TRANSLATING WORLDS: NEGOTIATING CHRISTIAN WESTERN COSMOGRAPHY IN EARLY MODERN JESUIT MISSIONARY CONTEXTS IN JAPAN AND CHINA

Angelo Cattaneo[*]
CNR – National Research Council[1]

ABSTRACT: This essay focuses on documented cases of epistemic translations at the time of the encounters among Jesuit missionaries, Buddhist monks and neo-Confucian scholars in the context of early modern Catholic missions in Japan. These encounters involved intense translational activities of various kinds: linguistic (for the purpose of teaching and learning Portuguese, Japanese, Chinese and Latin), cultural (i.e. mutual learning of and adaptation to local customs and behaviors for the reception and negotiation of Christian rituals) and, epistemic: particularly of Christian cosmology, for the purpose of evangelization, and Buddhist cosmology, for the purpose of its refutation by the missionaries. We will analyse the Jesuits' epistemic translations of the Christian cosmology and cosmography and how they were challenged by equally complex and structured Buddhist and Neo-Confucian cosmologies on the part of their Japanese interlocutors.
KEYWORDS: Epistemic Translation; Early Modern Jesuit Mission in Japan; Western-Christian Cosmology; Buddhist Cosmology

1.Introduction

This essay focuses on specific cases of epistemic translation involving Jesuits, Buddhist monks and neo-Confucian scholars in the context of early modern Catholic missions in Asia. We will look at the central role occupied by the Aristotelian-Ptolemaic cosmology and cosmography in Jesuit missionary practices and how this was challenged by equally complex, structured and rigorous cosmologies on the part of their interlocutors, leading to theatrical 'cosmographic clashes' involving Jesuit missionaries, Buddhist *bonzes*, and neo-Confucian scholars. The focus will be on the strategies that both sides used to try to convince the other of the reasonableness of their point of view.

This essay therefore does not aspire to explore the theoretical dimensions of epistemic translation: instead, it focuses on documented attempts at epistemic translation between mutually heterogeneous, if not incommensurable, knowledge systems. It will provide and analyse examples of these in multilingual Catholic missionary contexts in Japan in the second half of the 16th century as an outcome of cultural interactions between Catholic missionaries and Buddhist and Confucian communities. These encounters involved intense translational activities of various kinds: linguistic (for the purpose of teaching and learning Portuguese, Japanese, Chinese and even Latin)[2], cultural (i.e. mutual

[*] ang.cattaneo@gmail.com

[1] This essay is dedicated to the memory of Silvio Vita (1954-2023), Director and Scientific Coordinator of the Italian School of East Asian Studies (ISEAS) in Kyoto, former professor at the University of Naples 'L'Orientale', at 'Sapienza' University of Rome and most recently at Kyoto University of Foreign Studies. The research I present here has greatly benefited from Professor Vita's scientific guidance, care, subtle irony as well as critical acumen and erudition.

[2] Consider in this regard the trilingual, Latin-Portuguese and Romanized Japanese dictionary with about 27,000 entries, printed by the Jesuit press in Amakusa, Kyūshū: *Dictionarium Latino Lusitanicum, ac Iaponicum*,1595. Only eight years later, when the Jesuit missionaries returned to Nagasaki after the

learning of and adaptation to local customs and behaviors for the reception and negotiation of Christian rituals)[3] and, especially, epistemic (particularly of Christian cosmology, for the purpose of evangelization, and Buddhist cosmology, for the purpose of its refutation).

Much has already been written about linguistic and cultural translation mediated by the Christian mission in Japan in early modernity (e.g. Tollini, 2020; on Jesuit translations strategies *tout-court* see Bennett, 2022). Here, I will focus on epistemic translation as a possible interpretive model for deciphering the interactions between Catholic missionaries and their Buddhist and Confucian interlocutors through the lens of historically documented attempts by the Jesuits to make explicit to their Buddhist and Confucian interlocutors the complex cosmology and cosmography implicit in the Christian message.

2. Christian Dogmas and Creation *ex nihilo*

Together with the existence of the immortal soul, incarnation of Jesus Christ, history of salvation and resurrection, and belief in the final judgement, Creation *ex nihilo* and the incommensurability between the Creator and His creatures were among the dogmatic pillars of Christianity in the early modern period. Drawing on the Book of Genesis, Roman Christian scholars such as Tertullian (2nd-3rd century A.D.)[4], Origen of Alexandria (3rd century A.D.)[5] and Lactantius (c. 250 - c. 325 A.D.)[6] considered Creation *ex nihilo* as a central tenet of Christianity; and from the 12th century, after the translation of the *corpus aristotelicum* from Arabic into Latin,[7] it was incorporated into and explained through the Scholastic-Aristotelian cosmology of the homocentric spheres of the four elements, seven planets and fixed stars.

---

persecutions of 1596, a Japanese-Portuguese vocabulary was printed by the Jesuit press, with about 34,000 entries, the *Vocabulario Da Lingoa De Iapam, com a declaração em Portugues* (Vocabulary of the language of Japan, with the translation into Portuguese), 1603.

[3] For example, Alessandro Valignano's *Advertimentos e avisos acerca dos costumes e catangues de Jappão* (Warnings about the habits and etiquette of Japan) that aimed at translating Japanese customs to Western Christian missionaries. See Valignano, 1946.

[4] "The object of our worship is the one God, who, by the Word of his command, by the reason of his plan, and by the strength of his power, has brought forth from nothing for the glory of his majesty this whole construction of elements, bodies, and spirits; whence also the Greeks have bestowed upon the world the name Cosmos", Tertullian (Quintus Septimius Florens Tertullianus, 2nd-3rd century A.D.), *Apology* 17:1 [A.D. 197]).

