

The Silk Road

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Cover images: (left) A female costume from Belorechenskaia Kurgan 20, the fabric antedating 1457, the burial second half of the 15th century. Reconstruction by Zvezdana V. Dode, drawing by Irina P. Oleinik. Courtesy of Zvezdana V. Dode. (right) Mural of a weeping lady. Karashar: Shikshin, building K-9e, 9th-10th centuries. Collection of the State Hermitage Museum, St. Petersburg, Inv. No. IIIIII-801. Courtesy of the State Hermitage Museum, all rights reserved.

IN MEMORIAM

At year's end, we tend to reflect on both our blessings and our losses of months just past. Work on every new volume of *The Silk Road* rewards me with the blessing of new discovery and interaction with the authors, most of whom I have never met. Yet this year at the forefront of my thoughts is loss, the loss of two wonderful scholars of unbounded promise who died young in 2013. Cherie Woodworth and Irene Good defended their dissertations at about the same time a little over a decade ago. Cherie concentrated on pre-modern Russia and had a serious interest in the ecology of steppe pastoralism. Irene Good was an archaeologist and specialist on early textiles, who also was deeply involved in projects concerning pastoralism and ecology. Both were questioning received tradition in the literature in their fields, and were active professionally, attending conferences, publishing articles and reviews. Cherie's work probably is little known to most readers of this journal — her CV described an ambitious but now only partially realized book project: "An environmental history of the steppe pastoralists, polities, and products and their relation to the rise of the Muscovite state in the early modern era; comparisons with China and other states bordering on the steppe." Irene's work is better known, since some of it applied sophisticated analytical techniques in an attempt to answer the seminal question about the location of the earliest production of silk. She published a penetrating review of how we must adopt new methodologies and ask new questions if we are to learn more about Eurasian exchange ("When East met West: Interpretive problems in assessing Eurasian contact and exchange in Antiquity," Archäologische Mitteilungen aus Iran und Turan 43 (2010): 24-45). She was working on a book tentatively entitled Cloth and Carpet in Early Inner Asia.

For neither of them can I convey effectively a sense of the loss felt by their families and close friends. We exchanged a lot of e-mail, but in both cases met only once. The more recent of those meetings, with Irene at Oxford, where she had a post-doctoral fellowship which she was destined never to complete, left a vivid impression. Not knowing the battles she was fighting, ever the importunate editor, I kept encouraging her to write for us on her "work in progress," about which she was passionate. We never made it past some early drafts. Cherie had listed as one of her projects an article for us, and was to have reviewed the newly remounted Islamic collection at the Metropolitan Museum. When she apologized last spring for not being able to complete the review, I had no idea she had only weeks to live. My essay below on the collection in no way can replace the insights she would have provided. I think many of the articles which follow, in particular those which lay out new approaches and pose new questions, would have interested Irene and Cherie.

This volume of *The Silk Road* honors them.

Readers are strongly encouraged to view the online version of the journal, since so many of the illustrations are in color and can be best appreciated that way.

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All physical mailings concerning the journal (this includes books for review) should be sent to the editor at his postal address: Daniel Waugh, Department of History, Box 353560, University of Washington, Seattle, WA 98195 USA. It is advisable to send him an e-mail as well, informing him of any postings to that address.

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LANGDON WARNER AT DUNHUANG: WHAT REALLY HAPPENED?

Justin M. Jacobs

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rom 1923 to 1925, Harvard art historian Langdon Warner led two separate expeditions to the Thousand-Buddha Caves (qianfodong 千佛洞) at Dunhuang 敦煌, in the far northwestern corner of China's Gansu 甘肅 province. The goals of both expeditions were simple: to procure a modest stockpile of Asian art and artifacts so as to assist in the development of the "Oriental collections" of the fledgling Fogg Museum, and to encourage "advanced studies in Far Eastern art and archaeology" at Harvard University (Bowie 1966, p. 106). The expeditions themselves, however, coming as they did on the tail end of the heyday of Western and Japanese excavations in northwestern China, have come to be regarded as something less than a success for their undertakers. The material harvest of the first expedition, leaving behind the scars of Warner's makeshift removal techniques, elicited a "lukewarm reaction" among his colleagues in Cambridge and failed to impress prominent art collectors in Boston (Balachandran 2007, p. 16). As for the second, more infamous expedition to Dunhuang in 1925, even Warner himself readily conceded that it had been something of a fiasco, as the Americans were forced to exit China with little more than photographs (Bowie 1966, p. 130).

The Fogg Museum expeditions to Dunhuang in the mid-1920s signaled the first time a foreign scholar encountered insurmountable obstacles to his expedition in China. It comes as something of a surprise, then, to find that so few scholars have attempted to understand just why Warner met with such an ignominious end. Much of this complacency stems from the fact that Warner himself was quick to establish his own "authoritative" version of the events, first made public in his book, The Long Old Road in China (1926a). For one reason or another, Warner's narrative, embellished further in his Buddhist Wall-Paintings: A Study of a Ninth-Century Grotto at Wan Fo Hsia (1938), has tended to be accepted by later historians at face value. For Theodore Bowie, a former colleague and editor of Langdon Warner Through His Letters (1966), Warner's tales of Chinese perfidy and xenophobia served to rehabilitate well-meaning Western scholars whose reputations had suffered through the long decades of decolonization. For Peter Hopkirk, whose Foreign Devils Along the Silk Road (1980) introduced an entire new generation of scholars and armchair travelers to the romance and intrigue of Western archaeological adventurers, Warner represented the hubris of the Western imperialist enterprise. Though all Euro-Americans still set out with what they believed were good intentions, their unprecedented achievements had ultimately blinded them to the realization that they could not dictate the terms of their craft forever.

Over the past decade, Western expeditions in pursuit of antiquities in colonial and semi-colonial lands - invariably carried out in the name of science - have garnered significant scholarly attention (see, for example, Reid 2002, Hevia 2007, Balachandran 2007, Goode 2007, Colla 2007, Pettitt 2007, Heaney 2010). More often than not, however, these studies are more concerned with drawing theoretical connections among transnational "cultural imperialisms" writ large than in revisiting the empirical evidence of the expeditions themselves. Recent articles by Sanchita Balachandran (2007) and this author (Jacobs 2010) both illustrate this trend with regard to the Warner expeditions: while Balachandran seldom shies away from condemning the haughty sense of entitlement Warner exhibited as an agent of Western imperialism, I pass similar judgment on Warner's nationalist counterparts in China, whom I portray as engaged in a comparable enterprise of cultural and intellectual disenfranchisement directed toward their own subalterns. Though both authors do make use of a novel empirical source base, such evidence is treated more as a means to a theoretical or ideological end rather than a tool with which to revise the received narrative of the Warner expeditions themselves.

A different perspective can be gained by looking more closely at Warner's version of events, along with evidence, long available, which his influential public narrative has distorted. In 1926, the same year that Warner published *The Long Old Road in China*, Chen Wanli 陳萬里, a Chinese member of the second expedition (Fig. 1), published his own record of the party's journey to Dunhuang just one year previously. Over the ensuing nine decades since the appearance of Chen's *Diary of Westward Travels* (Xixing riji 西行日記),



Fig. 1. Chen Wanli in a photo taken by one of the American members of the expedition. After: Chen 1926, p. 3.

however, not a single scholar has attempted to compare Chen's version of events to that of Warner. This is all the more remarkable in light of the fact that Warner himself accused Chen of nothing less than treason toward the Americans, a charge repeated by nearly every Western scholar who has had reason to examine Warner's fate in China (see, for example, Bowie 1966, p. 129; Hopkirk 1980, p. 225; Balanchandran 2007, p. 20).1 Publicly, Warner wrote in the introduction to his Buddhist Wall-Paintings (1938, pp. xiv-xv) that Chen later published a book that "explains his association with the Americans as being for the express purpose of keeping track of their actions and preventing them from marauding. He further took the trouble to attempt to cast discredit on the characters of my party in a way that is perhaps worth a flat denial from me." In a private letter to the British archaeologist Aurel Stein, however, Warner referred not to a slanderous book but rather to "a series of articles about his amazing adventures with the foreigners," in which Chen attributes "to my young assistants the vilest motives" (Warner 1926b).

Chen's book has sat gathering dust in the libraries of several prominent American universities for nearly a century. Why has no one thought to pick it up to see

whether or not Warner's accusations were warranted? The answer, I believe, is to be found in Warner's deliberate attempts to absolve himself of responsibility for his failures in China by distorting the historical record to make it appear as if forces beyond his control were ultimately responsible for the scant return his donors received on their investment. In this regard, Warner was extremely fortunate that the second expedition partially overlapped with one of the cardinal events in the narrative of modern Chinese nationalism: the May 30, 1925 incident in Shanghai, when British soldiers opened fire upon unarmed Chinese protesters, resulting in numerous fatalities. Never mind that news of the bloodshed in Shanghai did not reach Warner's party in northwestern Gansu until they had already completed most of their survey work at Wanfoxia 萬佛峽 (Myriad Buddha Gorge; what is now known as Yulin ku 榆林窟 "Yulin Grottoes"), or that the Americans had departed from Dunhuang a full week before the May 30th incident broke out. The much publicized anti-foreign backlash occasioned by the tragedy, harnessed to great rhetorical effect by the nascent Nationalist and Communist parties, offered Warner an airtight alibi that few Westerners would think to question.

Just one year after his ignominious retreat, Warner had already begun to conflate the May 30th incident with the troubles experienced by the second Fogg Museum expedition in China. In his conclusion to *The Long Old Road in China* (1926) — a book chiefly concerned with the slightly more successful first expedition — Warner alluded to that which would bedevil him on the second:

I could not guess that in a short seven months the whole Chinese nation was to stir in its sleep and yawn so portentously that all we foreigners would be scuttling back to our Legations. ... But in those months of the first return from the border, the Shanghai shooting and the marchings and countermarchings of Feng and Chang and Wu were not guessed. We had no idea of the serious troubles a few months were to bring forth. [Warner 1926a, pp. 149–50, emphases mine]

This is a gross misrepresentation of the course of events that preceded the second expedition. The first expedition returned to Beijing in the spring of 1924. For Warner to suggest that the "Shanghai shootings" occurred in those amorphous "months of the first return from the border" (or, as he puts it in the following sentence, in the space of "a few months") is deliberately to mislead his readers into thinking that the May 30th incident happened at some point in the second half of 1924, at least half a year—if not more—before its actual date. In *Buddhist Wall-Paintings* (1938), Warner strengthened this misperception by declaring that

their time in the northwest coincided with the death of "Old China," and that "nowhere were we welcome and seldom were we tolerated by the people, and little of our mission could be accomplished" (p. xv).

In his popular treatment of Warner's expedition, read by nearly every student of Western archaeological expeditions, Peter Hopkirk (1980) falls headlong into the trap of misinformation set by his protagonist. In painting the backdrop for Warner's return to China in 1925, Hopkirk contextualizes everything that occurred in the course of the second expedition in light of the May 30th incident, something that "no one could have foreseen." Hopkirk then takes to new literary heights what Warner had merely viewed as a pragmatic alibi:

A wave of anger against foreigners swept across China. Warner, who had recently arrived in Peking at the head of a larger expedition, reported: 'News of the Shanghai shooting on that day travelled like wild-fire through the interior.' Missionaries and other foreigners in remote stations had to be evacuated. When Warner's party reached Tun-huang, where they had planned to work for eight months, they were met by a menacing mob of peasant farmers – the same people who had welcomed Warner the previous year. [p. 223]

Faced with such compelling "evidence" of cause and effect, few scholars chose to question Warner's accusations of sabotage and slander against Chen Wanli. Of course Chen was a spy. How else could the leaders of a prestigious American expedition from Harvard have made such an egregious miscalculation regarding their fate in China, unless Chinese treachery was involved? In a letter to Stein, Warner, who spent all of one week together with Chen, wrote about the latter that "almost to the end he was aloof & suspicious," and that he "never really believed that we would keep our word about not removing the treasures" (Warner 1926b). Those scholars inclined to look askance upon Western expeditions to China and instead sympathize with the vague "winds of nationalism" described by Hopkirk, need only reinterpret Chinese "perfidy" as "heroism," and depict Chen or his Chinese colleagues in Beijing as the protagonists of the story.

Warner's first expedition to Dunhuang (1923–24), in which he removed a dozen wall paintings from the Thousand-Buddha Caves, did not bring him the measure of acclaim for which he had hoped. It was, however, considered just enough of a "success" to help secure funding for a second, much larger expedition, intended to bring back even more paintings and antiquities for the Fogg Museum. Whereas the first expedition consisted only of Warner and his colleague Horace Jayne, Curator of Oriental Art at the Pennsyl-

vania Museum in Philadelphia (now the Philadelphia Museum of Art), the second expedition included five additional young men who brought with them technical expertise in various aesthetic specialties. Once in Beijing, Warner was asked to take along as a traveling companion Chen Wanli, of the Peking University 北 京大學 School of Medicine. "They begged me to have him go along," he later wrote to Stein, "and, though I wasn't anxious to take him, I felt that if they wanted a spy on my actions I could best show my good faith by taking him with me. If they did not, he could do no harm" (1926b). Bowie, however, citing Warner's correspondence from his time in Beijing, concludes that Warner was "highly pleased because he counted on Dr. Ch'en to help interpret some of the very difficult inscriptions found on many of the wall paintings" (1966, p. 126).

For most of the second expedition's time in China, Warner was physically separated from the rest of his party. While Warner stayed behind in Beijing to attend to other matters, Horace Jayne set forth with the rest of the expedition members, ultimately putting about three weeks' distance between the vanguard party and its putative leader. Thus, Warner's understanding of the troubles the rest of the party encountered en route to Dunhuang was mediated almost entirely through telegrams and letters sent to him by Jayne. Until Jayne and the others reached Dunhuang, the only warning signs came during courtesy calls to local officials, who warmly reminisced with the Americans about their first expedition, but also warned both Jayne and Warner that they were not to remove anything from the Thousand-Buddha Caves this time around (Bowie 1966, p. 127). Then, suddenly, just days shy of Dunhuang, Warner was met unexpectedly on the road by Jayne, who had returned from the Thousand-Buddha Caves with the sole purpose of calling off Warner's advance. It is at this point that Warner's narrative apparently based on Jayne's reports, since Warner never actually made it to Dunhuang during the second expedition — begins to make for riveting reading. "They have been under heavy guard," he wrote to his wife, "forced to come back 4 hours to town each night and an angry crowd outside the inn gates each time. They will not let us live at the caves nor take flashlights." The threat of violence was apparently pervasive. "The crowd are waiting at Anhsi 3 days from here," he noted, "whence we go to Wan Fo Hsia – the smaller group" (Bowie 1966, p. 128).

In describing his time at Wanfoxia, the only site of survey at which Warner was actually present, Warner would ultimately put forth several dramatically different versions of what transpired. In his 1938 preface to *Buddhist Wall-Paintings*, Warner described a situation "of extreme delicacy on account of the presence

of a dozen villagers who had left their ordinary employments, some fifteen miles off, to watch our movements and to try by a thousand expedients to tempt us into a breach of the peace which would warrant an attack or forcible expulsion from the region." According to Warner, "it took unwearying politeness in the face of nagging, treachery, and even open hostility, to avoid physical violence" (pp. xiii-xiv). In letters actually penned during his stay at the Gorge, however, Warner only noted the presence of "sulky villagers" and an "egregious" \$200 fine levied by the local magistrate upon his carter, "whose horse is said to have eaten that amount of young wheat" (Bowie 1966, p. 129). Seemingly reinforcing these impressions of only modest tribulations is Warner's 1926 letter to Stein. Though he begins by outlining, in great detail, the party's allegedly rough treatment at Dunhuang, Warner says almost nothing about any difficulties he experienced at Wanfoxia, mentioning only that they visited the Gorge "under guard" (Warner 1926b).

It is, however, the expedition's treatment at Dunhuang that is most associated with Warner's name in China. For the life of him, Warner simply could not understand what he may have done wrong on his earlier visit to elicit such antipathy from the locals. He told Stein that he believed he was in "particularly good odour" when he departed the caves just one year earlier. "The magistrate dined & wined me & prominent citizens saw me on my road with ceremony." Warner even confided to Stein that he had "made a point of telling the magistrate what I [had] done & also telling him that I had seen no scrolls." Thus, both the magistrate and Dunhuang's "prominent citizens" knew what he had done, and they did not seem to care. So why were his colleagues "mobbed at Tun Huang & forbidden the caves" upon their return, and why did they have to be "protected from the populace"? Though he and Jayne "searched our souls, we can find no action of ours which could have excited the people." Warner's confession, repeated in various forms in other letters, appears distinctly odd in light of an earlier paragraph included in the exact same letter to Stein:

My visit had become a sort of sun myth. They showed Jayne whole hillsides from which I was said to have blasted the chapels. There had been a drought & a partial famine for which I was held responsible and my flash-light photographs had gravely offended the Gods. So far as the truth can be pried out my modest tls. 75., presented to the priest, had grown to \$100,000. ... Your visit & Pelliot's & mine were by this time grown into huge bandit expeditions & all foreigners were suspect. [Warner 1926b]

In other words, Warner knew exactly what had happened. The peasants of Dunhuang – stricken by a famine, starving, and mired in poverty - had channeled their frustrations toward Warner's blasphemous activities at the Thousand-Buddha Caves, still an active site of worship for them. Warner, it seems, was right to assume that Stein was liable to "blame me for lack of tact & for making foreigners unwelcome in Western Kansu." For Stein had long ago made careful note of the world of difference that obtained when conducting excavations at long-abandoned sites of Buddhist worship in Muslim Xinjiang versus those in China proper, where the Buddhist gods still claimed the pious attentions of their flocks. In the eyes of the locals, removing previously unknown manuscripts and artwork from a secret cave library - as Stein, Pelliot, Otani, and Chinese officials had done - was simply not the same as peeling away the venerated paintings of their visible and public gods.

Warner, the art historian from Harvard, could not publicly admit that one of the first American expeditions to Dunhuang had been thwarted by a bunch of hungry, superstitious peasants. Far better if he could blame an insidious Chinese conspiracy, fanned by the flames of "blind" post-May 30th nationalism. Mainland Chinese historians, however, intrigued by the "peasant mobs" described by Warner, have long been permitted – in accordance with the dictates of Marxist scholarship — to embrace these "organic protectors of China's national heritage" (Liu and Meng 2000, p. 119), so long as they were glossed in a nationalist light. This impulse to interpret the fate of the second Fogg Expedition within a nationalist framework, first evident in Warner's temporal manipulation of the May 30th incident, gained a second lease on life in 1987, with the publication of William Hung's memoirs. In 1978, Hung (Hong Ye 洪業), Dean of Yenching University 燕京大學 at the time of the second Fogg Expedition, revealed to his biographer that he had been responsible for the expedition's tribulations at Dunhuang and Wanfoxia. To hear Hung tell it, the Chinese interpreter from Warner's first expedition, Wang Jinren 王近仁, came to see him one night after he learned that Warner had returned to China and was planning a second trip to the northwest. After hearing what Warner had done the first time around, Hung sprang into action:

He instructed Wang Chin-jen to go ahead with the trip and act as if nothing was happening. The next morning, Hung went to see the Vice Minister of Education Ch'in Fen [Qin Fen 秦汾], who took immediate action. Ch'in sent a telegram to every governor, district magistrate, and police commissioner along the way to Tun-huang, saying that very soon, a delegation from a great institution

in America would be coming for archaeological study. He instructed the local authorities to provide these friends with ample protection and courteous treatment, but on no account allow them to touch any historical relics. [Chan 1987, p. 114].

A close reading of Chen's diary, to which we will turn in a moment, appears to confirm Hung's claims. During a conversation with the local police warden of Dunhuang, Chen was told that "the offices of the Defense Commissioner and Circuit Intendant both have multiple secret orders (dieyou miling 疊有密令) that compel them to act in such a manner" (Chen 1926, p. 92). Thus, Hung clearly managed to get the Vice-Minister to send out the telegram in question. But was Hung moved to action purely out of selfless, patriotic motives? Just as Warner managed to portray his acute humiliation as one of the first casualties of Chinese nationalism — rather than ignorant peasants - there is reason to suspect that Hung, too, may have engaged in precisely the sort of rhetorical sleight of hand as did his erstwhile nemesis. The only difference was that Hung was claiming a retroactive role for himself as a champion of Chinese nationalism, rather than (as Warner depicted himself) its victim. As a self-proclaimed "latter-day Confucian," Hung would have been just as loath as Warner to give any credit to the superstitious peasants of Dunhuang for foiling the American Goliath.

The key to unraveling the seductive logic of Hung's narrative lies in the recognition that the real Chen Wanli bears no resemblance whatsoever to the slanderous profile that Warner tried so hard to foist upon him. To grasp the implications of this for our understanding of William Hung's motives, we must first prove that Chen was, in fact, not the spy of Warner's vivid imagination. To do so, we need turn no further than the opening lines of Chen's supposedly "slanderous book," his *Diary of Westward Travels*:

In the spring of 1925, thanks to the introduction provided by Mr. [John Calvin] Ferguson and the generous assistance of [Langdon] Warner and [Horace] Jayne, I received the opportunity to accompany the members of an American archaeological expedition to Dunhuang in order to conduct the first-ever on-site survey for my university's Graduate School of Sinology and its Committee on Archaeology. For me, it was an unforgettable trip that I had longed to undertake for more than a decade. Even though [our time at Dunhuang] lasted less than three days, the joy and happiness I experienced are simply indescribable. [Chen 1926, p. 1]

Nowhere in his diary does Chen betray even the

slightest knowledge of a plot to sabotage the expedition, even though he prepared his diary for publication within a political climate that would have made it quite advantageous for him to do so. Moreover, at various points throughout the diary, Chen refers to his American colleagues as his "friends," and on one notable occasion even expresses "deep remorse" for failing to protect his "friends" from "several hours of terror" brought about by "greedy" and unruly peasants in southeastern Gansu (p. 39).

Perhaps the clearest indication of Chen's pro-American sympathies, however, is to be found in his numerous expressions of regret at his inability to fulfill the scientific mission entrusted to him by his colleagues, both American and Chinese. Upon arrival at Dunhuang, Chen writes that it is "not without regret that I will now have to cancel entirely my original plans to carry out a survey of the Western Lake region near the village of Yangguan" (p. 89). When his time at the caves was cut short after less than three days by Jayne's decision to return to Anxi 安西 and intercept Warner before he reached Dunhuang, Chen notes how he lost out on the chance to visit some fifty remaining caves. He also ran out of time to return to numerous other caves that he had hoped to photograph. All this was "truly cause for enormous regret" (p. 94). On his return to Beijing, Chen notes that all his friends "regarded my experience as an impressive journey." In his own eyes, however, the "lack of any accomplishments whatsoever" instead filled him with "great shame and a sense of guilt" (p. 134).

Thus, when authorities at Peking University expressed shock and surprise at the obstruction of the expedition at Dunhuang, they were not — as Warner angrily asserted - engaged in a "masterpiece of shameless evasion" (Bowie 1966, p. 128). Quite the contrary: for Chen and his Chinese colleagues, the expedition's severely circumscribed stay at Dunhuang was every bit as much a professional tragedy as it was for Warner and the Americans. And while Chen and his university peers readily identified Warner as the chief cause of the expedition's troubles — a fact privately conceded by both Warner and Jayne themselves - they did not blame Warner for his role as a lightning rod. Gu Jiegang 顧頡剛, one of the most famous intellectuals of the day, wrote in his preface to Chen's diary that "the malice of the locals toward Westerners" was an "enormous cause for regret" (Chen, 1926, p. 3). But both he and Chen went out of their way to make it clear that the only people who should be held accountable for what had transpired were the ignorant residents of Dunhuang —not Warner. Reflecting on the considerable damage visited upon the caves by the residence of White Russian soldiers in 1921, Chen expressed befuddlement toward the reception of the expedition just four years later. "I simply cannot understand," Chen wrote, "how the people of Dunhuang, having exhibited such startling stupidity toward the activities of the Russians, could then refuse to countenance Dr. Warner's westward travels while also preventing Dr. Jayne and the rest of the party from residing at the Thousand-Buddha Caves" (pp. 144–45).

Other than the peasants of Dunhuang, the only other person singled out for censure in Chen's diary is Abbot Wang 王道士, the long-time guardian of the Thousand-Buddha Caves, who had discovered the hidden cave library a quarter of a century earlier. "The Thousand-Buddha Caves are partitioned into three stories," Chen wrote in his diary. "The bottom story includes the residence of Abbot Wang, who has unlawfully sold (daomai 盜賣) antiquities for more than a decade now." Chen learned that Wang, who had made himself scarce during the expedition's stay at Dunhuang, was said to be suffering from an "ailment of the mind" (jingshen bing 精神病). When a temple attendant told Chen that such rumors were false, however, Chen speculated that he was probably just hiding out in order to "avoid severe punishment at the hands of the officials" (p. 96). In Chen's mind, those who sought to purchase such artifacts — presumably for the more lofty purpose of study, display, or transfer to other educated elites – bore no responsibility for the transaction. Their motives, if not always their means, could be understood and respected by other cosmopolitan savants. And yet, to judge from sentiments expressed in Chen's diary, it seems that those who sold items whose true aesthetic or intellectual value was merely incidental to the pursuit of material profit were indeed guilty of "theft," for they had stolen cultural and intellectual treasures away from those most qualified to appreciate them. And, since motive, education, and social class weighed far more heavily on Chen's mind than did means of acquisition or national identity, the attachment of an unsavory label to Warner's actions would reflect just as poorly on Chen himself, whose mission was to mimic and learn from the Americans, not to spy on them.

The realization that Chen Wanli was not the spy of Warner's imagination puts the "patriotic" actions of William Hung in a radically different light. After all, if Chen was not a spy, then Hung is no longer simply the saboteur of Langdon Warner and his American accomplices. He also becomes the saboteur of the first mission to Dunhuang that included a Chinese scholar from the eastern seaboard, at a time when warlord politics and bandit infestations made such a trip exceedingly difficult to undertake. No wonder Hung chose to wait for more than fifty years and the death of

Chen Wanli before revealing his role in frustrating the long-cherished ambitions of his crosstown colleague! Previous scholarly treatments of the second Fogg expedition have all acknowledged that both Chen and Hung were intimately involved in Warner's fate, thus marking a dramatic shift from earlier foreign expeditions to China's northwest, which eschewed Chinese scholars from the eastern seaboard. But since these scholars did not know that Chen Wanli was also a staunch friend and sympathizer of his American colleagues, Chen and Hung have found themselves habitually placed in the same historiographical camp: as representatives of the first generation of Western-educated Chinese nationalist scholars, eager to reclaim for China what had long been regarded as the imperialist prerogatives of the foreigners.

How, then, are we to make sense of Hung's actions, which nearly derailed the career of a man who himself might otherwise have become a hero of the nascent Chinese nationalist intelligentsia? The most cynical explanation might be found in the knowledge that expenses for Warner's expedition were drawn from the estate of aluminum magnate Charles Martin Hall. Funds from this estate also endowed Harvard's newly founded Yenching Institute for Asian Studies, along with much of the operating costs of Yenching University itself — where Hung held his position as Dean. Hung's biographer reports that John Leighton Stuart, the principal of the university and Hung's boss, "was perplexed and angered to learn that Warner had been in close contact with the government-run Peking University without Yenching's knowledge. Warner had evidently decided that if Harvard must affiliate with a Chinese institution in order to partake of the Hall estate, it should be a prestigious national university instead of the missionary-ridden Yenching" (Chan 1987, p. 115). Stuart apparently then discussed Warner's betrayal with Hung, who, just days earlier, had asked the Vice-Minister of Education to send out a telegram barring the Americans from touching any historical relics. Though Hung is careful in his memoirs to claim that he visited the Vice-Minister of Education a full two days before Warner's defection to Peking University became known at Yenching - thereby assuring the integrity of his motives — we have only Hung's own words to serve as the basis of such a timeline.

Moreover, such an explanation still fails to answer the most obvious follow-up questions. Would Hung have felt similarly moved to obstruct the Warner expedition had the Americans selected a Chinese scholar from Yenching University to accompany them, rather than from Peking University? And if petty institutional rivalries were beneath Hung, could he not simply have asked Vice-Minister Qin to despatch a second telegram to officials in northwestern Gansu,

once he learned that an earnest Chinese scholar had indeed been attached to the expedition? Why let a budding Chinese scholar and his esteemed colleagues at Peking University invest in the long-term success of a mission doomed from the outset, unless spite and jealously were involved? Was Hung a grandmaster of the nationalist chessboard, sacrificing an unsuspecting Chinese pawn in exchange for the checkmate of an American king? Maybe, maybe not. The most charitable explanation, the only one in which Hung emerges as anything other than a sore loser or a nationalist mastermind, is this: perhaps his goal was only to prevent the removal of historical relics, but otherwise permit the benign on-site study of artifacts, steles, and cave murals.

After all, the telegram bearing Hung's imprint – admittedly known to us only through Hung's own summary of its contents - said nothing at all about restricting either the amount of time or means of access that would be allotted to the expedition at Dunhuang and Wanfoxia. It merely called upon local officials to prevent their guests from touching anything of historical or cultural value. In other words, Hung's telegram, if read as he actually portrayed it half a century later, seems to suggest that the Americans (and Chen) should still be free to look around, take notes, and procure photographs for as long as they wished. The decision to restrict the expedition to three days at Dunhuang and one week at Wanfoxia - and in neither case permit residence at the caves — appears to have been made on site in northwestern Gansu, in light of fluid conditions on the ground.

With this in mind, perhaps it is still possible after all to grant Hung the benefit of the doubt. Regardless of the judgment we ultimately pass on William Hung, however, the foregoing analysis has made one thing clear: the most important factors leading to the dubbing of the second Fogg Museum expedition to Dunhuang as a "fiasco" are to be found in local actors and events at Dunhuang, not in Beijing. Those in Beijing were merely responsible for sabotaging Warner's "Plan A": to fill the halls of the Fogg Museum with cave murals and Buddhist statuary from northwestern Gansu. It was those in Dunhuang who were responsible for "sabotaging" Warner's "Plan B": to spend a minimum of three months' residence at the Thousand-Buddha Caves, where the expedition hoped to produce a comprehensive record of its disintegrating aesthetic bounty through photographs, sketch renditions, and reproductions of mural inscriptions.

In order better to understand what really happened at Dunhuang, let us now take a closer look at the diary of Chen Wanli, who, unlike Warner, expressed no inclination to impugn his foreign colleagues. On

May 1, the vanguard party, led by Horace Jayne and including Chen, reached Suzhou 肅州, the administrative seat of the prefecture governing Dunhuang. Jayne and Wang Jinren, the party's Chinese translator, paid a cordial visit to Wu Jingshan 吳靜山, the Defense Commissioner whom Warner had cordially dined with the previous year. Jayne later told Chen that he had broached the question with Wu of removing wall paintings from the Thousand-Buddha Caves, but that Wu would not accede to his request. While still in Suzhou, Chen also met a man named "Old Zhou." A carpenter by trade, Old Zhou told Chen that Warner had hired him the previous year to help him conduct excavations at Khara-khoto and Dunhuang. At the latter site, Zhou claimed, "Warner stayed for seven days and paid the Daoist monk seventy silver liang in alms." According to Old Zhou, Warner then "used calico and a type of gum paste to remove more than twenty wall paintings and ship them to Beijing." Old Zhou said that he himself had done most of the work, a claim seemingly corroborated by Jayne's decision to hire Old Zhou again for the present expedition (Chen 1926, p. 81).

By May 15, the party reached Anxi, the last major stop before Dunhuang. The local magistrate, a man by the name of Chen Zhigao 陳芷皋, held a feast for the members of the expedition and insisted they spend the night at his lodgings. Three days later, Magistrate Chen and Defense Commissioner Wu, who had accompanied the party from Suzhou, sat Jayne down for a frank talk. An hour later, Jayne came to Chen and told him that "after we reach Dunhuang, he will go back to Suzhou with [Wang] Jinren to stop Dr. Warner from proceeding westward. The reason is because after Dr. Warner peeled off wall paintings from the Thousand-Buddha Caves last year, the people became quite agitated, and it is feared that further complications may arise on the current trip." On May 18, the party entered Dunhuang County under the escort of Defense Commissioner Wu's soldiers. Though Chen now knew that Warner would not be permitted to return to Dunhuang, he did not seem to think that this would in any way impact upon his own work at the caves. "We are now only seventy li away from Dunhuang," Chen wrote in his diary that night. "The Thousand-Buddha Caves of my many dreams these past few months is about to burst into reality. I am thrilled beyond all reckoning" (p. 88).

The events of the next day, May 19, would do much to temper Chen's enthusiasm. After calling upon Yang Yiwen 楊繹聞, the newly appointed magistrate of Dunhuang, Chen, Wang, Jayne, and Alan Priest (a tutor in fine arts at Harvard) proceeded to Yang's yamen to discuss the work they hoped to accomplish at the caves. They spoke of their desire to take

photographs, but "achieved no results whatsoever" (haowu jieguo 毫無結果). Later that same afternoon, the members of the expedition were called in to an even larger meeting, where they found waiting for them four officials, two heads of the local chambers of commerce and education, and seven or eight representatives of various other interest groups in Dunhuang. Jayne opened the deliberations by saying that "he had originally planned to peel off a portion of the wall paintings, ship them to Beijing, and have them displayed there for the convenience of Chinese and foreign scholars who wished to conduct research on them." According to Chen, Jayne "mentioned that he had discussed this idea with [Gansu] Governor Lu [Hongtao], but it did not meet with his approval. Therefore, he now wanted only to take photographs, and hoped that those present would understand and grant ample time to accomplish this task" (pp. 88–89).

Their hosts responded in turn. Chen records only a summary of what was said. After Warner removed "more than twenty wall paintings and several Buddhist statues," Chen recounted, "the local people went en masse (difang renmin qunxiang 地方人民群 向) to the magistrate to question (jiewen 詰問) him about this matter. Then, at a temple meeting this year, another person had made accusations (jieze 詰 責) against Abbot Wang." As a result, even with an armed escort, "there is a fear that it might prove impossible to guarantee our safety." As for setting up camp at the caves, permission for such a provocative move could not possibly be granted. At most, the expedition would be granted no more than two weeks with which to conduct work at the caves, but they would need to travel back and forth from their lodgings each day, wasting several hours in daily transit. Chen's colleagues, "having nothing else to discuss, promised to respect each stipulation and promptly took their leave." Apparently, permission to photograph the caves was granted, for both the Americans and the Chinese would take many. After this deflating meeting, Jayne made up his mind not to spend the full allotment of two weeks at the caves, reasoning that Warner could not possibly be stopped in time unless they departed on the afternoon of the third day (p. 89). Why Jayne could not simply send one or two members of the expedition back to Suzhou to intercept Warner-as originally planned-is not clear. What is clear is that the decision to spend less than three days at the caves was made by Jayne. It was not the decree of the local Chinese officials, who were prepared to grant him five times that length.

On the following day, the local police commissioner privately told Chen even more about the delicate situation with the peasants. According to this man, when the previous magistrate was transferred from his post the year before, he made it no further than the outskirts of town when suddenly a group of local people "detained" (jieliu 截留) him, declaring that they would not release him until he "returned those wall paintings peeled away by Warner." The police commissioner, then serving as an escort for the departing magistrate, "raced back to Dunhuang and called upon the local gentry. Only then was the situation resolved." As a result, the current Magistrate Yang "was taking this present expedition by the foreigners extremely seriously" (p. 92). In Warner's version of events, narrated in a letter to Stein in 1926, his former "friend the magistrate had been expelled for allowing me to make off with untold treasures. His successor had been expelled for failing to produce me dead or alive & the present man was of course trembling in his shoes" (1926b). Warner, of course, was flattering himself to think that he might be the chief determinant in the near annual rotation of Chinese officials in Gansu. More to the point, however, Warner again fails to acknowledge the legitimate grievances of the peasants of Dunhuang — whose religious icons he had defiled — preferring to chalk up his troubles to Chinese perfidy and xenophobia at the highest levels.

From May 21 to 23, Jayne, Chen, and the rest of the vanguard party visited the Thousand-Buddha Caves. Their entire security detail appears to have consisted of one man, Lieutenant Zhang 張哨官. In Cave 120,2 Jayne pulled Chen aside and told him that this was the cave from which he had originally planned to remove a wall painting. Elsewhere, Chen noted the considerable damage enacted on some of the murals by exiled White Russian soldiers, whom Chinese officials had interred in the caves back in 1921. At Caves 139, 141, 144, and 145, however, Lieutenant Zhang made a point of showing Chen the exact locations from which Warner had peeled off several wall paintings the year before. In his diary, Chen describes these as "those that were peeled away and stolen" (boli giegu zhe 剝 離竊去者), though it is not clear here whether he is merely recording the words of Lieutenant Zhang or passing his own judgment on what Warner had done (pp. 92-93). Either way, this notation marks perhaps the first time ever that an unambiguously negative Chinese verb or adjective was used in print to describe the activities of foreign scholars in northwest China (Jacobs 2010).

