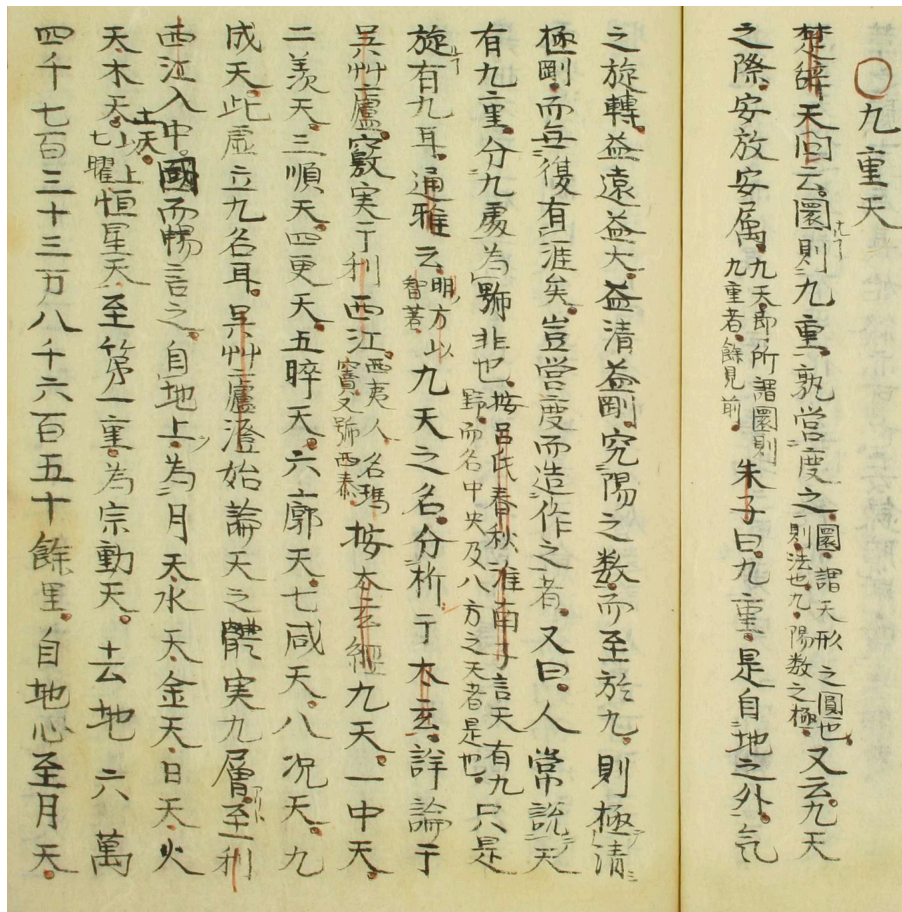


Figure 4.48. Beginning of the section on the “nine-layered heavens” in Nakamura Tekisai’s *Tenmon kōyō* (Waseda University Library)

As Tekisai continues his description of the nine-tiered heavens, he clarifies that “the barbarian Li (Ricci) was from the so-called lands of the [sect of] Jesus; he entered China during the Wanli era (1572–1620) of Ming and from there propagated Western celestial scholarship” (利夷所謂耶蘇國人也、明萬曆間入中國、西洋天學自此而傳). Tekisai is clear about the identification of Matteo Ricci as the original figure from Christian lands (*yasokoku* 耶蘇國) who would promote Western cosmology (*seiyō tengaku* 西洋天學) in China, having a rippling effect in Japan. As we have seen, Ricci was singled out by name as early as the original prohibition of Christian books coming in from the continent from 1630, so there was no going around the fact that his teachings were highly controversial and outright prohibited in Tokugawa Japan.

Due to these conditions, scholars in Nagasaki had an ambivalent attitude toward Jesuit knowledge, Joken being a prime example. The very notion of “celestial scholarship” (Ch. *tianxue*, Jp. *tengaku*) undergoes a process of resignification from its usage in Ming China to

Tokugawa Japan. The reaction of certain Chinese literati to what Jesuit missionaries themselves and their associates called “celestial scholarship” – also designated simply as “Western scholarship” (Ch. *xixue* 西學) – can be understood in light of their equally ambivalent feelings toward the Manchu rulers.¹⁶⁷ This ambivalence was even stronger in Japan, where it was further complicated by reflections on the country’s position in a new geopolitical order with China’s formerly undisputed status as the center of civilization being undermined. While *tianxue* was used in China extensively for describing Jesuit knowledge, the opposition between moral and practical knowledge exemplified by *Tianxue chuhan* had its roots in Neo-Confucian thought. Jesuits themselves were aware of the composite nature of their writings and often referred to precedents in Chinese history to justify their ideas.¹⁶⁸

Joken ascribes to the term *tianxue/tengaku* a significance that is quite removed from the “Learning from Heaven”¹⁶⁹ proposed by the Jesuits and the literati with whom they collaborated. One should not assume that this discrepancy was simply due to Joken’s active rejection of the Christian elements contained in the Jesuit conception of the term. Rather, the texts through which he learned about Jesuit cosmology were in all likelihood already truncated and stripped of their moral and theological components.

The incorporation of Western cosmological knowledge embodied by Ricci into a long Confucian tradition to which Tekisai alludes was at the core of the Jesuit accommodation strategies. It was precisely this accommodative approach that enabled contemporary and subsequent Chinese scholars such as You Yi and his masters Fang Yizhi and Xiong Mingyu to engage with Jesuit cosmology “on their own terms,” to quote Benjamin Elman.¹⁷⁰ As Tekisai writes, “You Yi, a Fujianese from Qing, wrote *Tianjing huowen* to expound on [Ricci’s] explanations” (清閩人游藝著「天經或問」敷演其說), presenting the early Qing scholar’s contribution within the framework of “Western cosmological scholarship,” or the highly hybridized forms of Jesuit knowledge that emerge in late Ming scholarly circles.

Similar to Ricci’s world maps, one fundamental point addressed in *Tianjing huowen*, *Tenmon kōyō*, and *Ryōgi shūsetsu* that reflects Jesuit cosmological concerns is the sphericity (*kon'en* 渾圓) of the earth and the surrounding heavens. There is a meaningful discussion on this

¹⁶⁷ See, for instance, Jami, “La carrière de Mei Wending (1633-1721) et le statut des sciences mathématiques dans le savoir lettré.”

¹⁶⁸ Peterson, “Learning from Heaven: The Introduction of Christianity and Other Western Ideas into Late Ming China,” 92–101.

¹⁶⁹ cf. Peterson, “Learning from Heaven: The Introduction of Christianity and Other Western Ideas into Late Ming China.”

¹⁷⁰ Cf. Benjamin Elman, *On Their Own Terms: Science in China, 1550–1900* (Cambridge, Mass: Harvard University Press, 2005), chap. 5.

topic in the first question of the section on “the earth and its five belts” (地體附五帶) of *Ryōgi shūsetsu*. The question is as follows:

There are numerous old and new explanations about the principle of the sphericity of heaven and earth. However, while by looking at the constant form of heaven as a semicircle and observing the seven luminaries rising and setting, one has an overview of the one-hundred and eighty degrees above one’s head – making it easy to know that the celestial form is the shape of a circle – with the earth, despite being smaller than heaven, the area that the human eye sees is always no more than a single degree of the terrestrial sphere. Therefore, one does not have an overview of even one percent of the earth. By what means can one, while standing on earth, see evidence of its sphericity?

天地渾圓ノ理古今ノ説甚多。然レトモ天ノ體ハ常ニ天ノ半周ヲ視テ、七曜ノ出没升降ヲ窺ヒ仰テ、頭上ノ一百八十度ヲ一覽スル事カ故ニ天體周圓ノ形勢知り易キ事アリ。大地ハ天ヨリ小也ト云トモ、常ニ人目ノ見ル處僅ニ地球ノ一度ヲ不過。然レハ地ノ百分之一ヲ一覽スル事無之。何ヲ以テカ居ナカラ地ノ渾圓タル驗ヲ見ン哉。¹⁷¹

In the answer, Joken provides a number of different types of evidence for the spherical earth (*chitai kyūen naru shō* 地體球圓なる證), including the shadow cast by the earth during a lunar eclipse and the fact that “Westerners” (*seiyō no to* 西洋の徒) sailed around the globe and measured its dimension. Observational and navigational astronomy, taken to be a defining trait of Western knowledge, is important for proving central notions, such as the sphericity of the earth. Joken uses the example of a lunar eclipse to provide observational evidence for understanding the earth as a sphere (*chikyū* 地球). He claims, nevertheless, that there are excesses when it comes to practical astronomical measurements and equates these with the folly of the barbarians who pretend to know the distance between the different layers of heaven.

¹⁷¹ Nishikawa, *Ryōgi shūsetsu*, vol. 1, fols. 12b–13a.

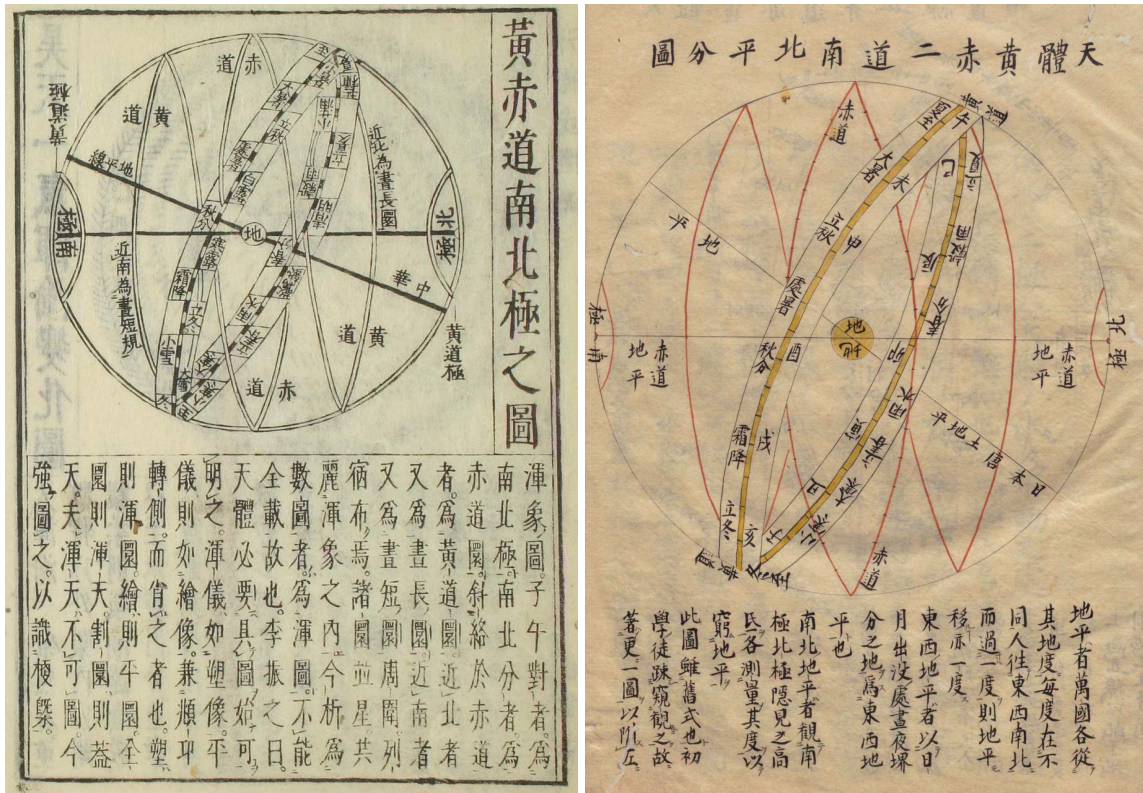


Figure 4.49. On the right, a model for an armillary sphere in Nishikawa Seikyū’s edition of *Tianjing huowen* with the equator, the tropics, the polar circles, the line of the horizon, and the ecliptic displaying the names of the solar terms (Waseda University Library); on the left, similar model in Joken’s *Ryōgi shūsetsu* with the ecliptic containing the names of the twelve signs of the East Asian zodiac in addition to the solar terms (National Archives of Japan)

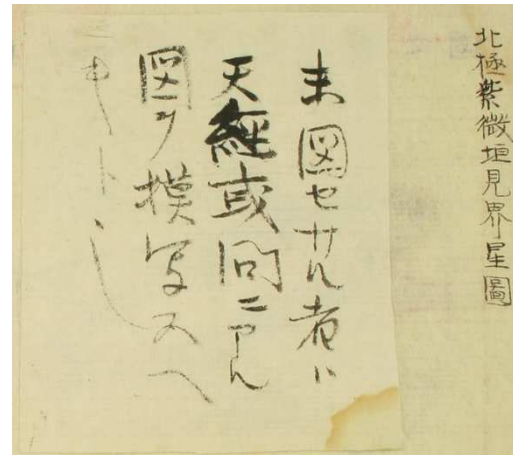
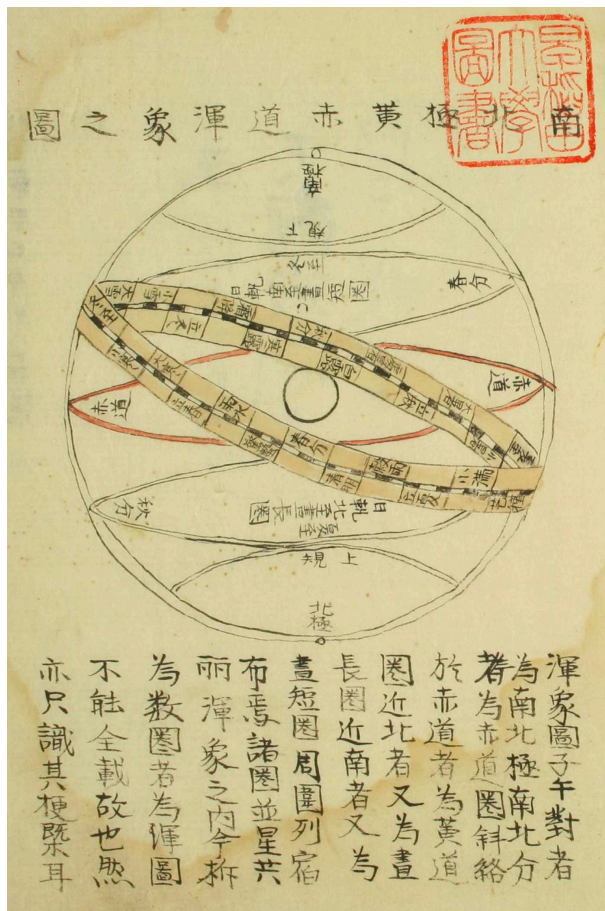


Figure 4.50. On the right, a model of the armillary sphere as depicted in *Tenmon kōyō* (Waseda University Library); on the left, a handwritten note in the same copy of the book stating that “the diagrams not depicted are to be copied from the illustrations found in *Tianjing huowen*” (未圖セサル者ハ天經或問ニアル圖ヲ模寫スヘキトシ)

4.6. *Multi-tiered heaven*

Besides the model of the armillary sphere, another important element from the margins of Ricci’s world maps that makes its way into the cosmological discourse of Nagasaki’s scholars is the depiction of the layers of heaven. The cosmographical models reproduced in the margins of *Kunyu Wanguo quantu* and *Liangyi xuanlan tu* are featured on their own in both *Yueling guangyi* and *Sancai tuihui*, and from there are further recirculated in Japanese works. In *Ryōgi shūsetsu*, Joken begins the section concerning the “nine heavens, their sequence, and altitude” (九天次第高下) with the following explanation:

The nine heavens refer to the entirety of the celestial sphere containing nine tiers but that does not [mean] that there are divisions by levels. Heaven is an indistinct body of great qi, a single entity transpierced by it from top to bottom, inside and outside.

九天ト云ハ周天ノ總體九重有ツテ、段々分界アルニハ非ス。天ハ大氣ノ混體ニテ上下内外貫徹セル處ノ一體也。¹⁷²

This passage sets the tone for the section, encapsulating the central tenets of Joken's cosmological views as a whole, which emphasize the permeability of heaven as opposed to its solid nature. Despite the ubiquitous “great qi” (*taiki* 大氣) that constitutes heaven being a material substance, it is not solid and static as the crystalline celestial spheres of the Jesuits. The number of spheres that constitute heaven varied among Jesuit accounts in China, but the solid nature of the spheres was a central notion that elicited a wide range of reactions from Ming literati.¹⁷³ This worldview also presupposed the existence of four elements that make up earthly matter, with the celestial bodies being composed of quintessence. This is another central point for Joken for distinguishing between Sinitic and “barbarian” knowledge, for “proper” cosmology must be based on the five phases.

Before enunciating what the nine tiers of heaven are, Joken underscores that they are not actual, discrete divisions of the celestial spheres. He clarifies that the order of the first seven tiers of heaven is established according to the different revolutions of the sun, the moon, and the five planets (*gosei* 五星). Above them, there is the eighth “heaven of sequential lodges and the stars” (*resshū shosei ten* 列宿諸星天), and finally the ninth “heaven of general motion” (*sōdō ten* 總動天) – which corresponds to the *primum mobile* in European cosmologies.

Concerning this final tier, he writes:

The heaven above [the others] is that of “general motion,” also called “fundamental motion.” It envelops and supports the eight heavens located within, rotating leftward a full circle every day. Adding this [to the rest], there are nine heavens.

其上ノ一天ヲ總動トス、又ハ宗動ト云フ。内ニ在ル處ノ八天を包ミ提ケテ毎日一周左旋ス。是を加ヘテ九天トス。¹⁷⁴

Despite the model's name of “nine heavens,” Joken still discusses the existence of a perfectly still section of heaven beyond the last tier.

Although what is above the “heaven of general motion” is named the “heaven of constant stillness,” it is the supreme void (*taikyo*), perpetually still and motionless. Since there are no moving bodies or physical phenomena to be seen, one can only provide its denomination, but not go so far as to discuss its function. Not to mention that there is an explanation of eleven

¹⁷² Nishikawa, vol. 1, fol. 47a-b.

¹⁷³ See Sun Chengsheng 孫承晟, *Guannian de jiaozhi: Mingqing zhi ji xifang ziran zhexue zai zhongguo de chuanbo* 觀念的交織：明清之際西方自然哲學在中國的傳播, *Keji zhishi de chuangzao yu chuanbo yanjiu congshu* 科技知識的創造與傳播研究叢書 (Guangzhou: Guangdong renmin chubanshe, 2018), chap. 3.

¹⁷⁴ Nishikawa, *Ryōgi shūsetsu*, vol. 1, fol. 47b.

heavens among the barbarians, but it is a pointless idea. It is only the explanation of nine heavens from China that is today evidently concrete and factual.

總動天ノ上ヲ常靜天ト號スト雖ドモ、太虛永靜不動ニシテ、運行ノ體無ク、物象ノ看ル無キガ故ニ其名號ヲ立ツルノミ、其用ヲ論ズルニ及バズ。況ヤ戎蠻ニ於テ十一天ノ說アリト云トモ無用ノ義也。只中國九天ノ說今日當然ノ實事也。¹⁷⁵

In this passage, Joken neither denies nor confirms the existence of a purported “heaven of constant stillness” (*jōsei ten* 常靜天), he merely presents its name. Joken focuses on the physical elements in the sky such as stars and planets that can be used as reference points. Since there are no such “physical images” (*bussō* 物象) in this purported tenth tier of heaven, he refrains from speculating about any of its characteristics. It is from this perspective that he rejects “barbarian ideas” concerning an eleven-tiered heaven.

The need for an immobile heaven that acts as the substratum for the other mobile parts is unclear in Joken’s explanation. It is significant that he concludes his explanation by claiming that one cannot discuss its “function” (*yō* 用). If one cannot discuss the “function” of a supposed tenth tier of heaven, it goes without saying for an extra eleventh tier. This is why he calls such an explanation “pointless” (*myō* 無用); it lacks any material or practical application. He concludes by claiming that it is solely the nine-tiered explanation, which he identifies as the *Chinese* model, that can be understood as the evident truth (*tōzen no jitsuyi* 當然ノ實事).

4.7. *The heaven of perpetual stillness*

The eleventh heaven in the “barbarian theory” appears in *Liangyi xuanlan tu* and is designated as the location of the Christian paradise, i.e., the empyrean. The outermost layer is described as “the eleventh tier of heaven, [where] the Lord of Heaven, Emperor on High, created Paradise, inhabited by all the holy saints, perpetually still and motionless” (第十一重天主上帝發見天堂諸神聖所居永靜不動). The reason that there are two more layers compared to the nine-tiered model is that right below the primum mobile – the tenth “starless heaven of fundamental motion” (無星宗動天) – there is another “starless heaven of crystal” (無星水晶天) that also rotates the other layers underneath, which would account for the precession of the equinoxes.

¹⁷⁵ Nishikawa, vol. 1, fols. 47b–48a.

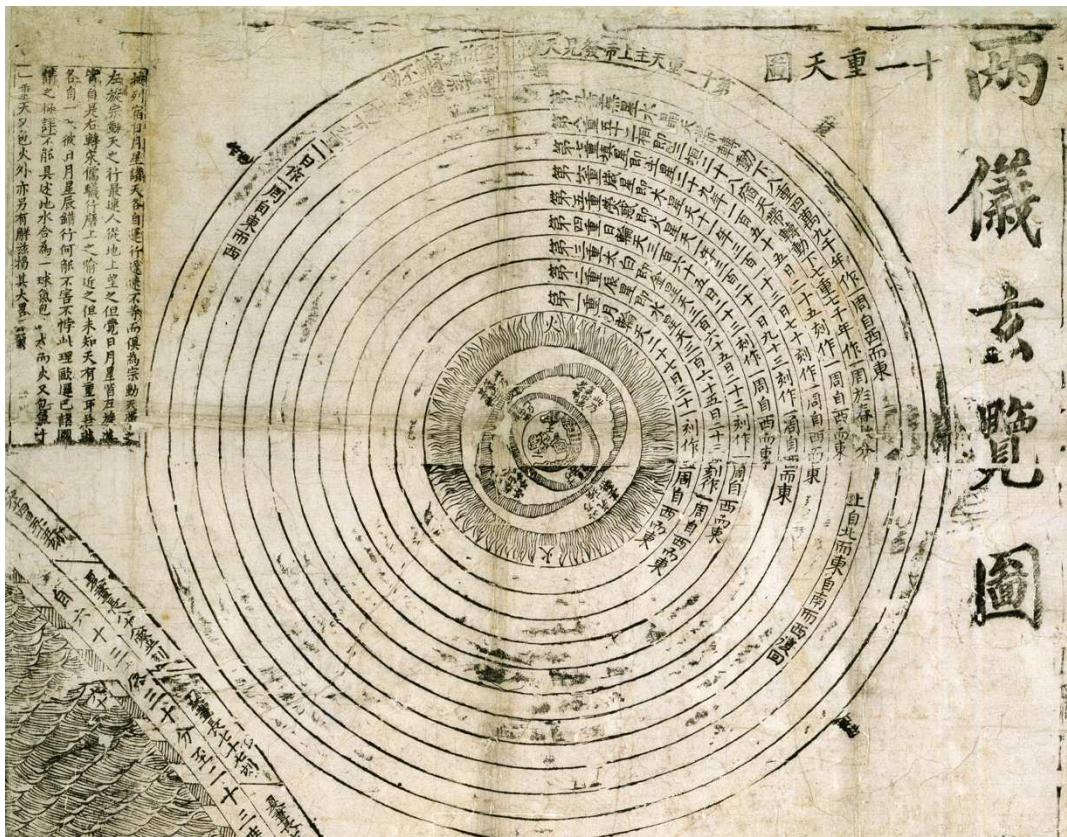


Figure 4.51. The “diagram of the eleven-tiered heaven” (十一重天圖) in *Liangyi xuanlan tu* (Korean Christian Museum at Soongsil University)

The model of the eleven-tiered heaven serves the theological purpose of locating the Christian God in Jesuit-inspired cosmology. In China, the convert Yang Tingyun – who collaborated in the production of *Zhifang waiji* with Giulio Aleni – is one of the scholars to defend this model. In *Daiyipian* 代疑篇 (“Essays for replacing doubts”), one of the titles banned in 1630, Yang claims that, starting from the first heaven containing the moon, the celestial circles become gradually wider as they get further away from earth until one reaches the “eleventh tier of heaven” (第十一重天), whose distance from earth cannot be known (不知幾何遠) and where one can “revere the sole Lord of Heaven” (然其仰惟一天主也).¹⁷⁶

Besides the eleven-tiered model, Yang also argues for the solid nature of the celestial sphere. He writes:

The heavens are of a perfectly concrete matter; it is able to keep the Seven Directors attached and be in regular motion. If the structure of the earth does not fall apart, it is because heaven’s constitution impedes it.

¹⁷⁶ Quoted in Sun, *Guannian de jiaozhi: Mingqing zhi ji xifang ziran zhexue zai zhongguo de chuanbo*, 123.

天體極實、能係七政、能時刻運行。若地形不脫空、則天體窒礙。¹⁷⁷

Also in Japan, the eleventh heaven is mentioned in Christian texts published by the Jesuits. In the Latin textbook *Compendium catholicae veritatis* used in seminaries in Japan, the eleventh-tiered model fulfills an analogous theological function, used for explaining the existence of the highest heaven, which “is the perfectly still abode of the saints” (*quietissima sedes est beatorum*).¹⁷⁸ Its author describes the existence of seven heavens corresponding each to one of the seven wandering stars (*stellae erraticae*), an eighth heaven “in which all stars are fixed” (*in quo sunt omnes stellae fixae*), a ninth crystalline heaven, and the tenth heaven that is the *primum mobile*.¹⁷⁹ He concludes that “to these ten heavens known by the astrologers, they add the theological eleventh heaven, which is aflame in [God’s] splendor and called the empyrean heaven” (*his decem caelis ab astrologis cognitis, addunt theologi undecimum caelum, quod ab splendore igneo vocatur caelum empyreum*).¹⁸⁰

It is clear from this passage that the grounds for the existence of the empyrean are entirely theological, as explained in the *Compendium*, a fact that would have to be masked in later Japanese descriptions of the eleven-tiered cosmology. As Hiraoka Ryūji has shown, the impact of the *Compendium* in early modern Japan was larger than previously estimated in modern scholarship, for it circulated under different forms despite the ban on Christianity by the Tokugawa regime.¹⁸¹

This type of cosmology is retained in *Nigi ryakusetsu* 二儀略説 (“General explanations on heaven and earth”) by Kobayashi Kentei 小林謙貞 (1601–1683) – which, as we have seen, was a Japanese adaptation of the section called *De sphaera* from the *Compendium*.¹⁸² One of the distinctive features of the cosmological explanations found therein is that it lacks the theological implications of the eleventh heaven. Concerning the empyrean, it mentions solely that above the *primum mobile* (*sōdō ten*) one finds “the eleventh immobile heaven, which serves as the support for the layers below” (不動成宿アリテ、下ノ諸層宿ノ台成レリ).¹⁸³ This is a clear departure from the Latin text, but it is significant inasmuch as it demonstrates

¹⁷⁷ Yang Tingyun 楊廷筠, “*Daiyipian*” 代疑編 (Woodblock print, 1621), fol. 11b, Waseda University Library, https://www.wul.waseda.ac.jp/kotenseki/html/bunko08/bunko08_d0274/index.html.

¹⁷⁸ see Ryuji Hiraoka, “Clavius and His Astronomical Data during the ‘Christian Century’ in Japan,” *Historia Scientiarum* 3, no. 18 (2009): 235.

¹⁷⁹ Hiraoka, 232.

¹⁸⁰ Hiraoka, 232.

¹⁸¹ Ryuji Hiraoka, “The Transmission of Western Cosmology to 16th Century Japan,” in *The Jesuits, the Padroado and East Asian Science (1552-1773)*, ed. Luís Saraiva and Catherine Jami (Conference “History of Mathematical Sciences: Portugal and East Asia III,” Singapore: World Scientific, 2008), 88.

¹⁸² Hiraoka, 89.

¹⁸³ Hirose, Nakayama, and Ōtsuka, *Kinsei kagaku shisō*, 2:24.

how the Japanese text had to be modified not only to be intelligible for its audience but also due to the sensitive Christian doctrine implied in the belief in a “theological heaven.” As for the nature and constitution of the heavens, Kentei describes it as follows:

The celestial layers are not a compound of the four greats. Their substance is perfectly strong and perfectly solid, with which no rock or iron can be compared. Based on this, these heavens are designated as the fifth great. It means that it is the fifth [type of] materiality that transcends the four greats.

天層ハ四大和合ノ物ニ非ズ。其體至剛至堅ニシテ、鐵石等ノ可及モノニアラズ。依是、此諸天ヲ五大ト名ク。四大ノ上ニ勝レタル五番メノ色相ト云義ナリ。¹⁸⁴

The central tenet of solid crystalline spheres is taken up as is, for it should not pose any issues in regard to the ban on Christian books. If one compares this passage with the Latin text, however, it becomes clear that the Japanese text is not a mere translation.

Heaven is a perfectly solid body, made up of matter and form, and not of the [four] elements and their properties. Hence its essence is designated by the philosophers as a body distinct in essence from the four elements. This [view] is common to both philosophers and theologians.

*Caelum est corpus solidissimum, compositum ex materia et forma, non autem ex elementis aut ex illorum qualitatibus. Unde sua essentia a philosophis nominatur, id est, corpus distinctum essentialiter a quatuor elementis. Haec est communis philosophorum et theologorum.*¹⁸⁵

The philosophical concepts of the “matter” and “form” familiar to the Jesuits are rendered in Japanese by the Buddhist term *shikisō* 色相, which is translated in the passage above as materiality but should evoke both notions. The mention of “philosophers and theologians” is omitted and replaced with a clarification of the “fifth great” (*godai* 五大) corresponding to the quintessence and how it differs from the four elements. The terminology regarding the four elements should not be unfamiliar to a Japanese scholarly readership. The “four greats” (*shidai* 四大) are at the core of Buddhist cosmology and even Confucian scholars such as Joken, who are not necessarily acquainted with its nuances, can draw parallels with Jesuit cosmology.

Another fundamental distinction between the Latin and Japanese texts is that *Compendium*'s conclusions are based on postulates that rely on faith and scriptural authority, a line of argumentation that clearly had to be discarded in the Japanese version. Indeed, the Latin passage quoted above is preceded by the enunciation that God created heaven and

¹⁸⁴ Hirose, Nakayama, and Ōtsuka, 2:16.

¹⁸⁵ Quoted in Ryuji Hiraoka, “Jesuit Cosmological Textbook in ‘the Christian Century’ Japan: De Sphaera of Pedro Gomez (Part I),” *SCIAMVS*, no. 6 (2005): 110.

earth ex nihilo.¹⁸⁶ In *Nigi ryakusetsu*, on the other hand, the explanation about the nature of heaven (*ten no shitsu* 天之質) is preceded not by theological postulates, but rather by a simple statement that there are four “axioms” (*kettei* 決定) that can be used to elucidate the topic. Besides, Kentei also resorts to the familiar format of questions and answers typical of Confucian dialogues to clarify specific points – a stylistic choice also prominent in Joken’s works.

It is consistent with Joken’s worldview that he rejects this eleven-tiered cosmology as thoroughly “barbarian” and refutes its premises. It should come as no surprise that he disregards the reasons for the existence of the empyrean and does not even provide its name. The works that he could have used as references, such *Nigi ryakusetsu* and *Liangyi xuanlan tu*, do not explore the theological justification for the empyrean.

4.8. *A single heaven of all-pervading qi*

The first quotation that appears after Joken’s explanation about the nine tiers of heaven in *Ryōgi shūsetsu* is attributed to Zhu Xi as reproduced in the Ming Neo-Confucian compilation *Xingli daquan* 性理大全 (“Great compendium on nature and the principle”), completed in 1415.