[5] "The specific points which are clearly handed down through the apostolic preaching are these: First, that there is one God who created and arranged all things and who, when nothing existed, called all things into existence," Origen of Alexandria (c. 184–c. 253), *The Fundamental Doctrines* 1: Preface:4.

[6] "Let no one inquire of what materials God made those so great and wonderful works, for he made all things out of nothing. Without wood, a carpenter will build nothing, because the wood itself he is not able to make. Not to be able is a quality of weak humanity. But God himself makes his own material, because he is able. To be able is a quality of God, and, were he not able, neither would he be God. Man makes things out of what already exists, because he is . . . of limited and moderate power. God makes things from what does not exist, because he is strong; because of his strength, his power is immeasurable, having neither end nor limitation, like the life itself of the maker," Lactantius (Lucius Caecilius Firmianus Lactantius), *The Divine Institutions* 2:8:8, (ca. 304-310).

[7] In particular, the *De caelo* (On the Heavens), the *Metereologica* (Meteorology) and the *Physica* (Physics).

Another important work in this context was the *Tractatus de sphaera* (On the Sphere of the World) by the Augustinian Johannes de Sacrobosco (c. 1195 – c. 1256), especially the edition curated by the Jesuit mathematician and cosmographer Christophorus Clavius (*In Sphaeram Ioannis de Sacro Bosco Commentarius*, Rome, 1570).[8] This work was widely used for the scientific education of the Jesuits, particularly in the Roman College, and was circulated in the mission of China. Indeed, Matteo Ricci SJ quoted it, in both visual and textual forms, in the 1602 edition of his planisphere printed in Beijing (Baldini, 2013; Cattaneo, 2016b).

There is no doubt that the missionaries were more interested in the evangelization and spiritual salvation of the non-Christian communities they encountered than in their scientific acculturation. Nevertheless, due to the profound cosmological, cultural and philosophical differences that impeded the immediate, direct transmission of the Christian belief system, the epistemic translation of the Christian-Aristotelian cosmology became increasingly necessary in their interactions with the learned communities of Buddhist monks and Confucian (or neo-Confucian) scholars.

The Christian belief in God as creator *ex nihilo* of a geocentric spherical universe, from which all other dogmas and articles of faith were deduced, was in deep contrast with Buddhist and Confucian cosmological visions. As Max Moerman (2021, p. 321) explains:

> According to Buddhist scripture, the entire universe is cylindrical and flat and is supported by lower strata of wind, water, and gold. The heavenly bodies revolve around the central Mount Sumeru, (*Shumisen* 須弥山) square and hourglass-shaped, which is itself surrounded by eight concentric mountain ranges, seven of gold and the eighth made of iron. Seas separate the mountain ranges and in the largest outermost sea lie four great continents: the half-moon-shaped continent of Pūrvavideha in the east, the circular continent of Godānīya in the west, the square continent Uttarakuru in the north, and the world on which we reside, the trapezoid-shaped continent of Jambudvīpa, (*Nansenbushū* 南瞻部州) in the south.

The profound differences between Buddhist and Christian cosmologies led the Jesuits to undertake a detailed critical comparison of these religious worldviews by means of textual and visual representations to attempt to transmit them through processes of epistemic translation (Cattaneo, 2021).

The composite field of Western cosmography that they translated into both written and visual form integrated elements of Christian cosmology and chronology (the Heavens and the Earth situated within the creation story, e.g. Dal Prete, 2022, pp. I-124), Ptolemaic astronomy (the Earth placed in relation to the heavenly world of planets and stars), Aristotelian natural philosophy (the Earth placed in relation to other elements of the sublunar world, such as water, air and fire), and universal geography and chorography (the pictorial description of the world, cf. Brincken,1968; Gautier Dalché, 1996; Cattaneo, 2016a). In the second half of the sixteenth century, at the time of the Jesuit missions in Asia, Abraham Ortelius (1527-1598) and Gerard Mercator (1512-1594) regarded

[8] On the reception of the *De Sphaera*, see Thorndike, 1949; Grant, 2005, pp. 165-224.

Translation Matters, 6(1), 2024, pp. 112-126, DOI: https://doi.org/10.21747/21844585/tm6_1a7

cosmography as the second ranking field of knowledge, surpassed in importance only by theology: indeed, Mercator chose to become a cosmographer only because he could not afford the doctoral training required to become a theologian. His cosmographic and cartographic masterpiece, the *Atlas sive Cosmographicae meditationes de fabrica mundi et fabricati figura* (Atlas or cosmographic meditations on the creation of the world and its 'constructed [visual] representation') published posthumously by his son Romualdus in 1595, is revealing in this regard (Mercator, 1595). The very concept of 'cosmographic meditations' about the 'created world' unequivocally places cosmography and cartography very close to religious contemplation, and for Mercator, the world should be studied and represented precisely because it was created by God.[9] It is therefore no surprise that his major intellectual enterprise in the last decades of his life was the publication of a synoptic edition and history of the Gospels, the *Evangelicae historiae quadripartita monas sive harmonia quatuor Evangelistarum...* (The Fourfold Gospel Harmony or Concordance of the Four Evangelists...) published at Duisburg in 1592, which focuses on and spatializes their explicit and implicit geography (Mercator, 1592).

