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ORIGINAL PAPER



A unique Sogdian bronze pin and a fragment of a Chinese "Zhenzifeishuang" 真子飞霜 mirror from Sanjar-Shah (Tajikistan)

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Abstract

The article presents two special finds uncovered at the site of Sanjar-Shah during the 2016 archeological season—a bronze pin with a unique finial of two Janus-like faces, and a fragment of a Chinese mirror. The bronze pin has no parallels among Sogdian objects but is strikingly similar to a group of so-called "mace-heads" that originate in Sasanian Iran. We suggest that the design of the Sanjar-Shah pin is inspired by these objects, all of them being modelled on real maces attested in Sogdian paintings. The surviving fragment of the mirror allows us to establish that it belongs to a well-known type of mirror from the Tang period, the "Zhenzifeishuang" mirror. This is the first time that a mirror of this type has been found outside of China.

Keywords Sogdian · Tang mirror · Bronze pin · Mace · Zhen zi fei shuang

1 The site of Sanjar-Shah

Sanjar-Shah is situated in the Zeravshan valley of northwestem Tajikistan, some 12 km to the east of Panjikent (Fig. 1). In antiquity, the area of Panjikent, and more broadly the valleys of the Zeravshan and Kashkadarya rivers, were populated by Sogdians—Iranian people who spoke Sogdian, an eastern Iranian language.¹ In the fourth through eighth centuries CE, Sogdians, who were politically organized in several independent city-states (such as Samarkand, Bukhara, Kesh and Panjikent), but who shared a similar culture and historical background, spread all the way to northern China, where they established a number of colonies.² It was Sogdians who managed the complex network of economic and cultural

The Sogdian civilization is mostly known through extensive excavations of the city of Panjikent, which have been conducted continuously since 1947 by Russian archaeologists. The households of Sogdian nobles and wealthy merchants, many of which were lavishly decorated with extraordinary figural and narrative wall paintings, are the most important and rich source for Sogdian culture until its collapse following the Arab conquest in the eighth century (Azarpay 1981; Marshak 2002a, 2009).

Sanjar-Shah, like neighboring Panjikent, was probably founded in the fifth century and abandoned in the 770–780 s. The excavations of the current archaeological mission directed by the authors have been ongoing at the site since 2014 through the generous support of the *Society for the Exploration of EurAsia*. Sanjar-Shah was a small town (about 5 ha) composed of three distinct parts: the Round Tower (Area

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See also Shenkar and Kurbanov forthcoming, for a detailed discussion of the site and of the finds from the 2014–2015 seasons.



connections and routes between Central Asia and China to which we today apply the misleading term "Silk Road" (Hansen 2016).

¹ For a survey of Sogdian history, see Marshak 2002a: 1–25; de la Vaissière 2011; Grenet and Rapin 2013.

 $^{^{2}}$ For a discussion of Sogdian social and religious institutions, see Shenkar 2017.

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³ The bibliography on the Panjikent excavations is enormous. See the entry in *Encyclopædia Iranica* with a list of primary publications: Marshak 2002b.

⁴ Several preliminary reports have appeared so far: Kurbanov 2010, 2012, 2014. Brief annual excavation reports are published on the website of the Society for the Exploration of EurAsia. http://www.exploration-eurasia.com/EurAsia/inhalt_english/projekt_5.htm#

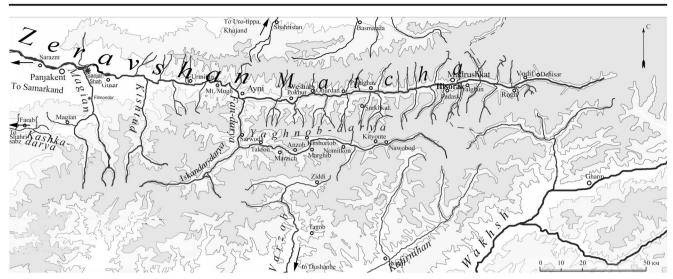


Fig. 1 Map of the Upper Zeravshan Valley, Tajikistan. Courtesy of Pavel Lurje

I) in the northwestern corner of the site, and the western and eastern parts of the town itself (Fig. 2). The most remarkable finds at Sanjar-Shah so far were revealed during the excavations of the Round Tower in 2008–2009 (Fig. 3), and include numerous fragments of cotton and silk fabrics, leather, woven baskets, and a well-preserved child's cotton

shirt (Kurbanov and Teplyakova 2014), and fragments of three letters written in Arabic. The latter, which are the earliest preserved Arabic texts written on paper, probably represent correspondence between commanders of the local Arab forces from the first half of the eighth century (Haim et al. 2016) (Fig. 4).