Master Zhu said: “What people frequently explain as heaven having nine tiers does not mean that it is divided into sections; it simply is that there are nine rotations.”

朱子曰。人常說天有九重、分處為非也。只是旋有九耳。¹⁸⁷

Joken quickly contributes with his “humble opinion” (*gu anzuru ni* 愚按) after this passage, writing in Sinitic that it is the best explanation (此說最好矣) for it “only follows the revolutions of the seven luminaries and the stars and the fact that they have a different path from [heaven’s] general motion to establish the nine names [of each celestial layer]” (只是從七曜諸星之運轉與宗動之自有異行而立九號耳).¹⁸⁸ This appraisal serves to ground the cosmological discussions of *Ryōgi shūsetsu* in the Neo-Confucian orthodoxy associated with Zhu Xi before incorporating heterodox elements from “barbarian” sources.

The second citation comes from *Liangyi xuanlan tu* without any mention of its author or its origins. The cited passage offers the values for the circumference of the earth, its radius,

¹⁸⁶ Hiraoka, 109–10.

¹⁸⁷ Nishikawa, *Ryōgi shūsetsu*, vol. 1, fol. 49a.

¹⁸⁸ Nishikawa, vol. 1, fol. 49b.

and its distance to the different tiers of heaven in Chinese *li*, which are also converted into Japanese *ri*, and concludes with the statement that “these nine layers cover each other like onion skins” (此九層相包如葱頭皮焉).¹⁸⁹ The onion metaphor – also appearing in other of Ricci’s writings such as the aforementioned *Qiankun tiyi* that also contains depiction of eleven celestial tiers – reinforces the solid nature of the heavens, with each layer understood as a single translucent crystalline sphere that keeps the celestial bodies in motion. This idea is taken up by Xiong Mingyu in his *Gezhicao*¹⁹⁰ but not adopted by his disciple You Yi in *Tianjing huowen*. You Yi presents instead an understanding that is closer to that of Jie Xuan 揭暄 (1612–1695), a student of Fang Yizhi who wrote a preface to *Tianjing huowen* and espoused a vortex-like understanding of the cosmos filled with qi in constant circulation.¹⁹¹

As illustrated by the images below, the diagram of the nine heavens from *Yueling guangyi*, followed by an explanation by Ricci, contains clear divisions between each of the layers, whereas the diagram from *Tianjing huowen* emphasizes the flows of all-pervading qi (*yiqi* 一氣) that causes the celestial bodies to orbit the immobile earth. Right under the image, You Yi’s text underscores that “heaven is a single mass of qi, without any number of layers” (天渾淪一氣、無有重數). Joken takes this approach and combines it with the nomenclature used in Ricci’s maps and explanations, while also referring to the measurements and distances provided in Jesuit sources.

¹⁸⁹ Nishikawa, vol. 1, fol. 50a.

¹⁹⁰ See Sun, *Guannian de jiaozhi: Mingqing zhi ji xifang ziran zhexue zai zhongguo de chuanbo*, 123–24.

¹⁹¹ Zhang, *Making the New World Their Own*, 190–94; Sun, *Guannian de jiaozhi: Mingqing zhi ji xifang ziran zhexue zai zhongguo de chuanbo*, 126–34.

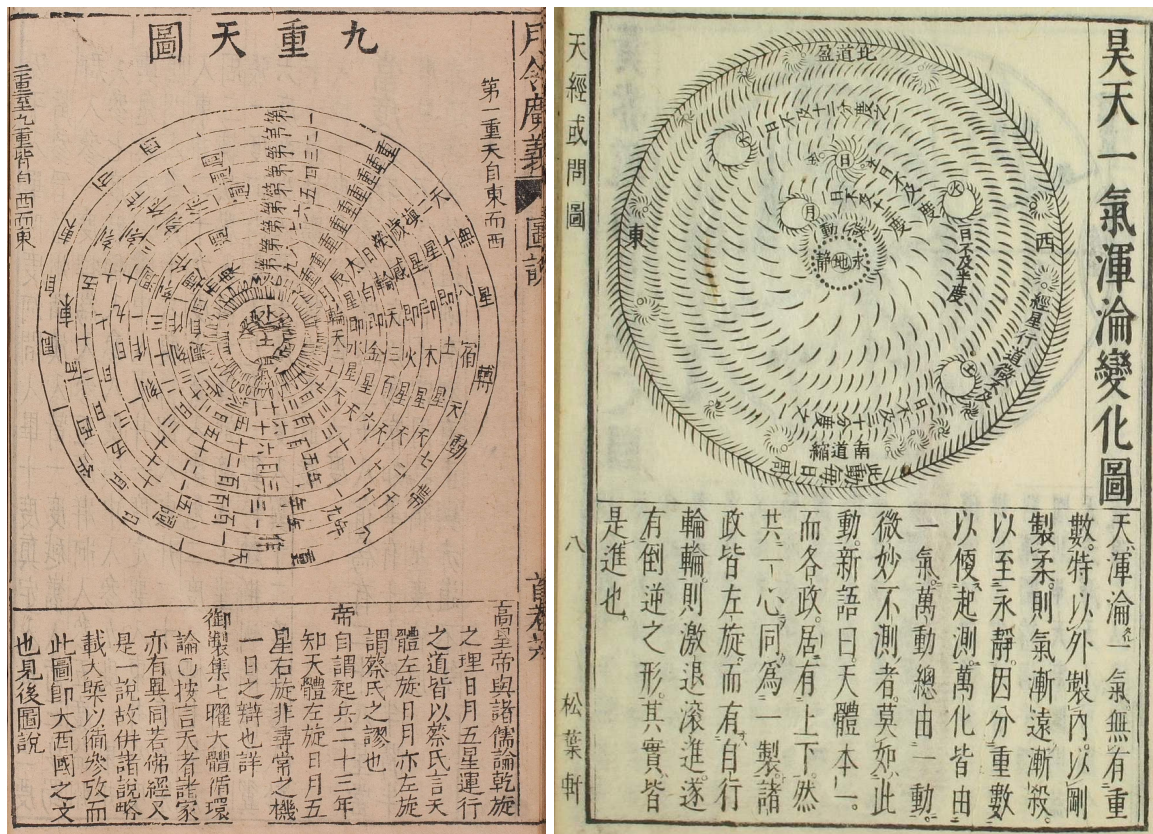


Figure 4.52. On the left, a “diagram of the nine-layered heaven” (九重天圖) numbered from the outermost layer in Feng Yingjing’s *Yueling guangyi* (National Astronomical Observatory of Japan); on the right, a “diagram of the transformations of the vast heaven’s undifferentiated qi” (昊天一氣渾淪變化圖) in Nishikawa Seikyū’s edition of *Tianjing huowen* (Waseda University Library)

Joken’s appraisal of the numeric values that appear in *Liangyi xuanlan tu* is tentative and even somewhat dismissive. In response to the question of what sort of techniques are used to measure the distances to the nine heavens in *Liangyi xuanlan tu* (玄覽圖九天ノ里程是ヲ測ノ術如何) – omitting the fact that the model adopted in the map is that of eleven tiers – Joken writes simply that it is not known (不知). He argues that only the general outline of the techniques can be known (皆大概ノ義ト可知) but not whether the measurements are indeed precise and accurate (密合ノ實ト妄トヲ不知).¹⁹²

The overall principles he identifies for the calculations are: 1) one can determine the diameter of the earth by measuring its circumference (大地ノ周圍ヲ測量シテ其徑直ヲ知り), 2) one can know that the moon is smaller than the earth by measuring its shadow (月影ヲ測リテ月體ノ大地ヨリ小キナル事ヲ知り), and 3) one can observe the sun’s shadow

¹⁹² Nishikawa, *Ryōgi shūsetsu*, vol. 1, fol. 51b.

with a gnomon to determine that the sun is larger than the earth (日晷ヲ窺ヒ量リテ大地ヨリ大ナル事ヲ知テ). Altogether, these methods allow one to extrapolate the altitude of the sun and the moon and from there establish values for the five planets (共ニ其高下ヲ窮メ是ニ準シテ又五星ヲ測ル).¹⁹³ As we have seen in the previous chapter, these were some of the methods that Mukai Gensei describes in his letter to the shogunal official Watanabe Gunzō. Gensei explicitly mentions discussing Joken’s values for the altitude of the sun, which would then enable the measurements for the other layers of heaven.

In his commentary, Joken draws a distinction between the methods of the “barbarians” (*jūban no tomogara* 戎蠻ノ等) – referring no doubt to Jesuit cosmologists – and those of the “ancient theories of China” (*tōdo no kosetsu* 唐土ノ古説). The barbarians “are fond of what is vast and expansive” (曠蕩ヲ好ミ), such as the dimensions of the cosmos, “discussing at all costs ingenuities of precision and accuracy in measurements” (強テ測量密合ノ巧妙ヲ説テ). The ancient Chinese theories, on the other hand, “stick to what is close at hand, preferring partial measurements to a fault” (至近ニ泥ミテ偏測ニ失ス). His conclusion is that all “these explanations should be examined” (其説可察),¹⁹⁴ striking a balance between the perceived excessive technicalities of Europeans and the limited scope of old Chinese measurements.

This distinction reflects a dual understanding of the meaning of heaven and the “celestial scholarship” that constitutes Joken’s cosmology. First, there is heaven in a metaphysical sense – one that cannot be observed or measured, remaining largely unknowable by empirical means. This immaterial heaven – called that of “mandate-principle” (*meiri* 命理) – is the domain of the sages of ancient China, the ones capable of understanding its principle (*ri* 理) but whose wisdom has not been properly transmitted to the “latter days” (*matsudai* 末代) of Joken’s time. Proper knowledge concerning the ineffable principles of the cosmos is essentially Sinitic in its essence. Second, there is heaven in a physical sense, i.e., the observable sky above. This physical dimension is the object of study for astronomical specialists. Knowledge about the material heaven is not only possible but also becomes more accurate as time progresses. Joken largely circumscribes the scope of his cosmological writings to this material understanding of the sky. In the general introduction (*sōdai* 總題) to *Ryōgi shūsetsu*, Joken writes:

¹⁹³ Nishikawa, vol. 1, fol. 51b.

¹⁹⁴ Nishikawa, vol. 1, fol. 52a.

There are two meanings for what one calls heaven: the heaven of the mandate and principle and the heaven of form and qi. What is written down in this present book is for clarifying the form and qi – this is what is commonly called “the study of the celestial signs” (*tenmongaku*).

天ト云フニ二義アリ。命理ノ天ト形氣ノ天ト也。今此書ニ抄スル者ハ形氣曉セリ、世ノ所謂天文學是也。¹⁹⁵

Knowledge about the material heaven – that of “form and qi” (*keiki* 形氣) – can be obtained from Western “barbarians,” be they Jesuit missionaries, Iberian seafarers, or Dutch merchants. Having sailed around the world, they obtained more precise measurements for navigational and cartographical purposes that can be subsumed into East Asian cosmologies. The role of Nagasaki scholars such as Joken is to demonstrate how the instruments, devices, maps, and diagrams from these faraway people can contribute to the practical astronomical needs of his day.



¹⁹⁵ Nishikawa, sec. *sōdai*, fol. 1a.

Figure 4.53. Joken’s “diagram of the nine heavens, their altitude, and sequence” (九天高下次第之圖) in *Ryōgi shūsetsu* depicted his hybrid model in which each layer is defined by the movement of the celestial bodies it contains (National Archives of Japan)

Conclusion

Historians of science researching Japan, such as Nakayama Shigeru, have traditionally articulated Joken’s dual interpretation of heaven as a “separation of speculative and empirical cosmology”¹⁹⁶ that marked a shift toward a more rational understanding of astronomical phenomena. As Nakayama puts it, “the way in which [Joken] specified *keiki* astronomy in opposition to the study of the *meiri* heaven opened the door to an objective view of the phenomenal world unimpeded by Confucian preconceptions.”¹⁹⁷ Nakayama sees this movement as a sign of emerging positivistic attitudes that would continue later with the Kyoto scholar Nishimura Enri 西村遠里 (1718–1787), who was involved in the reform of the Hōryaku 寶曆 calendar adopted in 1751.¹⁹⁸

As I have argued throughout this study, such teleological narratives of the development of cosmological knowledge in Tokugawa Japan obscure the larger picture of how epistemic systems intersected and interacted in the archipelago. Joken’s goals in presenting his cosmologies the way he did were not to become “unimpeded by Confucian preconceptions” that prevented him from seeing the world “objectively.” Both interpretations of heaven as immaterial (*meiri*) and as physical (*keiki*) – and thus empirically apprehensible – were deeply rooted in models and traditions that Joken traced back to ancient China. The eclectic explanations he assimilated in the form of Sinitic texts discussing Jesuit worldviews were themselves in constant dialogue with well-established Confucian paradigms.

It is undeniable that Joken’s hybridized forms of cosmological knowledge were the product of Nagasaki’s pivotal position in transnational commercial and cultural networks. Yet, precisely due to the fact that the city was such a strategic port for the shogunal regime, the routes passing through it were heavily surveilled. Despite reclaiming a local heritage associated with practical navigational skills dating back to the seafaring past of the city’s residents, Joken’s sources seem to be largely textual, reflecting instead composite sources from Ming China. The impact of cosmographical models derived from Matteo Ricci’s world maps

¹⁹⁶ Nakayama, *A History of Japanese Astronomy*, 107.

¹⁹⁷ Nakayama, 108.

¹⁹⁸ Nakayama, 113–14.

is undeniable, but it is more likely that scholars like Joken, rather than interacting directly with large print versions of the map, assimilated it indirectly from works such as *Yueling guangyi*, *Sancai tuihui*, and *Tianjing huowen*. These works, together with the works of local scholars such as Joken himself, would then circulate throughout the archipelago – arguably not only in spite of the censorship of Jesuit-affiliated knowledge but at least partly because of it – transforming the intellectual landscape of Tokugawa Japan. There are then some significant differences in the hybridized cosmologies produced in the contact zone of Nagasaki as compared to their counterparts in the continent.

There are then some significant differences in the hybridized cosmologies produced in the contact zone of Nagasaki as compared to their counterparts in the continent. Unlike the conditions for the production of Ricci's world maps in late Ming China, in which the Jesuits were in direct contact with their local interlocutors,¹⁹⁹ Nagasaki scholars such as Joken did not openly engage with Catholic-inspired cosmologies due to the ban on Christianity. Nagasaki's heritage from missionaries and converts who used to promote their faith and discuss their cosmological views was largely stripped of its religious elements by the mid-17th century. In China, even after the transition to the Qing dynasty, Jesuit missionaries continued to perform important functions in the highest echelons of the imperial bureaucracy, to the extent that the Kangxi 康熙 Emperor (1654–1722, r. 1661–1722) would employ some of them as personal tutors to harness the potentials of “Western scholarship” (*xixue*).²⁰⁰ While interesting parallels can be traced between the reign of Yoshimune and that of Kangxi,²⁰¹ the shogunal policies of the late 17th and early 18th century ensured that no Catholic missionary could enter Japan and that any mention of their activities remained under strict surveillance. This major difference between the continent and the archipelago defined how hybridized forms of knowledge developed in Chinese and Japanese contact zones.

Nagasaki scholars were associated with several groups of people. Their cross-border connections were simultaneously their main asset and potentially risky. VOC merchants, although considered loyal servants to the shogun, could still be regarded as barbarians whose religion was dangerously close to the prohibited “sect of Jesus” that was so vilified by the authorities. Conversely, the Dutch, albeit Christians, were eager to dissociate themselves from the image of Catholic missionaries in the region. They were instead quite antagonistic toward

¹⁹⁹ See Zhang, *Making the New World Their Own*, chap. 2.

²⁰⁰ Cf. Jami, *The Emperor's New Mathematics*, chap. 3.

²⁰¹ Cf. Ōba Osamu 大庭脩, *Tokugawa Yoshimune to Kōki Tei: Sakokuka de no nitchū kōryū 徳川吉宗と康熙帝—鎖国下での日中交流*, Ajia bukkusu あじあブックス 19 (Taishūkan, 1999).

the presence of Catholics in Japan and, as demonstrated by the encounter with Sidotti, the animosity was reciprocated. From the perspective of the shogunate, the Dutch were not simply allies in combating the Iberians, but more importantly, tamable subjects fully incorporated into their domestic political hierarchy. This meant that, since they served the shogun, they were expected to provide the sovereign with useful goods and information that could prove beneficial to the Tokugawa reign.

According to Joken, European “barbarians” in general might be able to contribute with some technical improvements to astronomical practices in East Asia, but the core of the cosmological tenets underpinning such practices was to be found in the ancient Chinese classics. This interpretation was part of the orthodoxy concerning the proper understanding of cosmological phenomena, first articulated by Mukai Genshō in *Kenkon bensetsu*. Joken, deeply embedded in this tradition, does not propose a new type of astronomy divorced from ancient Chinese thought, nor do his writings represent a shift toward Western-style “objective” practices. Instead, he utilizes references and precedents from Chinese classical texts to promote astronomical practices relevant to his time yet still rooted in ancient cosmological views.

CONCLUSION

The main goal of this dissertation was to unravel some of the epistemological entanglements between scholars in early modern Nagasaki and multiple sources of cosmological knowledge coming from Eurasia and beyond. The materials utilized, as well as the methodology, reveal a variety of transnational actors involved in the formation of hybridized cosmologies that developed in this highly monitored strategic port city between the 1630s and the 1720s. Ranging from analyses of the networks of local scholars to examinations of the form, style, and content of printed books and manuscripts, this study has demonstrated that the contact zone of Nagasaki acted as a hub for producing and obtaining novel information that increasingly attracted the attention of the Tokugawa regime. Shogunal anti-Christian repressive measures, allied to growing commercial restrictions, were determinant for transforming Nagasaki into a strictly controlled gateway that filtered and curated knowledge and goods arriving from around the globe. These policies enabled local scholars to embrace eclectic views while also upholding a discourse aligned with Confucian orthodoxy.

The development of hybridized forms of cosmological knowledge in Nagasaki throughout the 17th and 18th centuries is due to a confluence of five main factors: 1) local astronomical and geographical practices closely linked to the navigational skills of transregional seafarers, notably of Iberian origin; 2) the circulation of Jesuit-adjacent writings produced both in Japanese and Sinitic; 3) the presence of the members of the Dutch East India Company as intelligence purveyors and technical consultants to the shogunate; 4) the development of an active community of Chinese-speaking (Nanjing Mandarin, Eastern Min, and Southern Min) communities with strong bonds to their ancestral homes; and 5) strict surveillance by shogunal authorities ensuring direct communication with Edo. The interplay between these elements led to the emergence of types of scholarship peculiar to a contact zone marked by disparate intersecting traditions and shaped by censoring policies. Local scholars like Nishikawa Joken and Ro Sōsetsu, by virtue of their connections to central figures in the communities of Chinese interpreters, and also to the censors of the Mukai clan at the Nagasaki Seidō, were in a privileged position to create novel understandings of a changing world in a resignified cosmos.

I cannot overemphasize the fact that venues of knowledge production in Nagasaki were by no means self-contained and isolated – even Dejima, which by its very nature was

closed off from the rest of the city, received the occasional visit of local figures such as Mukai Gensei. As for the Chinese-speaking diaspora, even after the establishment of the “Chinese quarters,” there was still some permeability. There was no clear-cut distinction between knowledge produced in the Nagasaki Seidō and information that circulated within the Chinese communities, with considerable communication between them. The central actors in this communication were the interpreters, whose hereditary positions ensured their continued influence on the scholarly milieus of the city.

In the first half of the 17th century, Mukai Genshō was representative of a city undergoing major transformations. Besides devoting himself to Confucian orthodoxy, he was also a practicing physician who dabbled in “barbarian” techniques and possessed knowledge of the forbidden “Sect of Jesus” – to the extent that he could critique Christovão Ferreira’s account of Aristotelian cosmology. As his function was taken over by his son Gensei, it embodied the tensions of living in a city that represented one of Tokugawa Japan’s heavily surveilled gateways to the world. Their role as “inspectors of writings” stood as a symbol for such ambiguity, simultaneously suppressing and curating information that could be traced back to Christian sources.

Ro Sōsetsu, a well-connected Chinese interpreter, contributed to the consolidation of a highly Sinified type of scholarship that was attuned to developments taking place in the continent. Proximity to the trade with Ming and Qing merchants meant that local scholars could have direct access to books that dealt with cosmological topics and also learn from seafarers about navigational and astronomical techniques. Besides his assistance to Gensei at Nagasaki Seidō and the inspection of Sinitic writings, Sōsetsu performed important tasks for the shogunate due to his knowledge of Chinese vernaculars. As he was summoned with Joken to advise Tokugawa Yoshimune on technical cosmological issues, Sōsetsu provides the link between the five factors evoked above.

In this study, I mobilized a variety of sources and methodologies to shed light on the ways that Nagasaki’s traditions of navigational astronomy recombined with Jesuit cosmology, Dutch technical information, and the knowledge circulated in Chinese-speaking circles to produce composite epistemologies that would circulate in the Japanese archipelago and be seized and instrumentalized by the Tokugawa regime for practical purposes. Each of the four chapters provides different tools of analysis, starting with the geopolitical context in the transition from the Ming to the Qing dynasty, passing through the crystallization of local scholarship in the form of books, reaching the shogunal court via VOC records and the Ro family’s archives, and finally culminating in the eclectic works of Joken and his syncretic

cosmological views. I add to a growing field of localized histories of science that are specific to their time and place and profoundly global in scope and ambition.

As we have seen, Nagasaki held a crucial position within transnational networks, and shogunal efforts to exert control over the city took multiple forms. At first, the shogunate strove to eradicate all traces of Catholic activities that formerly dominated the city's landscape, physically replacing churches with Buddhist temples, and contributing to the formation of Chinese-speaking communities around such religious and cultural venues. As the Chinese communities expanded, interpreters grew in importance as mediators between the archipelago and traders from all over East and Southeast Asia. With the lingering memory of Catholic missionaries, the Tokugawa shogunate targeted the cargo of Chinese junks as potential threats to the regime, ensuring that they did not contain any hidden Christian objects or texts.

The Ming-Qing transition also had profound consequences for how Tokugawa authorities interacted with maritime traders reaching Nagasaki, which became a focal point for new shogunal economic regulations that directly impacted the local population. The sudden arrival of Qing ships in the 1680s started a process of escalating commercial restrictions that eventually led to the creation of the "Chinese quarters" at the end of the century. Concomitantly, the ongoing ban on Christian ideas – especially its concrete manifestation in the censoring of Sinitic books – gradually intensified as Gensei became the new inspector in 1680. Despite the ban, and partly *because* of censoring practices, Jesuit cosmological knowledge continued to circulate in Nagasaki, embodied by the figure of Matteo Ricci and his world maps that combined European cartography with Sinitic traditions.

The journey undertaken by Joken and Sōsetsu to Edo, in tandem with the annual visit of Dutch merchants to the shogunal court, highlights the significance of Nagasaki in Yoshimune's political projects. Joken, Sōsetsu, and the Dutch merchants were part of broader networks that involved a great number of stakeholders. Yoshimune's decision to partially lift the ban on Sinitic books associated with Jesuit doctrines – with particular emphasis on practical titles associated with the "instrument" section of *Tianxue chuhan* – coincided with the shogun's growing interest in a range of Sinitic and European sources, particularly concerning astronomical and calendrical matters.

A close reading of Joken's writings clarifies the contours of the hybridized cosmologies that circulated through and from Nagasaki, reaching the shogunal and imperial capitals. Joken maintained his allegiance to astronomical traditions grounded in methods from ancient China – notably, lineages of empirical astronomy based on the armillary sphere – but

incorporated techniques, cosmographical models, and visualization methods from Jesuit sources. Due to anti-Christian policies, such connections with the prohibited “sect of Jesus” – obtained from already hybridized books and maps written in Sinitic – were obscured and assimilated into orthodox Confucian paradigms. By combining these types of hybrid knowledge with Nagasaki’s traditions of navigational astronomy and with newer technical information about world geography from VOC officials, Joken became one of the main representatives of what the city had to offer within the broader intellectual landscape of Tokugawa Japan.

By bringing the local scholarship of a contact zone such as Nagasaki to the forefront, my research highlights the existence of multiple epistemic renegotiations that took place as vernacular knowledge and scholarly practices were systematized and rationalized at transnational crossroads. I have only begun to untangle the multifaceted relationship between the local Chinese diasporic community and different parts of the continent – not to mention other groups of the diaspora that settled all across Southeast Asia. There is still room to broaden the scope of my dissertation and foreground scholars who reached Nagasaki from different parts of China both during and in the aftermath of the Ming-Qing transition, such as the Ming loyalist Zhu Shunshui – a remarkable example of transregional networks through his association with the so-called Mito school around Tokugawa Mitsukuni and the Kyoto bookseller Ryūshiken, who published a great number of Joken’s books. In addition, the familial and scholarly connections between the Chinese interpreters and the interpreters for the Dutch have only been lightly touched upon and deserve a fuller investigation. I hope my work will contribute to growing debates surrounding border-crossing historical phenomena on a global scale, opening new vistas in a pluralistic field of history of science that both acknowledges and transcends the boundaries of Nagasaki in early modern Japan.

BIBLIOGRAPHY

Primary sources in European languages

- Aouwer, Johan. “Dagregister (1716 november 3 - 1717 oktober 24).” Manuscript, 1716–1717. Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860. Nationaal Archief. https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/127/file/NL-HaNA_1.04.21_127_0001.
- . “Dagregister (1718 oktober 13 - 1719 oktober 31).” Manuscript, 1718–1719. Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860. Nationaal Archief. https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/129/file/NL-HaNA_1.04.21_129_0001.
- Bachofner, Rudolf, and Paul van der Velde, eds. *The Deshima Diaries: Marginalia 1700-1740*. Nichi-Ran Gakkai Gakujutsu Sōsho 12. Tokyo: Japan-Netherlands Institute, 1992.
- Bodart-Bailey, Beatrice M., trans. *Kaempfer’s Japan: Tokugawa Culture Observed*. Honolulu, Hawaii: University of Hawai’i Press, 1999.
- Mansdale, Jasper van. “Dagregister (1708 november 2 - 1709 oktober 22).” Manuscript, 1707–1708. Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860. Nationaal Archief. https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/120/file/NL-HaNA_1.04.21_120_0001.
- Messingh, Hermanus. “Dagregister (1707 oktober 15 - 1708 november 2).” Manuscript, 1707–1708. Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860. Nationaal Archief. https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/119/file/NL-HaNA_1.04.21_119_0001.
- Vrijeberghe, Christiaan. “Dagregister (1717 oktober 24 - 1718 oktober 13).” Manuscript, 1717–1718. Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860. Nationaal Archief. https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/128/file/NL-HaNA_1.04.21_128_0001.

Primary sources in East Asian languages

- Arai Hakuseki 新井白石. *Seiyō kibun* 西洋紀聞. Edited by Miyazaki Michio 宮崎道生. Tōyō bunko 東洋文庫 113. Tokyo: Heibonsha, 1968.
- Feng Yingjing 馮應京. “*Yueling guangyi*” 月令廣義. Woodblock print, 1602. Naikaku bunko. National Archives of Japan.
- Fu Fanji 傅汎際, and Li Zhizao 李之藻. “*Huanyou quan*” 寰有詮. Print, undated. Chinois 3384. Bibliothèque nationale de France. <https://archivesetmanuscrits.bnf.fr/ark:/12148/cc26572z>.
- Hayashi Gahō 林鷺峰. “*Ka’i hentai*” 華夷變態. Manuscript, undated. Naikaku bunko. National Archives of Japan. <https://www.digital.archives.go.jp/file/1271611>.

- Hiraoka Ryūji 平岡隆二, and Hibi Kayoko 日比佳代子. “*Shiryō shōkai Hosoi Kōtaku hen ‘Sokuryō higen’*” 史料紹介 細井広沢編 『測量秘言』. *Kagakushi kenkyū* 科学史研究 43, no. 230 (2004): 94–105.
- Honda Wataru 本田濟. *Eki* 易. *Chūgoku koten sen* 中国古典選 10. Asahi shinbunsha, 1997.
- Hosokawa Junjirō 細川潤次郎. “*Nishikawa Joken den*” 西川如見傳. In *Gusho rekishō zokkai* 虞書 曆象俗解, Vol. 1. Nishikawa Joken isho 西川如見遺書 1. Tokyo, 1899.
- Ikeda Kō’un 池田好運. “*Genna kōkai ki*” 元和航海記. Manuscript, 1618. Kyoto University Library. <https://rmda.kulib.kyoto-u.ac.jp/item/rb00013334>.
- Ikeda Suetoshi 池田末利. *Shōsho* 尚書. *Zenshaku kanbun taikai* 全釈漢文大系 11. Tokyo: Shūeisha, 1976.
- Itō Miyoji 伊東巳代治. “*Nishikawa Joken isho jo*” 西川如見遺書序. In *Gusho rekishō zokkai* 虞書 曆象俗解, Vol. 1. Nishikawa Joken isho 西川如見遺書 1. Tokyo, 1899.
- Kaibara Ekiken 貝原益軒. *Ekiken zenshū* 益軒全集. Edited by Ekikenkai 益軒会. Vol. 2. 8 vols. Kokusho kankōkai, 1973.
- Katō Jōken 加藤常賢. *Shokyō* 書經. Vol. 1. 2 vols. Shinshaku kanbun taikai 新釈漢文大系 25. Meiji shoin, 1983.
- Kawahira Toshifumi 川平敏文. *Roshi monjo: Ro Sōsetsu shiryōshū* 盧氏文書—盧草拙資料集. *Gazoku kenkyū sōsho* 雅俗研究叢書 4. Fukuoka: Gazoku no kai, 2019.
- Kō Eitatsu 孔穎達. “*Shōsho chūso*” 尚書註疏. Woodblock print. Kyoto, 1777. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/ro12/ro12_00559/.
- Kobayashi Kentei 小林謙貞. “*Nigi ryakusetu*” 二儀略說. Manuscript, undated. Naikaku bunko. National Archives of Japan. <https://www.digital.archives.go.jp/img/1237250>.
- Koga Jūjirō 古賀十二郎, ed. “*Roshi monjo*” 盧氏文書. Manuscript, 1911. Koga Bunko 古賀文庫. Kyushu University Library. <https://hdl.handle.net/2324/1627100>.
- . *Nagasaki shi seihen* 長崎志正編. Nagasaki: Nagasaki bunko kankōkai, 1928.
- Kokusho kankōkai 國書刊行會, ed. *Kondō Seisai zenshū* 近藤正齋全集. Vol. 3. Kokusho kankōkai, 1905.
- Kon Ransai 金蘭齋. “*Rōshikyō kokujikai*” 老子經國字解. Woodblock print. Osaka, 1809. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/ro13/ro13_03062/index.html.
- Kondō Jūzō 近藤重藏. “*Kōsho koji*” 好書故事. Manuscript, 1826. Naikaku bunko. National Archives of Japan. <https://www.digital.archives.go.jp/file/1234372>.
- Kuroita Katsumi 黑板勝美, ed. *Tokugawa jikki* 德川實紀. Vol. 9. Kokushi taikai 國史大系 46. Tokyo: Kokushi taikai kankōkai, 1934.
- Kyūshū shiryō kankōkai 九州資料刊行会. *Ekiken shiryō* 益軒資料. Vol. 7. Fukuoka: Kyūshū shiryō kankōkai, 1955.
- Mukai Genshō 向井元松, and Sawano Chūan 澤野忠庵. “*Kenkon bensetsu*” 乾坤辨說. In *Bunmei genryū sōsho* 文明源流叢書, 2:1–100. Tokyo: Kokusho kankō kai, 1914.
- Nakamura Tekisai 中村惕齋. “*Tenmon kōyō*” 天文考要. Manuscript, vol. 1, 5 vols. Kyoto, 1720. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/ni05/ni05_02436/index.html.
- Nakamura Yukihiko 中村幸彦, ed. *Kinsei chōnin shisō* 近世町人思想. *Nihon shisō taikai* 日本思想大系 59. Tokyo: Iwanami shoten, 1975.
- Nakanishi Kei 中西啓. *Nagasaki sakki, Gensei nikki, Genchū nikki* 長崎割記・元成日記・元仲日記. Nagasaki gakkai sōsho 長崎学会叢書 9. Nagasaki: Nagasaki gakkai, 1964.

