

A Study on the Prosperity and Decline of Buddhist Sites in Northern Bactria: Kara Tepe and Zurmala

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Abstract

This paper presents research on the Buddhist sites of Kara Tepe located in Termez, Republic of Uzbekistan conducted by Rissho University in partnership with Uzbekistan research institutions. It also offers an organized arrangement of previous research concerning the Buddhist sites of Zurmala in the same region undertaken beginning in the fiscal year of 2016, along with research findings and an indication of issues facing the future. Both sites are thought to have been constructed in the 2nd Century by Kanishka I of the Kushan Empire. Preceding this in the 4th Century B.C., Alexander the Great, ruler of Macedonia, had made an expedition there with a great number of Grecians to bring the region under his command. The region later came to be governed by the Kushan Empire following the Greco-Bactrian Kingdom, the Tocharians and the Greater Yuezhi. There then, through the amalgamation of Indic and Grecian cultures, appeared Buddhist images, which are thought to have contributed to the spread of Buddhist culture. And just what were those actual images like? The sites of Kara Tepe and Zurmala provide keys to deduce this.

Introduction

In 2014, Rissho University Uzbekistan Academic Research Group (hereafter, Rissho Group) entered into a five-year research agreement with the Fine Arts Institute of the Uzbekistan Academy of Sciences (hereafter, Fine Arts Institute) and began excavations on the Buddhist sites of Kara Tepe located outside of Termez in the Surkhandarya Region of the Republic of Uzbekistan.

The excavations took place every September from 2014 to 2017 (four times in total). Based on previous research, this paper presents a summary of the study and issues stemming from it. The author was engaged in these activities on each occasion, starting from a preliminary research.¹ First is a simple introduction of the region and topics covered in this paper.

This article targeted several Buddhist sites believed to have been constructed by King Kanishka who ruled the region during the Kushan Empire in the 2nd century. Going back to the 4th century BCE, Alexander the Great, ruler of Macedonia in northern Greece, invaded the region with many Greeks and brought it under his control. The Greek culture continued under the Greco-Bactrian Kingdom that subsequently controlled the region. However, later the Tocharians, a different ethnic group, came under the rule of the Yuezhi, and thereafter the Kushan Empire took control. During the Kushan Empire, the Indian and Greek cultures Hellenistically fused and saw the emergence of Gandhara Buddhism, which is regarded as having contributed to the spread of the Buddhist culture from the time of King Kanishka.

What kind of groups were these ruling powers and how did they rule? How did Buddhism spread? Furthermore, how did Gandhara art develop, and did it influence China and Japan? There are still many unknowns, and it is the answers to these unknowns that numerous academics have pursued for many years as research themes.²

The following first presents an overview of the historic and geographic positioning of the Surkhandarya Region. Thereafter, previous studies, our Research Group's focal points, and issues are presented for Kara Tepe and then Zurmala.

1. Historical Geography and Archaeological Research to Date in Northern Bactria

This section gives an explanation of the historical geography of Termez, which is viewed as having been a principal city in Northern Bactria, particularly in ancient times (Fig. 1).

Termez is located on the southern edge of the Surkhandarya Region in Uzbekistan. The Surkhandarya Region is separated from its environs by high mountains and large rivers. The Amu Darya (Darya means river) flows east to west in the south, and in the east is the Babatag mountain range. Running

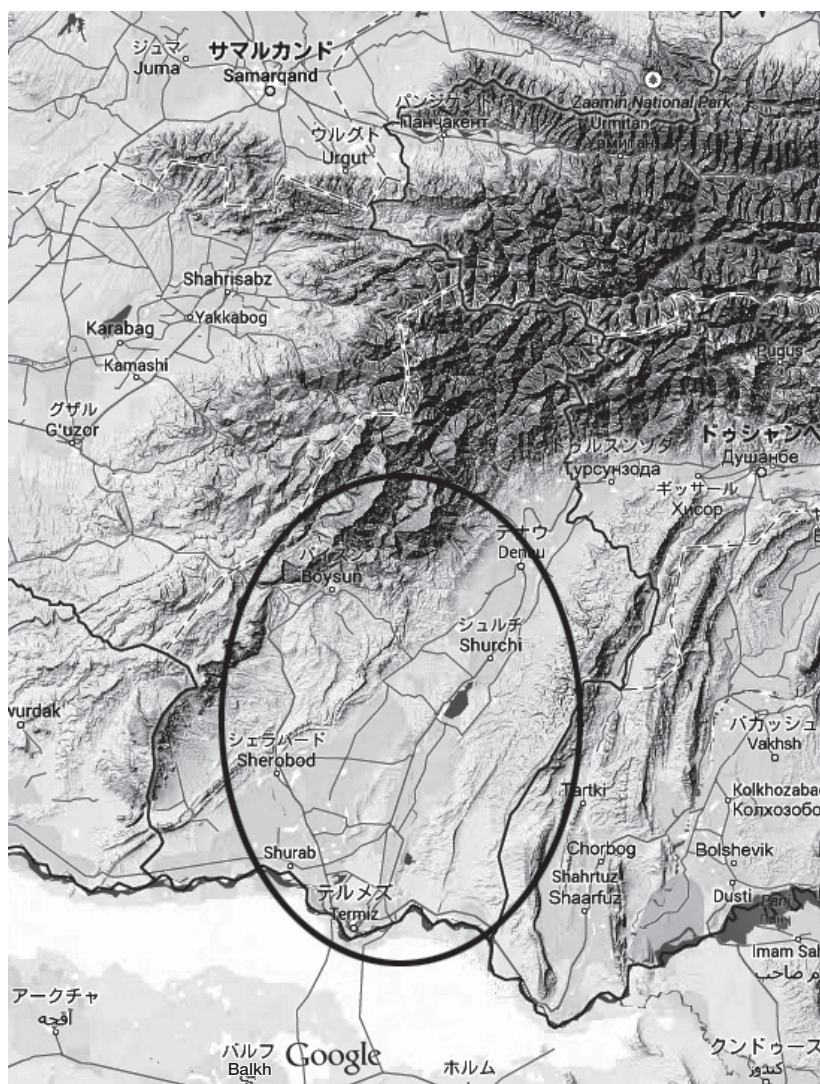


Fig.1 Location of Termez (Prepared with Google Maps)

alongside this range is the Surkhandarya (river), a tributary of the Amu Darya that flows north to south. In the far north is the Hissar mountain range stretching to the Pamir mountains, and extending to that are the Boysuntau mountains and Kugitangtau mountains in the west (Fig. 2). In addition, on the opposite side of the Amu Darya, that is, on the Afghanistan side, the land looks out on the Hindu Kush range far to the south. In the center of this region, straddled by major rivers sat Bactra, the Greco-Bactria capital (present-day