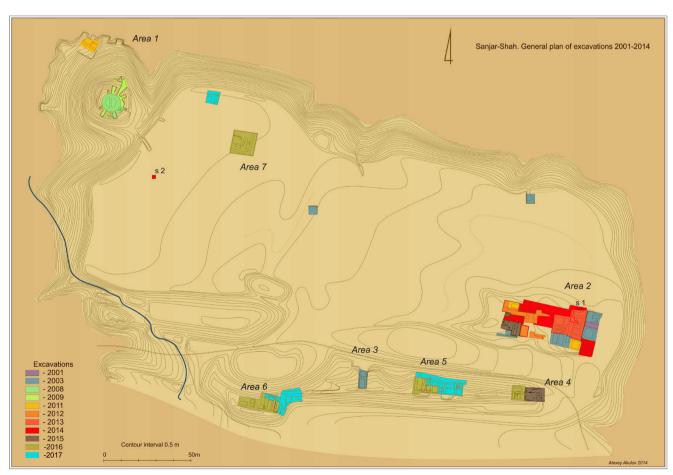


Fig. 2 Plan of Sanjar-Shah showing excavated areas. Drawing by Alexey Akulov and Elena Bouklaeva





Fig. 3 The round tower at Sanjar-Shah (Area 1) after the 2009 excavations. Photo by Sharof Kurbanov

Until 2016, the previous excavations mainly concentrated on the Round Tower and in Area II in the southeastern part of the town. Area V, adjacent to the southern wall of the town, which was newly opened in 2016,⁵ produced two special finds, which are the subject of the present article. The architecture in this Area (as well as in Areas IV and VI, also situated along the southern city wall) is characterized by uniquely preserved architecture up to three storeys high (up to 5 m in some places) (Fig. 5).

2 The bronze pin

A bronze pin was found in the fill of Room 6 in the eastern part of Area V. This room is distinguished by its large dimensions $(4.4 \times 2.2 \text{ m})$ (Fig. 6). Its walls were built of *pakhsa* (rammed earth) blocks and of mud brick and plaster. Wall 1, which corresponds to the city wall, is preserved in this room up to a height of 3.2 m. The room was vaulted, and the vault, which was made of mud-brick, had a height of 2.35 m from the floor level. No coins were found in the room, but based on the ceramic assemblage and the material from other rooms in Area V, the finds can be dated to the eighth century.

The length of the pin is 6.2 cm and its width in the widest part of the finial is 1.3 cm (Figs.7, 8, and 9). This finial is of the greatest interest, since it is so unique among the similar objects found in Sogdiana. It presents two identical, juxtaposed Janus-like faces joined at the back. Due to deformation, one face is slightly higher than the other. The facial features are typical of Sogdian art: large almond-shaped eyes shown frontally and a nasal bridge that forms a straight line with the forehead. The double-faced character wears a conical head-dress. The headdress appears to be decorated with a kind of pattern, including bands and almond-shaped forms (?), but the exact form of the design is impossible to establish due to the



Fig. 4 Fragment of a letter in Arabic from area I at Sanjar-Shah. Photo by Anastasia Chizhova

object's poor state of preservation. Both faces have a double band running below the chin, which looks like the strap of a headdress. The headdress belongs to the type most commonly depicted in Sogdian art (Yatsenko 2006: figs. 180.1–5, 181.3). However, such caps (and others) never have a strap in wall paintings (Fig. 10). The only headgear shown with a strap in Sogdian paintings is helmets. The problem is that Sogdian helmets were usually of a specific onion-like shape, ending in a point, while our headdress is conical. Based on analogies from Iran (see below), we believe that these "straps" are in fact a schematic representation of a beard.