- Nanbu Kagehira 南部景衡. “*Kanki mansō*” 喚起漫草. Manuscript, vol. 4, 4 vols., undated. Osaka Prefectural Nakanoshima Library. https://e-library2.gprime.jp/lib_pref_osaka/da/detail?tilcod=0000000005-00165582.
- Nanbu Sōju 南部草壽. “*Taijō kan’ō hen zokkai*” 太上感應篇俗解. Woodblock print. Osaka, 1680. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/ro13/ro13_03062/index.html.
- . “*Tsurezure gusa genkai*” 徒然草諺解. Woodblock print. Kyoto, 1677. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/bunko30/bunko30_e0112/index.html.
- Nishikawa Joken 西川如見. “*Kaii nuisan*” 怪異類纂. Manuscript. Keio Institute of Oriental Classics, Undated.
- . “*Ka’i tsūshō kō*” 華夷通商考. Woodblock print, 1695. Tsukuba University Library.
- . “*Zōho ka’i tsūshō kō*” 增補華夷通商考. Woodblock print, 1708. Naikaku bunko. National Archives of Japan.
- . “*Tenmon giron*” 天文義論. Woodblock print. Kyoto, 1712. Kanō bunko. Tohoku University Library.
- . “*Kyōdō rekidan*” 教童曆談. Woodblock print. Kyoto, 1714. Kanō bunko. Tohoku University Library. <https://doi.org/10.20730/100330361>.
- . “*Kaii bendan*” 怪異辨斷. Woodblock print, 1715. Naikaku bunko. National Archives of Japan.
- . “*Wakan unki rekisetsu*” 和漢運氣曆說. Woodblock print. Kyoto, 1716. Kanō bunko. Tohoku University Library. <https://doi.org/10.20730/100330480>.
- . “*Gusho rekishō zokkai*” 虞書曆象俗解. Woodblock print. Kyoto, 1720. Kanō bunko. Tohoku University Library.
- . “*Nihon suido kō*” 日本水土考. Woodblock print, 1720. Waseda University Library.
- . “*Wakan unki shinan kōhen*” 和漢運氣指南後編. Woodblock print. Kyoto, 1726. Shimoura bunko. Museum of Science, Tokyo University of Science. <https://doi.org/10.20730/100228189>.
- . *Tenmon giron* 天文義論. Edited by Nishikawa Tadasuke 西川忠亮. Vol. 2. 2 vols. Nishikawa Joken isho 西川如見遺書 2. Tokyo, 1899.
- . *Ryōgi shūsetsu* 兩儀集說. Edited by Nishikawa Tadasuke 西川忠亮. Nishikawa Joken isho 西川如見遺書 15. Tokyo, 1907.
- . *Chōnin bukuro, Hyakushō bukuro, Nagasaki yawa gusa* 町人囊・百姓囊・長崎夜話草. Edited by Iijima Tadao 飯島忠夫 and Nishikawa Tadayuki 西川忠幸. Iwanami shoten, 1942.
- . *Nihon suido kō, suido kaiben, zōho ka’i tsūshō kō* 日本水土考・水土解弁・增補華夷通商考. Edited by Iijima Tadao 飯島忠夫 and Nishikawa Tadayuki 西川忠幸. Iwanami Shoten, 1944.
- Nishikawa Seikyū 西川正休. *Tairyaku tengaku meimoku shō* 大略天學名目鈔. Edited by Nishikawa Tadasuke 西川忠亮. Nishikawa Joken issho 西川如見遺書 11. Tokyo, 1891.
- Ōoka Kiyosuke 大岡清相. *Kiyō gundan* 崎陽群談. Edited by Nakata Yasunao 中田易直 and Nakamura Tadashi 中村質. Kondō shuppansha, 1974.
- Sai Shin 蔡沈. “*Shokyō shitchū*” 書經集註. Woodblock print. Kyoto, 1663. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/ro12/ro12_00559/.

- . “*Shokyō shitchū*” 書經集註. Woodblock print. Kyoto, 1801. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/ro12/ro12_03114/.
- Takimoto Seiichi 瀧本誠一, ed. “*Kenzan hisaku*” 兼山秘策. In *Nihon keizai sōsho* 日本經濟叢書. Tokyo: Daitōkaku, 1914.
- Tokugawa jikki* 徳川實紀, vol. 2. Tokyo: Keizai zakki sha, 1904.
- Urakawa Kazuo 浦川和男. “*Hosoi Kōtaku hen ‘Sokuryō higen’*” 細井広沢編「測量秘言」. *Yōgakushi kenkyū* 洋学史研究 28 (2011): 118–56.
- Wakaki Taiichi 若木太一, Takahashi Masahiko 高橋昌彦, and Kawahira Toshifumi 川平敏文. *Nagasaki senminden chūkai: Kinsei nagasaki no bun’en to gakugei* 長崎先民伝注解—近世長崎の文苑と学芸. Tokyo: Bensei shuppan, 2016.
- Yabuta Yutaka 藪田貫, and Wakaki Taiichi 若木太一. *Nagasaki Seidō saishu nikki* 長崎聖堂祭酒日記. Suita: Kansai Daigaku Shuppanbu, 2010.
- Yang Tingyun 楊廷筠. “*Daiyipian*” 代疑編. Woodblock print, 1621. Waseda University Library. https://www.wul.waseda.ac.jp/kotenseki/html/bunko08/bunko08_d0274/index.html.
- “*Zhifang waiji*” 職方外紀. Print, 1626. Naikaku bunko. National Archives of Japan. <https://www.digital.archives.go.jp/file/3602548>.

Secondary sources in European languages

- Akin, Alexander. *East Asian Cartographic Print Culture: The Late Ming Publishing Boom and Its Trans-Regional Connections*. Amsterdam: Amsterdam University Press, 2021.
- Andrade, Tonio, and Xing Hang, eds. *Sea Rovers, Silver, and Samurai: Maritime East Asia in Global History, 1550-1700*. Perspectives on the Global Past. Honolulu: University of Hawai‘i Press, 2016.
- Baroni, Helen J. *Obaku Zen: The Emergence of the Third Sect of Zen in Tokugawa Japan*. Honolulu: University of Hawai‘i Press, 2000.
- Bhabha, Homi K. *The Location of Culture*. Routledge Classics. London: Routledge, 1996.
- Blue, Gregory. “Xu Guangqi in the West: Early Jesuit Sources and the Construction of an Identity.” In *Statecraft and Intellectual Renewal in Late Ming China: The Cross-Cultural Synthesis of Xu Guangqi (1562-1633)*, edited by Catherine Jami, Peter Mark Engelfriet, and Gregory Blue, 19–71. *Sinica Leidensia* 50. Leiden: Brill, 2001.
- Blussé, Leonard. “A Glimpse behind the Screens: Some Remarks on the Significance of the Deshima Dagregisters for the Study of Tokugawa Japan.” In *The Deshima Diaries: Marginalia 1700-1740*, edited by Rudolf Bachofner and Paul van der Velde, xv–xxiii. *Nichi-Ran Gakkai Gakujutsu Sōsho* 12. Tokyo: Japan-Netherlands Institute, 1992.
- . “From Inclusion to Exclusiveness: The Early Years at Hirado, 1600-1640.” In *Bridging the Divide: 400 Years, the Netherlands-Japan*, edited by Leonard Blussé, Willem Rummelink, and Ivo Smits, 13–32. Leiden: Hotei Publishing, 2000.
- . “The Grand Inquisitor Inoue Chikugono Kami Masashige, Spin Doctor of the Tokugawa Bakufu.” *Bulletin of Portuguese-Japanese Studies* 7 (2003): 23–43.
- Bodart-Bailey, Beatrice M. *The Dog Shogun: The Personality and Policies of Tokugawa Tsunayoshi*. Honolulu: University of Hawai‘i Press, 2006.
- Bodart-Bailey, Beatrice M., and Derek Massarella, eds. *The Furthest Goal: Engelbert Kaempfer’s Encounter with Tokugawa Japan*. Sandgate: Japan Library, 1995.

- Boot, W. J. "Introduction." In *Tetsugaku Companion to Ogyū Sorai*, edited by Daiki Takayama and W. J. Boot, 1–8. Tetsugaku Companions to Japanese Philosophy 2. Cham: Springer, 2019.
- Botsman, Daniel V. "Freedom without Slavery? 'Coolies,' Prostitutes, and Outcastes in Meiji Japan's 'Emancipation Moment.'" *The American Historical Review* 116, no. 5 (2011): 1323–47.
- Boxer, C. R. *The Christian Century in Japan, 1549-1650*. Berkeley: University of California Press, 1951.
- Brockey, Liam Matthew. *Journey to the East: The Jesuit Mission to China, 1579-1724*. Cambridge: Harvard University Press, 2008.
- Buhrman, Kristina. "The Stars and the State: Astronomy, Astrology, and the Politics of Natural Knowledge in Early Medieval Japan." Ph.D. dissertation, University of Southern California, 2012.
- . "Knowledge of Nature and Craft: Researching the History of Science, Mathematics, and Technology in Japan before 1600." In *Routledge Handbook of Premodern Japanese History*, edited by Karl F. Friday, 364–76. London: Routledge, 2017.
- Butler, Judith. *Excitable Speech: A Politics of the Performative*. Routledge Classics. London: Routledge, 2021.
- Carioti, Patrizia. "The Zheng Regime and the Tokugawa Bakufu Asking for Japanese Intervention." In *Sea Rovers, Silver, and Samurai: Maritime East Asia in Global History, 1550-1700*, edited by Tonio Andrade and Xing Hang, 156–80. Perspectives on the Global Past. Honolulu: University of Hawai'i Press, 2016.
- Casalini, Cristiano. "Rise, Character, and Development of Jesuit Education: Teaching the World." In *The Oxford Handbook of the Jesuits*, edited by Ines G. Županov, 153–76. Oxford: Oxford University Press, 2019.
- Chance, Linda H. *Formless in Form: Kenkō, Tsurezuregusa, and the Rhetoric of Japanese Fragmentary Prose*. Stanford: Stanford University Press, 1997.
- Chen, Bo. "The Making of 'China' out of 'Zhongguo': 1585–1690." *Journal of Asian History* 50, no. 1 (2016): 73–116.
- Cheng, Anne. *Histoire de la pensée chinoise*. Paris: Seuil, 1997.
- Ching, Julia. "Chu Shun-Shui, 1600-82: A Chinese Confucian Scholar in Tokugawa Japan." *Monumenta Nipponica* 30, no. 2 (1975): 177–91. <https://doi.org/10.2307/2383841>.
- Chu, Pingyi. "Trust, Instruments, and Cross-Cultural Scientific Exchanges: Chinese Debate over the Shape of the Earth, 1600–1800." *Science in Context* 12, no. 3 (1999): 385–412.
- . "Archiving Knowledge: A Life History of the *Calendrical Treatises of the Chongzhen Reign (Chongzhen Lishu)*." *Extrême-Orient, Extrême-Occident*, no. Hors série (2007): 159–84.
- Cieslik, Hubert. "The Case of Christovão Ferreira." *Monumenta Nipponica* 29, no. 1 (1974): 1–54.
- Cieslik, Hubert, and Gustav Voss, eds. "Das Kirishitan-Yashiki." In *Kirishito-Ki Und Sayō-Yoroku: Japanische Dokumente Zur Missionsgeschichte Des 17. Jahrhunderts*, 191–202. Monumenta Nipponica Monographs. Tokyo: Sophia University, 1940.
- Clements, Rebekah. *A Cultural History of Translation in Early Modern Japan*. Cambridge: Cambridge University Press, 2015.
- Clulow, Adam. "From Global Entrepôt to Early Modern Domain: Hirado, 1609–1641." *Monumenta Nipponica* 65, no. 1 (2010): 1–35.
- . *The Company and the Shogun: The Dutch Encounter with Tokugawa Japan*. Columbia Studies in International and Global History. New York: Columbia University Press, 2014.
- . "Determining the Law of the Sea: The Long History of the Breukelen Case, 1657–1662." In *Sea Rovers, Silver, and Samurai: Maritime East Asia in Global History, 1550-1700*,

- edited by Tonio Andrade and Xing Hang, 181–201. *Perspectives on the Global Past*. Honolulu: University of Hawai'i Press, 2016.
- . *Amboina, 1623: Fear and Conspiracy on the Edge of Empire*. New York: Columbia University Press, 2019.
- Cullen, Christopher. *Astronomy and Mathematics in Ancient China: The Zhou Bi Suan Jing*. Needham Research Institute Studies 1. Cambridge: Cambridge University Press, 1996.
- . *Heavenly Numbers: Astronomy and Authority in Early Imperial China*. Oxford: Oxford University Press, 2017.
- Cullen, Christopher, and Anne S. L. Farrer. "On the Term 'Hsüan Chi' and the Flanged Trilobate Jade Discs." *Bulletin of the School of Oriental and African Studies, University of London* 46, no. 1 (1983): 52–76.
- De Bary, Wm. Theodore, and Irene Bloom, eds. *Principle and Practicality: Essays in Neo-Confucianism and Practical Learning*. Neo-Confucian Studies. New York: Columbia University Press, 1979.
- D'Elia, Pasquale M. "Recent Discoveries and New Studies (1938-1960) on the World Map in Chinese of Father Matteo Ricci SJ." *Monumenta Serica* 20 (1961): 82–164.
- Despeux, Catherine. "The System of the Five Circulatory Phases and the Six Seasonal Influences." In *Innovation in Chinese Medicine*, edited by Elisabeth Hsu, 121–65. Needham Research Institute Studies 3. Cambridge: Cambridge University Press, 2001.
- Durrant, Stephen W., Wai-yee Li, and David Schaberg, eds. *Zuo Tradition / Zuo zhuan: Commentary on the "Spring and Autumn Annals"*. Vol. 1. *Classics of Chinese Thought*. Seattle: University of Washington Press, 2016.
- Durven, Hendrik. "Dagregister (1721 november 9 - 1722 oktober 28)." Manuscript, 1721–1722. Inventaris van de archieven van de Nederlandse Factorij in Japan te Hirado [1609-1641] en te Deshima, [1641-1860], 1609-1860. Nationaal Archief. https://www.nationaalarchief.nl/onderzoeken/archief/1.04.21/invnr/132/file/NL-HaNA_1.04.21_132_0001.
- Elison, George. *Deus Destroyed: The Image of Christianity in Early Modern Japan*. Harvard East Asian Monographs 141. Cambridge: Harvard University Press, 1988.
- Elman, Benjamin. *On Their Own Terms: Science in China, 1550–1900*. Cambridge, Mass: Harvard University Press, 2005.
- . "Collecting and Classifying: Ming Dynasty Compendia and Encyclopedias (Leishu)." *Extrême-Orient Extrême-Occident*, 2007, 131–57.
- Engelfriet, Peter M. *Euclid in China: The Genesis of the First Chinese Translation of Euclid's Elements, Books I-VI (Jihe Yuanben, Beijing, 1607) and Its Reception up to 1723*. Sinica Leidensia 40. Leiden: Brill, 1998.
- Fan, Fa-ti. "The Global Turn in the History of Science." *East Asian Science, Technology and Society: An International Journal* 6, no. 2 (2012): 249–58. <https://doi.org/10.1215/18752160-1626191>.
- Fogel, Joshua A. *Articulating the Sinosphere: Sino-Japanese Relations in Space and Time*. Cambridge: Harvard University Press, 2009.
- Frumer, Yulia. *Making Time: Astronomical Time Measurement in Tokugawa Japan*. Studies of the Weatherhead East Asian Institute, Columbia University. Chicago: The University of Chicago Press, 2018.
- Gruzinski, Serge. *The Mestizo Mind: The Intellectual Dynamics of Colonization and Globalization*. Translated by Dusinberre Deke. New York: Routledge, 2002.
- Hall, John Whitney, and James L. McClain, eds. *Early Modern Japan*. The Cambridge History of Japan 4. Cambridge: Cambridge University Press, 1991.

- Han, Qi. “F. Furtado (1587-1653) S.J. and His Chinese Translation of Aristotle’s Cosmology.” In *História Das Ciências Matemáticas: Portugal e o Oriente*, 169–79. Lisbon: Fundação Oriente, 2000.
- Handler-Spitz, Rivi, Pauline C. Lee, and Haun Saussy, eds. *The Objectionable Li Zhi: Fiction, Criticism, and Dissent in Late Ming China*. Seattle: University of Washington Press, 2020.
- Hang, Xing. *Conflict and Commerce in Maritime East Asia: The Zheng Family and the Shaping of the Modern World, c. 1620-1720*. Cambridge: Cambridge University Press, 2015.
- Hayek, Matthias. *Les mutations du yin et du yang: divination, société et représentations au Japon, du VIe au XIXe siècle*. Bibliothèque de l’Institut des hautes études japonaises. Paris: Collège de France, Institut des hautes études japonaises, 2021.
- Henderson, John B. *The Development and Decline of Chinese Cosmology*. Neo-Confucian Studies. New York: Columbia University Press, 1984.
- Hesselink, Reinier H. *The Dream of Christian Nagasaki: World Trade and the Clash of Cultures, 1560-1640*. Jefferson: McFarland & Company, 2016.
- Hesselink, Reinier H., and Yōko Matsui. “Sakoku, or Japan ‘closed off’ from the World: A New Stage: The Second Half of the Seventeenth Century.” In *Bridging the Divide: 400 Years, the Netherlands-Japan*, edited by Leonard Blussé, Willem Remmelink, and Ivo Smits, 35–53. Leiden: Hotei Publishing, 2000.
- Hiraoka, Ryuji. “Jesuit Cosmological Textbook in ‘the Christian Century’ Japan: De Sphaera of Pedro Gomez (Part I).” *SCIAMVS*, no. 6 (2005): 99–175.
- . “The Transmission of Western Cosmology to 16th Century Japan.” In *The Jesuits, the Padroado and East Asian Science (1552-1773)*, edited by Luís Saraiva and Catherine Jami. Singapore: World Scientific, 2008.
- . “Clavius and His Astronomical Data during the ‘Christian Century’ in Japan.” *Historia Scientiarum* 3, no. 18 (2009): 213–36.
- . “Printed Editions and Manuscripts of Tianjing Huowen.” *Historia Scientiarum* 29, no. 1 (2019): 80–111.
- . “Deciphering Aristotle with Chinese Medical Cosmology: Nanban Unkiron and the Reception of Jesuit Cosmology in Early Modern Japan.” In *Overlapping Cosmologies in Asia: Transcultural and Interdisciplinary Approaches*, edited by Bill M. Mak and Eric Huntington, 98–115. Crossroads - History of Interactions across the Silk Routes 4. Leiden: Brill, 2022.
- . “The Discovery and Significance of *Sufera No Nukigaki* (Selection on the Sphere), a Jesuit Cosmology Textbook in Japanese Translation.” *Historia Scientiarum* 32, no. 2 (2023): 88–116.
- Horiuchi, Annick. “When Science Develops Outside State Patronage: Dutch Studies in Japan at the Turn of the Nineteenth Century.” *Early Science and Medicine* 8, no. 2 (2003): 148–72.
- . *Japanese Mathematics in the Edo Period (1600-1868): A Study of the Works of Seki Takakazu (?-1708) and Takebe Katahiro (1664-1739)*. Translated by Silke Wimmer-Zagier. Science Networks, Historical Studies 40. Basel: Birkhäuser, 2010.
- . “Eloges du Japon et de la japonité au seuil du XVIIIe siècle : Nishikawa Joken (1648-1724) et la culture de Nagasaki.” In *Nihon no aidentiti: keisei to hankyō 日本のアイデンティティ—形成と反響*, edited by Hōseidaigaku kokusai Nihon-gaku kenkyūjo 法政大学国際日本学研究所, 113–39. Kokusai Nihongaku kenkyūsōsho 国際日本学研究叢書 16. Tokyo: Hōsei daigaku kokusai nihongaku kenkyū sentā, 2012.
- Hsia, Florence C. *Sojourners in a Strange Land: Jesuits and Their Scientific Missions in Late Imperial China*. Chicago: University of Chicago Press, 2009.
- Hsia, R. Po-chia. *A Jesuit in the Forbidden City: Matteo Ricci, 1552-1610*. Oxford: Oxford University Press, 2010.

- Hur, Nam-lin. “Anti-Christian Temple Certification (Terauke) in Early Modern Japan: Establishment, Practice, and Challenges.” In *Religion, Power, and the Rise of Shinto in Early Modern Japan*, edited by Stefan Köck, Brigitte Pickl-Kolaczka, and Bernhard Scheid, 21–32. New York: Bloomsbury Academic, 2021.
- Ishii, Yoneo. *The Junk Trade from Southeast Asia: Translations from the Tōsen Fusetsu-Gaki, 1674–1723*. Sources for the Economic History of Southeast Asia 6. Singapore: Institute of Southeast Asian Studies, 1998.
- Jami, Catherine. *The Emperor’s New Mathematics: Western Learning and Imperial Authority during the Kangxi Reign (1662–1722)*. Oxford: Oxford University Press, 2012.
- . “La carrière de Mei Wending (1633–1721) et le statut des sciences mathématiques dans le savoir lettré.” *Extrême-Orient, Extrême-Occident*, no. 36 (2013): 19–47.
- Karlgren, Bernhard. *The Book of Documents*. Stockholm: Museum of Far Eastern Antiquities, 1950.
- Kasaya, Kazuhiko. “The Tokugawa Bakufu’s Policies for the National Production of Medicines and Dodonaeus’ *Cruijdeboek*.” In *Dodonaeus in Japan: Translation and the Scientific Mind in the Tokugawa Period*, edited by Willy vande Walle and Kazuhiko Kasaya, 167–84. Leuven: Leuven University Press, 2001.
- Klöter, Henning. *The Language of the Sangleys: A Chinese Vernacular in Missionary Sources of the Seventeenth Century*. Sinica Leidensia 98. Leiden: Brill, 2011.
- Kornicki, Peter. *The Book in Japan: A Cultural History from the Beginnings to the Nineteenth Century*. Leiden: Brill, 1998.
- . “From *Liuyu Yanyi* to *Rikuyu Engi Taii*: Turning a Vernacular Chinese Text into a Moral Textbook in Edo-Period Japan.” In *Listen, Copy, Read: Popular Learning in Early Modern Japan*, edited by Matthias Hayek and Annick Horiuchi, 205–25. Leiden: Brill, 2014.
- . *Languages, Scripts, and Chinese Texts in East Asia*. First edition. Oxford: Oxford University Press, 2018.
- Kouamé, Nathalie. “The Sûden’s Anti-Christian Edict (1614).” In *Encyclopédie Des Historiographies: Afrique, Amériques, Asies*, edited by Éric P. Meyer, Anne Viguier, and Nathalie Kouamé, 1:1760–79. TransAireS. Paris: Presses de l’Inalco, 2020.
- Lattis, James M. *Between Copernicus and Galileo: Christoph Clavius and the Collapse of Ptolemaic Cosmology*. Chicago: University of Chicago Press, 1994.
- Leca, Radu. “Brazilian Cannibals in Sixteenth-Century Europe and Seventeenth-Century Japan.” *Comparative Critical Studies Electronic Supplement*, no. 11 (2014): 109–30.
- Legge, James. *The Sacred Books of China: The Texts of Confucianism*. Vol. 1. 6 vols. The Sacred Books of the East 3. Oxford: Clarendon Press, 1879.
- Lewis, James B. *Frontier Contact between Chosŏn Korea and Tokugawa Japan*. London: Routledge, 2003.
- Lim, Jongtae. “Matteo Ricci’s World Maps in Late Joseon Dynasty.” *The Korean Journal for the History of Science* 2, no. 33 (2011): 277–96.
- Loewe, Michael, ed. *Early Chinese Texts: A Bibliographical Guide*. Early China Special Monograph Series 2. Berkeley: Society for the Study of Early China, 1993.
- Low, Morris. “Beyond Joseph Needham: Science, Technology, and Medicine in East and Southeast Asia.” *Osiris* 13 (1998): 1–8.
- . “The History of Japanese Science: Recent Developments.” *East Asian Science, Technology and Society: An International Journal* 3, no. 4 (2009): 519–24.
- Lynn, Richard John. *The Classic of Changes: A New Translation of the I Ching as Interpreted by Wang Bi*. Translations from the Asian Classics. New York: Columbia University Press, 2004.
- Mair, Victor H. “Buddhism and the Rise of the Written Vernacular in East Asia: The Making of National Languages.” *The Journal of Asian Studies* 53, no. 3 (1994): 707–51.

- Marcon, Federico. *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan*. Studies of the Weatherhead East Asian Institute, Columbia University. Chicago: The University of Chicago Press, 2015.
- Massarella, Derek. *A World Elsewhere: Europe's Encounter with Japan in the Sixteenth and Seventeenth Centuries*. New Haven: Yale University Press, 1990.
- McMullen, James. *The Worship of Confucius in Japan*. Harvard East Asian Monographs 421. Cambridge: Harvard University Asia Center, 2020.
- Menegon, Eugenio. *Ancestors, Virgins, & Friars: Christianity as a Local Religion in Late Imperial China*. Harvard-Yenching Institute Monograph Series 69. Cambridge: Harvard University Press, 2009.
- Mervart, David. "A Closed Country in the Open Seas: Engelbert Kaempfer's Japanese Solution for European Modernity's Predicament." *History of European Ideas* 35, no. 3 (2009): 321–29.
- Morar, Florin-Stefan. "Relocating the Qing in the Global History of Science: The Manchu Translation of the 1603 World Map by Li Yingshi and Matteo Ricci." *Isis* 109, no. 4 (2018): 673–94.
- . "The Westerner: Matteo Ricci's World Map and the Quandaries of European Identity in the Late Ming Dynasty." *Journal of Jesuit Studies*, no. 6 (2019): 14–30.
- Moretti, Laura. *Pleasure in Profit: Popular Prose in Seventeenth-Century Japan*. New York: Columbia University Press, 2021.
- Morgan, Daniel Patrick. *Astral Sciences in Early Imperial China: Observation, Sagehood and the Individual*. Cambridge: Cambridge University Press, 2017.
- Mungello, D. E. *Curious Land: Jesuit Accommodation and the Origins of Sinology*. Honolulu: University of Hawai'i Press, 1989.
- Nakai, Kate Wildman. *Shogunal Politics: Arai Hakuseki and the Premises of Tokugawa Rule*. Harvard East Asian Monographs 134. Cambridge: Harvard University Press, 1988.
- Nakayama, Shigeru. *A History of Japanese Astronomy: Chinese Background and Western Impact*. Harvard-Yenching Institute 18. Cambridge: Harvard University Press, 1969.
- . *Academic and Scientific Traditions in China, Japan, and the West*. Tokyo: University of Tokyo Press, 1984.
- Nappi, Carla. *The Monkey and the Inkpot: Natural History and Its Transformations in Early Modern China*. Cambridge: Harvard University Press, 2009.
- Needham, Joseph. *Science and Civilisation in China*. Vol. 3. Cambridge: Cambridge University Press, 1959.
- Nicolas Standaert. "The Making of 'China' out of 'Da Ming.'" *Journal of Asian History* 50, no. 2 (2016): 307–28.
- Nogueira Ramos, Martin. *La foi des ancêtres: chrétiens cachés et catholiques dans la société villageoise japonaise (XVIIe-XIXe siècles)*. Paris: CNRS Editions, 2019.
- . "Renier sa foi sans perdre son âme. Les catholiques japonais au début de la proscription (XVIIe s.)." *Cahiers d'études des cultures ibériques et latino-américaines*, no. 5 (2019): 177–202.
- . "The Monk and the Heretics: A Reappraisal of Sessō Sōsai's Anti-Christian Documents (Mid-Seventeenth Century)." *Japan Review*, no. 35 (2021): 59–90.
- Norman, Jerry. *Chinese*. Cambridge Language Surveys. Cambridge: Cambridge University Press, 1988.
- Ōba, Osamu. *Books and Boats: Sino-Japanese Relations in the Seventeenth and Eighteenth Centuries*. Translated by Joshua A. Fogel. Portland: Merwin Asia, 2012.
- Ooms, Herman. *Tokugawa Ideology: Early Constructs, 1570-1680*. Michigan Classics in Japanese Studies 18. Ann Arbor: The University of Michigan Press, 1998.

- Osterkamp, Sven. “The Textual History of the Jesuit *Compendia* in Latin and Japanese as Seen from the Newly Identified Manuscript at Herzog August Bibliothek, Wolfenbüttel.” *Historia Scientiarum* 32, no. 2 (2023): 63–87.
- Paramore, Kiri. “Hayashi Razan’s Redeployment of Anti-Christian Discourse: The Fabrication of *Haiyaso*.” *Japan Forum* 18, no. 2 (2006): 185–206.
- . *Ideology and Christianity in Japan*. Routledge/Leiden Series in Modern East Asian Politics and History 4. London: Routledge, 2009.
- Peng, Hao. *Trade Relations between Qing China and Tokugawa Japan: 1685-1859*. Singapore: Springer, 2019.
- Peterson, Willard J. “Learning from Heaven: The Introduction of Christianity and Other Western Ideas into Late Ming China.” In *China and Maritime Europe, 1500-1800: Trade, Settlement, Diplomacy, and Missions*, edited by John E. Wills, 78–134. Cambridge: Cambridge University Press, 2011.
- Pinto dos Santos, José Miguel. “A Study in Cross-Cultural Transmission of Natural Philosophy: The Kenkon Bensetsu.” Ph.D. dissertation, Universidade Nova de Lisboa, 2011.
- Pratt, Mary Louise. *Imperial Eyes: Travel Writing and Transculturation*. 2nd edition. London: Routledge, 2008.
- Puett, Michael. “Following the Command of Heaven: The Notion of Ming in Early China.” In *The Magnitude of Ming*, edited by Christopher Lupke, 49–69. Honolulu: University of Hawaii Press, 2005.
- Raj, Kapil. *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900*. Basingstoke: Palgrave Macmillan, 2007.
- Ren, Dayuan. “The Influence of Tianxue (Heavenly Learning) on Chinese Thought in the Seventeenth Century.” *Monumenta Serica* 69, no. 1 (2021): 143–60.
- Ross, Andrew. *A Vision Betrayed: The Jesuits in Japan and China, 1542-1742*. Maryknoll: Orbis Books, 1994.
- Roux, Pierre-Emmanuel. “La Trinité antichrétienne : Essai sur la proscription du catholicisme en Chine, en Corée et au Japon (XVIIe-XIXe siècles).” Ph.D. dissertation, École des Hautes Études en Sciences Sociales, 2013.
- . “The Prohibited Sect of Yaso: Catholicism in Diplomatic and Cultural Encounters between Edo Japan and Chosŏn Korea.” In *Space and Location in the Circulation of Knowledge (1400-1800): Korea and Beyond*, edited by Marion Eggert, Felix Siegmund, and Dennis Würthner, 119–40. Research on Korea 1. Frankfurt: Peter Lang, 2014.
- Schottenhammer, Angela. “Exchange of Medicinal Knowledge and Specialists in Early Modern East Asia: The Triangle of China, Japan and the Ryukyu Islands.” In *Tribute, Trade, and Smuggling: Commercial, Scientific and Human Interaction in the Middle Period and Early Modern World*, edited by Angela Schottenhammer, 165–88. East Asian Maritime History 12. Wiesbaden: Harrassowitz, 2014.
- Screech, Timon. *The Lens Within the Heart: The Western Scientific Gaze and Popular Imagery in Later Edo Japan*. University of Hawaii Press, 2002.
- Sivin, Nathan. *Granting the Seasons: The Chinese Astronomical Reform of 1280, with a Study of Its Many Dimensions and a Translation of Its Records*. Sources in the History of Mathematics and Physical Sciences. New York: Springer, 2009.
- Smits, Gregory. *Maritime Ryukyu, 1050-1650*. Honolulu: University of Hawai‘i Press, 2019.
- Söderblom Saarela, Mårten. “Manchu, Mandarin, and the Politicization of Spoken Language in Qing China.” In *Language Diversity in the Sinophone World: Historical Trajectories, Language Planning, and Multilingual Practices*, edited by Henning Klöter and Mårten Söderblom Saarela. Routledge Studies in Sociolinguistics. New York: Routledge, 2021.