Mercator's intellectual trajectory, integrating theology with chronology, geography and cartography, is paramount for understanding and deciphering the "cosmographic mind" of the missionaries active in Asia. Prominent among them, in chronological order, are: Michele Ruggieri (1543-1607), who made an early attempt to draw an atlas of China based on Chinese sources (*Diccionario,* 2001, v.4., pp. 3433-3434; Lin, 2022; *Lo Sardo*, 1993); Matteo Ricci (1552-1610), who co-authored several manuscripts and printed planispheres in Chinese, including the famous *Kunyu Wanguo Quantu* 坤輿萬國全圖, *Map of the Myriad Countries of the World*, produced together with the Chinese mathematician Li Zizhao in Beijing in 1602 (*Diccionario*, 2001, v.4., pp. 3351-3353)[10]; Alessandro Valignano (1539-1606), 'hidden author' of the *Missio legatorum iaponensium ad romanan curiam* (Mission of the Japanese legates to the Roman curia), printed in Macao 1590 and largely based on a literary transposition of Abraham Ortelius' *Theatrum orbis terrarium*, one of the first printed atlases, printed in Antwerp in 1570 (*Diccionario*, 2001, v.4., pp. 3877-3879)[11]; Manuel Dias 'the Younger' (1574-1659) (*Diccionario*, 2001, v.2., pp. 1113), who, with Niccolò Longobardo (1565-1654) produced the earliest surviving terrestrial globe in 1623 in China, labelled in Chinese (*Diccionario*, 2001, v.3. pp. 2411-2412; Needham and Wang, 1959; Longobardo, 2017); and Carlo Spinola (1564-1622), astronomer and engineer at the Japan Mission from 1602 (Frison, 2009, 2018; *Diccionario*, 2001, v.4, pp. 3623-3624). These missionaries mobilized the western Christian cosmography of the geocentric universe (*mundus*) to convince their Buddhist and Confucian interlocutors of the intellectual superiority of the knowledge system connected to and conveyed by

[9] On the concept of 'cosmographic meditations' see Besse *et alii*, 2008. The Latin lemma *fabrica* in Mercator's title refers to the creation; nevertheless, it also coveys and implies a meaning of 'creation' as an ongoing process.

[10] For the most recent re-edition of the planisphere, translated into Italian: [Ricci] Mignini, 2013.

[11] On Valignano's *De missione Legatorum Iaponensium ad Romanam curiam*, see Valignano and De Sande, 2012 (English translation); Valignano and De Sande, 2016 (Italian translation).

Christianity, drawing on the Christian medieval speculative tradition of Aristotelian natural philosophy.

The synthesis of Creation theology and Aristotelian natural philosophy had been achieved in the 13th century by (above all) the Dominican Albertus Magnus (Albert the Great, c. 1200-1280), Thomas Aquinas (1225-1274) and the Franciscan Roger Bacon (1214-1294) (Grant, 2011). In the first part of the *Summa theologiae*, Thomas Aquinas distinctly defined the connections between theology, natural philosophy and cosmography:

> The very order of things created by God shows the unity of the world. For this, world is called one by the unity of order, whereby some things are ordered to others. But whatever things come from God, have relation of order to each other, and to God Himself, as shown above. (Aquinas, 1920, p. I, q. 47, a. 3)[12]

In this passage, Saint Thomas debated the substantial unity of the *mundus*, that is, of the entire universe created by God, distinguishing and analysing its individual parts, in the sublunary world and in the celestial one, distinct from each other and yet linked by unbreakable bonds. It is significant that this quote was painted onto the book in the hands of Saint Thomas at the base of an enormous fresco representing the Christian Aristotelian-Ptolemaic cosmos, depicted by Piero di Puccio (active in Orvieto and Pisa in the second half of the fourteenth century) on the north wall in the monumental Cemetery of Pisa [Fig. 1].

In the context of the Catholic missions in Japan and China, where competitive interactions had developed locally with both Buddhist monks and Confucian *literati*, the Aristotelian-Ptolemaic-Christian cosmography "paved the way for the comprehension of the Creator's significance" (Chen, 2007):

> It was an embodiment of the Renaissance tradition of cartography as the graphical representation of the universe, which included the idea of understanding nature through mathematical science as well as of understanding Heaven by visualization and sensibility'. (ibid*.,* p. 517)

The conception and theological discernment of the Christian *Deus* as Creator was grounded, therefore, on Aristotelian-Ptolemaic cosmology, and explained through the Christian natural philosophy of the spherical Heavens, made up of the seven planets, surrounded by an outer circle of the fixed stars. The sublunary world, with the four corruptible elements, placed toward the centre, provided the epistemological basis on which the missionaries could ground their disputes with the learned communities of Buddhist priests and Confucian scholars.

[12] The original quotation in Latin runs: "*Ipse ordo in rebus sic a Deo creatis existens, unitatem mundi manifestat. Mundus enim iste unus dicitur unitate ordinis, secundum quod quaedam ad alia ordinantur*." See Aquinas, 1952, p. 334.

Figure 1. Piero di Puccio (second half of the 14th century), Theological Aristotelian cosmography of the geocentric mundus with St. Augustin and St. Thomas Aquinas. One of seven frescoes depicting the stories of the Genesis. Pisa, Monumental Cemetery, north wall, late 14th century, 715 x 810 cm (Wikipedia commons)

Hence, the presentation and explanation of the round Earth within the spherical heavens was one of the pillars of the missionaries' negotiation of the Christian message and at the centre of their critique of Confucianism, Buddhism, Daoism and Shintoism (Paramore, 2008, 2009, pp. 10-50).[13] For Ruggieri, Ricci, Valignano, Dias, Longobardo and Spinola, none of these Eastern philosophies were able to explain the foundations and origins of the universe, and were therefore totally incapable of leading human beings to salvation. They argued, in a circular fashion, that Buddhism, Daoism and Shintoism lacked a clear understanding of the origins and shape of the universe (something made manifest mathematically by the inconsistencies of the Chinese and Japanese lunar calendar) and could therefore not have been created by God – in fact, were idolatries that had originated from the devil to confuse and divert men from salvation. Only Confucianism was