In all, Chen, Wang, and the Americans spent just two days and two hours at the caves, all of it quite uneventful. As they departed the caves for the last time, Daniel Thompson, an art tutor at Harvard, told Chen about the enormous sum of money that the sponsors of the expedition had invested in their expedition. Calculating their expenses purely in terms of the amount of time they had managed to spend at

the Thousand-Buddha Caves, Thompson concluded that the expedition had spent approximately forty cents per second, and even more if calculated on the basis of individual photographs (p. 94). Clearly, we can see how Warner must have felt an overwhelming sense of pressure to absolve the expedition of all blame for why it had failed to achieve any of its goals. Presumably this is why Warner stuck so tenaciously to his insistence that the Americans "had been mobbed at Tun Huang & forbidden the caves," when in fact no such thing had happened. With only the "utmost difficulty," he later claimed, Jayne had "persuaded the officials to allow them to visit the chapels 3 days in succession" (Warner 1926b), when in fact Jayne had been offered up front two weeks at the caves.

Elsewhere, Warner felt compelled to add the menacing specter of "an angry crowd outside the inn gates each time" (Bowie 1966, p. 128). Yet unless the diary of Chen Wanli is a complete fabrication, the only mobs that greeted the Americans at the gates of their inn at Dunhuang were those desperate to sell what remained of Tang manuscripts from the not-sosecret cave library. On the contrary, the only person who experienced the threat of real physical violence was the magistrate who had condoned Warner's removal of some twelve to twenty wall paintings in the first place. While his successor may indeed have been "trembling in his shoes," it was only because Warner had helped turn his own constituents against him. And as for the intimidating bodyguards and constant surveillance? The lonely Lieutenant Zhang, who ultimately answered to Warner's friend Defense Commissioner Wu, stands out in Chen's account only for pointing out the scars of Warner's infamous handiwork. On the final day of the expedition's stay at Dunhuang, Zhang even made a special trip to the inn where Chen and the others were staying, to chat and bid farewell (p. 94).

By May 26, the vanguard party was back in Anxi, and soon after Warner makes his first appearance in Chen's diary, negotiating with local officials and representatives for an extended stay at Wanfoxia. During multiple meetings on June 1 and 2, Warner demanded a month, but a local representative countered with an offer of only three days. It was at this point that Defense Commissioner Wu rallied to Warner's defense, helping to broker a compromise of one week, with the promise of additional deliberations if the Americans still felt there was a case to be made for further work. Again, Chen makes no mention of Warner's "dozen villagers who had left their ordinary employments, some fifteen miles off, to watch our movements and to try by a thousand expedients to tempt us into a breach of the peace which would warrant an attack or forcible expulsion from the region."

And there is certainly no sense in Chen's account that "a single slip, even an angry look, would probably have brought the whole hive about our ears and might well have cost us our lives" (Warner 1938, p. xiv). And yet Chen was clearly not averse to describing such scuffles with the locals when they did in fact occur: a few months earlier during the vanguard party's time in Jingchuan, a village in southeastern Gansu, Chen went into great detail in his diary to describe the threatening intimidation tactics of "greedy" peasants, along with his own personal guilt at failing to protect his American "friends" from several hours of terror. According to Chen, nothing similar occurred at Wanfoxia. On the contrary, Chen writes of how the local magistrate of Anxi, Chen Zhigao, personally assisted in helping to compile register numbers for some of the inscriptions he had copied, thus "incurring much of the rigors of travel" (p. 101).

The only part in Chen's diary which might arouse the suspicion of the historian concerns his failure to mention the May 30th incident in Shanghai, even though he includes multiple references to other current events elsewhere in China in the weeks and months afterward. According to Warner, news of the Shanghai shootings reached the party soon after their arrival at Wanfoxia and coincided with Chen's sudden departure to Beijing on the pretext of an ailing grandmother. Though Chen does not refer to the May 30th incident in his diary – nor to an ailing grandmother — he does offer the following account of his sudden departure from the party. On June 5, right about the time news of May 30th incident would have reached such a remote site in the northwest, Chen describes an after dinner discussion among himself, Jayne, Priest, and Wang. According to Chen, all four men thought it best to return to Beijing forthwith, owing both to the "antipathy of local villagers toward foreigners and the fact that the magistrate himself must return immediately to the city tomorrow." Only Warner, Chen informs us, was "determined to stay here another day" (p. 101). As a result, Chen made up his mind to leave the next day by himself for Anxi and thence Beijing. That very same night, he came down with a severe case of near debilitating indigestion, the symptoms of which he describes in graphic detail over the next several weeks.

Other than Chen's glaring omission of his receiving news of the May 30th incident, there seems to be little else to suspect in his account. It makes perfect sense to think that most members of the expedition, both American and Chinese, would have regarded news of the Shanghai shootings as a clear indication that it might be wise to remove themselves from a Chinese district in which they were already regarded with considerable suspicion by the local peasants — even

if there is no evidence that the Americans were in danger of losing their lives! That Warner would insist on the Americans completing his hard-won week at Wanfoxia sounds most plausible, especially since he had already been rebuffed at Dunhuang. And yet, faced with Warner's determination to remain in hostile territory during a national crisis, Chen seems to have made the eminently sensible decision to distance himself from the expedition immediately and return home to his family, friends, and colleagues in Beijing, even if he would not admit to such a motive in the published version of his diary.

That Chen meant no ill will toward his American friends, however, and continued to sympathize with their scientific mission in spite of the volatile new political atmosphere, was made abundantly clear in his decision to publish his surprisingly sympathetic diary the very next year, when a riveting tale of antiimperialist sabotage might well have done far more for his political and professional prospects. Though both Warner and Chen certainly prioritized their own professional interests over that of their international colleagues, it is worth noting that only Warner would eventually deem it necessary to repeatedly disparage the name, reputation, and integrity of his foreign collaborator in a public arena. We cannot deny, of course, that if Chen and his home institution, Peking University, had actually been forced, like Warner, to expend enormous sums of political and economic capital for the expedition's passage to northwestern Gansu, it is possible that they, too, facing similar pressures of accountability, might have sung a radically different tune in the years after the "fiasco" at Dunhuang.

In the final analysis, we cannot look for the causes of Warner's frustrations regarding the fate of the second Fogg Museum expedition to Dunhuang in the explanations that Warner himself bequeathed to posterity. Nor can we rely solely on the claims of educated foreign and Chinese elites in Beijing or abroad. Regardless of any concessions Warner may have been forced to make on the eastern seaboard in deference to Chinese "winds of nationalism," the fact of the matter is that he - and many more foreign explorers after him - was still welcome to travel to sites of historical and aesthetic interest along the furthest borderlands of China. As seen in Chen's diary, the Chinese and American members of the vanguard expedition to Dunhuang were welcomed warmly at every official stop on their itinerary, and treated with the utmost courtesy and hospitality.

Warner's great misfortune was not that he attempted to undertake an expedition to China while nationalist indignation against foreign imperialism had peaked. The true source of his misfortune was far less abstract. By turning the peasants of Dunhuang against the local magistrate, Warner broke the unspoken compact that had long existed between late imperial Chinese scholar-officials and their social counterparts from the Western world. In sum, foreign savants were to be treated the same as any other cosmopolitan Confucian elite from inner China might expect to be treated, so long as their actions did not interfere with the governing duties of the host. Though Warner portrayed his presence in northwestern Gansu as marred by an unrelenting series of attempts to inflict public humiliation and bodily harm on the Americans, what actually occurred appears to be have been precisely the opposite. It was, in fact, the local Chinese officials who had been publicly humiliated in front of their own peasants and forced to endure threats of physical violence, all as a direct result of Warner's presence. And yet, despite it all, they still elected to treat Warner and his party with all the pomp and circumstance that his class and occupation obligated

That Langdon Warner could not set foot in Dunhuang and the rest of the expedition not spend more than three days at the Thousand-Buddha Caves had nothing at all to do with Chen Wanli, William Hung, Chinese nationalism, the May 30th incident, or Western imperialism writ large. It also had nothing to do with a rising Chinese consciousness toward the protection of their country's cultural patrimony. It had only to do with the fact that Warner, through his own acknowledged actions, had effectively instigated a peasant rebellion against local Chinese authority. As a result, Warner, no matter how desirable a guest he may have appeared as an individual, was no longer someone that local officials at Dunhuang were prepared to risk their livelihood to host. With famine besetting the land and extractive measures from the warlord government on high only making matters worse, the last thing any official in northwestern Gansu wanted to deal with was a spark to fan the flames.

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Notes

- 1. Hu Tongqing (2011), a scholar from mainland China, is to my knowledge the only person who has attempted, in systemic fashion, to interrogate Warner's accusations against Chen. Though I also expressed skepticism toward Warner's claims (Jacobs 2010), this was not the chief focus of my research question.
- 2. The cave numbers given here are those used by Paul Pelliot in his Les grottes de Touen-Houang. Peintures et Sculptures bouddhiques des époques des Wei, des T'ang et des Song. Grottes 1 a 182 (Paris: Librairie Paul Geuthner, 1914), although it is not clear that they have been accurately recorded in the reported exchange. In many cases, Pelliot designates with a single number several caves, distinguishing them with a superscript letter. The present system used at the Dunhuang Research Institute assigns each cave its own number. Thus, it is uncertain which the current equivalent would be for the reported no. 120, used with superscripts by Pelliot to designate 23 different caves. The equivalent current numbers for the other caves mentioned here are: no. 139 (= current 320), 141 (= 326), 144 (= 329), 145 (= 331). Balachandran 2007 (p. 26n5), who is undoubtedly correct, identifies the cave nos. of Warner's activity on his first expedition as 320, 321, 323, 328, 329, and 335 (that is, Pelliot nos. 139, 139a, 140, 143, 144, 149). For a full correlation table of the Mogao cave numbers in all four of the systems which have been used beginning with Pelliot, see the inserted prefatory material to the Chinese facsimile re-publication of the Pelliot expedition photos (Dunhuang shiku: Bei Wei, Tang, Song shiqi de fojiao bihua he diaosu Di 1 hao-182 hao ku ji qita 敦煌石窟. 北魏,唐,宋時 时的佛教壁画和雕塑 第1号-182号窟及其它 [Lanzhou: Gansu wenhua chubanshe, 1997]). – ed.

METALLURGY AND TECHNOLOGY OF THE HUNNIC GOLD HOARD FROM NAGYSZÉKSÓS

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he Hunnic treasure of Nagyszéksós was found in ■ 1926 in a vineyard near the village of Nagyszéksós just outside of Szeged, in the Hungarian County Csongrád (Fig. 1). With the exception of a few pieces - such as the cup and the fragmentary bowl which are now in the Hungarian National Museum in Budapest - it is now stored in the Móra Ferenc Museum in Szeged. Up to now the hoard has never been on display and no technical description exists. Part of it was shown to the public on the occasion of exhibitions, for example, in the exhibition "Germanen, Hunnen und Awaren, Schätze der Völkerwanderungszeit" in Nuremberg in 1988 (Kürti 1988). The exhibition "Hun Gold" was organized in the Móra Ferenc Museum in Szeged in 2003 (Kürti 2003). Some of the pieces, in particular those of Alanic tradition, were on display in the exhibition "Attila und die Hunnen" in the Historisches Museum der Pfalz in Speyer in 2007 (Kürti 2007, fig. p. 261). The most complete work on the hoard was published by Fettich (1953). The finds consist of 157 golden objects and fragments, many of which are decorated with inlays of gemstones - such as garnet, rock crystal, possibly amethyst and of red glass. Among the finds there are also lumps of metal looking like molten silver. During the emergency excavation carried out by Ferenc Móra

Fig. 1. Map showing the location of Nagyszéksós.



The Silk Road 11 (2013): 12-35 + Plates I, II

no human remains were identified, but there was a large number of very precious and symbolic gifts. The complex of Nagyszéksós is most probably what is left from the offerings on a funerary pyre erected for the death of a king — who has been tentatively identified with Uptar — or at least for the death of an important member of the royal family. Uptar/Oktar was, together with Rua/Ruga, the predecessor of Attila, and if this identification is right, the finds have to be dated to around 430 CE (Bóna 1991, pp. 46-60). Funerary pyres accompanied by ritual banquets were the special prerogative of males of the royal family or, at least, of males of very high rank, while socially important women were buried without the ritual burning of gifts on pyres (Bóna 1991, p. 149).

It is also important to mention that when Móra arrived on the site, he discovered that the children of the village had been exchanging shiny metal pieces for apples and slices of pumpkin pie for quite a while (Kürti 1988). The 157 fragments of objects recovered by Móra during his excavation are therefore apparently just a small part of a much larger hoard. A large number of objects belonging to the hoard presumably found their way to the international market and are now on display in the cases of several large museums in the world (see for example Bóna 1991, p. 162, Fig. 63 and p. 261, n. 63).

This paper presents the results of ca. 280 X-ray Fluorescence Spectrometry (XRF) analyses and 290 examinations by different magnification devices and digital microscope carried out on most of the objects belonging to the Nagyszéksós hoard. The only pieces which have not been analysed by XRF are ca. 10 very small fragments of gold sheet; however they have been examined with the microscope to try and find out to which piece they belong. In some cases this could be done with a high degree of certainty. The aim of this research was to determine the composition of the gold and of the silver alloys and to identify the manufacturing technique. A further intention was that of grouping the pieces belonging to the hoard according to their composition and manufacture,

and to attempt a distinction between the different metallurgical traditions of the artisans who created the various ornaments.

Xiongnu and Huns, short historical background

Around 370 CE, the nomadic tribes from the vast plains of Central Asia, known in Europe as the Huns, crossed the River Volga, and invaded the territories of Alans and Goths. The two populations were easily defeated and subjugated. In 425 CE the Huns founded a kingdom in the Pannonian Plain (today's Hungary and part of Romania) and settled down in the area between Tibiscus/Tisza-Cris/Körös and Maros, where they had their capital, made of tents around the ordu, i.e. the fortified king's camp. From here they attacked the Eastern Roman Empire in Thrace, Cappadocia, Armenia and Syria. After a treaty, they became mercenaries of both the Western and the Eastern Roman Empire, and of the Goths, and greatly increased their number by incorporating more ethnic groups such as Gepids, Sarmatians, Scirii and Rugians.

The origin of the Huns and in particular the question of their possible relationship to the Xiongnu have been the subject of yet unresolved scholarly dispute. The earliest mention of the Huns in Western classical texts is found in the Periegesis of Dionysius (730). The text is dated to the 2^{nd} century CE, and lists the Huns together with Skythi, Caspii and Alani as tribes living around the Caspian (Müller 1861, p. 149). Dionysius' contemporary, the geographer Claudius Ptolemy mentions the Huns as a Sarmatian population in his Geographia (III, 5, 25). The Huns conquered various tribes, among them the Alans and Aorsi and Germanic Gepids, Goths and Skires living in the Aral and Black Sea regions. The population of the Hunnic Kingdom spoke many languages, and the names of the warriors have Hunnic, Germanic, Latin, Iranian etc. origins (Mänchen-Helfen 1973, p. 382).

The Xiongnu founded a steppe empire on the northern borders of China around the end of the 3rd century BCE (see Di Cosmo 1999; 2011). At its greatest extent, it controlled territories across much of Inner Asia, but had fragmented by the beginning of the Common Era. Some scholars have challenged the commonly held identification between Xiongnu and Huns, because the Xiongnu apparently spoke a proto-Siberian language that has never been encountered or identified in Europe (Vovin 2000). However, there is very little evidence about their language; in any event, there is good reason to think that the Xiongnu polity was a multi-ethnic one. While much has been written about a connection between the names Xiongnu and Huns, the chronology and direction of transmission are at very least complex, and it is difficult to prove that the sources in various languages and spread over several centuries are referring to the same nomadic peoples (see Atwood 2012 for the most recent and detailed analysis).

Among the numerous Hunnic-related tribes there would seem to be many aspects of shared material culture, religion, customs, rituals and way of life (Grignaschi 1980; Kradin 2005). Yet, to what extent do certain shared elements - such as the bow, the golden diadems worn by women, or the so-called nomadic mirrors that were adopted as well by Alans, Gepids and Goths - prove an association between Xiongnu and Huns? (See Tomka 1994, 29-34; 2008; Brosseder 2011.) Some have cited the evidence of large bronze cauldrons, apparently used for funerary rituals, which have been found all across the huge area extending from the Great Wall to the Black Sea and the Pannonian Plain. However, as Ursula Brosseder has recently emphasized (2011, p. 415), "the attempt to prove centuries' long connections by means of the category of cauldrons is methodically not convincing."

Archaeological finds, in particular coins, demonstrate that there was an early trade route through the territories of these tribes from the northern Pontic area to Central Asia, China and India, dated to at least the 2nd century BCE (Mielczarek 1997; see also Polos' mak et al. 2011). Several classical and late antique texts (Josephus VII, 7, 4; Jordanes XXXIV, 178; Strabo 23, XI, 8) also mention the important trade route from the Caspian coast to the Sea of Azov, Armenia, Media, "Babylonia" and to India. In the Pannonian Plain, near the ordu, gold coins of the Indian king Kumaragupta (414–455 CE), the Sasanian king Bahram V (420–438) and a Kidarite ruler have been found. That the "Huns" from Central Europe had wide connections extending across Central Asia cannot be doubted. The different metallurgical traditions shown by the finds from Nagyszéksós partly reflect the multiple ethnicities of the "Hunnic Kingdom."

Methods of analysis

All pieces belonging to the Nagyszéksós hoard, with the exception of a few very small fragments of sheet metal, have been non-destructively analysed by X-ray fluorescence spectrometry (XRF). This is a well-established method and it has been applied for several decades in archaeology (Hall et al.1973; McKerrell 1974; Hackens et al. 1977; Helmig et al. 1989) as a non-destructive analysis that can simultaneously determine the presence of over thirty elements without touching the finds. This kind of analysis offers a good performance, particularly with precious metals, as they do not alter, and it does not require drilling as is the case with other methods such as Atomic Absorption or Inductively Coupled Plasma

Spectrometry. The measurements are performed by illuminating a small, flat and cleaned area with x-rays for a short time (typically 5–10 minutes), but the measurement can also be longer, if required. In the case of small objects or small details the analysed area can be reduced to 1mm. The measurements are accomplished at a fixed angle and from a constant distance from the sample. At least three readings have been obtained for confirmation in case of unclear results.

XRF is a surface analysis method, and we have to keep in mind that the surface composition of most ancient objects is altered by oxidation and corrosion. Even in the case of precious metals, the less noble elements in the alloy can leach out. On the surface remains an enriched metal that is much purer than it was originally. The surface is not always representative of the whole object and silver and copper can be underestimated. The only way to solve this problem would be the abrasion of the surface, but this was obviously not possible. Nevertheless, in the case of the Nagyszéksós hoard – found several decades ago and repeatedly cleaned — it has been mostly possible to find a spot which showed traces of abrasion and the measurement has been performed on the cleanest areas. The problem of the presence of molten silver on the surfaces could also be avoided by checking the metal under the microscope before the measurement. In several cases, in particular with burnt pieces, the alloy was altered and the results could not be improved even when the analysis was repeated several times on different areas. The uncertain results are evidenced in italics in the Table of Results (p. 29 below).

Past experience has shown that a wide range of elements can be simultaneously quantified with a high degree of precision if proper standards and some precautions are used (cf., for example, Hahn-Weinheimer et al. 1995; Lutz et al. 1996). The comparison of previous analyses, carried out by AAS and XRF on the same samples, demonstrated that over 90% of the XRF results were well within + 20% of the corresponding AAS results. Several different standards, each with a different composition, as similar as possible to the alloys in use in antiquity, and expressly produced by AGM Archeoanalisi for the analysis of ancient metal alloys, have been employed as standards for the measurements. They represent an essential tool for a precise evaluation of the results and greatly improve the performance of the XRF equipment.

The transportable device can be taken to the object — virtually anywhere — and can perform analyses *in situ*, even on excavation. For the analyses of the Nagyszéksós hoard a transportable X-ray fluorescence equipment especially developed for the examination

of cultural heritage objects, and with a dedicated program for metal analysis, was brought to the Móra Ferenc Museum in Szeged. The same equipment was brought to the Hungarian National Museum in Budapest for the analysis of the remaining pieces of the Nagyszéksós hoard on display in Budapest, so that the same procedure could be applied. Before the analysis all objects were examined by optical microscopy to recognise possible wear traces, indications on manufacture and other working details, such as the different kinds of decorative beaded wire. A second important aim was that of finding the best spots for analysis and avoid the areas on which molten silver had dripped in the fire of the funerary pyre. In some cases the thin layer of silver alloy was not visible to the naked eye, and could be detected only after the analysis, when the silver results were unusually high, or under the microscope.

Discussion of analysis results

The analyses have shown that most of the objects are made of a gold alloy with a purity of over 90% and that around 30% have a purity of over 95% (Histogram no. 1, p. 27 below). The high silver results shown by Histogram no. 2 and in the table are due to contamination with silver from the rivets employed to attach the different parts of the ornaments or possibly from silver objects molten in the fire of the pyre. The results due to contamination are written in *Italics* in the table, so as to be clearly evidenced. These data were not taken into consideration for the statistics and for the histograms.

Silvery remains

The traces of the silver rivets or of the silver which had been utilised as backing for the garnets are relatively easy to identify, as most of them are still visible on the back of the single objects; however none of the hypothesised silver objects can be identified. The only remains are shapeless silver lumps, some of which are intermingled with semi-molten gold sheet or gold foil (Fig. 2). This seems to suggest that the silver

Fig. 2. Photo taken through the microscope showing the remains of a semi-molten gold sheet (Inv. No. 2002-21.74) in a silver lump.





Fig. 3. The largest piece of silver alloy contains 20% of copper and only traces of gold (Inv. No. 2002.21.75). This was most probably the original composition of the silver objects. This alloy could be used for vessels, boxes and mirrors.

objects were decorated with gold or had some gold details. Regrettably this makes it almost impossible to establish which kind of silver alloy was used. Most of the molten silvery lumps also contain high percentages of gold, certainly coming from the gilding or from the molten gold details. Only in a few cases, for example with the largest piece of silver in the hoard (Inv. No. 2002.21.75; Fig. 3) and with the silvery remains inside the bowl (Inv. No. 162) in the National Museum in Budapest, the gold content is quite low and the remains can give us a good idea of the composition of the original silver alloys. In both cases the silver contains 15-20% of copper. This composition was commonly employed in antiquity for silver alloys utilised to produce functional objects, for example, for vessels, boxes or small containers and mirrors (see for example Pike et al. 1997; Lang et al. 1984; Lang and Hughes 1985; Bachmann 1993; Giumlia-Mair 1998; 2000). Purely decorative objects had instead a higher purity. The silver lumps from Nagyszéksós are not large; we can therefore hypothesize that the objects were small luxury containers, vessels or even cast decorative objects such as large fibulae. The fact that they had gold plated details might confirm this tentative hypothesis, but the size of the shapeless pieces of silver and the presence of gold are the only objective clues we have.

Gold alloys

The analyses of the whole group of items from Nagyszéksós allow us to distinguish several trends in the alloying practice. In most cases the different groups of alloys also correspond to different production techniques, as shown by the examination of the

manufacturing details of the single pieces. For a better understanding of the technology employed by the artisans in the production of the objects it is important to examine the groups with similar characteristics, and produced with alloys of similar composition.

The lowest silver and copper content (around 99 -100% Au) have been determined in the torques (Inv. No. 2002.21.1), in the heavy gold buckle (Inv. No. 2002.21.2; Fig. 4) and in the many fragments of decorated gold sheets (Inv. Nos. 2002.21.76 - 2002.21.144). The choice of using very pure gold for the production of gold sheets is partly due to the properties of this extremely malleable and ductile metal that, if very pure, can be easily beaten into foils of a few microns. However in this case the sheets are relatively thick (ca. 0.05 mm). All fragments have to be defined as sheet (and not as foils), as they are always thick enough to sustain their own weight. The high purity of the gold would not have been necessary for sheets of this thickness. However, the color of the precious metal must have been an important criterion in the choice of the alloy. The surface covered by the gold sheets must have been rather large and therefore the color would have attracted the attention of the onlookers. The sheets have been utilised on the handles of daggers (for example Inv. Nos. 2002.21.34; 2002.21.35; 2002.21.153) and as decoration on flat parts of ceremonial or parade saddles. Apparently, for these representative objects, certainly belonging to an important member of the royal family, if not to the king himself, it was important to have decorations with the bright color of real and very pure gold. The same criterion must have determined the choice of metal for the torques (Inv. No. 2002.21.1) — made of a thick bar of very pure

Fig. 4. This large gold buckle (Inv. No. 2002.21.2) is made of gold of very high purity, similar to that used for the torques and the gold sheets.



gold — and for the impressively large and very heavy gold buckles (Inv. Nos. 2002.21.2, 2002.21.6), probably part of the ceremonial horse fittings or weapons of the royal personage.

It is commonly thought that the gold used by the Huns came from the molten and re-used Roman coins, received as *tributus*. Every year the Romans paid a *tributus* of 160 kg of gold coins to Ruga, and later, at the time of Attila, the *tributus* became as large as 300 kg of gold coins. These must have been the *solidi*, i.e. the gold coins introduced by Constantine in 310 CE to replace the *aurei*. In 368 the fineness of the *solidi* was increased from 95% (the fineness of the earlier *aurei*) to 99% (see for example Johns 2010); so the gold employed for the torques, the large buckles and most of the gold sheet, might indeed come from the molten Roman coins received by Ruga and Uptar.

A different class of gold alloys, with a silver content between 3 and 6% and a copper content from under 1 to around 2%, was used for a group of objects with a very distinctive cloisonné decoration (Fig. 5; Color Plate Ia). *Cloisons* are gold walls soldered on a metal sheet to form cells in which stones can be inserted. In this group of objects flat garnets are mounted in triangular or semicircular cells. The cloisonné buckles (for example Inv. Nos. 2002.21.3; 2002.21.5 and

Fig. 5. Selection of cloisonné objects (Inv. Nos. 2002.21.17; 30-33; 38-40). This group is made of gold of excellent quality with ca. 3-6% Ag and 1-2% Cu. With the addition of Ag and Cu the gold is harder and not as easily scratched. The rivets for fixing these ornaments are of gold.

2002.21.10), the fittings with gold rivets and without beaded wire decoration around the stone mounts (for example Inv. Nos. 2002.21.7; 2002.21.8; 2002.21.11; 2002.21.12, 2002.21.13; 2002.21.14; 2002.21.30; 2002.2131; 2002.21.32; 2002.21.33), and the round decoration which probably was part of a bowl (Inv. No. 2002.21.69) belong to this group. These kinds of alloys — of excellent quality — are harder than pure gold and not as easily scratched or damaged. The color is still similar to that of unalloyed gold, as the low silver content is counterbalanced by the low copper percentage. In some cases, for example in the cicada-shaped fitting Inv. No. 2002.21.30, the patterned sheets used as backing for the flat garnets can be still seen.

Cloisonné ornaments are commonly considered typical products of artisans working for tribes of Germanic origin. Several tribes who spoke some kind of Germanic language, such as the Visigoths, Heruls or Eruls, Gepides, Burgundians, Franks, Suebians, Vandals and Alamans were first subjects and then allies of the Huns (Bóna 1988, pp. 119–21; 1991; Zasetskaya 2007; Menghin 2007). Part of these tribes were pushed out of their territories and, between 378 and 406, invaded the territories of the Western Roman Empire and, in due time, caused its fall.

Among the cloisonné objects, different alloys and

technologies can also be distinguished. A group of objects shows higher contents of alloying elements and seems to belong to a different metallurgical tradition from that of the cloisonné objects just discussed. The cloisonné fitting with square end Inv. No. 2002.21.9, for example, contains up to over 8% of silver and over 6% of copper. The rivets contain over 8% of silver and over 9% of copper. This alloy is harder and more suitable for rivets, but very different from the alloy of the rivet of the eagle-head fitting, with around 5% of silver and only 0,5% of copper, or of the pointed fitting, with around 3,2 % of silver and 2,7 % of copper. In the case of the latter pieces, the alloy is very similar to that of the actual object to which they belong, and the rivets are rather soft. The larger ornaments with three round garnets (Inv. Nos. 2002.21.27 and 2002.21.28) contain much higher

silver percentages (up to almost 20%) and relatively high copper (up to 14%) and are clearly different from the alloys discussed before, but also from the alloys employed for the very similar ornaments Inv. Nos. 2002.21.25 and 2002.21.26. It has to be mentioned that

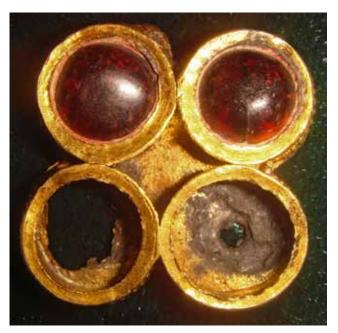


Fig. 6. This large decoration with 4 garnets (2002.21.49), and a group of other objects, seem to belong to a different metallurgical tradition. They contain higher percentages of Ag (up to 20%) and Cu (up to 14%). Many of the rivets of this group are made of silver.

the high silver and copper percentages obtained from the measurements on the back sheet of these pieces are due to contamination, while in the case of the larger pieces they reflect the real composition of the stone mounts. The stones of the smaller trefoil-shaped ornaments are cabochons, while the stones still in place in the larger trefoil-shaped ornaments are flat garnets with a round cut. Apparently the gold of the larger trefoil ornaments was diluted with some brass.

A further example of alloy with higher silver and copper contents (up to around 9% Ag and over 10% Cu) was used for the large decoration with four garnets (Inv. Nos. 2002.21.49-50; Fig. 6). Very high silver (around 15% Ag) and copper (12% Cu) have also been observed in most of the alloys of the cloisonné

studs with crescent shaped garnets (Inv. Nos. 2002.21.52-53). Possibly these ornaments were made of a much harder alloy, because they were applied on horse fittings that were actually used, and were not just representative items like many other objects of the hoard. The differences in composition are quite striking, and the manufacture is of excellent quality. For example the beaded wire is accurately worked; many details and the appropriate choice of alloys demonstrate excellent workmanship. These objects with higher contents of silver and copper therefore seem to belong to a different metallurgical tradition. Very few Germanic or Gothic gold objects dated to this period and coming from this area have been analysed,

and in general very little analytical work has been carried out on all kinds of materials dated to the first half of the 5th century CE in this region. Appropriate comparisons are lacking, but the composition suggests that the cloisonné ornaments with higher silver and copper percentages might perhaps have been produced by some of the many ethnically different tribes that moved around with the nomadic Huns as their vassals or allies.

Some gold objects from Crimea, dated between the 4^{th} and the 7^{th} century CE, have been recently analysed in the British Museum (La Niece and Cowell 2008, pp. 154–55, tab.1 and 2; Craddock et al. 2010). Their silver and copper contents are more similar to those of this group of finds. The percentages of alloying elements in the gold are rather irregular, with a very wide range of 4-30% for silver and 0.5-5% for copper. The silver content is mostly higher than the copper content, as is generally typical for ancient gold alloys.

A further difference is that the rivets for fixing the ornaments on a support — certainly made of some organic material now lost in the fire — are made of silver instead of gold as in the previous group. In the studs with crescent-shaped garnets, the head of the silver stud was flattened and polished, certainly to be used as backing for the garnet. These rivets are the only ones in the entire hoard preserved in an acceptable condition. The analysis has shown that the alloy is silver with gold traces and around 20% of copper. This alloy is quite hard and therefore very suitable for rivets.

The decorative plates (Fig. 7; Color Plate Ib) with regularly mounted rectangular stones (Inv. Nos. Fig. 7. The decorative plates (2002.21.21-24) with elon-

gated and protruding stones are considered typical for the Hunnic tradition. The alloys employed contain ca. 3% Ag and 2% Cu. The rivets are of silver, the decoration around the rim is an imitation of beaded wire (see also Fig.18).





Fig. 8. The elongated stones of some of the plates (Inv. No. 2002.21.22) seem to be of different materials. The first on the right is garnet, the second shows inclusions suggesting either imperfections of the stone or perhaps red glass, and the third has a purplish color like an amethyst. Note also the detached strip imitating beaded wire (see also Fig.18).

2002.21.21; 2002.21.22; 2002.21.23 and 2002.21.24) seem to belong to yet another group. The gold alloy contains around 3% of silver and 2% of copper, with the

exception of the rivets and the beaded wire. The plates consist of a gold sheet framed by an imitation of beaded wire (see below). Gold strips were soldered onto the plate and around the stones to hold them in place. The stones are protruding and the upper side is rounded and carefully polished. The examination at the microscope showed that different kinds of stones have been used. Plate Inv. No. 2002.21.22 was cut and shows only three inlaid stones in a row (Fig. 8), while the first on the left is lost. The first stone on the right has the dark red color of the garnet, the second shows some bubbles or inclusions in the transparent stone, and the third is very transparent and shows a very purplish colour. Decorative plates with protruding stones are considered typical of the Hunnic tradition. The examples from Nagyszéksós look very similar to the stone-inlaid plates of diadems worn by Hunnic women (see Bóna 1991, pp. 147-49), but the size and the number of inlays are different, and it would be difficult to assemble them on a diadem. Ornamental plates of this type could have been applied on saddles, horse fittings, weapons or representative belts, and it is now impossible to attribute them to a specific object.

Alanic-type objects

The plates (Fig. 9) with round or oval cabochon stones (Inv. Nos. 2002.21.41–42 and 2002.21.54–68) are considered typical Alanic ornaments (Kürti 1988; 2007). The Alans were, like the Sarmatians, a population of Iranian language (Alemany 2000) perhaps originating from the Aral region. After having been overwhelmed by the Huns, they moved to the Caucasus or joined the nomadic Hunnic warriors and fought at their side as appreciated archers and riders (Botalov 2009, pp. 140–57; Kazanski 2008, Quast 2008, p. 276). The integration was so complete that in the 4th century



Fig. 9. The plates with oval or round cabochon stones (Inv. Nos. 2001.21.41–42 and 54–68) are considered typical Alanic ornaments and were applied on a saddle and on horse fittings. The gold of this group of items contains 6–7% Ag and only very little Cu. Two groups can be recognized: one with smaller stones and a frame of beaded wire imitation and one with larger stones without a frame.

CE Vegetius mentions "Hunnorum Alannorumque natio," the "nation of Huns and Alans" (3.26). With all probability the plates with round or oval cabochon stones (Inv. Nos. 2002.21.41-42 and 2002.21.54-68) belonged to a set of ornaments for a saddle and matching horse fittings. The analysis of the alloys of these objects evidenced peculiarities that seem to indicate a different origin. They contain 6-7% of silver and only very little copper, mostly less than 1%. The cabochon stones are not garnets, but seem to belong to the family of the chalcedonies (i.e., a cryptocrystalline form of silica with many varieties: agate, aventurine, carnelian, chrysoprase, heliotrope etc.). The stones seem to have had, with all probability, a bluish colour, as shown by the few less altered examples. Only in one case the stone can be easily identified: the inlay of the small fragment with one single stone still in place (Inv. No. 2002.21.66) is clearly a cabochon cut rock crystal. Regrettably, most stones are lost and many show a whitish colour, most probably due to the exposition to the intense heat of the pyre. The low copper content suggests that this metal was present in the gold as impurity and that only silver was added to the gold or, perhaps more probably, that a silver alloy containing copper was added to the gold. The alloys are similar, but there are differences in the manufacture. The fragments can be distinguished in two groups. The first is characterised by smaller stones and by a frame of beaded wire imitation, while the second group shows larger, unframed stones.



The 23 pyramidal sequins (Inv. Nos. 2002.21.29 a-z; Fig. 10) with decorated rims are also considered typical decorations of Alanic garments (see for example Bóna 1991, pp. 162-66; Anke et al. 2008, pp. 19-20). The four small holes on the corners were evidently used for sewing the ornaments on thin fabric. The nine analysed pieces are all made of a malleable alloy containing around 9% of silver and 3% of copper. One of the analysed sequins (Inv. No. 2002.21.29 x) is burnt and shows traces of molten silver on the surface. They were all obtained from the same metal sheet, struck with a die to produce the pyramidal shape and the decorated rims. As in the horse fitting ornaments attributed to Alans, the silver content is relatively high, and much higher than the copper content. This might be a distinctive and indicative detail for this kind of Alanic-type production of gold objects. Very similar, indeed almost identical sequins have been found in Carthage, Tunisia, in the Koudiat Zaateur Treasure (Ben Abed 2008, p. 332), dated to the second half of the 5th – early 6th century CE, belonging to a "Vandal" context. Mounted troops of Alans, Huns and Ostrogoths led by Alatheus and Saphrax fought on the side of the Visigoths, for example at Adrianople, and in 378 they became federates of the empire in Pannonia. Most probably, a contingent of these troops took part in the migration of the Vandals and Suevi to the West. Saphrax is a name of Iranian origin (Kazanski 2008, p. 255).

Wooden bowl decorations

Among the items found at Nagyszéksós, there are rhomboidal gold sheet fragments (Inv. Nos. 2002.21.71-73 and 2002.21.157) with a rudimentary decoration around the rims and rivet holes. These objects, as well as the ribbed strip with one rounded end (Inv. No. 2002.21.70) were certainly used as decoration of wooden bowls. The alloys contain around 7% of silver and 2% of copper (analysis results with lower percentages were determined on damaged

Fig. 10. The 23 pyramidal sequins (Inv. Nos. 2002.21.29 a-z) are also considered Alanic. They are made of the same alloy and come apparently from the same piece of gold sheet with 9% Ag and 3% Cu. Gold alloys of this composition with relatively high Ag and low Cu might be distinctive for Alanic production.

pieces, altered by fire, and should not be taken into consideration). Their composition is similar to that of the alloys used for the richest cloisonné ornaments of better quality and perhaps they belong to the Hunnic metallurgical tradition. The fragment of triangular decoration (Inv. No. 2002.21.157) seems to be thinner, slightly different from the other examples and might belong to a cheaper bowl, perhaps only produced for funerary use.

