



Transmission of the “World”: Sumeru Cosmology as Seen in Central Asian Buddhist Paintings Around 500 AD

Satomi Hiyama

This paper considers the process of how the image of Mount Sumeru, the *axis mundi* of the Indian Buddhist cosmology, was transmitted from the Indo-Iranian cultural sphere to the Chinese cultural sphere in the fifth and sixth centuries. The research focus is mainly on the representations of Mt. Sumeru in the wall paintings of two monumental Buddhist sites from this period, the Kizil Grottoes (Kucha) and the Mogao Grottoes (Dunhuang), with reference to a relevant image in the Yungang Grottoes (Datong). As the monks of Kucha were in direct intellectual contact with contemporaneous India via the Sanskrit language, it is a purely Indian Buddhist cosmological worldview that is reflected in early Kizil paintings. In Dunhuang, on the other hand, the earliest-extant Sumeru representation clearly shows the visual syncretism of Buddhist and Taoist cosmologies. These visual symbols of the “World” are composites of multiple historical factors, such as languages, geopolitical situation of regional powers, and ideological trends of the regions.

Keywords: Buddhist cosmology, Dunhuang, Kucha, Silk road cultural history, Sumeru, Yungang

Wanderung der „Welt“: Sumeru-Kosmologie in zentralasiatischen buddhistischen Wandmalereien um 500 n. Chr.

Dieser Artikel betrachtet, wie die Darstellung des Berges Sumeru/Meru – die Weltachse der indischen buddhistischen Kosmologie – vom indoiranischen Kulturbereich in den chinesischen Kulturraum im 5. und 6. Jahrhundert übertragen wurde. Der Forschungsschwerpunkt liegt hauptsächlich auf den Darstellungen des Meru in den Wandgemälden zweier monumentaler buddhistischer Stätten aus dieser Zeit, und zwar den Höhlenklöstern von Kizil (Kucha) und von Mogao (Dunhuang im Vergleich mit einem relevanten Relief im Höhlentempel von Yungang/Datong). In Kucha, wo Mönche über das Sanskrit in direktem intellektuellem Austausch mit dem zeitgenössischen Indien standen, war es eine rein indisch-buddhistische kosmologische Weltanschauung, die sich in den frühen Wandmalereien von Kizil widerspiegelt. In Dunhuang hingegen zeigt die früheste Darstellung des Meru eindeutig einen visuellen Synkretismus buddhistischer und taoistischer Kosmologien. Diese Symbole der „Welt“ reflektieren den Einfluss verschiedener historischer Faktoren, wie etwa Sprachen, geopolitische Situation der Regionalmächte sowie ideologische Strömungen in jeder Region.

Schlüsselwörter: Buddhistische Kosmologie, Dunhuang, Kucha, Kulturgeschichte der Seidenstraße, Sumeru/ (Berg) Meru, Yungang

Whenever Buddhism was introduced to a new region, Sumeru cosmology was transmitted to that region as well, since the basic framework of the Buddha’s teaching and its doctrine is based on it.

The *Weltmodell* centered on the cosmic mountain called Sumeru (or simply Meru, as *su-* is a prefix meaning “good”, “great”, “beautiful”) is a pan-Indian cosmic model that is not limited to Buddhism but also common in Brahmanism, Jainism, and Hinduism. Buddhist cosmology depicts the world as consisting of a vast plain with four large islands (*dvīpa*) lying in each of the four directions, with Mount Sumeru standing at the middle point of these four islands. Mt. Sumeru itself is surrounded by seven mountains consisting of gold as well as an additional iron mountain, with worldly oceans filling the space between each mountain. Jambūdvīpa, the island of the South, is supposed to be the place where humankind lives, while three other islands are inhabited by creatures of a mythological character.

Mt. Sumeru is an *axis mundi* connecting the earth and the heaven. On and above Mt. Sumeru are the multiple layers of the heaven.¹ Buddhist heaven is divided in three large realms in a vertical order, from the top down these are: the Kāmadhātu (the realm of desire), Rūpadhātu (the realm of form), and Ārūpyadhātu (the formless realm). Each is further divided into multiple heavenly levels, inhabited by heavenly residents of different classes; the higher the level, the higher the rank.² On the other hand, the underground world is reserved for the multiple layers of the hell; the lower the level, the worse the hell. The whole Sumeru world is repeatedly destroyed and recreated on a *mahākalpa* (great eon), a cosmic epoch of a tremendous period of time consisting of four *kalpas* (eons), lasting millions or billions of years.³

Buddhism, which originated in North India around the fifth century BC, was transmitted to Central, East, South, and Southeast Asia. Frequently sponsored at the state level, Buddhist culture had a major impact on the formation of the philosophy and cultural landscape of wide areas of Asia by merging with the local culture. An inevitable process following its initial transmission involved considering solutions to conflicts between the Sumeru world system and the worldview already established in local cultural traditions. How then did the people in pre-modern Asian regions react to and incorporate Sumeru cosmology when accepting Buddhism?

This short essay provides a case study on the process of the transmission of India-originated Sumeru cosmology to East Asia along the so-called Silk Road by focusing on the Buddhist visual arts of two oasis towns, Kucha and Dunhuang, located in the border regions between the Indo-Iranian and Chinese cultural spheres around 500 AD (Fig. 1). This periodical focus is based on the presence of the earliest representations known that can be identified as Sumeru with certainty. In spite of their more or less contemporary date, the Buddhist paintings of these two regions bear the witness to completely different reactions to the visual symbol of Mt. Sumeru and its cosmological system.



Fig. 1 Map of regional centers of the Eastern Silk Road. (© Alexey Akulov 2020)

Sumeru Representations in Early Buddhist Paintings in Kucha

Kucha refers to a region that corresponds today with Kuche (库车) in the Aksu Prefecture, Xinjiang Uyghur Autonomous Region in the People's Republic of China. Blessed with abundant water and mineral resources, the historical city of Kucha was once one of the largest oasis towns to flourish on the northern edge of the Taklamakan Desert before the beginning of the Christian era. Moreover, situated along a branch of the Silk Road, which ran across the northern edge of the Tarim Basin and connected Central Asia with the western boundary of China, the Kucha Kingdom enjoyed great prosperity as a cultural crossroads connecting Eastern and Western Eurasia.

While the majority of the current population of the Kucha region today is Muslim Uyghurs, earlier inhabitants of this region were the so-called Tocharians, devout Buddhists who spoke Tocharian B also known as Kuchean, the easternmost branch of the Indo-European language group. Despite being over 2000 km from the Indian continent, Kucha belonged to the Sanskrit Buddhist tradition. The monks were acquainted with Sanskrit, the Indian language which was widely used as a "church language" in Central Asian Buddhist communities (cf. Nattier 1990), and thus were in direct contact with Buddhist teachings as transmitted through Sanskrit as well as the intellectual world of contemporaneous India it entailed.

