

Matteo Ricci's World Maps in Late Joseon Dynasty*

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In the period of the Ming (明) Empire, there was a man from Gura[-pa] country named Li Madu. He proudly said, “Having traveled far and wide throughout all under heaven, I realized that there were five worlds other than and comparable to the Central Kingdom (中國).” The envoys of our Eastern country dispatched to Beijing brought his teaching [to our country]: Yi Gan (李東, 1677-1727)¹

Matteo Ricci (1552-1610), or “Li Madu (利瑪竇)” as known to Korean literati, was one of a few “Western barbarians,” who enjoyed exceptional popularity among intellectuals in the late Joseon (朝鮮, 1392-1910) period. No Korean seems to have ever met him in person, but by the early eighteenth century, Ricci’s name and his role as the initiator of Western learning in late Ming (明, 1368-1644) China were well appreciated by Korean literati. They even considered “Li Madu” representing Europe (Gurapa, 歐羅巴) and its culture as a whole, giving him a multifarious identity as a Christian priest, an astronomer, a geographer, and even a clockmaker, which covered the whole range of Jesuit’s cultural accomplishments in China. Of these multiple roles assigned to Ricci, this essay focuses on Ricci as a geographer and mapmaker.

As shown in Yi Gan’s remark, Ricci was known foremost as an extraordinary traveler, who, based upon his journey “throughout all under heaven,” suggested a grand geographical scheme of the plural worlds, a scheme presented in a series of his world maps published in China. Indeed, “Li Madu’s maps,” introduced from China and then reproduced and circulated widely among literati intellectuals, were one of the main sources of Li Madu’s popularity in late Joseon society. World maps

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¹ Yi Gan, “Cheonji byeon huseol” (Discourse on Heaven and Earth, and an Epilogue), *Oeam yugo*, gweon 12, in *Hanguk munjip chonggan* (Seoul: Minjok munhwa chujinhoe, 1997), Vol. 190, p. 447 [李東, 『巍巖遺稿』 卷 12, “天地辨後說”, 韓國文集叢刊].

of other Jesuits, those of Giulio Aleni (1582-1649) and Ferdinand Verbiest (1623-1688), were also circulated, occasionally misidentified as “Li Madu’s maps.” In a sense, “Li Madu’s maps” became a generic term for Western style world maps in the late Joseon period.²

This paper examines the circulation of “Li Madu’s” or “Western” world maps in late Joseon society with particular emphasis on how Korean mapmakers and general intellectuals read and reproduced the maps of foreign origin. However, this is not an attempt to measure the “influence” of the Jesuit cartography upon indigenous map culture, as has been done in much of the previous research about the cartography of early modern East Asia.³ The Jesuit maps were circulated in Joseon society, this paper argues, not as ready-made entities, the meaning and the usages of which had been predetermined by the Jesuit authors. On the contrary, this paper examines the circulation and consumption of the Jesuit maps in late Joseon society as a process in which the Korean audience created a new entity called “Li Madu’s maps”: a cultural hybrid that the Koreans made out of features from both the East Asian and the European cartographic traditions.

Circulation of Matteo Ricci’s Maps in Late Joseon Period

Since the Jesuit missionary did not establish a foothold in Korea during the late Joseon period, the world maps and the geographical ideas of the China Jesuits came into Korea mainly through the efforts of Korean visitors to China. Matteo Ricci’s world maps were transmitted to Korea from as early as the beginning of the seventeenth century, when Ricci had settled in Beijing and launched an ambitious project to proselytize China with the help of European secular learning.

Yi Sugwang (李晬光, 1563-1628), a famous courtier of this period, recorded one of the earliest Korean encounters with Ricci’s world map. In 1603, he saw a map presented to the court by the returning envoys from Beijing. He simply called it a “terrestrial map of Europe” (歐羅巴國輿地圖) drawn by a certain “European envoy” named Feng Baobao (馮寶寶). Yet, there is little doubt that this “six-scroll” map is a copy of the famous “Kunyu wanguo quantu” (坤輿萬國全圖, the Complete Map of Ten Thousand Countries of the Earth), which had been drawn by Ricci and Li

² Recent research, for example, shows that an early nineteenth-century copy of a Jesuit world map, titled “the Map of Ten Thousand Countries by a Western Jesuit, Li Madu,” was actually a copy of Aleni’s world map. See, Yang Bogyong, “Ha Baikwon’s Map of Ten Thousand Countries and Map of the Eastern Kingdom,” *Jeonnam sahak* 24 (2005), 73-109 [양보경, “圭南河百源의 <萬國全圖>와 <東國地圖>,” 『全南史學』].

³ For a review of previous research on the introduction of European cartography into late Imperial China, see Cordell Yee, “Traditional Chinese Cartography and the Myth of Westernization,” in J.B. Harley and David Woodward (eds.), *The History of Cartography*, Vol. 2, Book 2, *Cartography in the Traditional East and South East Asian Societies* (Chicago: University of Chicago Press, 1994), pp. 170-202.

Zhizao (李之藻, 1565-1630) in the previous year.⁴

Yi Sugwang marveled at the Western representation of the world. He was most impressed by the map's precise and detailed description of the parts of the world, especially the regions around China, Korea, and Japan. The map might have appealed to the strategic concern of the Korean court official in the direct aftermath of the tragic Hideyoshi Invasion (1592-1598), in which the allied force of Joseon and Ming China had fought the Japanese invaders. But the Western map's precision was not the only source of Yi's fascination with it. His interest pointed more to the remote place where the map originated – the distant country called “Gurapa” and its cultural features, about which he had never heard before. His record about Ricci's map belonged to a part in which he summed up information about Europe, its geography, religion, and its representative figures such as Feng Baobao and Li Madu. Again his description of Europe was included as an entry of a chapter titled “Various Countries of the World,” a part of his encyclopedic work that compiled fabulous stories about remote regions.