[13] On this topic, see also Pedro Gomez, S.J., *Compendium catholicae veritatis in gratiam Iapponicorum Fratrum Societatis Iesu*; Jp. Kōgi Yōkō (講義要), c. 1590, whose three parts include the *De Sphaera*, *De Anima* and a Christian doctrine, in Latin. The three parts were translated into Japanese by the Spanish Jesuit Pedro Morejon. The *Compendium* was 'the most extensive Jesuit text in Japanese we have extant, […] seemingly the basis for theological education in the Japanese Jesuit colleges', cf. Paramore, 2009, p. 23. Modern edition: Gomez, 1997-1999. Specifically on Gomez's *De Spahera,* based on the *Compendium philosophiae naturalis*, by the Franciscan Franciscus Titelmans (1502-1537), see Hiraoka and Watanabe, 2015.

acknowledged (by Matteo Ricci) as a form of natural religion, which, though incomplete and distorted, could provide a foundation for a new Christianity in China, in much the same way as Stoicism had done with respect to early Christianity.[14]

3. Epistemic Translations: the Jesuit viewpoint

These assumptions, and the political-religious epistemology underpinning them, spread and became a literary trope in Jesuit letters and reports. For example, the eloquent *Annual letter from Japan* of 1605 reports a theatrical dispute that took place between the Jesuits (in particular, Carlo Spinola) and some *bonzes* [Buddhist monks] in the presence of the shōgun Tokugawa Hidetada. Here are a few passages that I translated into English from the original source in Portuguese:

> With the arrival at Miaco [Kyoto] of the son of the Kubō [Tokugawa Hidetada, son of the Kubō 公方 Ieyasu] from Quantó [Kantō 関東] to take the rank of shōgun […] there were numerous visits to our homes [the missions], in particular to the mission of Miaco [Kyoto], as they [the Japanese] were moved out of curiosity […] to see new things and some instruments we have in the house that show the movements of the planets and other European instruments never seen in Japan; and with this occasion, many of them listened to us and were baptized. […] The Japanese listened to us with great interest and curiosity about astrology [astronomy] and mathematics and showed us great consideration; and this caused great discredit […] to their *bonzes* [Buddhist monks], because the things that we teach about the movement of the Sun, Moon and planets, the representation of the elements, and other teachings dealing with meteorology, thus being in complete accordance with reason and experience, just makes them fall into the truth of these and makes them realize how absurd are the opinions and stories of their *bonzes*.[15]

The reference to Tokugawa Hidetada (1579-1632), the second *shōgun* of the Tokugawa Shogunate, suggests that the episode has probably been exaggerated, presumably to impress their Jesuit *confréres* in Macao, Goa and Europe. But whether or not the passage is an accurate record of what actually happened, it is nevertheless possible to detect the same circular argument linking Buddhist inconsistencies in cosmology and astronomy with eschatological and moral falsehood, a trope also developed by Ricci to challenge and dispute with his Chinese (Buddhist and Confucian) interlocutors.

[14] See Ricci's *Dell'amicizia* (On friendship), composed by Ricci in Nanchang, in November 1595, originally authored in Italian and later translated and printed in Chinese. Modern edition (Chinese and Italian): Ricci, 2005. This work aims at showing the moral compatibility and similarity between Greco-Roman and Christian Humanism with the Confucianism. At this regard, it's worth recalling Ricci's definition of Confucius as "another Seneca". *Dell'amicizia* (On friendship) was written in the very moment in which Ricci decided to assume the posture, habits and status of a Confucian *literatus*, literally taking off the clothes and abandoning forever the posture of Buddhist bonze that for almost fifteen years, with his *confrère* Michele Ruggieri had kept, since their entrance in China in 1579 and 1582, respectively.

[15] *Annua de Iapam do anno de 1605,* Rome, ARSI, Jap. Sin. 55, ff. 274v-275v. See Frison, 2009, pp. 15-16, and note 73 for the transcription.

Translation Matters, 6(1), 2024, pp. 112-126, DOI: https://doi.org/10.21747/21844585/tm6_1a7

An early seventeenth-century *nanban* folding screen (*byōbu*)[16], currently held in the Nanban Bunkakan Museum in Osaka, provides a visual representation of the "new things and some instruments […] that show the movements of the planets" that the Jesuits had in their residences. In the upper left-hand corner, the screen displays a Jesuit residence on the outskirts of an unidentified, imaginary Japanese port city, inhabited by Portuguese and Japanese merchants and their multi-ethnic crews and slaves, Japanese women, Jesuit missionaries and novices, and also (on the right-hand side) a Franciscan friar, interacting with a Japanese man [Fig. 2]. The Jesuit residence comprises a *nanban-ji* (a wooden Christian church, built in the architectural style of a Buddhist temple, with a cross on the top of the *kawara* 瓦 roof) and another building whose entrance is protected by a gate. To the left of it, facing the street outside, is a huge image hanging or depicted on a wooden panel. At the top of this, with three indigo lotus flowers, is a huge geometric representation consisting of eight concentric circles that fully occupy the left wall. By keeping to the proportion of the objects represented in the folding screen, the size of the circles would indicate a huge, nearly square depiction, at least about one and a half meters in size. The drawing with the eight concentric circles, traced with the compass, could represent an astronomical diagram of the Aristotelian-Ptolemaic cosmos. The representation could be an enlargement of the astronomical diagrams printed for example in the comments to *De Sphaera*. Hanging at the entrance to the mission, facing the street, it would have been visible to all that approached or simply walked along the adjacent street. If this interpretation is correct, then the Aristotelian-Ptolemaic cosmology of the elementary and celestial concentric spheres, generated by the creative will of God, was one of the emblems of the Christian mission, together with the cross, visible on the top of the roof of the *nanban-ji*. The representation of the cosmological diagram could potentially also function as a metonym for the entire western planisphere, like the astronomical diagrams generally placed in the corners of Matteo Ricci's planispheres in Chinese.