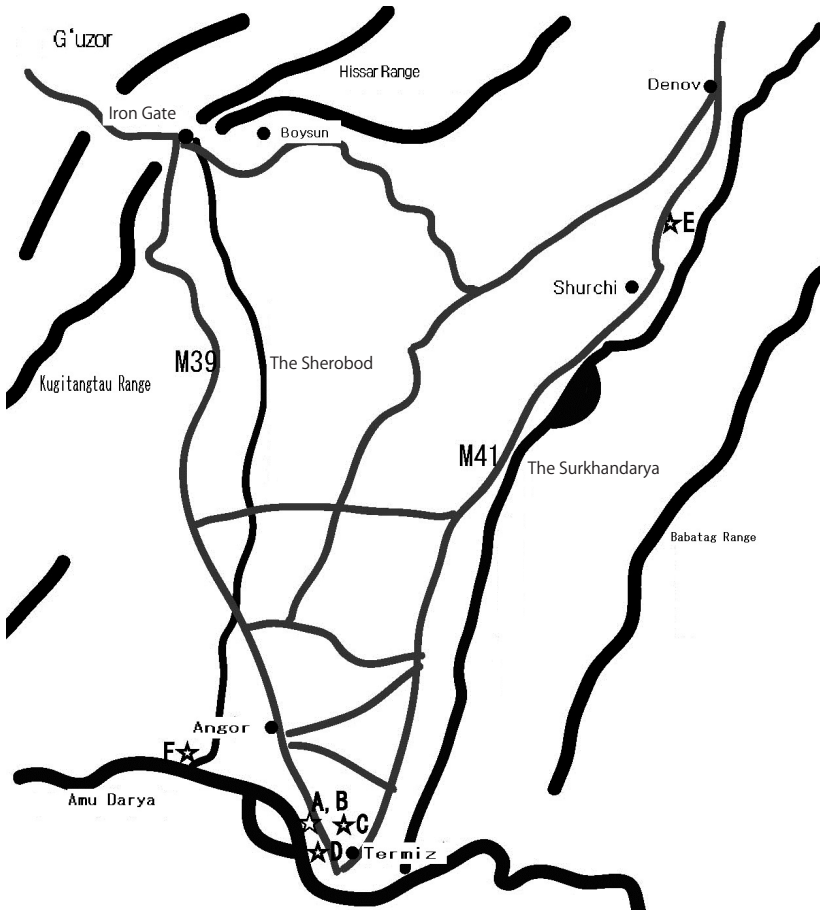


Fig.2 Map of sites in the Surkhandarya Region

Balkh on the southern bank of the Amu Darya Fig. 1). However, according to one theory, Greco-Bactria was destroyed by the invading Tocharians, and in connection with this, the entire area, including the Surkhandarya Region up to southern Tajikistan, is also called Northern Bactria or Tokharistan.

Currently, Termez is the capital of the Surkhandarya Region with a population of approximately 150,000. Before being destroyed by a Mongolian invasion, ancient Termez was located around 7km. from the center of present-day Termez along the right bank of the Amu Darya (◆D, Fig. 2; hereafter ◆denotes a position on Fig. 2). A different theory of the city's history will be introduced based primarily on the explanation presented by Sh. Pidaev (2002) (2007).

According to the opinion presented by Pidaev, in the middle of 1,000 BCE, residents living at the skirts of the Boysuntau and Kugitangtau mountains began moving to the Amu Darya river basin due to a depletion of resources. This coincided with people who conversely moved to the southern bank of the Amu Darya from the skirts of the Hindu Kush range, bringing people to the Termez settlement, which was the site for crossing the large river.

Around 329 BCE, the Macedonian army, commanded by Alexander the Great, crossed the Amu Darya in the north in pursuit of Bessus, a general in the Achaemenid Empire. At that time, the Macedonian army passed through the Iron Gate (Fig. 2, slightly north of Derbent) and exited Sogdiana. It gained control of Sogdiana and Fergana, then once again went south through the Iron Gate and crossed the Amu Darya to begin a conquest of India. From around this time, Termez was called Tarmita.

In a short while, Tarmita was temporarily destroyed by invading nomads when Alexander the Great died, but was restored during the Seleucid Empire. In the subsequent Greco-Bactrian Kingdom it developed into an important city of commerce. E. V. Rtveladze (2006) (2007) identified Alexander the Great's crossing point as the Shor Tepe sites neighboring the west side of Kampyr Tepe (◆F) in regard to the origin of Termez and its transition into a crossing site. Termez was considered an important city from the time of the Greco-Bactrian Kingdom. The aforementioned different interpretation is based on discrepancies in geographical observations and chronological views on artifacts unearthed from ancient Termez.

Later, the economic importance of Termez grew during the Yuezhi's occupation of the land. According to the Chinese historical source, Si-ma-Chen's *Records of the Grand Historian* (part of the history of Dayuan), the Yuezhi

lived north of the Amu Darya. Archaeological research during the time of the Soviet Union assumed Dalverzine Tepe (◆E) and Khalchayan (Fig. 2, northern Denov) were two of their bases and that Tarmita came under the Yuezhi's power. Around the 1st century, when feudal lords under the Yuezhi are thought to have established the Kushan Empire, heavy construction was carried out in ancient Termez, particularly within the citadel. A strong defensive wall was constructed, and the town developed more and more into a commercial city.³

Also, Buddhist sites located next to ancient Termez, such as Fayaz Tepe (◆A), Kara Tepe (◆B), and Zurmala (◆C), are thought to have appeared in this period.⁴ However, there were diverse and complex beliefs in the Kushan era, comprising Zoroastrianism, Grecian gods, and local gods. It required time for a single religion to possess significant power. Buddhism gained ground around the reign of Kanishka I, the 4th emperor of the Kushan Empire. Given that, Pidaev estimates that while contact between Tarmita and Buddhism occurred in the 1st century BCE, the formation of these kinds of temples occurred from the 2nd–4th centuries. On the other hand, Rtveladze (2007) believes Tarmita was under control of either the Yuezhi or the Tochara in the era (around the mid to late 1st century) of Vima Takto (also known as Soter Meges), the second ruler of the Kushan Empire, but that in the era of Kanishka I in the 2nd century, it came under the rule of the Kushan Empire and played a central role in Buddhism in Central Asia.

A confirmation of the Chinese historical source, the *Memoirs of Eminent Monks* shows that around the reign of Emperor Ling of the Later Han (reigned from 168–189), a Yuezhi traveled to China in this era; that is, Lokaksema, a Buddhist monk that may have been from the Surkhandarya basin, visited Luoyang. In addition to translating sutra, one of his disciple's disciples, Zhi Qian learned a variety of disciplines through six languages of the western regions. He visited Jiankang in the Wu and translated sutra. Also, Dharmarakṣa (239–316) was a monk born in Dunhuang County whose secular family name was Zhi, a name used by Yuezhi descendants. He traveled the Western Regions and learned different languages and Buddhism. He is thought to have visited Chang'an and Luoyang and engaged in translating sutra up until the reign of Emperor Hui di in the Western Jin. However, it is unlikely that Zhi Qian was born in the Surkhandarya basin, and a relationship with the Surkhandarya basin cannot be called definite simply because Dharmarakṣa's ancestors were Yuezhi.

In the 240s (Western calendar), Tarmita came under the rule of the Sassanid Empire through territorial expansion by Shapur I. This period was subsequently called the Kushano-Sasanian era. Pottery fragments unearthed at Kara Tepe bear writings related to this period. It next came under the control of groups such as the Kidarite and Hephthalite from the 4th century. Much of previous research purports that Buddhism under the Hephthalites was not always protected, but that its existence was not rejected.⁵

When the Hephthalites were defeated by the Western Turkic Khaganate, Tarmita came under the rule of the Sassanid Empire for a time, but there were several battles between the Western Turkic Khaganate and Sassanid Empire, and in 603, Tarmita fell under control of the Western Turkic Khaganate. At this time, Tardu Shad, the son of Khagan the khan of the Western Turkic Khaganate, established a base near Kunduz on the southern bank of the Amu Darya. During this period, the Western Turkic Khaganate held enormous power in Central Asia, and Tardu Shad took the younger sister of Yan Wenta, the king of Gaochang, as his wife. This is recorded in writings by Xuanzang, who was under the patronage of Khagan of Western Turkic Khaganate.⁶

During the Tang Dynasty, many passed through Tokharistan. For example, Xuanzhao, a monk who went to Tang China and is discussed in *Da Tang Xi Yu Qiu fa Gao Seng Zhuan* (The Life of the Monks of the Tang Dynasty who Travelled to the West (Adachi 1942), traveled south through Sogdiana and Tokharistan to the Tibetan Empire (Kuwayama [1990: 128–130] indicated he traveled by way of the Wakhan road) for an audience with Princess Wencheng, who married into the Tibetan Empire. Huilun, a monk from Silla who accompanied Xuanzhao, is said to have later lived in a “wealthy and abundant” Tokharistan temple named Gandhara that was built for a Tokharistan who had visited India. Around the 7th century, there were a certain number of Buddhist believers in Tokharistan, and active exchange with Tang China is conceivable. Recently, as research on the Sogds based in Sogdiana, located next to Tokharistan, is growing, the focus is being placed on a relationship with people from Tokharistan and Bactria. There is also research regarding commerce and religious activities by Sogds that refers to a relationship with Tokharistan (Yoshida 2011, Fukushima 2010).