The cup and the bowl from Nagyszéksós

The composition of the gold of the cup (Inv. No. 81.1.1, gold Inv. 160; Fig. 11) from Nagyszéksós, now in the National Museum in Budapest, clearly differs from those of other objects. The metal can be considered an *electrum* alloy, with around 11% of silver and only ca. 3% of copper. The slightly different composition of the ring-shaped foot might be due to surface enrichment, caused by the oxidation of the less noble metals of the alloy. This seems to be confirmed by the slightly lower copper content. The bowl of the cup was cast by lost wax technique with a carefully worked wax model. The internal part of the spaces left for the stones still bear the marks of the work carried out on the wax

Fig. 11. The cup (Inv. No. 81.1.1, gold Inv. No. 160) from the Nagyszéksós hoard, now in the Hungarian National Museum in Budapest is made of an electrum alloy with 11% Ag and ca. 3% Cu. The separately cast foot has a slightly different composition, but this might be due to oxidation. The cup was cast by lost wax technique by using a carefully worked wax model and has been interpreted as an object of Iranian origin.





with a warmed tool (Fig. 12). The remains of the inlays were described as "brown glass"; however it is more plausible that the glass was originally red and that it was altered by fire. The glass roundels were set into place in the round holes and fixed by pressing the soft gold alloy on them, so that they did not fall out and the cup could be used for drinking. Istvan Bóna has interpreted the cup from Nagyszéksós as an object of Iranian origin and compared its shape to that — almost identical — of some contemporary Iranian glass cups. One is in the Museo Nazionale d'Arte Orientale in Rome, Inv. No. 2705 (Bóna 1991, p. 168, Fig. 64; p. 261, n. 64). Another has been found in a grave dated to the Northern Zhou Dynasty in China, at Li Xian, Hopei (An 1986, pp. 173-81, Fig. 1, tab. 1-2) and a third very similar example, dated to the 4th century CE, has been published by von Saldern (1963, p. 12). An analogous motif and a rather similar technique are found on the "pectoral" from Wiesbaden, consisting

of a gold torques with two hinges and a part which looks like the lid of a small jewelled box adapted as a pendant. Alternatively, the pendant has been interpreted as part of a Parthian bracelet (Bernhard 2007, p. 124). The piece is a gold plate, apparently hinged, decorated with round, triangular and square-shaped garnet (or possibly red glass) inlays and with a leaf-shaped movable element with three differently cut red stones. The most important feature of the pendant from Wiesbaden is an inscription on the back with the name Artachshatar, i.e. the Lat. Artaxerses or Ardashir I, the founder of the Sasanian Dynasty who, at the time of Alexander Severus (222-235 CE) attacked Mesopotamia, Syria and Cappadocia (Hist. Aug., Alexander Severus, LV). It is quite clear that the decorative piece had been looted and re-used as pectoral, most probably by a socially prominent Hunnic warrior. The Iranian name on a piece

Fig. 12. The internal part of the spaces in which the stones were set on the cup still bears the marks of a warmed metal tool used on the wax model. The now lost inlays were described as brown glass; however it is more plausible that the glass was originally red and was altered by the fire.

with a construction similar to that of the cup from Nagyszéksós seems therefore to confirm the hypothesis of an Iranian origin of both the vessel and its decorative technique. The rim of the cup was cast together with the bowl, while the ring of the foot is a separate casting. Inside the foot there is an inscription in Greek

letters, written as dotted lines with a pointed chisel and a small hammer.

The fragmentary bowl (Inv. No. 81.1.2, gold Inv. Nos.161a, b, c, and 162; Fig. 13) is made of an alloy containing around 10% of silver and only traces of copper. All parts, also the cells of the decorative rosette in the center of the bowl, are made of the same alloy and were certainly cast in one piece. If the cellwork had been soldered onto the plate, as commonly thought, the cells would show a different composition, because of the presence of the solder that would diffuse around the soldering line. The stone inlays are now lost, but were most likely protruding in the center of the bowl.

Fig. 13. The fragmentary bowl (Inv. No. 81.1.2; gold Inv. Nos.161a, b, c, and 162) is made of an alloy containing around 10% of silver and only traces of copper. The rosette was cast by lost wax technique in one piece with the bowl. The production technique is similar to that of the cup.



Only the heavy Hunnic-type objects, such as the torques, the very large buckles and some of the richer cloisonné objects (e.g., the buckle Inv. No. 2002.21.05 and the eagle fitting Inv. No. 2002.21.07) are characterised by extremely low copper percentages, while the silver content can vary. This seems to suggest that gold alloys with very little copper can be attributed to the Hunnic metallurgical tradition, and therefore that the rich cloisonné ornaments made of these alloys might not necessarily be objects of Germanic origin, as hypothesised.

Regrettably, up to now no analyses have been performed on the amazing gold objects with garnet decorations, excavated at Boma in Xinjiang. Some of them closely resemble some of the Nagyszéksós finds and in particular the stone setting on the cup and the bowl in Budapest. These are two garnet decorated gold vessels, and a gold mask [Fig. 14; Color Plate II] with features depicted with garnet inlays (Koch 2007). The construction of the cells on the vessels from Boma is similar to that of the central rosette inside the bowl from Nagyszéksós and the shape and the stone setting are similar to that of the cup. The cells of the mustache and eyebrows on the mask look like the cells of the cicada-shaped finials (Inv. Nos. 2001.21.17-20) from Nagyszéksós. The crescent-shaped garnets which depict the beard of the mask are similar to those of the studs (Inv. Nos. 2001.21.52-53); however the mount of the Boma mask is of much better quality and workmanship, with the cells of the single crescent stones surrounded by an accurate granulation. The "Western" characteristics of the cup with panther handle and of the other finds from Boma, have been discussed in detail by Lin Ying (2008). She interpreted them as objects produced in the Turkic Empire of Central Asia and adds that these populations "transmitted material and cultural achievements between East and West, but also combined in their own distinct culture the elements of different civilisations" such as the Byzantine, Iranian, Indian and Chinese (Ying 2008, p. 25).

The researches of Périn et al. (2006) have shown that the vast majority of archaeological garnets, in particular in the 5th – 7th centuries CE, come from the metamorphic belts in Rajasthan and the east coast of India. Some examples come from Ceylon as do most of the garnets used in Roman times. Pyropes from Eastern Europe have only been employed since the 7th century CE. The large amount of garnets on Hunnic-type gold items, but also on the jewellery of other populations coming from the Sarmatic Plain, the Aral region and the Caucasus, makes one wonder whether these stones did not arrive to Europe through land trade over the ancient mountain routes through



Fig. 14. Gold mask, ca. 5th-6th century CE, excavated at Boma in the Ili region of Xinjiang. Collection of Ili-Kazakh Autonomous District Museum, Inv. No. 97YZS4.

Xinjiang, Ferghana, Bactria or Parthia (Giumlia-Mair et al. 2009, pp. 40–41) instead of having been brought on sea routes.

It is just possible that the cloisonné pieces with consistently higher silver and copper content discussed above belonged to a different, perhaps Germanic tradition. This could explain the noticeable differences in the use of gold alloying elements for cloisonné-decorated pieces of similar appearance. It is also important to note that the addition of silver (and of copper) hardens the gold alloy and renders the objects more resistant to wear.

Technological details

The nogaika elements

Only very few of the objects contain higher Cu percentages. One of them is the stone setting of the *nogaika* or *kamcha*, i.e., of the horsewhip which, according to Byzantine sources, indicated a high status. The large stone setting has been interpreted as the decoration at the end of the *nogaika* handle (Kürti 1988; 2007). Its alloy contains around 10% of silver and 7% of copper. This composition ensures a better resistance to wear and renders the alloy very suitable for a stone setting like this. It is noteworthy that the other pieces identified as decorative parts of the *nogaika*, such as the ribbed bands (Inv. Nos. 2002.21.36 and 2002.21.37) and the thinner gold cylinder (Inv. No. 2002.21.44), most probably all positioned at higher points above the handle, are made of a much softer

gold alloy, containing around 5% of silver and 1% of copper, because they did not need to be particularly resistant to wear.

The dagger decorations

Three relatively thick fragments of decorated gold sheets still show that they had some stone inlays. They have been interpreted as decorations of dagger handles. The analyses of the fragment with the Inv. No. 2002.21.34 identified a gold alloy with around 9% of silver and 1% of copper, but the fragment is burnt and the composition might have been different before being damaged by fire. The thick decorated band, used as reinforcement for the handle rim, is in better condition, and made of a gold alloy with around 7% of silver and 2% of copper. The second decorated

Fig. 15. As shown on the microscope picture, some of the decorated gold sheets have a distinctive scale pattern with slightly irregular marks and a thicker mark almost in the middle of the arch. These marks have been identified on the objects with the analysis numbers 202–204, 237–243, 246 and 260 (Inv. Nos. 2002.21.86–88; 121–127; 130 and 143).



Fig.16. A number of gold sheets with scale pattern could be attributed to a different object after the examination with the microscope and the comparison of the composition. Their decoration shows wider arches and smaller marks (analysis numbers 221, 222, 250 and 257, Inv. Nos. 2002.21.105, 106, 133 and 140).



gold sheet with mounts for stone inlays (Inv. No. 2002.21.35) was also damaged by fire and its alloy contains around 5% of silver and 1% of copper. The upper ring alloy contains around 9% of silver and 5% of copper and is much harder than the rest of the metal. The original composition of the decorated sheet possibly showed higher alloying elements, but among the gold sheet fragments there is also a small decorated fragment (Inv. No. 2002.21.153) with the remains of a mount for a stone, in much better condition than the two damaged pieces. Its alloy contains 5,4% of silver and 1,4% of copper and it is similar to the fragment with Inv. No. 2002.21.35. The two fragments might belong to the same object and the alteration due to the fire might be less extensive than suggested by the condition of the fragments.

The examination with jeweller magnification lenses and under the microscope of the gold sheets hypothetically belonging to daggers has drawn attention to the fact that the gold sheets had been decorated from the front and not by repoussé, as commonly thought. The actual dagger handle, apparently made of an organic material is lost, but the fragments still preserve the cylindrical shape with the thicker decorated band at the top, so that the position of the sheet is quite clear. The decoration lines and dots are all deeper than the surface of the sheet and in relief on the internal side. As very similar tools or, in some cases, even the same ones - have been used to decorate all gold sheets it can be assumed that this was the common practice and all decorations were produced on the recto, i.e. the external part of the sheets.

Decorated gold sheets

The composition of the gold sheets and the examination under the microscope allowed the identification of decorations carried out with particular tools and of pieces belonging together or at least produced in the same workshop and with the same tool. The pattern was most probably obtained with a tool made of carved bone or ivory. Metal tools are not suitable for this purpose, because their points and edges are too sharp for soft gold metal sheets. The present study helped to distinguish different scale patterns obtained with different tools. The first, and one of the most distinctive details identified with the microscope, is a scale pattern with slightly irregular marks and in particular a thicker dot clearly recognisable on the arch of the scale pattern (Fig. 15). The marks of this particular tool were identified on the objects with analysis numbers 202-204, 237-243, 246 and 260. A further distinctive scale pattern shows a wider arch and very small horizontally elongated marks (analysis numbers 221, 222, 250, 257; Fig. 16), while a third scale

pattern is characterised by a narrower arch and oval marks (for example analysis numbers 249 and 235). Some of the fragments are decorated with irregular dotted lines (analysis numbers 231, 233, 234, 244, 271). A herringbone pattern (analysis numbers 231, 233, 234, 247, 271) and a distinctive checked pattern (analysis numbers 230, 251, 253-255) were also identified.

Decorative "beaded" wires

On the objects from Nagyszéksós there are different decorations made by applying beaded wires or beaded wire imitations. In antiquity, gold wire was commonly produced by cutting thin strips or thin square rods from a metal sheet with a sharp blade and twisting them (see, e.g., Ogden 1982, p. 46). To obtain a regular thickness and to smooth the wire the twisted strip was rolled between two blocks of wood or stone, but the spiral-shaped line obtained by twisting is mostly visible under the microscope. The "real" beaded wire was then annealed to be made softer, and rolled under a swage block, i.e., a block with a groove cut with the pattern the goldsmith wanted to achieve. A swage block for beaded wire was cut so as to obtain a beaded pattern on part of the wire length. The same procedure was then repeated on the entire wire. No traces of drawn wire could be seen. The beaded wires employed as frame for the cloisonné cells or for the cabochon stone mounts are usually soldered on the flat and protruding gold sheet, itself soldered at the back of the stone mounts and are of different quality and workmanship. For example, the beaded wire on the large stone setting of the nogaika is very regular and almost perfect, while the wires on the crescent shaped mounts are much more irregular and less accurate (Fig. 17a and b). The beaded wires on the Hunnic and Alanic pieces are not made in the usual way, but they seem to have been cast in a mould

Fig. 17a, b. The beaded wires are of different quality and workmanship, and several groups can be distinguished. The microscope picture 17a shows the very regular and accurate beaded wire on the stone setting of the nogaika (Inv. No. 2002.21.43), while 17b shows the less accurate wire of the crescent mounts (Inv. Nos. 2002.21.52-53).







Fig. 18. Several items, in particular those considered Alanic (Inv. Nos. 2001.21.41-42 and 54-68), are framed by an imitation of beaded wire (see also Figs. 7 and 8). The protruding "globules" are visible on only one side of the decorative strip. The other side is flat and soldered on the gold sheet support.

or shaped by hammering a thin rod into a keying prepared so as to obtain an imitation of beaded wire. The protruding "globules" are visible on only one side of the decorative strip, while the other side is flat and soldered on the gold support to build a frame for the object (Fig. 18).

Conclusions

None of the items recovered at Nagyszéksós are real jewels, with the only exception of the heavy gold torques. All other objects and fragments belong to saddles and horse fittings, and weapons fit for a warrior king or a royal warrior. Even the decorations for wooden bowls belong to the type which could be tied to the saddle and carried to war. The only pieces that are not necessarily prerogative of a warrior and belong to a different class of objects are the cup and the bowl now in the Hungarian National Museum in Budapest. Both seem to be objects of Iranian origin, or at least they show peculiarities that might be typical for populations from Central Asia, the Caucasus or Iran. In the present work, the detailed examination of the single items made it possible to distinguish objects of

> different workmanship and to group them according to their composition and production techniques.

The Romans paid around 160 kg tributus in gold coins to Ruga every year. Certainly some of the gold of the objects of Nagyszéksós comes from tributus. However, as we have seen, this is not always clear, and in some cases it looks as if the technology and perhaps

also the metal were brought from far away and from different regions. Many more analyses of Hunnic or Hun-related gold objects will be necessary to achieve a good general picture of the metallurgical traditions and trends in the vast territory in which the Huns moved and lived, however the study of the Nagyszéksós hoard has given a glimpse into the goldsmith practice of the time and can be considered one of the first steps in the study of Hunnic metallurgy.

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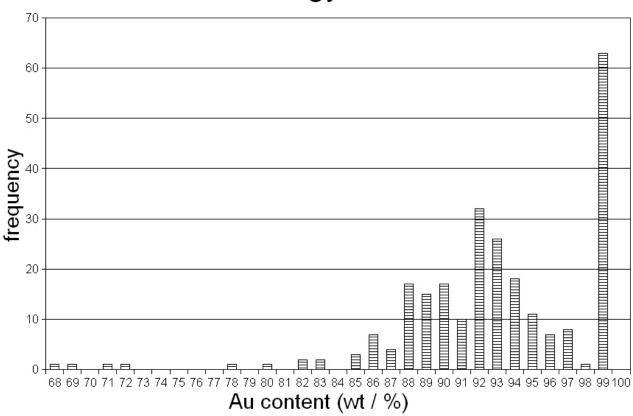
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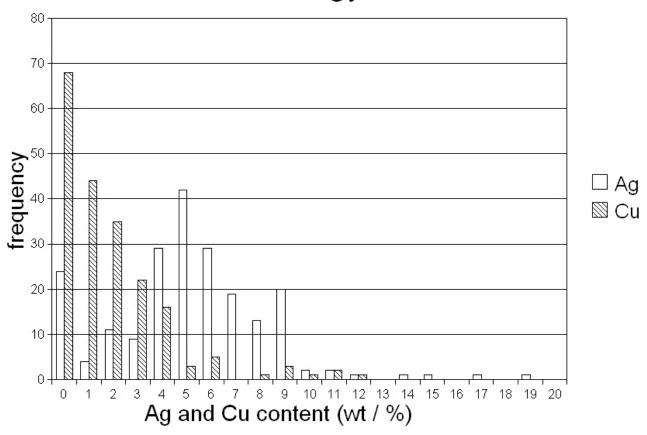
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Hunnic Au Nagyszéksós



Histogram 1: The histogram shows the frequency of the gold content (weight %) determined in the finds from Nagyszéksós. The metal of the group of objects made of very pure gold (99–100%) consists of some ceremonial objects and gold sheets and comes probably from molten Roman solidi received as tributus. The group with 92–96% Au consists mainly of cloisonné ornaments of excellent quality, while the objects with lower and irregular Au on the left side of the histogram are cloisonné ornaments of different manufacture belonging to another metallurgical tradition.

Hunnic Au Nagyszéksós



Histogram 2: The histogram shows the frequency of the silver and copper contents (weight %) determined in the finds from Nagyszéksós. The objects with low Cu % are mainly gold sheets, but also Alanic ornaments. The objects with 4–6% Ag are the cloisonné ornaments of good quality, while those with high and irregular Cu and Ag contents correspond the the cloisonné ornaments of different, less accurate workmanship.

XRF Analyses of Hunnic gold artefacts from Nagyszéksós

no. Object	inv.no.	Part	Au	Ag	Cu	Fe	Zn
1 torques	LTSZ001	torques	99.2	0.3	-	-	-
2 torques	LTSZ001	silvery traces	69.8	25.4	3.1	0.5	-
3 torques	LTSZ001	silvery traces	65.3	37.2	5.7	0.2	-
4 torques	LTSZ001	hook decorat.	99.6	0.2	-	-	-
5 torques	LTSZ001	att. fragment	93.7	4.5	0.6	0.6	-
6 belt buckle	LTSZ002	loop	99.1	0.3	0.5	-	-
7 belt buckle	LTSZ002	tongue	99.1	0.4	0.6	-	-
8 belt buckle	LTSZ003	loop	92.9	5.5	1.7	0.2	-
9 belt buckle	LTSZ003	tongue	93.6	5.1	2.2	-	-
10 belt buckle	LTSZ003	stone frame	88.8	7.6	3.3	0.2	-
11 belt buckle	LTSZ003	rivet	88.3	5.4	3.6	0.7	-
12 belt buckle	LTSZ003	sheet	89.1	7.2	3.3	0.4	-
13 belt buckle	LTSZ004	loop	93.0	5.8	0.5	0.2	-
14 belt buckle	LTSZ004	tongue	93.1	5.7	0.6	0.2	-
15 belt buckle	LTSZ004	stone frame	93.6	5.7	0.4	0.3	-
16 belt buckle	LTSZ004	sheet	93.7	5.3	0.5	0.2	-
17 cloisonne buckle	LTSZ005	stone frame	93.2	5.1	0.7	-	-
18 <i>cloisonne buckle</i>	LTSZ005	sheet 1	63.0	46.5	0.5	-	-
19 cloisonne buckle	LTSZ005	sheet 2 dark	67.1	4.2	0.3	28.4	-
20 cloisonne buckle	LTSZ005	sheet 1 clean	95.2	4.3	0.5	-	-
21 cloisonne buckle	LTSZ005	sheet 2 clean	95.1	4.4	0.5	-	-
22 cloisonne buckle	LTSZ005	rivet 1	94.8	4.8	0.3	-	-
23 cloisonne buckle	LTSZ005	tongue	95.5	4.2	0.3	-	-
24 cloisonne buckle	LTSZ005	loop	98.0	2.8	0.2	-	-
25 cloisonne buckle	LTSZ005	silver drop	92.3	7.7	tr.	-	-
26 large buckle fragment	LTSZ006	loop	92.1	5.5	2.4	-	-
27 large buckle fragment	LTSZ006	silver blob	24.3	63.3	12.4	-	-
28 eagle fitting	LTSZ007	back sheet	94.1	5.4	0.4	-	-
29 eagle fitting	LTSZ007	sheet recto	94.8	4.8	0.5	-	-
30 eagle fitting	LTSZ007	rivet	93.9	4.9	0.5	0.6	-
31 pointed fitting	LTSZ008	stone frame	96.4	3.4	-	0.2	-
32 pointed fitting	LTSZ008	rivet	97.3	3.2	2.7	-	-
33 sq. cloisonne fitting	LTSZ009	cloisonne wall	86.4	8.1	6.5	tr.	-
34 sq. cloisonne fitting	LTSZ009	back sheet	86.3	8.4	6.3	-	-
35 sq. cloisonne fitting	LTSZ009	rivet	86.2	8.3	9.6	-	-
36 sq. cloisonne fitting	LTSZ009	rivet	86.0	8.4	9.6	-	-
37 cloisonne buckle	LTSZ010	stone frame	91.2	7.2	3.8	-	-
38 cloisonne buckle	LTSZ010	tongue	94.9	4.5	1.6	-	-
39 cloisonne buckle	LTSZ010	loop	94.6	4.6	1.8	-	-
40 cloisonne buckle	LTSZ010	cloisonne wall	90.7	7.2	3.5	-	-
41 cloisonne buckle	LTSZ010	stone	-	-	-	tr.	-
42 boot decoration	LTSZ011	back sheet	95.1	4.6	2.2	-	-
43 boots decoration	LTSZ012	back sheet	95.2	4.9	2.1	-	-
44 boots decoration	LTSZ011	rivet remains	79.8	12, 5	7.9	0.5	-

no. Object	inv.no.	Part	Au	Ag	Cu	Fe	Zn
45 3 points	LTSZ013	verso	90.2	7.6	2.2	-	-
46 3 points	LTSZ013	recto	90.8	6.9	2.3	-	-
47 3 points	LTSZ014	verso	90.9	7.2	1.9	-	-
48 3 points	LTSZ014	rivet a	-	1.2	98.5	tr.	-
49 3 points	LTSZ014	rivet b	4.3	2.2	94.5	-	-
50 3 points	LTSZ014	stone frame	90.1	6.7	3.1	-	-
51 curved point fitting	LTSZ015	verso	93.1	4.6	2.3	-	-
52 curved point fitting	LTSZ015	cloisonne wall	93.2	4.6	2.2	-	-
53 curved point fitting	LTSZ015	rivet	63.6	28.9	7.4	-	-
54 curved point fitting	LTSZ016	verso	93.2	4.5	2.3	-	-
55 curved point fitting	LTSZ016	cloisonne wall	93.0	4.6	2.4	-	-
56 curved point fitting	LTSZ016	recto sheet	93.2	4.7	2.1	-	-
57 cicada fitting	LTSZ017	stone frame	97.2	1.7	2.1	-	-
58 cicada fitting	LTSZ017	rivet	80.2	8.2	10.5	0.2	-
59 cicada fitting	LTSZ018	stone frame	93.4	5.2	4.4	-	-
60 cicada fitting	LTSZ019	stone frame	88.9	6.3	5.2	-	-
61 cicada fitting	LTSZ020	stone frame	89.2	5.8	4.9	-	-
62 dec. plate	LTSZ021	sheet recto	95.6	1.9	2.7	1.8	-
63 dec. plate	LTSZ021	sheet verso	96.9	2.5	0.6	-	-
64 dec. plate	LTSZ021	beaded wire	90.6	7.1	1.3	-	-
65 dec. plate	LTSZ021	rivet	72.4	22.4	4.2	0.3	-
66 dec. plate	LTSZ022	sheet recto	96.5	2.7	1.8	-	-
67 dec. plate	LTSZ022	sheet verso	96.2	2.8	1.0	-	-
68 dec. plate	LTSZ023	sheet recto	96.0	2.9	1.6	-	-
69 dec. plate	LTSZ023	sheet verso	96.4	2.8	8.0	-	-
70 dec. plate	LTSZ023	rivet	90.7	7.3	2.0	-	-
71 dec. plate	LTSZ024	sheet recto	95.7	3.1	1.2	-	-
72 3 stones decoration	LTSZ025	stone frame	88.4	7.7	1.9	-	-
73 3 stones decoration	LTSZ025	sheet	88.4	6.3	3.6	-	-
74 3 stones decoration	LTSZ025	rivet	52.2	28.4	17.0	2.4	-
75 3 stones decoration	LTSZ026	stone frame	78.6	7.6	4.1	5.7	-
76 3 stones decoration	LTSZ026	back sheet	69.1	20.6	8.7	1.6	-
77 3 stones decoration	LTSZ027	stone frame	68.0	19.7	11.2	1.1	-
78 3 stones decoration	LTSZ027	back sheet	69.4	17.9	14.5	0.2	tr.
79 3 stones decoration	LTSZ027	beaded wire	88.8	9.2	2.0	-	-
80 3 stones decoration	LTSZ028	stone frame	86.0	17.7	4.2	4.1	-
81 3 stones decoration	LTSZ028	back sheet	86.1	11.2	4.4	0.3	-
82 3 stones decoration	LTSZ028	beaded wire	89.1	9.1	1.8	-	-
83 sq. sheet ornament	LTSZ029	а	89.4	8.9	2.7	tr.	-
84 sq. sheet ornament	LTSZ029	b	90.3	9.2	2.5	-	-
85 sq. sheet ornament	LTSZ029	С	90.1	9.3	2.6	-	-
86 sq. sheet ornament	LTSZ029	d	90.2	9.3	2.5	tr.	-
87 sq. sheet ornament	LTSZ029	е	89.8	9.5	2.7	-	-
88 sq. sheet ornament	LTSZ029	f	90.1	9.2	2.7	-	-
89 sq. sheet ornament	LTSZ029	g	90.4	9.2	2.4	-	-
90 sq. sheet ornament	LTSZ029	h	89.3	9.4	2.2	1.1	-
91 sq. sheet ornament	LTSZ029	X	90.3	9.2	2.5	-	-
92 sq. sheet ornament	LTSZ029	x silver blob	48.5	43.7	5.2	2.6	-

no.	Object	inv.no.	Part	Au	Ag	Cu	Fe	Zn
93	double cicada fitting	LTSZ030	sheet verso	97.8	0.7	1.8	_	-
94	double cicada fitting	LTSZ030	rivet	93.7	3.6	2.5	0.2	-
95	double cicada fitting	LTSZ030	beaded wire	93.5	5.7	8.0	-	-
96	cicada fitting	LTSZ031	back sheet	94.6	4.6	1.8	-	-
97	cicada fitting	LTSZ031	cloisonne wall	91.1	6.2	2.7	tr.	-
98	cicada fitting	LTSZ031	beaded wire	91.6	5.9	2.5	-	-
99	cloisonnè strap	LTSZ032	cloisonne wall	91.4	6.1	2.5	-	-
100	fitting fragment	LTSZ033	sheet recto	93.1	4.9	1.2	0.5	-
101	dagger sheet	LTSZ034	sheet	89.6	9.6	0.6	0.2	-
102	dagger sheet	LTSZ034	top ring	90.8	7.3	1.9	-	-
103	dagger sheet	LTSZ035	sheet	94.9	4.5	0.6	tr.	-
104	dagger sheet	LTSZ035	upper ring	86.3	8.8	4.9	tr.	-
105	dagger sheet	LTSZ035	silver blob	9.4	79.3	8.1	3.2	-
106	ribbed band	LTSZ036	rim	93.7	4.9	8.0	0.4	-
107	ribbed band	LTSZ037	band	93.9	5.2	0.9	-	-
108	cloisonne decoration	LTSZ038	verso	89.5	6.3	5.2	-	-
109	cloisonne decoration	LTSZ038	cloisonne wall	89.4	4.8	3.3	2.3	-
110	stone inlay	LTSZ038		-	-	-	17.3	-
111	cloisonne decoration	LTSZ038	beaded wire	93.2	4.6	3.2	-	-
112	cloisonne decoration	LTSZ039	verso	94.0	4.1	1.9	-	-
113	cloisonne decoration	LTSZ039	rivet	88.1	9.2	2.7	-	-
114	cloisonne decoration	LTSZ039	cloisonne wall	92.6	4.8	2.6	-	-
115	cloisonne bow	LTSZ040	back sheet	92.8	5.3	1.9	-	-
116	cloisonne bow	LTSZ040	cloisonne wall	91.1	5.4	3.5	-	-
117	cloisonne bow	LTSZ040	beaded wire	88.5	6.2	3.8	0.5	-
118	cloisonne bow	LTSZ040	rivet	5.6	78.0	8.1	-	-
119	mounted stone	LTSZ041	stone frame	91.2	8.4	1.6	0.5	-
	mounted stone	LTSZ041	back sheet	91.7	8.7	1.6	-	-
121	mounted stone	LTSZ041	beaded wire	90.7	8.1	1.2	-	-
122	single stone mounted	LTSZ042	stone frame	92.9	9.4	1.7	-	-
	single stone mounted	LTSZ042	sheet	92.3	9.5	1.2	-	-
	single stone mounted	LTSZ042	wall	92.6	9.1	2.2	tr.	-
	single stone mounted	LTSZ042	beaded wire	92.8	9.3	1.9	-	-
	stone mount nogaika	LTSZ043	back sheet	83.4	9.6	7.0	0.3	-
	stone mount nogaika	LTSZ043	wall	83.5	9.7	6.8	-	-
	stone mount nogaika	LTSZ043	beaded wire	82.7	10.9	6.4	0.2	-
	cylindric sheet	LTSZ044	sheet	94.8	4.5	0.7	-	-
	buckle plate	LTSZ045	back sheet	92.8	5.9	1.3	-	-
	buckle plate	LTSZ045		90.5	6.4	3.1	-	-
	buckle plate	LTSZ045	_	39.5	46.3	14.2	-	-
	buckle plate	LTSZ045	wall	93.1	5.4	1.5	-	-
	buckle plate b	LTSZ045	verso	92.9	5.4	1.7	_	-
	buckle plate b	LTSZ045	rivet remains	53.8	27.9	18.3	tr.	-
	buckle plate b	LTSZ045	beaded wire	91.8	5.5	3.7	-	-
	buckle plate c	LTSZ045	verso	93.8	5.4	1.8	-	-
	buckle plate c	LTSZ045	beaded wire	91.8	5.6	3.6	-	-
	arrow-shaped fitting	LTSZ046	wall	89.0	6.7	3.5	0.3	-
140	arrow-shaped fitting	LTSZ046	back sheet	92.9	5.3	1.8	-	-

no.	Object	inv.no.	Part	Au	Ag	Cu	Fe	Zn
141	arrow-shaped fitting	LTSZ046	rivet	91.1	6.4	3.5	-	-
142	arrow-shaped fitting	LTSZ047	wall	93.6	5.2	1.2	-	-
143	arrow-shaped fitting	LTSZ047	rivet	89.0	7.7	3.3	-	-
	arrow-shaped fitting	LTSZ047	silver blob v.	2.5	88.1	8.7	tr.	_
	arrow-shaped fitting	LTSZ048	wall	92.3	5.2	2.0	0.2	_
	arrow-shaped fitting	LTSZ048	att. fragment	92.8	5.3	1.9	_	_
	arrow-shaped fitting	LTSZ048	rivet a	92.6	5.2	2.2	_	_
	arrow-shaped fitting	LTSZ048	rivet b	92.7	5.3	2.0	_	_
	large 4 stones fitting 2	LTSZ049	cloisonne wall	87.9	6.0	4.8	1.3	_
	large 4 stones fitting 2	LTSZ049	back sheet	87.8	6.2	4.5	1.5	_
	large 4 stones fitting 2	LTSZ049	stone	-	_	-	tr.	_
	large 4 stones fitting 2	LTSZ049	beaded wire	88.5	6.1	4.7	1.7	_
	large 4 stones fitting	LTSZ050	cloisonne wall	81.0	8.7	10.3	tr.	_
	large 4 stones fitting	LTSZ050	back sheet	85.6	8.9	5.7	0.8	_
	large 4 stones fitting	LTSZ050	upper stone r.	-	-	-	tr.	_
	large 4 stones fitting	LTSZ050	lower stone r.	_	_	_	tr.	_
	large 4 stones fitting	LTSZ050	beaded wire	89.1	5.8	4.6	0.5	_
	single stone fitting frg.	LTSZ051	cloisonne wall	88.9	6.2	4.9	tr.	_
	single stone fitting frg.	LTSZ051	rim	89.2	6.0	4.8	tr.	_
	single stone fitting frg.	LTSZ051	back sheet	89.0	6.2	4.8	tr.	_
	single stone fitting frg.	LTSZ051	beaded wire	89.0	5.9	4.7	0.4	_
	stone crescent stud	LTSZ052	stone frame	71.2	12.5	8.3	-	_
	stone crescent stud	LTSZ052	rivet	3.5	75.8	18.9	0.5	3.3
	crescent shaped stud	LTSZ053	wall	69.9	15.4	11.3	1.2	1.2
	crescent shaped stud	LTSZ053	rivet	3.7	70.1	24.4	0.8	-
	crescent shaped stud	LTSZ053	back sheet	82.9	9.2	9.9	-	_
	crescent shaped stud	LTSZ053	beaded wire	72.9	14.9	12.2	_	_
	plate fitting	LTSZ054	sheet recto	93.0	6.3	0.7	_	_
	plate fitting	LTSZ054	sheet verso	92.7	6.7	0.7	_	_
	plate fitting	LTSZ054	beaded wire	92.5	6.9	0.6	_	_
	plate fitting	LTSZ055	sheet	93.1	5.4	1.5	_	_
	plate fitting	LTSZ055	sheet verso	93.5	5.4	1.1	_	_
	plate fitting	LTSZ056	sheet	92.7	6.8	0.5	_	_
	plate fitting	LTSZ056	sheet verso	92.5	6.9	0.6	_	_
	fitting, bow	LTSZ057	sheet recto	94.2	5.7	1.2	_	_
	fitting, bow	LTSZ057	sheet verso	94.3	5.8	1.0	_	_
	plate fitting fragment	LTSZ058	sheet verso	94.6	5.7	0.7	_	_
	plate fitting	LTSZ059	sheet recto	92.6	6.8	0.6	_	_
	plate fitting	LTSZ059	sheet verso	92.6	6.7	0.7	_	_
	plate fitting	LTSZ060		92.7	6.5	0.8	_	_
	plate fitting	LTSZ061	back sheet	95.6	5.8	0.6	_	_
	plate fitting	LTSZ061	recto	94.1	5.6	1.3	tr.	_
	plate fitting	LTSZ062	verso	95.3	3.9	8.0	_	_
	plate fitting	LTSZ062	recto	94.5	3.8	1.7	tr.	_
	plate fitting	LTSZ063	verso	92.6	6.9	0.5	_	_
	plate fitting	LTSZ064	verso	92.7	6.7	0.6	_	_
	plate fitting	LTSZ065	recto	92.8	6.5	0.7	-	_
	rock crystal fitting	LTSZ066	back sheet	94.3	5.2	0.5	-	-