A large number of the rock monasteries were carved around the area of the Kucha Kingdom during its Buddhist period, that is until around the tenth century. These rock monasteries, along with the inner décor of

wall paintings, statuary, wooden structures, and manuscripts discovered in and around them, are a rare repository of the local Buddhist culture. The peak of making cave monasteries in Kucha is considered to have been around the fifth to eighth centuries.

Wall paintings in caves with the so-called First Indo-Iranian style—generally thought to be the earliest type among different pictorial styles attested in this region dating to around 500 AD⁴—contain some spectacular representations of the Sumeru world system. These present a “pure” Buddhist content, indicating how essential Buddhism was in the cultural and intellectual history of this region. The wall paintings of Kizil Cave 118 (*Hippokampenhöhle*) are the most prominent examples, in which the Sumeru world is visualized by full use of the three-dimensional space (Fig. 2a, b).⁵ In all likelihood, all of the paintings of this transverse rectangular cave involve the story of King Māndhātara, a spectacular Buddhist tale about the rise and fall of a king with innate supernatural power between earth and heaven (Hiyama 2010, 2012).

The cosmic order of the Sumeru world is mirrored in the spatial order of the murals. The representation of Mt. Sumeru in the shape of an hourglass is found in the lower half of the left lunette, which divides the heavenly realm above it and the earthly realm below. Namely, the scenes placed above Mt. Sumeru all illustrate scenes that occur in the Trāyastriṃśa heaven (“the heaven of the thirty-three deities”, located right on the peak of Mt. Sumeru), while the scenes below show episodes occurring in Māndhātara’s earthly palace. The mountainous landscape covering both haunches of the vault ceiling are part of the depiction of heaven; because some of the celestial realms are located on Mt. Sumeru, that is, above the sun and moon in orbit half way up the mountain (cf. Dietz 1994: 276), the mountain motif was associated with heaven in earlier Indian art traditions (cf. Zin 2015).⁶ Above the heavenly mountainous landscape is a frieze running along the zenith, filled by celestial beings such as the mythological bird Garuḍa and a raincloud represented as the cloud containing entangled snakes. The heavenly realm is bordered by the frieze running through the cornices of both rear and front walls, occupied by mythical aquatic creatures that are extensions of the worldly ocean surrounding Mt. Sumeru.⁷

Two multiheaded Nāgas (cobra deities) are coiled at Mt Sumeru’s narrowest midsection.⁸ The presence of these two coiling Nāgas, along with the sun and moon revolving around the midsection of Mt. Sumeru, can be explained by references in several Buddhist cosmological texts.⁹ Enigmatically, though, the reference to an hourglass-shape in early Buddhist texts seems unknown, even though this particular depiction of Mt. Sumeru had been widely accepted in early Buddhist art across Asia. The earliest clear references to this particular shape are, to the best of the present author’s

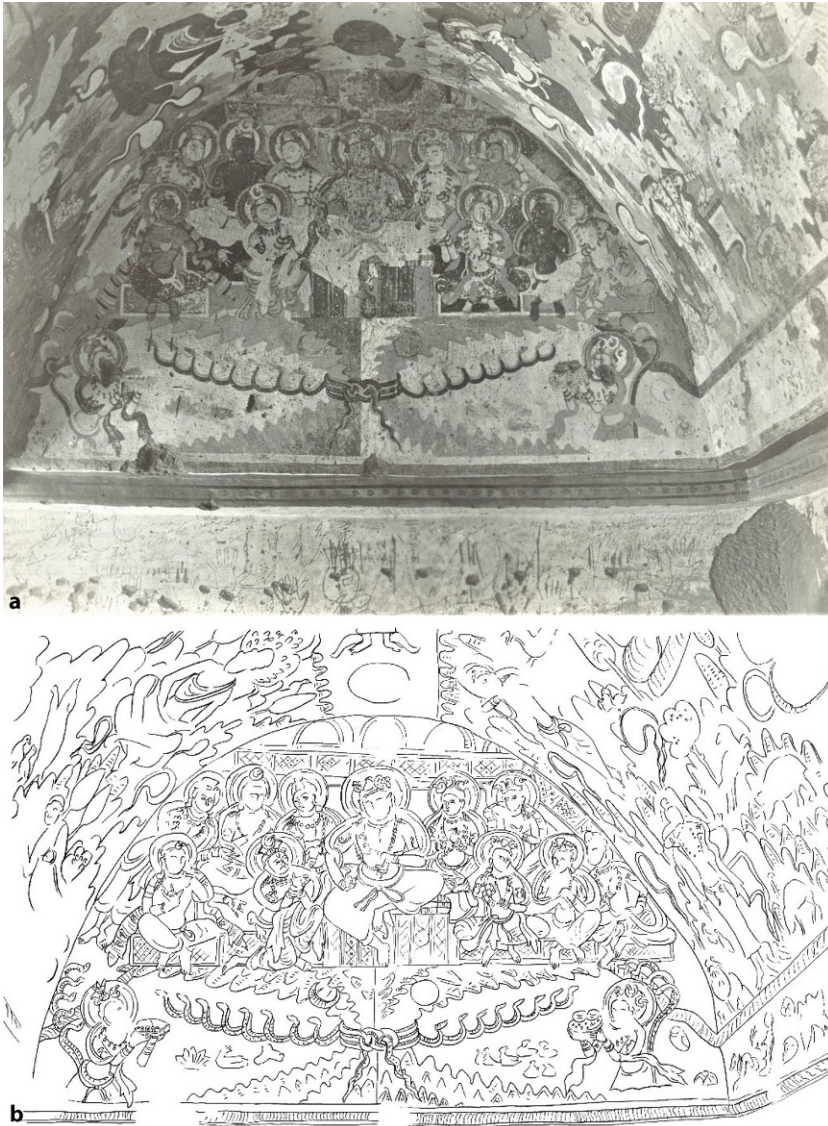


Fig. 2 a Left lunette of Kizil Cave 118 (Hippokampenhöhle, historical photograph taken by the Pelliot expedition in 1907. Paris, Musée Guimet, Photographic archive, 18-500534/AP7445. © MNAAG, Paris, Dist. RMN-Grand Palais/image musée Guimet/ distributed by AMFGuimet Museum) b Drawing of the left lunette of Kizil Cave 118 by Monika Zin. (Zin 2020a)



Fig. 3 Right lunette of Kizil Cave 118 (Hippokampenhöhle, historical photograph taken by the German expedition in 1906. Asian Art Museum, State Museums of Berlin, B 1701)

knowledge, two commentaries in the Chinese translation of the *Abhidharmaśāstra* dated to the seventh century.¹⁰ These texts can be regarded as evidence that the graphical symbol of the hourglass-shaped Mt. Sumeru had been firmly established in Chinese cultural sphere by then; the visual image might have influenced these textual accounts rather than vice versa. The formation process of the visual symbol of Mt. Sumeru needs further investigation.