During the 70 years of continuous excavations of neighbouring Panjikent, several metal pins have been found. Two of the cast bronze pins are topped by an image of a bird (a rooster or a peacock) and the third is topped by a crescent moon (Raspopova 1999: figs. 30, 7, 8). The first two were found in a layer dated to the first quarter of the eighth century, and the third is from the layer dated to the 740 s-760 s (Raspopova 1999: 30). An additional pin with a ball-shaped finial comes from room 12/XXV (Raspopova 1980: fig. 31.12). A similar pin topped by a bird was found at Sukuluk in Semerech'e (Bernshtam ed. 1950: fig. XLIII, 4). A cast bronze pin (6.1 cm long) dated to the fourth-fifth centuries CE, surmounted by a bird, was found in southern Tajikistan (Zeymal' 1985: n. 368). Valentina Raspopova (1999: 30) interprets these pins as a coiffure decoration, and it seems, also because of the similar length, that the Sanjar-Shah pin belongs to this category of objects. Such pins were obviously decorative since they were not long enough to serve as a proper hairpin for holding a coiffure in place. As an example of actual functional hairpins we can view the rich assemblage of more than 100 pins excavated from the site of Zartepa in Tokharistan in layers dated to the late Kushan and Kushano-Sasanian periods (Zav'yalov 2008: 112–123). They are made of bone, and their length is closer to 10 cm—a length that would allow the pin to actually support the coiffure. Some of them have anthropomorphic tops (Zav'yalov 2008: fig. 56, types 1–3), but none resembles the pin from Sanjar-Shah.



⁵ Area supervisor Abdurahmon Pulotov.

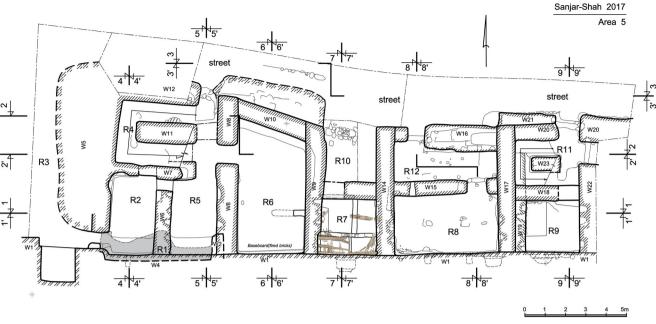


Fig. 5 Plan of area V of Sanjar-Shah after the 2017 field season. Drawing by Alexey Akulov and Elena Bouklaeva

It is noteworthy that hairpins are not attested in Sogdian paintings for male or female coiffures. The only exception is seen in the Afrasyab paintings from the so-called "Ambassadors Hall." In a scene on the northern wall showing Chinese ladies in a boat, their coiffures have hairpins. A similar hairstyle with hairpins is attested in paintings in the Xincheng新城 tomb (663 CE) (Kageyama 2005). The Afrasyab hairpins are decorated with framed rhombi, while

the hairpins from Xincheng are topped with a flower or maple leaf (Kageyama 2005: 33). These seem to be functional rather than decorative hairpins, and their dimensions are rather more comparable with those from Zartepa than with pins from Panjikent and Sanjar-Shah.

The pin from Sanjar-Shah finds a striking parallel in a group of three objects usually called "mace-heads" and are dated to the Sasanian period. One is in the Abegg Collection, the second



Fig. 6 Area V, room 6, at Sanjar-Shah



Fig. 7 Bronze pin from room 6 at Sanjar-Shah. Photo by authors





Fig. 8 A finial of the bronze pinfrom room 6 at Sanjar-Shah. Photo by authors

in the Ashmolean Museum at Oxford, and the third one is in an unknown private collection (Overlaet 1998) (Fig. 11). Unfortunately, none of them comes from scientifically controlled excavations and has a clear provenance, but they most probably originate from Iran. The first and the second "maceheads" are topped with a male head in a Sasanian style. Especially remarkable is the "ring" that separates the shaft from

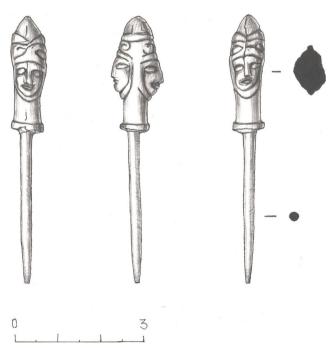


Fig. 9 Drawing of the three sides of the bronze pin from Room 6, Area V at Sanjar-Shah. Drawing by Darya Zhulina



Fig. 10 A fragment of a wall painting from Panjikent showing a banqueting scene. Photo by Yury Karev

the finial itself, since exactly the same "ring" characterizes the object from Sanjar-Shah, too. The closest parallel to the Sanjar-Shah pin is offered by the "mace-head" from the unknown private collection, as it depicts not a single head, but a double, Janus-like one. As mentioned above, these objects are most often interpreted as "mace-heads." However, their small size (height 8.7 cm, width 6.7 cm for the object in the Abegg Collection, and height 8.5 cm, width 6.7 cm for the one from Oxford) makes one question their function as ceremonial maceheads. Indeed, Moorey has suggested that they might have been linch-pins or furniture terminals (Moorey 1972: 400; Overlaet 1998: 257–258). The pin from Sanjar-Shah is of comparable length, but is only 1.3 cm wide. Therefore, there is no doubt that it cannot be a ceremonial mace-head, but given the striking similarity between our pin and the "mace-head" from the unknown private collection, it seems that the Sanjar-Shah pin might have been directly inspired by similar objects from Sasanian Iran. Moreover, the modelling of the beard on these three "mace-heads" in three bands is probably the model for the bands visible beyond the chin of the image on the Saniar-Shah pin, which thus should be interpreted as a beard.