Yoshida (2010) has discussed monks who visited China from Central Asia and their home city. A monk surnamed in the memoirs as Kang—that is, viewed as being from Samarkand—visited China and translated sutra, but numerous questions remain unanswered, such as Buddhist sites from that

time not being found in Sogdiana and Chinese writings/Buddhist scriptures thought to have been translated by them that exist today, having been translated from the 8th century. Thus, the state of Buddhism in Central Asia at this time holds important keys to clarifying the process of Buddhism's spread to the East.

In the 6–7th centuries, Termez maintained a certain degree of political independence, but in 689 was seized by an Arabian general who provoked a rebellion, and in 704 the city became a caliphate. Later, it was controlled by the Samanid Empire, Kara-Khanid Khanate, Ghaznavid Dynasty, Seljuq Dynasty, and Khwarezm. Today, the Al Hakim At-Termizi Mausoleum located in ancient Termez (adjacent to ♦D) is said to originate from a facility from around this time.

During the Mongolian invasion of 1220, Termez demonstrated strong resistance and in the end was destroyed. Later, the city was moved to its current location some distance from old Termez and closer to the Surkhandarya (river). As the above shows, in typical research, the history of Termez has been interpreted from the geographical environment of the Surkhandarya Region and chronological views of excavated artifacts from sites in the area, but there are many uninvestigated sites and shortcomings in rationalizations.

Rtveladze (1974, 1982) provides a general comprehensive overview of ancient medieval sites in Surkhandarya (around the 2nd–7th centuries BCE). In addition, while focused solely on Buddhist sites, Stavisky (1977), Litvinskiy (1996), and Kato (1997) provide information on Central Asia as a whole, including this region. Furthermore, recently Iwai (2006) (2013) and Abdullaev (2015) can be said to have provided a sizeable overview of Buddhist sites in Northern Bactria. There is also a long history of archaeological studies on Afghanistan and Pakistan, which are located south of the Amu Darya, conducted in particular by the French (MAFOUZ). A considerable number of reports have been published, as well as several reports from Kyoto University. These are essential to considering the historical and geographical environment of Termez in Bactria and Tokharistan.⁷

It can be said that the prosperity and decline of Kara Tepe, temple sites outside of Termez that are discussed below, are inseparable from that of these sites found in the region and the historical understanding derived from them.

2. Excavation and Research of Kara Tepe

The next section introduces previous research on Kara Tepe, which was the main subject of excavations by the Research Group from 2014 to 2017, and a summary of those excavations.

Kara Tepe is situated outside of present-day Termez, 8km to the north-west and approximately 400m north of ancient Termez (citadel sites). It is a complex of Buddhist buildings atop a sandstone hill on the northern river-banks of the Amu Darya. The Amu Darya sandbank (Aral-Paygambar Island, Uzbekistan) and the opposite bank are clearly visible. Around 70km from there is Balkh, where the capital of the Greco-Bactrian Kingdom is believed to have once stood. The location and sites sit within a training area managed by the Uzbekistan army. Entry requires application months in advance.

(1) Previous research and issues

According to previous research, Kara Tepe was a Buddhist temple built in the rule of Kanishka of the Kushan Empire. A cave temple complex has been studied off and on since its existence was confirmed by a study done in the 1920s soon after the Soviet Union was established. Earnest excavations began from 1961 by a research group centering on B. J. Stavisky, resulting in the discovery of several complexes that included a small stupa, a courtyard, and caves on the southern hill. The same research group conducted excavations on a part of the sites on the northern hill, but in 1994 the research group accomplished a great deal and determined these sites were from around the 2nd–5th centuries, after which it ceased activities. During that time, six reports were published. The final report (Stavisky 1996) is particularly important (Grek, et al. 1964; Imperatorsky Ermitazh, et al. 1969; Institut vostokovedenya 1972; Stavisky 1975, 1982, 1996; a portion of these were translated into English: Stavisky 1980, 1984; Livshits et al. 1996; a portion of the final report was translated into Japanese: Stavisky translated by Kato 2002; Zeimal translated by Kato (2007); Stavisky translated by Kato 2007).

With the collapse of the Soviet Union in 1991, the Republic of Uzbekistan became an independent nation, and excavations by Sh. Pidaev and Kyuzo Kato resumed. In addition to progress being made on the study of the western hill, sites were found on the northern hill comprised of a large stupa and rectangular monastery. The caves on the southern hill were carved out of

sandstone hills, and while religious installations made of sun-dried brick were included in the cave entrances, on the northern hill several buildings were established constructed only of sun-dried bricks.

There are numerous unsolved issues regarding the sites of Kara Tepe, but the period in which the temple was abandoned garners particular attention. As has been noted, a research group centering on archeologists from the Soviet era such as Stavisky believed this temple was no longer used from around the late 4th century. That was based on the determination that many of the caves that had been used for purposes such as monks' cells were converted into burial places before the late 4th century. Also, the period the rooms were used could be derived based on excavated currency found on the floors of monks' cells (Stavisky translated by Kato 2002, 2007).

However, objections have been raised on the identified period of abandonment based on excavation results from the northern hill. The observations made according to the discovered currency are valid for estimating the upper limit of building utilization, but cannot be said to be conclusive for estimating the lower limit. In addition, it was already understood that the monastery on the northern hill could not have existed when Kara Tepe was originally built, based on the architectural style of the large stupa and monastery. The famous French scholar, Fussman (2011) examined the sites in detail and pointed out that different size sun-dried bricks were intermixed and used in the monastery and large stupa on the northern hill, and that some parts of the construction appear as if they were added later. In addition, numerous plinth stones have been discovered at highly unnatural positions inside the monastery on the northern hill. Based on these findings, a process of original appearance, destruction, and repeated reconstruction of the monastery on the northern hill can be surmised. Furthermore, Fussman organized a collection of earthenware fragments that contained ink writing unearthed at the Kara Tepe sites and at Fayaz Tepe, sites of a somewhat older Buddhist temple situated several hundred meters away. Furthermore, Fussman organized a collection of earthenware fragments containing ink writing unearthed at the Kara Tepe sites and at Fayaz Tepe, sites of a somewhat older Buddhist temple situated several hundred meters away.

Moreover, based on that, Iwai (2013) suggested the possibility that even during that period when the southern hill was being used as a burial site, the sites on the northern hill were being repeatedly reconstructed and functioned as a temple (Fig. 3).