- Spence, Jonathan D. *The Memory Palace of Matteo Ricci*. New York: Penguin Books, 1985.
- . *The Search for Modern China*. Third Edition. New York: W.W. Norton & Company, 2013.
- Standaert, Nicolas. *The Chinese Gazette in European Sources: Joining the Global Public in the Early and Mid-Qing Dynasty*. Sinica Leidensia, volume 155. Leiden, The Netherlands ; Boston: Brill, 2022.
- Struve, Daniel. “Identité sociale et identité nationale dans ‘Chōnin bukuro’ et ‘Hyakushō bukuro’ de Nishikawa Joken.” *Extrême-Orient, Extrême-Occident*, no. 41 (2017): 45–68.
- Struve, Lynn A. “The Southern Ming, 1644-1662.” In *The Cambridge History of China*, edited by Frederick W. Mote, Denis Crispin Twitchett, and John King Fairbank, 7:641–725. Cambridge: Cambridge University Press, 1998.
- Sugimoto Masayoshi, and David L. Swain. *Science and Culture in Traditional Japan, A.D. 600-1854*. MIT Press, 1978.
- Tan, Wei Yu Wayne. “Science, Politics and Networks: Shibukawa Harumi and the Birth of the New Almanac in Seventeenth-Century Japan.” *Annals of Science* 71, no. 2 (2014): 1–30.
- Thomas, Julia Adeney. “Why Do Only Some Places Have History?: Japan, the West, and the Geography of the Past.” *Journal of World History* 28, no. 2 (2017): 187–218.
- Toby, Ronald P. *State and Diplomacy in Early Modern Japan: Asia in the Development of the Tokugawa Bakufu*. Studies of the East Asian Institute. Princeton: Princeton University Press, 1984.
- . *Engaging the Other: “Japan” and Its Alter Egos, 1550-1850*. Brill’s Japanese Studies Library 65. Leiden: Brill, 2019.
- Totman, Conrad D. *Early Modern Japan*. Berkeley: University of California Press, 1993.
- Tronu, Carla. “Sacred Space and Ritual in Early Modern Japan: The Christian Community of Nagasaki (1569-1643).” Ph.D., SOAS, University of London, 2012.
- . “Anti-Christian Measures in Nagasaki During the Early Edo Period (1614–44).” In *Religion, Power, and the Rise of Shinto in Early Modern Japan*, edited by Stefan Köck, Brigitte Pickl-Kolaczia, and Bernhard Scheid, 47–60. New York: Bloomsbury Academic, 2021.
- Tucker, Mary Evelyn. *Moral and Spiritual Cultivation in Japanese Neo-Confucianism: The Life and Thought of Kaibara Ekken, 1630-1714*. SUNY Series in Philosophy. Albany: State University of New York Press, 1989.
- Unno, Kazutaka. “Cartography in Japan.” In *Cartography in the Traditional East and Southeast Asian Societies*, edited by J. B. Harley and David Woodward, Vol. 2. The History of Cartography 2. Chicago: University of Chicago Press, 1994.
- Unschuld, Paul U. *Huang Di Nei Jing Su Wen: Nature, Knowledge, Imagery in an Ancient Chinese Medical Text, with an Appendix, The Doctrine of the Five Periods and Six Qi in the Huang Di Nei Jing Su Wen*. Berkeley: University of California Press, 2003.
- Van der Velde, Paul. “The Interpreter Interpreted: Kaempfer’s Japanese Collaborator Imamura Genemon Eisei.” In *The Furthest Goal: Engelbert Kaempfer’s Encounter with Tokugawa Japan*, edited by Beatrice M. Bodart-Bailey and Derek Massarella, 44–58. Sandgate: Japan Library, 1995.
- Walle, Willy vande, and Kazuhiko Kasaya, eds. *Dodonaeus in Japan: Translation and the Scientific Mind in the Tokugawa Period*. Leuven: Leuven University Press, 2001.
- Wu, Jiang. “Taikun’s Zen Master from China: Yinyuan, Tokugawa Bakufu, and the Founding of Manpukuji in 1661.” *Journal of East Asian History*, no. 38 (2014): 75–98.
- . *Leaving for the Rising Sun: Chinese Zen Master Yinyuan and the Authenticity Crisis in Early Modern East Asia*. New York: Oxford University Press, 2015.

- Yonemoto, Marcia. *Mapping Early Modern Japan: Space, Place, and Culture in the Tokugawa Period, 1603-1868*. Berkeley: University of California Press, 2003.
- Zhang, Qiong. *Making the New World Their Own: Chinese Encounters with Jesuit Science in the Age of Discovery*. Leiden: Brill, 2015.

Secondary sources in East Asian languages

- Ahn Daeok 安大玉. *Minmatsu seiyō kagaku tōdenshi: “Tengaku shokan” kihen no kenkyū* 明末西洋科学東伝史—『天学初函』器編の研究. Chisen shokan, 2007.
- Aoki Chieko 青木千枝子. “Nihon ni genson suru ‘Kon’yo bankoku zenzu’ sho zu ni tsuite” 日本に現存する「坤輿万国全図」諸図について. *Kirishitan bunka kenkyūkai kaihō* キリシタン文化研究会会報, no. 102 (n.d.): 1–12.
- Arano Yasunori 荒野泰典. *Kinsei Nihon to higashi Ajia* 近世日本と東アジア. Tokyo: Tōkyō Daigaku Shuppankai, 1988.
- . “Sakoku” o minaosu 「鎖国」を見直す. Tokyo: Iwanami shoten, 2019.
- Ayuzawa Shintarō 鮎沢信太郎. “Nishikawa Joken no ‘Kai tsūshō kō’ ni tsuite” 西川如見の「華夷通商考」について. *Rekishi chiri* 歴史地理 77, no. 1 (1941): 17–34.
- . “Ikoku fudoki ni tsuite: Ka’i tsūshōkō to no kankei” 異国風土記について—華夷通商考との関係. *Rekishi chiri* 歴史地理 83, no. 2 (1952): 50–59.
- . *Sakoku jidai no sekai chirigaku* 鎖国時代の世界地理学. Hara shobō, 1980.
- Cryns Frederik. *Wiriamu Adamusu: Ieyasu ni aisareta otoko, Miura Anjin* ウィリアム・アダムス—家康に愛された男・三浦按針. Chikuma shinsho ちくま新書 1552. Tokyo: Chikuma shobō, 2021.
- Ebisawa Arimichi 海老澤有道. “Kinshorei ni kansuru sho mondai” 禁書令に関する諸問題. *Rekishi kyōiku* 歴史教育 4, no. 11 (1956).
- . *Nanban gakutō no kenkyū: Kindai nihon bunka no keifu* 南蠻學統の研究—近代日本文化の系譜. Tokyo: Sōbunsha, 1958.
- . *Kirishitan no kenkyū* 切支丹史の研究. Nihon shūkyōshi meicho sōsho 日本宗教史名著叢書. Tokyo: Shin jinbutsu ōraisha, 1971.
- Etchū Tetsuya 越中哲也. *Nagasaki Shuntokuji shi* 長崎春徳寺史. Nagasaki: Shuntokuji, 1981.
- Harada Hiroji 原田博二. “Tōdera to tōsō” 唐寺と唐僧. In *Nagasaki: tōzai bunka kōshōshi no sutēji* 長崎・東西文化交渉史の舞台, edited by Wakaki Taiichi 若木太一, Vol. 2. Bensei Shuppan, 2013.
- Harada Hiroji 原田博二. “Oranda tsūji no shokkai to sono henshen ni tsuite” 阿蘭陀通詞の職階とその変遷について. *Jōhō media kenkyū* 情報メディア研究 2, no. 1 (2003): 45–55.
- . “Tōdera to tōsō” 唐寺と唐僧. In *Nagasaki: tōzai bunka kōshōshi no sutēji* 長崎・東西文化交渉史の舞台, edited by Wakaki Taiichi 若木太一, Vol. 2. Bensei Shuppan, 2013.
- Hashiguchi Kōnosuke 橋口侯之介. *Wahon nyūmon: Sennen ikiru shomotsu no sekai* 和本入門一千年生きる書物の世界. Tokyo: Heibonsha, 2011.
- Hashimoto Keizō 橋本敬造. “Ri Shisō / Fu Hansai dōyaku ‘Kan’yūsen’ josetsu” 李之藻・傅汎際同譯『寰有詮』序説. *Kansai Daigaku tōzai gakujutsu kenkyūjo kiyō* 関西大学東西学術研究所紀要 38 (2005): 79–95.
- Hayashi Makoto 林淳. *Kinsei onmyōdō no kenkyū* 近世陰陽道の研究. Tokyo: Yoshikawa kōbunkan, 2005.

- . *Shibukawa Harumi: Ushinawareta koyomi o motomete* 渋川春海—失われた暦を求めて. Yamakawa shuppansha, 2018.
- Hayashi Rokurō 林陸朗. *Nagasaki tōtsūji: Daitsūji Hayashi Dōei to sono shūhen* 長崎唐通事—大通事林道栄とその周辺. Nagasaki: Nagasaki bunkensha, 2010.
- Hiraoka Ryūji 平岡隆二. “‘Sokuryō higen’ no shahon ni tsuite” 「測量秘言」の写本について. *Kenkyū kiyō / Nagasaki rekishi bunka hakubutsukan* 研究紀要／長崎歴史文化博物館 6 (2012): 43–56.
- . *Nanbankei uchūron no gententeki kenkyū* 南蛮系宇宙論の原典的研究. Hikaku shakai bunka sōsho 比較社会文化叢書 27. Hana shoin, 2013.
- . “*Kobayashi Kentei den: Nagasaki no shiryō o chūshin ni*” 小林謙貞伝—長崎の史料を中心に. *Nagasaki-gaku* 長崎学 2 (2018): 19–33.
- . “*Arisutoteresu o unkiron de yomitoku: ‘nanban unkiron’ to 17 seiki Nagasaki ni okeru seigaku rikai*” アリストテレスを運氣論で読み解く—『南蛮運氣論』と17世紀長崎における西学理解. In *Ten to chi no kagaku: Higashi to nishi no deai* 天と地の科学—東と西の出会い, edited by Takeda Tokimasa 武田時昌 and Mak Bill M. 麥文彪, 396–407. Kyoto: Kyōto Daigaku jinbun kagaku kenkyūjo, 2019.
- . “*Tenkei wakumon’ no kanpon to shahon*” 『天経或問』の刊本と写本. *Kagakushi kenkyū* 科学史研究 58, no. 289 (2019): 2–21.
- Hirose Hideo 広瀬秀雄. “*Hōreki no kaireki ni tsuite*” 宝暦の改暦について. In *Onmyōdō sōsho* 陰陽道叢書, edited by Murayama Shūichi 村山修一, 3:369–89. Tokyo: Meicho shuppan, 1994.
- Hirose Hideo 広瀬秀雄, Nakayama Shigeru 中山茂, and Ōtsuka Keisetsu 大塚敬節, eds. *Kinsei kagaku shisō* 近世科学思想. Vol. 2. 2 vols. Nihon shisō taikai 日本思想大系 63. Tokyo: Iwanami shoten, 1971.
- Hori Isao 堀勇雄. *Hayashi Razan* 林羅山. Jinbutsu sōsho 人物叢書. Tokyo: Yoshikawa kōbunkan, 1990.
- Horikawa Takashi 堀川貴司. *Shoshigaku nyūmon: Kotenseki o miru, shiru, yomu* 書誌学入門—古典籍を見る・知る・読む. Bensei shuppan, 2010.
- Hsu Kuang-Tai 徐光台. “*Li Madou, Li Yingshi yu ‘Liangyi xuanlan tu’*” 利瑪竇、李應試與《兩儀玄覽圖》. *Hanxue yanjiu* 漢學研究 4, no. 30 (2012): 133–67.
- . “*Mingmo Qingchu xifang shijie ditu de zaidihua: Xiong Mingyu ‘Kunyu wanguo’ yu Xiong Renlin ‘Yudi quantu’ kaoxi*” 明末清初西方世界地圖的在地化：熊明遇「坤輿萬國全圖」與熊人霖「輿地全圖」考析. *Qinghua xuebao* 清華學報 46, no. 2 (2016): 319–58.
- Imamura Hideaki 今村英明. “*Tokugawa Yoshimune to ‘Oranda mondō’*” 徳川吉宗と『和蘭問答』—オランダ商館長日誌を通して. In *Nichiran kōryūshi: Sono hito, mono, jōhō* 日蘭交流史—その人・物・情報, edited by Katagiri Kazuo 片桐一男, 123–42. Kyoto: Shibunkaku shuppan, 2002.
- . *Oranda shōkan nishshi to Imamura Eisei / Imamura Meisei: Nichiran bōeki ya yōgaku no hatten ni kōhen shita Oranda tsūji no kiroku* オランダ商館日誌と今村英生・今村明生—日蘭貿易や洋学の発展に貢献した阿蘭陀通詞の記録. Tokyo: Bukkomu, 2007.
- . “‘Sokuryō higen’ seiritsu no haikai ni tsuite” 『測量秘言』成立の背景について. *Yōgakushi kenkyū* 洋学史研究 28 (2011): 1–15.
- Inoue Tadashi 井上忠. *Kaibara Ekiken* 貝原益軒. Jinbun sōsho 人物叢書 103. Yoshikawa Kōbunkan, 1963.

- Ishimura Kiei 石村喜英. *Fukami Gentai no kenkyū: Hinaka bunka kōryū-jō ni okeru Gentai den to Ōbaku Dokuryū zenji den* 深見玄岱の研究—日中文化交流上における玄岱伝と黄檗独立禅師伝. Tokyo: Yūzankaku, 1973.
- Ishizaki Matazō 石崎又造. *Kinsei Nihon ni okeru Shina zokugo bungaku shi* 近世日本に於ける支那俗語文學史. Tokyo: Kōbundō shobō, 1940.
- Ishizaki Takahiko 石崎貴比古. “Nishikawa Joken no Indo ninshiki” 西川如見のインド認識. *Indogaku bukkyōgaku kenkyū* 印度學佛教學研究 59, no. 1 (2010): 502-499 (sic).
- Itō Tasaburō 伊東多三郎. “Kinsho no kenkyū” 禁書の研究. In *Kinseishi no kenkyū* 近世史の研究, Vol. 1. Tokyo: Yoshikawa Kōbunkan, 1981.
- Kasaya Kazuhiko 笠谷和比古. “Arai Hakuseki to Tokugawa Yoshimune: Tokugawa jidai no seiji to honzō” 新井白石と徳川吉宗—徳川時代の政治と本草. In *Mono no imeji: honzō to hakubutsugaku e no shōtai* 物のイメージ・本草と博物学への招待, edited by Yamada Keiji 山田慶兒, 319-35. Tokyo: Asahi shinbunsha, 1994.
- . *Tokugawa Yoshimune* 徳川吉宗. Chikuma shinsho ちくま新書 44. Tokyo: Chikuma shobō, 1995.
- Katagiri Kazuo 片桐一男. *Oranda tsūji no kenkyū* 阿蘭陀通詞の研究. Yoshikawa kōbunkan, 1985.
- . “Oranda tsūji Nishi Kichibee fushi ni tsuite: Nanban-Oranda tsūji to igaku kenshū/kyōju” 阿蘭陀通詞西吉兵衛父子について—南蛮・阿蘭陀通詞と医学兼修・教授. In *Sakoku Nihon to kokusai kōryū* 鎖国日本と国際交流, edited by Yanai Kenji 箭内健次, 197-217. Tokyo: Yoshikawa kōbunkan, 1988.
- . *Oranda tsūji Imamura Gen’emon Eisei: Totsukuni no kotoba o wagamono toshite* 阿蘭陀通詞今村源右衛門英生—外つ国の言葉をわがものとして. Tokyo: Maruzen, 1995.
- . *Edo jidai no tsūyakukan: oranda tsūji no gogaku to jitsumu* 江戸時代の通訳官—阿蘭陀通詞の語学と実務. Tokyo: Yoshikawa kōbunkan, 2016.
- Kawaguchi Hiroshi 川口浩. “Nishikawa Joken no keizai ninshiki to jukyō” 西川如見の経済認識と儒教. *Shakai keizai shigaku* 社会経済史学 56, no. 4 (1990): 451-79.
- Kawahira Toshifumi 川平敏文. *Tsurezuregusa no jūnana seiki: kinsei bungei shichō no keisei* 徒然草の十七世紀—近世文芸思潮の形成. Tokyo: Iwanami shoten, 2015.
- Kawamura Hirotada 川村博忠. *Kinsei Nihon no sekaizō* 近世日本の世界像. Tokyo: Perikansha, 2003.
- Kazu Tsuguto 嘉数次人. *Tenmongakusha tachi no edo jidai: Koyomi, uchūkan no daitenkan* 天文学者たちの江戸時代—暦・宇宙観の大転換. Tokyo: Chikuma shobō, 2016.
- Keiō gijuku daigaku fuzoku kenkyūjo Shidō bunko 慶応義塾大学附属研究所斯道文庫. *Zusetsu shoshigaku: Kotenseki o manabu* 図説書誌学—古典籍を学ぶ. Tokyo: Bensei shuppan, 2010.
- Kitada Kunihiko 喜多田久仁彦. “Tōtsūji no chūgokugo ni tsuite” 唐通事の中国語について. *Kenkyū ronsō* 研究論叢 87 (2016): 9-20.
- Kizu Yūko 木津祐子. “Tōtsūji kokoroe’ yakuchū kō” 『唐通事心得』 訳注稿. *Kyōto daigaku bungakubu kenkyū kijō* 京都大學文學部研究紀要 39 (2000): 1-50.
- Kobayashi Tatsuhiko 小林龍彦. “Momijiyama bunko ni shūzō sareru Bai Buntei no chosaku ni tsuite” 紅葉山文庫に収蔵される梅文鼎の著作について. *Kagakushi kenkyū* 科学史研究 41, no. 221 (2002): 26-34.

- Kodama Shōgo 児玉祥吾. “*Jōkyō kaireki no jittai*” 貞享改暦の実態. In *Shin onmyōdō sōsho* 新陰陽道叢書, edited by Umeda Chihiro 梅田千尋, Vol. 3. Kadoma: Meicho shuppan, 2021.
- Koga Jūjirō 古賀十二郎. *Nagasaki yōgakushi* 長崎洋学史. Edited by Nagasaki Gakkai 長崎学会. 3 vols. Nagasaki: Nagasaki bunkensha, 1966.
- Kojima Kogorō 小島小五郎. “*Nishikawa Joken no suido shisō*” 西川如見の水土思想. *Nagasaki shigaku* 長大史学 2 (1958): 1–7.
- Komoguchi Isao 菰口治. “向井元升の「知恥篇」素描—神道・仏教・キリシタン観.” 中国哲学論集, 1993, 54–69.
- Li Doushi 李斗石. *Minji tangtongshi yanjiu* 閩籍唐通事研究. Beijing: Shehui kexue wenxian chubanshe, 2019.
- Matsukata Fuyuko 松方冬子. *Oranda fūsetsugaki: “sakoku” Nihon ni katarareta “sekai”* オランダ風説書—「鎖国」日本に語られた「世界」. Chūkō shinsho 中公新書 2047. Tokyo: Chūō Kōron Shinsha, 2010.
- Matsukata Fuyuko 松方冬子, Nishizawa Mihoko 西澤美穂子, Tanaka Yōko 田中葉子, and Matsui Yōko 松井洋子, eds. *Jūkyū seiki no Oranda shōkan* 一九世紀のオランダ商館. Vol. 2. 2 vols. Tōkyō daigaku shuppankai, 2021.
- Matsuura Akira 松浦章. *Kaigai jōhō kara miru Higashi Ajia: Tōsen fūsetsugaki no sekai* 海外情報からみる東アジア—唐船風説書の世界. Osaka: Seibundō shuppan, 2009.
- . “*Shindai hansen no sennai saishi: enkai chiiki ni okeru shūkyō denpa no katei ni oite*” 清代帆船の船内祭祀—沿海地域における宗教伝播の過程において. *Higashiajia bunka kōshō kenkyū* 東アジア文化交渉研究, no. 2 (2009): 109–20.
- Michel, Wolfgang. “*Jui Mukai Genshō to seiyō igaku/yakugaku no juyō ni tsuite*” 儒医向井元升と西洋医学・薬学の受容について. In *Nagasaki: tōzai bunka kōshōshi no sutēji* 長崎・東西文化交渉史の舞台, edited by Taiichi Wakaki 若木太一, 2:161–86. Bensei shuppan, 2013.
- Minamoto Ryōen 源了圓. “*Shushigakuha no jitsugakukan to ri no kannen (2) nishikawa joken no baai*” 朱子学派の実学観と理の観念(2)—西川如見の場合. *Kokoro* 心 29, no. 4 (April 1976): 66–74.
- . *Kinsei shoki jitsugaku shishō no kenkyū* 近世初期実学思想の研究. Sōbunsha, 1980.
- Miyazaki Michio 宮崎道生. *Arai Hakuseki no kenkyū* 新井白石の研究. Tokyo: Yoshikawa kōbunkan, 1969.
- Miyata Yasushi 宮田安. *Tōtsūji kakei ronkō* 唐通事家系論攷. Nagasaki: Nagasaki bunkensha, 1979.
- Munemasa Isō 宗政五十緒. *Kinsei Kyōto shuppan bunka no kenkyū* 近世京都出版文化の研究. Dōhōsha shuppan, 1982.
- Nagasaki shishi hensan iinkai 長崎市史編さん委員会, ed. *Shin Nagasaki shishi* 新長崎市史. Vol. 2. 4 vols. Nagasaki: Nagasaki-shi, 2012.
- Nagasaki kenshi hensan iinkai 長崎県史編纂委員会編. *Taigai kōshō-hen* 対外交渉編. Nagasaki kenshi 長崎県史. Yoshikawa kōbunkan 吉川弘文館, 1963.
- Nakamura Tsukō 中村士. *Edo no tenmongakusha hoshizora o kakeru: Bakufu tenmongata, Shibukawa Harumi kara Inō Tadataka made* 江戸の天文学者星空を翔ける—幕府天文方、渋川春海から伊能忠敬まで. *Shiritai saiensu* 知りたいサイエンス 32. Tokyo: Gijutsu hyōronsha, 2008.
- . *Edo no tenmongaku: Shibukawa Harumi to Edo jidai no kagakusha tachi* 江戸の天文学—渋川春海と江戸時代の科学者たち. Tokyo: Kadokawa gakugei shuppan, 2012.

- Nakayama Shigeru 中山茂. *Nihon no tenmongaku: Seiyō ninshiki no senpei* 日本の天文学—西洋認識の尖兵. Iwanami shinsho 岩波新書 837. Tokyo: Iwanami shoten, 1972.
- . *Rekishi to shite no gakumon* 歴史としての学問. Chūo kōronsha, 1974.
- . “‘Tenkei wakumon kōhen’ ni tsuite” 『天経或問後集』について. In *Tōyō no kagaku to gjyutsu: Yabuuchi Kiyoshi Sensei shōju kinen ronbunshū* 東洋の科学と技術—藪内清先生頌寿記念論文集, 199–208. Dōhōsha shuppan, 1982.
- . *Paradaimu de tadoru kagaku no rekishi* パラダイムでたどる科学の歴史. Bere shuppan, 2011.
- Nikaidō Yoshihiro 二階堂善弘. “Nagasaki tōdera no masodō to sajin ni tsuite: enkaï ‘shūen’ chūki ni okeru shinkō no denpa” 長崎唐寺の媽祖堂と祭神について—沿海「周縁」地域における信仰の伝播. *Higashi ajia bunka kōshō kenkyū* 東アジア文化交渉研究, no. 2 (2009): 99–108.
- Numata Jirō 沼田次郎. *Yōgaku* 洋学. Nihon rekishi sōsho 日本歴史叢書 40. Tokyo: Yoshikawa kōbunkan, 1989.
- Ōba Osamu 大庭脩. “Tōhoku daigaku Kanō bunko kazō no gobunko mokuroku” 東北大学狩野文庫架蔵の御文庫目録. *Kansai daigaku tōzai gakujyutsu kenkyūjo kiyō* 関西大学東西学術研究所紀要 3 (1970): 9–90.
- . “Tokugawa Yoshimune to Daishin kaiten: Kyōho jidai ni okeru nisshin kōshō no ippan” 徳川吉宗と大清会典—享保時代における日清交渉の一斑. *Hōseishi kenkyū* 法制史研究 21 (1971): 61–95.
- . *Edo jidai no nitchū hiwa* 江戸時代の日中秘話. Tokyo: Tōhō shoten, 1980.
- . *Edo jidai ni okeru chūgoku bunka juyō no kenkyū* 江戸時代における中国文化受容の研究. Dōhōsha shuppan, 1984.
- . “Kyōhō-ban ‘zō’ no subete” 享保版「象」のすべて. In *Mono no imēji: honzō to hakubutsugaku e no shōtai* 物のイメージ・本草と博物学への招待, edited by Yamada Keiji 山田慶兒, 92–114. Tokyo: Asahi shinbunsha, 1994.
- . *Tokugawa Yoshimune to Kōki Tei: Sakokuka de no nitchū kōryū* 徳川吉宗と康熙帝—鎖国下での日中交流. *Ajia bukkusu* あじあブックス 19. Taishūkan, 1999.
- . *Nitchū kōryū shiwa: Edo jidai no nitchū kankei o yomu* 日中交流史話—江戸時代の日中関係を読む. Osaka: Nenshōsha, 2003.
- Obara Satoru 尾原悟. “A Comparative Table of Contents for the Latin and Japanese MSS.” In *Compendium catholicae veritatis: Kaisetsu* 解説, edited by Jōchi Daigaku Kirishitan Bunko 上智大学キリシタン文庫, 3:73–126. Tokyo: Ōzorasha, 1997.
- Ōhashi Yukihiro 大橋幸泰. *Kenshō Shimabara Amakusa ikki* 検証島原天草一揆. *Rekishi bunka raiburari* 歴史文化ライブラリー 259. Tokyo: Yoshikawa Kōbunkan, 2008.
- Okumura Kayoko 奥村佳代子. *Edo jidai no tōwa ni kansuru kiso kenkyū* 江戸時代の唐話に関する基礎研究. Suita: Kansai daigaku shuppanbu, 2007.
- Ōshima Akihide 大島明秀. “Sakoku” to iu gensetsu: Kenperu cho, Shizuki Tadao yaku “Sakokuron” no juyōshi 「鎖国」という言説—ケンペル著・志筑忠雄訳『鎖国論』の受容史. Minerva shobō, 2009.
- Ōtori Ranzaburō 大鳥蘭三郎. “Kurisaki Dōu den hoi” 栗崎道有伝補遺. *Nihon ishigaku zasshi* 日本医史学雑誌 15, no. 1 (1969): 1–5.
- Peng Hao 彭浩. *Kinsei Nisshin tsūshō kankeishi* 近世日清通商関係史. Tokyo: Tōkyō Daigaku Shuppankai, 2015.

- Phan Hài Linh. “*Zenkindai Betonamu ni okeru zō no kokkateki kanri to zō bōeki*” 前近代ベトナムにおける象の国家的管理と象貿易. *Senshū daigaku shakai chisei kaihatsu sentā Higashi Yūrashia kenkyū sentā nenpō* 専修大学社会知性開発研究センター古代東ユーラシア研究センター年報 4 (2018): 143–59.
- Ri Kenshō 李獻璋. *Nagasaki tōjin no kenkyū* 長崎唐人の研究. Shinwa Ginkō furusato shinkō kikin, 1991.
- Sakai Hideo 酒井忠夫. *Chūgoku zensho no kenkyū* 中国善書の研究. Expanded edition. Vol. 1. 2 vols. Kokusho kankōkai, 1999.
- . *Chūgoku zensho no kenkyū* 中国善書の研究. Expanded edition. Vol. 2. 2 vols. Kokusho kankōkai, 2000.
- Sakuma Tadashi 佐久間正. “*Nishikawa Joken ron: chōnin ishiki, tengaku, suidoron*” 西川如見論—町人意識・天学・水土論. *Nagasaki daigaku kyōyō bu kiyō* 長崎大学教養部紀要 26, no. 1 (1985): 1–29.
- . *Tokugawa nihon no shisō keisei to jukyō* 徳川日本の思想形成と儒教. Tokyo: Perikansha, 2007.
- Satō Shōsuke 佐藤昌介. *Yōgakushi kenkyū josetsu: yōgaku to hōken kenryoku* 洋学史研究序説—洋学と封建権力. Tokyo: Iwanami shoten, 1964.
- Shu Zenan 朱全安. “*Fukami gentai ni tsuite: kinsei nihon ni okeru chūgokugo no juyō ni kansuru ichikōsatsu*” 深見玄岱について—近世日本における中国語の受容に関する一考察. *Chiba Shōdai kiyō* 千葉商大紀要 41, no. 4 (2004): 69–92.
- Sudō Toshio 須藤敏夫. *Kinsei Nihon sekiten no kenkyū* 近世日本積奠の研究. Kyoto: Shibunkaku shuppan, 2001.
- Sugimoto Isao 杉本勲. *Kinsei jitsugakushi no kenkyū: Edo jidai chūki ni okeru kagaku/gijutsugaku no seisei* 近世実学史の研究—江戸時代中期における科学・技術学の生成. Tokyo: Yoshikawa kōbunkan, 1962.
- . *Kagakushi* 科学史. Taikai Nihonshi sōsho 体系日本史叢書 19. Yamakawa shuppansha, 1967.
- Sun Chengsheng 孫承晟. *Guannian de jiaozhi: Mingqing zhi ji xifang ziran zhexue zai zhongguo de chuanbo* 觀念的交織：明清之際西方自然哲學在中國的傳播. *Keji zhishi de chuangzao yu chuanbo yanjiu congshu* 科技知識的創造與傳播研究叢書. Guangzhou: Guangdong renmin chubanshe, 2018.
- Suzuki Nobuaki 鈴木信昭. “*Chōsen ni denrai shita Ri Matō ‘Ryōgi genran zu’*” 朝鮮に伝来した利瑪竇『兩儀玄覽図』. *Chōsen gakuho* 朝鮮学報 201 (2006): 1–30.
- . “*Ri Matō ‘Ryōgi genran zu’ kō*” 利瑪竇『兩儀玄覽図』攷. *Chōsen gakuho* 朝鮮学報 206 (2008): 21–60.
- Takano Nobuharu 高野信治. “*‘Sekai’ to ‘shingoku’: Nishikawa Joken no ‘tengaku’ ron wo megutte*” 「世界」と「神国」—西川如見の「天学」論をめぐって. In *Kyōkai no aidentiti* 境界のアイデンティティ, edited by Kyūshū shigaku kenkyūkai, Vol. 1. “Kyūshū shigaku” sōkan gojū shūnen kinen ronbunshū 「九州史学」創刊五〇周年記念論文集. Tokyo: Iwata shoin, 2008.
- Tsuji Tetsuo 辻哲夫. *Nihon no kagaku shisō: Sono jiritsu e no mosaku* 日本の科学思想—その自立への模索. Chūo kōronsha, 1973.
- Uchida Hideo 内田秀雄. “*Nishikawa Joken to sono chirigaku*” 西川如見と其の地理學. *Shirin* 史林 24, no. 1 (1939): 138–64.