no. Object	inv.no.	Part	Au	Ag	Cu	Fe	Zn
189 rock crystal fitting	LTSZ066	wall	94.4	5.0	0.6	-	-
190 rock crystal fitting	LTSZ066	stone	-	tr.	-	-	-
191 plate fitting	LTSZ067	verso	93.6	6.6	0.7	-	-
192 plate fitting	LTSZ068	recto	92.1	7.1	8.0	-	-
193 cup decoration	LTSZ069	back sheet	94.7	3.9	1.8	_	-
194 cup decoration	LTSZ069	stone frame	93.3	4.7	2.3	0.7	-
195 cup decoration	LTSZ069	beaded wire	88.5	7.4	1.8	_	-
196 ribbed cup dec.	LTSZ070	centre	89.8	7.3	2.9	-	-
197 ribbed cup dec.	LTSZ070	rivet	90.0	6.8	3.2	_	-
198 triang. cup dec.	LTSZ071	centre	88.9	7.6	3.1	-	-
199 triang. cup dec.	LTSZ071	silvery remains	53.5	27.8	18.8	-	-
200 triang. cup dec.	LTSZ072	centre	90.0	6.9	3.1	_	_
201 triang, cup dec.	LTSZ073	clean area	89.3	7.2	3.5	_	-
202 small silver blob a	LTSZ074	centre	2.3	80.3	13.5	0.3	tr.
203 small silver blob b	LTSZ074	centre	2.5	82.6	12.6	_	tr.
204 small silver blob b	LTSZ074	gold inside	78.5	18.8	2.3	0.4	_
205 small silver blob c	LTSZ074	centre	2.3	84.7	12.8	0.2	_
206 melted silver blob	LTSZ075	recto	2.8	76.2	21.2	0.7	2.2
207 melted silver blob	LTSZ075	verso	39.4	41.5	17.8	0.9	tr.
208 melted silver blob	LTSZ075	top	5.7	70.2	20.5	0.3	2.2
209 gold sheet	LTSZ076	recto	95.1	4.7	0.2	_	
210 gold sheet	LTSZ076	silver verso	5.2	86.5	8.3	_	_
211 gold sheet	LTSZ077	recto	87.4	8.3	4.3	_	_
212 gold sheet	LTSZ077	blob verso	tr.	27.8	58.9	4.5	_
213 gold sheet	LTSZ078	recto	88.3	7.8	2.9	tr.	_
214 gold sheet	LTSZ078	silver verso	2.6	88.6	6.2	1.3	_
215 gold sheet	LTSZ080	recto	99.8	tr.	tr.	-	_
216 gold sheet	LTSZ081	recto	99.9	tr.	-	_	_
217 gold sheet	LTSZ082	recto	99.8	tr.	tr.	_	_
218 gold sheet	LTSZ083	verso	99.9	tr.	tr.	_	_
219 gold sheet	LTSZ084	recto	99.9	tr.	tr.	_	_
220 gold sheet	LTSZ085	verso	99.8	tr.	tr.	_	_
221 gold sheet	LTSZ086	recto	100	-	-	_	_
222 gold sheet	LTSZ087	recto	99.6	0.3	_	_	_
223 gold sheet	LTSZ088	recto	99.4	0.4	_	_	_
224 gold sheet	LTSZ089	recto	99.9	_	0.3	_	_
225 gold sheet	LTSZ091	recto	99.9	tr.	-	_	_
226 gold sheet	LTSZ092	verso	99.5	0.4	_	_	_
227 gold sheet	LTSZ093	recto	99.8	tr.	_	_	_
228 gold sheet	LTSZ094	recto	99.8	-	tr.	_	_
229 gold sheet	LTSZ095	recto	99.9	tr.	-	_	_
230 gold sheet	LTSZ096	recto	99.9	tr.	tr.	_	_
231 gold sheet	LTSZ096	verso	99.9	tr.	-	_	_
232 gold sheet	LTSZ097	verso	99.7	tr.	0.2	_	_
233 gold sheet	LTSZ098	recto	99.8	tr.	tr.	_	_
234 gold sheet	LTSZ099	recto	99.2	0.3	0.4	_	_
235 gold sheet	LTSZ100	recto	99.5	0.3	0.4	_	_
236 gold sheet	LTSZ100	recto	99.2	0.3	0.4	_	- -
200 gold Slieet	102101	10010	55.2	U. 4	J. 4	-	_

no. Object	inv.no.	Part	Au	Ag	Cu	Fe	Zn
237 gold sheet	LTSZ102	verso	99.9	tr.	tr.	-	-
238 gold sheet	LTSZ103	recto	99.9	tr.	tr.	-	-
239 gold sheet	LTSZ104	recto	99.9	tr.	tr.	-	-
240 gold sheet	LTSZ105	verso	99.8	-	0.2	-	-
241 gold sheet	LTSZ106	recto	99.9	-	tr.	-	-
242 gold sheet	LTSZ107	recto	99.7	_	0.3	_	-
243 gold sheet	LTSZ108	recto	99.6	0.3	tr.	-	-
244 gold sheet	LTSZ109	recto	99.5	0.6	-	-	-
245 gold sheet	LTSZ110	verso	99.5	0.3	0.2	-	-
246 gold sheet	LTSZ111	recto	97.6	2.3	tr.	-	-
247 gold sheet	LTSZ112	recto	96.5	2.4	0.9	-	-
248 gold sheet	LTSZ113	recto	94.5	3.5	2.0	-	-
249 gold sheet	LTSZ114	recto	99.9	_	tr.	-	-
250 gold sheet	LTSZ115	verso	99.8	tr.	tr.	-	-
251 gold sheet	LTSZ115	recto	99.9	0.8	tr.	_	-
252 gold sheet	LTSZ116	recto	99.8	tr.	-	-	-
253 gold sheet	LTSZ117	recto	97.4	2.1	0.5	-	-
254 gold sheet	LTSZ117	recto 2	97.3	2.1	0.6	-	-
255 gold sheet	LTSZ117	recto 3	98.5	1.1	0.2	_	-
256 gold sheet	LTSZ118	recto	99.8	tr.	tr.	-	-
257 gold sheet	LTSZ119	verso	99.9	-	tr.	-	-
258 gold sheet	LTSZ121	recto	99.6	0.3	tr.	_	-
259 gold sheet	LTSZ122	recto	99.4	0.3	0.2	-	-
260 gold sheet	LTSZ123	recto	99.9	_	tr.	_	-
261 gold sheet	LTSZ124	recto	96.9	2.3	0.5	-	-
262 gold sheet	LTSZ125	recto	99.2	0.4	0.2	-	-
263 gold sheet	LTSZ126	verso	99.8	tr.	tr.	-	-
264 gold sheet	LTSZ127	recto	99.9	tr.	tr.	tr.	-
265 gold sheet	LTSZ128	recto	99.8	tr.	tr.	-	-
266 gold sheet	LTSZ129	recto	99.6	tr.	0.3	-	-
267 gold sheet	LTSZ130	verso	99.7	0.2	tr.	_	_
268 gold sheet	LTSZ131	recto	99.9	tr.	tr.	-	-
269 gold sheet	LTSZ131	silver blob	60.2	34.4	5.4	-	-
270 gold sheet	LTSZ132	recto	99.8	tr.	tr.	-	-
271 gold sheet	LTSZ133	recto	99.3	0.4	0.2	-	-
272 gold sheet	LTSZ134	recto	99.7	tr.	0.2	-	-
273 gold sheet	LTSZ135	recto	99.9	-	tr.	-	-
274 gold sheet	LTSZ136	recto	99.5	0.2	0.3	-	-
275 gold sheet	LTSZ137	recto	99.6	tr.	0.3	-	-
276 gold sheet	LTSZ138	recto	99.5	0.2	0.3	-	-
277 gold sheet	LTSZ139	verso	97.7	1.2	tr.	-	-
278 gold sheet	LTSZ140	recto	99.8	tr.	0.2	-	-
279 gold sheet	LTSZ141	recto	99.9	-	tr.	-	-
280 gold sheet	LTSZ142	recto	99.8	tr.	tr.	-	-
281 gold sheet	LTSZ143	recto	99.6	0.4	-	-	-
282 gold sheet	LTSZ144	recto	99.5	0.3	0.2	-	-
283 rivet	LTSZ145	head	86.8	8.7	4.2	-	-
284 dagger sheet	LTSZ153	verso	92.1	5.4	1.4	-	-

no.	Object	inv.no.	Part	Au	Ag	Cu	Fe	Zn
285	sheet fragment	LTSZ155	verso	92.9	4.7	2.4	-	-
286	triangular fragment	LTSZ157		94.5	3.5	2.0	-	-
287	Nagysz. Cup BP	160	foot ring	87.7	11.3	1.6	-	-
288	Nagysz. Cup BP	160	body	86.2	10.7	3.1	-	-
289	Nagysz. Cup BP	160	upper rim	86.2	10.9	2.8	-	-
290	Nagysz. Bowl BP	162	large fragment	90.1	9.8	tr.	-	-
291	Nagysz. Bowl BP	162	inside	88.5	7.2	4.3	-	-
292	Nagysz. Bowl BP	162	rosette	90.2	9.7	tr.	-	-
293	Nagysz. Bowl BP	161a		90.1	9.8	tr.	-	-
294	Nagysz. Bowl BP	161b		90.2	9.7	tr.	-	-
295	Nagysz. Bowl BP	161c		90.1	9.8	tr.	-	-
296	Nagysz. Bowl BP	162	incrustation	1.8	83.6	14.6	-	-

Note: The analysis results reported in Italics in the table should be only considered semi-quantitative. These uncertain data are due to the bad preservation of the burnt pieces.

New Discoveries of Rock Art in Afghanistan's Wakhan CORRIDOR AND PAMIR: A PRELIMINARY STUDY

John Mock

Independent Scholar

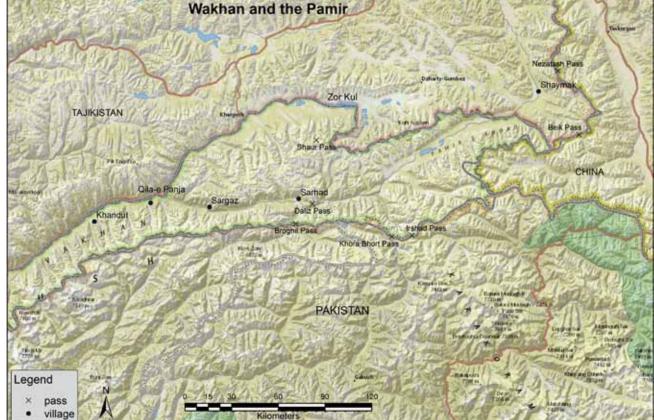
rom at least the first century BCE when China's Han Dynasty became the predominant power in the Pamir, merchants, monks, travelers and occasionally armies passed through Wakhan and the Pamir along one of the main branches of the so-called "Silk Road" (Fig. 1). Their accounts provide a rich historical record of the kingdom of Wakhan¹ and of its strategic role in the great rivalries for control of routes through the Pamir.2 Wakhan's archaeological record, in comparison, remains largely unknown. Our knowledge of the historical archaeology of Wakhan comes largely from Aurel Stein's brief visit in 1906. Stein, who sought to correlate on-the-ground reality with the textual record of the Tang Annals,3 traveled through Wakhan in May 1906 on his way to Khotan.4 He entered Wakhan from the south via the Broghil pass on May 19, followed the main trail along the true right (north) bank of the Wakhan river to the Pamir, and exited Wakhan via the Wakhjir pass on May 27. Although The Geographical Journal of 1939 proclaimed that "thorough excavation of the ancient sites in Wakhan must be perhaps the most important single item on any agenda of archaeological work in Central Asia" (Barger 1939, p. 389), the historical archaeology of Wakhan and the Afghan Pamir has received only one survey (Miller 2009) since Stein's 1906 visit.

Prehistoric archaeology of Wakhan

The prehistoric and protohistoric archaeology of Wakhan has been briefly noted in reports by French,

Fig. 1. Map of Wakhan and the Pamir.

Wakhan and the Pamir



German and Austrian Pamir expeditions and a UNDP/FAO survey of wildlife, all between 1968 and 1974.5 They reported numerous rock art depictions of ibex and hunters on foot, sometimes armed with bows and occasionally accompanied by what appear to be dogs. One well-executed panel depicts mounted archers hunting wild yaks (Naumann 1973; Dor 1974). The panel is on a boulder that sits on a small terrace slightly above and adjacent to the Wakhan River where the spring-fed Zang Kuk stream joins the glacier-fed Wakhan River at 3600m elevation. The river runs through a steep-walled gorge in this section and there is no area suitable for cultivation and settlement anywhere nearby. A small rock-wall roofless enclosure that travelers along the trail utilize is the only built structure. Naumann suggested that this location might have been a campsite for hunters who made the rock carvings depicting their wild yak hunt.

Figure 2 shows this rock art scene. The overall depiction is a yak hunt by two riders on horseback using bows. The two yaks appear to be fleeing the riders, with their heads raised as is typical of running yaks, as is the raised tail of the upper yak. The yaks have long curved horns, characteristic of wild yaks (Fig. 3). The yaks, although large, are in proportion with the horses. The skillful riders are aiming their bows, which appear to be composite bows and were the typical weapon of mounted hunters of the Inner Asian area. The Scythians in particular were noted for their use of such bows.⁶ The lower hunter perhaps has a quiver on his back, but this is not certain. Nor is it possible to determine if the riders' feet are depicted in stirrups, which, according to the Soviet archaeologist Vadim Ranov, appeared in Central Asia in the 5th to 6th century CE (Ranov 2001, p. 127). The depictions

Fig. 2. Riders with bows hunting wild yaks. Zang Kuk, Wakhan.





Fig. 3. A wild yak, characterized by the long curved horns and shoulder hump. Photo copyright © Daniel Miller.

are quite life-like and lively, and appear to have been made with attention to detail. This hunting scene was composed by completely bruising the surface of the rock for each figure, rather than pecking only the outline of each figure, resulting in a silhouette depiction of the yaks, horses and riders. In 1972, when Naumann observed these depictions, he noted that the rock carvings are "only insignificantly deeper than the rough surface," which appears to be even more true now. The loss of detail, especially towards the center of the panel, may be due to gradual repatination and to erosion of the patina that may once have been more substantial on the rock surface. Such processes occur gradually over time.7 The erosion and repatination of this panel suggests considerable age, which would support attribution to hunters of the Iron Age, although a more recent dating to the Kushan period of the first millennium CE cannot be ruled out.

> Most of the rock art identified in Wakhan is in the lower elevation area, where Wakhi villages are located on alluvial fans formed by side streams flowing into the main Panj River. Some rock art was also identified in the high elevation Pamir regions of Wakhan.8 The wildlife biologist Ron Petocz, who studied Marco Polo sheep (argali) and prepared a draft management plan for a wildlife reserve in the Big Pamir, made the most detailed survey of the region and included a brief but interesting report on archaeology. Petocz photographed several scenes of ibex hunters using bows and a remarkable panel depicting "a line

of human figures holding three-pronged spears." He also reported "noticeable mounds" in the Little Pamir, where Kyrgyz "claim to have found bronze projectile points" (Petocz 1978, pp. 20-21). Soviet archaeologists working in the adjacent Pamir regions of what is now Tajikistan between 1946 and 1991 located numerous rock art sites and more than 260 Saka kurgans (Ranov 1984, p. 80; Ranov 2001, pp. 122-49; Yablonsky 1995, pp. 234-37). The proximity of the Tajikistan Pamir sites to the Afghanistan Little Pamir sites and the similarity of their rock art suggest a correlation between the Pamir sites. The Soviet archaeologists found daggers, arrowheads and zoomorphic plaques, all in bronze in "classical Saka form" (Yablonsky 1995, p. 235). Further archaeological investigation is needed to determine the extent and continuity of Saka sites in the greater Pamir region.

The high altitude Pamir grasslands supported wildlife that attracted nomadic hunters from at least the Late Bronze Age.9 Rock art depictions of wild yaks, ibex, argali and possibly stags suggest game may have been abundant not only in the broad Pamir but also in the many smaller side valleys that feed the main Panj River. Recent research shows that in the early Holocene, "hunter-gatherer populations well adapted to high altitude life conditions in summer settled in the Pamir plateau, especially near the Kara Kul Lake" (Malassé and Gaillard 2011, p. 123). Although this research also indicates that hunter-gatherers abandoned the Pamir in the mid-Holocene, probably due to increasing aridity in the northern Pamir, the southern Pamir may have experienced monsoonal moisture and retained biodiversity that continued to draw hunters. Human presence in Wakhan, probably hunters, is attested (radiocarbon of charcoal) from the beginning of the 2nd millennium BCE (Raunig 1984).¹⁰ Hunters undoubtedly came seasonally, when high elevation

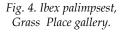
meadows were accessible and relatively snow free, and some may have belonged to communities of agropastoralists that developed in the Amu Darya and Hindukush regions during the late Holocene Bronze Age (Malassé and Gaillard 2011, p. 129; Meihe et al. 2009a, p. 255). This seasonal usage likely contributed to the peopling of Wakhan, and the earliest dating (radiocarbon of pollen) for cultivation is the 1st century CE (Raunig 1984, p. 19). In addition to hunters on foot, hunting in the Pamir may have been carried out by horse-riding Central Asian steppe peoples who used a composite or double bow, 11 portrayed in rock art from Wakhan.

Current work

Between 2004 and 2007, Kimberley O'Neil and I made five trips to Wakhan. Although the archaeology and cultural heritage of Wakhan were not the primary objectives of our visits, they were always in mind, and we took the opportunity to visit the sites described by Stein and to explore widely throughout Wakhan and the Afghan Pamir. These efforts have yielded remarkable rewards. 12 This article is a preliminary and general presentation of the rock art identified in Wakhan that is not directly linked through iconography or epigraphy with the era of Tibetan Imperial occupation of Wakhan.¹³ This newly discovered rock art offers valuable information on human presence in Wakhan from at least the Iron Age onward,14 up to and including the Silk Route trade and travel across what Afghans call Bam-e Duniya, or the Roof of the World. The article is organized geographically by site and presents five newly discovered rock art galleries: Grass Place, Mud Place, Shrine Rock, Big Rock, and Rock Pile sites. 15

Grass Place gallery

This rock art gallery is located along the Wakhan River in the settled area of Wakhan. It is a compact site in an area occasionally flooded during high river flow. Hence, there are no terraces. A broken cliff face rises almost vertically and on the dark polished rock faces of the lower cliff are several rock art panels. Most of the art depicts ibex hunting, which is the most commonly observed composition in Wakhan. The panels are palimpsests, as indicated by the differing degrees of repatination of the compositions on the panels. This indicates that the compositions were





made at different times but is only a relative indicator of age.

The three very large ibex, shown in silhouette, are the most detailed and the most repatinated images in the panel shown in Fig. 4, preceding page (Color Plate IIIa). These ibex are depicted in full silhouette, with long curving horns. The large upper left ibex is depicted with knobbed horns and four legs. A long slender line under the body extending from the hindquarters appears to represent a penis, and the lower right large ibex also displays the same. On the upper right, a small ibex is also represented with penis and knobbed horns.

In the bottom center of the panel, below and right of the lower large ibex, is another ibex with very curled, spiral-like horns (Fig. 5). We can compare these ibex with similar ibex images from Alchi in Ladakh, published by



Fig. 5. Detail of Fig. 4.

Henri-Paul Francfort (Francfort et al. 1990, Figs. 21, 22, 28). Overlaying these images are lighter images of ibex and humans. They are all depicted in stick-like form,

lacking the detail and silhouette composition of the older, more repatinated ibex images. Of interest are the two humans standing sideby-side, as though holding hands. A. H. Dani published similar images from the Ziarat I and II sites near Chilas in the Indus Valley and



Fig. 7. (above) Detail of Fig. 6 showing "flaming" antlers/horns.

Fig. 6.(left) Panel showing several ibex and a human.

Fig. 8. (right) Human leading

suggested that depictions of men holding hands may represent dancing in celebration of a successful ibex hunt (Dani 1983, p. 22; Figs. 22, 24).

A separate panel in the same gallery has many small, heavily repatinated ibex images and one human image with outstretched arms (Fig. 6). The ibex at the lower left are depicted in silhouette. The upper ibex of the lower left group has a sinuously curved neck, which is suggestive of the 'S' style of steppe art. It is similar in style to rock art depictions of ibex from Langar, an extensive site in the Wakhi settled area of Tajikistan (Ranov 2001, Fig. 11). Below it are two ibex facing each other. In the center of the panel is an ibex or a deer with "flaming" horns or antlers (Fig. 7). Readers will immediately recognize these as a characteristic style associated with steppe nomads. This style has been reported from Ladakh (Francfort et al. 1990; Bruneau and Vernier 2010) and from the upper Indus (Dani 1983; Jettmar 1989). It is also attested, as previously mentioned, from the Pamir areas of Tajikistan that are adjacent to Wakhan. This Wakhan rock art is situated geographically between the Central Asian sites and the sites in the upper Indus and in Ladakh, which are south of the main Karakoram and Tian Shan mountain ranges that separate Central Asia from South Asia. These stylistic and geographic cor-

> relations suggest a circulation of people between the Pamir and the southern fringes of the Pamir-Karakoram-Hindukush mountain region.¹⁶

> Finally, at the same site, is an image depicting a human walking in stride, with arms bent, leading what appears to be a horse on which is seated another person (Fig. 8). The rider has two long lines angling downward from the crown of the head, which may represent hair and could indicate that the rider is female. Above the horse and rider is another human who may be holding a spear. Behind this human are other humans



with exaggeratedly long arms and torsos. These depictions are significantly repatinated and weathered. They do not seem to have been executed with a sharp edge, but rather to have been bruised into the rock surface with a more blunt tool. The humans and the horse are in stick-like style and may be of a similar age as the other stick-like images at this site. These depictions may be of less age than the ibex depictions previously discussed, based on comparative repatination. Perhaps they are from early human settlement in Wakhan or perhaps from as recent as medieval times. The weathering and repatination suggests that they are not more modern compositions, but it should be noted that even today, Wakhi and Kyrgyz women ride horses that are led by men walking on foot.

Mud Place gallery

This site is also located along the Wakhan River in the settled area of Wakhan. It is an extensive site, with rock art depicted on small boulders that sit on a very long but narrow terrace above the present level of the river. The compositions are not palimpsests. Rather, a single image or small single composition of images is depicted on each individual dark varnished boulder surface.¹⁷

Figures 9 and 10 depict wild yaks, which are no longer present in Wakhan.¹⁸ These images are located well outside of typical yak habitat,¹⁹ at an elevation of





approximately 3200m, comparable to the elevation of the Langar site in Tajikistan Wakhan, which has been described by Ranov (2001). The images appear to depict wild yaks with long curved horns and bushy tails. Figure 9 shows the characteristic prominent shoulder hump of a wild yak. These two figures depict neither a hunting scene nor a group of yaks, which might suggest domesticated yaks. Instead, each figure occurs alone on the rock surface as a solitary depiction of a powerful wild animal.

The two figures were executed with different techniques. Figure 9 was composed in silhouette, and Fig. 10 was composed in outline, except for the large bushy tail, which is completely filled in. Figure 9 can be compared with a similar yak in silhouette from the Nubra Valley in Ladakh. Both Fig. 9 and the Ladakh depiction have similar body shapes, long, almost closed horns, and a round-shaped tail, which is a stylistic feature characteristic of Bronze Age yak depictions from Central Asia (Bruneau et al. 2011, p. 93). The body of the yak in Fig. 10 is rectangular with short legs; all four legs are not distinguishable. Figure 10 can be compared with a similar yak outline from Langar in nearby Tajikistan (Ranov 2001, Fig. 16). The two figures, despite their differences, share a significant stylistic attribute. Neither yak has long horns protruding forward, a characteristic they share with the yak depictions at Langar and Nubra and which sets them apart from yak depictions elsewhere in Central Asia (Ranov 2001, pp. 136, 143).

Figures 9 and 10, although composed in different styles, both depict the animal in a reduced, more stylized form, with prominent features (horns, tail) appearing in slightly exaggerated scale. Wild yaks were important animals that would have provided meat, hair, horns and burnable dung for people entering Wakhan. Yaks would have formed a vital component of a hunting economy and their depictions in rock art may have had symbolic significance. A fuller contextual study of the large rock art field where these two figures are located would be useful to analyzing the symbolic dimension. It is noteworthy that Fig. 9 appears to be more repatinated than Fig. 10, which could indicate greater age. The difference in technique (outline vs. silhouette) noted above may also be significant in attributing age.

Figure 11, next page (Color Plate IIIb) depicts an ibex hunt. Two ibex are depicted in outline and two hunters, also in outline, aim bows at the ibex. The uppermost hunter is drawing a long bow with curved bow tips, which appears to represent a composite bow. The second hunter, standing behind the ibex

Fig. 9 & Fig. 10. Wild yaks, lower Wakhan.

Fig. 11. Ibex and ibex hunters with dogs. The photo has been desaturated and the contrast enhanced to show the figures clearly. See also Color Plate IIIb.

on the right of the figure, is also drawing what appears to be a bow with curved tips. Between the two ibex and below the first hunter are two zoomorphs with long tails and short ears. They are depicted facing the second ibex, and may represent canids. Use of dogs for hunting ibex is widely depicted throughout Central Asia (Ranov 2001, p. 146) and is also known from Ladakh (Francfort et al. 1990, pp. 8, 11). These images were executed with some precision, suggesting that the entire composi-

tion was planned and executed at the same time. It would have taken several days to complete. It is substantially repatinated, which suggests considerable age. It is probably not a medieval composition, but rather an earlier composition by hunters who employed dogs and used composite bows.

Figure 12 also depicts an ibex hunt, with hunters on foot using bows. The hunter in the upper left has a long bow, but the hunter in the middle has a shorter bow. There is insufficient detail and clarity to ascertain if the bows depicted are simple or compound bows. The hunter in the middle appears to have something hanging between his legs, but the lack of detail makes is impossible to ascertain if it is clothing, a weapon,

or even an exaggerated phallus. The hunters are in silhouette, Fig. 12 (left). Ibex hunters on foot with with their heads completely filled in, and their arms and legs are articulated much more than stick-like figures. The upper



ibex is depicted in outline, with two curving horns. There appears to be a small zoomorph above the ibex, which could be a dog, but is not clear. The depictions are weathered and significantly repatinated, suggesting considerable age and are likely much older than medieval compositions. Although similar to Fig. 11 in composition, they are stylistically different.

Two other compositions depict mounted riders and accompanying men on foot. The panel shown in Fig. 13 depicts five riders; four on horses and one on a camel. Two of the horse riders and the camel rider appear to wear headgear, which could be hats or turbans. All the mounts appear to have reins and bridles, and each rider has one hand holding the reins and

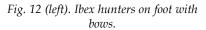
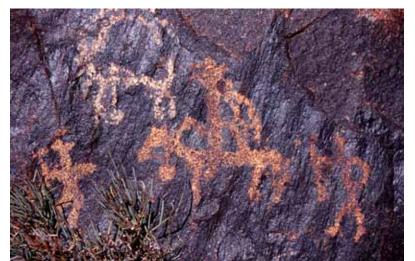


Fig. 13. (right) Four equestrians and one camel rider.







the other hand curved back to touch the waist. The upper right horse shows the bridle most clearly, and the horse has what appears to be a round bag hanging from its neck. This may be an ornament, or perhaps a small feedbag. The feet of the riders appear to be horizontal, as though in stirrups. Ranov, citing Boris Litvinskij, notes that stirrups appeared in Central Asia in the 5th and 6th centuries CE (Ranov 2001, p. 127), which provides a *terminus post quem* for this panel. The execution of the panel is more precise and distinct than that of riders from Vybist-Dara, Tajikistan (Ranov 2001, Fig 19), which Ranov dated from the Kushano-Hephthalite period.

The panel shown in Fig. 14 (Color Plate IVa) depicts a horse rider accompanied by two men on foot, one in front and one behind, as though they are escorts of the rider. The panel is an interesting palimpsest with a paler ibex depicted above the reddish-brown repatinated horse rider and escorts scene. The differing degrees of repatination offer comparative dating. Ranov has categorized repatination of Tajikistan rock art into three grades, P-1, P-2 and P-3 (Ranov 2001, p. 126). P-1 is almost completely repatinated, indicative of the oldest compositions. P-2 is reddish-brown in color and P-3 is lighter, almost white and indicative of more recent composition. The rider and escorts in this panel show P-2 repatination, and the ibex above shows P-3. As with the riders depicted in Fig. 13, bridle and reins are shown, as is the round bag or ball beneath the horse's neck. All the men are wearing headgear, which appear to be hats or thick turbans, and the two escorts are carrying objects. The lead escort may have an axe, and the rear escort has what at first glance may suggest a rifle with a stock, but the repatination and comparative dating mentioned above would rule out a firearm, although the object cannot be readily identified. This panel would seem to show a scene of travelers along the "Silk Road." Further investigation

Fig. 14. Equestrian accompanied by pedestrians.

into the horse gear, such as the distinctive round ball or bag, and the headgear styles may reveal more information about the identity of these travelers and help to establish a more accurate chronology.

Shrine Rock gallery

Shrine Rock is also located in the settled area of Wakhan along the Wakhan River. The rock sits on a low terrace that appears to have once been a lake bed. The rock art at this site is a single large panel, here shown in a composite from three separate photos (Fig. 15, next page). The panel depicts eleven horse riders, two of whom

are leading horses. The degree of repatination, using Ranov's scale (discussed above), is between P-2 and P-1. That is, the depictions show only light reddish-brown color. Stylistically, they are comparable with the riders from the Mud Place gallery (Figs. 13, 14). Most of the riders wear headgear, which appears more turban-like than hat-like. The horses all have bridles and the riders hold reins. The horses also have the small round ball or bag under their necks, which is linked into the horse tack. The two horses being led by riders on the left reveal the most detail and definitely appear to have saddles on their backs.

Interspersed among the riders are ibex, which have the same degree of repatination as the riders and horses, indicating they were composed at about the same time. However one horse and rider, right of center, is clearly composed over an ibex, indicating that the ibex depiction antedates the horse and rider. Three riders have one hand raised behind them and two of them are holding something in that hand. It is not clearly depicted, but brings to mind Kyrgyz hunters who use eagles and hold them in a similar way. However, this is only speculation at this preliminary stage. Two men on foot are shown in the panel. One is at the far right of the panel and holds a bow. The other human, more crudely drawn with an oval head and holding a bow, is above the left side of the panel. Also noteworthy is the long-tailed zoomorph at the upper right of the panel, which can probably be identified as a snow leopard, indigenous to Wakhan.

At the top center of the panel is a shield-like device, divided into quadrants, with a dot in each quadrant. In discussing similar circles from Langar in Tajikistan, Ranov mentions that although their symbolic significance is obscure, perhaps linked to Buddhist *cakra* or perhaps to anti-Buddhist solar symbolism, their dating is undoubtedly the 8th through 10th centuries CE (Ranov 2001, pp. 145–46).

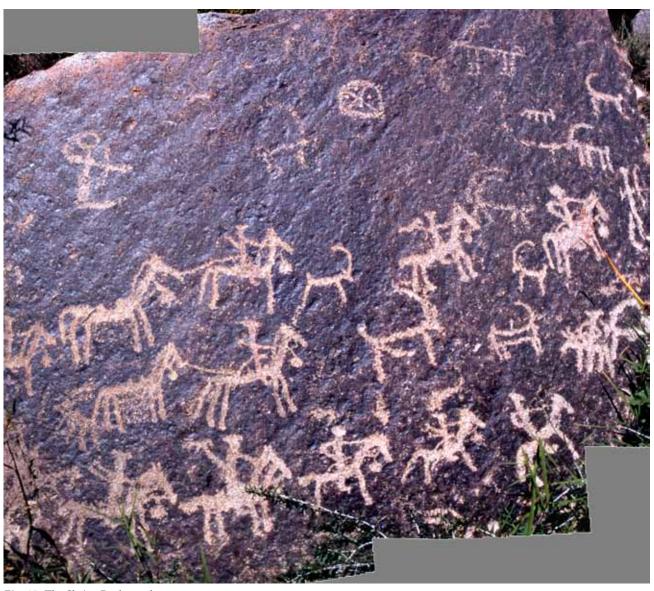


Fig. 15. The Shrine Rock panel.

Big Rock gallery

The Big Rock site is located at an elevation of 4000m, well above and beyond the settled areas of Wakhan and near summer pasture areas used by Wakhi herders. The site shows evidence of Tibetan usage (Mock 2013a) that dates to the Tibetan Imperial period, most likely to the latter half of the 8th century CE. Older rock art at the site depicts ibex, yaks and a hunter with a spear (Fig. 16). Rock carvings that depict ibex, argali sheep, yaks, and humans holding spears or bows are among the earliest rock art of Central Asia. Such rock art hunting

Fig. 16. Hunter, ibex, swastika, lunar crescent; Color Plate IVb.





Fig. 17. Wild yak, Big Rock site, Wakhan District.

scenes are widely found throughout Central Asia and probably were related to ritual practices that ensured hunting success (Dodykhudoeva 2004, pp. 151–52; Hauptmann 2007, pp. 24–25; Bellezza 2008, p. 173).

The panel at the Big Rock site (Fig. 16) shows a hunter holding a spear, several ibex, a yak, and a large ibex with exaggeratedly long curving horns and clearly depicted hooves. The excessively large size of this ibex suggests a ritual function for the art, which is further indicated by a reverse (counter-clockwise) swastika above the ibex and a crescent moon beneath it, both symbols closely associated with pre-Buddhist traditions.²⁰

Figure 17 depicts a large wild yak, with four legs, a massive body, a bushy tail, and a raised head with curved horns extending upward, not a lowered head with horns protruding forward. The yak is depicted in silhouette. It is pecked into the glacially polished surface of a large boulder. The yak is not being hunted. Rather, like Figs. 9 and 10, it may be a symbolic depiction of a wild yak.

Figure 18, from the same boulder as Fig. 17, depicts a rider on horseback aiming a bow and is a depiction

Fig. 18. Equestrian shooting from a bow, Big Rock site.



of skillful riding. The depiction is mostly in outline. The edges of the pecking appear sharper and better defined than those of Fig. 17, indicating a different and possibly more recent composition. The rider uses a long single bow rather than a composite bow. The rider appears to wear a headdress or hat, perhaps a helmet. The horse has a bridle and a saddle. The foot position of the rider suggests stirrups although they are not depicted, which, as previously noted, is significant for dating. The trapezoidal figure on which the rider sits on the back of the horse is suggestive of the shape of a saddle carpet or felt. These elements²¹ suggest that this depiction may be a more recent composition than the yak in Fig. 17.





Fig. 19. (left) Three ibex in silhouette. Fig. 20. (right) Three ibex.

Rock Pile gallery

The Rock Pile site is located in the Pamir region at an altitude of 4000 meters. The site is on a terrace high above the Wakhan River, where a large outcrop of dark polished rock is exposed. The rock outcrop is broken into smaller boulders and most display rock art. Many of the carvings depict ibex, which, as previously noted, is the most common subject of rock art throughout Wakhan. Figures 19 and 20 depict ibex, but in notably different styles. The panel shown in Fig. 19 depicts three ibex in silhouette. The top ibex has two legs, a short tail, a long neck, curved horns and outstretched legs, as though running or leaping. Below it is another ibex whose horns, depicted as a single horn, seem to fit into the space between the front and rear legs of the upper ibex. This middle ibex also has two legs, a short tail, a long neck, and appears to show a slight beard. It is unclear if the upper ibex is depicted with a beard or not. Below the middle ibex is a small ibex that is not as well defined as the upper two ibex. The front legs of the lower ibex are shorter than its

rear legs, perhaps as though leaping. All three seem to form a unified composition with the same style of execution, form of depiction and degree of repatination. The whole composition and spacing of the three ibex suggests a group of ibex running or jumping together and can be compared to similar ibex depictions from the Aq Jilga site in the Tajikistan Pamir (Ranov 2001, pp. 132–38).

The panel shown in Fig. 20 depicts three ibex. The top left ibex is depicted in outline, with four legs and large curved horns that appear to join at the end. It is facing another ibex that is depicted in silhouette (partially cut off in the figure). The horns of both ibex are exaggeratedly long, and those of the top left ibex are very exaggerated as though emphasizing this aspect of the animal. Ibex horns are associated with spirituality and even today are often placed at religious shrines. Below the top left ibex is a small stick-figure ibex showing two straight legs and a downward-curving tail. Its head merges with the front legs of the upper ibex. The degree of repatination of all three ibex is similar, suggesting they were composed at about the same time, although they are all in different styles.

and the large shoulder hump of the powerful animal. The upper figure shows four legs, but the lower figure shows only two legs. The lower figure has a darker color, closer to that of the surrounding rock, suggesting more repatination than the upper figure. Hence, although the depictions are stylistically similar, the lower figure, due to the degree of repatination, appears to be older than the upper figure. Below the upper yak and in front of the lower yak is a depiction of another animal. It is lighter in color than either yak, showing less repatination. The long tail is not typical of an ungulate, nor is the elongated muzzle. It may be a wolf, which is a common animal on the Pamir. Behind the upper yak is a rider on horseback. The depiction is not detailed and the execution is less precise than that of the yak, suggesting that it may have been composed separately rather than being a unified, contemporaneous hunting scene depiction.

The panel shown in Fig. 22 depicts two yaks in profile silhouette. The lower yak is several times larger than the upper yak, although both yaks are stylistically and compositionally similar. Both yaks show four legs. Their bushy tails are not exaggerated in size,

and are not raised high, but rather extend rearward. Their heads are lowered and their horns extend forward. The horns of the lower yak appear in a full circle and those of the upper yak may also be in a full circle, but a fracture line in the rock surface makes this difficult to discern. A large fracture line runs through the rear portion of both figures and shows lichen growth, indicating that the depictions were made before the fracturing occurred. Fracturing is a feature of weathering, especially in a



Figures 21–23 depict yaks in silhouette, with the body fully inscribed. They share the stylistic motif of massive depiction of the animals, seemingly emphasizing strength and power. The two yak depictions shown in Fig. 21 are similar in style and composition.²³ Both depict a yak in silhouette, with head lowered and curved horns prominent in front, a similarity they share with wild yak depictions from southern Siberia, Mongolia and Kazakhstan (Ranov 2001, p. 143). Both show the characteristic bushy tail

Fig. 22. Two yaks, Afghan Pamir site.



Fig. 23. Yak, Afghan Pamir site.

high altitude environment subject to extremes of heat and cold. Above the horn of the lower yak are several outline drawings of what appear to be ungulates — perhaps big horn sheep, which are resident in the Pamir. The massive stylistic quality of both yaks is remarkable and seems to emphasize the power and strength of the animals.

The panel shown in Fig. 23 depicts a large yak in profile silhouette. The yak has its head lowered and its large curved horns forward, as though in a defensive or aggressive posture. The horns, like those in Fig. 22, appear to be in a full circle. The depiction shows only two legs. The characteristic bushy tail extends rearward, and a fracture line obscures the final portion of the tail. The depiction appears to be heavily repatinated, but clearly shows the pecking technique which was employed. Several other symbols appear on the panel, but they have no obvious significance or relation to the yak. The massive quality of this yak figure emphasizes the strength of the animal.