Back to the discussion of the murals, two main protagonists, the superhuman king Māndhātara and the god Indra are represented facing each other in the corresponding positions, namely above the realm above Mt. Sumeru, on the opposite walls (Fig. 2a and 3). This is the representation of a narrative moment, when Māndhātara and Indra shared one heavenly throne; the supernatural power of the king was recognized as equal to that



Fig. 4 The Buddha's sermon about the end of a *kalpa* on the right wall of Kizil Cave 207 (Historical photograph taken by the third German expedition in 1906, Asian Art Museum, State Museums of Berlin, B 812)

of the lord of heaven. After a while Māndhātār thought himself superior to Indra and thus wished to occupy the heavenly throne alone; through this evil wish, however, the king suddenly lost his supernatural power, falling off heaven to the earth below, and died uttering verses about the danger of greed (Fig. 3). This elaborate spatial arrangement turns the void space in the cave into a narrative stage in which visitors to this cave are not only involved in the thrilling narrative moment of Māndhātār and Indra making eye contact with their own intentions in mind, but can also navigate within the Buddhist geography. The three-dimensional space of this cave served viewers as a miniature model of the cosmos.

While focusing on another narrative subject, the murals of Kizil Cave 92 (*Höhle mit der Äffin*) repeat the same spatial arrangement to illustrate the landscape of Trāyastriṃśā heaven in the upper part of the cave. The front lunette shows the god Indra, the ruler of Trāyastriṃśā heaven, seated on the throne in his palace surrounded by his celestial retainers, while both haunches of the vault ceiling are filled by the mountainous landscape (Zin 2021; in press).¹¹ The rear lunette presents the Buddha meditating in a mountain cave, just having awakened from deep contemplation by the melody played by a heavenly harpist sent by Indra. The concept of decorat-

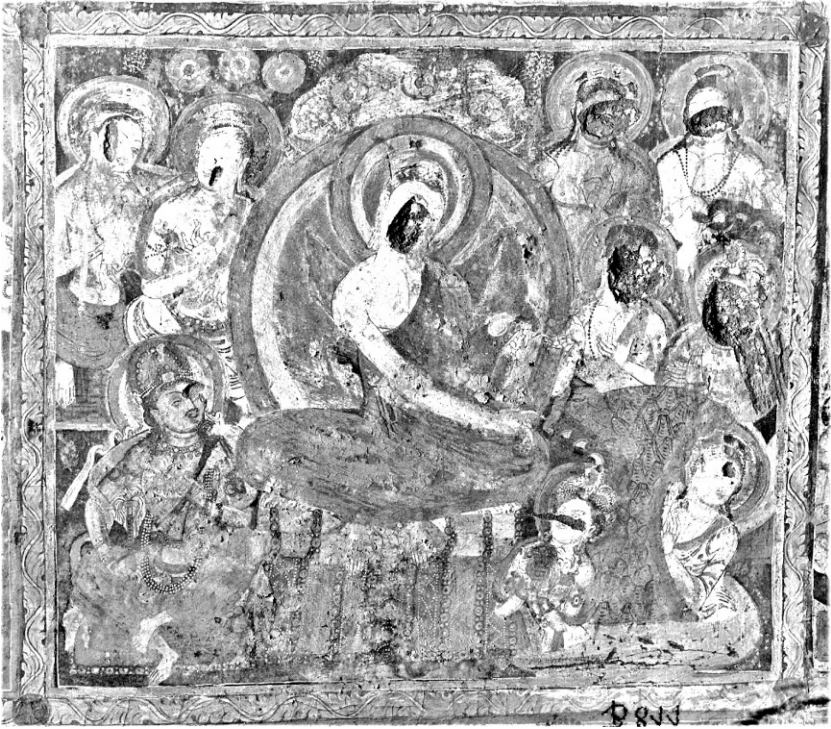


Fig. 5 The Buddha's sermon about the beginning of a *kalpa* on the left wall of Kizil Cave 207 (Historical photograph taken by the third German expedition in 1906, Asian Art Museum, State Museums of Berlin, B 811, detail)

ing the upper part of the cave temple with the imagery of the Trāyastriṃśa heaven is consistent with Kizil Cave 118.

Another interesting representation is a pair of the Buddha's sermon scenes, arranged at the middle of the facing side walls of Kizil Cave 207 (*Malerhöhle*), illustrating the cosmological/cosmogonic scenes at the end and the beginning of a *kalpa* (Grünwedel 1920: II. 24–25; Hiyama 2016: 122–138; 2017: 377–386; Figs. 4 and 5).

The scene on the right wall (Fig. 4) visualizes the eschatological moment when the seventh sun rises and flame burns the world up to the uppermost level of the heaven, while the scene of the left wall (Fig. 5) visualizes the Buddhist genesis, namely the recreation of the world system at the beginning of a new *kalpa*, with primordial humans from the uppermost heaven reborn to fill the new-born earth. A Nāga king offering a bowl filled by treasure to the Buddha can be understood as an embodiment of the primordial water filling the primordial world. The ultimate subject of the latter scene, though, is the Buddhist refutation to the cos-

mogonic concept of Brahmanism. Brahmanism and Buddhism had been religious rivals in India during the Buddha's lifetime and the following millennium. Brahmanic doctrine regards the god Brahmā as the eternal and omniscience creator-god, and those born in the social rank of Brahmins are considered descendants of the god Brahmā, and hence bestowed with a superior position in society. The Buddha refuted this Brahmanic social-religious hierarchy, regarding Brahmā just as one of the ignorant sentiment beings without any influence on the repetitive process of destruction and recreation of the world, and rejected Brahmanic cosmology absolutely. In the painting, the Buddha is looking towards Brahmā and pointing at him with his right forefinger. Brahmā, who is depicted much smaller than the Buddha, hides himself behind Mt. Sumeru, as if he is ashamed and looks toward Buddha anxiously—this is a quite drastic visual propaganda against Brahmanism.