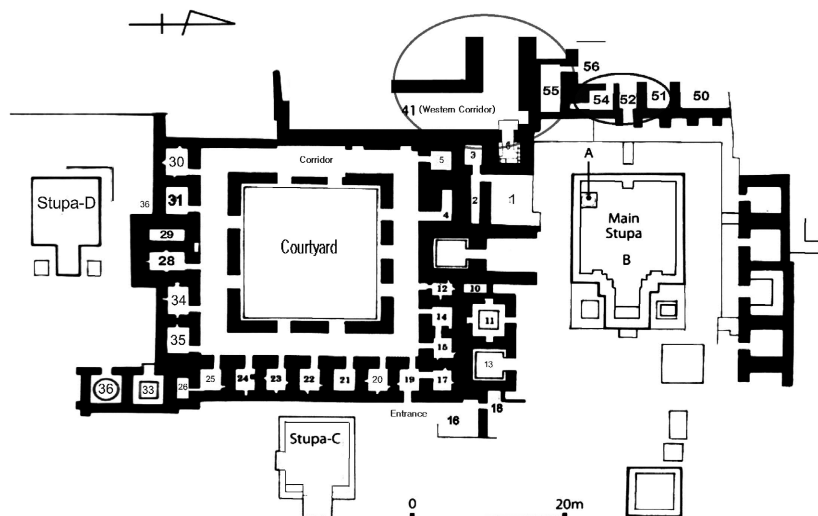


Fig.3 Plan of northern hill at Kara Tepe (Produced based on Rissho University (2016). Area inside oval excavated by Rissho University team.)

Actually, an historical record that perfectly dovetails with this interpretation has been known for some time. This historical record is the *The Great Tang Dynasty Record of the Western Regions*, thought to be based on writings made when Xuanzang was traveling to India. That record says the following about Termez.

“Termez is more than 600 *li* from east to west and over 400 *li* from south to north, its capital city being more than 20 *li* in circuit, long from east to west and narrow from south to north. There are more than ten monasteries with over 1,000 monks. Many stupas and the venerated images of the Buddha are mostly miraculous and cause spiritual manifestations. To the east of this country is the country of Chaganiyan” (Mizutani 1971).

It is known that Xuanzang did not travel to all the place names written in the *Great Tang Records of the Western Regions*, but it is widely agreed that the characters, “咀蜜国” indicate Termez and that Xuanzang passed through it. Since he departed Chang’an around 629, in the first half of the 7th century there were more than ten temples and over 1,000 monks, as well as stupa and Buddhist statues. If so, it is possible that Xuanzang saw the stupa on the northern hill of Kara Tepe, which had the largest stylobates of those presently

known located outside of Termez.

According to conventional interpretation, it was abandoned prior to the late 4th century, but it is hard to believe that if Xuanzang saw the stupa on the northern hill of Kara Tepe it was already in sites. Also, Buddhist temples and stupa sites have been excavated in Termez in places other than Kara Tepe. There is no need to focus solely on the condition of the northern hill of Kara Tepe when Xuanzang passed through Termez. Meanwhile, according to Fussman's interpretation, there is the possibility that only the northern hill still functioned as a temple. Could it be that the rise of Buddhism in Termez recorded in the *Great Tang Records of the Western Regions* that is noted above was written without actual observation of the abandoned temple?

The question of whether temples constructed in Termez during the Kushan Empire existed until the 5th or 7th century is important for understanding the state of the political powers of the Kidarite, the Hephthalites, and the Western Turkic Khaganate that ruled there from the 4th century. In addition, as has already been noted, for an historical look at Buddhism it is also important to understand how Buddhism spread from here to the Sogds (including whether it really was disseminated) and the territories of the Chinese dynasties. Though the routes spreading Buddhism to the east were not limited to those passing through this area, there were those from this region who engaged in propagating Buddhism in Chinese dynasties and monks from the Chinese dynasty who visited Tokharistan. Also, it is unlikely that the existence of temples is unrelated to the economic benefactors supporting those religious facilities and groups. The matter of how and until when Kara Tepe was maintained is extremely important information and is essential for explaining the role this region played.

(2) The progress of the Rissho Group's excavation

In 2014, the Rissho Group began studying the unexcavated areas on the western side (the Amu Darya side) of the monastery on the northern hill (Fig. 3, room no. 41 north side). According to Fussman (2011), construction of monasteries around the 5th century in surrounding regions such as Afghanistan were generally designed so that the center axis runs through the center of the stupa in the neighboring temple tower area and the hall where the principal image is placed (Fussman believes this to be room no. 28, no. 29). In addition, at the sites of Guldara in Afghanistan, which Fussman indicated

similarity with Kara Tepe, the monastery was constructed symmetrically to the center axis. However, prior to the 2015 excavation, the monastery on the northern hill of Kara Tepe was only viewed as a construction asymmetrical to the center axis. Fussman found that inexplicable and believed the western side of the monastery required research.

Prior to the excavation, it did not appear as if structures were buried on the western side of the monastery on the northern hill, but it was a location that promised new discoveries in consideration of the above points. However, excavations outside of the western side of the monastery corridor on the northern hill conducted in FY2014 showed there is a wall that follows the exterior of the corridor within the monastery and that it was painted red (room no. 3, no. 5 exterior western wall), but the excavation finished without being able to confirm whether a structure exists on the western side. Later, the existence of a wall on the western side was clarified, and the area the Research Group excavated was revealed to be a path between structures. At the time of the 2014 excavation, it was understood that a large amount of soil had been cast onto that area. A confirmation of the horizon made some facts clear, including that a large quantity of soil was deposited by strong winds that sometimes blow from the direction of Afghanistan and the Amu Darya (called Afghanetz); that during a certain period earthenware fragments and a portion of clay figures from the Kushan Empire were deliberately thrown into the corridor; and that when the monastery had been buried to a certain degree, there were people who used fire in the depression that formed on the nearly buried path. In addition, earthenware fragments and a portion of limestone figures discovered together with the soil were of the same material and style as already known artifacts from Kara Tepe. It was determined that the majority belonged to the Kushan Empire. However, very few new discoveries were connected to the monastery, stupa structure, or clarification of dates.

In spring 2015, a little excavation work was conducted on the Uzbek side, which led to the understanding that a wall also existed on the side opposite of the corridor's western wall (Fig. 3: west of room no. 3, no. 5, the wall appearing on the very top of the figure; sun-dried bricks). In other words, the site excavated by the Research Group in 2014 was a passageway or path on the monastery's outside corridor, which had already been discovered. In the fall, the Research Group made good progress on the dig and confirmed that the western outer wall wound even further to the west and the passageway faced the direction of the Amu Darya (Fig. 3: room no. 6 towards the west).

On the western side of the monastery, it is possible there is a buried structure that is slightly smaller than the already known monastery.

In addition, more relics were unearthed in 2015 than in 2014. Human bones were found in the excavated corridor and in room no. 55 near the floor surface on the western side of the temple tower area, which was simultaneously excavated. They were identified through radiocarbon dating as being from the 6th–early 7th centuries (Yoneda, et al. 2016). Typically, most human bones discovered at Kara Tepe were judged as dating from the 4th–5th centuries, but the fact that human bones from a different period had been found from monks' cells on the northern hill became a clue for determining when the monastery on the northern hill stopped functioning as a temple. That is to say, it is reasonable that when Xuanzang passed through Termez, the stupa and monastery on the northern hill of Kara Tepe (the areas already discovered) were being used by monks, but were abandoned soon thereafter. If so, conceivably the Buddhist faith was maintained in this place for a long period stretching from the Kushan Empire to the Western Turkic Khaganate. Though a hasty conclusion cannot be made, it is one focal point for excavations and research going forward.