The panel shown in Fig. 24 is a palimpsest and depicts two large yaks in profile. They are composed in silhouette. Both depictions show four legs, lowered heads with horns thrust forward and raised bushy tails. Although they are in silhouette, with the interior pecked, the outer edge of each figure appears to be more strongly pecked than the interior. This is especially true of the upper yak, which has a fully defined silhouette head and horns. The tail is also strongly defined, but shows some repatination. This style of composition is comparable to that found at the Aq-Jilga site (3800m) in the Pamir region of Tajikistan. Ranov (2001, p. 126) described the technique as "first the contour of the drawing was carved with a sharp object, then its inner side became shaded ... and then sometimes ground down ... [so that] their color didn't differ from that of the surface." Ranov noted that this technique appeared unique for the Pamirs. Ranov (2001, p. 137) commented that the manner of representing a yak, in which "a massive body presents a contrast to a small head and thin legs," is unique and



Fig. 24. Wild yak palimpsest, Afghan Pamir.

is not found elsewhere in Central Asia. The yaks in Fig. 24 best exemplify these Pamir characteristics and so can be linked to the Aq-Jilga site in adjacent Tajikistan, which Ranov tentatively dates to the "very beginning of the first millennium BC."

In the center of the upper yak is an ibex figure, with exaggeratedly large curving horns. Above the back and head of the upper yak and above the head of the lower yak are thinly inscribed smaller ibex figures. Below the lower yak is another animal, difficult to identify. It may be an ungulate, as there is a suggestion of curving horns, but the repatination makes it obscure. The repatination of the main animal figures appears equal. The overlay of a stylized ibex on the body of the massive yak is an intriguing palimpsest, showing important game animals of the Pamir.

The panel shown in Fig. 25 depicts two argali heads, head on, which are readily identified by the distinctive shape of the horns. Argali, commonly known as Mar-



Fig. 25. Ibex, argali heads, anthropomorph.

co Polo sheep, are big horn sheep indigenous to the Pamir and were described in the account of Polo's 13th century travels through the Pamir (Polo 1871). The depiction of argali is less common in Wakhan than that of ibex, and this head-on depiction is unusual. Argali horns also decorate shrines in Wakhan, and argali are associated with the spiritual world. The argali in this panel are depicted with ears and have central "antennalike" protrusions from the middle of their heads and a single dot on their foreheads. These last two elements make them seem "tamgha-like"24 and suggest a symbolic or spiritual significance to the depictions.

The panel also has an ibex in silhouette at the lower left, and below the upper argali head is an anthropomorph, with arms outstretched. It is weathered and difficult to see clearly. To the right of the anthropomorph is an unidentifiable figure,

almost like a torso, but not recognizable. All of the rock art in this panel is very weathered and repatinated, suggesting considerable age.

The panel shown in Fig. 26 depicts an unusual and stylized anthropomorph, whose round outline head has two eyes. From the body-right side of the head is a zig-zag line. The rock panel is broken on bodyleft side of the head, and if there was a corresponding zig-zag line, it is now gone. 25 The anthropomorph has a longish neck and two arms that are bilaterally symmetrical and have zig-zag angular bends that parallel the line coming from the head. The part that would be the hands is very long, and neither hands nor fingers are depicted. The body or torso is depicted in silhouette with a tapered waist. The legs extend to the knees, but the knees bend backwards, almost as though squatting, or sitting with legs spread. Such a posture cannot readily be depicted on a two-dimensional rock surface. From the waist (body left) is a line extending out, with a thick part at its end, but the rock is broken, and whatever may have existed beyond is lost.²⁶ Extending down between the legs is a line, but it bifurcates to form an oval, open (uncarved) in the center. The oval connects with an unusual design of two circle outlines, with a dot in the middle of one and a swirl or half circle in the middle of the other. These are connected by a horizontal line that joins the oval shape mid-line, with a vertical line descending down from the center of this horizontal line. The inner part of each circle design descends as though forming legs.



Fig. 26. Anthropomorph with rays from head.

Although this lower figure displays bilateral symmetry, it is not identifiable as either an anthropomorph or a zoomorph. One could ascribe sexual symbolism to a phallus connecting to the oval shape, but the odd angularity of the upper human design suggests a ritual or possibly shamanic function.

Conclusion

Afghanistan's remote, high altitude Wakhan District has retained numerous rock art sites. The sites have remained largely unknown and undisturbed due in large part to the difficulty of visiting the area. On the basis of stylistic and content comparison with other, more well-studied high mountain sites in Central Asia and South Asia, the sites appear to date from the Bronze Age through the Iron Age and into the modern historical era. The rock carvings range in altitude from

areas that are now permanently settled to areas that, due to high altitude, could only be used seasonally. The human usage depicted evidences hunting of wild game (ibex, argali, yaks) and trans-regional trade that followed what has become known as the Silk Road. These depictions portray the progression of human usage of Wakhan.

The rock art also provides data on the symbolic concepts of the high mountain Pamir-Hindukush regions. From early visitors to current residents, continuing concepts of the spiritual world are evidenced in the rock art and shrines of Wakhan. This continuing dynamic concept is characteristic of the Pamir-Hindukush-Karakoram region and demonstrates linkages to concepts of shamanic people of the steppes of Central Asia.

The people who left rock art records in Afghanistan's Wakhan and Pamir, by comparison of their rock art, may be linked to hunters of the Eurasian steppe and subsequent Scythian/Saka nomads. Were some compositions made by the early nomadic huntergatherer groups that moved into the Pamir following the Last Glacial Maximum (LGM), 14,000-10,000 years ago, that is, at the start of the Holocene? At this point, without any excavation that might reveal tools or a faunal record, it is impossible to say. Malassé and Gaillard (2011) show that the early mountainous hunters disappeared from the Pamir region 5000-4000 years ago, as the region grew more arid and the bio-

diversity necessary for their lifestyle decreased. They also note a concurrent rise in a pastoralist lifestyle. Did the nomadic hunters begin to settle and adopt a transhumant lifestyle? Did Wakhan have more extensive forest cover in the first half of the Holocene that was burned to establish rangelands, as Miehe et. al. have proposed for the southern flanks of the Hindukush-Himalaya and the Tibetan plateau (Miehe et al. 2009a; 2009b)? Without pollen and charcoal studies we cannot know. Were some of the compositions made by Bronze Age people that were part of the "mobile pastoralist network" moving within the "Inner Asian Mountain Corridor" (Frachetti 2012) or more specifically, Andronovo people utilizing transhumant herding to exploit the Pamir ecological niche (Kuzmina 2008, pp. 63-64)? Again, without excavation to reveal a faunal record or lithic or metal industries that can be associated with known cultural periodization, we cannot know. In the adjacent Pamir region of Tajikistan, chariots depicted in the "from above" perspective have been described from the Aq-Jilga site (Ranov) and linked to Andronovo people (Kuzmina 2008, p. 57). Despite the proximity and similarity of landscape, so far we have found no chariot depictions in Wakhan. Such depictions are unknown after the early Iron Age (Jacobson-Tepfer 2012), and suggest the Aq-Jilga depictions were made by Saka people at the beginning of the first millennium BCE (Ranov 2001). The presence of Saka people in Wakhan seems probable, based on stylistic elements of the rock art that suggest composition by Scythian/Saka people venturing into the Pamir for hunting. Depictions of skillful horse riding and archery, i.e., shooting a composite bow while riding at full gallop, strongly suggest Saka/Scythian presence. Although the evidence of Saka culture is widespread in the Tajikistan Pamir region, specific archaeological evidence to support this attribution of stylistic elements of the rock art has not been located in Wakhan. Even so, the rock art evidence from Wakhan and the Pamir supports the hypothesis of a circulation of Scythian/Saka people from Eurasia into the upper Indus regions of present-day Pakistan (Gilgit-Baltistan) and India (Ladakh).

We would also like to know when wild yaks became extinct in Wakhan and to what extent improved weaponry and horsemanship contributed to their extinction. Faunal remains at old hunting camps would help answer this ecological question. The realization that Bronze Age hunters and herders utilized the same routes, water sources and mountain passes that were used by travelers along the historical Silk Roads (Kuzmina 2008, pp. 64, 108) leads us to suppose that historical sites in Wakhan may overlay prehistoric and proto-historic sites. The rock art record at several Pamir sites indicates a long period of human usage.

In Wakhan, the historical Tibetan material can be dated with a relative degree of accuracy to the midseventh through mid-eighth centuries CE with the numerous depictions of riders on horses equipped with saddles and bridles following in sequence after the Tibetan period. Lichenometric comparative studies might help ascertain the chronology of the historical art.

The rock art and other archaeological material of Afghanistan's Wakhan and Pamir has neither been thoroughly studied nor documented. On-site research, including pollen and radiocarbon studies, would contribute greatly to the important theoretical questions mentioned above. This article presents a preliminary survey of the prehistoric and protohistoric rock art of Wakhan and the Pamir. Altogether, this preliminary study indicates that Afghanistan's Wakhan and Pamir regions would richly reward further research to reveal the ecological and cultural heritage of the Roof of the World.

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Notes

- 1. Wakhan was the last settled region before crossing the Pamir from west to east, and the first settled region reached when crossing from east to west. Villages in Wakhan today range from 2600 to 3270 meters in altitude and are located along side streams flowing into the main Panj River. This article addresses the part of Wakhan within Afghanistan, where it constitutes the district (*woluswoli*) of Wakhan.
- 2. For more on the history of the Silk Road and routes through the Pamir, see Barfield 1989, Beckwith 2009, Grousset 1970, Waugh 2010, Whitfield 2004, Zelinsky 1965. For a summary of exploration in the Pamir, with useful maps, see Middleton and Thomas 2008.
- 3. The Tang Annals were translated into French by Édouard Chavannes and first published in 1903. The Old Tibetan Annals (OTA), interestingly, were obtained by Stein on this expedition. Subsequent scholarship utilizing these and other sources has produced more detailed analysis. See Beckwith 1987 and Denwood 2009. See Dotson 2009 for an annotated new translation of the OTA.
- 4. This was Stein's second Central Asian journey, recounted in Stein 1912, pp. 63–88, and Stein 1921, pp. 60-72. His conclusions regarding the famous 747 CE battle between the Tibetans and the Chinese are in Stein 1922.
- 5. See Ferrandi 2010 for an overview of rock art in Afghanistan and the Hindukush, in which he notes the research lacunae for Wakhan and the Pamir. Research expeditions in the 1970s largely focused on geology and natural history, with brief mentions of rock art and cultural heritage. See Agresti 1970; Naumann 1973; Dor 1974; Gratzl et al. 1978; Petocz 1978.
- 6. For more on Scythian/Saka mastery of horse riding, see Davis-Kimball et al. 1995, pp. 193–95. A 'Scythian' bow is depicted in Artamonov 1974, Pl. 44. Scythian/Saka presence in the Pamir in the 8th-6th c. BCE is discussed in Davis-Kimball et al. 1995, p. 235, and Litvinskij 2002. Jettmar (2002, pp. 96–101) and Hauptmann (2007, pp. 26–28) provide a chronology placing Saka/Scythians in the Gilgit and Pamir regions in the 1st millennium BCE.
- 7. Repatination of rock art, that is, the gradual return of the weather-induced patina, is a physical indicator of age. The more the art is repatinated, the older it is. Stylistic elements are also useful indicators of age. For a thorough discussion of Central Asian rock art see Tashbayeva 2001, especially the section on petroglyphs of Tajikistan by Vadim A. Ranov (Tashbayeva 2001, pp. 122–48), which includes the Langar

- site on the north (right) bank of the Panj river in Wakhan.
- 8. Pamirs are high-elevation U-shaped valleys, distinctive to Central Asia.
- 9. Initial human foraging in the comparable high altitude Tibetan Plateau is attested from at least the Late Paleolithic (13,000 calendar years BCE) (Madsen et al. 2006; Rhode et al. 2007; Aldenderfer 2011).
- 10. Although Paleolithic tools dating to about 800,000 BCE have been found in loess deposits in southern Tajikistan, "the region may have been largely uninhabited during the Last Glacial Maximum and sites dating from 34,000 14,000 BCE are virtually unknown" (Davis and Ranov 1999, p. 186).
- 11. Composite bows are often termed Scythian bows (Reisinger 2010). The Scythians were masters of mounted archery and dominated the central Eurasian steppe region for much of the first millennium BCE (Barfield 1989, pp. 46–51; Beckwith 2009, pp. 58–70; Davis-Kimball et al. 1995, pp. 193–95). Access to the Pamir grasslands and wild game was undoubtedly made easier by horse riding and yak hunting made easier by the compact, powerful compound bow. For more on horses and the development of riding by steppe people, see Anthony 2007, Di Cosmo 2002 and Drews 2004.
- 12. See Mock and O'Neil 2004 for a report on 2004; Mock and O'Neil 2005, 2006a, 2006b, 2007a for results of 2005; Mock and O'Neil 2007b and Mock 2011b for results from 2006 and 2007; and Mock 2011a for results from 2006–10.
- 13. For studies of the archaeology of the Tibetan Empire in Wakhan see Mock 2013a, 2013b, 2013c.
- 14. No chronology has been established for Wakhan. Rock art may date to the Bronze Age, or even earlier to the beginning of the Holocene. See the discussion at the conclusion of this article.
- 15. Wakhan, like the rest of Afghanistan, is subject to iconoclasm, digging and looting. The sites discussed in this article have not been fully documented or studied and no excavation has been done. Until and when such work is complete, I have chosen not to reveal publicly the actual locations and instead have used English translations of the Wakhi and Kyrgyz toponyms. I am happy to communicate more specifically with interested scholars and welcome collaboration.
- 16. The Indus river system links Ladakh with the Gilgit-Baltistan region of modern Pakistan, where the joint Pakistani-German project begun by Karl Jettmar and continued by Harald Hauptmann has identified over 30 sites, 30,000 petroglyphs and 5,000 inscriptions. This is documented in two series: Antiquities of Northern Pakistan (ANP, five volumes), providing selected specialized articles on the subject, and Materialien zur Archäologie der Nordgebiete Pakistans (Materials for the Archaeology of the Northern Regions of Pakistan MANP, nine volumes) which is devoted to the publication of complete rock art sites in monographs. For more information see http://www.rzuser.uni-heidelberg.de/~u71/kara/intro.html.
- 17. This dark patination can be correlated with strongly varnished boulders typical of the nearby Batura (Hunza Valley) glacier advance period of the early Holocene, 10.8–9.0 ka BPE (Owen et al. 2002).

- 18. Currently, wild yaks (*bos mutus*) are found only in a small part of Ladakh and in the Chinese provinces of Tibet, Qinghai and Xinjiang (Buzzard et al. 2010; Fox et al. 2004; Harris and Leslie 2008; Schaller 1998). Domesticated yaks (*bos grunniens*), however, are kept by both Wakhi and Kyrgyz residents of Wakhan (Shahrani 1979).
- 19. An early European description typifies their habitat: "The wild yak occurs on the Tibetan Plateau at elevations of 3,000–5,500 m, where it inhabits the coldest, wildest, and most desolate mountains" (Blanford 1888, p. 491).
- 20. See John Bellezza's website http://www.tibetarchaeology.com/september-2010/> for images and additional discussion of the pre-Buddhist significance of these symbols. I am grateful to John for reading several drafts of this article and offering useful comments and expert advice.
- 21. The "Ambassadors' Painting," a Samarkand mural painting from an aristocratic house in the ancient city of Afrasiab, dated to the mid-7th century CE, attests to these elements of horse gear in Central Asia. See Whitfield 2004, pp. 110-11.
- 22. See Mock 2011a, p. 122, for specific discussion of ibex horns at shrines. See also Mock 1998, pp. 45–46, for a broader discussion of the association of wild ungulates with the spiritual world throughout the Pamir-Hindukush region.

- Shatskiy 1966, p. 112, discusses the sacred significance of wild ungulate horns in ancient Central Asia.
- 23. Ronald Petocz published a photograph of a similar yak depiction from the Waghjir (Wakhjir) valley of Afghanistan's Little Pamir (Petocz 1978, p. 21).
- 24. Tamgha and tamgha-like rock art found in the Pamir and upper Indus have been ascribed to Sogdians. See Passarelli 2010, pp. 74–75, for discussion. Tamgha are well-known as clan symbols and carpet motifs among Turkmen and Mongol people.
- 25. "Schematic, anthropomorphic figures with rays on their heads are a particular feature of Siberian and Central Asian rock art. Their bodies may be curvilinear, and some of them are missing legs or hands, but they are always depicted with rays either on the head or even replacing it" (Devlet 2001, p. 50). Devlet suggests such figures represent shamanic or supernatural beings.
- 26. Human figures with a rod extending from the waist and ending in a ball, identified as a mace, have been studied in the Altai, Xinjiang and Ladakh (Francfort et al. 1990, pp. 3–5) and ascribed to the Bronze Age. Jacobson-Tepfer (2012, pp. 4 and 12), however, identifies the Altai rock-art depictions of these objects as daluur, "usually made of yak hair or foxtail mounted on a stick and used in hunting small animals to distract the intended prey."

ON THE INTERPRETATION OF CERTAIN IMAGES ON DEER STONES

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Deer stones are one specific type among the monuments of the Eurasian steppes from the Bronze Age and Scythian periods. They are stone steles of varying dimensions, sometimes with anthropomorphic but primarily with zoomorphic representations, among which dominate stylized figures of of galloping deer with long branching horns. Such monuments have frequently been the subject of study by many scholars, who have established their date and the range of territory over which they are found (Volkov 1981; Chlenova 1984; Khudiakov 1987; Savinov 1994; Varenov 1998). All the specialists have interpreted deer stones as symbolic representations of warriors and the depictions on them as tattoos or leather appliqués on warriors' clothing.

Scytho-Siberian cultures. Its shape is approximately trapezoidal, it measures 31.5×8.5 cm, and is about 0.5 cm thick; its lower edge is rounded, while the upper and wider edge has roughly a triangular shape. On the face side of the plaque are several ornamental zones: three of them have geometric compositions and two zoomorphic subjects. The geometric compositions consist of volutes, three rows of which are in the center of the plaque and one row each on the lower and upper edges. The zoomorphic subject in the upper part of the plaque contains two figures of deer and two figures of oxen, these pairs symmetrically arranged in addorsed (back-to-back) poses (Fig. 2). On the lower part of the plaque (Fig. 3) in two rows (but



Analysis of a number of bronze objects both from museum collections and from excavations of recent years suggests yet another variant for the interpretation of such representations. Let us look first of all at a bronze plaque from a private collection (Fig. 1). The circumstances of the discovery of this plaque are unknown, but the style of the depictions connect it with



Fig. 1. Bronze plaque with zoomorphic images. After: Treasures 1998, p. 68, Fig. 62).

Figs. 2 & 3, details of upper and lower parts of bronze plaque in Fig. 1



practically in direct symmetry) are scenes of predation: in each row is a feline predator, under which is depicted the head of an ungulate (a horse or kulan). Behind the feline in a row stand three raptors with long beaks. Along the long edges of the plaque and along the lower border, approximately equidistant from each other, are 37 holes, each with a diameter of 3–4 cm.

The presence of these holes led the authors of the catalog description to decide that the plaque was decoration for horse harness (probably they had in mind a browband) attached to leather (*Treasures* 1998, p. 68). However, that purpose would not have required such a large number of holes. So it is possible to propose a different function for the given plaque. It could be part of defensive armament and have served either as separate arm plates or (with the help of leather straps or sinews) have been combined with an analogous plaque or plaques to form a protective suit.

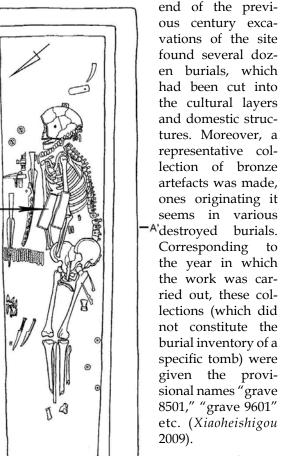
The similarity of the depictions of the deer and other animals on the given plaque with those on the deer stones is quite obvious (Fig. 4). Therefore, one can propose that the depictions, carved on these stone statues of warriors, imitate not only tatooing or leather appliqués on clothes but as well zoomorphic compositions on bronze armor.



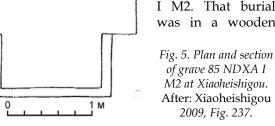
Fig. 4. The Ivolga deer stone. After: Okladnikov 1954.

The use of such bronze armor by the peoples of the Eurasian steppes in Scythian times is well established. In archaeological monuments its parts are represented principally by bronze helmets whose traditions of manufacture and use date from the Bronze Age (Komissarov 1987; Varenov 1989). For a long time such helmets of the Scythian period in the eastern part of the steppe belt were known only from chance finds, and in individual instances were found in plundered graves (Erdenebaatar and Khudiakov 2000; Khudiakov and Erdene-Ochir 2010; Varenov 1994; for a collection of finds in the eastern region of the steppe belt see Kang 2009). Excavations of recent years in northeastern China not only have filled out the collection of armaments but for the first time possibly have recorded finds of armor parts in situ.

In particular, this is the case in grave No. 2 excavated in 1985 (85 NDKhA I M2) at the site of Xiaoheishigou in Ningcheng County, Inner Mongolia (Fig. 5). At the



In toto six bronze helmets were found at the site, five of them outside the complex and one in grave no. 85 NDXA I M2. That burial was in a wooden



coffin in a shallow pit with vertical walls. The male body lay on its right side, head to the southeast with extended limbs, but the foot bones were missing. On the head of the deceased was a bronze helmet with a rectangular loop at the top. The inventory included bronze weapons (spears [Fig. 6.1,2], daggers [6: 9–12, 14–16], a dagger axe with tapering blade and trapezoidal butt [6:3], a socketed axe of rectangular shape with a knob on the butt [6:7], and two-bladed arrowheads [6:17–23]), knives, awls, a small hollow axe [6:13], bronze grommets [6:24, 27, 28], belt decorations formed like a row of five beads [6:26, 29], and a square

Fig. 6. Inventory of grave 85 NDXA I M2 at Xiaoheishigou. After: Xiaoheishigou 2009, Fig. 238.

plaque shaped from two pairs of animal heads [6:25]. Above the head of the deceased was a wedge-shaped stone object with an opening (possibly a small axe) [6:8] and a spike made from animal horn [6:5].

Of particular interest were two bronze plaques found in the vicinity of the forearm of the deceased [Figs. 5, indicated by arrow; 6:4,6; 7:1,2]. They have approximately the same size, whose determination (as also that of the measurements of the grave) in the excavation report is imprecise: on the drawing of the burial (*Xiaoheishigou* 2009, Fig. 237) the scale suggests that their length is about 45 cm, whereas in the figure depicting the inventory, the scale suggests the plaques have a length of about 11 cm (Ibid., Fig. 238).

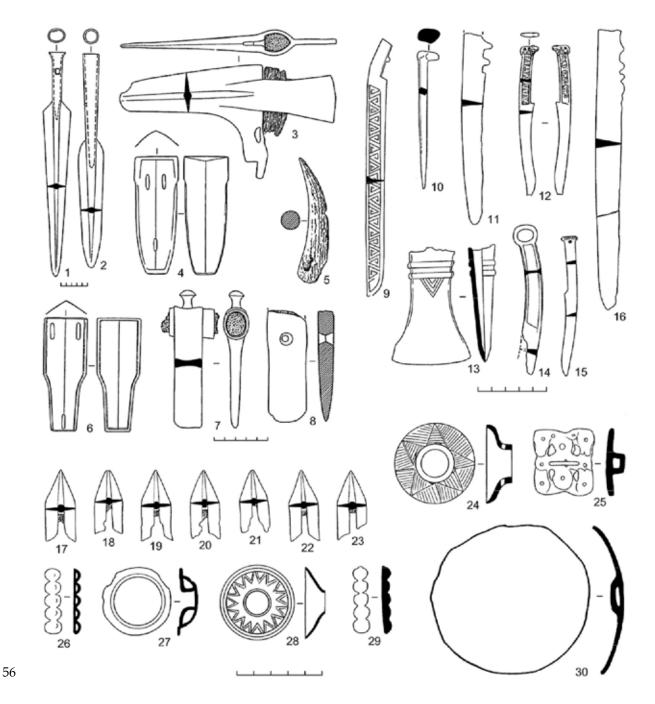


Fig. 7. 1, 2. Bronze plaques from grave 85 NDXA I M2 (depicted also in Fig. 6: 4, 6). 3. Bronze plaque from "grave M8501." 4. Bronze plaque from "grave M9601". After: Xiaoheishigou 2009, Figs. 238; 330:2,10.

The description of the finds assigns one plaque a length of 22.1 cm, the other 11.4 cm (Ibid., p. 298). Judging from the size of the grave given in the description (285 x 100 cm) the scale on the diagram should be corrected (from 1 m to 0.5 m) and thus the probable length of the plaques is 22 cm. One of the plaques has the shape of an irregular trapezoid with rounded long edges; the lower part of the other is in the shape of a rectangle with the upper part narrowing in the shape of a trapezoid. The cross-section of the plaques is triangular; on the reverse side are two loops in the upper part and one in the lower.

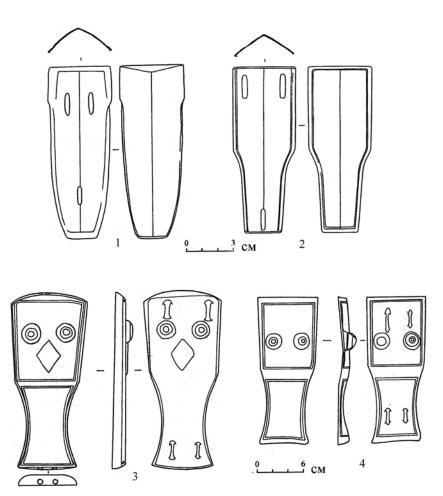
The authors of the excavation report describe the given objects as horse browbands, which hardly seems justified: in the inventory of burial 85 NDXA I M2 are no objects which can be connected with pieces of horse harness (whereas in other burials such are found). Taking into account the posi-

tion of the plaques in situ in the vicinity of the forearms and the loops for securing them, one can suggest that such plaques could have been used as arm plates and, along with the helmet, served to defend the wearer from blows of sharp weapons.

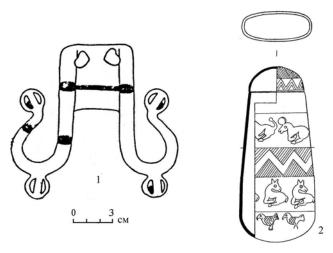
Similar in shape and possibly analogous in function are the plaques known from the site that were among the chance finds (the collection of artefacts with the provisional numbers "M8501" and "M9601") (Fig. 7:3,4). The length of one of them is 24 cm, the other 20 cm. The upper part of the plaques has the shape of a trapezoid, No. M8501 with rounded upper edge; the lower part narrows in the shape of an irregular trapezoid with concave longer sides. On the face side of the plaques in the center of the upper part are two projections; under them on plaque M8501 is also a small rhomboid-shaped projection (possibly, taken together these details represent a mask). Small loops for fastening project from the short sides on the reverse of both plaques.

Fig. 8. Bronze objects collected at Xiaoheishigou from "grave M8061" and "grave M8501" respectively.

After: Xiaoheishigou 2009.



Clearly grave 85 NDXA I M2 and the majority of the other burials at the Xiaoheishigou site are part of the Far Eastern extension of the Scythian world (Miniaev 1991). Attesting to this is the inventory of the graves, where there are many objects both found in burials of the Scythian period and depicted on deer stones (daggers, dagger-headed axes, axes, rein guides), and the depictions on a number of the artefacts are in the "Scytho-Siberian" style (Fig. 8).



The connection of these burials with the Upper Xiajiadan culture (to which this site is attributed) as yet remains controversial. Just as at Xiajiadian, which has defined the features of this culture, the stratum of the Xiaoheishigou site and the burials in round pits connected with it that have no inventory were cut through by burials with inventory of Scythian appearance, often in stone cists, less commonly in wooden coffins or coffins placed inside a stone cist. Thus it is clear that the phenomenon of the "culture the Upper Xiajiadian" is in need of more detailed analysis in order to avoid terminological and chronological confusion (Miniaev 1985, p. 78; 1991, p. 173). Rather it is probable that the real "culture of the Upper Xiajiadian" (both settlements and burials in pits without inventory) represents a separate culture which is not connected with the culture of burials in cists or wooden coffins with Scythian inventory.

Taking into account the currently accepted chronology of the Upper Xiajiadian — 1000–600 BCE (*Regional* 2003), the stratigraphy of the burials discussed here, and analogies of the majority of finds from the "inserted" burials at Xiaoheishigou to Scythian cultures of Inner Asia, the probable date of such burials is the second half of the Spring and Autumn period to beginning of the Warring States period, approximately the 7th-5th centuries BCE.

Note: This article previously appeared in Russian as "K interpretatsii nekotorykh izobrazhenii na olennykh kamniakh," in: Kul'tury stepnoi Evrazii i ikh vzaimodeistvie s drevnimi tsivilizatsiiami: Materialy mezhdunarodnoi nauchnoi konferentsii, posviashchennoi 110-letiiu so dnia rozhdeniia vydaiushchegosia rossiiskogo arkheologa Mikhaila Petrovicha Griaznova, Kn. 1 (SPb.: IIMK RAN; Periferiia, 2012), pp. 262–67.

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-- translated by Daniel C. Waugh

TAMGAS, A CODE OF THE STEPPES. IDENTITY MARKS AND WRITING AMONG THE ANCIENT IRANIANS

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My subject is a topic that has seldom been discussed outside the specialized scholarly literature, although it has an important bearing on the overall knowledge of the ancient history of Eurasia (Jänichen 1956; Ol'khovskii 2001; Yatsenko 2001). The focus of the paper is a peculiar class of marks — identity marks — that have been used for centuries (and are still in use) by various populations in every period and area of the world: Iranians and Turks, Celts (Gambacurta 2013, p. 33, Fig. 1) and Vikings — just to limit ourselves to the Eurasian continent — through the ages had wide inventories of identity marks of their own. Heraldic insignia as the coats of arms of the European aristocracy are still in use today (van Gennep 1905).

In this paper I will deal specifically with the identity marks used by the ancient Iranians, living in an area extending from Eastern Europe to inner Mongolia, from the Late Iron Age to pre-Islamic times (Fig. 1). However, the paper, is not meant to track a history of such marks through the major periods involved (mainly the Achaemenid, the Parthian and the Sasanian empires). Rather, it will discuss their functions and social implications, especially their relationship to writing (methodological matters that are more commonly investigated by anthropologists and semiologists), and it will explore a few topics that deserve further research in the future.

The peculiar identity marks of the ancient Iranians, that are composed by lines, circles, and geometrical shapes arranged in various ways, are usually called "tamgas," using a Turkic word, inasmuch they were later widespread among the Turks, Mongols, Kazakhs and even Slavs. Mongolia and Kazakhstan are in fact the two countries where tamgas (there called "tamagas") are most often used today, where researchers can still observe their transmission and changes through the generations and study the social premises and implications of their use (Waddington 1974). The Turkish term "tamga," strictly speaking, would

not be appropriate to describe the pre-Turkic marks of the ancient Iranian peoples, namely those which I will discuss here: the Iranian term "nishan" would better match them. However, "tamga" has generally met the favor of scholarship dealing with the ancient Iranians, therefore it will be used in this paper too. The origin of the word "tamga" lies possibly in the Alanic language that is directly descended from the earlier Scytho-Sarmatian language and therefore belongs to the family of the Eastern Iranian languages. According to Vernadsky (1956, p. 189), "tamga" would descend from the Alanic term "damyghœ," meaning "clan emblem," in its turn related to the word "dee myg," meaning "your sperm." This word clearly relates to family and blood relations, i.e., the conceptual

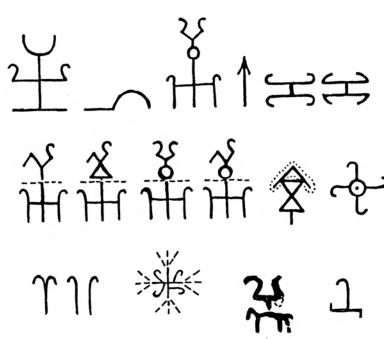


Fig. 1. Examples of Sarmatian tamgas. After: Yatsenko 2001, p. 164, Fig. 14.

sphere where tamgas do belong. Moreover, an earlier root for the word "tamga" has been recently proposed (Perrin 2010, p. 24, n. 1): a borrowing from the Greek word "tagma," involving metathesis, would bear on the relevant fields of taxation and tagging. Whatever the real origin of the word, the relevance of tamgas within the fields of identity and blood relations, ownership and administration, can be established for every society within they were (and are still) used.2

Since time immemorial, man marks his own properties — lands, animals, stuff — in order to claim rights to them and preserve them from theft or assault. Rooted in man's biological legacy, such use descends from the animal instinct to mark the environment by means of tracks, scratches and smells (Perrin 2010). As every animal does it in order to inform about its presence, to establish hierarchies, to claim rights to an area and to prevent struggles for it, so also do humans need to signal their presence, to mark the areas where they live basically for the same purposes. The animal instinct is developed into well codified customs within human society: it has evolved and adapted to complex social conditions that require elaborated codes and rules, that may lean on various kinds of distinguishing marks, and may be supported by language, a very important feature that is exclusive to the human species. Since olfactory means are losing importance (being however not completely neglected), in human societies the reminders about identity and ownership may be expressed mainly by physical or visual means and by linguistic means, namely by marks and words.

Marks are a primitive, though very efficient way to convey information on identity. These mnemonic devices that may be depicted on several kinds of objects (seals, pottery, bricks and stones, head-gear, carpets, dress and even skin³) are immediately understandable by people living within the same areas, even if they cannot read. Marks must not be read, but have to be recognized. As we live in a world dominated by communication and advertising, we well know the value of clear and distinguishable brands as a key to profit (Mollerup 1997). Just like advertising marks (Fig. 2),

identity marks always had to be clearly identifiable. A lot of delicate

matters might depend on prompt

recognition in the past too, such as







Fig. 2. Modern brands as tamgas.

After: Perrin 2010, p. 56, Fig. 18.





them. Obviously, this method of accounting is adequate as long as

the principal means of economic exchange is generalized reciprocity

rather than hierarchical redistribution. That is, the method functions within families and clans relying on blood relations, but is inadequate within proper states. However, the history of the Iranian populations shows that the system of tamgas often survived and retained much importance within the urban and literate contexts, as it represented a native way of thinking and managing, deeply rooted in their cultural legacy. We

populations, ensuring fairness in trade, and so on. However, the appearance of the Iranian tamgas is seldom plain and geometrical as is that of the advertising brands: rather, tamgas are often complicated, asymmetrical and unclear, thus giving rise to many

social stability, peaceful relations with neighboring

Scholars generally agree that tamgas have figurative roots in the schematic depictions of meaningful objects or animals that may have some kind of relationship with the families to which they refer.4 Certain scholars, however, think that tamgas share something with writing, and have gone so far as to conclude that tamgas might indeed be some sort of alphabet (Nickel 1973). Thus it is important to present some considerations on the use of tamgas among the ancient Iranian populations, reflecting on the social premises of their employment and their relationship with writing.

Both writing and tamgas were developed for the same needs, namely for accounting. They are two different responses, or rather two different steps of the same response to the demand for adequate social rules to regulate and guarantee personal properties. (Cf. Gelb 1968, p. 36: "Symbols used as property marks are an important step toward writing.") The main difference is the following: while writing relies on signs (graphemes) that make up different words and may be combined in countless speeches on whatever subject, tamgas communicate just one kind of information, that pertaining to identity and ownership. Tamgas arise in social milieus where written communication is absent, where information is conveyed through spoken language or through visual and physical means. Such a characterization pertains to pre-urban, agro-pastoral communities, whereas writing arose with urbanization and specialization of jobs, that led to the storing and accounting of different kinds of goods (Schmandt-Besserat 1992).

A feature that has seldom been considered in this regard is that the birth of writing was the birth of counting too: establishing the distinction between words and abstract numbers was an achievement of sedentary peoples. With this consideration in mind, we can observe that within pre-urban societies, concrete counting is maintained through the use of tamgas that take the place of abstract numbers: every animal is branded and every jar, weapon and other valuable item marked, as they are concretely counted, tamgas being the only means to claim ownership of



Fig. 3: Examples of Achaemenid Anatolian tamgas. After: Boardman 1998, p. 4, Fig. 4.

must not forget that alphabetization was a privilege of few people even in the Achaemenid and Sasanian times, and Iranian people kept depicting tamgas on administrative instruments such as coins and seals, as they were easily understandable by everybody, both literate and non-literate people.

The fact that the earliest Iranian tamgas we know come from urban, sedentary communities, even large empires such as the Achaemenid one (Fig. 3; see the western Anatolian tamgas collected by Boardman 1998), is due to the nature of the objects on which they are depicted. In fact, among nomads, tamgas are usually branded on animals' skins and depicted on carpets, felts, or clothing — in a word, on perishable materials that are seldom preserved in archaeological excavations. In contrast, within urban societies ownership and administration are regulated by durable means such as coins and seals that are often brought to light by archaeology.