Thanks to their cartographic merits and cultural novelties, the Jesuit world maps soon became important objects for the official envoys to see and then to acquire during their tributary missions to China. Some of them even made a direct contact with the Jesuits, from whom they received many books and artifacts, including their world maps. Viewing the Korean envoys as high officials from a country yet to be proselytized, the Jesuit fathers also had a good reason to cultivate a favorable relationship with them. Thus, for instance, when a Korean envoy named Jeong Duwon (鄭斗源, 1581~?) met João Rodrigues (1561-1633) in 1631 at his military camp in Shandong Province, the Portuguese Jesuit gave him a world map and a geographical treatise of Giulio Aleni (1582-1649) in addition to numerous other gifts.⁵ After about a decade, Adam Schall von Bell (1591-1666) had a much better chance to befriend with the Korean crown prince Sohyeon (昭顯世子, 1612-1645), who was then a hostage to the Manchu court in Beijing. When the prince was finally allowed to return to Korea in 1644, the missionary presented him with many books and artifacts.⁶

Mainly through these joint efforts of Korean visitors and the Jesuits, most of Jesuit cartographic works were brought into Korea, including several versions of Ricci's maps, Aleni's “Wanguo quantu” (萬國全圖, the Complete Map of Ten Thousand Countries, 1623), and Ferdinand Verbiest's “Kunyu quantu” (坤輿全圖,

⁴ Yi Sugwang, *Jibong ryuseol*, “Jeguk bu” (Seoul: Euryu munhwasa, 1994), Vol. 1, pp. 90-91 [李睟光, 『芝峰類說』, “諸國部”]. On the introduction of world maps of Ricci and other Jesuits into late Joseon Korea, see O Sanghak, *World Maps and Worldviews in Joseon Dynasty Korea* (Seoul: Changbi, 2011), pp. 171-176 [오상학, 『朝鮮時代の 世界地圖와 世界認識』].

⁵ Gang Jaeon, *A History of Western Learning in Korea* (Seoul: Mineumsa, 1990), pp. 49-57 [강재언, 『朝鮮의 西學史』].

⁶ *Ibid.*, pp. 57-65; Yamaguchi Masayuki, *A History of Western Religion in Korea: A Cultural Historical Research on Christianity in Korea* (Tokyo: Yuzankaku, 1967), pp. 37-43 [山口正之, 『朝鮮西教史: 朝鮮キリスト教の文化史的研究』].

the Complete Map of the Earth, 1672). Only a few of them, however, have survived, an example of which is the 1603 edition of Ricci's map, "Liangyi xuanlan tu" (兩儀玄覽圖, the Map of the Profound View of the Heaven and Earth), preserved in the Korean Christian Museum of the Soongsil University in Seoul [Figure 1].⁷

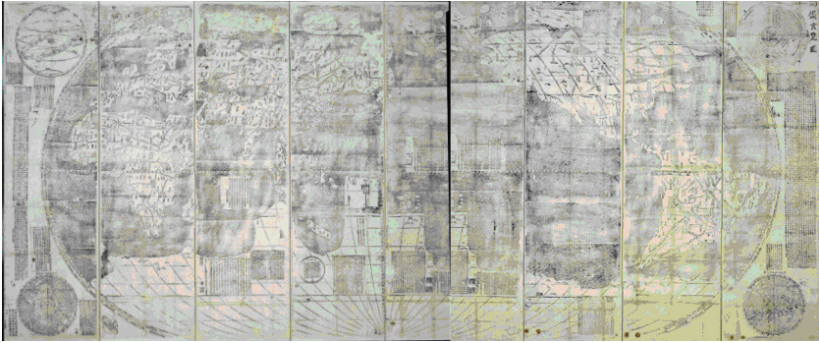


Figure 1. Matteo Ricci, "Liangyi xuanlan tu" (Yang'ui hyeollamdo in Korean), 199×444 cm. Woodblock Print in 1603. Korean Christian Museum, Soongsil University, Korea.

These authentic versions were, however, only a part of what had been brought under the label of Ricci's, or Western, world map. Many less authentic versions, mostly Chinese reproductions, also entered Korea. In his encyclopedia, Yi Sugwang mentioned another European map, "Shanhai yudi quantu" (山海輿地全圖, the Complete Map of Mountains and Seas of the world), this time correctly identifying the author as "Li Madu." He saw this map, perhaps based on the Nanjing edition (1600) of the same title, in a Chinese encyclopedia, Wang Ji's *Sancai tuhui* (王圻, 三才圖會, Collected Illustrations of the Heaven, Earth, and Men).⁸ As is well known, this Chinese copy was an outcome of serious cartographic distortions from the Jesuit's original; the circles of longitude and the parallels of latitude were simply omitted, and the shape of continents was considerably deformed [Figure 2].⁹

⁷ On the introduction of this map into Korea and its later history, see Kim Yangseon, *Research Notes on the Old Maps in Korea: World Maps* (Seoul: Sungjeon daehakgyo bangmulgwan, 1972), p. 228 [김양선, "韓國古地圖研究抄: 世界地圖", 『梅山國學散稿』]; O Sanghak, *World Maps and Worldviews in Joseon Dynasty Korea*, p. 173.

⁸ Yi Sugwang, *Jibong ryuseol*, pp. 90-91.

⁹ On the Nanjing edition of Ricci's world map and its copies included in books written by the Chinese, see Huang Shijian and Gong Yingyan, *A Study on Li Madou's World Maps* (Shanghai: Shanghai guji chubanshe, 2004), pp. 22-29 [黃時鑒, 龔纓晏, 『利瑪竇世界地圖研究』].



Figure 2. A Chinese copy of Ricci's Map titled "Shanhai yudi quantu" 山海輿地全圖. From Wang Ji, *Sancai tuihui*, in *Xuxiu sikuquanshu*, vol. 1233 (Shanghai: Shanghai guji chubanshe, 1995), p. 3 [王圻, 『三才圖會』, 續修四庫全書].

There were several attempts in Korea, mostly by the court, to make faithful reproductions of the Jesuit world maps. In 1708, for instance, the Royal Astronomy Bureau (Gwansanggam 觀象監) made a painted copy of a version of Ricci's "Kunyu wanguo quantu" with a star map of Adam Schall von Bell.¹⁰ This version of "Kunyu wanguo quantu," which Korean painters rendered into an eight-scroll map, was based on the 1608 edition of Ricci's map, which contains numerous pictures of exotic animals and European sailing vessels [Figure 3]. Major cartographic works of other Jesuits were also reproduced in the Joseon court. Figure 4 shows a late eighteenth-century reproduction of Aleni's "Wanguo quantu," included in an atlas of three volumes, titled *Yeojido* (輿地圖, The Terrestrial Maps).