[16] *Nanban* folding screens, also known as *nanban byōbu*, are a Japanese pictorial genre that emerged at the beginning of the 17th century. On large, paired screens, they depicted Western ships arriving from imaginary port cities in India, and the disembarkation of Portuguese merchants, their crews (including slaves) and Catholic missionaries, particularly Jesuits. The highly detailed and colorful pictorial representations also show the many European, Persian, Indian and Chinese goods transported by the Portuguese to Japan, including textiles (silk in particular), and exotic animals. See Sakamoto, 2008; Curvelo, 2015, Fujikawa, 2016.

Figure 2. Image with eight concentric circles, possibly a representation of the Christian Aristotelian cosmos, depicted on the outer wall of an early 17th-century Jesuit residence in Japan. Detail from one of a pair of nanban folding screens, ink colours and gold on Japanese paper. Ōsaka, Nanban Bunkakan, early 17th century (Angelo Cattaneo)

4. Epistemic Translations: the Neo-Confucian viewpoint

Interestingly, there also exists a brief dialogue, *Hai-Yaso* (The Anti-Jesuit) 俳耶蘇, about cosmological and cosmographical topics attributed to the renowned neo-Confucian master and academician Hayashi Dōshun (林 羅山, 1583-1657, also known as Hayashi Razan) in which he engages with Fukan Habian (不干斎, Fukansai, c. 1565–1621), a Buddhist writer who in 1583 converted to Christianity, becoming a 'brother' (irmão) of the Society of Jesus in 1588.[17] The short dialogue, written from the point of view of neo-Confucianism, was clearly attempting to demonstrate the inconsistency of the Christian cosmology of the spherical world, as exemplified by the globes and armillary spheres brought to Japan by the Jesuit fathers and displayed to the Japanese political and military authorities to impress, challenge or ridicule local Buddhist or Neo-Confucian scholars and religious authorities (Moerman, 2021, pp. 319-323).

The dialogue was originally dated 22 July 1606 but has recently been postdated to around 1640 and declared apocryphal by Paramore (2008). In 1606, Hayashi Dōshun would

[17] After 1608, Fukan Habian renounced Christianity and in 1620 published an anti-Christian essay, *Ha Daiusu* (Against *Deus* – the Christian God – or *Deus* destroyed). See Elison, 1988; Paramore, 2008, 2009, pp.10-50.

Translation Matters, 6(1), 2024, pp. 112-126, DOI: https://doi.org/10.21747/21844585/tm6_1a7

have been only 23 years old, and it is very unlikely that he would already have been recognized as the great Confucian master that he appears in the dialogue. However, the date of 1606 is significant, as it coincides with the episode of the cosmographic dispute between the *bonzes* and the Jesuit fathers in the presence of Tokugawa Hidetada, described above. The dialogue attributed to, or just featuring Hayashi, fits into the same conceptual paradigm, developed by the Jesuits, of the recourse to the (presumed) scientific inconsistency of one's interlocutors, to show their moral and gnoseological unreliability.[18]

The dialogue proceeds as follows. On July 22nd 1606, Hayashi Dōshun is invited to enter a Jesuit residence, where he meets Fukan Habian and his Jesuit *confréres*. Having received a warm welcome, they sit down, and Hayashi notices a globe on display in the room. Provocatively, he asks Fukan Habian to explain the device to him. In response, the Japanese Jesuit shows him how, with a spherical earth, east and west are relative concepts rather than physical realities (unlike north and south), as evidenced by the navigations that brought the the Europeans (*nanban-jin*) to Japan. However, Dōshun flatly rejects this statement and the cosmology underlying the spherical world. To ridicule Fukan Fabian, he contrasts it with the neo-Confucian cosmology of Zhu Xi (朱熹 1130-1200), in which a flat non-spherical earth is encapsulated into a celestial hemispherical heaven. In Confucian cosmology, he argues, all cardinal points are connected to spatial and physical realities that are stable and well defined, and this quality makes Confucianism more reliable and rational than Christianity.

Hayashi Dōshun goes on to address the heart of the question underlying the cosmographic dispute: the belief that the world was created by God, creator of all things, visible and invisible. He does so, by referring explicitly to Matteo Ricci, in a quote translated by George Elison that is worth transcribing, with minor stylistic variations:

> *Dōshun says*. The Jesuit Matteo Ricci argues, Heaven, earth, spirits and gods and the human soul would have a beginning but not an end. I don't believe this. If there is a beginning, there is also an end. It is believed that both beginning and end are missing. But it is not correct that there is a beginning, but no end. Confirmation is therefore necessary.
> Fukan could not answer.
> *Dōshun*: God created the universe etc etc, but who created God?
> *Fukan*: "God has no beginning and no end and the earth is created. Instead, on the contrary, that God is without beginning and end cannot be ignored. This is very clear. (Hayashi, 1988, p. 151)

Then, the discussion moves onto the fundamental cosmological principles of neo-Confucianism, the *ri* ('principle' or 'pattern') and *qi* ('generative energy'), as the primordial forces driving the world. By expanding on Zhu Xi's neo-Confucian philosophy, according to Dōshun, these forces precede and generate God too (Tucker, 2018). Two conclusions are