The presence of such radical scene is worth special attention, considering that Brahmanism had not been present in the region. Such a hostile attitude towards Brahmanic doctrine played no practical role in the region in a purely Buddhist climate of Kucha. This demonstrates what a direct, pure form of Indic Buddhism the Kuchean Buddhist people accepted—even including its attitude toward other religious streams in India that were not present in the region as part of the cosmological lore.

Sumeru Representation in Buddhist Paintings in Dunhuang in the Western Wei Period

Around 1400 km east of Kucha, Dunhuang (敦煌) is another ancient oasis town in the current Gansu Province of China. Located at the northwest border of the Chinese cultural sphere under steady impact from the West, this multi-ethnic town, once an important hub of the Silk Road trade, became the cradle of a unique development in Buddhist culture.

Among various cultural influences brought from the west to this region, it was surely those from Kucha which left a clear trace on the formation of early Buddhist visual art in the Dunhuang area. Despite the long distance, these oasis towns were closely linked by the Silk Road trade network. Especially remarkable are the Buddhist caves from the Western Wei period, in the first half of the sixth century, which include various motifs common to the First Indo-Iranian style paintings in Kucha (for examples see Sudo 1989; Hiyama 2018). The situation of the acceptance of Sumeru cosmology in Dunhuang was, though, very different from Kucha. The westernmost town of the Chinese dynastic realm had strongly established Chinese cul-

tural traditions, and it was the residents with Chinese cultural customs who became the main recipients of Buddhism imported from the West. In the process of accepting Buddhism, they had to confront a new worldview, namely the Sumeru cosmology, entailed in its doctrine.

In the Mogao Grottoes, the representative Buddhist site of the Dunhuang area where the Buddhist image-making activity continued over a millennium, the earliest Sumeru representation appears in Cave 249 carved in the Western Wei period, in all likelihood in the 530s.¹²

Before taking a closer look at the wall paintings, it is important to consider the special geographical conditions of the region in this specific period. Dunhuang under Western Wei period was a time when cultural influence from both East and West drastically converged. The cultural wave from Central China had arrived through the appointment of “the Prince of Dongyang” Yuan Rong as a local governor of Dunhuang.¹³ Yuan Rong was the fourth-generation grandson of Emperor Ming Yuan of the Northern Wei dynasty, and following his appointment in 525 he brought the latest cultural trends from Luoyang, the capital of Northern Wei dynasty, to this marginal area of the Chinese speaking world—most likely along with the immigrants and artisans from Luoyang who came with him. At the same time, Central Asia in the first half of the sixth century was at the beginning of a period often referred to as the *Pax Hephthalica*, namely the groups of people called the White Huns or the Hephthalites originally from Bactria who gained control of the vast territory starting from northern India, on the eastern periphery of the Sasanian Empire to the whole Central Asia region.¹⁴ The geopolitical expansion of the Hephthalites contributed to accelerate traffic, logistics, and transfer of ideas owing to the smoothed trade network that linked the whole area of central Eurasia. Even though Dunhuang was outside Hephthalite territory, this geopolitical change clearly and directly influenced the Silk Road trade in which Dunhuang took large part. The presence of some Hephthalite and Sogdian donors portrayed in Mogao Cave 285 (cf. Ishimatsu 2010) reveals the direct contact and even immigration of people from Hephthalite territory to Dunhuang at that time.

The Sumeru representation on the western slope of the ceiling of Mogao Cave 249 was created with such historical background (Fig. 6a, b). Even at a glance, it is clear that the image is significantly different from the pure Indic Buddhist one from Kucha, with various new elements inserted in it. The shape of Mt. Sumeru itself, despite its dense representation that confuses one’s visual perception, is basically the same as seen in Kucha, an hourglass form consisting of blue-green, brown, and white mountain ranges, with two multi-headed Nāgas entangled at its midsection.



Fig. 6 a Ceiling of Dunhuang Cave 249; b Mt. Sumeru depicted in Dunhuang Cave 249. (After Dunhuang Wenwu Yanjiusuo 1981: pl. 101)

Interestingly, these Nāgas are clearly depicted as Chinese dragons with forelegs, while those in Kucha are depicted as multi-headed snakes, the traditional Indian Nāgas. A comparable representation is found in Yungang Cave 10 in Shanxi Province of China (Fig. 7), which was carved in the 480s and thus predates Mogao Cave 249 by about half a century.¹⁵ The Yungang Grottoes were carved in the vicinity of Pincheng (or present



Fig. 7 Upper part of the entrance of Yungang Cave 10. (After Mizuno & Nagahiro 1952: pl. 23; © Institute for Research in Humanities, Kyoto University)

Datong), the first capital of Northern Wei dynasty, by commission of the Northern Wei imperial house. The image-making of the Yungang Grottoes were supervised by the monk Tan Yao, who originated from Northern Liang, a dynasty based on Liangzhou (= present Gansu Province) that was conquered by Northern Wei in 439. Among the artisans engaged in carving the Yungang Grottoes are some forced to immigrate from Liangzhou to Pincheng as captives. The Buddhist art tradition of Liangzhou was deeply impacted by oasis towns in the Tarim Basin like Kucha (Su 1986). Although these two areas were distant from each other, they had close ties through the Silk Road network, and even belonged to same regional dynasties, the Former Qin dynasty and the Later Liang Dynasty, at the end of the fourth century. So it is no wonder that we find the same motif in Kucha and Yungang as the distance of over 3000 km was intermediated by the transfer of captured Liangzhou artisans to Pincheng. The transmission of the Sumeru motif back to the west occurred when the local governor Yuan Rong emigrated from Luoyang to Dunhuang along with the artisans. This observation demonstrates that a transregional transmission of an artistic motif over long distance is not a lineal process, but is intertwined with political changes, geographical shifts of power and the movement of artisans hired by powerful patrons.

Looking again at the mural in Mogao Cave 249, we see a demigod Asura standing in front of Mt. Sumeru raising the sun and the moon with his hands. This motif is associated with Buddhist cosmological lore concerning the Asura king, Vimalacitra, attempting to steal sun and moon, as narrated in several early cosmological texts (cf. He 1982; Duan 1983: 2–3; He 2006: 263–269; Tuzzeo *in press*). In contrast, a series of new elements appears around Mt. Sumeru, such as the thunder god encircled by drums and the wind god holding a cloth blown by wind, and a pair of figures sitting in Chinese-style architecture, and so forth. They apparently do not fit with the pure Buddhist Sumeru cosmology. These “Chinese” figures are further observed in the northern and southern slopes of the ceiling conflating the Sumeru imagery, including a pair of divine figures riding on mythical chariots flying toward Mt. Sumeru, along with various mythological creatures flying toward the western slope as well.