- Unno Kazutaka 海野一隆. “*Shōhō-kan ‘Bankoku sōzu’ no seiritsu to rufu*” 正保刊『万国総図』の成立と流布. In *Tōzai chizu bunka kōshōshi kenkyū* 東西地図文化交渉史研究, 328–83. Seibundō shuppan, 2003.
- . “*Edo jidai ni okeru ‘Nigi ryakusetsu’ no rufu*” 江戸時代における『二儀略説』の流布. In *Tōyō chirigakushi kenkyū* 東洋地理学史研究, Nihon hen 日本篇:48–61, 2005.
- . “*Ri Matō ‘Konyo bankoku zenzu’ no shohan*” 利瑪竇『坤輿万国全図』の諸版. *Tōyō gakahō* 東洋学報 87, no. 1 (2005): 101–43.
- . *Nihonjin no daichizō: seiyō chikyūsetsu no juyō o megutte* 日本人の大地像—西洋地球説の受容をめぐって. Taishūkan, 2006.
- Wakaki Taiichi 若木太一. “*Tonkin tsūji Gi-shi no kakei: Gi Gozaemon Ryūzan o chūsin ni*” 東京通詞魏氏の家系—魏五左衛門竜山を中心に. *Nagasaki daigaku kyōyōbu kijō* 長崎大学教養部紀要 37, no. 3 (1997): 1–16.
- . “*Amenomori Hōshū shōkō: Tōwa no shi Koku Shisei*” 雨森芳洲小考—唐話の師國思靖. *Gazoku* 雅俗 7 (2000): 211–20.
- . “*Tōwa jisho, Tonkingo jisho, Chōsenjo jisho*” 唐話辞書・東京語辞書・朝鮮語辞書. In *Jisho yūho: Nagasaki de jisho o yomu* 辞書遊歩—長崎で辞書を読む, edited by Sonoda Naohiro 園田尚弘 and Wakaki Taiichi 若木太一, 3–16. Fukuoka: Kyūshū daigaku shuppankai, 2004.
- . “*Shomotsu aratame: Shuntokuji to nagasaki seido*” 書物改—春徳寺と長崎聖堂. In *Nagasaki: tōzai bunka kōshōshi no sutēji* 長崎・東西文化交渉史の舞台, edited by Wakaki Taiichi 若木太一, 2:346–76. Bensei Shuppan, 2013.
- Wakao Masaki 若尾政希. “*Tenpen chū no shisō: Andō Shōeki no tenjin sōkan setsu to Nishikawa Joken*” 天変地異の思想—安藤昌益の天人相関説と西川如見. *Nihon Bunka Kenkyūsho kenkyū hōkoku* 日本文化研究所研究報告 26 (1990): 57–107.
- . *Andō Shōeki kara mieru Nihon kinsei* 安藤昌益からみえる日本近世. Tōkyō daigaku shuppankai, 2004.
- Watanabe Kurasuke 渡邊庫輔. “*Kyorai to sono ichizoku*” 去來とその一族. In *Mukai Kyorai* 向井去來, edited by Mainichi shinbunsha tosho henshūbu 毎日新聞社圖書編集部. Nagasaki: Kyorai kenshō kai, 1954.
- Watanabe Toshio 渡辺敏夫. *Kinsei Nihon tenmongakushi*. 近世日本天文学史. Vol. 1. 2 vols. Tokyo: Kōseisha kōseikaku, 1986.
- Xu Xingqing 徐興慶. *Zhu Shunshui yu dongya wenhua chuanbo de shijie* 朱舜水與東亞文化傳播的世界. Guoli Taiwan daxue chuban zhongxin, 2008.
- Yachi Aya 谷地彩. “*Nishikawa Joken to ‘Shokuhō gaiki’: ‘Zōho ka’i tsūshō kō’ o chūshin ni*” 西川如見と『職方外紀』—『増補華夷通商考』を中心に. *Jōchi daigaku bunka kōshōgaku kenkyū* 上智大学文化交渉学研究 6 (2018): 11–23.
- Yagi Ichio 八木意知男. *Wagebon zensho no shiryō to kenkyū* 和解本善書の資料と研究. Kyōto joshi daigaku kenkyū sōkan 京都女子大学研究叢刊 46. Kyoto: Kyōto joshi daigaku, 2007.
- Yahano Takao 矢羽野隆男. “*Tosho hen’ no shoshigakuteki kōsatsu*” 『図書編』の書誌学的考察. *Machikaneyama ronsō Tetsugaku-hen* 待兼山論叢・哲学篇 28 (1994): 15–27.
- Yamada Keiji 山田慶兒. *Ki no shizenzō* 気の自然像. Iwanami shoten, 2002.
- Yamada Yoshihiro 山田義裕. “*Genna kōkai sho to nanban no kyori: gurau to regua*” 元和航海書と南蛮の距離—グラウとレグア. *Kaijishi kenkyū* 海事史研究 60 (2003): 23–33.

- . “‘Genna kōkai sho’ no taiyō sekū hyō no genten” 『元和航海書』の太陽赤緯表の原典. *Kaijishi kenkyū* 海事史研究 63 (2006): 113–31.
- Yamamoto Noritsuna 山本紀綱. *Nagasaki Tōjin yashiki* 長崎唐人屋敷. Tokyo: Kenkōsha, 1983. Yanagisawa Minami 柳澤南. “Nishikawa Joken to shindai jugaku” 西川如見と清代儒学. *Tetsugaku, shisō ronsō* 哲学・思想論叢, December 1982, 3–15.
- . “Nishikawa Joken no jugaku shisō” 西川如見の儒学思想. *Nihon shisō shigaku* 日本思想史学 14 (1982): 49–60.
- Yō Ryū 楊柳. “Nagasaki tōtsūji shūdan no kenkyū” 長崎唐通事集団の研究. Doctoral dissertation, Nagoya University, 2017.
- Yokota Fuyuhiko 横田冬彦. *Nihon kinsei shomotsu bunkashi no kenkyū* 日本近世書物文化史の研究. Tokyo: Iwanami shoten, 2018.
- Yokoyama Toshio 横山俊夫, ed. *Kaibara Ekiken: tenchi waraku no bunmeigaku* 貝原益軒—天地和楽の文明学. Tokyo: Heibonsha, 1995.
- Yonechi Fumio 米地文夫. “Nishikawa Joken ‘Kaii bendan’ ni miru jikeikan/kankyōkan” 西川如見『怪異辨断』にみる地形観・環境観. *Sōgō seisaku* 総合政策 2, no. 2 (2000): 145–52.
- Yoshida Tadashi 吉田忠. “‘Tenkei wakumon’ no juyō” 「天経或問」の受容. *Kagakushi kenkyū* 科学史研究 24, no. 156 (1985): 215–24.

APPENDICES

Appendix A: Proscribed titles between 1630 and 1720

1) Titles banned in 1630

Titles in bold are contained in the first part of *Tianxue chuhan* 天學初函, whereas underlined are contained in the second part.

	ORIGINAL TITLE	TITLE IN ENGLISH	AUTHORS
1	<i>Jiren</i> 畸人	An eccentric	Matteo Ricci (1552–1611)
2	<i>Shiyi</i> 十慰	Ten consolations	Alfonso Vagnoni (1568–1640)
3	<i>Xiexue fan</i> 西學凡	An overview of Western learning	Giulio Aleni (1582–1649)
4	<i>Bianxue yidu</i> 辨學遺牘	Posthumous refutations [of Buddhism]	Matteo Ricci (1552–1611)
5	<i>Qike</i> 七克	Seven victories	Diego de Pantoja (1571–1618)
6	<i>Misa jiyi</i> 彌撒祭義	Liturgy of the mass	Giulio Aleni (1582–1649)
7	<i>Daiyipian</i> 代疑篇	Essays for replacing doubts	Yang Tingyun 楊廷筠 (1562–1627)
8	<i>Sanshanlun xueji</i> 三山論學記	Study notes from the three-mountain discourse	Giulio Aleni (1582–1649)
9	<i>Jiaoyao jielüe</i> 教要解略	Abridged explanation of religious principles	Alfonso Vagnoni (1568–1640)
10	<i>Tang Jingiao bei</i> 唐景教碑	The Nestorian stele from the Tang [dynasty]	N/A
11	<i>Shengji baiyan</i> 聖記百言	One hundred sayings of the holy records	Giacomo Rho (1593–1638)
12	<i>Tianzhu shiyi</i> 天主實義	The true meaning of the Lord of Heaven	Matteo Ricci (1552–1611)
13	<i>Tianzhu xupian</i> 天主續篇	Further essays on the Lord of Heaven	Diego de Pantoja (1571–1618)
14	<i>Ershiwu yan</i> 二十五言	Twenty-five sayings	Matteo Ricci (1552–1611)
15	<i>Lingyan li shuo</i> 靈言蠡勺	Treatise on the soul	Francesco Sambiasi (1582–1649) and

Appendix A: Proscribed titles between 1630 and 1720

			Xu Guangqi 徐光啓 (1562–1633)
16	<i>Kuangyi</i> 況義	Aesop’s Fables	Nicolas Trigault (1577–1628) and Zhang Geng 張賡 (c.1570–1646)
17	<i>Wanwu zhenyuan</i> 萬物真源	The true origins of the myriad things	Giulio Aleni (1582–1649)
18	<i>Dizui zhengji</i> 滌罪正記 ¹	Correct records of washing away sin	Giulio Aleni (1582–1649)
19	<i>Diping yiji</i> 滌平儀記 ²	Record of a flat device for cleaning (?)	N/A
20	<i>Biaodu shuo</i> 表度說	Explanations on the measurements of the sundial	Sabatino de Ursis (1575–1620)
21	<i>Celiang fayi</i> 測量法義 (unbanned after 1720)	The meaning of measurement methods	Matteo Ricci (1552–1611) and Xu Guangqi 徐光啓 (1562–1633)
22	<i>Celiang fayi yitong</i> 測量法義異同 (unbanned after 1720)	Differences and similarities in the meaning of measurement methods	Xu Guangqi 徐光啓 (1562–1633)
23	<i>Jian pinyi shuo</i> 簡平儀說 (unbanned after 1720)	A simple flat device [for measuring the projection of the sun’s movement]	Sabatino de Ursis (1575–1620)
24	<i>Zhifang waiji</i> 職方外紀 (unbanned	Records of [lands] outside [the purview] of the imperial geographer	Giulio Aleni (1582–1649) and Yang

¹ The actual title for this work is *Dizui zhenggui* 滌罪正規 (“Proper rules for washing away sin”).

² This work cannot be identified.

Appendix A: Proscribed titles between 1630 and 1720

	after 1720)		Tingyun 楊廷筠 (1562–1627)
25	<i>Tian wen lie</i> 天問略 (unbanned after 1720)	Summary of questions concerning the heavens	Manuel Dias (1574–1659)
26	<i>Gougu yi</i> 勾股義 (unbanned after 1720)	The meanings of base and altitude	Xu Guangqi 徐光啓 (1562–1633)
27	<i>Jihe yuanben</i> 幾何原本 (unbanned after 1720)	Elements of geometry	Matteo Ricci (1552–1611) and Xu Guangqi 徐光啓 (1562–1633)
28	<i>Jiaoyou lun</i> 交友論 (unbanned after 1720)	Discourse on friendship	Matteo Ricci (1552–1611)
29	<i>Taixi shuifa</i> 泰西水法 (unbanned after 1720)	Water methods of the Great West	Sabatino de Ursis (1575–1620) and Xu Guangqi 徐光啓 (1562–1633)
30	<i>Hungai tongxian tushuo</i> 渾蓋通憲圖說 (unbanned after 1720)	Illustrated explanations of the [celestial] sphere and the astrolabe	Li Zhizao 李之藻 (1565–1630)
31	<i>Yuanrong jiaoyi</i> 圓容較義 (unbanned after 1720)	Compared meanings inscribed in a circle	Matteo Ricci (1552–1611) and Li Zhizao 李之藻 (1565–1630)
32	<i>Tongwren xuanzhi</i> 通文算指 ³ (unbanned after 1720)	Rules of arithmetic common across culture	Matteo Ricci (1552–1611) and Li Zhizao 李之藻 (1565–1630)

³ Listed in two parts, *qianbian* 前編, *tongbian* 通編, the same as in *Tianxue chuhan*.

Appendix A: Proscribed titles between 1630 and 1720

2) Titles confiscated after 1685

	ORIGINAL TITLE	TITLE IN ENGLISH	AUTHORS / EDITORS	CIRCUMSTANCES
1	<i>Huanyou quan</i> 寰有詮	Explanations about the cosmos	Francisco Furtado (1589–1653) and Li Zhizao 李之藻 (1565–1630)	Burned in 1685
2	<i>Fujian tongzhi</i> 福建通志	Gazetteer of Fujian	Jin Hong 金鋹 (dates unknown)	Burned in 1686 Unbanned after 1720
3	<i>Diwei</i> 地緯	Meridians of the earth	Xiong Renlin 熊人霖 (1604–1666)	Burned in 1686
4	<i>Tianjing huowen houji</i> 天經或問後集	Latter collection of questions on the meridians of heaven	You Yi 游藝 (ca. late 17 th century)	Partially blotted out and returned in 1687
5	<i>Dingjing jingwu lue</i> 帝京景物略	Summary of scenic sights at the imperial capital	Liu Tong 劉侗 (c. 1593–1637)	Burned in 1695
6	<i>Xitang quanji</i> 西堂全集	Complete collection on the western hall	You Tong 尤侗 (1618–1704)	Confiscated in 1696 Unbanned after 1720
7	<i>Sancai fami</i> 三才發秘	Revealing the secretes of the three powers	Chen Gengshan 陳畊山 (dates unknown)	Partially blotted out and returned in 1699 Unbanned after 1720
8	<i>Yuanxue ji</i> 願學集	Collection on the eagerness for learning	Zou Yuanbiao 鄒元標 (1551–	Partially blotted out and

Appendix A: Proscribed titles between 1630 and 1720

			1624)	returned in 1699
9	<i>Xihu zhi</i> 西湖志	Records of the western lake	Fu Wanglu 傅王露 (ca. early 18 th century)	Partially blotted out and returned in 1699 Unbanned after 1720
10	<i>Chanzen yishi</i> 禪真逸志 ⁴	Outstanding records of Buddhist truths	Fang Ruhao 方汝浩 (ca. early 17 th century)	Partially blotted out and returned in 1700
11	<i>Tanyou xiahe ji</i> 譚友夏合集	Tan Youxia's collection	Tan Yuanchun 譚元春 (1586– 1637)	Partially blotted out and returned in 1701 Unbanned after 1720
12	<i>Fangcheng lun</i> 方程論	Discussion of rectangular arrays	Mei Wending 梅文鼎 (1633– 1721)	Partially blotted out and returned in 1701
13	<i>Mingjia shi guan</i> 名家詩觀	Vistas of poems from famous figures	Deng Hanyi 鄧漢儀 (1617– 1689)	Confiscated in 1702, returned and banned from sale
14	<i>Tanxue zhaji</i> 檀雪齋集	Collection of the studio of the sandalwood and the snow	Hu Jingchen 胡敬辰 (ca. early 17 th century)	Confiscated in 1703, returned and banned from sale
15	<i>Zengding guangyu ji</i> 增定廣輿記	Expanded and revised records on the expansive earth	Lu Yingyang 陸應陽 (1542– 1624) and Cai Fangbing 蔡方	Partially blotted out and returned in 1710 Unbanned after 1720

⁴ The more current title for this work is *Chanzen yishi* 禪真逸史, which translates as roughly the same.

Appendix A: Proscribed titles between 1630 and 1720

			炳 (1626–1709)	
16	<i>Jianhu.ji</i> 堅瓠集	The firm gourd collection	Chu Renhu 褚人穫 (1635 – early 18 th century)	Partially blotted out and returned in 1712 Unbanned after 1720

Appendix B: Table of contents for all titled published as *Nishikawa Joken isho* 西川如見遺書 (“The bequeathed works of Nishikawa Joken”)

西川如見遺書		總目録	
		第一篇	全三卷
第二篇	天文義論	全二卷	
第三篇	四十二國人物圖	全二卷	
第四篇	增補 華夷通商考	全五卷	
第五篇	和漢變象 怪異辨斷 天文精要	全八卷	

西川如見遺書

總目録

Appendix B: Table of contents for all titled published as *Nishikawa Joken isho* 西川如見遺書 (“The bequeathed works of Nishikawa Joken”)

第十二篇	第十一篇	第十篇	第九篇	第八篇	第七篇	第六篇
水土解辨	大略天學名目鈔	天經或問注	日本水土考	百姓囊	町人囊	長崎夜話草
全二卷	全一卷	全三卷	全一卷	全五卷	全七卷	全五卷

Appendix B: Table of contents for all titled published as *Nishikawa Joken isho* 西川如見遺書 (“The bequeathed works of Nishikawa Joken”)

西川如見遺書 總目録	第十三篇	和漢運氣指南後編	全一卷
	第十四篇	七曜右旋辯論	全一卷
		五行解	全一卷
		建正辯	全一卷
	第十五篇	兩儀集說	自首卷至第一卷 二卷
	第十六篇	兩儀集說	自第二卷至第三卷 二卷
	第十七篇	兩儀集說	自第四卷至第五卷 二卷

Appendix B: Table of contents for all titled published as *Nishikawa Joken isho* 西川如見遺書 (“The bequeathed works of Nishikawa Joken”)

西川如見遺書	總目錄終
第十八篇	
兩儀集說	
自第六卷至第七卷	
二卷	

西川如見遺書序

方世人多皆知之時已亦從而知之雖庸者可能也一世之人未及知而已先獨知之非哲人弗能也竄文享保間幕府嚴禁海外通交國內士庶所見聞局於和漢事物之範域矣此以學問寡陋徒崇信陳腐之說墨守乖謬之見者沿沿皆是也豈知復於和漢以外之邦國有許多智識暨學說乎哉西川求林齋先生以此時生于我崎陽幼而好學研苦累年涉獵和漢先儒諸說遂窺泰西理學之門考訂參酌多所闡明就中最邃於天文曆數之術名聲籍然矣逮晚年將軍有德公特徵備顧問厚蒙恩賚可謂異數之榮也嗚呼若先生一世之人未及知而蚤已有獨知之明非所謂哲人者何耶所著天文曆算其他雜書二十餘種刊行于世幾乎

二百年焉今茲戊戌冬先生裔孫忠亮君憂原版漸剝磨而祖先
功勞或歸湮滅將再刊其遺書來徵序余余於君不啻有同鄉之
好兼有和書同學之舊則義已不獲辭况又於君申追孝之誠因
以俾我鄉先哲不朽于千載乎遂弁一言於卷端云

明治三十一年戊戌臘月

後學 伊東己代治識

西川如見傳

細川潤次郎撰

川如見名ハ忠英求林齋ト號シ次郎右衛門ト稱ス如見ヲ以テ行ハル如見或ハ恕軒ニ作り又恕見ニ作ル長崎ノ人ナリ西川氏如見ノ曾祖正忠ヨリ始メテ顯ル其前ノ譜牒傳ハラス是ヲ以テ其詳ナルコトヲ知ルニ由ナシ然レトモ其家ニ傳ハル所ノ一説ニ據レハ如見ノ高祖名ヲ正幸ト曰ヒ忠右衛門ト稱シ後監物ト改ム肥後ノ國主加藤清正ノ家臣ナリシカ後貿易ヲ業トシテ朝鮮ニ往來シ對馬ニ家ス今ニ此家ニ存スル薙刀關兼常ノ作ト槍トハ此人ノ遺物ナリト云フ正幸

實子ナキヲ以テ正忠ヲ養フテ嗣トス正忠ハ本豊後大友氏
ノ家臣吉弘右衛門大夫源鑑滿ノ二男ナリシカ大友氏亡ヒ
テ後西川氏ヲ嗣ク對馬ニ在テ朝鮮人ト貿易ス文祿中朝鮮
ノ役起リ復業ヲ營ムコトヲ得ス之ニ由テ對馬ヨリ長崎ニ
移ル家僕鍛冶ヲ能クスル者アリ種々ノ鐵器ヲ作りテ之ヲ
鬻ク人多ク之ニ倣フ冶工隣ヲ成ス今ノ鍛冶屋町是ナリ家
ヲ治ムルコト勤儉ニシテ家道漸ク興ル曾テ其子忠政ヲ戒
メテ曰ク禾穀ノ實熟スルトキハ頭ヲ低ル人富貴ナルトキ
ハ頭ヲ仰ク爾等宜ク禾穀ニ倣フヘシト西川氏此ヨリ此語
ヲ以テ家訓トス忠政人トナリ質直ニシテ力數人ヲ兼ヌ常
ニ大志ヲ抱ク高久ノ領主松倉氏呂宋ヲ征スル志アリ一商

船ヲ蟻シ商人ト武士トヲ載セ名ヲ貿易ニ托シテ其ノ虛實
ヲ窺ハシム此時忠政商人トシテ呂宋ニ往ク歸ル比ヒ大風
ニ遇フ激浪舵ヲ折ル他ノ舵ヲ以テ之ニ代ヘントスレトモ
船動搖シテ將ニ覆ラントス人起ツコト能ハス忠政獨躍テ
水際ニ至リ死力ヲ出タシ遂ニ舵ヲ代フルコトヲ得テ船モ
亦恙ナキコトヲ得タリ此時忠政ハ船體ニ附着セル牡蠣殻
ノ爲ニ傷ケラレ流血淋漓タリ一船ノ人皆拜謝シテ曰ク我
々性命ノ全キヲ得タルハ實ニ君ノ賜ナリト寛永十三年又
東埔寨ニ航ス利ヲ獲ルコト甚多シ常ニ商船ヲ造ルヲ以テ
業トス家益饒富ナリ數子アリ長忠近早ク没スルヲ以テ二
男忠益家ヲ嗣ク忠益諸般ノ武技ヲ講シ又書史ニ涉ル寛文

三年其家災ニ罹リ賞財蕩盡ス此ヨリ家道稍衰フ年僅ニ三十八歳ニシテ没ス忠益ノ子ハ即如見ナリ如見少ニシテ父ヲ喪ヒ母ニ事ヘテ至孝ナリ年二十餘始メテ學ニ志ス寛文十二年京師ノ儒家南部艸壽長崎ニ來游シ徒ヲ聚メテ教授ス如見其門ニ入り濂洛關閩ノ學ヲ修メ又天文曆算ノ學ヲ講シ先儒ノ諸說及外國ノ說ヲ參酌シテ發明スル所多シ此ヨリ先キ長崎ニ林吉左衛門ト曰ヘル者アリ天文曆算ノ學ニ精シ正保中耶蘇教徒ノ獄ニ連坐シテ刑セラレ其門人ニ小林謙貞向井元舛小野昌碩吉村長藏胡麻屋了益朝日立育本山作左衛門金屋孫右衛門三島吉左衛門等アリ謙貞ノ門人ニ關莊三郎盧艸碩等アリテ各其學ヲ傳フ如見ノ此學ニ

於ケル恐クハ亦林氏ノ學ニ本ツキテ諸家ノ說ヲ折衷セル者ナラン如見ノ著述ハ大抵版ニ鏤メテ世ニ行ハル虞書曆象俗解二卷、教童曆談三卷、天文義論二卷、四十二國人物圖二卷、華夷通商考五卷、天文精要八卷、長崎夜話草五卷、町人囊七卷、百姓囊五卷、日本水土考一卷、天文和歌注一卷、天經或問注三卷、天學名目鈔一卷、水土解辨二卷、幹枝數源二卷、氣運論一卷、右旋有無論二卷、天人五行解二卷、運世年卦考一卷、紫清粹語一卷等ノ二十餘種アリ如見ノ二子長ヲ正昌ト曰ヒ次ヲ正休ト曰フ共ニ家學ヲ承ケテ著作ノ才アルヲ以テ其父ヲ助ケテ編纂ニ從事セリ如見ノ晚年將軍有徳公天文曆算ノ學ヲ好マレタルヲ以テ如見ノ名ヲ聞及ハレ享保三年七月

如見ヲ召シテ江戸ニ至ラシメ時ニ諮詢スル所アリタリ然
レトモ尊卑懸隔セルヲ以テ將軍ハ大吏ニ命シテ其意ヲ傳
ヘシメ如見モ亦大吏ニ對シテ其ノ見ル所ヲ述フルノミナ
リキ如見江戸ニ留ルコト久クシテ辭シテ長崎ニ歸ル九年
八月十日年七十七ニシテ没ス今其ノ遺書ヲ閱スルニ往々
誤謬アルヲ免レスト雖モ當時學術ノ講究未タ盡サ、ル所
アルハ何人ニモ免レサル所ナルヘシ世ニ西洋學術ノ我邦
ニ傳ハリシハ新井君美ニ始マレリト謂フト雖モ如見ガ西
洋學術ヲ傳ヘタルハ其前ニ在リテ創闢ノ功自ラ掩フヘカ
ラサル者ナリトス
余嘗テ長崎ニ遊ヒ西川氏ニ寓スルコト數年因テ如見ノ

事ヲ聞クコトヲ得タリ且諸書ニ載セタル如見ノ事蹟ニ
付テ其ノ西洋學術ヲ我邦ニ傳フルニ於テ大功アルヲ知
ル爲ニ其ノ小傳ヲ作り之ヲ筐中ニ藏スルコト久シ會如
見ノ裔孫忠亮如見ノ遺書ヲ再版シ余カ一言ヲ求ム乃此
篇ヲ錄シテ序言ニ代フト云フ

明治三十一年十一月

細川潤次郎再識

先民傳所載西川忠英傳

西川忠英。號如見。少孤。事母孝。性不喜華靡。年二十餘。始志于學。寬文十二年。南部艸壽來此。招諸生讀書立山。於時忠英從之遊。篤信濂洛關閩之學。並仰希其行事。而步趨焉。人服其文行兼優者。以此。又講於天文曆數。由古聖賢書。暨先儒諸說。並戎蠻故老之所傳。多所發明。筆之爲書。以藏于家。年五十。屬業長子。自爲退隱計。營別業于山莊。娛志林泉。殆將老矣。然於學不少廢。享保己亥。徵辟有加。以其能天文學也。忠英年已七十二。乃至東府。承顧問者數十條。特蒙賜賚。歸鄉奉旨。錄呈所著天文地理之書。厥後五年。以甲辰秋九月卒。所著兩儀集說九本。怪異類纂二本。右旋有無論。幹枝數原。天人五行解。

Appendix C: Introductory texts from *Nishikawa Joken isho* 西川如見遺書

西川如見傳
運世年卦考。氣運盛衰論。各一本藏家。其餘如天文議論等書。又有十二部ハルニ行世。

西川如見逸事

泰平年表抄出

泰平年表有徳院殿ノ部延享二年ノ條ニ曰ク同年十月十四日貞享曆違ヒ有之仍テ補曆之事西川忠次郎へ被仰付注ニ曰ク公潜邸ヨリ既ニ英意ヲ天文曆算ニ用ヒサセラレ即位ノ始寄合建部彦次郎へ親問セラレ又京ノ銀座中根文右衛門へモ下問アリ紀州良工加藤某へ大渾天儀ヲ作ラシメラル享保三年御製作ノ測午表ヲ吹上御表へ設ラル同年西川如見ヲ長崎ヨリ召テ其著述ヲ呈進セシメ延享元年簡天儀ヲ御親製アリ此年神田佐久間町へ天文臺ヲ設ケ簡天儀ヲ置ル又此補曆寛延二年ニ至テ事ナリ又土御門泰邦へ校合セシメラル惜哉公薨御其事中頃ニ近ク神田天文臺モ寶曆

西川如見遺書

七年ニ廢シタリ

又同書惇信院殿ノ部ニ曰ク寶曆三年十一月八日冬至京都
土御門三位安倍泰邦梅小路館ニ於テ立表測景推歩規式ヲ
行ハル江戸ヨリ天文方澁川圖書西川忠次郎如見男上京注ニ曰
ク澁川家遠祖ハ安井算哲ト申碁方相勤罷在候處天文曆算
功者ニ仕候段憲廟達御聞貞享元年十二月朔日碁方被成御
免天文方被仰付候テ貞享曆撰述被仰付始テ御頒行ニ相成
候西川如見ハ長崎へ歸府被仰付候

緒言

余カ九世ノ祖諱ハ忠英如見ト稱シ求林齋ト號ス世々長崎ニ住シ商販ヲ業トス如見君ニ至リ學ヲ好テ廣ク和漢ノ書籍ニ涉リ又外國ノ事情ニ通曉シ特ニ天文曆算ノ學ニ精シク著述ノ多キ二十餘種ニ至ル皆版ニ鏤メテ世ニ行ハレタリ其詳ナルコトハ細川先生作ル所ノ如見傳ニ在リ爾後百七十年許原版已ニ亡ヒ印本漸ク減ス想フニ此ノ如クニシテ久キヲ經ハ遺書ノ存スル者加少ク遂ニハ得テ見ルヘカラサルニ至ラントス因テ多方ニ訪求シテ虞書曆象俗解、天文義論、四十二國人物圖、華夷通商考、天文精要、長崎夜話草、町人囊、百姓囊、日本水土考、天經或問注、天學名目鈔、水土解辨、運

西川如見遺書
氣指南後編、七曜右旋辨論、五行解、建正辨、兩儀集說ノ十七種
ヲ得タリ之ヲ活字ニテ印刷シ以テ流傳ノ廣ク且ツ遠カラ
ンコトヲ謀ル其他ハ當ニ得ルニ從テ再版スヘシ凡ソ子孫
タル者ノ常情トシテハ祖先ノ勤勞ヲ湮滅セシムルニ忍ヒス
其ノ遺書ノ如キハ祖先精神ノ凝結セル所ナルヲ以テ必ス
之ヲ傳ヘサルヘカラス抑如見君ノ著述當時ニ在テハ固ヨ
リ有用ナレトモ今日ニ在テハ不用ニ屬スル者少シトセス
然レトモ亦後人ノ參考ニ供スヘキ者ナキニ非ス讀者其ノ
取ルヘキヲ取り捨ツヘキヲ捨テ、可ナリ

明治三十一年十一月

西川 忠 亮 謹 識

Appendix D: Nishikawa Joken's biography in *Nagasaki senmin den* 長崎先民傳

西川忠英。號如見。少孤事母孝。性不喜華靡。年二十餘、始志于學。寬文十二年、南部草壽來此。招諸生讀書立山。於時忠英從之遊。篤信濂洛關閩之學。並仰希其行事、而步趨焉。人服其文行兼優者以此。又講於天文・曆數。由古聖書暨先儒諸說、並戎蠻故老之所傳、多所發明。筆之為書以藏于家。年五十、屬業長子。自為退隱計。營別業于山莊。娛志林泉。殆將老矣。然於學不少廢。享保己亥、徵辟有加。以其能天文學也。忠英已七十二、乃至東府、承顧問者數十條、特蒙賜賚。歸鄉奉旨、錄呈所著天文地理之書。厥後五年、以甲辰秋九月卒。所著『兩儀集說』九本、『怪異類纂』二本、『右旋有無論』、『幹枝數原』、『天人五行解』、『運世年卦考』、『氣運盛衰論』各一本、藏家。其餘如『天文義論』等書、又有十二部行世。

Nishikawa Chūei, art name Joken. He became an orphan [of his father] in his youth, and was piously devoted to his mother. His nature was not to rejoice in opulence. Past the age of twenty, he began to set his heart on learning. In the twelfth year of the Kanbun era [1672], Nanbu Sōju came here [to Nagasaki]. He attracted many disciples to come read the [Confucian classic] books at Tateyama. At times, Chūei would follow [Sōju] in his outings. He believed deeply in the scholarship of the Song masters. Besides, he looked up to their deeds and followed in their footsteps. It is by these means that one can perform [the quality of] excelling both in one's writings and in one's actions. He also lectured on celestial signs and calendrical calculations. He clarified numerous things relying on the books of the ancient sages as well as the various explanations of previous [Confucian] scholars and putting side by side what the barbarians and the elders conveyed. He wrote these down and made them into books to preserve them in the family. At the age of fifty, he entrusted the business to his eldest son, and of his own accord carried out his plan of retirement. He engaged in other activities in his mountain cottage, finding pleasure in dedicating himself to gardening, deciding merely to grow old. However, in his scholarship, he did not slacken in the least. In the year of the Yin Earth Pig of the Kyōhō era (1719), there was a summons [from the shogun], due to his competence in the scholarship of celestial signs. Chūei, already seventy-two, then proceeded to the Eastern Court, where he was consulted on several tens of issues and was especially rewarded. Upon returning to his hometown, he

Appendix D: Nishikawa Joken's biography in *Nagasaki senmin den* 長崎先民傳

received the [shogunal] order to copy his writings on the celestial signs and the terrestrial principle and present them [to the shogun]. Five years after that, he expired in the fall, in the ninth month of the year of the Yang Wood Dragon [of the Kyōhō era] (1724). His writings “Collected explanations on heaven and earth” in nine books, “Compilation of anomalies” in two books, “Discourse and discussion on the existence of the rightward rotation”, “The numeric origin of the stems and branches,” “Explanation on heaven, human, and the five agents,” “Investigation into the yearly hexagrams of the flows of this world,” “Discussion on the intensification and deterioration of qi flows,” all in one book each, are preserved in the family. Besides these, among books such as “Discussion on the meaning of the celestial signs”, there are other twelve in circulation.