[18] Japanese edition: Hayashi, 1970; German translation: Müller, 1939; English translation and commentary: Hayashi, 1988, pp. 149-153.

attributed to Hayashi (Hayashi, 1988, p. 153), which we transcribe from Elison's translation, with minor stylistic variations:

> Conclusion. The Jesuits argue that even under the earth there is heaven. If you dug through the earth and reached the bottom, you would surely see the sky, as if you were looking out of a well. For this reason, the falling stone stops in the centre of the earth and there is no top and bottom. This would be a confirmation [for the Jesuits] that the earth would be the centre of the heaven. However, I believe that all things between heaven and earth that I see have an above and a below. […]
>
> Conclusion. The Jesuits argue: the sky is round, and the earth is also round. I believe that everything is movement, everything is calm, everything is angled, and everything is round, especially the universe. And the reason is as above. If things were as according to their words, there would be neither angled nor round, neither movement nor calm. (Hayashi, 1988, p. 153)

For historians of culture and science, it is undoubtedly fascinating to imagine Hayashi Dōshun, the future tutor and an advisor to the first four *shōguns* of the Tokugawa *bakufu*, engaged in a debate with Fukan Fabian in a Jesuit residence. But even if the dialogue were no more than a literary fabrication, authored much later than the alleged date of 1606, the dialogue does not lose its cultural relevance. Based on the founding principles of neo-Confucian philosophy, it offers a radical critique of Christian cosmology, starting from an ironic reading of the cosmology and cosmography translated by the Jesuits and using their own rhetorical trope of 'scientific inconsistency' against them.

If Paramore's hypothesis is correct, it is very interesting to observe how even in 1640, almost thirty years after the expulsion of the Jesuits, Christian cosmology was still the object of critical reflection, at least in neo-Confucian learned communities. In the immediate aftermath of the Shimabara rebellion,[19] the epistemic translation of the Christian cosmos, its spherical shape and geometry, continued to interpellate Buddhist and Confucian cosmologies even decades after the abrupt expulsion of the missionaries from Japan in 1614.

5. Conclusion

The events and documents that we have considered here are concrete examples of attempts at epistemic translation between mutually incommensurable belief systems at the interface of cultures in the Early Modern period. The mutual incompatibility of the Christian-Aristotelian and Buddhist-Confucian worldviews produced the complex attempts

[19] The Shimabara Rebellion broke out in the autumn of 1637, near Shimabara in southern Japan, when peasant communities rebelled against excessive taxation and abuse by governors, as well against violent repression of Japanese communities who had converted to Christianity. The revolt was put down in blood, by shogunate troops sent from Nagasaki and ended with the beheading of more than 35,000 people, including women and children, in addition to the rioters. Suspecting that Christian Portuguese merchants had surreptitiously fostered the uprising, some 25 years after the expulsion of Catholic missionaries (1614), the shogunate decided in 1639 to also sever trade relations with the Portuguese, expelling all Portuguese and preventing their ships from docking (See Ramos, 2021).

at epistemic translation that was at the heart of the project of Christian conversion of Japan carried out by the Jesuits from the mid-sixteenth century onward. Although the Catholic religious orders were expelled from Japan in 1614, and Christianity eradicated, the Aristotelian-Ptolemaic concepts of the spherical earth and spherical universe, which the Jesuit missionaries had discussed with and taught to their Japanese interlocutors, gradually took root in Japan in a 'purified' form, detached from their Christian epistemological matrix (Cattaneo, 2021; Moerman, 2021).

In the light of the documentation we have considered, epistemic translation was an essential tool for addressing the complex histories of cultural interactions in the early modern age, at the time of the first contacts between major urban civilizations on a global scale.

REFERENCES

Primary Sources

Annua de Iapam do anno de 1605, Rome, ARSI, Jap. Sin. 55, ff. 274v-275v.

Aquinas, T. (1920) *The Summa Theologica of St. Thomas Aquinas.* Second and revised edition, literally translated by Fathers of the English Dominican Province. London. Available [online] at: https://www.newadvent.org/summa/ (Accessed: 15 June 2024).

Aquinas, T. (1952) *S. Thomae Aquinatis Summa theologiae*, cura et studio sac. Petri Caramello cum textu ex recensione leonina, pars prima et prima secundae. Turin: Marietti.

Clavius, C. S. J., *Christophori Clavii Bambergensia In Sphaeram Ioannis de Sacro Bosco Commentarius.* Rome: apud Victorium Helianum, 1570.

Dictionarium Latino Lusitanicum, ac Iaponicum, ex Ambrosii Calepini volumine depromptum. Amakusa: Collegio Iaponico Societatis Iesu, 1595 (facsimile edition: Tokyo: Benseisha, 1979).

Gomez, P. S. J. and Morejon, P. S. J. (transl.) (c. 1590) *Compendium Catholicae Veritatis in gratiam Iapponicorum Fratrum Societatis Iesu,* Jp. Kōgi Yōkō (講義要). Modern edition: [Gomez, Pedro, S.J.], *Compendium catholicae veritatis*; Iezusukai Nihon korejio no kōgi yōkō イエズス会日本コレジヨの講義要綱. Ohara Satoru 尾原悟 (Ed.). Tokyo: Ōzorasha.

Hayashi R. (1970)'「排耶蘇」(*Hai yaso*)' in *日本思想大系 Nihon shiso taikei*, vol. 25. Tokyo: Iwanami Shoten, pp. 414-417 (modern Japanese); p. 490-491 (original Japanese).