The identification of these apparently “Chinese” figures is still under dispute; some researchers explain them on the basis of a Taoist context, while the others are rather inclined to give a Buddhist interpretation to them.¹⁶ One thing though is very sure; regardless of how many Buddhist connotations were given to such motifs, the visual language is borrowed from the Chinese visual art tradition, especially of the funeral context (cf. Tabayashi 2011: 240–1). The fact that this Chinese visual vocabulary could have been inserted around the Indic representation of Mt. Sumeru suggests that a very different cultural phenomenon occurred here from the case seen in Kucha.

It is most likely that the creation of such syncretistic image, as pointed out in some previous studies (He 1982: 32; Li 2013; He 2006: 263–294), is the product of the “Three-in-One thought”, which was a philosophical trend in Luoyang at that time. This refers to the philosophical movement to consider Confucianism, Taoism, and Buddhism as a harmonious aggregate, and thus to explain the doctrine of each teaching by rendering terms and notions of the others. In this movement, the Kunlun Mountain—the mythical mountain in ancient Chinese mythology which is said to be located to the west of China, where the queen of immortality resides along with other mythical creatures—overlapped with Mt. Sumeru.¹⁷ The representation of a gate with a slightly opened door on the top of Mt. Sumeru is worth special attention in this regard. The motif of the slightly opened gate had been represented in Chinese art since Han dynasty, symbolizing the passageway to the heavenly realm placed above Mt. Kunlun (Saito 1995: 51–53). On the other hand, the gate is placed in the middle of the gray-colored (which is most likely the result of the discoloration of originally brighter pigment) buildings with zigzag walls, seemingly representing a city wall. The city located at the summit of Mt. Sumeru can be understood as

the city of Sudarśana of the Trāyastriṃśa heaven, the inhabitants of which are often caught in conflict with the *asuras*.¹⁸ This Sumeru representation masterfully projects both Kunlun and Buddhist cosmologies with their own coherencies, without conflicting with each other at all.

The Sumeru image of Mogao Cave 249 can be understood as a result of an attempt to present syncretistic worldview merging the Kunlun and Sumeru cosmologies. This could be a reflection of the domestic policy of the local governor Yuan Rong, who was not only a pious Buddhist by himself but also apparently employed Buddhism for solving conflicts and uniting powerful local clans. To govern the multi-ethnic, multi-religious milieu of the Dunhuang area, a syncretic worldview with a subtle balance between the Buddhism and Taoism in which neither of them are deemed as having a lower value than the other could have been utilized to unite the people beyond religious affiliations.¹⁹

These observations of the Sumeru images in the wall paintings dated to around 500 in two major Buddhist sites of the Silk Road show that even when the basic form looks similar, the cosmological connotation entailed in each representation is quite different. In the case of early Kuchean paintings, the content is a direct import from Indian Buddhism, even including a rivalry with Brahmanic cosmology that was not at all present in the region. In the case of Mogao Cave 249, on the other hand, it was a syncretistic cosmography in which Buddhist and Taoist mythical figures coexist without any conflict with each other, the product of the ideological trend and political situation of the region. In addition, the presence of the Sumeru image in an intermediate form between Kucha and Dunhuang in the far eastern Yungang Cave 10²⁰ is most likely connected to the forced movement of artisans over long distances caused by the shift of regional political power. The Buddhist visual symbol of the “World” was slightly, but certainly, transformed as it crossed the cultural crossroads of the Silk Road by reflecting the localized expectation for Buddhism of each region.

Endnotes

- 1 Lower levels of heaven are located on Mt. Sumeru itself, such as the Cāturmahārājikayika heaven and the Trāyastriṃśa heaven (cf. Kirfel 1920: 187–188; Kloetzli 1983: 29; Dietz 2003: 212; Zin 2015: fn. 47).
- 2 For representations of inhabitants of the celestial layers of the Kāma- and Rūpadhātu in Buddhist art, see Zin (2015). Beings of the *Ārūpyadhātu* (sphere of non-form) exist only as discarnate intellects and therefore cannot be visualized.
- 3 For the analysis of the Sumeru world system (which is called the Cakravāla Cosmology by Kloetzli after the name of the mountain ranges encircling the entire world) as described in canonical literatures of early Buddhist schools, see (Kirfel 1920: 178–207); Kloetzli (1983: 23–50); Dietz (1994); Dietz (2003); Sadakata (2011: 201–245). Another

- recommended reading is Huntington (2019), providing the overview of textual accounts about Buddhist cosmology (especially in Chapter I) with helpful pictograms and rich illustrations of relevant visual arts, mainly from Himalayan regions.
- 4 The classification of Kuchean paintings of the regional style into the “First Indo-Iranian style” and “Second Indo-Iranian style”, and the dating of each of them respectively as around 500 and after 600 was proposed in the pioneer study by Waldschmidt (1933). This view had been challenged by a number of scholars (for example Klimburg 1974; Su 1983; Howard 1991; and so forth). At least concerning the “First style”, however, recent studies by Hiyama (2016; 2018) argue that some specific motifs typically depicted in the paintings of this style can be dated to around 500 AD on the basis of comparison to the better datable materials in surrounding areas.
 - 5 For the detailed record of this cave in the condition of 1906 see Grünwedel 1912: 102–112. The wall paintings of this cave were partly detached by the third and fourth German expeditions, and brought to Berlin. About a half of the detached paintings was damaged during the WWII; the rest of the mural fragments are presently kept in Berlin and St. Petersburg.
 - 6 In fact, some specific motifs inserted in the mountainous landscape of this cave can be the representation of Buddhist cosmogony. See Hiyama (2010; 2012).
 - 7 For the new iconographical reading of the ocean friezes painted along the cornices of several caves in Kucha, see Konczak-Nagel (2020) and Zin (2020).
 - 8 Since Nāgas often symbolize water in Buddhist visual art, these two Nāgas could have symbolized the surrounding ocean as well. In this case, the lower half of the mountain under the “knot” of the coiling Nāgas could be intended to represent the subterranean sphere.
 - 9 Several canonical texts narrate the following story; once an Asura king, the ruler of the subterranean territory, was jealous of the sun, moon, and celestial beings who fly around the Trāyastriṃśa heaven above his head. Accompanied by his Asura army, he attempted an invasion of heaven. At that time, two Nāga kings, Nanda and Upananda, coiled themselves around Mt. Sumeru sevenfold and shook the mountain causing it to rain. They also struck the ocean, so that the sea level rose up to the top of Sumeru. Due to these unusual events, the inhabitants of the heaven were warned of the invasion. Cf. Howard (1986: 15–16); Hiyama (2010: 366–367); Hiyama (2012: 148–149).
 - 10 These two commentaries of the *Abhidharmakośa* are the works of Puguang (T 1821: 189a11–26) and of Fabao (T 1822: 618b19–23), two disciples of the prominent monk Xuanzang in the seventh century. Both texts explicitly describe the shape of Mt. Sumeru with the top in the same width as the base, and the middle part narrower than the top and the base —as compared to the shape of a hand drum in the former. The text that these two commentaries reference, namely the Chinese translation of the *Abhidharmakośa* by Xuanzang (T 1558), is a translation of the Sanskrit original text by Vasubandhu. It is tricky, because neither the description of this Chinese translation (T 1558: 59a16–60a26) nor its Sanskrit original text (for English translation see Pruden 1988: vol. 2, 462, verses 63–64) refer to the hour-glass shape of Mt. Sumeru.
 - 11 For illustrations see *Mural Paintings in Xinjiang of China* (2009: vol. 1, figs. 9–13). For the detailed record of this cave in the condition of 1906 see Grünwedel 1912: 100–102.
 - 12 The wall paintings of Mogao Cave 249 are closely related to those of Mogao Cave 285 from the stylistic and iconographical perspective, the level of similarity is such that the same artisan group may have participated in creating both caves. The latter includes the donative inscriptions referring to the Year 4 and 5 of Dadai Dawei Datong = 538 and 539 AD. For the recent study on these inscriptions, see Ishimatsu (2010).
 - 13 For recent studies on political and cultural impacts on Dunhuang by the appointment of Yuan Rong see Rong (2013: 29–30); Tabayashi (2013); Wang (2017: 241–267).
 - 14 For studies on the Hephthalite’s expansion into Central Asia and its cultural impact see Grenet (2002: 209–218); De la Vaissière (2005: 101–111); Neelis (2010: 159–170);