¹⁰ See the original preface to the copy written by the director of the Royal Astronomy Bureau, Choe Seokjeong, "Preface to the Celestial and Terrestrial Maps of the West" *Myeonggok jip*, gweon 8, in *Myeonggok seonsaeng munjip* (Seoul: Gyeong'in munhwasa, 1997), vol. 8, pp. 172-173 [최석정, 『明谷集』 卷 8, "西洋乾坤象坤輿圖二屏總序", 明谷先生文集]. Huang Shijian and Gong Yingyan, *op. cit.*, pp. 147-150 claims that this world map of Ricci was what Adam Schall von Bell presented to the crown prince Sohyeon without providing any substantial evidence. According to the court record that describes the dialogue between the King and the officials about the reproduction of the Ricci's map, the King said that the original map had been brought to Korea during the Wanli (1573-1619) and Tianqi (1621-1627) periods, which is much earlier than the return of the crown prince in 1645. See *Seungjeongwon ilgi* 承政院日記 (The Daily Records of the Royal Secretariat), 5th Month, 12th day, 1708 (the 34th year of King Sukjong's reign). I used the electronic text version of the *Seungjeongwon ilgi* provided by the National Institute of Korean History (<http://sjw.history.go.kr>).



Figure 3. A Korean reproduction of Ricci's "Kunyu wanguo quantu." Manuscript copy in color. (1708) 172.0×531.0 cm. Seoul National University Museum, Korea.

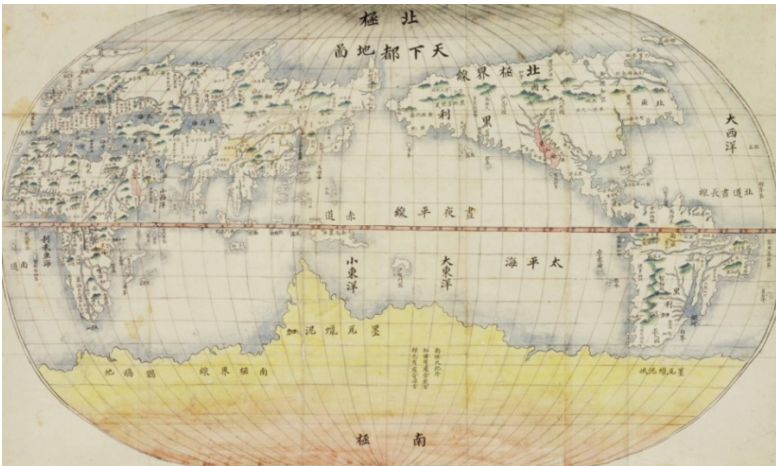


Figure 4. "Cheonha do jido" a Korean reproduction of Aleni's "Wanguo quantu." Manuscript map in color. (Late 18th Century). From *Yeojido*. Kyujanggak Library, Seoul National University, Korea.

Yet a small number of fine reproductions, kept in the court and thus not open to public view, simply could not satisfy the ever-increasing demand of the Korean literati for Western world maps. Indeed, the late Joseon period, particularly the eighteenth century, witnessed two overlapping trends that fostered the circulation of the Western style maps in the literati society. First, the official ban on the private production and possession of maps, which had been instituted mainly for political and strategic reasons, was lifted during the seventeenth century. As a consequence, geographical maps and atlases began to be privately produced and then disseminated among intellectuals. Maps became one of the necessary items for the cultural life of the literati.¹¹

¹¹ The features of the map culture in the late Joseon period including the popularization of map

Another driving force behind the literati's demand for Western maps was the heightened interest of literati intellectuals in Western learning. After the political relation between Qing and Joseon stabilized in the early eighteenth century, the Joseon court and literati officials made efforts to introduce cultural accomplishments of the new Manchu dynasty, among which the Jesuit learning was considered one of the important features to be seriously assessed and then, at least partly, adopted.¹²

Although it is not easy to measure how widely Western maps were circulated in Korea, an abundance of written records as well as the surviving maps of the Western style testify to the widespread aspiration of literati to see and possess copies of the Jesuit maps. Many literati of all political and intellectual bents left records and comments about Western maps, in which they often described in detail how they had seen the maps. For instance, the journal of Hwang Yunseok (黃胤錫, 1729-1791), a second-rate intellectual from an academically less prestigious southern province, extensively documented his strenuous efforts to locate and borrow copies of the Jesuit maps. As a result, he was able to see many Western maps, including several copies of Ricci's maps.¹³

What were circulated as Western maps, however, very often turned out to be cartographically less authentic ones. Filling the gap between demand and supply, less authentic copies of the Jesuit maps flourished in literati society. Some even made their own copies of what they borrowed from others. In this case, the quality of reproduced maps tended to deteriorate even more. Yi Jonghwi (李種徽, 1731-1797), a scholar-official of the late eighteenth century, left an interesting record about the ways in which an indigenous copy of a "Li Madu's map" was produced. Yi borrowed a version of Ricci's map, titled "Li Madu nambukgeuk do" (利瑪竇南北極圖, Matteo Ricci's Map of the North and South Poles) from one of his acquaintances. He had enjoyed examining the map for three days before the owner finally asked him to return it. Unable to endure the loss of the marvelous map, he found a good way to possess it: by making a copy. Without enough time to make a complete copy, however, he drew only the region of Asia rather precisely, while for the remaining "five continents" he marked only important names of countries, mountains, and rivers. To this already distorted version, he added his own twist by supplementing written comments about the cultural features of the countries that he had read from

have not yet been fully studied. But Yang Bogyong's article provides us a useful sketch. Yang Bogyong, "History of Cartography in Korea up to the 'Daedong yeojido,'" *Hanguksa simin gangjwa* 16 (1995), 84-121 [양보경, "大東輿地圖를 만들기까지," 『한국사시민강좌』]. For a general survey of the history of cartography in Korea, see Gari Ledyard, "Cartography in Korea," in J. B. Harley and David Woodward (eds.), *History of Cartography*, vol. 2, book 2, *Cartography in the Traditional East and Southeast Asian Societies* (Chicago: University of Chicago Press, 1994), pp. 235-345.

¹² No Daehwan, "The Discussions about Introducing Western Science and Technology in the King Jeongjo Period," *Han'guk hakbo* 94 (1999), 128-141 [노대환, "正祖代の 西器受容 論議: 中國源流說을 中心으로," 『한국학보』].