Excavations in 2015 also yielded limestone figures from the Kushan Empire including fragments from which the shape of figures could be recognized, such as the heads of human figures and the head and feet of Garuda, as well as small plinths decorated with lotus flowers (Fig. 4). Furthermore, four earthenware fragments with ink writing were excavated (one with Bactrian writing was unearthed from room no. 55). Two of the fragments had only partial character strokes and identifying the type of writing was difficult (thought to be Kharosthi script), but the remaining two were inscribed with numeric characters similar to the cursive script of Greek letters. Yutaka Yoshida (2016) from Kyoto University identified them both as being written in Bactrian. In 2017, there were also two earthenware fragments discovered from room no. 41 inscribed with Kharosthi script.

Until the first half of the 1990s, the only major materials featuring Bactrian were just a few inscriptions (stele) and cursive script in ink on earthenware fragments discovered from northern Afghanistan and southern Uzbekistan/Tajikistan (pieces discovered from Kara Tepe and the neighboring Fayaz Tepe were particularly numerous). However, later analysis by N. Sims-Williams at School of Oriental and African Studies (SOAS), University of London, progressed on the Khalili Collection (cursive script) whose archaeological site



Fig.4 A portion of artifacts excavated in the fiscal year 2015 (Left: Head of limestone human figure; Right: Head of Garuda, Limestone)

is unknown, and the grammar and vocabulary was generally clarified (Sims-Williams 2012, Yoshida 2013, Miyamoto 2015). Bactrian is thought to have been used when creating official documents in the Kushan Empire, and it is worth considering why a comparatively large amount of the examples have been excavated from Kara Tepe. Many fragments have been discovered from Kara Tepe and the neighboring Fayaz Tepe that are inscribed not only with Bactrian, but also Kharosthi and Brahmi scripts. Based on these, it has been demonstrated that in the Kushan Empire Kara Tepe was called the emperor's monastery, and Fayaz Tepe was called the horse's monastery (Fussman 2011).

Kharosthi script was originally used to write the Gandhari language and was also widely used during the Kushan Empire. After the Later Han Dynasty withdrew from the Western Regions, it is believed that the power of the Kushan Empire extended to the Western Regions, and relics with identical script have been found in present-day Niya and Loulan in the Xinjiang Uyghur Autonomous Region. The Research Group contributed to discovering some of those kinds of materials.

In 2016, a few days before the excavation began, Kyuzo Kato was to have been traveling around the Uzbekistan-Kazakhstan area actively collecting data, but tragically passed away suddenly. However, the excavation began soon after his body was sent back to Japan.

Excavation continued on room no. 41; that is, the archaeological dig

continued on the corridor area. Discoveries were made near the floor's surface of several sheep bones and fragments of a wall painting that appears to be a part of a human face. At the same time, ongoing excavation of room no. 52 yielded wall painting fragments depicting some kind of design, while the nearly complete excavation of room no. 55 yielded several candle stands. A wall painting was also detected near the exit of room no. 55, which foreshadowed a wall painting that was later discovered.

As in every year, the Research Group finished the excavation at the end of September, but the Fine Arts Institute Group continued independently working from October to November. They dug in the room next to room no. 55 (room no. 56) and made a new discovery of a wall painting. Some of the photos published by the Fine Arts Institute Group in an academic magazine are reprinted here (Fig. 5, Pidaev 2016). At a glance, they seem similar to wall paintings at Fayaz Tepe and Miran in the Xinjiang Uyghur Autonomous Region, and are without a doubt a groundbreaking finding in terms of both the history of Asian art and the historical study of the Kushan Empire. Yasuda (2018) has presented a very interesting discussion about them.

In 2017, the last year of the archaeological digs, excavation continued in locations including room no. 41 (corridor area), room no. 52, no. 54, and no. 55. A relic was unearthed from the vicinity of room no. 54 and no. 55 that is almost identical to the small pillar in front of the well-known Buddha triad unearthed at Fayaz Tepe. The aforementioned wall painting and the small

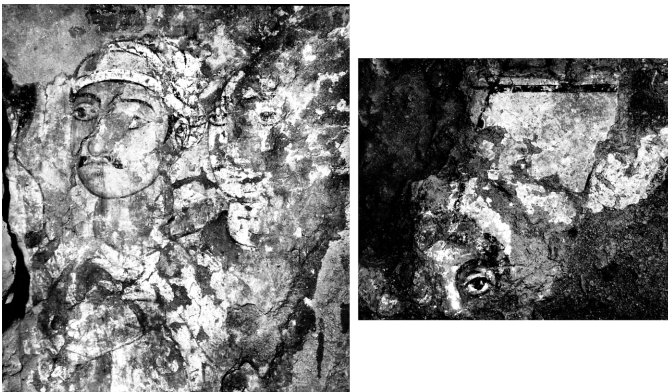


Fig.5 Portions of wall paintings excavated in the fiscal year 2016 by the Uzbek team

pillar in front of the Buddha triad can truly be said to evoke images of the hall enshrining the principal image at Fayaz Tepe.

Furthermore, the Research Group found several bone fragments in multiple sun-dried bricks used in structures on the northern hill of Kara Tepe, as well as animal bones on the floor's surface exposed by excavation. The group requested they be radiocarbon dated by The University Museum, The University of Tokyo. Results confirmed that room no. 41 (corridor area) was already being buried around the end of the late 3rd century, and there were bone fragments that could be identified as dating from around the 7th century in the sun-dried bricks from the western wall of room no. 5. Although radiocarbon dating cannot be said to definitively determine time periods, this further reinforced the possibility that vestiges of additions to structures exist on the northern hill. Ikegami (2016) presents a comprehensive discussion of these.

Based on the above, structures and unearthed relics from rooms no. 41, 52, 54, 55, and 56 prompt fundamental rethinking of the establishment and extension/reconstruction process of the monastery on the northern hill that were surmised by previous research.

A formal report on the full image and preservation of wall paintings from the Fine Arts Institute Group is anticipated. In any case, the archaeological four-year study by the Research Group unquestionably was an important first step in elucidating a full picture of Kara Tepe and the state of Buddhism in Tokharistan.

3. Research of the Zurmala and Preservation Activities

Zurmala (◆C) can be seen from Kara Tepe at a distance of approximately 4km and is regarded as remnants of a Buddhist stupa. A large quantity of sun-dried bricks is stacked in an orderly fashion to form a tower 13 meters high. Its existence is uncommon in Central Asia. However, a large fissure has opened up in the past decades, and preservation measures are deemed urgently needed. Around 90 years ago when research began, the issue was whether this was a Buddhist stupa, but the current issue is what kind of status this should be given in the historical transition of the style of Buddhist stupa from India to Central Asia. Figure 6 is a photo of Zurmala, and Figure 7 is a diagram by Pugachenkova, who will be noted later.



Fig.6 Zurmala (Photographed in 2015)

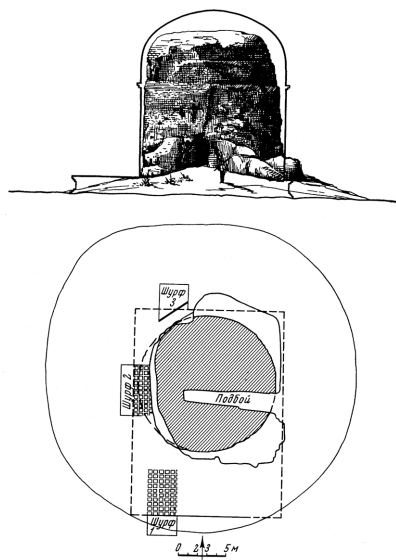


Fig.7 Plan of Zurmala (Pugachenkova 1967)

(1) Previous research and issues

The oldest records already known to exist related to Zurmala are the previously introduced writings on Termez by Xuanzang. Xuanzang left Chang'an (Xi'an) in 629, and it is highly likely that he crossed the Amu Darya in the vicinity of Termez. In the *Great Tang Records of the Western Regions*, he wrote, "Termez...(omitted) the stupas and the venerated images of the Buddha are mostly miraculous and cause spiritual manifestations. To the east of this country is the country of Chaganiyan" (Mizutani 1971).