- Yoshida (2011: 22–25) (in which Yoshida proposed to the designation of *Pax Hephthalica*); (Alram 2016: 63–122).
- 15 For the extensive survey of Yungang Cave 10 see Mizuno and Nagairo (1952), especially see pp. 17, 45, pls. 22–23, fig. 12 for the documentation on the Sumeru representation. Also see Su (1989) for the chronology of the site. Even though the chronology of the Yungang Grottoes is still under discussion, there is a general consensus about dating the pair of Caves 9 and 10 to the 480s. For the iconographical studies on this Sumeru image, see Yagi (1994: 6–7); Li (2003: 39–40). The author expresses her deep gratitude to Prof. Hidenori Okamura (Kyoto University) for generously providing the digital data of the original photograph used for pl. 23 of Mizuno & Nagahiro (1952), kept at the Institute for Research in Humanities of Kyoto University.
 - 16 Among numerous prominent studies, especially notable contributions are He (1982); Duan (1983); Ning (1990); Koyama (1995); Saito (1995); He (2006); Tabayashi (2011: 240–241). In addition, the author expresses the deepest gratitude to Dr. Daniel R. Tuzzeo (Stanford University) for sharing his unpublished paper which summarizes the previous studies and elaborates the Buddhological reading of this representation. The publication of his dissertation, *Crafting Cosmologies: Buddhist Cartography and the Spatial Imagination in Medieval China* (successfully defended at Stanford University in May 2019), from which this paper was developed, will greatly benefit the field.
 - 17 Since Mount Kunlun was also regarded as the world axis linking the earth and heaven, the imagery on Kunlun and Sumeru could overlap with less conflict. In fact, in the tenth volume of *Shi Yi Ji (Forgotten Tales)*, a mythological treatise compiled by a Taoist writer Wang Jia in the late fourth century, explicitly mentions that Mt. Kunlun is called Mt. Sumeru in the West. See Saito (1995: 51).
 - 18 Saito rather associated this motif of heavenly gate with Tuṣita heaven by comparing it with the same motif depicted in the middle of the balcony with heavenly musicians, which can be found on the northern wall of Mogao Cave 248 (1995: 53–54). It is a fact that the worship for Bodhisattva Maitreya in the Tuṣita heaven became a religious fashion in China in the fifth to sixth centuries. Nevertheless, whether the representation in Cave 248, and the related wall paintings in Kizil Caves that Saito cites as the evidence for her argument (based on the interpretation by Miyaji 1992: Chapter III-2), indeed illustrate specifically the Tuṣita heaven, needs a careful reexamination, since the musicians on the balcony can also belong to other heavenly layers such as the Trāyastriṃśa heaven.
 - 19 In fact, Yuan Rong seems to have carried out another attempt along the same lines in Mogao Cave 285, another representative cave from the Western Wei period, for presenting the syncretistic visions of heavens by amalgamating astral motifs of Buddhism, Taoism, and even Brahmanism/Hinduism into one visual system. See Hiyama (in press a, in press b).
 - 20 By describing it as an intermediate form, the present argument is simplified by focusing on the silhouette of Mt. Sumeru and the shape of the Nāgas coiling around it. The element that specifically appears in Yungang Cave 10 is the animal figures inserted within each mountain range forming Sumeru, and two Indian-looking deities carved at each side of Sumeru. The former seems to derived from the Han art tradition (Mizuno & Nagahiro 1952: 45); especially related type of art object could be the so-called Chinese Hill Censer or *Boshan-lu*, a traditional incense burner in a form of mythical mountain inhabited by various animals (Saito 1995: 48). This had been another established visual symbol of the worldly mountain since Han dynasty (Rawson 2006). The Han connotation of the Sumeru representation and its relationship with two Indian-looking deities flanking Sumeru needs further in-depth study.