¹³ O Sanghak, *World Maps and Worldviews in Joseon Dynasty Korea*, pp. 217-218.

other texts. Strikingly, even the original, of which Yi made a copy, seems not to have been an accurate copy of Ricci's map. According to Yi's description, the "original" map renders the South America as a separate continent surrounded by the ocean, a mistake which is found quite often in the indigenous reproductions of Jesuit maps.¹⁴

Even though Yi's copy has not survived, we find a similar case of an impromptu copy of a Jesuit map, in this case, Aleni's "Wanguo quantu," in a cosmographic encyclopedia, *Hwanyeong ji* (寰瀛誌, A Treatise of the Universe), compiled by Wi Baekgyu (魏伯珪, 1727-1798). Titled "Seoyang jeguk do" (西洋諸國圖, the Map of Various Countries in the Western Sea), this copy of Aleni's world map omitted most of the geographical and cartographical details of the original map. Only preserved were the names of the continents and countries, which were put inside many circles, indicating only their approximate positions [Figure 5].

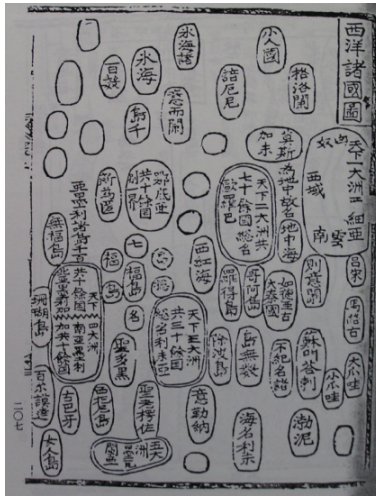


Figure 5. Wi Baekgyu's copy of Aleni's "Wanguo quantu." From Wi Baekgyu, *Jonjae jeonseo* (Seoul: Gyeong'in munhwasa, 1974), Vol. 2, p. 207 [위백규, 『存齋全書』].

These examples illustrate that the world maps of Matteo Ricci and other Jesuits were not circulated in Joseon society as ready-made commodities. On the contrary, the circulation of the Jesuit maps was also a process of remaking them, or even of creating new entities, to which the Korean consumers gave such titles as "Li Ma-du's maps" or "Western maps." That the indigenous remakes of Jesuit maps simply outnumbered the cartographically more authentic ones has posed a difficult problem in assessing the "influence" of Ricci's map upon the map culture of late Joseon

¹⁴ Yi Jonghwi, "Li madu nambukgeuk do gi," *Susan jip*, gweon 4 (Seoul: Gyeongmunsa, 1976), p. 81 [이종희, 『修山集』 卷 4, "利瑪竇南北極圖記"].

society. This difficulty of measuring the Western influence is reflected in the sharply divided opinions among researchers.

According to one opinion, the Western maps failed to exert any significant influence upon the indigenous mapmaking of late Joseon period. No Jeongsik, a representative of this position, supports this assertion by citing the scarce reproduction and circulation of the Jesuit maps in Korea compared to those in contemporary China and Japan.¹⁵ Yet, a similar observation is also made in the cases of late imperial China. In spite of a wide circulation of Ricci's maps in Chinese society, Cordell Yee argues, the Jesuit maps failed to "make any lasting impression on Chinese mapmaking."¹⁶ Researchers who believe in the scientific superiority of European over indigenous cartography are inclined to attribute this "transmission failure" to the Chinese and Korean sides, especially to their cultural backwardness or xenophobic opposition to anything foreign.¹⁷ Although researchers of a cultural relativist bent, including Cordell Yee, are critical of this "praise and blame" historiography, they are nevertheless in a good agreement with the former in considering that the "transmission failure" was caused by a cultural clash. Where they differ from the former is that they see in the same phenomena the persistence of indigenous cartography, its fundamental incompatibility with the modern European one. According to Yee, Chinese mapmakers had no practical reason to abandon such efficient indigenous methods as pictorial representation and textual description in favor of abstract mathematical methods of a European origin including geometrical projections and trigonometric survey.¹⁸

Yang Bogyong, another prominent historian of Korean cartography, does not entirely disagree with this negative picture, but nevertheless emphasizes the enlightening roles played by the Jesuit maps in the late Joseon period. The exact cartographic methods of the Jesuits, she argues, stimulated several Korean mapmakers to produce a series of fine maps of their country. According to Yang, many Confucian literati who happened to see the Western world map became aware of the vastness of the world, in which China was located only at a corner of the Asian

¹⁵ No Jeongsik, *The Old World Maps in Korea* (Daegu: Daegu gyoyuk daehakgyo jaejik dongmunhoe, 1998), pp. 112-113, 161-162 [노정식, 『韓國의 古世界地圖』].

¹⁶ Yee, "Traditional Chinese Cartography and the Myth of Westernization," p. 176.

¹⁷ No Jeongsik, for example, suggests that Korean literati were not interested in Western world maps because they contradicted the Sino-centric world view. See, No Jeongsik, *The Old World Maps in Korea*, pp. 112-113, 161-162.

¹⁸ Yee, "Traditional Chinese Cartography and the Myth of Westernization," pp. 177-202. On Yee's assertion of the incompatibility between Chinese and Western cartography, see Cordell D.K. Yee, "A Cartography of Introspection: Chinese Maps as Other than European," *Asian Art* 5-4 (1992), 28-47. Recently Zhang Qiong proposed a more sophisticated analysis on this "transmission failure" in late Imperial China. Instead of presupposing a great cultural divide between China and Europe, she illuminated the local dynamism of late Ming society, in which Ricci's maps "attracted the type of audience, who favored the maps' exotic features but were unprepared for or disinterested in assimilating their mathematical contents." Qiong Zhang, "Matteo Ricci's Worldmaps in Late Ming Discourse of Exotica," *Horizons: Seoul Journal of Humanities* 1-2 (Institute of Humanities, Seoul National University, 2010), pp. 215-250.

continent—an awareness that signaled a significant departure from traditional China-centered worldview.¹⁹

Neither of these two positions, however, incorporates the abundance of less authentic copies of Jesuit maps in China and Korea. The wide circulation of those maps resists any simplistic assertions concerning the “influence” of the Jesuit maps upon indigenous map culture. Contrary to what No Jeongsik portrays, the Western maps, albeit largely in distorted forms, were circulated widely as novel representations of the terrestrial world, giving new inspiration to mapmakers and literati intellectuals. This does not necessarily support the opposite picture, however. The novelties of the Western maps, as perceived by the Korean literati, did not wholly come from something inherent in the Jesuit maps. They were partly constructed by Korean consumers, and the ways Korean consumers perceived the Jesuit maps were conditioned, to a considerable degree, by their prior knowledge of, and attitudes toward, traditional ways of rendering the terrestrial world.