Appendix E: Letters from Ro Sōsetsu 盧草拙 to Watanabe Gunzō 渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

First letter (August 22, 1726)

○盧草拙答渡邊書中一ツ書

[頭注]草拙ハ享保年怨見ト同しく江戸にめされ逗留して御尋も有し也。相見せずといへとも詳なる事を聞き。知慎其時閑暇なくして遇事を得ず。雪山の事をよく知たる人也。雪山傳を作れり。一見して返しぬ。其傳の文愚意ニかなハぬ故草々ニ一見せし也

一長崎にて天文と申候は先年萬治川〔朱〕町に小林謙貞⁽¹¹⁾と申人御座候。此人より初りたる事にて御座候。謙貞ハ弟子も諸方に御座候。私家祖并父二代ともに右の謙貞と旧友にて諸事私傳申候儀も御座候。然に此学の根本は西洋按針役の者より相傳いたし来り申候付。圖ハ御座候て書物と申て全部の物は無御座候。謙貞も一生の筆力ハ家蔵に満申候ほと御座候へとも終に題号を付申候て撰申書は無御座候。

一長崎に假名天文鈔と申書二冊、諸人皆写し置申候書物御座候。又ハ三國運氣通要鈔とも題し申候。隨分天文の道理分明に聞へ申候。此書ハ先年淺野長澤様ト申候醫師江戸より御下り被成候て、南蛮の目付澤野忠庵⁽¹²⁾に被仰付候て西洋の天文の学の趣を被爲書候。其節忠庵ハ本より日本文字は讀申候得共和字を綴義ハ成申さず候ニ付、光源寺住寺⁽¹³⁾松吟と申し候僧筆譯仕候。就夫此書を世に光源寺天文書とも申候。松吟カ本筆の書物は吉村郷右衛門⁽¹⁴⁾カ方へ取持可仕候と奉存候。此者祖父ハ末次平蔵家来にて候付、其節末次平蔵方へも松吟直書納マリ申候。其書を相傳へ居申候。且又此二冊の書の内を段々挙申候て辨破致候書物を乾坤辨説と申候て四冊御座候。是ハ只今ノ元成カ親ニ元升⁽¹⁵⁾と申候者御座候。後は京都ニ上り大醫の名を振申候。此人撰作致申候。然とも天文の難破に於不分明の義も有之候。

右申上候趣長崎天文者ノ由来にて御座候。忠庵は終に天文の弟子ハ無御座候。外科の弟子は多御座候て、於今吉田家の祖と致被申候。乾貞ハ弟子も諸方に多御座候へとも家を起シ申候程ノ者無御座候間今は断絶ニ及申候。此弟子ノ隨一を関庄三郎⁽¹⁶⁾と申候。是モ子孫御座候へとも学文ハ傳り不申候。近来ハ西川怨見⁽¹⁷⁾様々の書物を撰被申候て尤重寶之至ニ御座候。

[頭注]知慎云、草拙は西川怨見を甘心せざりと見へたり

私方ニハ家傳書又ハ自撰の書物ととも無御座候⁽¹⁸⁾。図の類は持傳居申候。御用ニ⁽¹⁹⁾御座候ハ、何ニても可奉懸御目候。被仰下候趣承候て何ニても所持不仕と御返答申候て秘惜仕候様ニ被思召上と奉存候間、縷説なから長崎天文由来を申上候。尤自作に何か書立置可申とも心願御座候へとも、御存被遊候通役儀旁不得隙存念いまたに果不申候。年来御屋敷へも参上仕候へとも様々奉得貴意候間も無御座候て御互に残念奉存候。乍然當年も御發駕までハ数月ノ間御座候間⁽²⁰⁾病人さへ快罷成候ハ、折々以参上可奉得貴意候。右申上候通図の類ハ少々所持仕候間何ニても御用次第ニ被仰下候ハ、可奉備貴覽候。以上。

七月廿五日

Appendix E: Letters from Ro Sōsetsu 盧草拙 to Watanabe Gunzō 渡邊軍
藏 transcribed in *Sokuryō higen* 測量秘言

Second letter (August 22, 1726)

○盧草拙答書

御再報忝奉拝見候。仍て図類何ニても可懸御目〔朱〕之も由被仰下候。定て十二會圖渾天儀の類は先年も西川氏より御覽被成候と奉存候。珍敷も被思召間敷と奉存候。輿地の学の儀ハ西川氏も天文程ニハ無御座候ニ付地図ハ不宜所も相見へ申候。先輿地ノ小図を進上申候間御写可被成候。所ノ名は此方ニて書付可進上仕候。名付の御座候圖モ所持仕候へとも是は図形不宜候ニ付此図を懸御目申候。扱又自撰の書ノ事御聞及被遊候由只今存當申候。日外孫平様ニ自撰ノ外科の書御座候。貴公様外療を御心懸被遊候様ニ承及申候ニ付可奉懸御目と御物語申候。左様の御傳話ニも御聞及被遊候哉と奉存候付。乍序右之外科書一冊懸御目申候。御用ニも成申ましき儀押て如何敷奉存候へとも内々存寄申候儀ニ付為持奉備貴覽候。天文方⁽²¹⁾の図定て段々御覽可被遊候付。御對話候節未御覽被成候物所持之内御座候ハ、何ニても可懸御目候。曾て秘惜ニ及不申候。

一乾坤弁説ノ事ハ定て向井氏より先年御借被成候半と奉存候。此儀ハ懸御目候節大意可申上候。是は少し子細も有之候事御座候。

一澤野忠庵は本南蛮人ニて日本へ歸化仕候て日本形ニ成申候。忠次郎と名キ居申候。京都ニ在住申候を板倉様御所用の時分御吟味之義ニ付 公儀より三十人扶持被下候て長崎⁽²²⁾五嶋町に被召置候て宗門の目付ニ被仰付候。此相役ニ後藤了順と申者御座候。是も同前ニ御扶持被下長崎中の宗門ヲ吟味仕候。只今御屋敷ニ相納申候町々の宗旨踏繪帳面は先年ハ右兩人方へ相納申候。此兩人死去之後ニ子孫へ役儀相傳り不申候ニ付、右之帳面皆々御奉行所江納り申事ニ罷成候。忠庵は本ハ夷人ニ候へとも此方の太平記等ハ讀ほととの和才ニ成申候由。其子を忠次郎と申候てヒロウトノ巧者ニて御座候。堀ヲ杉本忠意⁽²³⁾ト申候て外科ニて御座候。忠意事江戸へ被 召出候由承及申候。於今家筋御座候由承置申候へとも委不奉存候。

[頭注]知慎云、忠意の後今に有。忠庵は忠澤か。堀にて外科の弟子たるによりて忠の字を傳へたるなり
一小林謙貞事ハ元來長崎萬屋⁽²⁴⁾町の者樋口久兵衛と申者の子ニて御座候。自身も少年の時ハ樋口謙貞と申候。是ハ林光生^{シンスサイ}⁽²⁵⁾と申者の弟子ニて御座候。忠庵と同時代ニて御座候へとも弟子ニてハ無御座候。忠庵ハ外科の弟子ハ御座候へとも天文の弟子ハ無御座候。謙貞ハ儒学無⁽²⁶⁾御座候者ニて御座候。元成・恕見等の咄に御聞被成候とハ些相違事も御座候。其段ハ御對話之節委細御物語可申上候。

一天經或問の事被仰下候。近年來唐の書物ノ内天文の書ニて⁽²⁷⁾是程の書ハ無御座候。中華ノ天文モ明朝以前ハ殊外不分明の事共ニテ、西洋の天文を承申候て始テ千歳ノ疑ヲ開申候事ニ御座候。然ルニ此内ニ所々誤御座候儀ハ不存候。右旋左旋の兩説の内左旋の説を用申敷と奉存候。此義不同心ニ御座候。左旋ノ説ハ宋儒の議論ニ始り申候て天文家ニ取不申候義ニ御座候。

七月廿五日

Appendix E: Letters from Ro Sōsetsu 盧草拙 to Watanabe Gunzō 渡邊軍
藏 transcribed in *Sokuryō higen* 測量秘言

Third letter (September 23, 1726)

盧草拙答書

一御不審之趣被仰下候。私方へ相傳仕候儀書付候て進上申候。只今にてハ殊外秘説ニ罷成候古來ノ事を存候者^{[朱]無}△御座候ニ付秘密ニ致申候。右⁽⁷⁶⁾之三説之内私方へ用來り申候は乾貞家の説にて御座候。

[頭注]知慎按、此右之字ハ左ノ字也⁽⁷⁷⁾

近年は怨見之新説又ハ元成流之説大抵世間へ傳ハリ申候。古説を存候者も無御座候。新古ノ説何れ可然候哉算數不案内御座候故難斗奉存候得共、度と申は星度ヨリ起り申候ニ付是にて相考相知り申候法を本法と奉存候。前任御尋秘匣ノ内にて見出申候まゝ書付進之申候。右⁽⁷⁸⁾の西洋人ハ慶長元和の間ノピロウトにて候之由私書ニ御座候。以上。

[頭注]此右も左タルヘシ⁽⁷⁹⁾

八月廿八日

西洋ノ一度ハ十七里半ヲ爲^レ度ト。

日本路四十五里六町ヲ爲^レ一度ト。

マネイゴ⁽⁸⁰⁾サル之説也。右ノ法ハ日本ノ曲尺ニテ九間一尺⁽⁸¹⁾ニシテ三千七百七十七間ヲ一里トシ十七里半ヲ以テ一度トス。

又

日本路五十二里廿八町六反^{ヅン}ヲ爲^レ一度ト。

アンジ之説也。アンジハ本西洋ノ者ニテ元和年中ニヤヨウスト云者ト南船ニテ來り⁽⁸²⁾。後ハ江戸ニ住

シ三浦安針ト名ヲ被下候。

[頭注]知慎云、今ノヤウスガシ、ヤウスニ被下候町屋也。アンシン町、アンシニ被下候町屋也。因ニ云、今の増上寺、もと安針町のあたりに有し也。町年より奈良屋に古キ御証文有。彦坂壱岐守とあるかと覚ゆ。其文に増上寺のあとの地安針町なみに三人支配すへき由也。今のならや三代の旧交なれば知慎したしく見たる所也。

又

ヒロウト之一里ハ日本ノ二里十四町一段五尺二寸也。是ヲ合テ四十二里ヲ爲一度。

右ハ関庄三郎ヨリ相傳來候。惣シテ昔ノ天文者ハ何れも四十二里ヲ一度ニ用申候先通法ニ候。近来怨見ノ一説モ御座候^{△(83)}。殊外短キ度法^{[朱]古}△も有之候。皆々臆説と被存候。如何トナレハ紅毛并中華⁽⁸⁴⁾ヨリ吟味致候ニ付數ノ上ヨリハ髓ニ聞へ申候へとも、度數ト申ハ星度ヲ取テ試申事故ニ強ニ地ノ尺寸ヨリ起り申候事ニテハ無御座候。中々三十里ノ南北ニテ一度ノ高低ハ無御座候付、南北相距事四十里餘ニ及不申候てハ星ノ高低知レ申間敷候。星ヲ試不申候テ尺寸ノ積リヨリ申候説ハ數ハ髓ニ候テモ難用奉存候。

Appendix E: Letters from Ro Sōsetsu 盧草拙 to Watanabe Gunzō 渡邊軍
藏 transcribed in *Sokuryō higen* 測量秘言

Fourth letter (November 17, 1726) and fifth letter (undated)

盧草拙答書

昨日は乍暫時奉得御意候。其節持参仕候明史紀事本末一本、此内ニ天文ノ十四ヶ條説見へ申候。此所ハ御拔萃被成被置候て可然奉存候。先年⁽⁹³⁾恕見へも見せ申候。殊之外珍敷被存候由写置被申候。尤天經或問之論も此十四條ノ説を載申候。

一ヒロウトの書一本又々懸御目候。此書も何様文盲ニ書申候へとも西洋曆之法ヲ少々書申候付懸御目申候。雜稿の内何か御用成可申物をと見申候へとも皆々不珍もの斗ニ付不能其儀候、云々。

十月廿四日

盧草拙答書

一御手前へ御写被成候一卷校合点付候様ニ被仰下候。随分奉得其意候。世界之図も小原勘八⁽⁹⁶⁾へ相頼置申候。出来候ハ、早々進上可申候。

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

First letter (August 25, 1726) and second letter (September 5, 1726)

向井元成答書

天之高さ積り江戸表へ指上申候儀，被仰下候通古来天之高サ之積り其高サ之里数ハ諸書に出申候へとも其算法相知不申候。先年怨見・草拙江戸へ参上仕候時分兩人ニ御尋御座候へとも何も算法ハ不存候由申上候。然所ニ草拙申上候は此算法は⁽²⁸⁾元成工夫仕候由申上候ニ付，右之算法書付候て指上候様ニとの御事故算法を書付指上申候。天之高サと申候ハ如仰九天と申候へハ日月五星衆星之天と惣動天と合テ申候段ニ御座候ニ付一様ニ難申候。先ハ日輪天迄を積り申候て其高サヲ申候。其法は日輪夏至之日ニ此地ノ南ニ幾度に在と相考候て，八尺之表を立申候て其影幾尺と考へ候へは表ハ股ニ成候。影ハ鉤に成申候。此算法相應に表より地心迄を合テ股と仕候。相應⁽²⁹⁾ニ影ニテ此大鉤を求候て自是積出候算法ニて御座候。然とも寸尺を里数に直し候事，一度之里数諸家説異同御座候ニ付一概に相究候てハ難申上候由申上候。其算法を書付上申候事ニ御座候。別て秘候儀も無御座候。即御傳受町見術にて御座候。重ても書付候て進上可仕候，云々。下略。

七月廿八日

又御手紙忝拜誦仕候。残暑尚甚敷御座候へとも，云々⁽³⁰⁾。然ハ天ノ高サ積り候⁽³¹⁾儀被仰下候。別て秘術も無御座候。即町見之術，勾股弦之相應之術ニて御座候。其里数之儀家々之一反説不同ニ候故一己ニ相極候てハ難申上候。貴公之御尤ニ思召候説を以て数を御立可被成候。其術は右申候通之外ハ無御座候。其内弧矢弦之方を用し所一ツ御座候。是亦諸家之圓法御存知被成候通一同ニ無御座候⁽³²⁾付，何之方ニても御用被成候て亘敷を御用可被成候。猶亦町見之方ニ御合点無御座候所有之候ハ、田邊八⁽³³⁾右衛門被召寄御尋可被成候。且又世界四分五分之儀別紙ニ申上候。私儀此間残暑ニ中り，云々。下略。

別紙

世界ヲ四ツ分候時ハ

アジヤ ユロツハ リミア⁽³⁴⁾ アメリカ
亞細亞 歐羅巴 利未亞 亞墨利加

五ツニ分ケ候時ハ

アメリカ^[朱]ニ
亞墨利加ヲ南北ヲ分チ申候

六ツニ分ケ候時ハ

メハラニキヤ
墨尾臘泥加 是ハ極南方ニ其地ハ蛮人江⁽³⁵⁾毛モ未
委細ニ不存候故図モ略申候。

リミア之地其方角之事御尋被成候。地球御存知候通混圓なる物ニ候へ共⁽³⁶⁾東西を指テ難申上候。併今日本を中に仕候図ニ依て申候は西南の隅ニテ御座候。其出崎ノ所ハ咬嚙吧より紅毛に通候海路ニテ殊ニ南方ニ突出仕候由兼テ承候。利未亞ノ義ハ歐羅巴人唐ニテ作り候世界ノ図説等ニ出申候。如何様阿蘭陀南蛮にて其詞ノ相違と奉存候。紅毛申候アフリカハ何ノ方ニて候哉御聞合可被成候。猶重て可申上候。

八月十日

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Third letter (September 6, 1726) and fourth letter (September 8, 1726)

○元成答書

先日御尋之日天高サ積り術之儀，先日之書付も猶御不審御座候由。町見術^{[朱]御}候得心之上ハ指テ御不審可被成儀とも不奉存候。餘り高妙之理も有之候哉と御工夫却テ穿鑿ニ陥候故御不審と奉存候。即凶ヲ仕候テ進申候間御覽可被成候。江戸へ上候は⁽⁵⁰⁾是程微細ニ解圖ハ仕上上申候。皆勾股弦術ニテ只其端ヲ求得候工夫迄ニ未皆平生之算法ニテ御座候。御心静ニ御覽可被成候。病中自筆ニ書畫共ニ相認候ニ付老眼之儀御座候へハ誤字落字も多御座候半奉存候間御推覽可被下候。利未亞之事地方申上候へ共書中迄ニテハ猶御不審も御座候半と奉存候ニ付小図一枚写させ進上仕候。此図歐羅巴人之作之由ニ候。私義も此間別て残暑痛⁽⁵¹⁾，云々⁽⁵²⁾。

八月十一日

又

乍貴報御手紙拝誦仕候。然ハ書付進申候圖解等得と御工夫被遊候。八右衛門へも御相談可被成候。一通之算法入組六ヶ敷事も無御座候。

一弧矢弦之算法ハ和板之算書ニ家々之法御座候。何ニても御好次第ニ御用可被成候。尤八右衛門・多十郎⁽⁵³⁾も^{[朱]知}存知可申⁽⁵⁴⁾候。

一圓法之儀被仰下候。圓周法之儀ハ古今其数難窮候ニ付其術も不正當候。徑一圍⁽⁵⁵⁾三之法ハ聖人の云ニ候得共是ハ其成数を挙て被仰候事候。其以後徽率，密率，又ハ近代唐より傳來候算書之説各不同候。本朝にても算学諸家之説各又異御座候。何も皆正的ニテ無御座候。改算記迄ハ徑一ニテ積七八五五を用テ周ヲ三一四二と仕候法ヲ用申候。古今算法記ニハ徑一積七九周三一六

ヲ用申候。改算記よりハ密細ニ御座候得共猶正當之事ニテ無御座候。先年阿蘭陀相尋候得共圓周法之儀難相窮由申候。然共阿蘭陀ニ用申候は徑七尺ニテ周二丈二尺之法を用候由申候。是ハ即劉徽^[カ]か法と同前ニ御座候。拙者愚見ニ奉存候は，凡角御座候物ハ萬角にても其法術御座候ト^[カ]て可相窮候。至圓ハ其数難相窮義奉存候。其理ハ圓ハ天之象陽ニテ御座候。陽ハ生々而無窮候。方ハ地之象陰ニテ御座候。陰ハ成之而有定候。生々不息故ニ一尺之法を以一丈之法と難成其術難尽。成^[シテ]之有^[ル]定ハ其術可窮之候。圓中之徑ハ陽中之陰ニテ其数推て可知之。方中之斜ハ陰中之陽ニテ其数又難測計御座候。是天生自然之道理ニテ御座候と得心仕候ニ付圓周を相極候⁽⁵⁶⁾用申候法は無御座候。此義ハ自己之懸⁽⁵⁷⁾見ニテ向他テハ難申候得共，乍慮外任御心安於算術申上候。先私算師沢口一之⁽⁵⁸⁾と申候人も七九之法近候由ニテ用申候。依之弧矢弦之術も私定テ用之候術ハ無御座候。其外度数里数等之儀自身ニ表を立テ日影ヲ窺ヒ遠近之地方ニテ相測候事紅毛西洋人之輩之測量之如ク仕候か，又庚山曆代之天学者受^{[朱]唐}命ヲ相測候様ニ不仕候てハ自分ニ難窮奉存候。只一處或ハ二三十里之間纔なる測器を以測之候て是を正的と難仕候ニ付，度数里数共ニ只紅毛人等ニ承候所を用申候。是ハ度々承合候ニ阿蘭陀之説相違候哉，通辨之違候哉，其説モ又一候。市兵衛ニ被仰付候得と⁽⁵⁹⁾御間可被成候。然とも通辨之人算学無之候得ハ難通所御座候。村賀氏⁽⁶⁰⁾算学者ニ候間被呼召通辨之時分問難被仰付候ハ、委細ニ相知可申候。右之通ニ御座候故私定直日^{[朱]置}[カ]度里圓弧之法ハ無御座候ニ付書付進上不仕候。御使相待候事久敷存候ニ付早々及御再報候。以上。

八月十三日

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Fifth letter (September 11, 1726)

又

御手紙拜見，云々。然ハ度数里数等之儀段々御吟味被成候間追て御積り立可被成由。乍御苦勞御仕立被成候^{〔朱〕ハ、}又後人之助にて御座候条，何とそ御成就可被成候。

一夏至干中之日影一尺六寸之事被仰下候。是ハ古書之説にて御座候。此外も少々分寸之差御座候へとも算法六ヶ敷候ニ付一尺六寸之儀申上候。即別紙ニ書付進上申候。表八尺と申候も古法にて御座候。然とも是ハ其後代に殊外長き表を被用候事も御座候。表八尺を以申上候は八⁽⁶¹⁾にてハ除法ニ便御座候ニ付無不盡之法故申進候。拙者去々年五月朔日夏至ニ二尺之表を立候て日影を測候ニハ、影三寸四分八厘御座候。八尺之表ニ仕候て積候へは一尺三寸八分にて御座候。一尺六寸よりハ二寸二分短御座候。是ハ長崎之地南方ニより^{〔朱〕候}故北極出地事卅三度弱之故にて御座候。其節如見ニも此説

を物語申候所成程算数相應之由申候。然とも表短候へ共厘毛之所難測候ニ付成候事ニ候ハ、力之及長ほと互敷道理ニ御座候。

一月天五星天衆星天之測法之儀是亦測法無之，漫ニ申候者とハ不被存候。此測法も日天同前ニ古書ニ其法ハ見へ不申候得共道理ハ測候筈ニ候。月ハ光御座候ニ付光影ヲ受テ可測候。其他ハ此地一所ニ居候てハ難測候。紅毛西洋之諸方ニ隔数千里候て測候にて無之候ハ、分明なる間敷愚案奉存候。猶彼方手近なる法も御座候哉不奉存候。此義ハ工夫仕候事も無御座候。

周髀算經曰、

周髀八尺夏至之日晷一尺六寸。髀者股也。正晷者勾也。

如此御座候。周髀算經ハ周公之作之由申傳候。其以後歴代表影不及一尺六寸者モ御座候。宋元嘉十九年ニハ交趾ニ表ヲ被立候事も御座候。是ハ夏至之影却テ南ニ御座候事三寸二分由ニ御座候。

長崎

北極出地三十三度弱

去夏至道九度半強

去赤道三十三度弱

去北極五十七度強

八尺表夏至日影

一尺三寸八分

享保九年甲辰五月朔日夏至日午測之。

阿蘭陀詞ニテ

七日宛ノ付名

同ラテン詞

ソングク

ソウリス

金

マアングク

ルウネ

銀

デンギスダク

マルテス

鍍

（デインスダクとも

ウ、ンスダク

メリクウリス

水銀

ウンスダクとも

ドンドロダク

ヨウビス

錫

フ⁽⁶²⁾ンイダク

ヘネーリス

銅

サアトルダク

サトルニス

鉛

紅毛十二宮 并 十二月名

羊

春分

マ

アリエス

阿蘭陀

マールト

三月

牛

ウ

ダウリス

阿蘭陀

アツブリル

四月

二子

ニ

ケミニ

同

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Fifth letter (September 11, 1726) - (continued)

	マイ	五月	<p>昨日乍御報，云々。然は五星ヲ測候儀，紅毛西洋人之數千里ヲ隔候て相測候様ニ不仕候ては難成御座候半由申上候。此測様ニ終ニ工夫仕候事も無御座候ニ付存寄も無御座候。夜前⁽⁶³⁾老病夜長ニて寢覚かちニ御座候ニ付右之測様ヲ工夫仕見候ニ，大形ハ此地ニ罷在候ても相測候事推其理て相成可申事ヲ工夫仕出候ニ付，即左ニ申上候。猶此上御工夫可被成候。其理ハ日天ヲ測候と同然ニて，只日影ヲ此方ニ移候と此方より星ヲ窺申候差別ニて御座候。</p> <p>一星天之高サヲ測候ニ，先其星之在所此地上之天ヨリ幾度南方ニアルト云事ヲ測知ルヘシ。</p> <p>一測器一ツヲ作ル。其器ハ圓形ヲ四ニ割タルーツ分ナリ。玉圓ニアラズ平圓板ナリ。其四分一ノ周ニ三百六十五度ニ半ヲ目ニ刻ミ，切口ノ一方ニ小管ヲ付ケ△⁽⁶⁴⁾是ニ糸ヲ付テ其糸ハ板ヨリ少シ長クシテ末ニ重リ付テ板ヲ立テ，星ヲ窺フ時此糸直下リ垂テ上下ノ直ヲ取り候爲ニ候。扱窺フ所ノ管ヲ弦トシ，其小口ヨリ糸ニ至テ横ニ平カニ度ツテ勾トシ，其糸ノ圓ノ中心ヨリ下ノ横</p> <p>勾ト合交スル處ニ至テ股トシテ小勾股弦ヲ得候。^{[朱]得}此糸ノ股ハ即立表ト同然ニ候。此平勾ハ即日影ト同理ニテ御座候。此管ノ人窺候穴ノ下口ヨリ地面ニ至テ幾尺ト，地面ヨリ地心ニ至テ幾万里ト，小股ト三併シテ日天ヲ測候。算法ノ如ク大股トナシ，大股數ヲ以テ亦相應術ニテ大勾ヲ求，其後術ハ皆日天ヲ測候術ト同理ニテ相知レ可申候積リニ御座候。併昨日申上候千里ヲ隔候測量之如密近ニハ御座有間數奉存候。一夜之工夫倉卒なから先御工夫之一助とも相成可申哉と如此御座候。別ニ器図仕進申候。</p>
蟹	夏至		
㊦	キャンセル	同	
	ユーニ	六月	
獅子			
㊧	レーヨ	同	
	ユーリ	七月	
女			
㊨	ヒルコ	同	
	アグストス	八月	
秤	秋分		
㊩	リフラ	同	
	セツプテンブル	九月	
蛇虫			
㊪	スコルピユス	同	
	ラクトーグル	十月	
弓人			
㊫	サギタアリユス	同	
	ノウヘンベル	十一月	
野牛	冬至		
㊬	カベル	同	
	デツセンブル	十二月	
水人			
㊭	アク ^ア ーリユス	同	
	ヤニワーリ	正月	
魚			
㊮	ピシス	同	
	ヘーブルワニ	二月	

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Fifth letter (September 11, 1726) - (end)

一昨日も書付可進と奉存候得共不能其儀ニ、立表之影差之事私覚候通書付進申候。此外ニ諸書ニ御座候ハ只今老病故相考候ニ不及候。先此分申上候。

一周髀云、髀長八尺夏至之日晷一尺六寸。

註云、五⁽⁶⁵⁾八尺表、今夏至影一尺六寸、冬至影一丈三尺五寸。

一尚書攷靈曜云、永影一尺五寸、短影一丈三尺。

一易緯通卦驗云、夏至影天⁽⁶⁶⁾有四寸八分、冬至一丈三尺。

一劉向洪範傳云、夏至影一尺五寸八分。

一後漢志云、夏至影一尺五寸、冬至一丈三尺洛陽。

一魏景初、夏至影一尺五寸。

一晉姜岌、夏至影一尺五寸。

一宋建康在江表、冬至影一尺三寸。

一宋大明祖冲之曆、夏至一尺五寸、冬至一丈三尺。

一周禮、冬至一丈三尺、秋分七尺三寸六分。夏至⁽⁶⁷⁾尺五寸。又一說春秋分七尺三寸。

一宋元喜十九年交州、夏至影在表南三寸三分。大康地理志云、交趾去洛一萬千里。

一張衡靈憲・鄭玄周禮註・王蕃・姜岌等說共曰、日影地於千里而差一寸。周世樟以此說爲不立深信。^{[宋]足}

一元郭守敬所用之表^{[朱]倍}五信于右、四丈也。測景之地凡二十七處。

大概覚候分書付進申候。猶詳ニ御考可被成候⁽⁶⁸⁾。

八月既望

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Sixth letter (undated)

又

一星天窺候術モ先日之日天を窺候術と同前ニ御座候。算術ハ指テ六ケ〔朱〕儀ニモ敷仙も無御座候条、八右衛門カ多十郎ニ一通御聞被成候へハ餘リ御工夫も費候儀無御座候。只勾股弦、弧矢弦之二法迄ニ御座候。世上板行之算書ニも皆出候事。只地面ヨリ測候テハ地之中心より測候と少差御座候道理ニ御座候へとも西洋紅毛ノ測法も皆地面之算法ニ候。且地ハ其圓徑三萬里と古法ニも申候へとも天ノ一度之廣サニ比候へハ萬分之一ニも及不申候故其通ニ仕候て用來申事候。日月五星等と地球大小之差定ヲ御存知可被成候へとも、若御入用ニ候ハ、古

書之趣書付候て可進候。

○長崎遠見番觸頭書付

覺

一小瀬戸御番所より唐船見出候節御註進申上候道法之儀、古来より槩ニ里数相知申候嶋々ニ見合夫ニなぞらへ凡積を以申上候。

一御番所より極て晴天之節、平日ニて五嶋之山々大形ニハ相見へ申候得共唐船日本船之見分ハ拾里之内外ならてハ難相究御座候。尤人之眼力次第ニて貳里三里之違ハ御座候。

一遠目鏡ニて極晴天之節〔朱〕は七三拾四五里程ハ槩ニ見へ申候。尤其餘も見へ申候得共唐船日本船之分不分明候。

一春夏秋冬之内ニてハ秋山別て遠く相見申候。〔朱〕春此も少々相見へ申候得共夏冬二季遠山見へ兼申候。

一朝暮之内ニてハ夕山遠く相見へ申候。

御番所より見渡之嶋々道法并方角之覚		
一鼠嶋	午ノ方	五丁程
一高ほこ嶋	午未ノ方	拾六丁程
一深堀村	同方	二里程
一大中瀬戸	未申ノ方	二里程
一横島	同方	三里程
一三ツ瀬	同方	六里程
一高嶋	同方 <small>少申ノ方寄</small>	三里余
一いわう嶋	申酉ノ方	三里程
一四郎か嶋	未申酉ノ方	壹里程
一中之嶋		
一松島		
一福田崎	戌亥ノ方 <small>少戌ノ方寄</small>	壹里程
一引島	戌ノ方	拾里程
一上五嶋	戌ノ方	三十里程
一下五嶋	酉ノ方	四十八里程