Zurmala is very likely one of many stupas that existed in Termez at the start of the 7th century. However, only the "possibility" of what Xuanzang saw can be indicated.

A reliable source is a report (1928–1929) by A. S. Strelkov who actually researched and wrote about Zurmala. He was involved in a study by a Termez research group that was conducted 1926–1928 and led by B. P. Denike of the State Museum of Oriental Art.

Strelkov points out the following: the fact that locally it was called Zurmala or Katta Tepe, the aforementioned records by Xuanzang, the size of the sun-dried bricks that were used, and the height, which is similar to stupa in places such as Afghanistan and Gandhara in northern India. Also, structurally there is a passageway that used a pit in the middle of the floor and a pit near the floor's surface; it can be imagined to have had a corridor. Zurmala is viewed as a part of a temple, and each of the two large pits is thought to connect to the corridor. However, after being unnaturally destroyed by something (illegal digging) the two pits have further disintegrated through natural degradation. Though the points made by Strelkov are not believed valid, he greatly helped later research with other accurate indications.

After the research group led by Denike, M. E. Masson formed the Termez Pluridisciplinary Archaeological Expedition (TAKE) and studied sites in the vicinity of Termez from 1936–1938. At that time, he conducted a simple study of Zurmala, and in his report he published just a few photos. He also found two drawings on stupa at "Cave no. 1" (surmised to have been in the southern hill) of Kara Tepe, which had yet to have been earnestly excavated (TAKE 1941).

Furthermore, Pugachenkova researched Zurmala in 1964. There are two points in his research (Pugachenkova 1967, translated by Imamura 2017; Fig. 7). First, he attempted to confirm the stylobate of Zurmala by digging

a trenches in the southwest and northwest sections. Second, he carried out surface collection within a 500-meter radius of Zurmala.

Zurmala was conceivably constructed in the Bactria period or thereabouts since its sun-dried bricks measure 32cm–33cm × 32cm–33cm square, are 11cm–12 cm thick, and also in light of their size and shape. In addition, establishing trenches in those two locations led to the conclusion there was a stylobate measuring 22m × 16m, and since there was a cylindrical part sitting on top made of sun-dried brick that measured 14.5m in diameter and 13m in height, it was estimated that a restoration taking into account the collapse of the upper portion would utilize 1.2 million sun-dried bricks at a height of 16m. Plus, the surface collection gathered cornice fragments and limestone blocks that fell in the vicinity of the tower, and it was initially surmised that an exterior finish existed. These deductions by Pugachenkova are oriented to a restoration of the entire image based on exploratory digging in the Zurmala vicinity and even today can be called important views on Zurmala.

Based on this work, Kato (1997) believed these sites to be a stupa built in the 2nd century around the rule of Kanishka I, and thought its existence merits attention in the study of Buddhism's spread north. Based on the findings of Turgunov and others, he also referenced a circular structure (stupa) called the Tumboy of Airtam at sites outside of Termez. In addition, there is a stupa in a field near Denov that is shaped remarkably like the Zurmala stupa. Kato introduced characteristics such as the fact that it is split in two lengthwise, and that Al'baum, who comprehensively researched sites in this area, wrote that he thought it is a structure related to the religion of Zoroastrianism.

Furthermore, Kato (2002) attempted to assign status to stupa in Surkhandarya based on previous research on the expansion of stupa from North India to Central Asia/East Turkistan by researchers such as Marshall, Franz, and Kuwayama. In research conducted prior to that, it was thought that stupa changed from the inverted bowl shape (circular design) in India to the square platform in Gandhara during the Kushan Empire. At the same time, it was thought that shapes were passed down that placed an enclosure called harmika on top of a dome, and on top of that a five to seven-tiered parasol-like canopy (chatras). However, opinions were divided on the origin of the change from circular to square designs. In particular, the square design thought to be the oldest was theorized to stem from either Zoroastrianism or temples during the Achaemenid Empire, or to have been influenced by Hellenism or Rome. Kato supported the theory of influence by Hellenism based on comparisons

with structures such as Ai-Khanoum temples. Kato also focused on the relationship between unique stupa discovered at Kara Tepe and Airtam—that is, structures with small, embedded stupa in places that were not central—and the three-tiered stylobate of the Kuṇala stupa in Taxila believed to date from the 3rd–4th centuries.

In the future, it is indispensable to closely compare stupa located in Pakistan and Afghanistan with those in southern Uzbekistan.

On 20 April 2012, relics were discovered that may be related to the Zurmala sites. Found 400m south of the stupa and reservoir near Zurmala (Abdullaev, K., Annaev, T. 2012), they include the bodies of two figures, stuck together, that seem to the configuration of a scene from *Illustrated Biographies of the Buddha*. Another relic is a portion of limestone relief that appears to be the exterior of a stupa. Together with the limestone blocks and cornice fragments mentioned in Pugachenkova's paper, they are important clues to surmising the state of the surrounding vicinity and exterior of the stupa.

(2) Recent research and studies/preservation activities by the Rissho Group

Thus, over 90 years have passed since research on Zurmala began. Restoration and preservation work has already finished on Fayaz Tepe, which has been the focus of attention since early on as a relic in this area. Excavations have also progressed on Kara Tepe and Chingiz Tepe, and the existence and transformations of Buddhist facilities are being clarified. As this is occurring, interest in Zurmala, which has yet to be thoroughly explored, is certain to grow going forward while preserving the only stupa form in the vicinity.

Recently, when Fussman mentioned the location of the large stupa in Balkh he compared it to Zurmala in Termez; like the latter, it is in a location visible from a distance, and was situated at an edge or an entrance of the city (Fussman 2015: 186). He also purports that Zurmala is perhaps a part of a monastery that presently is not visible from the ground (Fussman 2015: 192). In other words, when considering the Buddhist sites in Tokharistan (within Afghan territory), which are difficult to excavate, Zurmala in Termez can become criteria that itself includes unexplained issues.

Based on the above examinations, several issues emerge.

It is necessary to confirm the form of the stylobate based on the conclusions rendered by Pugachenkova. It is also necessary to carefully examine

Zurmala's exterior and the environment encompassing the stupa. Doing so requires examinations of the architectural history based on archaeological research on Pakistan and Afghanistan conducted by groups such as the French and Kyoto University research groups. This includes, for example, Kato, Yatani, and Masui (2009).

In addition, a comparison of present-day photos of Zurmala to photos taken in the 1970s kept by Termez Archaeological Museum shows a large fissure has emerged that did not exist in photos taken 40 years earlier. The fissure is already splitting the stupa in half. Details are given by Iwamoto (2017b). Naturally, rain enters the fissure, so it can be surmised there is increasing risk of the stupa collapsing. Urgent preservation measures are required.

Based on the above, the Research Group will expand research on the transformation of Buddhist stupa in Zurmala and the vicinity. At the same time, under the supervision of Toshiya Matsui (professor at the University of Tsukuba) whose area of expertise is the preservation of sites, the Research Group is setting up meteorological observatory equipment in the vicinity of Zurmala to research the impact that the area's climate has on the sun-dried bricks and sites (Matsui 2017), and is implementing preparations for appropriate preservation.

Conclusion

The following is a summary of the above.