Hayashi, R. (1988) *Hai-Yaso* (The Anti-Jesuit) 俳耶蘇. Translated by Elison, G., in *Idem*, (1988), *Deus destroyed*, pp. 150-153.

Lactantius (Lucius Caecilius Firmianus Lactantius), *The Divine Institutions* (ca. 304-310).

Longobardo, N. (2017) *Long Huamin: Trattato sui terremoti*. traduzione e saggio introduttivo di Silvia Toro. Bologna: Edizioni Dehoniane di Bologna.

Mercator, G. (1592) *Evangelicae historiae quadripartita monas sive harmonia quatuor Evangelistarum...* (The Fourfold Gospel Harmony or Concordance of the Four Evangelists...), Duisburg.

Mercator, G. (1595) *Atlas siue Cosmographicae meditationes de fabrica mundi et fabricati figura* (Atlas or cosmographic meditations on the world and its constructed [visual] representation). Dusseldorf: Albertus Busius.

Origen of Alexandria (c. 184–c. 253), *The Fundamental Doctrines*.

Ricci, M. (2005), *Dell'amicizia*. Edited by Mignini, F. Macerata: Quodlibet.

Tertullian (Quintus Septimius Florens Tertullianus, 2nd-3rd century A.D.), *Apology* (A.D. 197).

Valignano, A. (1946 [2011]) Il cerimoniale *per i missionari del Giappone. Advertimentos e avisos acerca dos costumes e catangues de Jappão: importante documento circa i metodi di adattamento nella missione giapponese del secolo XVI: testo portoghese del manoscritto originale, versione letterale italiana*, edited by Michela, C. Rome: Edizioni di Storia e letterature.

Valignano, A. and De Sande D. (2016) *Dialogo sulla missione degli ambasciatori giapponesi alla curia romana e sulle cose osservate in Europa e durante tutto il viaggio*: *basato sul diario degli ambasciatori e tradotto in latino da Duarte de Sande, sacerdote della Compagnia di Gesù*, traduzione di Pia Assunta Airoldi; presentazione di Dacia Maraini edited by Di Russo, M. Florence: Olschki.

Valignano, A. and De Sande D. (2012) *De missione Legatorum Iaponensium ad Romanam curiam. Japanese travellers in sixteenth-century Europe: a dialogue concerning the mission of the Japanese ambassadors to the Roman Curia (1590)*, edited by Massarella, D. and Moran, J. F. Farnham, Surrey, England, Burlington: Ashgate.

Vocabulario Da Lingoa De Iapam, com a declaração em Portugues, feito por Algvns Padres, E Irmaõs da Companhia de Iesv, Nangasaqui, anno M.D.CIII (Nagasaki, 1603) (facsimile edition: Masayuki, T. (ed.) (2013), *Nippo jisho: kirishitanban: karā eiinban. Vocabvlario da lingoa de Iapam: Nagasaqui 1603-4*. Tōkyō: Bensei shuppan.

Secondary Sources

Baldini, U. (2013) 'Matteo Ricci nel Collegio Romano (1572-1577): cronologia, maestri, studi', *Archivum historicum societatis Iesu,* 82(1), pp. 115-164.

Bennett, K. (2022) 'Jesuit Translation. The Ciceronian legacy', *The Routledge handbook of translation and religion.* London and New York: Routledge, pp. 319-333.

Besse, J.-M., Couzinet, M.-D., Lestringant, F. (eds.) (2008) *Les méditations cosmographiques à la Renaissance*. *Cahiers V.-L. Saulnier* 26.

Brincken, A.-D. von den (1968) 'Mappa mundi und Chronographie', *Deutsches Archiv für Erforschung des Mittelalters*, 24, pp. 118-186.

Cattaneo, A. (2016a) 'European Medieval and Renaissance cosmography: a story of multiple voices', *Asian review of world histories - The official Journal of The Asian Association of World Historians,* 4(1), pp. 35-81 [online]. Available at: http://dx.doi.org/10.12773/arwh.2016.4.1.035.

Cattaneo, A. (2016b) 'Shores of Matteo Ricci. Circularity of visual and textual sources and the Interrelation of the missionary experiences in Europe, Japan and China. Preliminary considerations', *The Bulletin of Portuguese-Japanese Studies,* n.s. 2, pp. 7-22.

Cattaneo, A. (2021) 'Spatial and linguistic patterns in early modern global history. Iberian and Dutch merchants, jesuit missionaries, buddhist monks and neo-confucian scholars and their interactions in Japan' in Curvelo, A. and Cattaneo, A. (eds.) *Interactions between rivals: The Christian mission and Buddhist sects in Japan (c.1549-c.1647)*. Berlin: Peter Lang, pp. 277-318 [online]. Available at: https://doi.org/10.3726/b18727.

Chen, H-H (2007) 'The human body as a universe: understanding heaven by visualization and sensibility in Jesuit cartography in China', *The Catholic Historical Review*, 93(3), pp. 517-52.

Curvelo, A. (2015) *Nanban folding screen masterpieces. Japan-Portugal, XVIIth century*. Paris: Chandeigne.

Dal Prete, I. (2022) *On the edge of eternity. The antiquity of the earth in medieval and early modern Europe*. Oxford: Oxford University Press, pp. I-124.

Diccionario histórico de la Compañía de Jesús: biográfico-temático, 4 vols. (2001) Madrid: Universidad Pont. Comillas.

Elison, G. (1988) *Deus destroyed*. Cambridge (Mass.): Harvard University Press.