Tamgas' functions were retained when they were depicted on objects used in the literate, urban societies such as coins and seals. However, on coins the identification and warranty purposes were already accomplished by different devices. In effect, the Greek monetary system often used letters and monograms since its birth (Fig. 4): these alphabetical devices could have different functions, indicating personal identities, identification of mints, or dates (see de Callatay 2012). Since the Greek and Iranian

Fig. 4 a-d. Examples of monograms on Greek coins (a. Lysimachos; b. Antigonos Monophthalmos; c. Antiochos III; d. Demetrios Poliorketes). After: http://coinarchives.com.

monetary systems met in the Hellenistic age, tamgas and letters or monograms could sometimes appear on the same coins, perhaps with different purposes, or maybe with the same function, namely to inform people with different backgrounds — both literate and not-literate — through the appropriate means, namely words and marks. However, such coexistence led to a certain confusion in research,

as a notorious tendency of European scholarship is to interpret foreign civilizations in the light of the European cultural legacy. Thus a number of scholars interpreted tamgas as akin to monograms, because the latter were better known from Greek and Roman numismatics. The eminent historian Helmut Humbach (1961) proposed to read a series of Sarmatian tamgas as monograms of the Greek gods Zeus and Dionysos. Some years later, in an article that had much resonance in Western scholarship, Helmut Nickel (1973) further injected confusion into the debate, pointing out vague similarities of tamgas with the earliest Slavic alphabet, namely the Glagolitic letters and numbers, and with Turkish tamgas and zodiac signs as well. Nickel's article, while stimulating, strengthened the tendency to consider tamgas as mysterious, magic kinds of signs; in rather vague ways, it pointed to fascinating, though groundless, hypotheses.

What is by and large the current consensus about Greek monograms holds that such devices are first found on Greek coins beginning from the 5th century BCE. In the Classical age, plain letters, usually the first two letters of a word, were often displayed on coins. They were still neither ligated nor assembled in any way; so we cannot actually speak of monograms. Rather, they are abbreviations, cyphers. From the 4th century BCE, a certain taste for aesthetic embellishment or intellectual games led the minters to combine two or more letters in various kinds of ligatures, arranging letters together in a more or less geometric way. Here indeed lies the beginning of monograms. Though different ideas are expressed in literature as to what information they contain, it is possible to discern a certain trend: i.e., earlier monograms preferably referred to the name







Fig. 5 a-d. Examples of monograms on Indo-Parthian, Indo-Scythian and Bactrian coins (a. Antimachus I; b. Maues; c. Philoxenus; d. Azes). After: http://coinindia.com.

of the minting town, or the ethnic identity of people settling the town, or the eponymous hero; later, more or less from the Hellenistic age, monograms started to hint at personal names. Whose names, however, is matter of debate. Numismatists often identify officers or magistrates of the ateliers, though I suspect they have just avoided the problem by giving an answer which relies on personal names for individuals whom in fact we cannot know. Indeed, attempts to identify town mints in the Hellenistic period have often been unsuccessful, as the letters composing the monograms do not always match those of the mint towns. While Imperial Roman and Byzantine monograms almost uniformly refer to the name of the Emperor, there are still a lot of inconsistencies in attempts to interpret monograms as abbreviations of personal names for the Hellenistic coinage.

A similar or even worse situation prevails for the less investigated Parthian, Bactrian and other Central Asian coinages where Greek monograms often occur (Fig. 5). Cunningham's effort (1892/1971) to demonstrate that the monograms on Central Asian coins were related to the mint cities was a total failure, according to Tarn (1951, p. 437), who instead was convinced that monograms might indicate moneyers, mint-masters or city-magistrates. As Richard B. Whitehead has stated, "the truth probably lies between the views of Cunningham and Tarn" (quoted in Marshall 1951, pp. 830-31). But this, again, seems to avoid the problem, and the truth is that nobody has yet found a satisfying answer as to the meaning and function of monograms on Hellenistic coins. Moreover, one should keep in mind that the Indo-Scythian and Indo-Parthian coins are among the most coveted and expensive coins on the antique market. Consequently, a great number of fakes may well have been issued in the last century, resulting in a number of senseless monograms being credited, further confusing research on them.

However, deciphering Greek monograms neither is my aim nor falls within my expertise. Rather, I focus here on the fact that, beginning in the Hellenistic





period, both tamgas and monograms were displayed on coins and seals of the Iranian populations (especially on Parthian coins, kharoshthi monograms being first used on Kushan coins). Potentially complicating the situation is the fact that Central Asian coins often display symbolic devices of a third and different tradition, such as the Indian *triratna* or *nandipada* (Fig. 6). However, since these are clearly distinguishable, confusion should not arise. Now that





Fig. 6 a-b. Indian triratna or nandipada on Indo-Scythian and Kushan coins (a. Vasudeva; b. Vima Kadphises). After: http://coinindia.com.

several studies on tamgas have cleared confusion on that point, one can see that monograms and tamgas really share certain features in that they had a similar function, namely to affirm the validity of coins by referring either to an individual or to a family who might authorize their issue. In the first case, that would be an officer; in the second case, the ruling clan.

Nonetheless, to summarize, there also are two substantial differences between monograms and tamgas, not only as regards their shapes, but more importantly in the contexts of their use and their social and cultural implications:

1) Monograms and tamgas were devised for completely different purposes, under completely different social conditions: the former were conceived specifically to affirm the validity of coins and seals, namely instruments of the administration and trade, while the latter were adopted from a different context, being originally displayed on properties and cattle, that is, the

objects of trade. Monograms were specifically created within a social order regulated by institutions not relying on blood-relationship. In contrast, tamgas belong to small social orders based on blood-relationship. Their use on coins and seals is a secondary one, which starts when nomadic, non-literate communities developed new social structures under the external influence of the urban, literate societies.

2) If we are to believe the interpretation given by numismatists with regard to the Hellenistic items, monograms are marks expressing identity by an individual: they are in effect signatures. Therefore the monogram of a son may often be totally different from the monogram of his father and have a random relationship with it. Names within a family do not usually relate to each other; they are usually chosen by relatives according to individual, non-predictable criteria. On the contrary, tamgas are marks expressing identity and ownership by a clan, a group of relatives. According to ethnological research conducted among Mongols and Kazakhs, tamgas' shapes do not change very much as generations go by. A well regulated grammar of additional signs and rotations exists in the morphology of tamgas, a grammar that allows everyone with a trained eye to understand the relations within a clan and between different clans (Waddington 1974, pp. 480-83; Yatsenko 2001, pp. 15-16). By means of well regulated changes in the disposition of signs, tamgas slowly change as generations go by, and from their disposition it is possible to understand the status and relationship of a person within a clan.

It follows that tamgas might be an extremely useful tool of research, if only the numismatists would appreciate their value. Exceptions to this neglect of tamgas, largely by Western scholars of Central Asia, are in the work of Ukrainian and Russian scholars who have already studied them for many decades (see e.g., Drachuk 1972; Yatsenko 2001). In the Western literature, the word "tamga" rarely appears; instead we find a generic "device," "symbol," or worse, "monogram," which thus confuses two distinct categories of signs, with different origins, compositions, and referring to completely different social structures with diametrically opposed weight given to the individual and the community.

A related subject which deserves further research is the so-called Sasanian "monograms" that are often found on Sasanian seals and coins (Fig. 7), and have long been debated by eminent scholars (Unvala

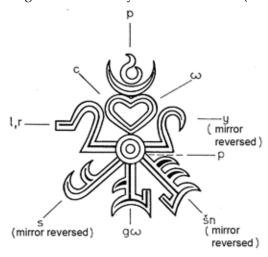


Fig. 8. Sasanian monogram-tamga deciphered by Robert Göbl (1971, p. 111, Fig. 2).

1953; Bivar 1959; de Menasce 1960; Frye 1964; Göbl 1971). Even today some scholars may call such marks "monograms," without explaining which letters they can discern, let alone how should they be read. Readings have been attempted for just a handful of them, where most of the extant ones remain unclear. Robert Göbl (1971, esp. pp. 110-11, Figs. 1-2) made some successful efforts, reading "pylwc gwšnsp," a personal name (here, Fig. 8). For other examples, Adhami (2003) derived a single reading (the word "amargar," i.e., an administrative office) for "monograms" having different shapes that are composed of clearly different elements. So it would seem that only a few of these marks might actu-

Fig. 7. Examples of Sasanian "monograms." After: Unvala 1953, Pl. VI.

ally be deciphered, the rest remaining unintelligible. Therefore it is incorrect to label them all "monograms" and suppose that they are consistently composed of Pahlavi letters, an idea which is at best partially valid.

A statement by Christopher J. Brunner (1978, p. 123) best expresses the status of "Sasanian monograms" between image and writing, viz.: "Later Sasanian devices show an increasing tendency to absorb monographic elements; this trend paralleled the freer use of abbreviations generally." In other words, "Sasanian monograms" were actually tamgas. However, in the late Sasanian age, some engravers began to adapt Pahlavi letters to the layout of those tamgas, likely for aesthetic reasons and as an intellectual game — that is, for the same reasons that might have led Greek mint-

ers to create monograms as signatures on coins. Yet what we seem to have here is just a few cases of virtuosity, whose aim was to leave the structures of tamgas intact, though they were "written" by, or rather included, Pahlavi letters.

crossed at the middle by a horizontal line. While there has been some speculation about that symbol, which vaguely recalls a cross (or, suggestively, a "two-legged Ankh"), it has never been the object of detailed analysis. With reference to a suggestion by Silvestre de Sacy, its interpretation as the "frawahr symbol" was sustained in a series of recent publications by Rika Gyselen, who however just labeled it so without discussing the matter at length (Gyselen 2003). In contrast, Abolala Soudavar (2009, pp. 426–27) recently proposed to read the device as "a caricature symbol of Apam Napat," as he sees a certain similarity with a schematic drawing of a child. His arguments are

Fig. 10. The main Firuzabad relief. After: Vanden Berghe 1984, p. 63, Fig. 8.



In sum, the few Sasanian "monogram-tamgas" that turn out to be actually composed by Pahlavi letters can be considered as ingenious marks. They combine the information on the individual name and the information on the clan, the latter remaining, however, the main and immediately recognizable one. That is, it is a mark that collects name and surname, a figurative signature indeed, that reflects the different social premises of tamgas and writing to which I called attention above.

Now let us turn to a different matter, a meaningful case of the attitude of Western scholarship towards researches on tamgas: I refer to the so-called "frawahr symbol," appearing in the Sasanian period on a number of artifacts (Fig. 9). It is a schematic depiction composed of a ring standing on two diverging lines,

Fig. 9. The so-called "frawahr symbol" carved in a niche at Tāq-i Būstān. Photo: Archive Centro Scavi Torino.



hardly convincing, based as they are on a personal interpretation of that drawing. (We should note as well that Soudavar adduced inconsistent arguments for the so-called "cow-sign" [Fig. 10, second figure from the left], whose shape should be rather compared with the well-known Gondophares' tamga and other tamgas of the Parthian period.) Perhaps the most credible reading is that proposed once more by Göbl (1976, Nos. 567–68, Taf. 44), who read the symbol as an "Investiturschleife," namely a "loop of investiture." Indeed, a certain similarity exists between such a symbol and the image of the bi-ribboned diadem symbolizing the investiture of the Sasanian kings on some rock reliefs (e.g., see Ardashir II invested by Ahura Mazda at Tāq-i Būstān; Fig. 11). However I am convinced that

Fig. 11. The investure scene at Tāq-i Būstān. Photo © 2010 Daniel C. Waugh.



none of these interpretations might be correct, the real purpose and implication of that symbol has possibly been misunderstood, and a huge amount of historical information lost. I would suggest instead that the symbol might be an identity mark, a tamga in all respects.

The Firuzabad rock reliefs are a fundamental document in this regards, as the so-called "frawahr symbol" is repeatedly depicted on the horse of the king Ardashir I (Fig. 10, second figure from the right). Significantly, however, three different symbols are also depicted on the saddles and headgear of each one of the mounted characters. A recent analysis of the Firuzabad reliefs by Maciej Grabowski (2011) has offered a better understanding of the scenes and the characters, based on the different marks displayed on their horses and headgear. However, in my view, Grabowski

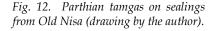
stopped short of a full understanding of the true nature of all those symbols: he explained the so-called "frawahr" and "heir" symbols as, respectively, divine and status markers. On the contrary, I am convinced that they are both identity marks of the Iranian clans: that which is allegedly considered to be the Parthian dynastic mark, depicted on the saddle of Artabanus IV falling from his horse, provides the key to such an interpretation. For the sake of the internal coherence of the scene, all the marks displayed at Firuzabad should be better interpreted as identity marks of the Sasanian aristocracy. The context indeed calls for such an interpretation, as the intent of those marks on the relief was clearly to inform about the identities of the figures, thus allowing an immediate understanding of the scenes. In this view it would be not appropriate to mix identity marks, status marks and divine marks in the same scene.

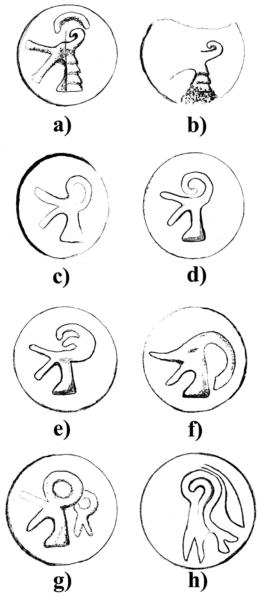
My interpretation might also provide different insights on the coins and seals where such marks are often depicted, adding fundamental information on a number of historical events. The so-called "frawahr symbol" has recently been found on several pawns coming from an exceptional fire temple at Mele Hairam, in southern Turkmenistan (Kaim 2011, fig. at p. 313), but the lack of information on the contexts of the pawns in the preliminary publications prevents me from further speculation about them. Whatever the meaning of the symbol, one can at least note that if, as assumed, the temple of Mele Hairam was built at the end of the Parthian period, that mark might possibly originate already in the Parthian period, and thus not be an exclusively Sasanian mark. If I am correct in interpreting it as a tamga, perhaps it could help in understanding the blood relations between the Parthian and Sasanian aristocracies at the turn of the dynasties.

Now for my final point. As just noted, the last Parthian ruler, Artabanus IV, is identified at Firuzabad by a tamga composed by a ring on the top of a vertical

staff (Fig. 10: first figure on the right). This mark, which first appeared under Orodes II and was depicted on both obverses and reverses of Parthian coins, is a "sort of family crest" and is usually called "the Arsacid symbol" by scholars (see Grabowski 2011, p. 220; Sinisi 2012, p. 64).

There is a certain similarity between this mark and images from a series of recent finds which have expanded the inventory of the known Parthian tamgas. These are marks depicted on a number of clay sealings excavated in the Southwest Building of Old Nisa, Turkmenistan, where the Arsacid kings established a sacred citadel with ceremonial purposes in the 2nd century BCE. Since 2009, a dozen stamp sealings (of both jars and doors) have been found, bearing the impressions of possibly one and the same tamga, represented with slight differences on each impression (Fig. 12; see Manassero 2010; Lippolis 2010, pp. 40-42, Fig. 6). No parallel may be found to these tamgas in the previously known inventory of sealings from the Square House of Nisa (cf. Masson and Pugachenkova 1954). The main image may be roughly described as composed by a ring (or hook)





on a staff, with two straight diverging lines at the top of the staff, facing leftwards. One impression has a second, smaller, mark on the right, composed of a ring standing on two diverging staffs similar to legs. In my previous publication I focused on the imagery of those tamgas and suggested one recognize their figurative origins in an ideologically meaningful image, namely the club and mace — the symbol of the Greek god Herakles, from whom the Arsacid dynasty claimed to be descended. However, this was mere speculation, as the state of preservation of the sealings does not allow reliable conclusions even today. Until there are clearer findings (clearer impressions or the seals themselves) to help resolve this matter, the real roots of the Nisean tamga remain unexplained. The badly preserved, crushed sealings with erased and faint impressions might even raise doubts that tamgas are in fact depicted. However, the secondary mark on one of the impressions (Fig. 12g), which closely matches the tamga of Phraates IV (Yatsenko 2001, Fig. 33.b.4), supports the idea that the main mark is a tamga too.

Whatever the exact subject hinted at by these new tamgas, I cannot refrain from noting a certain similarity between them and the so-called "Arsacid symbol." The tamga on the sealings from Nisa has quite a different shape, asymmetrical, with two straight and diverging lines on the left, and a less abstract appearance that made me suppose that "it might preserve some memory of the object originally depicted." However, the overall structure with an upper round element standing on a staff with a wider base is similar. Comparing the two marks, the diverging lines of the Nisean one may perhaps be explained as added signs to distinguish a branch of a clan, according to the previously mentioned rules regarding the changes of tamgas through the generations. As Nisa was the first Arsacid capital, established in their very homeland in the early Parthian period, I am inclined to suppose that the tamgas depicted on the newly found sealings might be connected to some extent with the so-called "Arsacid symbol." The ring-on-staff seems to be a recurrent element in both these Parthian marks, and in the Gondophares' tamga as well. Links with the Sasanian tamga featured by Shāpur I on the Firuzabad relief (that which Soudavar called the "cow-sign"; see the second figure from the left in Fig. 10) might be taken into consideration and lead to new results in historical research. Always bearing in mind the warning of Humphrey Waddington against automatically connecting distant tamgas by virtue of their shape, "we can suppose that there is a common stock of brandmarks that can be used by different people simultaneously, as long as contiguity does not cause confusion. This is like the use of proper names in our society or the use of colors in making maps: adjacent countries must be given different colors but further away the

same colors may be used again" (Waddington 1974, p. 473).

In this paper I have tried to lay out some topics about tamgas that have been seldom discussed by archaeologists and historians. In particular I have called attention to the relationship of tamgas to writing and to the social background they imply. In more specific examples, I outlined some largely understudied topics that have emerged in the last decades which merit further research, since they may have important consequences for our knowledge of ancient Iranian civilizations. The recent studies on tamgas that are largely the fruit of Russian scholarship point to a successful trend in focusing on functional matters rather than on the formal ones (Ol'khovskii 2001; Yatsenko 2001). They have stopped speculating merely on what objects are or "might be" depicted; rather they are concerned with learning about their contexts of use and their circulation and historical implications. This must be the agenda for future studies on tamgas. Scholars may reach better answers if they focus on the functions and the evolution of tamgas in time and space, in order to track the movements of people and increase our understanding of events about which there are no written sources.

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Notes

- 1. "Tamġa" is a Turkish word, also witnessed in Mongol as "tamaga" or "temdeg." The most ancient source witnessing a secondary form of the word is the so-called Ačura inscription, coming from the Abakan region in the Yenisei valley, that reads: "yirdeki tamqalıġ yïlqï bungsïz erti," meaning "his herds marked on his lands were countless." Here we find a clear reference of the word to ownership and cattle-branding (Orkun 1994, p. 544). The Uighur lexicographer Mahmud al-Kashghari gives a full account of the Turkish tamgas as of the 11th century (Kashgari 1982–1985).
- 2. The articles published in Evans Pim 2010, a real milestone in the studies on tamgas, show the diffusion of the identity marks among ancient and modern populations all around the world, from Europe to South America and Africa.
- 3. The famous Pazyryk and Tarim mummies display different kinds of images (mythological subjects and astral symbols), but we cannot exclude that identity marks were tattoed or branded on human skin in the past, as happens today. We are familiar with a number of depictions of tattoed Iranians and Thracians on Greek vases, and sources mention this practice among the Iranians, where it was not condemned as in Graeco-Roman civilization (Jones 1987; Renaut 2004).
- 4. Some scholars proposed to relate tamgas to the "deerstones" and the Bronze Age petroglyphs that are often found across Siberia in the vicinity of kurgans. Such relationships must be carefully considered, as those petroglyphs might often be of a votive and sacral kind. However, we may notice a certain affinity in the context of the so-called "encyclopaedias of tamgas," that survive on some rocks in Ukraine and Siberia (e.g., the lion statue from Olbia and the open-air sanctuary of Bayte III; see Yatsenko 2001, pp. 68–83). These monuments collect marks of the different clans that met there to commemorate some event or stipulate some path. Both these kinds of monuments establish a strong relationship between man and the environment. They are signacula in all respects, reminders that require no written accounts.

Some Observations on Depictions of Early Turkic Costume

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There are important data on the costume of early Turks of the 7th-10th centuries CE in petroglyphs found across Inner Asia from the mountains of the Mongolian and Russian Altai and Tuva to the central Tian-Shan in Kyrgyzstan and Karatau Mountains in the middle Syr Darya basin. In a number of cases, of course, dating them to the early period of Turkic history may be problematic, and despite the large number of such compositions, there is very little detailed and realistic depiction of costume in them. Of additional value are images on the coins of Chach (Tashkent Oasis) of the 7th-8th centuries CE (see, e.g., Shagalov and Kuznetsov 2006; Babayar, 2007) and the Oguzes of the lower Syr Darya in the second quarter of the 9th century (Goncharov and Nastich, forthcoming) and on several metal artifacts from the territory of the Khazar Qaghanate. These data have not yet been completely analyzed.

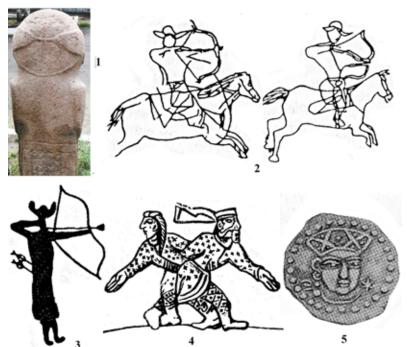
In important ways, this material supplements evidence derived from well-dated monuments of Chinese Sogdians in the second half of the 6th century CE, from Early Tang burial figurines (*mingqi*) of the 7th–8th centuries (Yatsenko 2009), and evidence from wall paintings of the mid-7th century in the "Hall of the Ambassadors" in Samarkand/Afrasiab (Yatsenko 2004). The new data also supplement that derived from analysis of early stone statues (see, e.g., Kubarev 1984; Baiar and Erdenebaatar 1999; Ermolenko 2004)¹ and from the remains of authentic clothes in tombs (Kubarev 2005, pp. 26–56; cf. Kubarev 2000, pp. 81–88). These sources provide information almost exclusively

about male costume. Personages who themselves may not be Turks may nonetheless sport costume with elements that suggest Turkic ethnicity. We see this in Sogdian (Yatsenko 2006, pp. 239, 240, 282) and Early Magyar/Hungarian depictions of the second half of the 9th century (Bokii and Pletneva 1988, Fig. 5.1; Komar 2008, p. 216), where it seems the interest is in emphasizing prestige elements of costume, and in the case of the Magyars it is a matter of borrowing Turkish iconography. It is important first of all to establish which elements of numerous details of silhouette, cut and décor were accentuated. In so doing, we make the a priori assumption that the elements of costume emphasized in Turkic petroglyphs may well differ from those in official court wall painting (Samarkand/Afrasiab), on coins, or in the examples from China. While these latter sources would seem to focus on the elites, the petroglyphs may often embody representations and values of ordinary nomads.

One of the first distinctions between the depictions in petroglyphs and those on coins, murals and mortuary beds is the emphasis in the former on the individuals' heads. In depictions of various types, headdresses and hair-dos (believed to be a receptacle of the soul and the most important distinguishing feature of an adult male) were of special significance for both creators and viewers. A cone-shaped headdress is the most popular type: high ones (Tsagaan Salaa IV, NW Mongolia; Jetysu/Semirech'e, SE Kazakhstan; Northern Tuva) [Fig. 1.2–3, 6–8]² and lower ones (from the Jetysu to the middle Syr Darya region) [Fig. 1.1, 4–5]. Occasionally

Fig. 1. Cone-shaped headdresses: 1, 3, 5, 7 – Jetysu; 2, 6 – Tsagaan Salaa IV, Mongolia; 4 – Chach coins of the 6th – early 7th centuries, group 7, type 1; 5 – Oi-Jailyau; 7 – Baian Zhurek; 8. Northern Tuva. (Sources: 1. Mar'iashev 1994: Fig. 225; 2. Jacobson et al. 2001, Fig. 292; Kubarev et al. 2005, Fig. 312; 3, 7. Samashev 2012, p. 42; 4. Shagalov and Kuznetsov 2006, p. 323; 5. Motov 2011, Fig. 1; 6. Jacobson et al. 2005, Fig. 619; 8. Elizarov and Kuznetsov 2006, unnumbered).





(from Jetysu up to the middle Syr Darya), the lower edge is turned up and has a turned-up flap [Fig. 1.4 lower]. Such a cap used to be made both of dense

felt (such depictions of headdresses with standing crowns are known in Jetysu and other districts to the east) and softer fabrics (Northern Tuva; Tsagaan Salaa IV) [Figs. 1.1; 6.7]. Hats with flaps to protect the ears in winter were another widely spread type. These flaps are usually depicted as projecting out and upwards from both sides [Fig. 2.1–3]. Images of them have been found at Tuekta, Russian Altai, in Tuva at Elte-Kizhig and at Jetysu.

Diadems of fabrics with long drooping ends were repeatedly depicted on metal appliqués in the territory of the Khazar Qaghanate (Verkhnii Saltov, catacomb 40; Subbotitsy, grave 2) [Fig. 3.3, 4]. Diadems have the image of the moon above the forehead (the coins of Chach *tuduns*) or a trefoil (a horseman bronze amulet from the environs of Minusinsk) [Fig. 3.1, 5]. They are much more modest in décor than

Fig. 3. Diadems and Crowns: 1 — Chach coin, group 4, type 1, Shania bag?; 2 — Tarskii, Northern Ossetia, catacomb 6; 3 — Verkhnii Saltov, catacomb 40; 4 — Subbotitsy, grave 2; 5 — a find near Minusinsk, Khakasia; 6 — the gold diadem from Bilge Qaghan's tomb, 735 CE, Mongolia. (Sources: 1. Shagalov and Kuznetsov 2006, p. 313; 2. Korol 2008, Fig. 1.15; 3. Aksenov 2001, Fig. 1.5; 4. Korol 2008, Fig. 1.15; Bokii and Pletneva, 1988, Fig. 5.1; 5. Korol 2008, Fig. 1.17; 6. photo by author).

Fig. 2. Hats with ear flaps (1–3) and low cylinder-shaped hats (4–5): 1 — El'te-Kezhig, Tuva; 2 — Tuekta, Russian Altai; 3 — Jetysu; 4 — the ladle from Kotskii Gorodok on the Ob' River, western Siberia; 5 — Chach coins, group 6, type 3, Satachari/Satak. (Sources: 1. Photo by author; 2. Martynov and Miklashevitch 1995, p. 17; 3. Mar'iashev 1994, Fig. 236; 4. Foniakova 2002, Fig. 1; Griaznov 1961, Fig. 2; 5. Shagalov and Kuznetsov 2006, p. 317).

crowns of qaghans, such as in the Bilge Qaghan burial of 735 CE (Bahar 2002) [Fig. 3.6]. A low cylinder-shaped hat [Fig. 2.4, 5] is shown on coins from Chach and in the depiction of the epic hero on the Khazar ladle pot found at Kotskii Gorodok in the lower Ob' River, western Siberia.³

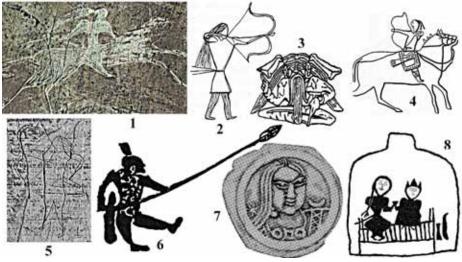
Other types are known from single depictions: a wide-brimmed hat (Tsagaan Salaa IV; Kurgak in the Russian Altai) [Fig. 4.1, 6], a narrow-brimmed one (Chach coins) [Fig. 4.3], a small cap made of four triangular pieces (Kyrgyzstan; Zevakino in the Kazakh Altai) [Fig. 4.4, 5], a headdress with a wide projection at the back of the





Fig. 4 (above). Headdresses of various types: 1 - Tsagaan Salaa IV, Mongolia; 2 - Chach coin, group 6, type 4/1; 3 - Chach coin, group 6, type 5, Satuk/Satar?; 4 - Kyrgyzstan; 5 -Zevakino (Kazakh Altai); 6 – Kurgak (Russian Altai); 7 - a bone object, Hyrlets, western Bulgaria; 8 - Eshkiolmes, Jetysu; 9 – Zhungylshek I, Karatau Mountains. (Sources: 1. Jacobson et al. 2001, Fig. 397; Kubarev et al. 2005, Fig. 425; 2, 3. Shagalov and Kuznetsov 2006, p. 318; 4. Kubarev 2005: Fig. 6.22; 5. Samashev et all. 2008, p. 113; 6. Kubarev 2012, Fig. 6; 7. Totev and Pelevina forthcoming, Pls. 5-6, courtesy of Boyan Totev; 8. Baipakov et al. 2005, Fig. 238; 9. Baipakov et al. 2007, p. 69).

Fig. 5 (below). Hair-dos: 1, 5 — Sook-Tyt, Russian Altai; 2 — Russian Altai; 3 — Subbotitsy, grave 2; 4 — Sulek, Khakasia; 6 — Tsagaan Salaa II, Mongolia; 7 — Chach coins, group 3, type 1/1; 8 — Kogaly (Jetysu). (Sources: 1, 5. Cheremisin 2011, Figs. 8, 13; 2. Kubarev 2005, Fig. 10.13; 3. Bokii and Pletneva 1988, Fig. 5.1; 4. Naskal'nye izobrazheniia 2007, p. 168; 6. Jacobson et al. 2001, Fig. 123; Kubarev et al. 2005, Fig. 126; 7. Shagalov and Kuznetsov 2006, p. 311; 8. Rogozhinskii 2008, Fig. 8).



head and a hole for plaits (a bone object of the 7th century from Xyrlets in western Bulgaria) [Fig. 4.7].

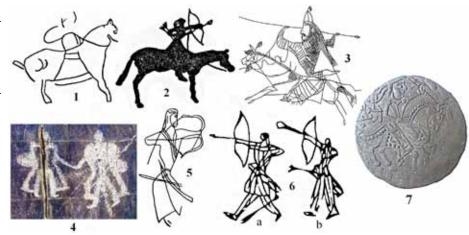
We see a very interesting cap on a tudun of Chach (group 6, type 4/1) [Fig. 4.2], the back part of which depicts a grotesque mask of a baldheaded old man with a big nose and a long narrow beard. The numismatists from Tashkent with insufficient cause think that it recalls a helmet with an elephant which crowns Graeco-Bactrian rulers on their coins. A headdress of a warrior-standard-bearer could be decorated with two long vertical feathers (Eshkiolmes, Jetysu) [Fig. 4.8]. Sometimes, during special rituals naked men performed in masks of wolves, which were sacred, originally totemic animals for Turks, as attested in texts of the Zhoushu and the Bugut stele (Kliashtornyi and Livshits 1978, p. 57) and many later materials (petroglyphs at Zhungylshek I in the middle Syr Darya basin) [Fig. 4.9].

Evidently, several long plaits joined together at the upper and lower parts formed the most widespread type of a hair-do for noble men (Sook-Tyt, Chagan River; Abadzhai, both Russian Altai) [Figs. 5.1; 8.2].

On rare occasions long plaits were divided into two bunches at the sides of the head (a mourning Turk in the wall painting of the Buddha's Parinirvana, Kizil, Maya Cave [site 3, no. 224]; Chagan River, Russian Altai) [Figs. 7.3; 8.6c]. The plaits might be bound at the top only (Russian Altai) [Fig. 5.2], or interwoven with only the ends divided (Kogaly in Jetysu) [Fig. 5.8]. A clear example of the long plaits divided into two bunches at the sides of the head is in the depiction of the old man on the belt buckle in Hungarian grave no. 2 from Subbotitsy, Kirovograd region of Ukraine) [Fig. 5.3]. Wearing of several short plaits was also very popular (Sulek, Khakasia [Appelgren-Kivalo 1931]; Jetysu) [Figs. 5.4; 6.2].

Sometimes, locks of short or long hair were combed to the sides leaving a small knot at the forehead (Chach coins, group 2, types 4-5 [Shagalov and Kuznetsov 2006, pp. 308-09] and group 3, type 1/1) [Fig. 5.7]. Rarely, locks of hair were spun around a vertically fixed comb (?) as we can see in the depiction of the spear-bearer at Tsagaan Salaa II, Mongolia [Fig. 5.6]. A frontal forelock on a shaven head was, evidently a very rare variant

Fig. 6. The silhouette and cut of clothes: 1 – Orta-Sargol, Tuva; 2 – Jetysu; 3 – Chagan River, Russian Altai; 4 – Kuldzhabasy, Jetysu; 5 – Zhaltyrak-Tash, Kyrgyzstan; 6 – Eshkiolmes, Jetysu; 7 – Oguz coin of Jabuya, second quarter of the 9th century CE. (Sources: 1. Devlet 1982, Pl. 28.1; 2. Mar'iashev 1994, Fig. 236; 3. Cheremisin 2004; 4. Baipakov and Mar'iashev 2004, Photo 61; 5. Kubarev 2005, Fig. 7.33; 6. Baipakov et al. 2005: Fig. 232; 7. photo courtesy Evgenii Iu. Goncharov).



(see only the statue from Taarbol near Arig-Bazhi in Tuva (Evtiukhova 1952, p. 82, Fig. 18); it is known only in isolated cases for nomads of Kazakhstan in the Scythian period and early nomadic Magyars/ Hungarians (cf. Ermolenko and Kurmankulov 2011). Common people wore their hair cut short and combed to the back (Sook-Tyt, Russian Altai) [Fig. 5.5]. A small beard is depicted rather episodically, but long, narrow and practically horizontal moustaches quite often. It was probably an object of pride and special care for the elite. In the opinion of Liubov' N. Ermolenko, starting at the end of the 7th to beginning of the 8th century CE some Turkic groups adopted the fashion of wearing, in addition to a moustache, a very small, barely visible beard under the lower lip as a mark of prestige (Ermolenko and Kurmankulov 2012, p. 107). However, it can be seen primarily on statues.

As for the clothing, only on rare occasions was the cut accentuated with lines on caftans and trousers as at Eshkiolmes, Jetysu [Fig. 6.6] or only on trousers (Tarskii, catacomb 6, Northern Ossetia) [Fig. 3.2]. The long-sleeved coats (probably with lateral cuts) are usually found in depictions of walking personages (but cf. the horsemen at Orta-Sargol, Tuva) [Fig. 6.1]. At times they have a deep wrap over to the left (Zhaltyrak-Tash, Kyrgyzstan) [Fig. 6.5]. Long cloaks, open in the front, which were worn thrown over one's shoulders were, evidently, close-fitting in the waist (Kuldzhabasy, Jetysu) [Fig. 6.4]. A deep wrapping over to the left was marked for them only occasionally (in Kyrgyzstan) [Fig. 6.5]. More often shorter caftans can be seen. Sometimes, vegetal or geometrical patterns on textiles were drawn in detail (the ladle pot from Kotskii Gorodok; Tsagaan Salaa II in Mongolia) [Figs. 2.4; 5.6]. The waistline (often very narrow) was accentuated with a belt (Russian Altai, including the Chagan River, and Kyrgyzstan) [Figs. 5.2; 6.2,3 and 5]; the shoulder line was also strongly emphasized, but less often [Fig. 5.1-2] (in Hyrlets, Bulgaria, shoulders are covered with a cape-pelerine). A narrow waist was a very important element of the proper appearance for a warrior in Scythian times (Yatsenko 2006, p. 101). In fewer cases (for common people) the waistline was not accentuated at all [Fig. 5.5].

Two lapels at the sides of short or long caftans were first marked in the 2nd-4th centuries CE on terracottas in Iranian-speaking Khotan (Xinjiang), then in the Kucha Oasis. Turks of the First Qaghanate (551-603), documented in Chinese depictions, almost without exception do not wear caftans (Yatsenko 2009). However, from the 7th century, two-lapel clothing begins to spread among them (Yatsenko 2006, pp. 252-53, 282-83), even though it is rare in depictions on the territory of the western Khazar Qaghanate. It is significant that, when on silver coins of old Khorasmian design from the lower Syr Darya basin issued by the Oguz ruler Jabuya in the second quarter of the 9th century there appear new elements in the costume of the "Khorasmian horseman" on the reverse, these elements reflect a local Turkic reality - namely, a caftan with two small lapels (with buttons made of fabric at their ends) [Fig. 6.7]. One additional element denoting Turkic costume in these coin depictions is a thick torque, which replaces a previously worn necklace. Long upper garments shirts that are not open in the front (evidently with lateral cuts in the hem) - are reliably documented in the Abadzhai Valley near the Chagan River in the Russian Altai. There are two square pieces of fabric (?) sewn in front on the breast part of warriors' clothing [Fig. 7.1, 2].4 The dancer on the early 9th-century saber from Zevakino has a shorter tunic (to the knees) worn closed. Its collar is vertically cut and the long sleeves during the dance allowed to hang loose [Fig. 7.5]. On the image of a man from Kichiku-Bom in the Russian Altai [Fig. 7.4] for some reason the artist attempted to depict two garments worn closed, one over the other. The outer one is knee-length and has a decorative border along the side seams and the edge of the hem and side slits and possibly an attached cape; the inner

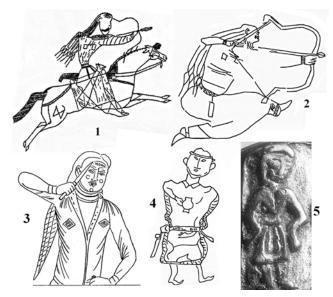
Fig. 7. The long shirts (1–2) and square insets on the breast: 1–2 – Abadzhai, Russian Altai; 3 – a mourning Turk; detail of the mural of the Buddha's Parinirvana, Maya cave (site 3, no. 224), Kizil, Xinjiang; 4 – Kichiku-Bom (Russian Altai); 5 – Zevakino (Kazakh Altai). (Sources: 1, 2. Cheremisin 2004, Fig. 2; 3. Grünwedel 1912, p. 180, Fig. 415; 4. Kubarev 2012, p. 138; 5. Samashev et al. 2008, p. 112).

one is a shirt tucked into the trousers with turned down collar.