Whatever the real purpose of these Sasanian "mace-heads" was, there can be little doubt that they were modelled on real maces. Similarly, it is clear that the Sanjar-Shah pin imitates real Sogdian maces depicted on two Panjikent paintings. The first example comes from an epic scene depicted in Room 1 in Area VI, where a warrior is carrying a double-faced mace (D'yakonov 1954: 119, fig. XXXV) (Fig. 12). The second attestation is from Room 28 in Area XXV (Fig. 13). The mural in the second register on the northern part of the eastern wall in this room depicts a king receiving gifts. His hand rests on a mace-head, which is shaped like a human head shown in profile. The excavators, Boris Marshak and Valentina Raspopova,

⁶ Interestingly, in Russian, the word for "pin", *bulavka* (булавка), is in fact a diminutive from "mace", *bulava* (булава). For a discussion of maces in the ancient Iranian world, see Kubik 2014; Kubik and Ahmad 2015.



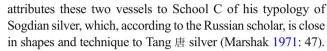
Fig. 11 A"mace-head" from a private collection. After Overlaet (1998, fig. 143)



describe it as "grotesque four-faced head" (Marshak and Raspopova 1990: 165). However, only about half of the mace is preserved and from the published drawing only a single face can be seen clearly. Bruno Overlaet has indeed expressed an opinion that "it is only one face with ornamental earrings" (Overlaet 1998: 259, no. 47). We think that given the parallel from Room 1 in Area VI it is more likely that the mace is double-faced, but this must, of course, remain conjectural. We should also mention a ceremonial mace/sceptre (50 cm long) that was found in the Jartepa II temple, topped by a single bearded head with a flat headdress (Berdimuradov and Samibaev 1999: 46, figs. 92–93).

Janus-like faces in Sogdian art are also attested on the handles of two silver vessels, dated by Boris Marshak to the second half of the seventh century and to the eighth century respectively, and which are decorated with two juxtaposed heads (Marshak 1971: 47, Types BC115 and BC114). Marshak

Fig. 12 A fragment of a wall painting from Room 1, Area VI, Panjikent. Photo by Michael Shenkar



Interestingly, a Janus-like portrait is also found on one coin type from Chach. Here, closer to the Roman tradition (see below), one face is that of a beardless youth and is shown in three-quarters, while the second head is that of a bearded old man depicted in profile (Shagalov and Kuznetsov 2006: group 6, type 4).

What is the meaning of these Janus-like images in Sasanian and Sogdian culture and who is depicted on the pin from Sanjar-Shah? Representations of two identical faces sharing the same bust and facing in the opposite directions are a common motif found on Sasanian seals (Grenet 2013: 204–206) (Fig. 14) They are clearly derived from the Roman Janus, but as observed by Frantz Grenet (2013: 204–205), unlike the Roman Janus, who usually has different faces (one young

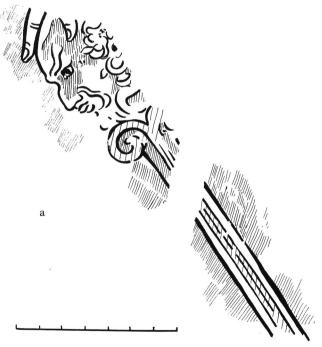


Fig. 13 A fragment of a wall painting from room 28 in Area XXV at Panjikent. After Marshak and Raspopova 1990, fig. 33a)





Fig. 14 A Janus-like bust on a Sasanian seal. After Gignoux and Gyselen (1982: 40.61)

and one old), the faces on the Sasanian seals are identical (with one exception). The same is true also for the "mace-head" from the unknown private collection, and since the heads on the pin from Sanjar-Shah are also identical, it adds credence to our assumption that it is inspired by Sasanian prototypes.