- (1) The history of Termez prior to the 13th century and the entire Tokharistan region is indivisible and has a strong relationship with the orientation and progress of research on ancient sites in present-day Afghanistan, Pakistan, and Southern Tajikistan. The same is true for Buddhist sites.
- (2) Kara Tepe, archaeological remains of a Buddhist monastery thought to have been built during the Kushan Empire under the rule of Kanishka, has been studied since the 1920s. The southern and western hills have been excavated, and today excavation is underway primarily on the northern hill. When the southern and western hills were excavated, the sites were thought to have functioned as a monastery until the 4th century, but analysis of the results of excavation on the northern hill pointed to the possibility that a part of the monastery functioned after the 5th century while

being extended and reconstructed. Excavations by the Rissho Group from 2014 clarified the function and structure of the western side of the northern hill, which had been unexplained, and corroborated that the monastery functioned after the 5th century. At the same time, there were several discoveries that forced reconsideration of the transformation of the northern hill as a whole. The discovery of a wall painting has led to considering a relationship with Buddhist sites in the Xinjiang Uyghur Autonomous Region.

(3) Study of the sites of the Buddhist stupa, Zurmala that is believed to have been built during the Kushan Empire under the rule of Kanishka began in the 1920s. In the 1960s, exploratory digging and surface collection took place and generally clarified that it is a Buddhist stupa. However, at some point from the 1970s a large fissure opened up in the stupa, placing it in imminent danger of being destroyed. In the future, a comparison of architectural history with stupa in present-day Afghanistan, Pakistan, and the Xinjiang Uyghur Autonomous Region is necessary, as well as scientific examination targeting preservation and measures based on them.

The author of this paper has already reported on the current state of research on sites in the vicinity and the ongoing status of Kara Tepe excavations in Iwamoto (2015, 2016a, 2016b, 2016c, and 2017a). Iwamoto (2017b) presents an overview of Zurmala research. This paper adds new information to Iwamoto (2018), which extracted information from the aforementioned papers with slight additions and corrections.

*This paper is a part of the results of the “Rissho University Academic Interchange Project with Uzbekistan,” a Private University Research Branding Project by the Ministry of Education, Culture, Sports, Science and Technology

Notes

1. The Uzbekistan Academic Research Group was launched around teachers from the Faculty of Buddhist Studies and Faculty of Letters Department of History. Under the then university president, Yamazaki, research on sites in the region related to Buddhism’s spread to the north, a topic proposed by Haruki Yasuda (Faculty of Buddhist Studies) and Satoru Ikegami (Faculty of Letters), was

recognized as befitting the spirit of the foundation of a Buddhism-based university and the promotion of the globalization of academic learning. Research began on Kara Tepe because of advice received from the late Kyuzo Kato (professor emeritus of the National Museum of Ethnology; professor emeritus of Soka University; special staff to the Institute for the Comprehensive Study of Lotus Sutra) who was involved for a long time with the excavations. The endeavor's immediate realization was due to support from Hiroaki Furusho (previously special staff to the Institute for the Comprehensive Study of Lotus Sutra of Rissho University) who had a wealth of local experience. In addition, initially the Zurmala was only subject to observation, but later developed into earnest research after partnering with the Termez Archaeological Museum. When Prime Minister Abe made a round of visits to Central Asia, it was mentioned in a joint statement with the president of Uzbekistan.

2. For example, recent publications include Harry Falk (2015), Yu (2015), Miyaji (2016), and Wang (2017). In addition, Odani (2010) published a Chinese translation in 2017.
3. Pugachenkova, Rtveladze, and Kato (1991) (1997), among others, have written about Dalverzin Tepe. For example, Kuwayama (1987: 137) raised doubts about Pugachenkova's theory.
4. This paper discusses Kara Tepe and Zurmala later, but in regard to Fayaz Tepe, in addition to Fussman (2011), Mkrttychev translated by Kawasaki (2016) is garnering attention for suggesting a new view on dating based on criticism of the opinions of Al'baum.
5. The paper compiled by Kazuo Enoki (1992) is useful for grasping the basic relevant historical materials concerning research on the Kidarite and Hephthalites. Also, recently several relevant papers have been compiled on the Hephthalites, including papers by Yu (2012), Naito (1975), and Alram, M., et al. (2010).
6. Regarding this topic, Mizutani (1971), Kuwayama (1995), and Nagasawa (1998) are translations with annotations or research that are easily obtainable in Japan.
7. Leriche P., Pidaev Ch. (2008) and Leriche, P. (2013) are examples of discussions on sites in Termez based on historical research by France and Russia.

References

Western languages

Research Group Reports

Rissho University (2015): Compiled by Rissho University Uzbekistan Academic Research Group, "The Kara Tepe Sites in the Surkhandarya Region of the Republic of Uzbekistan—FY2014 Research Overview—," Tokyo, Rissho University.

Rissho University (2016): Compiled by Rissho University Uzbekistan Academic

- Research Group, “The Kara Tepe Sites in the Surkhandarya Region of the Republic of Uzbekistan—FY2015 Research Overview—,” Tokyo, Rissho University.
- Rissho University (2017a): Compiled by Rissho University Uzbekistan Academic Research Group, “The Kara Tepe Sites in the Surkhandarya Region of the Republic of Uzbekistan—FY2016 Research Overview—,” Tokyo, Rissho University.
- Rissho University (2017b): Compiled by Rissho University Uzbekistan Academic Research Group, “Zurmala: A Stupa in Termez—Basic Research Report—,” Tokyo, Rissho University.
- Rissho University (2018): Compiled by Rissho University Uzbekistan Academic Research Group, “The Kara Tepe Sites in the Surkhandarya Region of the Republic of Uzbekistan—FY2017 Research Overview—,” Tokyo, Rissho University.

Japanese

- Adachi, K. (Yi Jing Compilation) (1942). *Da Tang Xi Yu Qiu fa Gao Seng Zhuan* (The Life of the Monks of the Tang Dynasty who Travelled to the West), Tokyo, Iwanami Shoten.
- Ikegami, S. (2018). “The Age of the Kara Tepe Sites,” previously cited, Rissho University (2018).
- Pugachenkova, G. A. (Eiichi, I. trans.). “Two Buddhist Stupa in Southern Uzbekistan,” previous cited, Rissho University (2017b), pp. 13–22.
- Iwai, S. (2006). “Transformations in Buddhist Monasteries in Afghanistan and the Surrounding Area,” *Bukkyo Geijutsu* (Buddhist Art) No. 289, pp. 100–112.
- Iwai, S. (2013). “The Temporary Decline of Buddhist Monasteries in Bactria,” *Journal of Oriental Studies* Vol. 88, pp. 422–403.
- Iwamoto, A. (2015). “Buddhist Sites in the Amu Darya Middle Basin & the State of Research,” previously cited, Rissho University (2015).
- Iwamoto, A. (2016a). “An Overview of Ancient Sites in Northern Bactria: Based on a Rationalization of Research History in the Surkhandarya Region,” previously cited, Rissho University (2016), pp. 44–62.
- Iwamoto, A. (2016b). “Kara Tepe Newly Discovered Written Materials & Sites in the Vicinity: Centering on the Termez/Angor Region,” *The Historical Reports of Rissho University* No. 119, pp. 1–18.
- Iwamoto, A. (2016c). “Buddhist Sites in Tokharistan & Xuanzang: Based on Research by the Research Group” *The Journal of Tang Historical Studies* No. 19, pp. 256–264.
- Iwamoto, A. (2017a). “Ancient Sites in Southern Uzbekistan: A Focus on Buddhist Sites” *Eurasian Studies* No. 56, pp. 5–9.
- Iwamoto, A. (2017b). “Looking Back on and at the Future of Zurmala Research: Stupa in Southern Uzbekistan and the Kushan Empire” previously cited, Rissho University (2017b), pp. 3–12.
- Enoki, K. (1992). *Kazuo Enoki Collection: Central Asia I*, Tokyo, Kyuko Shoin.
- Odani, N. (2010). *Yuezhi—Investigating the Mysterious People of Central Asia (2nd*