Men's trousers were often worn over footwear; sometimes they were bell-bottomed (Subbotitsy, Eshkiolmes [Figs. 3.4, lower right; 8.5]. Very wide trousers are exceptional - so far they are known only at Bayan Zhurek (in Jetysu) [Fig. 8.12]. There are depictions of completely quilted trousers analogous to those of the Pazyryk Culture (in the Russian Altai) [Fig. 5.2]. As to the types of footwear, ankle boots [Fig. 8.2,4,11] and shoes [8.8a,c, 9] are present in approximately equal proportions. Unlike on statues and wall paintings, we see very few trustworthy depictions of high boots in petroglyphs (Abadzhai in the Russian Altai) [Fig. 8.1]. In Chinese images of the Early Turks, low shoes were more prestigious (Yatsenko 2009); cf. the prestigious image on the Mungut-Khyas stele, western Mongolia [Fig. 8.11]. Shoes with long stockings were used in the Russian Altai (Abadzhai near the Chagan River) [Fig. 8.10]. On the Khazar reliquary from Talovyi II, lower Don basin, barrow 3/1, we see shoes with narrow pointed toe boxes and with tongues at the instep [Fig. 8.9]; for

a horseman from Mongolia (Tsagaan Salaa IV) the length of shoe toes was up to 30 cm [Fig. 4.1]. Only in the northern Altai does one apparently see on occasion belts of black fabric (Yatsenko 2009, Fig. 6.8, 9) with two hanging ends [Fig. 7.5] or with an end which divides into three ribbons [Fig. 5.2].

Fig. 8. Trousers and footwear: 1, 2, 10 - Abadzhai, Russian Altai; 3 - Sulek, Khakasia; 4 - Verkhnii Saltov, catacomb 40; 5 - Oi-Jailyau, Jetysu; 6 - Chagan River, Russian Altai; 7 - Russian Altai; 8 – the engraved bone ware, Suttuu-Bulak, Kyrgyzstan; 9 – the bone reliquary, Talovyi II, barrow 3/1, Rostov region. 10 - Abadzhai, Chagan River, Russian Altai. 11 – Mungut-Khyas stele, Mongolia; 12 - Baian-Zhurek (Jetysu). (Sources: 1, 2, 6. Cheremisin 2004, 2011; 3. Naskal'nye izobrazheniia 2007, p. 168; 4. Aksenov 2001, Fig. 1.5. 5. Motov 2011, Fig. 1; 7. Kubarev 2005, Fig. 10.13; 8. Khudiakov et al. 1997, Fig. 2; 9. Glebov and Ivanov, Fig. 2.07; 10. Cheremisin 2011, Fig. 10; 11. Bayar 2007, Fig. 3; 12. Samashev 2006, p. 135).



Women's costume was seldom depicted in detail. We see a silhouette of a lady holding a child by the hand in one of petroglyphs from Jetysu [Fig. 9.2]. She is in a short caftan and wide trousers worn untucked over her footwear; to her right stands a girl (?) in a short jacket and trousers.⁵ Apparently a narrow anklelength dress, cinched at the waist, is depicted on a girl in a scene of her abduction by two horsemen at Syyn-Chiurek, Tuva [Fig. 9.3]. In all likelihood a petroglyph at Ankeldy (Chu-Ili Mountains) depicts five handholding, dancing women [Fig. 9.7].⁶ They have kneelength jackets cinched at the waist and rather narrow

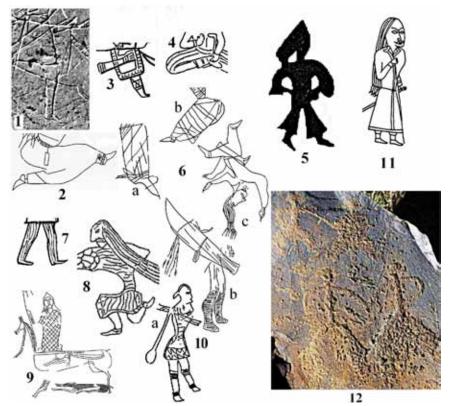




Fig. 9 (above). Female costume: 1 – a stone from Kudyrge, Russian Altai, grave 16; 2 – Jetysu; 3 – Syyn-Churek, Tuva; 4 – tudun's wife, Chach coin, group 2, type 4; 5 – Kotskii Gorodok, western Siberia; 6 – Kyrgyzstan; 7 – Ankeldy (Chu-Ili Mountains). (Sources: 1. Gavrilova 1965, Pl. VI; 2. Mar'iashev 1994, Fig. 231; 3. Kilunovskaia 2006, p. 75; 4. Shagalov and Kuznetsov 2006, p. 308; 5. Foniakova 2002, Fig. 1; Griaznov 1961, Fig. 2; 6. Tabaldiev 2012: Fig. 3; 7. Rogozhinskii 2012, Fig. 5.1-3;

Fig. 10 (right). Sogdian personage on a Turkic-type statue from Zavkhan aimag, NW Mongolia. (Photo courtesy of Yurii I. Ozheredov).

trousers. A long-sleeved coat of the goddess Umai without lapels (on the stone from grave 16 at Kudyrge, Russian Altai) is

decorated with horizontal lines of décor, probably a vegetal pattern [Fig. 9.1]. The upper part of the garment is secured with a button attached by a chain (?). A long- sleeved coat of the woman depicted on the ivory plaque from Suttuu-Bulak (Kyrgyzstan) has two lapels and is secured with a fastener at the breast (Khudiakov et al. 1997, Fig. 2). The lapels on one of the statues from Kyrgyzstan have a lining with ornament resembling a row of small circles or rosettes [Fig. 9.6] as is common in Chinese and Sogdian textiles of that period (Maitdinova 1996, Figs. 33; 43.1; 73–74).

The headwear (with three large projections) of elite women could resemble a narrow diadem with some sort of scaly covering (the Umai Goddess in Kudyrge); in all likelihood, the modest height of the main part of the headdress is to be explained by the schematic nature of the depiction. There is also a well-known,



more massive cone-shaped headdress with three large projections and a cap band (a turned-up flap) (worn by a wife of the tudun-governor, on Chach coins, group 2, type 4) [Fig. 9.4]. On the more detailed depictions, the lower border of a headdress with such pointed "horns" may be decorated by a tooth-like band. The image of Umai (and her female counterpart as well, the woman from Suttuu-Bulak) accentuates narrow joined eyebrows and an oval face [Fig. 9.1]. Probably it is a female warrior depicted on the ladle from Kotskii Gorodok

[Fig. 9.5], with short plaits tucked under the collar of the caftan before battle, her clothes no different than those of her male counterpart (Yatsenko 2006, pp. 340-41). Her sex is determined only by the hairdo, the two comparatively short but thick braids tucked under the collar.7 The important attribute of a woman from a ruling family was probably a gold necklace with a pendant on a lower part [Fig. 9.4]. Umai in Kudyrge apparently wears ankle boots with turneddown socks.

On rare occasions, not only ethnic Turks but representatives of other peoples were reproduced in statues of early Turkic type. In this

respect should be mentioned a very interesting statue discovered in 2010 in Zavkhan aimag, NW Mongolia, by Iurii Ozheredov [Fig. 10] which has a combination of a very wide face (close to a square) with wide pupils and a unique (unknown for early Turks) hair-do with curls along the lower edge. In Inner Asia at that time such a hair-do is encountered only for two peoples and only for men who were active, involved in commerce and occupying a prominent position both in China and the qaghanates: Tokharistanians (Yatsenko 2006, Fig. 189: 23-24) and Sogdians. To be precise, for the latter as yet there are no depictions in their motherland, but this feature can be seen among Chinese Sogdians, persons of not the lowest ranks – servants and caravaneers (Yatsenko 2009, Pls. 6 and 10; 2012, Pls. 10, 3 and 13.4). Probably the statue from Zavkhan aimag is that of a male Sogdian. It has an interesting



necklace of seven beads (a sacred number). There is nothing surprising about the find from Zavkhan, as participation of Sogdians in creating a series of Early Turkic statues is common knowledge (Hayashi 2006, pp. 245–60).8

On the whole, the appearance of costume on petroglyphs, coins and metalwork differs in many details from that in stone sculpture and wall paintings. The reasons for these distinctions can be found in the differing approach to the choice of personages which is connected with different purposes of the artifacts and compositions (in petroglyphs, common men could sometimes be depicted in scenes of hunting). The differentiation can also be explained by the need for special techniques in processing different materials and the requirements specific to three-dimensional and two-dimensional images. According to Liubov' N. Ermolenko (Ermolenko 2007), stone statues originally might have had some coloring of many important details, such color is no longer preserved and so far has never been the subject of special study.

Another interesting subject is the comparison of the costume of the early Turks and that of the tribes of the Tashtyk Culture in Khakasia, who lived to the north of their Xinjiang–Mongolian motherland in the 2nd century BCE – 5th century CE.⁹ From the later stages of their history we have an important series of detailed carvings whose rendition of details of costume has frequently attracted considerable attention. These include first of all the engraved wooden plaques found in crypt no. 1 near Tepsei Mountain in 1968 (Griaznov 1971), ones found near Tasheba Riva (Podolsky 1998), and the petroglyphs near Oshkol Lake (Pankova 2012). Svetlana V. Pankova concludes that the "Tashtyk peoples" were Turkic speakers, to

Fig. 11. Pre-Turkic Tashtyk Culture female costume in Khakasia: 1–7 – petroglyphs near Oshkol Lake and Podkamen ulus; 8 – details of belts (Sources: 1–7. Pankova 2012; 8. Azbelev 2009, Fig. 8).

a considerable degree basing her opinion on the "closeness" of their male hair-dos and the presence in their art of a series of parallels in Xinjiang (Pankova 2011, pp. 25–26).

Unfortunately, all the basic and clearly defined elements of Tashtyk costume which are the most important indices of ethno-cultural identity do not confirm this hypothesis. On the contrary, they are more likely unique and have no close analogies among the early Turks who replaced the "Tashtyk peoples." Tashtyk women have hair-dos of a Chinese type with decorated coverings on the crown in the form of a

Möbius ring made of birch bark [Fig. 11.3] (sometimes two long pins inserted in the coiffure are also visible [Fig. 11.1]). Their dresses have a relatively short train (which probably appeared among the Hephthalites, the enemies of the Turks, in the Amu Darya region and later in Western Europe) but absent covering shawls, belts worn high under the bust with a series of decorative pendants (Azbelev 2009) [Fig. 11.1-2, 8], and capes [Fig. 11.1-2] etc. In general the decorative motifs of Tashtyk textiles are foreign to those ot the early Turks in the cases where they are depicted with adequate detail [see, e.g., Fig. 11.2]. In contrast to the Turks, the men have shorter braids which are woven together (including those where the locks are bound at the back of the head and at the tip) [Fig. 12.10, 12], there is no emphasis on the moustaches, there are very short haircuts, as though shaped with a bowl and with a horizontal edge [Fig. 12.6, 13], their hairdos may have a knot on the crown and be fixed with a pin [Fig. 12.4-5, 14] and with curls at the temples at Yibat II (Vadetskaia 1986, Pl. IX.35) [Fig. 12.15], and finally they may have low and rather wide conic caps (Podolsky 1998, Fig. 1b). In contrast to the early Turks, in the dress of the "Tashtyk peoples" the projecting borders of the hems of the short caftans are meticulously emphasized [Fig. 12.6-9] (Pankova 2005, Fig. 7), but in contrast, the characteristically unfastened outer dress which they in fact wore is not emphasized (cf.. Vadetskaia 1986, pp. 137–38). (This is difficult to explain merely by the dominance among the former of depictions in profile.) In depictions of the early Turks, detailing of the face and of the upper part of the body is not emphasized. [Fig. 12.1-5].

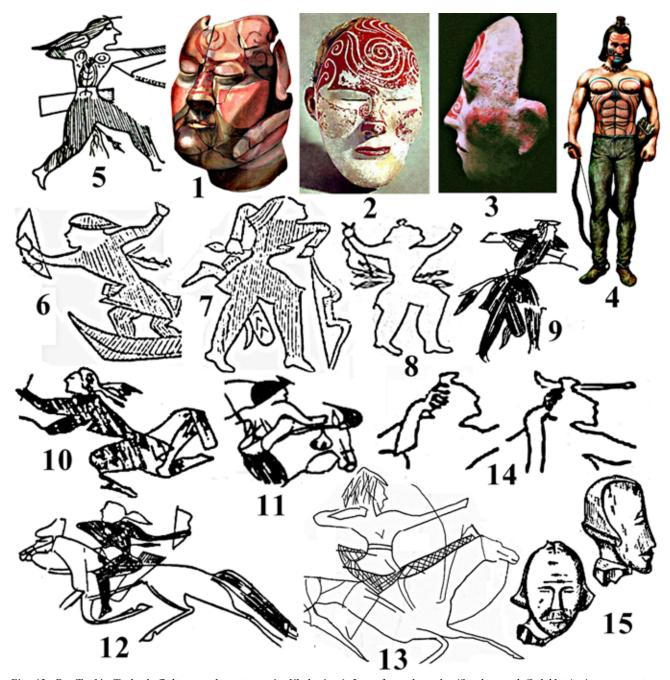


Fig. 12. Pre-Turkic Tashtyk Culture male costume in Khakasia: 1–3 – funeral masks (Syrskoe and Oglakhty); 4 – reconstruction of male body decoration; 5–8,14 – Tepsei Mountain, crypt 1; 9–12 – Tasheba Riva; 13 – Oshkol Lake; 15 – Yibat II, barrow 1. (Sources: 1, 4. http://images.yandex.ru/yandsearch?source=wiz&text/BE&noreask=1&pos=10&rpt=simage&lr=213&uinfo=sw-999-sh-548-fw-774-fh-448-pd-1&img_url=http%3A%2F%2Fwww.amic.ru%2Fimages%2Fgallery_10-2009%2F160.mask4.jpg. 3. <a href="http://images.yandex.ru/yandsearch?source=wiz&uinfo=sw-999-sh-548-fw-774-fh-448-pd-1&text=/BE&noreask=1&pos=15&lr=213&rpt=simage&img_url=http%3A%2F%2Fc12.kommersant.ru%2FIssues.photo%2FREGIONS%2FPITER_WEEKEND%2F2009%2F069%2FKSP_009929_00002_1_t203.jpg. 5-8, 14. Griaznov 1971, Figs. 1–3; 9–12. Podolsky 1998, Fig. 1; 13. Pankova 2012, Pl. 2; 15. Vadetskaia 1986, Pl. IX.35).

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Notes

1. These statues probably were stand-ins for the deceased at the time of his burial ceremonies and marked the place where one of his souls resided (Kyzlasov 1964, p. 36).

- 2. In many cases Zainulla S. Samashev interprets the schematic depictions of head-gear of warriors as a helmet with plumage (see, for example, at Bayan Zhurek; Samashev 2006, p. 122). In such a case though one cannot understand why a "feather on a helmet" always extends downward, not up, and thus follows the contour of the headgear.
- 3. The inscriptions which accompany portraits of rulers on Chach coins are in one of the Iranian languages (Sogdian). On account of that, in their interpretation one is best to rely on the opinion of iranists (Vladimir A. Livshits, Edvard V. Rtveladze and others), rather than on the turcologist Gaybulla Babayar(ov) (see, for example, Babayar 2007), whose reading of the inscriptions usually is significantly at odds from that by the iranian specialists and presupposes the presence in provincial Chach of the most important rulers of the Western Qaghanate.
- 4. Some Kazakh colleagues even consider these textile insets to be of Eastern Roman origin, like those which became popular in the early middle ages among many peoples of Eurasia and which were embroidered with depictions of specific local clan tamghas (Samashev et al. 2010, p. 54, Fig. 62).
- 5. With no explanation, Zainolla Samashev considers these women to be "dismounted warriors" (Samashev 2006, p. 141).
- 6. The one on the end holds in her hand a kerchief. Under the row of the dancers stands a man who holds in front of him a saber which he has unsheathed (Rogozhinskii 2012, Fig. 5.1–3).
- 7. The adherents of an interpretation of this scene as a duel between two men to date have not provided any cogent and systematic argumentation. Our version thus appears to be more likely, in that the motif of a duel between a soldier and a female warrior hero was very popular in many late Turkic epic poems. Moreover, the two braids which in real life Turkic men [Fig. 5.4] and turkicized Sogdians sported (Yatsenko 2006, p. 240) were much shorter and thinner than that which we see on the warrior maiden.
- 8. The influence of Sogdian iconography is evident also on certain Khazar medallions of the second half of the 9th century CE from upper Don River basin (Aksenov 2001, p. 137).
- 9. For some scholars the end date of the Tashtyk Culture was the 6th century (Dmitrii G. Savinov); for others, the 7th century (Anatolii K. Ambroz, Pavel P. Azbelev).

- translated by Daniel C. Waugh

THE RELATIONS BETWEEN CHINA AND INDIA AND THE OPENING OF THE SOUTHERN SILK ROAD DURING THE HAN DYNASTY

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When and how did relations between China and India begin? This issue has long been debated in China. The late Professor Ji Xianlin, a renowned Chinese scholar of Indian history and culture, pointed out that "Cina," the Indian word for China, and the silk from "Cina" first appeared in the early period of the Mauryan dynasty (c.321-185 BCE) (Ji 1982, pp. 74–78, 114). The implication is that China may have been known by the Indians since as early as the fourth century BCE. But when China began to hear of India is another question. Some Chinese Buddhist texts composed after the Han dynasty assumed that Buddhism had been spread into China long ago. But as Professor Tang Yongtong has said, they are too boastful and erroneous to be reliable. In order to compete with Daoism and Confucianism, these Buddhists created some fictitious stories to extol the greatness of Buddha and claim an earlier arrival of Buddhism in China.¹ In my opinion, the earliest available information about India should be attributed to Zhang Qian (张骞), the first Chinese to explore the hitherto unknown Western Regions beyond the Tarim Basin. After him, the early direct political, commercial and cultural relations between China and a number of Indian kingdoms and others nearby were established, which led to the emergence of the Southern Silk Road that ran through the Pamirs to India and Southeastern Iran. Meanwhile, the close connection between India and China facilitated trade by sea from Egypt via India to the southernmost parts of China and vice versa during the Han dynasty (206 BCE-220 CE). These relations are discussed in three early historical books: Shiji (史记, the Records of the Grand Historian), Hanshu (汉书, History of the Former Han Dynasty) and Houhanshu (后 汉书, History of the Later Han Dynasty). Unfortunately, since portions of these accounts are unclear, to explain them we must turn to non-Chinese sources from India and the West.

I. Shendu (身毒), the first term used for India in China

The name of Shendu appears in "the Treatise on Dayuan" ("大宛列传") of the *Shiji* by Sima Qian (司马迁), which is the earliest record about India among

Chinese historical documents. The great historian's information came from the report submitted to Han Wudi (汉武帝) by Zhang Qian, who, as an ambassador of the Han court, had been sent to the West to establish an alliance with the Dayuezhi (大月氏) against the Xiongnu (匈奴) in 139–126 BCE. Zhang Qian states that he was surprised to have found in Daxia (大夏, Bactria) bamboo sticks from Qiong (邛) and cloth from Shu (蜀) — both in present-day Sichuan province in China. The Bactrians told him that these goods had come from a country called Shendu and provided some new information about it:

Shendu may be several thousand li^2 to the southeast of Daxia. The people there have fixed abodes and their customs are very much like Daxia; but the country is low, damp, and hot. The people ride on elephants to fight in battle. The country is close to a great river.³

The beginning of this description differs greatly from the historian's introduction of other countries, like Dayuan (大宛), Dayuezhi (大月氏), Anxi (安息), Tiaozhi (條枝), and Daxia (大夏). First, Zhang Qian's information is indirect, as he heard it from the inhabitants of Daxia. Second, he provides merely an approximate location of the country and the life-style and customs of the people. On three points, however, his information is quite specific: India has a damp and hot climate; there are many elephants; and the great river, which most likely is the Indus, was the country's boundary. Since the bamboo sticks and cloth originated from Sichuan and got to Daxia via India, we can infer that there was a route that began in southwest China and ran through India before reaching Daxia. Having accepted Zhang Qian's suggestion that he should explore the road from the southwest of China to India, the Emperor Han Wudi committed this task to him. But, because hostile barbarian tribes stood in the way, Zhang Qian failed in this mission. Nonetheless, Wudi continued to try to find a route that led directly to India. During his second mission (119-115 BCE) to the Western Regions, Zhang Qian sent several vice-envoys to Shendu from Wusun (乌孙). Later Han Wudi also sent envoys to Shendu (*Shiji*, pp. 3169–70). Although we have no record of the reaction of the people in Shendu, it is certain that some more information about India should have been brought back by the Chinese envoys.

II. Jibin (罽宾), the first country neighboring India to establish diplomatic relations with China

Jibin appears in the "Traditions of the Western Regions" ("西域传") of the *Hanshu* by Ban Gu (班固, CE 32–92). The book concerns only the history of the Former Han Dynasty, and thus its "Traditions of the Western Regions" serves as a continuation and supplement to "The Treatise on Dayuan" of the *Shiji*. Shendu is not mentioned in the *Hanshu*. Instead, a new country, Jibin (Kophen?), suddenly appears. Apart from giving a general description, Ban Gu emphasizes the political and diplomatic relations between the rulers of Jibin and China.⁴

Ban Gu describes the country's location, its neighbors, and its distance to China:

The capital of the kingdom of Jibin is the city of Xunxian (循鲜), and it is 12,200 li from Ch'ang-an [长安], [the capital of China in the Former Han Dynasty]. The kingdom is not under the control of the Protector General (Duhu, 都护). The numbers of families, persons, and trained troops are very large, for it is a great kingdom. It is 6,840 li to the seat of the Protector General in the northeast, 2,250 li to the kingdom of Wuzha (乌秅国) in the east, and a nine days) journey to the kingdom of Nandou (难兜国) in the north-east. The country borders Dayuezhi (大月氏) in the north-west and Wuyishanli (乌弋山离) in the south-west.

The seat of the Protector General, in charge of all affairs in the Western Regions, was in the city of Wulei (乌垒, in present-day Luntai county of Xinjiang province). Since Jibin was so distant to the southwest from Wulei, and its location was to the southeast of the Dayuezhi, there is little doubt that Jibin was in or bordering the land of Shendu beyond the Pamirs. Ban Gu also briefly mentions the history of Jibin and the race of its inhabitants. We thus learn that a people originally called the Sai in Central Asia were forced to migrate south into India. In Chinese, the term Sai Zhong (塞种, Sai race or Sai people) is used to indicate the Sakas. So, Jibin should be understood as a kingdom ruled by the Sakas, or Scythians, as they are traditionally named by the Western classical authors.

Ban Gu also discusses in some detail the land, climate, way of life of the people, and some special goods produced in the country. He especially takes note of Jibin's currency: "They issue gold and silver coins. On the obverse is a man on horseback and on the reverse is a face or a head of a man" (*Hanshu* 1962,

p. 3885). This record is very important not only for the clues it provides for a comparison with the coins of the Indo-Greeks, but for the evidence on the commercial relations the country enjoyed with China.

Ban Gu's primary interest, however, centers on the political relations between China and Jibin. Contact between the two countries began during the reign of Emperor Han Wudi (141–87 BCE). Due to events that took place during the Former Han Dynasty, relations between the two countries can be divided into four stages (for details, see *Hanshu* 1962, pp. 3885–87).

The first occurred in the reign of king Wutoulao (乌头旁) of Jibin. Although we do not know the exact dates of his rule, we are secure in placing it in the reigns of the emperors Han Zhaodi (汉昭帝, 86-74 BCE) and Han Xuandi (汉宣帝, 73-49 BCE). Assuming that China was too far from his kingdom for the Chinese to exact revenge, Wutoulao cruelly murdered a number of Chinese envoys on several occasions. Fortunately for him, he escaped from the revenge of these two emperors because, just as he had expected, it proved too difficult and too distant for a Chinese army to punish him.

The second event took place during the reign of Wutoulao's son. We do not know what his name was or when he came to the throne, but only that he had been the king of Jibin in the reign of Han Yuandi (汉元帝, 48–33 BCE). Under the pretense of restoring friendly ties, he sent envoys with gifts to the Han court. The emperor accepted the request for pardon of his father's actions and sent general Wen Zhong (文忠) to escort those envoys back to Jibin. Upon their arrival Wen Zhong learned that the king of Jibin was planning to assassinate him. So Wen Zhong formed an alliance with Yinmofu (阴末赴), the prince of Rongqu ([容屈], a city that may have been under Jibin's authority). Together they attacked Jibin and killed the king. Yinmofu was then crowned as the new king of Jibin with the support of Wen Zhong and awarded by the Emperor Han Yuandi a seal and ribbon as a token of his subjection to China.

The third stage of relations transpired during the reign of Yinmofu, also in the reign of Han Yuandi. Ironically, relations between Jibin and China actually worsened under Yinmofu after he imprisoned the Chinese ambassador Zhao De (赵德) and murdered the vice-envoy along with more than seventy of his Chinese attendants. He then repeated the actions of his predecessor by sending envoys to the Han court to apologize. Han Yuandi, however, refused their request of friendship and the envoys were discharged, as the country was too distant and thus could not be directly placed under Chinese authority. Once again, relations between Jibin and China were severed.

The last stage happened during the reign of Emperor Han Chengdi (汉成帝, 32-7 BCE). In this case, envoys from Jibin arrived at the Han court bearing gifts and requested forgiveness of the country's previous transgressions. But this was also refused. In reality, the actual intention of Jibin was to obtain larger reciprocal gifts from the Han court and to profit from the silk trade with China. In fact, however, although political relations were not sustained, Jibin still managed to benefit from the silk trade, and, as noted, even occasionally sent envoys to China.

III. Chinese contacts with other countries near Jibin

Throughout this period, there were some other countries that were known to the Chinese and were also in direct contact with China.

Nandou (难兜国) was a dependency of Jibin which was 330 *li* away to its southwest. The location of Nandou was in the area neighboring the eastern parts of Dayuezhi. According to this orientation Nandou must have been an oasis-state in the Pamirs.⁶ Its products were similar to those of Jibin: five different types of grains, grapes and other fruits, gold, silver, copper and iron. It made weapons and issued coins (*Hanshu* 1962, p. 3884).

Wuzha (乌秅国) (Hanshu 1962, p. 3882) was located in the mountains, in all probability in the Hunza region of modern Pakistan (Yu 2005, p. 98, n. 181; cf. Hulsewé 1979, p. 98, n. 158). Wuzha was pronounced "Yazha" in ancient Chinese, thus close to the modern pronunciation of "Hunza." Several hundred li to the west of Wuzha was the well-known gorge of Xuandu (縣度), whose passage was very difficult and dangerous. To pass through it, travelers had to rely on ropes suspended or tied along the route. So, some scholars have rendered Xuandu in English as the "Hanging Pass." It was the shortest route between Jibin and China at that time. So those Chinese officials responsible for escorting envoys from Jibin back to their country usually advanced only to this point. The difficulty of the passage helps also to explain why Minister Du Qin (杜钦) successfully persuaded the supreme General Wang Feng (王鳳) to refuse Jibin's request for friendship (Hanshu 1962, pp. 3886-87). Xuandu should be identified as that portion of the road from either the Kilik or Mintaka Pass to Gilgit via Hunza.8

Wuyishanli (乌弋山离) was a kingdom adjacent to Jibin to the west and the terminal point of the Southern Silk Road. Ban Gu was quite familiar with it:

The capital of the kingdom of Wuyishanli is 12,200 li [?] distant from Ch'ang-an (长安). The state is not under the control of the Protector General. The numbers of families and trained troops quali-

fies it as a great kingdom. The seat of the Protector General lies to the north-east at a distance of a sixty days' journey. The country borders Jibin in the east, Pu-tiao (撲挑 Bactria) in the north, and Lijian ([犁靬] (Alexandria in Egypt?] and Tiaozhi (條支) [the Seleucid Kingdom?] in the west.

The climate of Wuyishanli is very hot and the land is flat and woody. It has herbs and trees, domestic animals, five kinds of grain, fruits, vegetables, food and drink, palaces and dwellinghouses, bazaars, a circulating currency, military weapons, gold, pearls, and the like, just as those found in Jibin. It has also the Taoba (桃拔),9 lion and buffalo. Killing innocent lives is forbidden according to its custom. On the obverse of their coins is a man's head, and on the reverse a man on horseback is depicted. They ornament their staves with gold and silver. Being extremely distant from China, envoys rarely journey there. From the Yu ("Jade") Gate (Yumen Guan, 玉门关) and the Yang Barrier (Yang Guan, 阳关), the southern road passing through Shanshan (鄯善) leads southward to Wuyishanli, which marks the terminus of the southern road. [*Hanshu* 1962, pp. 3888–89]

Compared with Jibin, Wuyishanli has some peculiarities, such as a hotter climate and different animals like the Taoba, lion and buffalo. The figures on its coins are the opposite of those of Jibin. Wuyishanli is probably equivalent to southern Afghanistan and southeast Iran, including Seistan, with Kandahar as its center. It had become a part of ancient India in the period of the Mauryan Empire.

It is worthy of note that Ban Gu did not refer to Shendu in his book. A possible explanation is that he knew that Shendu was a general name for the land beyond Congling (葱岭, the Pamirs); so he probably considered Jibin and the countries near it as the constituent parts of Shendu. Both Wuzha and Xuandu are in the Pamirs and thus on the road to Jibin and Wuyishanli from the Tarim Basin. Therefore, the southern Silk Road developed as the result of relations between China and India.

IV. Further developments of Chinese and Indian relations in the Later Han dynasty

"The Chronicle on the Western Regions" (西域传) of the *Houhanshu* (后汉书) by Fanye (范晔) introduces countries such as Dayuezhi-Guishuang (大月氏-贵霜), Gaofu (高附) and Tianzhu (天竺), which were entirely or at least in part in ancient India and had direct contact with China during the Later Han Dynasty (CE 25–220). His source was primarily from Ban Yong (班勇) (*Houhanshu* 1965, pp. 2912–13), a son of Ban Chao (班超, CE 32–102), who was a brother of the historian

Ban Gu and, as a cavalry commander had defeated the Xiongnu and secured control over the Tarim Basin, following which he was accorded the title "Protector General of the Western Regions." Ban Yong lived with his famous father and later oversaw the affairs of the Western Regions.¹¹ According to Fanye, what he recorded about the Western Regions since the reign of the first emperor of the Later Han Dynasty (Guangwudi, 光武帝, CE 25–57) was based on the reports of Ban Yong that had been presented to the Emperor at the end of the reign of Han Andi (汉安帝, CE 107–125) (Houhanshu 1965, p. 2913). Therefore, what Fanye provides should be viewed as highly credible.

After occupying Daxia for over 100 years, Dayuezhi people were united by the Kushan (贵霜, Guishuang), one of the five xihou (翕侯, Yabghu, or "allied princes"). Qiujiuque (丘就却, Kujula Kadphises), the first king of the Kushan Empire, invaded Anxi (安息, Parthia), occupied the kingdom of Gaofu, then conquered Puda (濮达)¹² and Jibin. The Kushan domain extended to northwestern India in the early first century BCE. After Qiujiuque died past the age of 80, his son, Yangaozhen (阎膏珍, Vima Taktu), succeeded him. He also conquered Tianzhu (in northwest India), and installed a general to rule it.

After annexing Gaofu, Jibin and Tianzhu, the Kushan Empire reached the height of its power and began to have frequent contacts with the Han Dynasty. At the same time, Chinese power was re-established over the Western Regions in the second half of the first century CE. General Ban Chao was sent to the Western Regions to take charge of the defense against the Xiongnu in CE 73. From that point on, he would be in charge there for more than 30 years. In CE 91 he was appointed as the Protector General responsible for all affairs in the Western Regions. In this period, besides his efforts to control or appease all kingdoms subjected to China and to hold back the Xiongnu, Ban Chao did his best to deal with the Kushans. The contacts and conflicts between the Chinese and the Kushans were recorded in detail in the "Biography of Ban Chao" of the Houhanshu.

In fact, changes in Chinese-Kushan relations depended on the growth and decline of each empire's power in the Western Regions. In the beginning, the Kushans were willing to establish friendly relations with China. In CE 78 in a report to the court, Ban Chao told the Emperor: "Now the kingdoms of Jumi (拘弥), Shache (莎车), Shoule (疏勒), Yuezhi (月氏), Wusun (乌孙), and Kangju (康居) all want to submit to China." Here the "Yuezhi" means the Kushan. When Ban Chao attacked the king of Shoule in CE 84, Kangju sent an army to help the king. With the help of the Kushans, Kangju withdrew so that Ban Chao took the

city controlled by the king of Shule. Previously, the Yuezhi had supported the Chinese attack against Jushi (车师), a kingdom on the northeastern rim of Tarim Basin,13 which probably indicates that an alliance of some kind existed between the Kushans and China. But when the king of the Yuezhi proposed a marriage alliance with the Han court in CE 88, Ban Chao categorically refused it. The Kushan king became so angry that he sent a viceroy (the underking, Fuwang, 副 王) named Xie (谢) to lead seventy thousand solders through the Pamirs on a raid against Ban Chao. Ban Chao believed that such a large army, coming from so far away, could not remain for long. In order to prevent the Kushans from asking for reinforcement from other small states, Ban Chao sent an army to kill the envoys of the Kushans halfway to Kucha/Qiuci (龟 兹), a state in the northern region of the Tarim that was on friendly terms with the Kushans. Finally, viceroy Xie had to apologize to Ban Chao for his invasion. Ban Chao forgave him and allowed him to withdraw his army. As a result, the Kushans became so frightened of the Han Empire's strength that every year the Kushan king sent ambassadors with gifts to China (Houhanshu 1965, pp. 1575-80). This is the only record of a Kushan invasion into the Tarim.

Tianzhu is another large country which had diplomatic and trade relations with China. It probably is the same Shendu mentioned by Sima Qian. Its location was several thousand li to the southeast of the Yuezhi. "Its customs are similar to those of the Yuezhi (Kushans), but the country is low, humid, and hot. This kingdom is close to a great river. The people ride elephants into battle."14 We are thus certain that this country was in India. In ancient Chinese, Tianzhu and Shendu pointed to the same country in different periods. According to the Houhanshu, Tianzhu was a great country bordering the Yuezhi and Gaofu (高附) in the west, the sea to the south, and the country of Banqi¹⁵ in the east. Its northern neighbor is not mentioned, but the region was evidently the Tarim Basin controlled by China at this time.

Tianzhu "has several hundred other towns. A chief rules each town. There are scores of other kingdoms in it. Each kingdom has its own king. Although the kingdoms differ slightly, they are all called Shendu. Now they are all subject to the Yuezhi. The Yuezhi killed their kings and installed a general to govern them" (*Houhanshu* 1965, p. 2921). Jibin, as an independent country, should not be regarded as one of "the other kingdoms." It once tried to control Gaofu in a struggle with Tianzhu and Anxi, but was defeated by the Yuezhi. Since Tianzhu, Jibin and Gaofu were all subject to the Kushans, the latter became the sole master of northwestern India, although it may be, despite the great extent their empire reached under

Kanishka, that the Yuezhi (the Guishuang or Kushan Empire) did not occupy the whole territory of Tianzhu. Therefore, the ambassadors from Tianzhu could come to China with gifts to the Chinese emperors Han Hedi (汉和帝, CE 89-105) and Huandi (汉桓帝, CE 147–167) by land or sea (*Houhanshu* 1965, p. 2922). Almost at same time, when the so-called ambassadors from Tianzhu reached the southernmost frontier of China by sea, merchants from Daqin (大秦) (the Roman Empire) also arrived at the same place by sea and presented themselves as ambassadors commissioned by the emperor Andun (安敦, Marcus Aurelius Antoninus, CE 161-180).17 However, they may have departed from India, because the gifts they brought to China were products of India such as ivory, rhinoceros horn and turtle shell (Houhanshu 1965, pp. 2920, 2922).18 It was only from these direct and indirect contacts between the two countries that Tianzhu became known to the Chinese.