Grenet (2013: 205) suggests that the Janus-like busts on Sasanian seals could be representations of the Zoroastrian god of time, Zurwān. The heads on our pin do not have any attributes except for the conical cap decorated with unclear designs. The Sogdian upper classes, nobles, and merchants are often depicted with such headgear in wall paintings. Deities and kings, however, are usually shown wearing elaborate crowns incorporating astral symbols such as the crescent moon or wings. The only Sogdian god that has a rather "simple" conical headdress is the "grain god" associated with agriculture from room 28 in Area XXV in Panjikent (Marshak and Raspopova 1990: 153-155; Naymark 2001: 360-389; Shenkar 2014: 170). Based on this, it is impossible to suggest a reliable identification for the character on the Sanjar-Shah pin. It is unique in its design and the most impressive example of this kind of object found so far in Sogdiana.

3 A fragment of a Chinese bronze mirror

A fragment of a bronze mirror was found in 2016 in the fill of Room 1 in Area V (Fig. 15). This room is located on the third floor above Rooms 2 and 5. It has a square shape. Only the southern (Wall 1) and eastern (Wall 2) walls are partially preserved. In the upper part of Wall 1 three layers of plaster were



Fig. 15 Area V, room 1, at Sanjar-Shah. Photo by authors

identified. The middle layer has traces of red colour, which most probably form evidence for the existence of wall paintings. One level of floor was cleared in the southern part of the room above Rooms 2 and 5.

The dimensions of the surviving fragment of the mirror are 5×5.5 cm (Figs. 16 and 17). It shows a character seated on what seems to be a carpet and playing a zither ($qin^{\frac{1}{3}}$). The character wears Chinese garments with typical wide sleeves. Folds of its long dress are also clearly visible beneath the zither. The facial features are not clear due to poor preservation and the low level of the original execution. It seems that the hair is gathered in a knot on top of the head. To the right of the character, three vertical strokes are shown, the middle one is shorter than the other two which extend beyond the preserved fragment. Four similar strokes are depicted to the left of the musician. The second stroke from the left appears to be shorter than the rest, which extend beyond the preserved fragment. On the left edge, a section of a rim is preserved (3 cm). The diameter of the complete mirror was around 20 cm.

The fragment belongs to a well-known type of Chinese mirror called in Chinese "Zhenzifeishuang"(真子飞霜) (Fig. 18). The name comes from the inscription of these four



Fig. 16 A fragment of a bronze mirror found in 2016 in the fill of room 1 in Area V, Sanjar-Shah. Photo by authors



⁷ On Zurwān, see De Jong 2014.

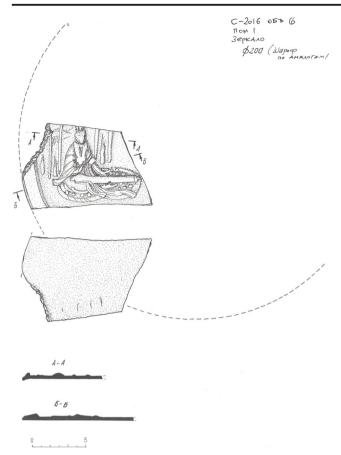


Fig. 17 Drawing of the bronze mirror fragment from the fill of room 1 in Area V, Sanjar-Shah. Drawing by Darya Zhulina



Fig. 18 A typical, complete "*Zhenzifei shuang*" mirror. From https://baike.baidu.com/item/%E5%94%90%E7%9C%9F%E5%AD%90%E9%A3%9E%E9%9C%E9%95%9C/6247680

characters that some such mirrors have in the center. Zhang Qingwen (2013) analyzed this type of mirror in a recent M.A. thesis, providing a detailed description, typology, and discussion (Zhang Qingwen 2013). In his thesis, author studied 41 such mirrors with this motif, and in a more recent paper (Zhang Qingwen 2015: 71) lists 43 examples. 28 mirrors listed in the thesis come from controlled archaeological excavations and the provenance of 12 other mirrors is unknown (Zhang Qingwen 2013: 9). It seems that *Zhenzi* (真子) refers to the character who is playing the zither and the mirror design perhaps illustrates a Taoist tale. The identity of the musician and the exact meaning and interpretation of the scene have been much debated (Zhang Qingwen 2013: 20–24; Zhang Qingwen 2015: 71–72).