右嶋々之道法古来より申傳候通如斯御座候。以上。

午八月 遠見番觸頭 日高刑部左衛門
同 福田関右衛門

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Seventh letter (September 22, 1726)

元成答書之末

追啓

地周之積リノ事難知，此間和蘭ニ御聞被成候所，紅毛ノ一度ハ十五里ニテ一里ハ日本ノ一里二十三町余ニ當候由。是ニテハ地周日本ノ九千里程ニ相見ヘ申候段々仰下候通ニ御座候。此説先年私和蘭ニ承候説ト同事御座候。惣テ和蘭ニ四度承候。皆々少々相違御座候⁽⁶⁹⁾。和蘭ニ天文者無之故ニ候乎，通辨ニ算学者無之故ニ候乎，不審ニ奉存候。古書ニ出候ハ唐路ノ積リニテ，毎度二百五十里，一周地九萬里計ト御座候。日本路ト唐路トノ違ハ唐ノ一里ハ凡日本路七町計ニ當候。積リト申候時ハ或ハ和蘭之一度ハ日本ノ四十五里ニ當ルト古来申傳候。唐船ノ御船頭嶋谷見立⁽⁷⁰⁾ハ四十二里程ニ當ルト申候。如見ハ一萬四十⁽⁷¹⁾里弱ト申候。元⁽⁷²⁾地周十二萬里ト申候ヘハ凡ハ日本ノ一萬六千里程ニ候。先ハ昔蛮人長崎ニテ人に傳候数ハ地周一萬六千二百里ト申説御座候。是ハ一度ヲ四十五里，一周を三百六十度ノ積リニ候。又一説ニ六千三百四十五里ト申候説御座候。此説モ松尾宗順ト申者之説之由ニ候ト山浦其庵⁽⁷³⁾ト申候者之聞書之蛮学天文者之筋之由承及候。此外説々紛々と御座候テ実説難定御座候。又ヲランタハ十五里ヲ一度トシ南蛮ハ十七里半ヲ一度ト仕候。エケン⁽⁷³⁾スプランス二十里ヲ以テ一度ト仕候故其一里ノ長短モ難相究候。唐人ニ一里ト申候ハ今官尺ニテハ何尺候哉相尋候ヘとも存候者一人も無御座候。算書ニ一里ハ千八十丈ト御座候得共是明人⁽⁷⁴⁾ノ营造尺ニ候哉，丈量⁽⁷⁵⁾尺ニテ候哉，官尺小尺等ノ訳相知不申候ニ付此方ニテ難相極候。先唐ノ古来之説ヲ御用一度二百五十里ニ被成置候テ其一里ハ日本ノ何里ニ當ルト申事ハ重テ御極メ可被遊候。右之一里ノ丈尺何程ニ當候哉彼方ニテ委細ニ存候者ニ此数ヲ尋ね今ノ尺を以テ算用仕持来候様ニ頼遣置候条，若無失念持来候ハ、懸御目可申上候。猶重テ可申上候。以上。

仲秋念七

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Eighth letter (September 24, 1726)

元成答書

一表影之尺之儀被仰下候。古今之尺之寸彼方にて説々多御座候^{〔朱〕}△一決不仕候。周髀之尺ハ周尺にて御座候。此周尺之寸法第一ニ定説古今之説紛々に御座候。然は其後之寸影も一尺と申候を何之尺にて極メ可申候様無御座候へとも、譬へハ周二申候八尺表ト⁽⁸⁵⁾一尺六寸影ハ周尺にて御座候。然は唐の時八尺之表を立候て表影を申候も共ニ唐尺を用候へは其理同前ニ候条、今日日本之曲尺之八尺を立候て表影を又曲尺にて測候同理に成候。小尺にては官尺にて唐の尺の八尺表を立ても⁽⁸⁶⁾影を曲尺を用候様ニ違候てハ其影寸相違仕候道理ニ御座候。左様ニ御合点可被成候。日本之曲尺相違御座候⁽⁸⁷⁾仰之通御座候。日本にてハ升と戥ハ極所御座候へとも尺ハ極所無御座候ニ付、細工人疎略ニ或ハ一分半分又ハ二分程之違も御座候。伊勢より出申候尺最大違御座候。南都法隆寺ニ聖徳太子之所持候尺と申御座候。今之尺と二分違御座候由申候。又佐賀城下ニ用申候尺も爰元^{〔朱〕元}之大工の用申候尺トハ二分違候由疊やとも申候。何も一決難仕候。只今清之官尺小尺も南京尺と福建の尺は違御座候。是ハ南京尺公儀部分之尺ニ御座候。被仰下候通古今之尺ハ詳に彼方ニも難相知、人々之了簡議論相違仕候。

日月五星の天之事古書ニ出候通書付可進候由奉得其意候。近日中ニ書付候て可⁽⁸⁸⁾進之可申候。

一先日之書牧右衛門方へ見せ可申由。若申来候ハ、見せ可申候、云々。

八月廿九日

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Ninth letter (November 23, 1726)

元成答書

一 町見術、今度持渡候測圓海鏡分類釋術と申候書并曆算全書・勾股引蒙・数度術など申候書中に様々の術御座候⁽⁹⁴⁾。何も其理精微之事ニ御座候へとも畢竟家傳町見相應之勾股之外ニ不出候。家傳術能熟得^{[朱]被}成候ハ、如何様之奇法も妙術も出可申候。術理精候ても器小ク候へは見分ニ差多御座候。家傳之地ノ廣狭ニ從テ大ニ術を求候儀專要候。畢竟道理ハ無ニニ付今小測器之圖を書候て其理を申候。併病中精力ノ⁽⁹⁵⁾眼昏候故自筆ニ相認候猶粗略多御座候。

一 右申候新渡候書ハ何も定て御用ニ上り可申と奉存候。珍書にて算法も精候条若御縁も御座候ハ、御才覚候て御覽可成候。此内籌算之事御座候。平松殿籌算之儀被仰越候御傳授可被成候。此外右之書中ニ尺算筆算杯種々之算法御座候事得と懸御目度奉存候迄御座候。

一 町見之儀ハ人を撰御傳授候て家法退転無之様ニ御廣め可被下候。申上度事ハ南山の竹を切盡ても難申盡候へとも病中、云々。 十月晦日

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Tenth letter (undated)

元成答書

一被仰下候知弧率起元論，関氏ノ徑一百十三周三百五十五ノ説ヲ精密至極適中と相極候儀ハ不得其意候。他術ニ較之ハ精密ニ御座候へとも是ヲ圓法ノ適中正當トハ難申候。此法ハ徑一尺ニテ三尺〇⁽⁹⁷⁾九九有奇之法ニテ候。此徑一尺ヲ周三尺零九九有奇ト知候術，是術イマタ真法之⁽⁹⁸⁾難存候。知之候⁽⁹⁹⁾て以後弧矢率ハ相考可申候。圓周生々不窮之儀ハ陰陽之理兼テモ申進候通ニ候へは一定ノ法を御求候てハ相違御座候。田邊氏末ニ申候通ニ其形ノ廣狭ニ随テ定率一決成難シト説候所本理ニテ御座候。此理ヲ御合点候て其地ニ從^{[朱]從テ}ヲ近キ術ヲ用ヒ其遠近ヲ御考可被成候。圓之定法を御求候事何程御工夫候共有之間敷候。圓周法之極理ハ不定所至理ニて候。南蛮和蘭人ニテモ皆只其近キ数ヲ用テ天地ノ数も考候事候条，貴公も此圓法其数近キト思召候数ヲ用テ天ノ高サヲ御測可被成候。圓理至極如此御座候。此所御解脱可被成候。即御書付ハ返進申候。

Appendix F: Letters from Mukai Gensei 向井元成 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言

Eleventh letter (undated)

又

一此間之御問御尤奉存⁽¹⁰⁰⁾候へとも動揺ノ船上ニて測見候事は其理無之事ニ御座候。能々御考御覧可被成候。委細ハ別紙ニ申上候。

[頭注]知慎按、江戸ニて清水など云者動揺の物ヲモハカリ又即座ニテ差ヲ求メスシテ道具ニテ遠町ヲ知ナント人ヲアサムキ教ル事久シ。其流今ニアルナリ一柰右衛門殿勾股之理御工夫被成候由被仰下候ニ付乍序勾股之趣を申入候。勾股ハ方圓ニ本つき候。勾ハ圓周ニて御座候。圓徑一寸⁽¹⁰¹⁾三を乗候て此周三寸即勾寸ニて御座候。方ハ一寸之徑ニテ圍四寸ニテ即股之寸ニて御座候。圓ハ陽象ニテ其数奇故ニ一ニ三乗候。方ハ陰象ニテ其数偶ニ二ニ二を乗候テ四と出申候。自是以下皆奇偶ノ数相乗相併天然之数生申候。即洛書四方之奇数北方之一より一三ガ三ト乗シ、順ニ左旋シテ次第ニ其数ヲ生申候。四偶ノ数ニ二ヨリ右旋シテ逆ニ二ニカ四ト乗候より段々其数ヲ生候通ニ奇三偶二皆陰陽之数ニテ御座候通勾股又其理数相同御座候。是ハ町見算法之入用事ニテハ無御座候得共勾股ノ本を爲可申述如此御座候。此段柰右衛門殿へも御對談可被成候。

元成答。軍藏ノ問ニ條々 上に別紙ニ申上候
是なり

一遠眼鏡を用候事

遠眼鏡を用て見候も直に見候も同事にて相違無之候。然とも遠目鏡にて数十里を見候ハ開き廣く仕候て見候程宜候。若開き狭く候へハ盤上にて毫厘の差見分かたく候。他流にハ種々の巧なる道具御座候。何も道理をつめ候物ニ候へハ一通之道理の上ハ無違候へとも、纔之道具の上の積りニ御座候故毫厘の差別難見御座候。當流ハ五十間開候へハ五十間の道具、百間開候へハ百間の道具ニ成候故見候所分明ニ御座候。横に不被開地は直に開⁽¹⁰²⁾ても見候。又斜に開候ても見候。只開かれ候程ハ随分廣く開候宜敷御座候。

一船町見之事

家傳之町見之法ハ不動の地⁽¹⁰³⁾居て不動の所を見候法にて御座候。動揺の所に住し或動揺の物を見候事は難仕御座候。動揺之地⁽¹⁰⁴⁾或ハ高く或ハ卑く或ハ近く或は遠く一定の理なく候へハ一定の法も無之候。若他流に有之と申候共難信御座候。和蘭のイスタラヒ或ハクハトロワン或ガラウトボウコの類、皆船上にて日影北極を測りて海上の南北の度数東西の里程を積り候も皆大概ニて風波の節は別て難測候。只能熟し候へハ自然に大概の積り合申候事ニ御座候。和蘭陀の説も拙者直ニ問答仕候所如斯に御座候。

一海上走り船之事

此問ハ走り船より陸を見候事ニて候と相聞申候⁽¹⁰⁵⁾。若又陸より走船を見候事ニ候哉。何に仕候ても右に申候通動揺の地に居或ハ動揺の物を見候事ハ難成候。二三尺の盤にて立候所を不去して見候術も候へとも近き所は猶可に候。少々遠く候てハ纔の盤上の算法にては微細の所分明ならず候。是亦大概の積りは可被申候。只熟するを專に仕候。能熟候へハ直立仕候て見候ても大概の大積りハ成申候。若又別にも御不審御座候ハ、可被仰下由。已上⁽¹⁰⁶⁾。

Appendix G: Letters from Imamura Eisei 今村英生 to Watanabe Gunzō
渡邊軍藏 transcribed in *Sokuryō higen* 測量秘言語

○今村市兵衛答書⁽³⁷⁾

然ハ先日相写シ縣御目候紅毛⁽³⁸⁾大工日本尺ニ御引合被遊候所ニ、日本ノカネ尺壹尺ハ紅毛十二寸ノ矩ニ当リ御手前様ニて二⁽³⁹⁾尺四五厘と相見へ候之由。御手前様ノ方可然と奉存候。

[本文「二尺」に対する頭注]知慎云、一歟⁽⁴⁰⁾

先日御物語申上候ハ一尺三四分と申上候へとも私覚違ニて御座候。御存知被遊候通惣して紅毛日本ともに尺ことに少宛の違御座候へとも三四分之違ハ無御座候。ヲラン⁽⁴¹⁾十一寸十二寸ともに先頃申上候里ノ書付縣御目申上候外ニヲラン大工ノ尺も縣御目申候。木ノ所七寸金ノ所ハ四寸合テ十一寸ノ尺ニて御座候。御考可被遊候。外ニも尺御座候へとも先細工人之用申候方可然と奉存候テ如此御座候。

紅毛一里、十二寸の尺ニて二萬二千八百尺ニて御座候六百尺と御座候ハ能無御座候。八百尺ハ先年船頭其外ヲランニ能念入させ考申候書物も私見申候。

先日之曆御考被成候處決定難被遊儀御座候由。大キナル事を小形ニ仕候へハ少し違ハ可有御座候。然とも大格ハ違申間敷候。此義ハ懸御目不申候てハ難申つ[カ]⁽⁴²⁾。御書付ニテモ私も難心得事も御座候。黃道とハ南北之日道、赤道とハ真中之春分秋分之筋と斗私ハ承申候得共惣て日本名ニテハとくと不奉存候。

同書にハルシヤ國中之筋より南四十度と御座候へハ⁽⁴³⁾地球ノ図ニてハ赤道より北ニて卅五六度之図⁽⁴⁴⁾と相見申候由。南之方能御座候。北ニてハ無御座候。西ノ國ノはてニテ候へハ北ノ方ニてハ無御座候筈ニ御座候。書誤ハいかほとも可有御座候。且又カアプハアフリカノ内ニテ御座候。カアプト申所ノ右左西ノ方ニカケ皆アフリカニて御座候。ハルシヤハ日本より西ニて余程カアフノ前ニテ御座候。図ニ能分レ申候。

一リミヤの儀元成ニ御聞被遊候由。ヲランダ方ニテハ曾テ存不申候。先ハ四ツニ分ケ候ヨリ外ハ無御座候。エウローパ、アージヤ、アフリカ⁽⁴⁵⁾、アメリカ。此^{[朱]メ}アタリカヲ南北ニ分チ候て申斗ニて御座候。唐ニてハヨリ所可有御座候。ちと考見可申候と奉存候。メカラニキヤ猶又得^{本ノマ、}奉存候。併アメリカノ内ニマガラーニスと申所御座候。是ハ昔マカラニスと申者初テ乘廻候て見出し申候。大ナル國の切途ニテ御座候。即見出し申候人ノ名を所ノ名ニ付置申候。メガラニ、マカラニ少似申候。リミヤなども此類ニてハ御座有間敷哉無心元奉存候。

一此間被仰付置候國々所々ノ度数之書付奉畏候。但⁽⁴⁶⁾舟ノ居所ヲ知候事ハ算用事ニて御座候へハ難知御座候。とくと承候事も無御座候へハ重て申上候儀無心元奉存

候。扱其外之儀ハ重て御出役被遊候節そろそろ⁽⁴⁷⁾申上候様に可仕候⁽⁴⁸⁾。此中の御書付も寸暇無御座候ていまたとくと見不申候。惣筆之上廉筆御宥免可被下候。只今出嶋より帰不自由旁⁽⁴⁹⁾ニ付用廉筆申上候。以上。

紅毛里法

一フウト	本朝曲尺ニテ	一尺二分
紅毛一里	但	二萬二千八百フウト
本朝曲尺ニテ	間ニ直シ	二萬三千二百五十六尺
	但	六尺五寸間
		三千五百七十七間五尺五寸
町ニ直シ	但	六十間町
		五十九町三十七間五尺五寸
里ニ直シ	但	三十六町里
		一里二十三町六反余
紅毛一度	但	十五里也
本朝		
		二十四里三十町四反半余

已上

Appendix H: List of titles from the library of Ro Sōsetsu

葆菴反草拙自撰書目其他

玉園云、本書目、著述目錄トイフヨリモ却テ所藏書目ト認ムハキモノナリ
尤モ葆菴草拙ノ著トミルハキモノ多ク有之

性理選問 武當山記 唐一行傳 吟園 西吟 劉素軒集 同詩 高天漪集

同詩 燕々子集 同詩 幻民遺業 崎陽文集 同詩 稽據錄 本朝史纂

拙存集 音義錄 詩海一擲 字便五本 瓊浦集正續前 輿地外紀二本 長崎編年圖

韻鏡口訣 清素漫錄 釋氏名目 梵本草 葆菴隨筆 百家名目 質問錄

大清順康文 經史子集目二本 天文考索 輿地提綱 古文套語 黃老字義 耳食錄二本

五支遺塵正續二本 天文權衡 不許人 林下雜錄 清素枕書 清素手鈔二本

天文秘括 曆家秘括 曆法入式 信手劄記 詩筒 雜纂詩話 詩套 清素詩集二本

明朝人物志 續老子 清素心書一本 非如語一本 古今流芳錄 讀佛書錄 推步記

訓字箋 韻學通旨 南京唐語一本 漳州唐語一本 聯珠字算二本 書籍大意

新渡書目 本草緒餘 三教全旨 搜聞錄 賀蘭地志 紅毛譯和 緯度曆補

渾天象數 梵書考 太乙名義一本 圓頓章解一本 清素筆記一本

瘡科言機一本 七音通畧 大清編年圖一本 本地乘迹辨 和漢紀文

航海錄 性相義海 三教九流人物志略

以上皆不傳家

Appendix I: Letters concerning cosmological matters from the Ro archives

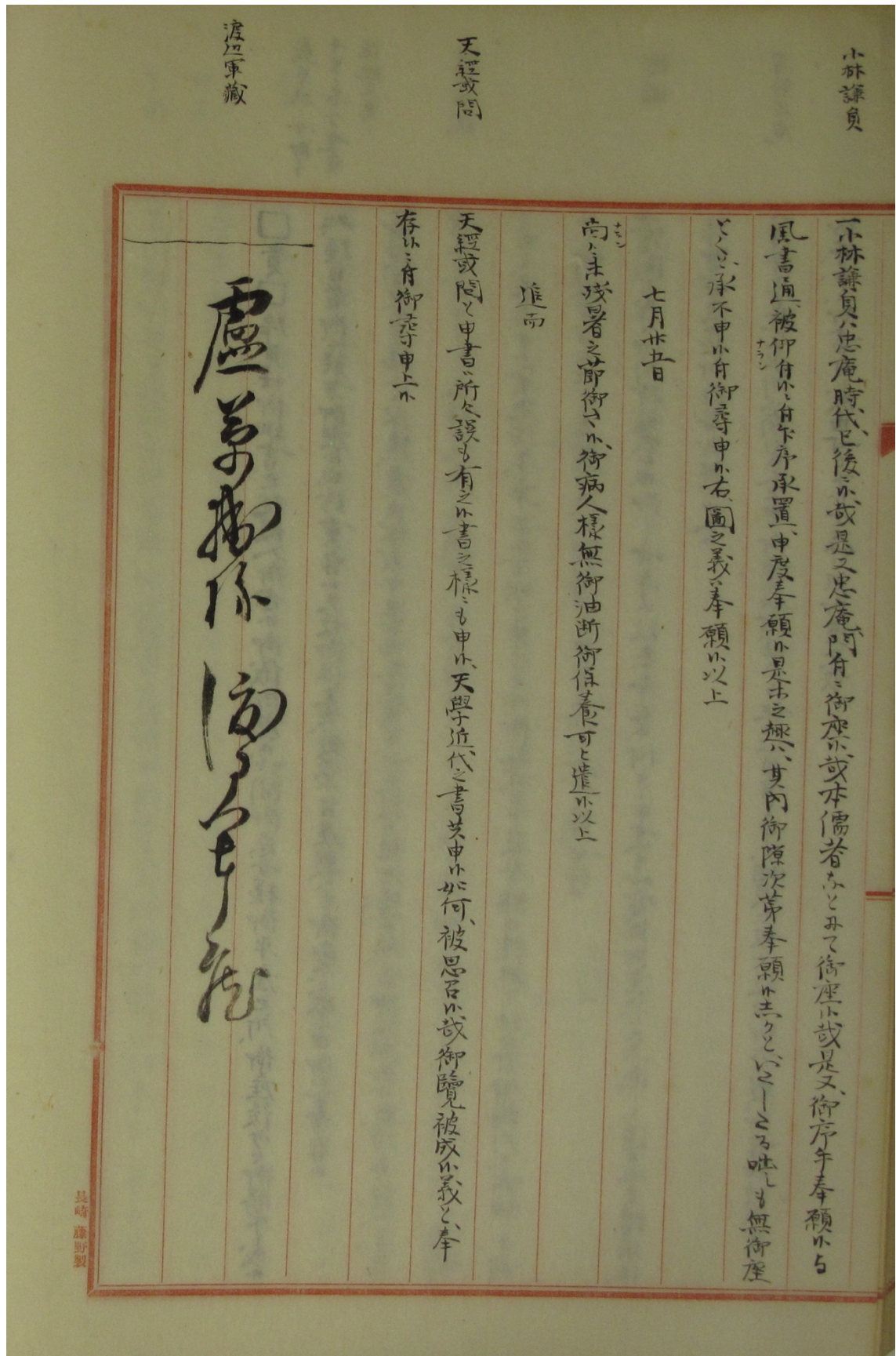
1) Letter from Watanabe Gunzō 渡邊軍藏 (first part)

廬草拙女即予
 千里遠分曉在
 後肥立悪
 乾坤辨説
 繪圖
 澤野忠庵

□貴□拜見仕御細書之趣被入御念の御儀御座の此間御息女様御平産之所、御座後少々御勝不と成の
 外頃日者御心能方御座の由珍重存の夫故御保養被成付屋敷も御出不と成の由御允奉存の
 御撰書有之様少々承迄、産末成義申進の而致迷惑の就夫段被仰遣の趣、委細致承知の乾坤辨説、先年
 成程見申のくと不相考一通見過申の、天文之辨破、おぼく不明之議論も御座の由其即、何も尤も議論
 との、存居申の共近頃乍、卒尔不明之思召之所御放成と下度奉願の後學、仕度勿論所々大辨、手前
 も寫取置申の江戸差置申の共、罷歸の思召之所引合了簡可仕の
 一繪圖之義、御所持被成の由御可下段奉存の、何と申ても心當無御座の、三箇、追々成更借用仕、
 拜覽仕度仕御許答御無心中申の
 一澤野忠庵及承所、南嶺人之申、御座の如何仕、詠以目有と申、相成の故此段下御六々數、御存知被成ハ、
 御序、御書有と成可下子孫、無御座の哉

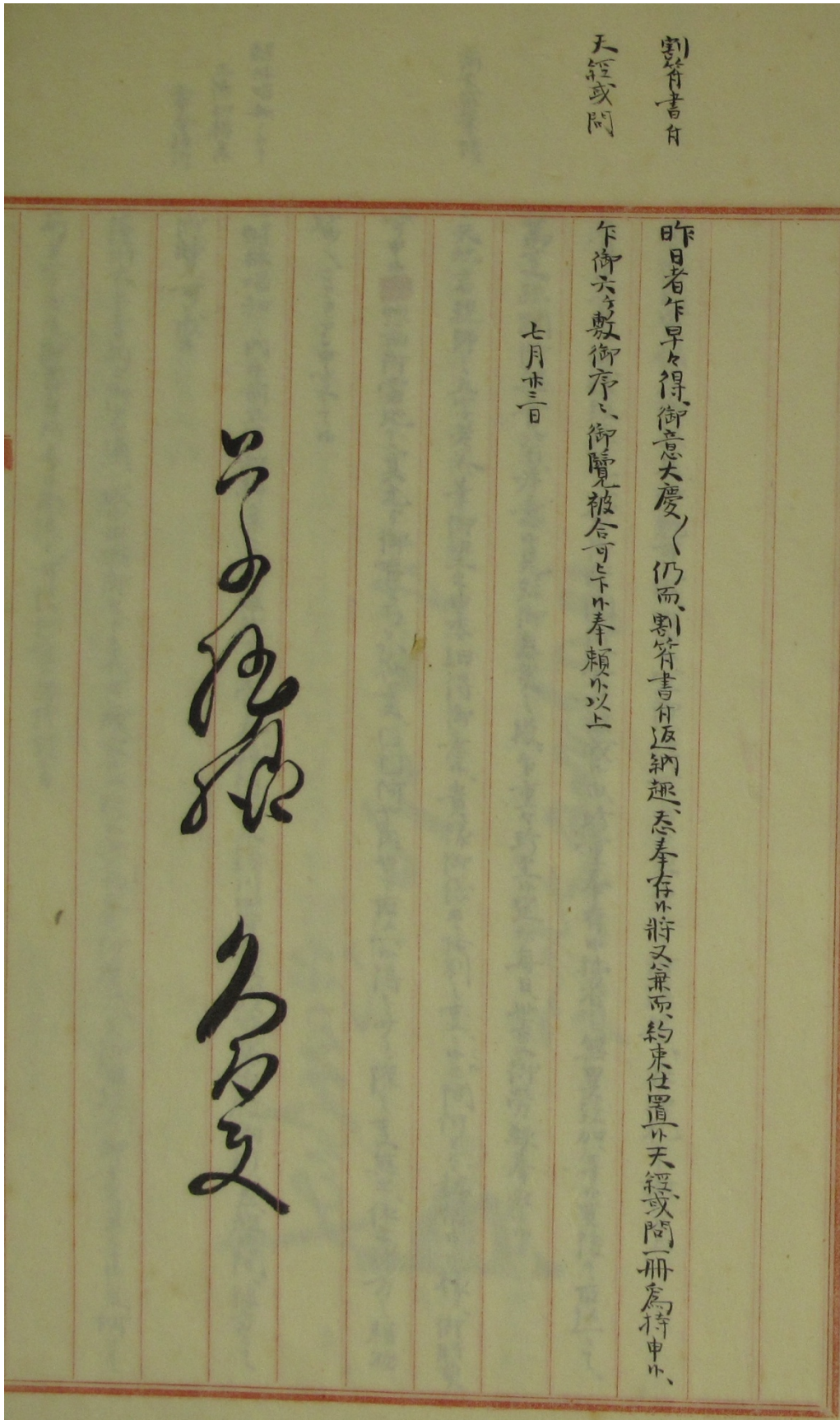
Appendix I: Letters concerning cosmological matters from the Ro archives

2) Letter from Watanabe Gunzō 渡邊軍藏 (second part)



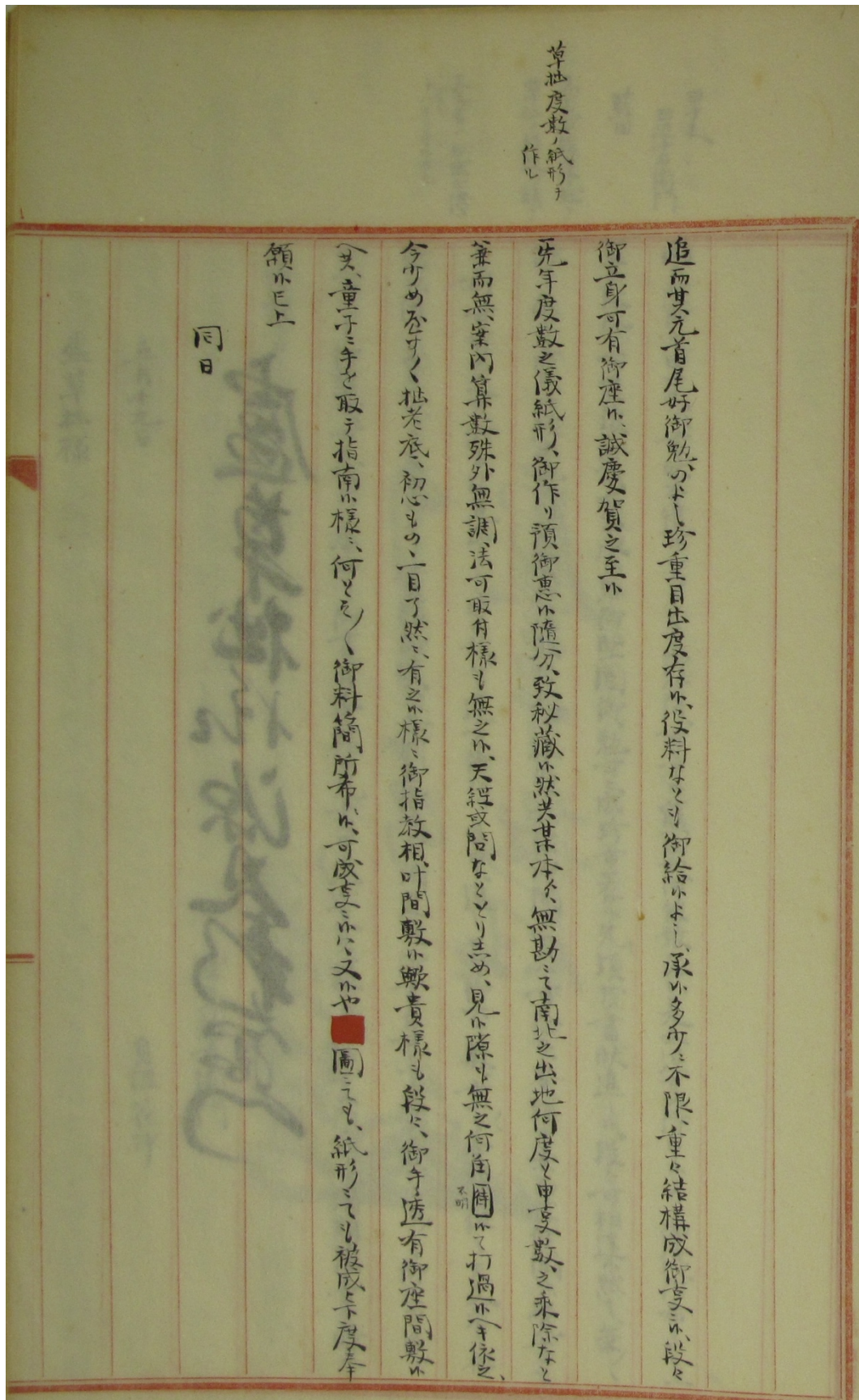
Appendix I: Letters concerning cosmological matters from the Ro archives