Once the Koreans created their own versions of “Li Madu’s maps,” it seems as much reasonable to talk about the “indigenous influence” upon Ricci’s maps. More precisely, the two phenomena, the influence of Jesuit maps on the Korean literati on the one hand, and the indigenous transformation of the Jesuit maps on the other, could never be neatly divided. They constituted two aspects of one process, in which foreign and indigenous elements became inseparably interwoven.

The Jesuit World Maps and the Cartography and Cosmography in Late Joseon Period

In order to understand this complex process, a good starting point is to examine what previous researchers considered the most prominent achievement in late Joseon cartography: a series of fine maps of the Joseon kingdom. Strangely enough, those maps lacked any identifiable traces of Western cartographic method; the mapmakers never explicitly adopted, for instance, astronomical measurements, trigonometric surveying, and mathematical projections. Similar to the cases of the contemporary China shown by Cordell Yee, Korean mapmakers seem to have been satisfied with the traditional methods of mapmaking such as the pictorial representation of topography and the heavy use of textual descriptions.²⁰

This does not mean, however, that Korean mapmakers of this period only produced cartographically less accurate maps. Quite the opposite: Korean cartography achieved a great advancement in precision in the eighteenth and nineteenth centu-

¹⁹ Yang Bogyong, “History of Cartography in Korea up to the “Daedong yeojido,”” 109-115. This position has been repeated, often in a more amplified tone, by the intellectual historians in the context of emphasizing the modernity of some late Joseon scholars. For a criticism of this modernistic interpretation, see Lim Jongtae, “Introduction of Western Science and the Rationalization of Traditional Astrology: Reevaluating Yi Ik’s ‘On Field-allocation,’” *Seoul Journal of Korean Studies* 17 (2004), 45-65.

²⁰ Yee, “Traditional Chinese Cartography and the Myth of Westernization,” pp. 177-202.

ries, the best examples of which are Jeong Sanggi's (鄭尙驥, 1678-1752) "Dongguk jido" (東國地圖, the Map of the Eastern Kingdom) and Gim Jeongho's (金正浩, ?-1866) "Daedong yeojido" (大東輿地圖, the Map of the Great Eastern Kingdom).²¹ Yet, the accuracy of those maps owed much to systematic application of the indigenous methods, particularly the fixed scales and the cartographic grids, which Korean mapmakers in this period frequently adopted to make their maps as precise as possible. Those methods, which enabled the mapmakers to represent the topography into a flat surface in a fixed mathematical proportion, was not of Western origin, but one of the traditional ways of rendering the terrestrial worlds, the precedents of which can be traced back to Pei Xiu (裴秀, 224-271) of third-century China.²² In this sense, the progress in exact cartography during the late Joseon period was made possible mainly by the systematic application of the traditional methods to the maps of Korea.

Certainly the Korean mapmakers of this period were not ignorant of Western maps. There are many instances to show that they recognized the advantages of the Western cartographic method over its indigenous counterpart. Jeong Hangnyeong (鄭恒齡, 1710-1770), the son of Jeong Sanggi, even planned to carry out systematic astronomical observations throughout the country in order to obtain more reliable data for a map of the kingdom; only his death prevented him from doing so.²³ The cartographic importance of astronomical measurements was widely recognized by mapmakers or the Confucian literati who had deep interests in astronomy and cartography. Since the earth and heaven constituted two concentric spheres, heavenly phenomena such as the lunar eclipses and the changing elevation of the polar star would tell in an exact manner the observers' position on the terrestrial globe. Thus, from the late eighteenth century, several astronomers and mapmakers presented to the thrones a series of proposals that emphasized the need to carry out astronomical observations to make better national maps. However, there is no evidence that these proposals were ever implemented.²⁴

Why did the Korean mapmakers fail to apply the Western method, the advantage of which they were more than willing to acknowledge? Perhaps the lack of royal patronage was one of the main reasons, considering the amount of effort and cost required to carry out the nation-wide astronomical survey. In this situation, traditional methods, including the cartographic grid system, provided mapmakers with a fairly good alternative for producing maps of considerable precision. If so, the cartographic advancement in late Joseon period was driven by the ideal of mathematical precision exemplified in the Jesuit maps, an ideal shared by leading

²¹ For a more detailed review of the cartographic development in the late Joseon period, see Gari Ledyard, "Cartography in Korea," pp. 305-343. Yang Bokyeong, "History of Cartography in Korea up to the "Daedong yeojido,"" 84-121.

²² Ledyard, "Cartography in Korea," p. 344.

²³ Yang Bokyeong, "History of Cartography in Korea up to the "Daedong yeojido,"" 110-111.

²⁴ Bae Wuseong, *The Changes in the Ideas of the National Territory and the World in Late Joseon Korea* (Seoul: Iljisa, 1998), p. 393 [배우성, 『朝鮮後期 國土觀과 天下觀의 變化』]. For the proposals for applying astronomical observation to cartography, see *ibid*, pp. 382-408.

mapmakers, who for practical reasons had no other choice but to adopt the best alternatives among the indigenous resources.²⁵

If we turn our attention from a rather small field of the precise cartography toward the broader intellectual scene in which Confucian literati consumed and reproduced maps, we will witness that the Jesuit world maps were more actively working and thus leaving more noticeable marks in the mind of literati and the maps they produced. In fact, the Jesuit-inspired ideal for mathematically accurate maps was not limited to a small group of mapmakers, but was shared widely among the Confucian literati. They found in Jesuit ideas of the geometrical correspondence between the celestial and terrestrial globes more significant implications than just a means for precise mapmaking. Choe Seokjeong's description of Ricci's map in his preface to the 1708 reproduction illustrates what Confucian intellectuals perceived as the novel features of the Western map.