- Ed.), Tokyo, Toho Shoten.
- Rtveladze, E.V. (Ch., Obiya trans.) (2006). *Delving into the Eastern Expedition of Alexander the Great: Unknown Achievements & Truths*, Tokyo, NHK Publishing.
- Kato, K. (1979a). “Bactria in the Kushan Era-5- Historical & Cultural Issues,” *The Toyo Gakujitsu Kenkyu* 18 (3), pp. 154–164.
- Kato, K. (1979b). “Bactria in the Kushan Era-6—Historical & Cultural Issues,” *The Toyo Gakujitsu Kenkyu* 18 (4), pp. 177–187.
- Kato, K. (1997). *Studies on Buddhist Sites of Northern Central Asia* (Silk Roadology: Bulletin of the Research Center for Silk Roadology, Vol. 4), Nara, Research Center for Silk Roadology.
- Pidaev, Sh. (K., Kato trans.) (2002). *New Finds of Uzbek Archeology*, Osaka, Toho Shuppan.
- Kato, K. (2002). “The Origins and Characteristics of Kara Tepe Stupa: The Development of Stupa in the Spread of Buddhism to the North,” previously cited, *New Finds of Uzbek Archeology*, pp. 109–126.
- Stavisky, B. J. (K., Kato trans.) (2002). “A New Discussion on Kara Tepe: A Short Summary of 1978–1989 Excavations,” *Ay Khanum*, ed. and compiled by Kyuzo Kato, Hadano, Tokai University Press.
- Pidaev, Sh. (K., Kato trans.) (2007a). “The History of Termez (Prior to the Arabs): The Origins and Development of the City,” *Ay Khanum*, ed. and compiled by Kyuzo Kato, Hadano, Tokai University Press, pp. 7–20.
- Pidaev, Sh. (K. Kato trans.) (2007b). “Excavations of the Northern Hill & Western (Middle) Hill of Kara Tepe (1998–2007),” previously cited, *Ay Khanum* 2007, pp. 59–130.
- Zeimal’, T. (K. Kato trans.) (2007c). “Excavations of the Northern Hill of Kara Tepe (1985–1989),” previously cited, *Ay Khanum* 2007, pp. 53–58.
- Stavisky, B. J. (K. Kato trans.) (2007d). “Discoveries and Simple History of Research on Buddhist Sites in Central Asia,” previously cited, *Ay Khanum* 2007, pp. 25–40.
- Rtveladze, E. V. (K. Kato trans.) (2011). *The History of the Silk Road Told by Archeology: Civilization, States, and Culture in Central Asia*, Tokyo, Heibonsha.
- Kato, N.; Yatani, S.; Masui, M. (2009). “The Shape and Transformations of Buddhist Stupa Platforms at Buddhist Monasteries in Central Gandhara: Research on Buddhist Stupa in Gandhara Buddhist Architecture 1, *Journal of Architecture, Planning and Environmental Engineering* 71 (637), pp. 703–710.
- Mkrtychev, T. K. (K. Kawasaki trans.) (2016). “Fayaz Tepe, Sites of a Buddhist Monastery in Northern Bactria According to the Latest Research,” *Silk Road Studies* No. 9, pp. 15–25.
- Kuwayama, Sh. trans. (1987). *Mahayana Buddhism Scriptures (China & Japan) Vol. 9 (Great Tang Records on the Western Regions)*, Tokyo, Chuokoronsha.
- Kuwayama, Sh. (1990). *From Gandhara to Kapisi*, Kyoto, Institute for Research in Humanities, Kyoto University.
- Kuwayama, Sh. (1995). *Records on the Western Regions: The Travels of Xuanzang*,

- Tokyo, Shogakukan.
- Kuwayama, Sh. (1998). *Huichao's Wang Wu-Tianzhuguo Zhuan Record of Travels in Five Indic Regions Translation and Commentary (2nd ed.)*, Kyoto, Institute for Research in Humanities, Kyoto University.
- Miyaji, A. (2016). *Deciphering Buddhist Images: Buddhist Art on the Silk Road*, Tokyo, Shunjusha, pp. 43–66.
- Tanabe, K.; K., Maeda, ed. (1999). *A Complete Collection of Global Art: The Orient Vol. 15 Central Asia*, Tokyo, Shogakukan.
- Naito, M. (1975). “The Hephthalite People & Their Development,” Ed. in Commemoration of the 70th Anniversary of Dr. Hisao Matsuda, *Cultural Interrelations Between the East and West*, Tokyo, Yuzankaku.
- Nakazawa, K. (1998). *The Travel Journal of Xuanzang: Western Regions & India* (Abridged Translation of the Biography of Master Xuanzang Daci'en Temple), Tokyo, Kodansha.
- Fukushima, M. (2010). “The Li Clan of Jibin: A Study of Bactrian Merchants on the Silk Road,” *Journal of Historical Science* Vol. 119 No. 2; same author *The Sogdians in Eastern Eurasia*, Tokyo, Kyuko Shoin, 2016, pp. 225–259.
- Matsui, T. (2017). “Views on the Restoration & Preservation of the Zurmala Stupa: Based on Analysis of the Bricks Used,” previously cited, Rishso University (2017b), pp. 23–27.
- Mizutani, Sh. (1971). *Great Tang Records of the Western Regions*, Tokyo, Heibonsha.
- Miyamoto, R. (2015). “An Introduction to Geographical Research on the Administration of Tokharistan,” *Journal of Oriental Studies*, Kyoto No. 90, pp. 320–277.
- Yasuda, H. (2018). “Newly Discovered Wall Paintings in Kara Tepe: Based on a Comparison with Examples of Relics from East Turkistan,” previously cited, Rishso University (2018).
- Yoshida, Y. (2010). “Religious Culture Related by Excavated Objects: A Focus on Buddhism in Iranian-speaking Countries,” Yasuaki Nara; Kosei Ishii ed. *A New History of Buddhism in Asia Vol. 5 Central Asia: The Crossroads of Civilizations and Culture*, Tokyo, Kosei Publishing Co., Ltd.
- Yoshida, Y. (2011). “The History of Sogdians and Sogd,” Hiroshi Sohukawa; Yutaka Yoshida ed. *The Art and Language of the Sogdians*, Kyoto, Rinsen Books Co., pp. 7–78.
- Yoshida, Y. (2013). “The Current State & Issues in Research on Written Bactrian Documents,” *Studies on the Inner Asian Languages*, XXVIII, pp. 39–65.
- Yoshida, Y. (2016). “Bactrian Inscriptions on Pottery Fragments,” previously cited, Rishso University (2016), pp. 39–43.
- Yoneda, M.; Ozaki, H.; Omori, T. (2016). “Radiocarbon Dating of Human Bones Unearthed from the Kara Tepe Sites,” previously cited, Rishso University (2016), pp. 72–74.
- Pugachenkova, G. A. chief ed.; E.V. Rtveladze, K., Kato ed. (1991). *Antiquities of*

Southern Uzbekistan, Tokyo, Soka University Publishing.

Chinese

- Jiang B. [1996] Dunhuang Research Academy(ed.) *Essays for the 50th Anniversary of Duan Wenjie's Career as Dunhuang Expert*, World Publishing Corporation, pp.29–45.
- Yu T. [2012] *Study of Ephtalites History*, Peking, The Commercial Press.
- Yu T. [2015] *Study of Kushan Dynasties History*, Peking, The Commercial Press.
- Wang Xi. [2017] *Study of Tocharistan History*, Peking, The Commercial Press.