References

- Aram, Michael 2016. *Das Antlitz des Fremden: Die Münzprägung der Hunnen und Westtürken in Zentralasien und Indien*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- De la Vaissière, Étienne 2005. *Sogdian Traders*. Leiden: Brill.
- Dietz, Siglinde 1994. Das Weltbild des indischen Buddhismus. In: Andreas Resch (ed.): *Die Welt der Weltbilder*. Innsbruck: Resch: 237–296.
- Dietz, Siglinde 2003. Die Kosmologie nach den buddhistischen Sanskrit-Texten aus Zentralasien. In: Sven Bretfeld and Jens Wilkens (eds.): *Indien und Zentralasien: Sprach- und Kulturkontakt, Vorträge des Göttinger Symposions vom 7. Mai bis 10. Mai 2001*. Wiesbaden: Harrassowitz: 207–226.
- Duan, Wenjie 1983. Lue lun Mogao ku di 249 ku bihua neirong he yishu (A brief account of the content and the artistic style of the murals in Cave 249 of Mogaoku). *Dunhuang yanjiu* (12): 1–9.
- Dunhuang Wenwu Yanjiusuo (ed.) 1981, *Dunhuang Mogaoku (Dunhuang Grottoes)*. Vol. 1. Beijing: Wenwu Chubanshe.
- Grenet, Franz 2002. Regional interaction in Central Asia and Northwest India in the Kidarite and Hepthalite periods. *Indo-Iranian languages and peoples = Proceedings of the British Academy* (116): 203–224.
- Grünwedel, Albert 1912. *Altbuddhistische Kultstätten in Chinesisch-Turkistan*. Berlin: Reimer.
- Grünwedel, Albert 1920. *Alt-Kutscha*. Berlin: Elsner.
- He, Shizhe 1982. Dunhuang Mogao ku di 249 ku kuding xi po bihua neirong kaoshi (The study of iconographical programme of the chief motif on the ceiling of Cave 249 of Mogao Grottoes). *Dunhuang xue ji kan* (3): 28–32.
- He, Shizhe 2006. *Dunhuang Tuxiang Yanjiu: Shiliuguo Beichao juan (Iconographical study on Dunhuang: Volume for Sixteen Kingdoms and Northern Dynasties)*. Langzhou: Gansu Jiaoyu Chubanshe.
- Hiyama, Satomi 2010. Kizil Sekkutsu dai 118 kutsu (Kaibakutsu) no Hekiga Shudai: Māndhātār ou Setsuwa wo Tegakarini (The wall paintings of Kizil cave 118: the story of King Māndhātār as a new identification). *Bijutsushi = Journal of the Japan Art History Society* (168): 358–372.
- Hiyama, Satomi 2012. New identification of murals in Kizil Cave 118 as the story of King Māndhātār. *Journal of Inner Asian Art and Archaeology* (5): 145–170.
- Hiyama, Satomi 2016. *The Wall Paintings of the "Painters' Cave (Kizil Cave 207)"*. PhD dissertation at Freie Universität Berlin. Ketsch: microfiche publication.
- Hiyama, Satomi 2017. Kizil dai 207 kutsu (Gaka kutsu) no Butsu Seppozu no Shinkaishaku (New interpretation of the Buddha's sermon scenes in Kizil Cave 207 (the Painters' Cave)). In: Akira Miyaji (ed.): *Asia Bukkyo Bijutsu Ronshu (1), Chuo Asia*. Tokyo, Chuo Koron Bijutsu Shuppan: 367–398.
- Hiyama, Satomi 2018. Untangling the Textiles in the Murals: A Study on the Monks' Robes depicted in the First Indo-Iranian Style Paintings of Kucha. *Journal of World Buddhist Cultures* (1): 59–94.
- Hiyama, Satomi (forthcoming a). New Identification of Astral Deities Represented in the Western Wall of Mogao Cave 285, Dunhuang. In: Imre Galambos (ed.): *Dunhuang and Cultural Contact along the Silk Road*. Budapest: Hungarian Academy of Sciences, 2020.
- Hiyama, Satomi (forthcoming b). Overlapping heavens in the wall paintings of Mogao Cave 285 in Dunhuang—An art-historical study on the syncretistic images on its west wall and ceiling. In: Bill M. Mak and Eric Huntington (eds.): *Overlapping Cosmologies in Asia*, 2020.
- Howard, Angela F. 1986. *The Imagery of the Cosmological Buddha*. Leiden: Brill.
- Howard, Angela F. 1991. In Support of a New Chronology for the Kizil Mural Paintings. *Archives of Asian Art* (44): 68–83.
- Huntington, Eric 2019. *Creating the Universe: Depictions of the Cosmos in Himalayan Buddhism*. Seattle: University of Washington Press.

- Ishimatsu, Hinako 2010. Tonko Bakko-kutsu dai 285 kutsu Hokuheki no Kuyosha-zo to Kuyosha Daiki (The donor figures and donative inscriptions on the northern wall of Mogao Cave 285, Dunhuang). *Ryukoku Shidan* (131): 43–87.
- Kirfel, Willibald 1920. *Die Kosmographie der Inder. Nach den Quellen dargestellt*. Bonn: Schroeder.
- Klimburg, Max 1974. Die Entwicklung des zweiten indo-iranischen Stils von Kutscha. In: Georg Hazai and Peter Zieme (eds.): *Sprache und Geschichte und Kultur der altaischen Völker: Protokollband der XII. Tagung der Permanent International Altaistic Conference 1969 in Berlin*. Berlin: Akademie-Verlag: 317–325.
- Kloetzli, Randy 1983. *Buddhist cosmology: From single world system to pure land. Science and theology in the images of motion and light*. Delhi: Motilal Banarsidass.
- Konczak-Nagel, Ines (2020). Painted Buddhist Cosmology: The Pictorial Programme of Central Pillar Caves in Kucha. In: *Essays and Studies on Kucha I, Leipziger Kuča-Studien I*. Delhi: DEV Publisher: 1–10.
- Koyama, Mitsuru 1995. Tonko Bakkokutsu dai 249 kutsu no Kuchou Hekiga (On the Mural Paintings in the Ceiling of Cavern 249 of the Dun-huang). *The Journal of the Asia Studies of Soka University* (16): 25–38.
- Li, Jingjie 2003. Unko dai 9, 10 kutsu no Zuzo Kosei ni tsuite (The arrangement of deities in the paintings in Yungang Grottoes No. 9 and 10). *Ars Buddhica* (267): 33–58.
- Li, Zhengyu 2013. Xina xiaohua Huabi weiwo—Tan Mogaoku Beicao Dongku ‘Shenhua, Daojiao Ticao’ de Shuxing (Learning for the Purpose of Application—on the Property of “Mythological and Taoist Themes” in the Northern Dynasties Caves at the Mogao Grottoes). *Dunhuang Yanjiu* (139): 47–50.
- Miyaji, Akira 1992. *Nehan to Miroku no Zuzogaku (Iconography of Mahāparinirvāṇa and Maitreya)*. Tokyo: Yoshikawa Kobunkan.
- Mizuno, Seiichi and Nagahiro, Toshio 1952. *Yun-Kang: The Buddhist Cave-Temples of the Fifth Century A.D. in North China. Detailed Report of the Archaeological Survey Carried out by the Mission of the Tōhōbunka kenkyūsho 1938–1945. Volume VII Cave Ten*. Kyoto: Kyoto University.
- Mural Paintings in Xinjiang of China* 2009 = Zhongguo Xinjiang bihua yishu bianji weiyuanhui 2009. *Zhongguo Xinjiang bihua yishu (Mural Paintings in Xinjiang of China)*. Urumqi: Xinjiang meishu sheying chubanshe.
- Nattier, Jan 1990. Church Language and Vernacular Language in Central Asian Buddhism. *Numen* 37 (2): 195–219.
- Neelis, Jason 2010. *Early Buddhist Transmission and Trade Networks. Mobility and Exchange within and beyond the Northwestern Borderlands of South Asia*. Leiden: Brill.
- Ning, Qiang 1990. Shangshi dengxian tu yu Weimojie jingbian—Mogaoku di 249 ku Kuding bihua Zaitan. *Dunhuang Yanjiu* (1): 30–37.
- Pruden, Leo M 1988. *Abhidharmakośabhāṣyam*. Berkeley: Asian Humanities Press.
- Rawson, Jessica 2006. The Chinese Hill Censer, bo shan lu: A note on origins, influences and meanings. *Arts asiatiques* (61): 76–86.
- Rong, Xinjiang 2013. *Eighteen lectures on Dunhuang*. Leiden/Boston: Brill.
- Sadakata, Akira 2011. *Indo Uchuron Taizen (Encyclopedia of Indian Cosmology)*. Tokyo: Shunjusa.
- Saito, Rieko 1995. Tonko dai 249 kutsu Tenjo ni okeru Chugoku teki Zuzo no Juyo Keitai (The form of understanding the iconographic Sinism on the ceiling paintings in No. 249 Cave at Dunhuang). *Ars Buddhica* (218): 39–56.
- Su, Bai 1983. Kizil Sekkutsu no Keishiki Kubun to sono Nendai (Classification and dating of the cave temples of Kizil). In: *Chugoku Sekkutsu Kizil Sekkutsu I*. Tokyo: Heibonsha/Bunbutsu Shuppansha: 162–178.
- Su, Bai 1986. Liangzhou Shiku Yiji he “Liangzhou Moshi” (The cave sites in Liangzhou and “the Liangzhou-style”). *Kaogu Xuebao* (4): 435–446.
- Su, Bai 1989. Pincheng Shili de Jiju he “Yungang Moshi” de Xingcheng yu Fazhan (Political power of Pincheng and the formation and development of “Yungang Style”). In: Su Bai et al. *Zhongguo Shiku Yungang Shiku (Caves of China: Yungang Grottoes)*. Beijing: Wenwu Chubanshe: 176–197.