These mirrors were produced under the Tang Dynasty. The earliest examples were made before the reign of Emperor Suzong 肃宗 (711–762). One mirror was found in a tomb dated to the Five Dynasties period (907–960) in Liaoning 辽宁 Province in northeast China, but it seems that it was made much earlier (Zhang Qingwen 2013: 17–18). Since only five mirrors were found in Northern China, it appears that the "Zhenzifeishuang" mirrors were more common in South China (Zhang Qingwen 2013: 18), and were perhaps also produced there. It is possible that a large number of them were produced in Yangzhou 扬州, which was the most important center of bronze mirror manufacture under the Tang Dynasty (Kong Xiangxing and Liu Yiman 1984: 177–180). No finds of mirrors of this type were previously known outside China and thus the fragment from Sanjar-Shah constitutes the first example.

Zhang Oingwen divides the mirrors into five main types with a few subtypes. His typology is based mainly on peculiarities of shape, on the presence or absence of inscriptions, and on the right or left position of the character playing a qin. The absence of an inscription on the rim and the position of the musician allows us to attribute our fragment to type IVAa (Zhang Qingwen 2013: 13). Zhang Qingwen attributes three mirrors to this type. One is kept in the Shanghai Museum (n. 5) while the locations of the other two are not given. The author attributes type IVAa to the middle Tang period (766– 835 CE) (Zhang Qingwen 2013: 49). This type is characterized by a sunflower shape with eight petals. The musician is seated on the left side of the mirror playing the qin. He is depicted in a grove, four trees are on his left and three on his right. On the left side of the mirror a phoenix is shown in a dynamic pose, as if dancing to the sounds of the music. A mountainous landscape with trees is visible behind the bird. A lake is depicted in the central lower part of the mirror and in the upper part there are clouds representing the sky. The place of the "Zhenzifeishuang" inscription on some types is occupied by the figure of a crane.

In her article dedicated to the bronze mirrors found in Panjikent until 1969, Valentina Raspopova lists 18 examples and divides them into seven types (Raspopova 1972; with



updated discussion in Raspopova 1980: 119–122). Most of them are undecorated and locally produced. Important for our discussion is a fragment of a Chinese mirror from the Tang period with a well-known "lion and grape" pattern which was found in the layer dated to the middle of the eighth century (Raspopova 1972: 69, fig. 2, 1980: 122, fig. 80.6). Raspopova later published an additional interesting fragment of a cast bronze mirror dated to the first half of the eighth century (Raspopova 1999: fig. 38, 2). It is decorated with an image of a bird, a cluster of grapes and a vine. According to the Russian archaeologist, this mirror was produced locally, based on a Tang prototype (Raspopova 1999: 34). A complete Chinese mirror dated to the Sui 隋 Dynasty (581-618) was also found in the Jartepa II temple, situated between Samarkand and Panjikent. It is decorated with a vine and 12 zodiac animals (Berimuradov and Samibayev 1999: 44-45, figs. 84, 86). The Sanjar-Shah find is thus the third Chinese mirror found in the region.

4 Conclusions

The artistic level of the objects found so far at Sanjar-Shah not only matches that of Panjikent, which was the largest and most dominant settlement in the region, but in some cases, as with the bronze pin, supersedes it. Combined with the observations that the quality of the ceramic vessels from Sanjar-Shah also appears to be higher than in Panjikent (Kurbanov forthcoming), this raises interesting questions regarding the relations between the two sites.

These two small finds reflect the far-reaching connections of the Sogdian culture and the influences of the most powerful ancient empires that lay to the east and to the west of the small land of Sogdiana. In a sense, they exemplify the "Silk Road" created by Sogdians, where prestigious items, such as the Chinese mirrors, and artistic influences, such as those seen in Sogdian maces and the bronze pin from Sanjar-Shah, travelled over great distances on the networks created by the Sogdians.

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References

Azarpay, Guitty. 1981. Sogdian painting: The pictorial epic in oriental art. Berkeley, Los Angeles, and London: University of California Press.

Berdimuradov, Amriddin E. and Masud K. Samibaev. 1999. *Khram Dzhartepa – II (k problemam kul'turnoj zhizni Sogda v IV-VIII vv.)* (The Jartepa-II Temple (on the problems of the cultural life in Sogdiana in the 4th–8th centuries). Tashkent: Izdatel'stvo narodnogo naslediya imeni A. Kadyri.