Although the terrestrial maps of past and present [in East Asian tradition] have adopted a variety of ways [of representing the world], commonly observed were [first] to represent a square earth into a flat surface and [second] to limit the scope of the maps up to the region to which the sagely teaching of China has reached. The Western scholars' ideas, however, adopted as the fundamental principle [the idea of] a round earth. They said, "The heaven is round and so is the earth." ... Across all the surface of the round earth, they put ten thousand countries and their names. The Nine Provinces of China is located in the Asian Continent and near the Northern Region. Their teachings are exaggerated and fabulous, which lie beyond reasonable discussions and thus could not be counted an orthodox teaching....²⁶

Despite the skeptical evaluation of Ricci's map, Choe's comment summarized the impression that the Confucian literati had of the Western world maps. Choe found the most prominent feature of Ricci's map in the idea of a round earth and one of its consequences – the systematic correspondence between heaven and earth. Thanks to this principle, he pointed out, the Westerners were able to represent in their maps the entire terrestrial world as paired with the corresponding celestial globe, a feature that was virtually unprecedented in East Asian tradition. The cosmological model of the concentric spheres also enabled Westerners to apply astronomical knowledge to explain terrestrial phenomena such as the alternation of seasons and the division of climate zones across the earth. Choe noticed that this feature of the Western map was in stark contrast with the traditional maps, seemingly a mere collection of geographical data about the known world without

²⁵ Several researchers have pointed out the importance of this 'indirect' influence of the Jesuit cartographic method on the Korean cartographers. See, for example, Ledyard, "Cartography in Korea," p. 298; Yang Bogyong "History of Cartography in Korea up to the "Daedong yeojido,"" 113-115.

²⁶ Choe Seokjeong, "Preface to the Celestial and Terrestrial Maps of the West," pp. 172-173.

being grounded in astronomical and cosmological principles.²⁷

Although many Confucians were suspicious of the geographical ideas found in Jesuit maps, notably the concept of a round earth, they seldom negated the imperative that a world map be cosmologically comprehensive.²⁸ Their skepticism was pointed more to the issue of whether the ideal was attainable, given the limited human capacity for comprehending the whole universe.²⁹ To the growing number of literati who had trust in the Jesuit sciences, however, the cosmographical feature of the Jesuit maps was even a great source of attraction. They found in the Jesuit maps a rare realization of the Confucian ideal for the “union of the Three Powers” of the world (*sancai yiguan* 三才一貫): the heaven above, the earth below, and the men in the middle. Portraying the ideal world order of the high antiquity, this Confucian ideal tells how astronomy and geography, the sciences symbolizing the cosmic virtue of Confucian rulers, were supposed to bring cosmic harmony down to the earth.

Even though astronomy and geography in East Asian tradition remained separate specialties, the ideal of the interrelation between heaven and earth often left some marks even in the maps of the traditional style. Take, for instance, a world map made by a Korean Confucian scholar, Gim Suhong (金壽弘, 1601-1681), in the middle of the seventeenth century [See Figure 6]. This map, “Cheonha gogeu daechong pyeollamdo” (天下古今大摠便覽圖, the Comprehensive Map for the Convenient View of All under Heaven, the Past and Present), shows many typical features of the traditional world maps in the genre of historical geography: the overwhelming textual elements, the China-centered worldview, and the apparent lack of efforts to adopt mathematical methods of mapmaking. Yet, the mapmaker, himself a serious Confucian scholar-official, left in his map two kinds of marks that signified the cosmic association between heaven and earth. First, inside the black

²⁷ On the separation of astronomy from cosmology in Chinese tradition, which made the Chinese astronomers to focus narrowly on predicting celestial phenomena and calculating ephemerides while having little interest in cosmological matters, see Nathan Sivin, “Cosmos and Computation in Early Chinese Mathematical Astronomy,” *T'oung Pao* 55 (1969), in Sivin, *Science in Ancient China: Researches and Reflections* (Aldershot: Variorum, 1995), chapter 2, pp. 3-5, 64-67.

²⁸ On the debate concerning the idea of a round earth in late imperial China, see Chu Pingyi, “Trust, Instruments, and Cross-Cultural Scientific Exchanges: Chinese Debate over the Shape of the Earth, 1600-1800,” *Science in Context* 12(3) (1999), 385-411. For the Korean cases, see Gu Man'ok, “The Implications of the Acceptance of the ‘Gigu’ Theory in the Intellectual History of the Late Joseon Period,” in *Ha Hyeongang gyesu jeongnyeom ginyeom nonchong – han’guksa-ui gujo-wa jeongae* (Seoul: Hyeon, 2000), pp. 717-747 [구만옥, “朝鮮後期 ‘地球’說受容의 思想史의 意義”, 『河炫綱教授定年紀念論叢-韓國史의 構造와 展開』].

²⁹ On the criticism of the Jesuit geographical texts and world maps, see Kenneth Chen, “Matteo Ricci's Contribution to, and Influence on, Geographical Knowledge in China,” *Journal of the American Oriental Society* 59(1939), 325-359; Lim Jongtae, “Impact of Western Geography on East Asian Geographical Tradition in the Seventeenth and Eighteenth Centuries China and Korea,” *Korean Journal for the History of Science* 26-2 (2004), 327-332 [임종태, “西歐地理學에 對한 東아시아 世界地理 傳統의 反應: 17-18 世紀 中國과 朝鮮의 境遇”, 『한국과학사학회지』].

squares where he specified the provinces and major cities of China, he added the names of constellations that corresponded to the terrestrial regions. Second, in the text attached to the left side of the map, Gim quoted passages from the astronomical or cosmological texts, which expounded a variety of cosmographical schemes such as the shape and magnitude of the universe. Interestingly, Gim mentioned “Li Madu” as a figure in the Ming China who suggested a scheme to make connections between astronomy and geography: the principle of *lichā* 里差, according to which one degree in the celestial sphere corresponded to 250 *li* distance on the earth. Although not explicitly adopting the idea of the association between astronomy and geography in his image of the world, Gim Suhong nevertheless showed his strong awareness of the Confucian ideal, and even mentioned Matteo Ricci’s principle as one of the alternatives that substantiated the ideal.



Figure 6. Gim Suhong, “Cheonha gogyeum daechong pyeollamdo” (天下古今大總便覽圖, the Comprehensive Map for the Convenient View of All under Heaven, the Past and Present). Woodblock print in 1666. 142.8 × 89.5 cm. Korean Christian Museum, Soongsil University, Korea.