3) Letter from Fukami Arichika 深見有隣 mentioning *Tianjing huowen* 天經或問



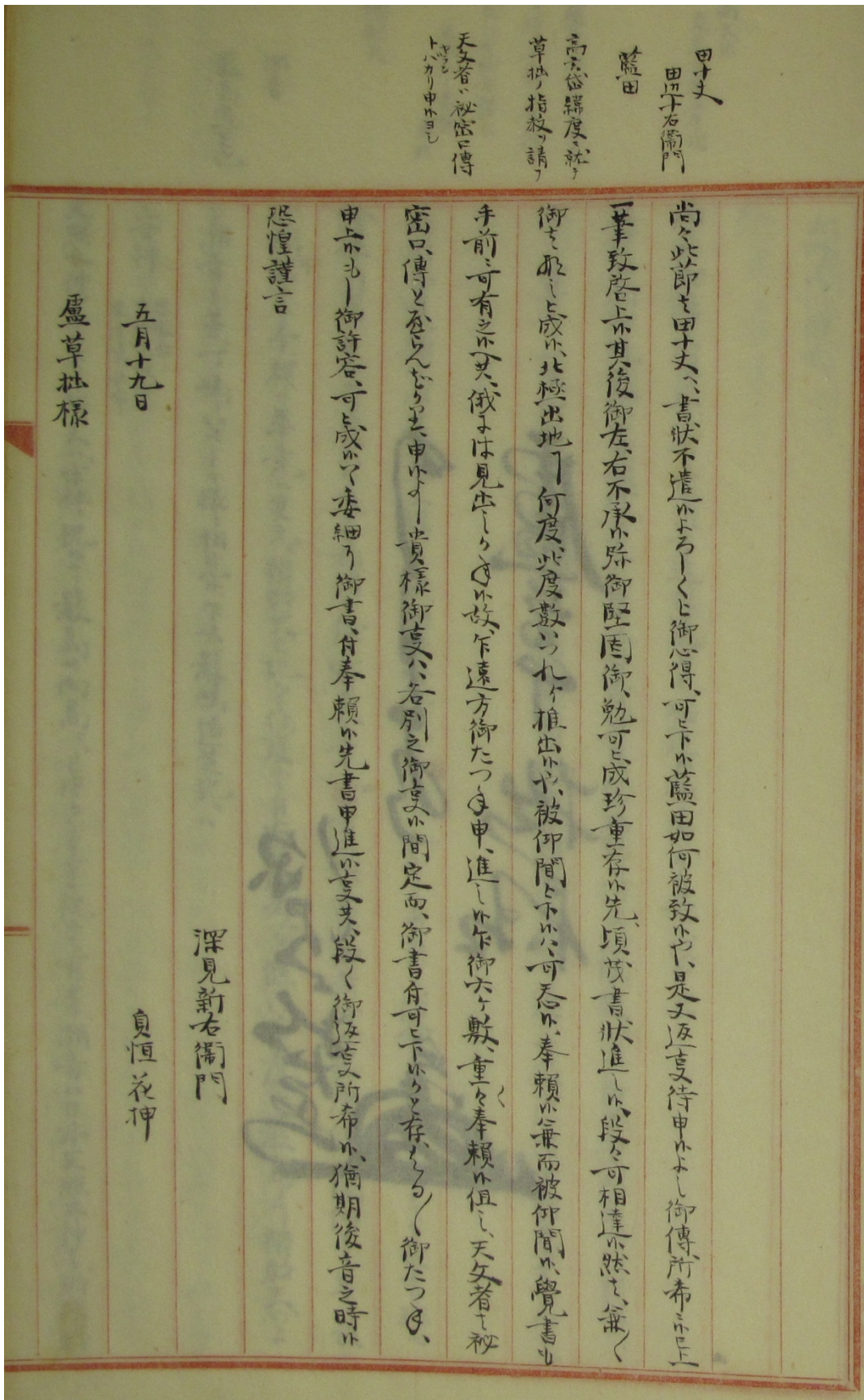
Appendix I: Letters concerning cosmological matters from the Ro archives

4) Letter from Fukami Gentai 深見玄岱 mentioning *Tianjing huowen* 天經或問



Appendix I: Letters concerning cosmological matters from the Ro archives

- 5) Letter from Fukami Gentai 深見玄岱 on astronomical techniques for calculating the latitude



馮應京月令廣義首卷載吳中明山海輿地全圖之說曰地輿海本是圓形而全為一球居天球之中如雞子黃在青內有謂地為方者乃語其定而不移之性非語其形體也

天既包地則彼此相應故天有南北二極地亦有之天分三百六十度地亦同之天中有赤道自赤道而北本非二十三度半為北道據中國在北道之北日行赤道則晝夜半行南道則晝短行北道則晝長故天球有晝夜平圈列于中晝短晝長二圈列于南北以著日行之界地球亦有三圈對于下俱天包地外為甚大其度廣地處天中為甚小其度狹查得直行北方者每路二百五十里覺北極出高一度南極入低一度直行南方者每路二百五十里覺北極入低一度南極出高一度則不特審地形果圓而並徵地每度廣二百五十里則地之東西南北各一週有九萬里實數也是南北與東西數相等不異夫地厚二萬八千六百三十六里零三十六丈上下四旁皆生齒所居渾淪一球原

無上下蓋在天之內何贍非天總六合內凡足所竚即為下凡首所向即為上不專以身之所居分上下也云

愚按今來天學細密之說也二百五十里者日本古測

四十四里弱也九萬里者日本古測一萬五千八百里

弱也又三才圖會粗載上之說愚計二百五十里當日

則當日本一萬三千八百四十里強是用六五法也或以七七四法地周日本一萬二千里弱一度三十二里

三分強是亦為不及也

馮應京『月令廣義』首卷載、吳中明「山海輿地全圖」之說曰。地輿海本是圓形、而全為一球居天球之中、如雞子黃在青內。有謂地為方者、乃語其定而不移之性、非語其形體也。天既包地、則彼此相應。故天有南北二極、地亦有之。天分三百六十度、地亦同之。天中有赤道、自赤道而北本非二十三度半為北道。據中國在北道之北、日行赤道則晝夜半、行南道則晝短、行北道則晝長。故天球有晝夜平圈列于中、晝短晝長二圈列于南北、以著日行之界。地球亦有三圈對于下。俱¹天包地外為甚大其度廣。地處天中為甚小其度狹。查得直行北方者每路二百五十里、覺北極出高一度、南極入低一度。直行南方者每路二百五十里、覺北極入低一度、南極出高一度。則不特審地形果圓、而並徵地每度廣二百五十里、則地之東西南北各一週有九萬里實數也。是南北與東西數相等不異。夫地厚二萬八千六百三十六里零二十六丈、上下四旁皆生齒所居、渾淪一球原無上下。蓋在天之內何贍非天。總六合內、凡足所竚即為下、凡首所向即為上、不專以身之所居分上下也。云云

¹ The quote in the *Ryōgi shūsetsu* manuscript provides the character 俱 (read as *tomo ni su*) meaning “together,” instead of *tadashi* 但 meaning “however” found in *Yueling guangyi*.

Appendix J: Citation of *Yueling guangyi* in *Ryōgi shūsetsu*

愚按。今來天學細密之說也。二百五十里者、日本古測四十四里弱也。九萬里者、日本古測一萬五千八百里弱也。又『三才圖會』粗載上之說。愚計二百五十里當日本三十八里弱。九萬里則當日本一萬三千八百四十里強。是用六五法也。或以七七四法地周日本一萬二千里弱。一度三十二里三分強。是亦為不及也。

Appendix K: Table of contents for *Tianjing huowen*, *Tenmon kōyō*,* and *Ryōgi shūsetsu*

*The manuscripts consulted for *Tenmon kōyō* does not have a table of contents at the beginning, so the sections listed correspond to the titles found within the text.

天經或問	天文考要	兩儀集說
<p>天之卷</p> <ol style="list-style-type: none"> 1. 天地之原 2. 天體 3. 地體 4. 黃赤道 5. 南北極 6. 子午規 7. 地平規 8. 太陽 9. 太陰 10. 日食 11. 月食 12. 交食 13. 朔望弦晦 14. 氣盈朔虛閏餘 15. 月見遲疾 16. 日月右行 17. 天行過一度 18. 五星遲速伏退 19. 羅計氣孛 20. 歲差 21. 經星名位 	<p>卷一</p> <ol style="list-style-type: none"> 1. 天地總論 2. 天地始終 3. 天色玄 4. 天行健 5. 九重天 6. 天象左右行 7. 南北極黃道赤道付九道 8. 天度二十八宿 9. 十二次 10. 極差時差景差 11. 歲差 12. 經星總考 13. 經星名位 14. 天漠 15. 天氣三際 <p style="text-align: center;">卷二</p> <ol style="list-style-type: none"> 1. 七曜總考 2. 太陽常度 3. 太陰常度 4. 日中黑翳 5. 天象差變 	<p>卷之一</p> <ol style="list-style-type: none"> 1. 天體 2. 地體付五帶 3. 黃赤二道 4. 南北二極 5. 子午規并卯酉/規 6. 地平規 7. 十二宮次并三十六 8. 九天次第高下 9. 天行/左旋七曜/右旋 <p style="text-align: center;">卷之二</p> <ol style="list-style-type: none"> 1. 日月體象并大小 2. 日月右旋行度并盈縮遲疾 3. 月行九道并交周 4. 日月食 5. 朔望弦晦 <p style="text-align: center;">卷之三</p> <ol style="list-style-type: none"> 1. 晝夜長短刻分并外國刻法 2. 四季八季并寒暑不同 3. 曆法大意并外國曆

Appendix K: Table of contents for *Tianjing huowen*, *Tenmon kōyō*,* and *Ryōgi shūsetsu*

*The manuscripts consulted for *Tenmon kōyō* does not have a table of contents at the beginning, so the sections listed correspond to the titles found within the text.

<p>22. 恆星多寡 23. 大星位分 24. 太陽出入赤道度分 25. 經星東移</p> <p style="text-align: center;">地之卷</p> <p>1. 觜星古今測法 2. 七曜各麗天 3. 恆星天 4. 宗動天 5. 常靜天 6. 諸天運行 7. 七曜離地 8. 星體大小 9. 金水伏見 10. 天漢 11. 經星伏見 12. 度分宮次 13. 度分廣狹 14. 度屬不同 15. 星動燦躍 16. 游氣 17. 星座 18. 晝夜長短</p>	<p>6. 日月交食 7. 五星總考 8. 五星別考 9. 五星變象 10. 四餘星 11. 七曜配五行論 12. 天鏡星象 13. 星動燦躍 14. 蒙氣差</p> <p style="text-align: center;">卷三</p> <p>1. 總論諸氣 2. 風雲 3. 雨露兼論霜霧 4. 霜雪兼論雨霰 5. 霰雹兼論雲雨 6. 蒙霧 7. 霾噎 8. 煙霞 9. 雷電 10. 虹霓霓通作蜺 11. 日月暈 12. 日月重見 13. 天開 14. 異星</p>	<p>4. 古今曆辨并曆差歲差</p> <p style="text-align: center;">卷之四</p> <p>1. 五星伏見行度并異行并衆會 2. 列宿衆星名數并度分三垣付天漢 分野</p> <p style="text-align: center;">卷之五</p> <p>1. 衆星變并星動隕星流星付占星辨 2. 客星并瑞星妖星彗星付吉凶占辨 3. 五星變異并羅計氣孛 4. 日月變并重見芒刺 變色 黑子 暈珥 出沒不時 再出沒 日月隕墜 日月破毀</p> <p style="text-align: center;">卷之六</p> <p>1. 風雲雨露霜雪并霧霞 2. 雹霾并雨異物雪霜異色付寒暑失時 3. 雷電并天火災旱災久雨虹蜺付蜃樓 4. 天開天鳴并地震地裂 5. 地燃并火山火井溫泉付水源鹹水鹽井</p> <p style="text-align: center;">卷之七</p> <p>1. 潮汐并潮泉并鹹味辨 2. 五行生尅辨付四大四行之辨 3. 風氣三部說并火部辨</p>
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*The manuscripts consulted for *Tenmon kōyō* does not have a table of contents at the beginning, so the sections listed correspond to the titles found within the text.

<p>19. 晨昏長短 20. 分野 21. 年月 22. 曆法 23. 霄霞 24. 風雲雨露霧霜 25. 雪霰 26. 雹 27. 雷電 28. 霾 29. 彗孛 30. 虹 31. 日月暈 32. 日月重見 33. 風雨徵 34. 天開 35. 地震 36. 海 37. 鹹水 38. 溫泉 39. 潮汐 40. 望氣 41. 野火 42. 占候</p>	<p>15. 飛火 16. 雨異 17. 歲月時日 18. 氣候 19. 晝夜長短 20. 晨昏長短 21. 寒暑漸積 22. 時刻 23. 更點 24. 曆法 25. 月盡朔數 26. 氣朔閏餘 27. 土旺 28. 月幹</p> <p style="text-align: center;">卷四</p> <p>1. 地球 2. 潮汐 3. 海水 4. 溫泉 5. 地震 6. 野火 7. 海影</p>	<p>4. 行舟指南大意并圖記并用器辨附風雨陰晴徵占</p> <p style="text-align: center;">卷之八</p> <p style="text-align: center;">目圖式 總計六十四圖舊為一册今分附之於各卷之條下故附設別卷</p>
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43. 四行五行		
44. 地理		
45. 數		
46. 星降生		
47. 人轉世		

ABSTRACTS (FRENCH AND ENGLISH)

Titre :

Liens surveillés : Nagasaki, ville carrefour, et la circulation de cosmologies hybrides dans le Japon pré-moderne (1630–1720)

Résumé :

L'objectif principal de cette thèse est d'éclaircir le développement de formes de pensée cosmologique hybrides dans le Japon du début de l'ère moderne en soulignant les entrecroisements épistémologiques qui ont eu lieu dans la zone de contact de Nagasaki, en particulier entre 1630 et 1720. Nous n'appuyons sur la notion de « cosmologies hybrides » qui circulaient à Nagasaki en tant que carrefour de biens et savoirs. Nous abordons cette ville portuaire comme une zone de contact dans laquelle des systèmes épistémiques divers s'entrecroisaient. Nagasaki peut être considérée comme une zone de contact extra-coloniale, dans laquelle les processus d'hybridation épistémique ont été façonnés non pas tant par des agents impériaux étrangers que par le pouvoir centralisé du shogunat Tokugawa qui administrait directement la ville.

Des savoirs astronomiques, géographiques, cartographiques et médicales, remontant à des sources chinoises et européennes, étaient au cœur de ce qui distinguait les cosmologies hybrides de Nagasaki. Les connaissances produites dans la ville ont suscité l'intérêt des plus hauts cercles politiques, ce qui a conduit le huitième shogun Tokugawa Yoshimune (1684-1751, r. 1716-1745) à consulter deux savants locaux sur des questions cosmologiques. Ils étaient l'interprète chinois Ro Sôsetsu (1675-1729) et de l'auteur Nishikawa Joken (1648-1724), deux personnages clés pour comprendre l'importance de Nagasaki à cette époque. De l'analyse des réseaux de lettrés locaux à l'examen de la forme, du style et du contenu des livres imprimés et des manuscrits, cette étude démontre que la zone de contact de Nagasaki a servi de plaque tournante pour la circulation de nouvelles informations qui ont de plus en plus attiré l'attention du régime des Tokugawa. Des mesures de répression antichrétienne de la part du shogunat, associées à des restrictions commerciales croissantes, ont été déterminantes dans la transformation de Nagasaki en une porte d'entrée sous contrôle stricte qui filtrait des biens et de savoirs arrivant du monde entier. Ces politiques ont permis aux savants locaux d'adopter des points de vue éclectiques tout en maintenant un discours conforme à l'orthodoxie confucéenne.

Dans le premier chapitre, nous présentons la position de Nagasaki dans le Japon des Tokugawa en tant que porte d'entrée vers l'Eurasie et au-delà, à la fois ouverte à l'afflux d'un grand nombre de marchands et fortement réglementée par les autorités locales et centrales. Nous analysons des textes sinitiques associés à des savoirs d'origine jésuite qui ont été interdits sous les Tokugawa et nous donnons un aperçu des ouvrages cosmologiques qui ont circulé au Japon par la suite. Le deuxième chapitre reprend la notion de censure et montre ses dimensions productives pour l'articulation d'une tradition locale enchevêtrée dans des formes de savoirs transrégionales et transnationales. Dans le troisième chapitre, nous nous tournons vers les activités de Nishikawa Joken, tout en nous appuyant sur trois sources primaires associées Ro Sôsetsu. Nous remettons en question l'interprétation selon laquelle Joken représentait un des premiers partisans de la rationalité scientifique et de l'empirisme « à l'occidentale » dans le Japon prémoderne. Dans le quatrième et dernier chapitre, nous nous penchons sur les cosmologies hybrides de Nagasaki plus en détail, telles qu'elles sont représentées dans les écrits de Nishikawa Joken. Nous concluons cette étude en abordant de front les notions clés des cosmologies composites incarnées par Joken, et la manière dont elles sont liées à l'amalgame des savoirs jésuites et de la culture lettrée chinoise à la fin des Ming. Nous démontrons les stratégies de Joken pour dissimuler la nature hybride de ses idées cosmologiques en masquant les éléments d'origine catholique derrière un discours qui soutient pleinement l'orthodoxie confucéenne.

Mots clefs :

Cosmologie, hybridité, censure, Nagasaki, Tokugawa, Japon, Nishikawa Joken, transition Ming-Qing, Jésuites, Compagnie néerlandaise des Indes orientales

Title :

Monitored Connections: Transnational Nagasaki and the Circulation of Hybridized Cosmologies in Early Modern Japan (1630–1720)

Abstract :

The main goal of this dissertation is to shed light on the development of composite forms of cosmological thought in early modern Japan by delving into the epistemological entanglements that took place in the port city of Nagasaki – particularly between 1630 and 1720. By introducing the concept of “hybridized cosmologies” circulating in this liminal space, I approach the city as a contact zone in which disparate epistemic systems intersected. Nagasaki can be understood as an extra-colonial contact zone, in which processes of epistemic hybridization were shaped not so much by foreign imperial agents, but rather by the centralized power of the Tokugawa shogunate directly administrating the city.

Elements of astronomical, geographical, cartographical, and medical knowledge that could be traced back to both Chinese and European sources were at the core of what distinguished the Nagasaki's hybridized cosmologies. Knowledge produced in the city attracted interest within the highest political circles, leading the eighth shogun Tokugawa Yoshimune (1684–1751, r. 1716-1745) to consult two local scholars on astronomical matters. These two scholars were Chinese interpreter Ro Sōsetsu (1675–1729) and popular author Nishikawa Joken (1648–1724), key figures for understanding the significance of Nagasaki's intellectual landscape during this period.

Ranging from analyses of the networks of local scholars to examinations of the form, style, and content of printed books and manuscripts, this study demonstrates that Nagasaki acted as a hub for circulating novel information that increasingly caught the attention of the Tokugawa regime. Shogunal anti-Christian repressive measures, allied to growing commercial restrictions, were determinant for transforming the port city into a strictly controlled gateway that filtered and curated knowledge and goods arriving from around the globe. These policies enabled local scholars to embrace eclectic views while also upholding a discourse aligned with Confucian orthodoxy.

In the first chapter, I present the position of Nagasaki in Tokugawa Japan as a gateway to Eurasia and beyond, simultaneously open to the influx of a large number of merchants and heavily regulated by local and central authorities. I analyze Sinitic texts associated with Jesuit knowledge that were banned under the Tokugawa, introducing cosmological works that later circulated in Japan. The second chapter takes the notion of

ensorship and shows its productive dimensions for articulating a distinctive local tradition enmeshed in transregional and transnational forms of knowledge. In the third chapter I focus on the activities of Nishikawa Joken, while engaging with three main primary sources associated with Ro Sōsetsu. I challenge the received interpretation that Joken represented an early proponent of “Western” scientific rationality and empiricism in Tokugawa Japan. In the fourth and last chapter, I delve into the details of Nagasaki’s hybridized cosmologies as represented by Nishikawa Joken’s writings. I conclude this study by addressing head-on the key notions of the composite cosmologies that Joken embodied, and how they were related to the interplay between Jesuit knowledge and late Ming scholarship. I demonstrate Joken’s strategies to obfuscate the hybridized nature of his cosmological views, masking its Catholic elements behind a discourse that fully supports Confucian orthodoxy as the ultimate paradigm.

Keywords :

Cosmology, hybridity, censorship, Nagasaki, Tokugawa, Japan, Nishikawa Joken, Ming-Qing transition, Jesuits, Dutch East India Company

Résumé long

Dans cette thèse, nous n'avons fixé comme objectif principal de décortiquer les enchevêtrements épistémologiques entre les savants de Nagasaki de la première moitié l'époque Tokugawa et les multiples sources de connaissances cosmologiques provenant d'Eurasie et d'ailleurs. Les sources utilisées, ainsi que la méthodologie, révèlent une variété d'acteurs transnationaux impliqués dans la formation de cosmologies hybrides qui se sont développées dans cette ville portuaire stratégique entre 1630 et 1720. De l'analyse des réseaux de lettrés locaux à l'examen de la forme, du style et du contenu des livres imprimés et des manuscrits, cette étude démontre que la ville de Nagasaki était un carrefour de savoirs essentiel pour la production et l'obtention d'informations nouvelles qui attirait de plus en plus l'attention du régime des Tokugawa. Les mesures répressives antichrétiennes shogunales, associées à des restrictions commerciales croissantes, ont été déterminantes dans la transformation de Nagasaki en une porte d'entrée sous stricte surveillance qui filtrait et contrôlait l'arrivée des biens et des savoirs. Ces politiques ont permis aux savants locaux d'adopter des points de vue éclectiques tout en maintenant un discours conforme à l'orthodoxie confucéenne.

Le développement de formes hybrides de connaissances cosmologiques à Nagasaki au cours des XVII^e et XVIII^e siècles est dû à la confluence de cinq facteurs principaux : 1) des pratiques astronomiques et géographiques locales étroitement liées aux compétences de navigateurs transrégionaux, notamment d'origine ibérique ; 2) la circulation d'écrits d'inspiration jésuites produits à la fois en japonais et en sinitique ; 3) la présence des membres de la Compagnie néerlandaise des Indes orientales (VOC) en tant que pourvoyeurs d'information et consultants techniques auprès du shogunat ; 4) le développement d'une communauté de locuteurs chinois (mandarin de Nanjing, Min oriental et Min méridional) ayant des liens étroits avec leurs maisons ancestrales ; et 5) une surveillance stricte par les autorités shogunales assurant une communication directe avec Edo. L'interaction entre ces éléments a conduit à l'émergence de savoirs lettrés propres à une zone de contact marquée par des traditions disparates qui s'entrecroisaient et façonnée par des politiques de censure. Des savants locaux comme Nishikawa Joken (1648–1724) et Ro Sōsetsu (1675–1729), grâce à leurs liens avec des personnages centrales des communautés d'interprètes chinois, ainsi qu'avec les censeurs du clan Mukai au Nagasaki Seidō, se trouvaient dans une position privilégiée pour créer de nouvelles visions d'un monde en pleine transformation.

Située à l'extrémité de l'île de Kyushu, qui relie le Japon à l'Eurasie, la ville portuaire de Nagasaki occupait une position prépondérante dans l'archipel au début de l'ère moderne. Nagasaki était au cœur d'une série de transformations économiques, politiques et culturelles qui ont marqué le passage à la période moderne au Japon, et les connaissances cosmologiques ont joué un rôle central dans ce processus. D'abord petit village de pêcheurs, Nagasaki est devenu, à partir des années 1570, un port commercial transnational dominé par les missionnaires de la Compagnie de Jésus. Au XVII^e siècle, la ville s'est transformée dans un port commercial stratégique sous le règne des Tokugawa (1603–1868).

Au début du régime shogunal, le christianisme a été fortement réprimé et les missionnaires catholiques ont été chassés. La présence des Jésuites dans la ville, venus avec les commerçants portugais dans le sillage de l'expansion ibérique en Asie, a jeté les bases de l'assimilation d'éléments de leur doctrine et créé un climat de tension autour de la diffusion de leur religion au Japon. Entre la fin du XVI^e siècle et le début du XVII^e siècle, Nagasaki est passée du statut de centre de promotion de la foi catholique à celui de bastion des efforts visant à l'éradiquer. Reconnaisant l'importance des lieux de savoirs pour retracer des liens transrégionaux et globaux, notre recherche prend Nishikawa Joken et son milieu intellectuel comme point de départ pour clarifier comment des connaissances cosmologiques circulaient à travers des frontières fortement surveillées. Outre l'héritage des missionnaires jésuites, les habitants de Nagasaki avaient des liens encore plus étroits avec la culture du sud de la Chine à la fin de la dynastie Ming (1368–1644). Des marchands, des moines, des loyalistes Ming et des expatriés originaires des régions de Nanjing et du Fujian ont profondément impacté la culture savante locale et contribué à la circulation de nouvelles idées cosmologiques. Dans la première moitié du XVII^e siècle, à la suite de mesures shogunales de plus en plus restrictives visant à contrôler l'afflux de commerçants au Japon, différents groupes de locuteurs chinois ont commencé à se rassembler dans la ville, autour de temples représentant trois groupes linguistiques principaux : les deux langues du Fujian (Min oriental et Min méridional) et la lingua franca du mandarin de Nanjing. Ces trois groupes culturels ont largement façonné la communication entre les acteurs locaux et le nombre croissant d'émigrés continentaux qui s'installaient à Nagasaki.

En introduisant le concept de « cosmologies hybrides » dans l'espace liminaire de Nagasaki, nous abordons la ville portuaire comme une zone de contact dans laquelle des systèmes épistémiques disparates s'entrechoquaient et se chevauchaient. Les notions d'hybridation ou de rencontres transculturelles ont été souvent discutées dans des contextes coloniaux, notamment en Asie du Sud et dans les Amériques, où les populations vivant en

contact avec d'autres cultures étaient souvent métissées. L'hybridité épistémologique dans les zones de contact est donc étroitement associée à des processus concomitants de métissage et à l'émergence d'un environnement culturel intermédiaire. Nagasaki sous les Tokugawa peut être considérée comme une zone de contact extra-coloniale, dans laquelle des processus d'hybridation épistémique ont été déterminés non pas tant par des agents impériaux venus d'ailleurs, mais plutôt par le pouvoir centralisé du shogunat nouvellement établi, qui administrait et surveillait directement la ville. Pour compliquer encore ces processus, un nombre croissant de restrictions ont été imposées à la fois à la population locale et à ceux qui atteignaient la ville depuis d'autres parties du monde. Bien que relativement inhabituelle par le niveau de contrôle politique et les pratiques de censure auxquelles elle était soumise, Nagasaki n'était pas le seul endroit en Asie orientale où des systèmes épistémiques divers s'entrecroisaient. En fait, les types de connaissances « occidentales » qui sont venus informer les savants locaux comme Joken étaient eux-mêmes le produit d'hybridations qui ont eu lieu dans d'autres zones de contact en Chine. L'hybridité cosmologique qui s'est épanouie dans la ville était donc une couche supplémentaire ajoutée aux savoirs déjà éclectiques circulant dans la région.

Dans le premier chapitre de cette étude, nous présentons la position de Nagasaki dans le Japon de Tokugawa en tant que porte d'entrée vers l'Eurasie et au-delà, à la fois ouverte à l'afflux d'un grand nombre de marchands et fortement réglementée par les autorités locales et centrales. Nous commençons par l'examen des politiques antichrétiennes adoptées par le régime shogunal dans les premières décennies du XVII^e siècle, ainsi que l'impact à long terme de ce projet d'éradiquer la religion dans l'archipel. Nous nous penchons ensuite sur la position des communautés chinoises dans cette ville en pleine mutation, en les comparant aux officiers de la VOC nouvellement arrivés, à la fois médiateurs culturels et informateurs du shogunat. La troisième section du chapitre aborde les conséquences de la chute de la dynastie Ming sur le continent pour les activités commerciales de Nagasaki, en mettant l'accent sur la façon dont elle a également impacté le développement intellectuel du Japon dans son ensemble. Le premier chapitre se termine par une analyse des textes sinitiques associés au savoir jésuite qui ont été interdits sous les Tokugawa, introduisant des ouvrages cosmologiques qui circuleraient plus tard au Japon, et indiquant que la censure dans la ville était ciblée.

Le deuxième chapitre reprend la notion de censure et montre ses dimensions productives pour l'articulation de traditions savantes locales imbriquées dans des épistémologies transrégionales et transnationales. Il commence par la figure de Mukai

Genshō, en soulignant son rôle non seulement en tant que censeur des livres siniques qui passaient par Nagasaki, mais aussi en tant que spécialiste de connaissances « barbares » provenant de sources européennes. Cela conduit à la deuxième section du chapitre, qui décrit comment son fils Mukai Gensei s'est appuyé sur l'héritage de son père, en élargissant le rôle de censeur qui lui était assigné, et en consolidant l'académie Nagasaki Seidō en tant que centre de promotion de l'orthodoxie confucéenne au Japon. La troisième section du chapitre utilise le livre *Nagasaki senmin den* comme source pour étudier la manière dont le clan Ro a pu construire un discours sur les traditions savantes de Nagasaki en tant qu'entreprise cosmopolite, reconnue bien au-delà de sa sphère d'influence immédiate ; tandis que la quatrième section incorpore des informations provenant de la source nommée *Sokuryō higen*, soulignant comment l'héritage des connaissances cosmologiques locales a été largement déterminé par des pratiques astronomiques de navigation qui ont d'abord circulé dans la ville grâce à des marins transfrontaliers. La cinquième section du chapitre explore les documents des archives de la famille Ro et démontre comment les activités savantes de Sōsetsu étaient en dialogue constant avec les développements dans la Chine des Ming ainsi que dans les deux capitales de Kyoto et d'Edo.

Le troisième chapitre marque la seconde moitié de cette étude, dans laquelle nous portons notre attention sur Joken et ses activités plus spécifiquement, tout en continuant à nous intéresser aux trois principales sources associées au Sōsetsu. Nous commençons par un aperçu des biographies de Joken, remettant en question l'interprétation reçue selon laquelle il aurait été l'un des premiers à promouvoir une rationalité « scientifique » et un empirisme « à l'occidentale » dans le Japon des Tokugawa. La deuxième section du chapitre rassemble les récits japonais de la convocation de Joken et de Sōsetsu à la cour de Tokugawa Yoshimune avec les informations trouvées dans les journaux des *opperhoofden* de la VOC lors de leur visite annuelle à Edo, qui a coïncidé avec le voyage des deux savants de Nagasaki. La décision de Yoshimune de lever l'interdiction de certains livres cosmologiques associés aux jésuites est étroitement liée à cette convocation et à la visite de la VOC, ce qui nous amène à la section suivante. Dans la troisième section, nous replaçons l'intérêt du shogun pour l'acquisition de connaissances techniques à partir de sources éclectiques dans le cadre de ses projets plus vastes de réforme du calendrier et de réforme économique. Dans la quatrième section, nous revenons sur le rôle des marchands hollandais, qui fournissaient à Yoshimune des informations diverses, agissant comme de loyaux pourvoyeurs de biens et de renseignements. La cinquième section conclut le chapitre en révélant quels types de connaissances

astronomiques et géographiques le shogun tentait de recueillir auprès de Sōsetsu et de Joken, ainsi que des fonctionnaires de la VOC.

Dans le quatrième chapitre, nous nous tournons vers les détails des cosmologies hybrides de Nagasaki telles qu'elles sont représentées par les écrits de Joken. La première section présente une image globale des œuvres produites par Joken, en mettant l'accent sur les différences entre les livres imprimés et les manuscrits. En classant ses publications selon un spectre allant des registres sinitiques aux registres vernaculaires, nous évaluons les différents types de lecteurs auxquels elles s'adressaient, en identifiant un discours cosmologique et une veine édifiante qui les imprègne. La deuxième section développe les thèmes de la « civilisation » et de la « barbarie » en tant que catégories utilisées dans les ouvrages géographiques de Joken pour expliquer l'existence de nombreuses terres habitées au-delà du cadre familier du monde sinisé. Nous soutenons qu'il existait en fait un palimpseste de connaissances qui alimentait ses perspectives concernant la position de la Chine, du Japon et de l'Asie sur un monde sphérique dont le centre n'est pas évident. Dans la troisième section, nous mettons en lumière l'utilisation par Joken d'anciennes théories cosmologiques chinoises pour justifier des approches empiriques vers l'astronomie à son époque, en les inscrivant dans une longue tradition de la sphère armillaire remontant aux sages de l'Antiquité.