- Bernshtam, Alexander N. (editor) 1950. *Trudy Semirechesnkoj* arkheologicheskoj ekspeditsii 'Chujskaya dolina' (Materialy i issledovaniya po arkheologii SSSR 14) (Transactions of the Semirech'e Archaeological Expedition 'Chui Valley'). Moscow-Leningrad: Izdatel'stvo Akademii Nauk SSSR.
- D'yakonov, Mikhail M. 1954. Rospisi Pyandzhikenta i zhivopis' Sredney Azii (The mural paintings of Panjikent and the Central Asian paintings). In *Zhivopis' drevnego Pyandzhikenta* (The paintings of ancient Panjikent), ed. A. J. Jakubovskij, 83–159. Moscow: Izdatel'stvo Akademii Nauk SSSR.
- De Jong, Albert. 2014. Zurvan. Encyclopædia Iranica Online Edition. http://www.iranicaonline.org/articles/zurvan-deity . Accessed 12 Sept 2018.
- de la Vaissière, Étienne. 2011. Sogdiana iii. History and archaeology. Encyclopædia Iranica Online Edition. http://www.iranicaonline. org/articles/sogdiana-iii-history-and-archeology. Accessed on 12 Sept 2018.
- Gignoux, Philippe, and Rika Gyselen. 1982. Sceaux sasanides de diverses collections privies. Leiden: Brill.
- Grenet, Frantz. 2013. Some Hitherto Unrecognized Mythological Figures on Sasanian Seals: Proposed Identifications. In *Commentationes Iranicae. Vladimiro f. Aaron Livschits nonagenario donum natalicium* (Iranian Studies. Presented to Vladimir Aronovich Livshits at 90), eds. S. Tokhtasev and P. Lurje, 201–211. St. Petersburg: Nestor-Istoriya.
- Grenet, Frantz and Rapin, Claude. 2013. Formatsionnye periody sogdijskoj kul'tury" (Formational Stages of Sogdian Culture). Sogdians, Their Precursors, Contemporaries and Heirs. Transactions of the State Hermitage Museum LXII: 13–29.
- Haim, Ofir, Michael Shenkar, and Sharof Kurbanov. 2016. The earliest Arabic documents written on paper: Three letters from Sanjar-Shah (Tajikistan). Jerusalem Studies in Arabic and Islam 43: 141–191.
- Hansen, Valerie. 2016. *The silk road. A new history with documents*. Oxford: Oxford University Press.
- Kageyama, Etsuko. 2005. Coiffure et vêtement des chinoises sur la peinture d'Afrasiab. In Royal Nawrūz in Samarkand: Acts of the Conference held in Venice on the Pre-Islamic Afrāsyāb Painting, ed. M. Compareti and E. de la Vaissière, 29–41. Rome: Sapienza -Universita di Roma.
- Kong Xiangxing, 孔祥星., and 刘一曼. Liu Yiman. 1984. Zhongguo gudai tongjing 中国古代铜镜 (Bronze mirrors in ancient China). Beijing: Wenwu chubanshe.
- Kubik, Adam L. 2014. About one group of Iranian maces in the context of the new find from Sivas, Turkey: an analysis from the Sasanian to the Sasavid Period. *Metamorfozy istorii* 5: 154–180.
- Kubik, Adam L., and Shah Nadeem Ahmad. 2015. Bronze mace with three rams' heads from Ashmolean museum, University of Oxford. *Historia i Świat* 4: 157–174.
- Kurbanov, Sharof. 2010. Otchet o rabotah Vostochno-Sogdijskoj arheologicheskoj èkspeditsii na gorodishche Sanzhar-Shah (Excavation report of the Eastern-Sogdian archaeological expedition on the site of Sanjar-Shah). Arheologicheskie raboty v Tadzhikistane 34: 278–299
- Kurbanov, Sharof. 2012. Arheologicheskie raskopki na gorodishche Sanzhar-Shah (Pendzhikentskij rajon) v 2009 godu (Archaeological Excavations on the Site of Sanjar-Shah (Panjikent District)). Arheologicheskie raboty v Tadzhikistane 35: 274–304.
- Kurbanov, Sharof. 2014. Otchet o rabotah na gorodishche Sanzhar-Shah v 2011 godu (Excavation Report of the Excavations at the Site of Sanjar-Shah in 2011). *Arheologicheskie raboty v Tadzhikistane* 37: 241–273.
- Kurbanov, Sharof. forthcoming. The study of ceramics from Sanjar-Shah: technological, cultural and administrative connections with Panjikent. In *Urban cultures of Central Asia from the Bronze age to the Karakhanids*, ed. Ch. Baumer and M. Novak. Wiesbaden: Harrassowitz Verlag.