As the Western maps became more popular during the eighteenth century, some literati made more ambitious attempts to appropriate the perceived cosmographical features of the Western maps for their own purpose. To take only one notable example, Jeong Jedu (鄭齊斗, 1649-1736), famous for his Wang Yangming (王陽明) scholarship, drew an interesting chart based upon a Jesuit map, probably Verbiest’s “Kyunyu quantu [See Figure 7].” This is an outcome of Jeong’s conscious effort to

maximize the cosmological potential that he perceived in the Jesuit map. To do this, he simply cut out geographical details of the Jesuit maps, leaving only several places of geographical importance as well as the cosmographical devices of the original map, including the two terrestrial poles, the equator, the scales indicating the latitudes, and the Fortunate Islands (*fudao* 福島) – the place through which the prime meridian passed. In fact, he was creating his own cosmography by giving the Jesuit map a new interpretation based upon the *Yijing* cosmology. Jeong recast the Jesuit map in a way that highlighted the action of *yin* and *yang* cosmic forces throughout the world, and this action made China, named “the Central Splendor” (*zhonghua* 中華), the most auspicious place in the world. China was located, he claimed, in the Northern part of the Southern longitudinal region (*nan zhi bei* 南之北), where the *yang* force (the virtue of the South) was harmonious with that of *yin* (the virtue of the North), explaining why the sacred culture had been generated and preserved since the remote antiquity.³⁰ As this example indicates, the Jesuit world maps not only sparked the aspiration for comprehensive cosmography in the minds of Confucian literati, but also provided them with substantial resources which enabled them to produce their own version of cosmography—in fact, a hybrid of the Jesuit geographical lore and the traditional *Yijing* cosmology.

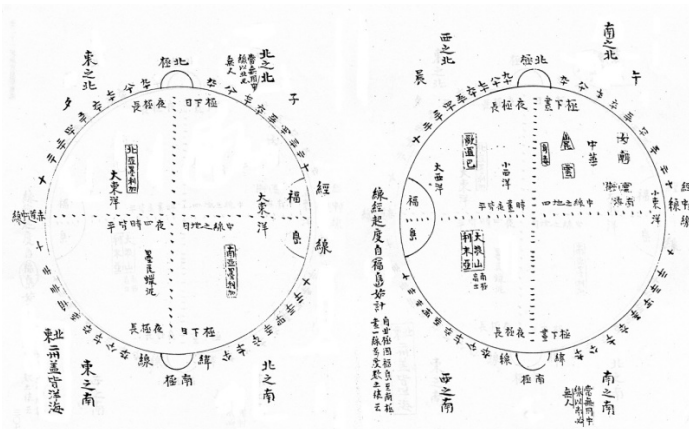


Figure 7. Jeong Jedu's cosmographical map based on a Jesuit world map. From Jeong Jedu, *Hagok jeonseo*, gweon 21, “Cheonji bangwi lido seol” (Seoul: Yeogang chulpansa, 1988), pp. 307-308. [정제두, 『霞谷全書』 卷 21, “天地方位里度說”]

The *Yijing* cosmology, however, is not the only indigenous resource that informed Korean literati's reading of the Jesuit world maps. The Jesuit maps had another partner in the indigenous map culture to make an

³⁰ For a more detailed account about Jeong Jedu's map, see Lim Jongtae, “Locating a Center on the Surface of a Globe: Negotiating China's Position on the Spherical Earth in Seventeenth and Eighteenth-Century China and Korea,” *Historia Scientiarum* 17-3 (2008), 175-188.

intriguing interplay with: the “circular world maps.”

During the late Joseon period, the growing popularity of Jesuit maps paralleled the emergence and the wide circulation of the cosmographical maps in a circular shape called “Cheonha do” (天下圖, Terrestrial Maps). These maps, found only in late Joseon Korea, were of a very unusual kind in East Asian cartographical tradition. First, as shown in a typical map of this kind, they portrayed the terrestrial world as a circle, not as a square as was customary in traditional maps [see Figure 8]. Nor did the configuration of the continents in the maps, consisting of the two roughly concentric landmasses surrounded by oceans, have clear precedents in East Asian maps. Except for a few countries around China, the place names in the map were mostly imaginary ones drawn from the *Shanhai jing* (山海經, the Classic of Mountains and Seas), a popular text of mythological geography which had been handed down from the pre-Qin period of China. Yet the very attempt to visualize them in this particular way was novel as long as no comparable effort had yet been identified in the East Asian tradition.³¹



Figure 8. A circular world map with no title. Late Seventeenth century. 29×33.0 cm. Yun Hyeongdu Collection.

Notably, all these novelties of the “Cheonha do” maps made them rare

³¹ A recently published article provides a useful survey on the issues concerning the Korean circular maps. See O Sanghak, “Circular World Maps of the Joseon Dynasty: Their Characteristics and Worldview,” *Korea Journal* (Spring 2008), 8-45.

examples of the cosmographical maps in the East Asian tradition.³² These maps incorporate the terrestrial world in its entirety, up to the very limit of the world where the outermost layer of ocean is bounded by the heaven. There are many places of cosmic importance, such as the trees where the sun rises and sets, and the mountains of the immortals that connect the realms of heaven and earth.

There is no consensus among researchers about the origin of these circular maps. In spite of, or due perhaps to, these maps' great popularity in late Joseon period, no meaningful evidence identifies their origin—the reason why the “originator” made the map, and which resources the “originator” relied upon in rendering the world in such a manner. Nor is it easy, if possible at all, to explain why these maps became popular in late Joseon society.

An intriguing line of argument concerning the origin of the circular maps, however, was to see them as responses of Korean intellectuals to the intrusion of Jesuit world maps. Yet, researchers disagree on what the Korean response actually means. One argues that the circular map represented anti-Western trends; the Korean mapmaker created this world map of the “Daoist-inspiration” to oppose the foreign world picture expressed in Jesuit maps.³³ Another researcher contends that the mapmaker took the circular shape and even the configuration of the continents of the map from the Jesuit maps, in spite of some considerable modifications, particularly in the place names, in order to make it look more familiar to an indigenous audience.³⁴ Yet, both of these diverging hypotheses assume that the features of the circular map were shaped under the impact of the Jesuit maps. If so, one of the most obvious effects of the “Western impact” was the cosmographical features of the circular maps; whether a reaction to or an emulation of the Jesuit world maps, the circular maps might be seen as a cohesion of cosmographical resources scattered throughout the East Asian geographical traditions, a process that was inspired by the Jesuit maps.

Although there is little possibility of reaching a conclusion on this issue, several examples show at least that some of the Confucian literati saw strong resemblances

³² For example, Joseph Needham characterized the Korean circular map as a representative of the “religious cosmography” in East Asian tradition. See Joseph Needham, *Science and Civilization in China*, Vol. 3 (Cambridge: Cambridge University Press, 1959), pp. 583-590.