- Sudo, Hirotooshi 1989. Zenjo Biku Zuzo to Tonko dai 285 kutsu (Paintings of Buddhist priests in meditative concentration, and the 285th cave of Dunhuang). *Ars Buddhica* (183): 11–27.
- Tabayashi, Kei 2011. Tonko Bakko-kutsu dai 285 kutsu no Bukkyo Sekai ni tsuite—Tenjo Hekiga wo Chushin to shite (The Buddhist realm depicted in ceiling paintings of Mogao Cave 285 at Dunhuang). *Bijutsushi = Journal of the Japan Art History Society* (170): 229–245.
- Tabayashi, Kei 2013. Tonko Bakkokutsu dai 285 kutsu Kaisaku no Haikei ni kanshite (Study on the historical background of the creation of Mogao Cave 285, Dunhuang). In: Donohashi Akio Sensei Taishoku Kinen Kentei Ronbunshu Kanko Inkai (ed.): *Bijutsushi Rekisan*. Tokyo: Chuo Koron Bijutsu Shuppan: 501–518.
- Tuzzeo, Daniel R. (forthcoming). Mapping the Buddhist Cosmos at Dunhuang. A New Interpretation of the Western Ceiling Slope of Mogao Cave 249. Unpublished paper under review.
- Waldschmidt, Ernst 1933. Über den Stil der Wandgemälde. In: Albert von Le Coq und Ernst Waldschmidt (eds.): *Die buddhistische Spätantike in Mittelasien VII, Neue Bildwerke* 3. Berlin: Reimer und Vohsen: 24–31.
- Wang, Huimin 2017. *Dunhuang Fojiao yu Shiku Yingjian (Dunhuang Buddhism and the making of cave temples)*. Lanzhou: Gansu Jiaoyu Chubanshe.
- Yagi, Haruo 1994. Unko Sekkutsu ni okeru Sangaku Monyo ni tsuite I (The mountain figures in Yun Kang caves 1). *Museum* (524): 4–14.
- Yoshida, Yutaka 2011. Sogdojin to Sogdo no Rekishi (Sogdian and the history of Sogdiana). In: H. Sofugawa and Y. Yoshida (eds.): *Sogdojin no Bijutsu to Gengo (Sogdian art and language)*. Kyoto: Rinsen Shoten: 7–78.
- Zin, Monika 2015. Pictures of Paradise for Good Luck and Prosperity. Depictions of Themes Irrelevant for Enlightenment in the Older Buddhist Tradition (with special reference to the paintings of Ajanta). In: V. Kumar and B. Rawat (eds.): *Mani-Sushma: Archaeology and Heritage (Dr. B.R. Mani Festschrift)*. Vol. I. Delhi: B. R. Publishing Corporation: 125–156.
- Zin, Monika 2020. Crossing the Ocean of samsāra: Berlin, Museum für Asiatische Kunst, no. III 9023. In: *Proceedings of the 7th International Conference of Oriental Studies Polish Academy of Sciences: Collections of Texts and Artefacts, held in Cracow on October 22–24, 2018, Rocznik Orientalistyczny* 72.2.
- Zin, Monika 2021. The Complex Contents of Unpretentious Pictures: Narrative Paintings in Kucha. In: Naomi Appleton (ed.): *Narrative Visions and Visual Narratives in Indian Buddhism*, Sheffield: Equinox Publishing: Chapter 4.
- Zin, Monika (forthcoming). The “*parinirvāṇa* space” in Kucha, an attempt to define its function, with a brief comparison of the painted caves in Kucha and Ajanta. In: *The Image as Instrument and as Reflection of Ritual in Central Asia and the Himalaya: from Antiquity to the Present. Proceedings of the Fifth International SEECHAC Colloquium, Università degli Studi di Napoli “L’Orientale” Naples, 5–7 November 2018*.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Satomi Hiyama
Hakubi Center/Institute for Research in Humanities
Kyoto University
Higashi-Oguracho 47, Kita-Shirakawa
606-8265 Kyoto
Japan
hiyama.satomi.4z@kyoto-u.ac.jp