- Kurbanov, Sharof, and Anastasia Teplyakova. 2014. Textile objects from the citadel of Sanjar-Shah. Bulletin of Miho Museum 15: 167–178.
- Marshak, Boris Il'ich. 1971. Sogdijskoe serebro. Oherki o vostochnoj torevtike (Sogdian silver. Essays on oriental Toreutics). Moscow: Vostochnaya literatura.
- Marshak, Boris Il'ich. 2002a. Legends, tales, and fables in the Art of Sogdiana. New York: Bibliotheca Persica.
- Marshak, Boris Il'ich. 2002b. "Panjikant." Encyclopædia Iranica, online edition. Accessed on 12.9.2018 from http://www.iranicaonline.org/ articles/panjikant
- Marshak, Boris Il'ich. 2009. Iskusstvo Sogda (Sogdian Art). St. Petersburg: State Hermitage.
- Marshak, Boris Il'ich, and Valentina I. Raspopova. 1990. Wall paintings from a house with a granary. Panjikent, 1st quarter of the eighth century A.D. Silk Road Art and Archaeology 1: 123–177.
- Moorey, Peter R.S. 1972. Recent museum acquisitions, Ashmolean Museum, Bomford Appeal Acquisitions 1971. The Burlington Magazine 114 (831): 397–404.
- Naymark, Aleksandr. 2001. Sogdiana, its christians, and Byzantium: A study of artistic and cultural connections in Late Antiquity and Early Middle ages. Ph.D. dissertation, Indiana University.
- Overlaet, Bruno. 1998. Sasanian bronze sculptures in the Werner Abegg Collection. In *Entlang der Seidenstrasse: Fruhmittelalterliche Kunst zwischen Persien und China in der Abegg Stiftung*, ed. K. Otavsky, 247–267. Riggisberg: Abegg Stiftung.
- Raspopova, Valentina I. 1972. Zerkala iz Pendzhikenta (Mirrors from Panjikent). *Kratikie soobshcheniya Instituta arkheologii* 132: 65–69.
- Raspopova, Valentina. I. 1980. *Metallicheskie izdeliya* rannesrednevekovogo Sogda (Metal objects of early medieval Sogdiana). Leningrad: Nauka.
- Raspopova, Valentina. I. 1999. Metallicheskie izdeliya iz Pendzhikenta (nakhodki 1971–1998 gg)(metal objects from Panjikent (Finds of years 1971–1998)). Saint Petersburg: Formika.

- Shagalov, Vladimir D. and Andrej, V. Kuznetsov. 2006. *Katalog monet Chacha III-VIII vv* (Catalogue of coins of Chach 3rd-8th centuries). Tashkent: Fan.
- Shenkar, Michael. 2014. *Intangible spirits and graven images: The iconography of deities in the pre-Islamic Iranian world*. Leiden and Boston: Brill.
- Shenkar, Michael. 2017. The religion and the pantheon of the Sogdians (5th–8th centuries CE) in light of their sociopolitical structures. *Journal Asiatique* 305 (2): 191–209.
- Shenkar, Michael, and Sh. Kurbanov. forthcoming. Sanjar-Shah a Sogdian town in the Zeravshan Valley. Some preliminary results of the recent archaeological investigations. In *Urban cultures of Central Asia from the bronze age to the Karakhanids*, ed. Ch. Baumer and M. Novak. Wiesbaden: Harrassowitz Verlag.
- Yatsenko, Sergej A. 2006. Kostyum drevnej Evrazii (iranoyazychnye narody) (Costume of Ancient Eurasia (Iranian-speaking people). Moscow: Vostochnaya literatura.
- Zav'yalov, Vladimir A. 2008. Kushanshakhr pri Sasanidakh. Po materialam raskopok na gorodishche Zartepa (Kushanshahr under the Sasanians. Based on the Zartepa excavations). St. Petersburg: St. Petersburg State University.
- Zeymal', Evgenij V. (editor). 1985. *Drevnosti Tadzhikistana. Katalog vystavki* (Antiquities of Tajikistan. Catalogue of the Exhibition). Dushanbe: Donish.
- Zhang, Qingwen张清文. 2013. Zhenzifeishuang jing yan jiu真子飞霜镜研究(A Study of Zhenzifeishuang Mirror). MA thesis, Shaanxi Normal University陕西师范大学.
- Zhang, Qingwen. 2015. Cong Gugong cang 'Houjinzhi' ming tongjing kan 'Zhenzifeishuang'jing de benyi从故宫藏'侯瑾之'铭铜镜看'真子飞霜'镜的本义(A study of *Zhenzifeishuang*mirror's original meaning through the bronze mirror with inscription "Houjinzhi" collected by the Forbidden City). *Sichuan wenwu* 四川文物2015.4: 71–75.