³³ Unno Kazutaka, “Map and Daoism in Yi Dynasty Korea”, *Toho shukyo* 57 (1981), 32-33 [海野一隆, “李朝朝鮮における地図と道教”, 『東方宗教』].

³⁴ Bae Wuseong, “Cheonha do as a Korean Interpretation of Western World Maps”, *Korean Journal for the History of Science* 22-1 (2000), 51-79 [배우성, “西歐式世界地圖의 朝鮮의 解析—‘天下圖’”, 『한국과학사학회지』].

between the Jesuit maps and the Korean circular maps. One of those literati was Wi Paekkyu, the copier of Aleni's map [Figure 5]. Before Wi acquired a copy of the Jesuit map, he had spent years searching for copies of famous Li Madu's maps to be included in his cosmographic treatise. Curiously, he happened to acquire a version of Matteo Ricci's map, "Li Madu Cheoha do" (利瑪竇天下圖, Matteo Ricci's Terrestrial Map), which he included in the first draft of his treatise. This map, however, turns out to be none other than a variant of the "Cheonha do" circular maps [See Figure 9].

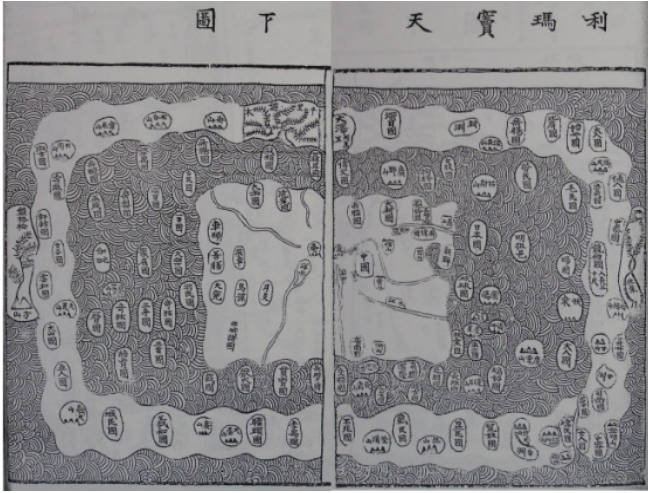


Figure 9. Wi Baekgyu, "A Terrestrial Map of Matteo Ricci," *Jonjae jeonso* (Seoul: Gyeong'in munhwasa, 1974), vol. 2, pp. 61-62 [위백규, "利瑪竇天下圖", 『存齋全書』].

Although Wi finally saw a "genuine" Western map, and thus in the later version of his book replaced the fake "Li Madu map" with his own copy of Aleni's map, this episode reveals much about the image of Ricci's map in late Joseon period. It shows that the Korean circular maps were circulated as "Li Madu's maps" in areas where authentic copies of the Jesuit maps were not readily available. Wi's confusion between the two was not without ground. In the preface to the first draft of his treatise, he called this fake Li Madu's map "Li Madu guguju do" (利瑪竇九州圖, Li Madu's Map of the Eighty One Provinces of the World).³⁵ This shows that Wi imagined the Jesuit maps to be a kind of cosmography created by Zou Yan 驍衍 of the Warring States period in China. According to Sima Qian's 司馬遷 biography of Zou Yan in his masterpiece *Shiji* (史記 Record of the Grand Historian), Zou

³⁵ Wi Baekgyu, "Preface to the Hwanyeongji Which Is Newly Compiled with Titles and Pictures," *Jonjae Jeonso* (Seoul: Gyeong'in munhwasa, 1974), vol. 2, p. 34 [위백규, "新編標題纂圖寶藏誌序", 『存齋全書』].

Yan expounded a grand cosmographical scheme of the Great Nine Provinces, in which China was relegated to only one of the total eighty-one worlds. To Wi, similarity between Zou Yan and Ricci was unmistakable, given the latter's scheme of the Five Continents, in which China was belittled to be only a part of the Asian continent. It is for this reason that, even after correcting the confusion in the later edition of his treatise, Wi did not change his opinion that the Jesuit world maps presented a world picture very similar to that of Zou Yan.³⁶

Concluding Remarks

To sum up, the great popularity that the world maps of Matteo Ricci and other Jesuits enjoyed in late Joseon society cannot be ascribed solely to their inherent "scientific virtues." Fine cartographic reproductions of the Jesuit maps were rarely made, and the indigenous efforts for the precise mapmaking were carried out without any significant adoption of the Jesuit cartographic methods. The popularity of "Li Madu's" representation of the world might be better explained by the fact that it conformed to the cosmological aspiration of Korean literati. The Jesuit maps provided the literati with solid principles, empirical data, and ready exemplars to be used in creating their own cosmography, which were actually a hybrid of Jesuit cartography and indigenous cosmology. Ricci himself, or Li Madu as was called by the Koreans, was also a hybrid figure. He was known to Korean literati as a man, who had "traveled far and wide through all under the heaven" and thus found "other five worlds that were comparable to China." In other words, Ricci was a cosmic traveler, following in the footsteps of Zou Yan, the ancient cosmographer and a founder of the Chinese cosmology. Perhaps this is the reason that the Korean literati quickly discovered the action of the *yin* and *yang* forces in Li Madu's maps—a way of reading Ricci's maps that the author himself would never have expected.

³⁶ On the widespread idea of the similarity between Ricci's and Zou Yan's cosmography, see Lim Jongtae, "Impact of Western Geography on East Asian Geographical Tradition in the Seventeenth and Eighteenth Centuries China and Korea," 327-332; O Sanghak, "Circular World Maps of the Joseon Dynasty," 13-15.

Abstract

This paper examines the circulation of Matteo Ricci's, or "Li Madu's" world maps in late Joseon Korea with particular emphasis on how Korean mapmakers and general intellectuals read and reproduced the foreign maps. Unlike the attempts of previous researchers to measure the "influence" of the Jesuit cartography upon indigenous map culture, this paper argues that the Jesuit maps were circulated in Joseon society not as ready-made entities, the meaning and the usages of which had been predetermined by the Jesuit authors. On the contrary, this paper examines the circulation and consumption of the Jesuit maps in late Joseon society as a process of creating a new entity called "Li Madu's maps"—a cultural hybrid that Korean mapmakers made out of features from both the East Asian and the European cartographic traditions.

Key Words: Matteo Ricci, Jesuits, World maps, Cheonha do, *Yijing* Cosmology