Emi, K. (2005) 'The adaptation of the European polyglot dictionary of Calepino in Japan*: Dictionarium Latino Lusitanicum, ac Iaponicum* (1595)' in Zwartjes, O. and Altman, C. (eds.) (2005) *Missionary Linguistics II / Lingüística misionera II*. Amsterdam-Philadelphia: John Benjamins publishing company, pp. 205-223.

Frison, D. (2009) 'Il contributo scientifico del gesuita Carlo Spinola nel Giappone del primo Tokugawa', *Il Giappone*, 49, pp. 21-56.

Frison, D. (2018) 'Spinola, Carlo' in *Dizionario biografico degli italiani*, 93 [online]. Available at: https://www.treccani.it/enciclopedia/carlo-spinola_(Dizionario-Biografico) (Accessed: 15 June 2024).

Fujikawa, M. (2016) 'Studies on the Jesuit Japan mission' in Maryks, R. A. (ed.) *Jesuit historiography online*. Leiden: Brill [online]. Available at: https://referenceworks.brill.com/display/entries/JHO/COM-196472.xml (Accessed: 15 June 2024).

Gautier Dalché, P. (1996) 'Pour une histoire du regard géographique. Conception et usage de la carte au XV^{e} siècle', *Micrologus*, 4, pp. 77-103.

Grant, E. (2005) *Science and religion, 400 B.C. to A.D. 1550. From Aristotle to Copernicus*. Baltimore: The Johns Hopkins University Press, pp. 165-224.

Grant, E. (2011) 'How theology, imagination, and the spirit of inquiry shaped natural philosophy in the late Middle Ages', *History of Science*, 49(1), pp. 89-108.

Hiraoka, R. and Watanabe, A. (2015) 'A Jesuit cosmological textbook in "Christian century" Japan: *De sphaera* of Pedro Gomez (Part II)', *SCIAMUS*, 16, pp. 125-223.

Lin Hong 林宏 (2022) 'Atlases of China by the Jesuits Ruggieri, Boym and Martini' in Caboara, M. *Regum Chinae. The printed western maps of China*. Leiden, Boston: Brill, pp. 122-136.

Lo Sardo, E. (ed.). (1993) *Ruggieri, Michele, Atlante della Cina. Facsimile reprint*. Rome: Istituto poligrafico e zecca dello Stato, Libreria dello stato.

Mignini, F. (ed.) (2013) *La cartografia di Matteo Ricci*. Rome: Libreria dello Stato, Istituto poligrafico e Zecca dello Stato.

Moerman, M. (2021) 'The Epistemology of vision: Buddhist versus Jesuit cosmology in early modern Japan' in Curvelo, A. and Cattaneo, A. (eds.) *Interactions between rivals: The Christian mission and Buddhist sects in Japan (c.1549-c.1647)*. Berlin: Peter Lang, pp. 319-358 [online]. Available at: https://doi.org/10.3726/b18727.

Müller, H. (1939) 'Hai-Yaso 俳耶蘇 Anti-Jesus. Hayashi Razan's antichristlicher Bericht über eine konfuzianisch-christliche Disputation aus dem Jahre 1606', *Monumenta Nipponica*, 2(1), pp. 268-275.

Needham, J. and Wang, L. (1959) 'Mathematics and the sciences of the heavens and the earth' in Needham, J. (ed.) *Science and Civilization in China*, 3. Cambridge University Press, pp. 497-590.

Paramore, K. (2008) 'Early Japanese Christian thought reexamined. Confucian ethics, Catholic authority, and the issue of faith in the Scholastic theories of Habian, Gomez, and Ricci', *Japanese Journal of Religious Studies*, 35(2), pp. 231-262.

Paramore, K. (2009) *Ideology and Christianity in Japan*. London: Routledge.

Ramos, M. N. (2021) 'Neither apostates nor martyrs. Japanese Catholics facing the repression (1612 – mid-seventeenth century)', in Curvelo, A. and Cattaneo, A. (eds.) *Interactions between rivals: The Christian mission and Buddhist sects in Japan (c.1549-c.1647)*. Berlin: Peter Lang, 361-392 [online]. Available at: https://doi.org/10.3726/b18727.

Ryuji, H. and Akihiko, W. (2015) 'A Jesuit cosmological textbook in 'Christian Century' Japan: *De sphaera* of Pedro Gomez (Part II)', *SCIAMUS*, 16, pp. 125-223.

Sakamoto, M. (2008), *Nanban byōbu shūsei* (*A Catalogue Raisonné of the Nanban Screens*). Tokyo: Chūōkōron Bijutsu Shuppan.

Thorndike, L. (1949) *The Sphere of Sacrobosco and its commentators*. Chicago: University of Chicago Press.

Tollini, A. (2020) 'Translation during the Christian Century in Japan. Christian keywords in Japanese' in Pesaro, N. (ed.) *Between texts, beyond words. Intertextuality and translation*. Venice: Ca' Foscari, pp.13-25.

Tucker, J. (2018) 'Japanese Confucian Philosophy' in Zalta, E. N. (ed.) *The Stanford encyclopedia of philosophy* [online]. Available at: https://plato.stanford.edu/archives/spr2018/entries/japanese-confucian/ (Accessed: 15 June 2024).

About the author: Angelo Cattaneo is a researcher for the CNR – National Research Council of Italy and an adjunct professor at the University of Florence. For 2024, he is Visiting Professor at Yale University. His current research focuses on the history of the first contacts of world languages and cultures in early modernity at the interface of Catholic missions and the Iberian empires. He is the PI of the PRIN 2022 Project "Mapping and Translating Spaces, Cultures and Languages: Experiences from the Missions connected to the Portuguese Empire (1540-1700)".