The author of Houhanshu is the first ancient Chinese historian to mention the popularity of Buddhism in India: "They practice the Buddhist Way (Dharma), not to kill any life or to wage war, which has become a custom in Indian society" (Houhanshu 1965, p. 2921). The birthplace of Buddhism was in the Ganges valley. It spread into the northwest of India, including the southern part of Afghanistan, in the reign of king Ashoka (c. 273-232 BCE). After converting to Buddhism, Ashoka felt so much remorse for his previous conquests and the pain that he had caused to his people that he later became the first king propagating pacifism through Buddhism in India. He not only issued rock and pillar edicts throughout his kingdom in India, but also sent five Buddhist missions to the Hellenistic kingdoms in western Asia and the eastern Mediterranean (Dhammika 1993, rock edict no. 13). In order to make Buddhism accessible for his Greek subjects in Kandahar, he even had his edicts translated into Greek in the city. 19 When the Kushans ruled India, Buddhism was further enhanced, as the Buddhist art of Gandhara testifies. It was in this context that, according to a popular story, Emperor Han Mingdi (汉明帝, CE 58-75) sent ambassadors to Tianzhu to search out Buddhist doctrines (Houhanshu 1965, p. 2922). As early as 2 BCE during the reign of Han Aidi (汉哀帝), a Chinese doctor-scholar named Jinglu (景卢) was taught Buddhist sutras by an ambassador named Yicun (伊存) who had come from Dayuezhi, namely the Kushan Empire.²⁰ Moreover, Prince Ying of Chu (Chuwang Ying, 楚王英), one of the brothers of Han Mingdi, learned Buddhism and practiced it in his realm (Houhanshu 1965, p. 1428). He was perhaps the first person in China to have converted to Buddhism (Houhanshu 1965, p. 2922). Furthermore, according to that same story, when Han Mingdi dreamed about a golden man and asked his ministers what it meant and who it was, one of his courtiers told him that it was a god from the West and his name was Buddha. This story seems to show that Buddhism was already known in China by the early first century CE. But it is strange that there is no record of it in the "Annals of Han Mingdi" in the Houhanshu. Consequently, it remains a mystery whether or not he sent an ambassador to Tianzhu for the express purpose of learning about Buddhism. The late Professer Tang Yongtong (1991, pp. 3–22) regarded it as probable.

Special attention was also paid in "The Chronicle of the Western Regions" of the *Houhanshu* to the particular items produced in Tianzhu as well as its trade with the outside world.

This region produces elephants, rhinoceroses, turtle shell, gold, silver, copper, iron, lead, and tin. To the west, it trades with Daqin [the Roman Empire]. Precious goods from Daqin can be obtained there. It also has fine [thin] cloths, excellent wool carpets, perfumes of all sorts, sugar loaves (its appearance resembles ice), pepper, ginger, and black salt.[Houhanshu 1965, p. 2921]

Although some of the items mentioned in this list originated in India, others might have come from Daqin or Anxi. These exotic items also might have been brought from Arabia or Egypt where "perfumes of all sorts" were produced. Some might have come from China and Central Asia, like "fine cloths" (Chinese silk?) and "excellent wool carpets," the special product of nomads.

It is evident that the three historical books cited above provide very important clues and information about the relations between India and China during the Han dynasty. But unfortunately they are often not clear and some of them might be unreliable. In order to create a solid foundation for the history of this period and to be able to confirm what the ancient Chinese historians recorded, we must turn to new archaeological materials and the Western and Indian literature related to this subject.

V. Evidence from India and the West

As is well known, unlike in the case of China, few historically accurate works were written in ancient India. This does not mean, however, that historical information was not transmitted in other ways. Over the course of several generations, Indian and Western scholars have brought to light the history of South Asia from Alexander to the Kushans.

Alexander the Great invaded India in 327 BCE. After his withdrawal two years later, a new Indian dy-

nasty, the Mauryan, rose to power. In 305 BCE, Seleucus I, founder of the Seleucid kingdom and a former general of Alexander, crossed the Hindu Kush from Bactria and tried to recover India. But he failed and was compelled to form an alliance with Chandragupta, the founder of the Mauryan Empire, from whom he obtained 500 elephants in exchange for the territory that Alexander had conquered. In addition, both agreed on a marriage alliance (Strabo 1969, XV.2.9). Although most of Greco-Macedonians were forced to leave India gradually after the withdrawal of Alexander the Great, some of them did not, as Ashoka's Greek inscriptions at Kandahar indicate. In the middle of the third century BCE the satrap of Bactria, Diodotus I, declared his independence from the Seleucid Empire. At about the same time, the Aparni or Parni invaded the satrapy of Parthia and created the Arsacid Kingdom (Strabo 1969, XI.9.1). In 208 BCE, the Seleucid king, Antiochus III, undertook a campaign to reclaim the lands in the eastern part of his realm. By 202 BCE his advance in northwestern India was halted by a local prince or king, and he withdrew to the west after having received 150 elephants and some treasures (Polybius 1978, 11.34).

At this time the ruler of Bactria was a Greek known as Euthydemus I. He and his son, Demetrius I, invaded India in the early second century BCE (Strabo 1969, XI.11.1; XV.1.3). Around 171 BCE, Eucratides I became king of Bactria. He marched into India but was killed by one of his sons when he returned to Bactria (Justinus 1853, 41.6.1-5). In the reign of Demetrius I (r. ca. 200-190/180 BCE), known as "king of the Indians" (Ibid., 41.6.4), the Greeks began a second period of ruling in northwestern India that would ultimately last until the early decades of the first century CE. Collectively, they are known as the Indo-Greeks. In 145 BCE the Graeco-Bactrian kingdom was conquered by nomadic tribes from the north, one of which was the Dayuezhi, originally from the region of Dunhuang and the Qilian mountains in China. The Greeks in Bactria retreated to northwestern India. Menander (ca. 155-130 BCE) was a famous Indo-Greek king and patron of Buddhism. He was able to unite all the small kingdoms of the Indo-Greeks (Bopearachchi 1991, p. 453), and even marched to the capital of Pataliputra (Patna) of the Sunga dynasty.21 Upon his death, northwestern India was split into many small kingdoms and ruled by various Indo-Greek families. Possibly in the late second century BCE, the Scythians or Sakas (also known as the Indo-Scythians) entered India from the north and east, respectively. In the first century BCE the Parthians also invaded India. They took some areas controlled by the Indo-Scythians and Indo-Greeks, who were forced to migrate elsewhere into the subcontinent. However, with the coming of the Kushans,

the remains of these foreign peoples almost disappeared: some Indo-Scythians, however, still managed to hold areas near the mouth of the Indus, while one or two other Scythian kingdoms existed in the south of India (Casson 1989, pp. 46–47 and sections 38, 41 [pp. 73–77]).

There are some points of this historical reconstruction that can be connected with the Chinese records. One is the arrival of Sai people in India. The original homeland of the Sai people should encompass the areas from the eastern shores of the Caspian Sea to the Ili Valley in today's Xinjiang province of China (Strabo 1969, XI.8.2; Hanshu 1962, p. 3901). They were driven out of this region by the Dayuezhi and migrated westward, passing through Xuandu, northwest of India. It was during this migration that they founded the kingdom of Jibin. Moreover, some of the tribes belonging to this confederation remained in the Pamirs. According to the Geography of Strabo, one of the four nomadic peoples responsible for seizing Bactria from the Greeks was the Sacarauli (Strabo 1969, XI.8.2). The Sacarauli are possibly related to the Sai race who are mentioned in the Chinese records. Presumably these are the so-called Saka people who were first mentioned by Darius I.22 They originally lived in the north of the Persian Empire and were conquered by Cyrus. Because the lands of the Sai race are almost the same as or near the areas of the Sakas in the northeast of the Persian Empire, the Sai possibly were descendants or a branch of the Saka or Scythians. The Sai race in Chinese records should be identified as the Sacarauli referred to by Strabo. When the Sai people or Sacarauli moved south they presumably took two routes. Some tribes passed by Bactria on their way to southeastern Iran from where they subsequently migrated through southern Afghanistan, and other tribes traversed the Pamirs into the northwest of India where they founded the kingdom of Jibin. Wuyishanli to the west or southwest of Jibin might be another kingdom founded by the Sai people (Sakas).

The second point concerns the role of Indo-Greek kings. According to W. W. Tarn and others, Wutoulao and his son were the Scythian kings of Jibin. Wutoulao (乌头旁) was the transliteration of "adelphou" which is part of the inscription on the coins of the Scythian King Spalyrios (Spalyrises). This king, when he was a viceroy, called himself "adelphou tou basileos," namely, "brother of the King," on his coins. Presumably, the Chinese General Wen Zhong did not know the meaning of "adelphou"; guessing that it was the name of the king, he transliterated it into Chinese as "Wutoulao." As for the Rongqu Wangzi (容屈王子), Tarn thought that Rongqu (容屈) came from the Greek word "Yonaki" ("Greek-town"), and Wangzi (王子) means "Prince" in Chinese. Yinmofu (阴末赴) was supposed

to be Hermaeus (Hermaios), the prince of the Greek city and the last king of the Eucratid dynasty in the northwest of India.²³ Although some of these hypotheses have been rejected or shown to be impossible by A.K. Narain (1957, pp. 154–55) and Osmund Bopearachchi (1991, p. 453), it is evident that the Indo-Greeks still played a role in the affairs of the northwest of India. Some small kingdoms of Indo-Greeks still existed there in the beginning of the first century AD. The Greek-styled coins issued by Jibin and Wuyishanli show the influnce of the Indo-Greeks' coins.²⁴

The third point concerns the kings in the early period of the Kushan dynasty. Two kings named Qiujiuque (丘就却) and Yangaozhen (阎膏珍) are mentioned in the Houhanshu. Another name of a Kushan King, Kanishka I (迦腻色迦), who reigned first half of the second century CE, was also known in ancient Chinese documents for his great contributions to the development of Buddhism. However, the coins of the Kushan kings of this period that are known to date mention five names of kings: Kujula Kadphises, Vima Taktu, Soter Megas (Great Savior, the so-called Nameless king²⁵), Vima Kadphises and Kanishka. Yet in the famous Rabatak Inscription, discovered in 1993, Kanishka, its author, refers to his great grandfather Kujula Kadphises, grandfather Vima Taktu, and father Vima Kadphises (See Cribb 1999, p. 180; Sims-Williams and Cribb 1996, p. 80). This means that there are only four kings from Kujula Kadphises (identified by the Chinese as Qiujiue) to Kanishka in the early period of the Kushan (Yuezhi-Guishuan) dynasty. Previously, historians knew only the names of three Kushan kings from Chinese documents, and some scholars identified Vima Kadphises with Yangaozhen, and further with the Nameless King, Soter Megas. After the discovery and decipherment of the Rabatak Inscription, some scholars identified Vima Taktu with Soter Megas.²⁶ Since Vima Taktu is confirmed as the second king of the Kushan dynasty, and Yangaozhen is the son and successor of the first king Qiujiuque (Kujula Kadphises), it is natural for some scholars to consider Vima Taktu, Soter Megas and Yangaozhen to be the same king.

I cannot agree with this point of view. According to my research, Soter Megas should not be identified with Vima Taktu and Yangaozhen. This idea was first pointed out by the famous numismatist Osmund Bopearachchi (2007), who theorized that Vima Taktu might be identified with Yangaozhen, and that Soter Megas was another king of the Kushan dynasty who took the throne from the short-lived Vima Taktu and therefore should be regarded as a usurper. I agree with his identification of "Vima Taktu – Yangaozhen," but I think Soter Megas was never a king of the Kushan dynasty and was only a local governor who presented

himself as a king. He should be thought of as a satrap of the Kushan Empire who had been assigned to govern India. Later he became so powerful that he arrogated to himself the status of a king. One of the reasons for his anonymity might be attributed to the fact that he knew clearly he was not the true descendant of the Kushan royal house. Therefore he did not dare to inscribe his name openly on his coins. There seems to be a historical confluence in the numismatic evidence and Chinese records. As mentioned above, according to the Houhanshu, a general had been sent by Yangaozhen to supervise Tianzhu (天竺, India). It is possible that Soter Megas was this general. Whether this general could be identified with the viceroy (the underking), Xie (谢), who had crossed the Pamir from India to attack Ban Chao, has not been proved yet on the basis of current evidence. Judging from the features of his coins — an image of a Greek, a legend only in Greek, and the Attic weight – he was possibly a descendant of Indo-Greeks.27

The fourth point concerns the special products and the goods of Tianzhu listed in the Houhanshu. According to The Periplus of the Erythraean Sea, written around 70 CE,²⁸ there were numerous goods imported into or exported from the several ports of India at his time.²⁹ The exported goods included iron, steel, cotton cloth, costus, bdellium, lycium, nard, turquoise, lapis lazuli, Seric skins, silk yarn, and indigo, spikenard, ivory, agate and carnelian, silk cloth, mallow cloth, yarn, long pepper, fine pearls, ivory, silk cloth, spikenard, malabathrum, transparent stones of' all kinds, diamonds and sapphires, and tortoise-shell. Among these, the cotton cloth, silk yarn and cloth were the main goods for export. The imported goods from Arabia, Egypt, Italy and the Eastern Mediterranean sea (Laodicea in Syria), and even from China and the steppes through the medium of Bactrians, Kushans and Parthians, included thin clothing, figured linens, topaz, coral, storax, frankincense, vessels of glass, silver and gold plate, and wine, copper, tin, lead, bright-colored girdles, sweet clover, flint glass, realgar, antimony, gold and silver coin, and ointment, silver, singing boys, beautiful maidens, fine wines, ointments, figured linens, antimony, crude glass, copper, tin, lead, orpiment, and wheat. These items not only confirm the records of the Houhanshu, but also include many products and goods unknown to the Chinese at that time, as well as indicating where and when they were imported into or exported from India. The Chinese silk yarn, even the thin clothing imported into India, certainly came from China. This is further evidence of the trade between China and India, even if it was indirect, through the medium of merchants along the southern Silk Roads and the maritime Silk Routes from Bactria, Parthia, and even Roman Egypt.

VI. Conclusion

Thanks to the three historical works, Shiji, Hanshu, Houhanshu, the archaeological materials, and the documents from India and the West, we now know more clearly the basic outlines of the relations between China and India during the Han dynasty. It is from Zhang Qian that the Chinese learned of Shendu, and formal ambassadors were sent there. China maintained political, commercial and cultural relations with Jibin, Tianzhu, and Kushan. Expanding into the Western Regions was a fundamental part of the foreign policy of the Han Dynasty since the time of the Emperor Han Wudi. It was inevitable that contacts and interactions took place between the two neighboring civilizations, India and China. The beginning of the increasing contact and exchanges between India and China established the Southern Silk Road. It started from Dunhuang (敦煌) in Gansu province of China, continued along the southern margin of the Tarim Basin, passed over the Pamirs into northwest India, then turned southwest to Wuyishanli. From there the road probably extended to the Persian Gulf (or Tiaozhi) (Houhanshu 1965, pp. 2914-97). According to The Periplus of the Erythraean Sea, there was a trade road from Bactria to Barygaza (Broach), a very important Indian port in the Gulf of Cambay. Chinese silk was exported to this place (Schoff 1912, Chs. 47, 49). Through the Southern Silk Road China not only established bilateral political relations with those countries of ancient India from the first century BCE to the early second century CE, but also began exchanges in trade and culture. Indian special products and wares, especially its great religion, Buddhism, spread into China during the Han dynasty. The political and cultural influence of the Kushan Empire also spread into the Tarim Basin. Apart from the relics of Buddhism, the writings in Kharosthi script and the issue of Sino-Kharosthi coins in Khotan/Hetian (和阗) provide the evidence that confirms the crucial role the Southern Silk Road assumed after the withdrawal of Han power from this region. It is worthy of note that all foreign elements (including the elements of Hellenistic heritage) in Indian culture flowed into the China as well. Buddhism even became one of the three mainstreams (the others being Daoism and Confucianism) of the Chinese cultural tradition after the Han Dynasty. Such a result could not have been imaged by those pioneers of the southern Silk Road like Zhang Qian, Ban Chao, and their successors.

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Notes

1. These fictions suggested many dates for the first appearance of Buddhism in China, such as in the Western Zhou Dynasty (11th century BCE–771 BCE), especially in the age of Confucius (551–479 BCE), or in the periods of the Warring States (475–221 BCE), Qin Dynasty (221–206 BCE) and during the Former Han Dynasty (206 BCE–CE 8). But it is only in the early period of the Later Han Dynasty,

exactly in the reign of Han Mingdi (汉明帝, CE 58-75) that Buddhism was formally brought into China. See Tang 1991, pp. 3-22.

- 2. One li (里) equals c. 0.416 kilometer.
- 3. Sima Qian, "The Treatise on the Dayuan," in Shiji, 1982, p. 3166. The English translation is quoted from Hirth, 1917, p. 98. The spelling of some Chinese place names has been changed by this author.
- 4. Ban Gu, "Traditions (description) of the Western Regions," in *Hanshu* 1962, pp. 3884–85. The English translations from this chapter are quoted basically from Wylie 1881. Some changes and adjustments, however, have been made in accordance with my reading of the Chinese text. [One should also consult the annotated translation by Hulsewé 1979 ed.]
- 5. "Formerly, when the Xiongnu (匈奴) subjugated the Dayuezhi, the latter migrated to the west, and gained the dominion over Daxia (大夏 Bactria). As a result, the king of the Sai (Sakas?) journeyed south and ruled over Jibin. The Sakas were scattered, and at times formed several kingdoms. From Shule to the north-west are the kingdoms of Xiuxun (休循), Juandu (捐毒), and those consanguineous nations that are all descendants of the ancient Sakas" (Hanshu 1962, p. 3884).
- 6. Yu Taishan (2005, p. 104, n. 222) guesses that the seat of the king of Nandou was in present-day Gilgit in Pakistan.
- 7. In fact, the pathways which are still used in parts of modern Hunza are created by placing or hammering sticks into the rock cliff faces and placing flat rocks forming a narrow surface on them, so that people though usually not pack animals can cross them. They are locally known as *rafiqs*. [Note kindly supplied by John Hill; see also Hulsewé 1979, pp. 99–100, n. 169.]
- 8. The Khunjerab Pass is further to the southeast, where the modern Karakoram highway enters Hunza. The Khunjerab provided an alternate, but longer route. [Note kindly supplied by John Hill.]
- 9. 桃拔 or 符拔 Fuba, a strange animal. Some scholars identify it as a giraffe. See Yu 2005, p. 115, n. 285. John Hill (2009, p. 239, n. 10.5) identifies it as the Persian or Goitered Gazelle (*Gazella subgutterosa*).
- 10. Alternatively, the Chinese envoys did not get past Jibin and the neighboring countries as far as Shendu, which would explain why Ban Gu does not refer to Shendu.
- 11. For the life of Ban Yong, see Fan Ye, "The biographies of Ban and Liang," in *Houhanshu* 1965, pp. 1583, 1587–1590. He was appointed as a general of lower rank (军司马) in CE 107, and the governor of the Western Regions (西域长史) in CE 123. Because of his late arrival on a battlefield he was accused and imprisoned. He possibly returned to the capital of Han China in CE 127.
- 12. Puda should be in the areas near Guishuang and Jibin. I agree with the theory of John Hill (2009, pp. 29, 506–16) that Puda might be in the lands between modern Afghanistan and Pakistan.
- 13. John Hill notes (2009, p. 109, n.1.22): "Jushi 車師. The peoples of the Kingdoms of Nearer and Further Jushi (the

- Turfan Oasis and the region around Jimasa), were closely related. It was originally one kingdom called Gushi 姑師 (Wade-Giles: Ku-shih) until it was subdivided after the Chinese conquest in 107 BCE."
- 14. This description was evidently taken from Sima Qian, but "Daxia" was changed to "Dayuezhi" because the former had been exterminated by the latter. The English translation of all quotations from *Houhanshu* is basically from Hill (2009, pp. 28–31), but I have made some changes and adjustments according to my understanding of the text.
- 15. Scholars have proposed various explanations for the location of "Banqi" (see Hill 2009, pp. 359–60). In my opinion the "Panchalas" located in the valley of Ganges is also possible. For their location, see Tarn 1951, Map 2.
- 16. According to the explanation of Fanye, "Although all the kingdoms call the ruler the kings of Guishuang (贵霜), Han Chinese still call them by their original name, as Dayuezhi." In this paper both names are used alternately according to context. See *Houhanshu* 1965, p. 2921.
- 17. As John Hill notes (private communication): "On close reading of the original Chinese text it is clear that Han Chinese did not question their authenticity as envoys, but they wondered if the earlier, somewhat mythical, accounts they had heard of Da Qin were exaggerations." That Daqin could be identified with the Roman Empire has been accepted by some scholars. But the description of this "Daqin" in Houhanshu seems more different from than similar to the true Roman Empire. The location of Daqin should point to Egypt, then a province of the Roman Empire. The author mentioned another name of Dagin, Lijian (犂鞬), which is generally regarded as the transliteration of Alexandria in Chinese. Although I do not completely agree with the current identity for Daqin, I cannot identify another country like so-called Daqin in the eastern Mediterranean regions. The identification of Emperor Andun of Daqin as Roman Emperor Marcus Aurelius Antoninus has been explained by the fact that the merchants arrived in southern China in CE 166 during his reign. See Hill 2009, p. 27.
- 18. As John Hill has suggested (private communication), "these products could equally well have come from Southeast Asia, or East Africa."
- 19. Two edicts, carved on stones, were discovered in Kandhahar in 1958 and in 1963 (1964). One is bilingual in Greek and Aramaic; the other is in Greek alone. See Wheeler 1968, pp. 65–69; Sherwin-White and Kuhrt 1993, pp. 101–102; cf. Burstein 1985, pp. 67–68.
- 20. See "The Peoples of the West" from the Weilue by Yu Huan (魚豢), in Chen Shou (陳壽), Wei Shu 1982, p. 859.
- 21. This march is referred to by two ancient Indian documents. One is the *Yuga Purana* ("the Story of the Ages") by Garge, another is the *Mahābhāsya* by Patanjali. But neither mentions the name of the king of the Yavanas (Indo-Greeks). For Menander as the protagonist of this event, see Yang 2011, pp. 134–55.
- 22. "Saka" first appears in the Persian text of the Behistun Inscription. It is translated generally as "Scythia." See Tolman 1908, pp. (2), 5, 10–11 (Cols. 1. 6; 2. 2).
 - 23. The scholars who first proposed this theory were

Alfred von Gutschmid and A. Wylie. Tarn (1951, pp. 339-42, 418) thought that von Gutschmid's explanations were correct and elaborated their points of view.

- 24. For details of the various kinds of Bactrian-Indo-Greek coins, see Bopearachchi 1991.
- 25. On his coins there is no name but only epithets such as "Soter Megas" and "Basileos Basileon" (King of kings). This is the basic difference from other coins of the Kushan kings. So numismatists call him the "Nameless king."
- 26. Joe Cribb (1999, pp. 180–83) is the first scholar who put forward this hypothesis. Although this identification was doubted by some scholars, it was accepted by many catalogues of auction houses for coins and numismatic websites.

- 27. On the identity of the nameless King Soter Megas, see Yang 2009.
- 28. There are some different points of view about the date of the completion of this book. The earliest is in CE 30, and the latest is in CE 230. Most scholars agree on the second half of the first century CE. The name of the author is not known now, but he is presumed to be a Greek from Alexandria because of a phrase he uses in his book "just as some of the trees we have in Egypt" (section 29, p. 67). He probably was a merchant engaging in sea trade. See Casson 1989, pp. 6–10.

29. See Schoff 1912, Chap. 6, 39, 49, 56, 63; cf. Casson 1989, pp. 55, 75, 81, 85, 91. There are a few differences between the names of some goods in the two translations.

AN EGYPTIAN CONTRIBUTION TO A LATE 5TH-CENTURY CHINESE COFFIN

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The Silk Road was a conduit in which goods and ideas were transported from West and South Asia to and from East Asia. Religious ideas were carried long distances from Bactria (Tajikistan) and Gandhara (northern Afghanistan and northern Pakistan) by courageous monks attempting to fulfill the Chinese fervent desire for an understanding of Buddhism. Goods and small precious objects were transshipped from West Asia and the Mediterranean between towns

and oases on animals under the aegis of successive traders. The actual routes changed in different periods depending on the threat or absence of marauding tribes such as the Xiongnu and the tribes' relations with the various polities on the way. The ultimate eastern destination is said to have been Xi'an (Chang'an), the capital during the Han (206 BCE-220 CE) and later the Tang (618-907 CE) Dynasties. The period of interest here is that of the Northern Wei (386-534 CE), a conquering dynasty whose capital until 494 was Datong (Pingcheng) in northern Shanxi and was the destination of the precious goods traveling east.

Some ideas and important goods did spread all over China; indeed the Silk Road can be said to have

Fig. 1. Drawings of "bird-bodied" creatures: (left) Dengxian; (right) Northern Wei epitaph Yuan Mi (524 CE).

After: Juliano 1980, Fig. 29.



Fig. 2. "Immortal Teasing a Tiger," tile mural from Huqiao Tomb, Danyang, Jiangsu, drawing. After: Juliano 1980, Fig. 20.



Fig. 3. Jade anthropomorph with avian attributes, Xin'gan, Jiangxi. Ca. 1200 BCE. After: Falkenhausen 2003, Fig. 17.

stretched from the Mediterranean to the Yellow Sea. Many of these objects carried artistic ideas or motifs which took root in their final destination. The conveyors may not have understood their original meanings, and so the motifs might have been interpreted in their destination in new ways. As will be seen, the motif to be discussed here, human-headed birds, did retain some of its original foreign implication.

The newly introduced humanheaded birds which appeared in China in the 2nd century BCE may be defined as having horizontal or in-

clined real bird bodies with real bird legs, but normal human heads attached in front. Of course they had wings and indications of feathers. They were completely birdlike except for the human heads (Fig. 1). They are to be distinguished from "transcendentals," Daoist aerial beings with feathers growing from their distinct arms and legs which had appeared about the same time (Fig. 2).

On the other hand, native Chinese depictions of birdlike humans had been produced since the Neolithic period. These were upright, often grotesque humans with suggestions of human legs, whose only birdlike features were feathered headdresses, wings, or perhaps tails (Fig. 3). No writing was associated





Fig. 4. Shaman in feather headdress riding birdlike monster. Laingzhu jade. Ca. 2500 BCE. After: Rawson 1995, p. 34, Fig. 17.

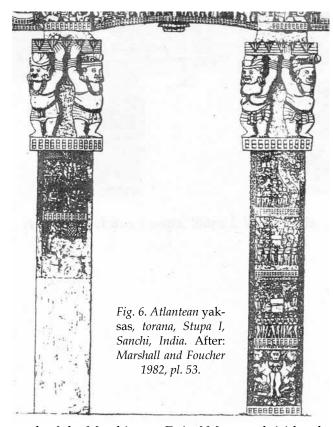
with them. Usually fashioned from jade, what did they represent: gods? shamans in the thrall of their familiars (avian conveyors to the spirit world)? That the latter is a possibility is suggested by the Liangzhu jade depicting a shaman in feather headdress riding a birdlike monster (Fig. 4).

Into this antique world flew the "anatomically correct" human-headed bird from afar, as first seen in the

Fig. 5. The lower half of Lady Dai of Mawangdui's silk painting. The human-headed birds and the atlantean yaksa have been circled here. Color image after: New Archaeological Finds 1973, cover; drawing after Sullivan 1984, p. 72.







tomb of the Marchioness Dai of Mawangdui (shortly after 168 BCE) in the enlightened and unified period of the Western Han. Surprisingly located south of the Yangzi River, Changsha (near her resting place) was far from the metropolitan center of Chang'an. Nevertheless, Lady Dai, with artistic foresight, managed to accumulate three innovative, and foreign, motifs in her tomb. The first is the reversed hindquarters of a

cervid, a nomadic motif, depicted on the end of her third (next to smallest) lacquer coffin. The second is the grimacing, pot-bellied dwarf at the bottom of the silk painting (sometimes called a banner) overlaying her coffin (Fig. 5). No doubt it derived from the prototype for the atlantean figures at Bharhut (ca. 100–80 BCE) and Stupa I at Sanchi (second to third decade of 1st century CE in northern India) (Fig. 6; see also Huntington 1985, pp. 66 and 95). The third innovative motif is, of course, the pair of humanheaded birds situated above the atlantean figure on the silk painting.

From this auspicious beginning, humanheaded birds could be found not only in many tombs of the Han, even as far as Koguryo in North Korea, but through succeeding dynasties right throughout the Northern Wei. An example of the latter is the Guyuan sarcophagus of the late 5th century, probably

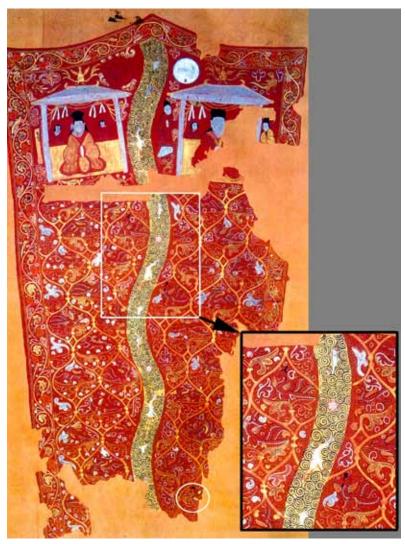


Fig. 7. Copy of cover of the Guyuan sarcophagus. Marked by the rectangle are the human-headed birds with topknots; the circle marks the location of the third bird. After: Ningxia Guyuan Bowuguan 1988, unn. plate.

Fig. 8. Line drawings of the three human-headed birds on the Guyuan sarcophagus. After: Ningxia Guyuan Bowuguan 1988, fold-out drawing.

made in Datong and shipped to Guyuan, Ningxia. This red lacquer coffin is covered with images and motifs from all over Asia, among them many fanciful animals as well as minor Buddhist deities included probably for apotropaic purposes, that is, to ward off evil spirits on the perilous posthumous journey and to ensure a happy outcome in the afterlife (Fig. 7 and Color Plate V). On the cover, three of these composite animals, are human-headed birds, two with elaborate topknots (Fig. 8).

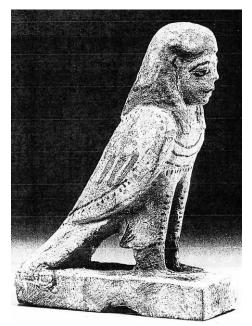
This interest in fanciful animals was particularly exemplified in *Shan Hai Jing* (Classic of Mountains and Seas),² a popular imaginary geography dating from the third century BCE through the first century CE. Each geographical feature was inhabited by a strange creature, e.g.:



Book 2, chapter 2: *Duck-wait* on Mount Stagstand looks like a cock but has a human face. It sings calling its own name 'Fu-shee'. When it appears there will be warfare. [p. 19]

Book 8: *Ape Strong* has a human face and a bird's body. His ear ornaments are two green snakes. He treads on two green snakes underfoot. [p. 124]

In a further example of the thought of the period, the fearful deity, Queen Mother of the West, to whom souls were thought to have gone in their posthumous journey, was accompanied by several pairs of animals, including human-headed birds.



Foreign Influence

Fig. 9. Egyptian babird, painted gesso over wood, ca. 525–305 BCE. After: Padgett 2003, No. 8.

Fig. 11. Human-headed bird, metal, North Syria, 8th century BCE, collection of Pergamon Museum, Berlin. Photo © 2001 Rosalind Bradford.

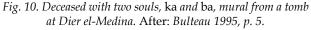


headed birds, and as such they continued into Ptolemaic times.³

They first appeared in Greece from the eighth century as supports for ring handles on bronze cauldrons imported from West Asia, especially Urartu, that were dedicated at Greek sanctuaries such as that to Zeus in Olympia and at Delphi (Fig. 11). They began to be copied in Greece in its seventh century Orientalizing Period when Greek art acquired a florid style it had not known before. Although less horizontal, protemes of human-headed birds as bases for the vertical handles on *hydriae* (Fig. 12) became widely popular,

Fig. 12. Siren hydria. Mid-5th century BCE. Found up Dnipro River, Ukraine. After: Reeder 1999, No. 82.





Whence came the horizontal (or diagonal) human-

headed birds? The point of origin of these creatures

may well have been Egypt, where the ba (Fig. 9) rep-

resented the mobile aspect of the soul. It "could

fly between the tomb, where the portion of the soul

known as the ka remained with the body, and the

heavens, where the third part of the soul, the akh,

abided" (Padgett 2003, p. 123). (Fig. 10). Though bahad long been depicted, often as humans with bird

heads, it was not until the New Kingdom (Dynasty 18 beginning 1558 BCE) that they appeared as human-

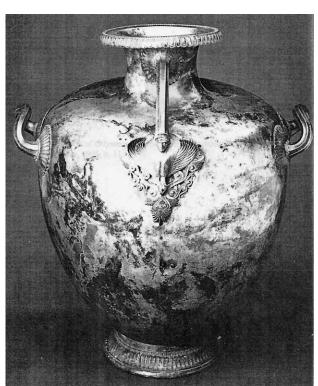






Fig. 14. Odysseus Legend. Red Figure vase, Attic stamnos from Vulci, 5th century BCE. After: Lexicon 1981, p. 632 Od-

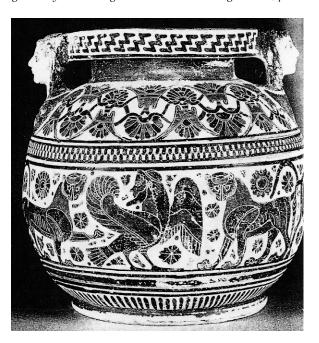
11.

ysseus 155. having been found from as far afield as the Dnieper River in Ukraine. These *hydriae* were used in funerary

Homer's sirens effected death on sailors through their tantalizing musical ability (Fig. 13)5 and, in a later tradition, Odysseus, having outwitted their vocal charms by plugging his sailors' ears with wax, caused the death of one siren by failing to succumb (Fig. 14). According to Ovid, a later Roman writer, they were daughters of Acheloos, the river god, associated with the underworld and were companions of Persephone who was abducted by Hades into the underworld, thus their association with death (Padgett 2003, p. 303).

rites for pouring libations.

Fig. 16. Pyxis showing male siren. After: Padgett 2003, p. 288.



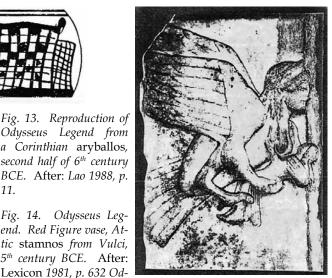


Fig. 15. Siren carrying the soul of a dead man, relief from Xanthos, Licia. After: Lao 1998, p. 157.

As mourners, sirens were depicted on stelae like that of a woman in Athens, Marmor in the fourth century BCE and, on another, carrying the soul of a dead man in a relief from Xanthos, Licia (Fig. 15). On a more commonplace note, a male siren decorates a pyxis (Fig. 16), and oil bottles in the form of sirens were molded in Corinth, Samos and Rhodes in the sixth century and widely exported (Fig. 17). Sirens continued to be portrayed in the Hellenistic period and, as such, may have marched across Asia with Alexander and his Seleucid successors.6

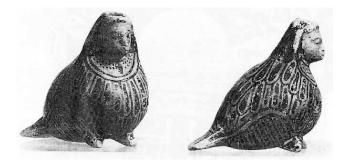


Fig. 17. Corinthian siren. After: Biers 1999, Fig. 2.2.

The association of birds with death seemed to have a more general distribution in Asia. In the higher reaches of the Mongolian Altai on sloping outcrops, images were pecked of birds leading horses in presumably a funeral cortege (Fig. 18, next page). The period has been difficult to ascertain: it has been suggested that this notion preceded the inclusion of sacrificed horses in burials before the Late Bronze Age (Jacobson-Tepfer 2012, p. 8).

By the time of the consolidation of Buddhist beliefs in Tang-period China, human-headed birds and other imaginary animals that had been so prominent even







Fig. 18. (above left) Petroglyph depicting bird men leading paired horses to a narrow opening guarded by a frontal figure. Within the enclosure to the right is a crouching figure holding paired horses. Baga Oigor, Mongolian Altai. Photo © 2005 Daniel C. Waugh.

Fig. 19. (left) Landscape with fabulous beings, detail insert showing human-headed bird, on northern slope of ceiling, Mogao Cave No. 249, Dunhuang. Western Wei Dynasty. After: Dunhuang 1999/1982, pls. 97, 103.

Fig. 20. (above right) Kimnaras, East Torana of the Great Stupa at Sanchi, 1st century CE. After: Hallade 1968.

on the ceiling of the sixth-century Western Wei Cave 249 at Dunhuang (Fig. 19) were disappearing.

There remained one further role for human-headed birds, this time in India. As *kimnaras*, a form of *apsarasas* (heavenly beings), they decorated a stupa, that

symbol of Buddhism, in first century Sanchi (Fig. 20), and also serenaded Padmapani, a form of Avalokiteshvara or Bodhisattva of Mercy, in a sublime painting in late fifth century Cave 1, Ajanta (Fig. 21). No longer connoting death, *kimnaras* indicated the supreme joy of release from earthly cravings, the

essence of Buddhism.



Fig. 21. Kimnara serenading Padmapani, Cave 1, Ajanta. B/w image after: Harle 1986, Fig. 284; color detail after: Behl 1998, p. 71.



About the Author

Rosalind Bradford studied Cultural and Social Anthropology at the University of Toronto, Harvard University (AM 1960) and the London School of Economics. Many years later, her growing interest in early East Asia and in Central Asia led her to enroll in the University of Pennsylvania, Department of Asian and Middle Eastern Studies and earn a PhD in 2009. Her dissertation was published as *The Guyuan Sarcophagus: Motifs from All Asia*, 3 vols.(Saarbrucken, Germany: LAP Lambert Academic Publishing,

2011–12) and is available on Amazon. E-mail: <rosalind. bradford@alumni.utoronto.ca>

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Notes

- 1. The late Beth Knox, Royal Ontario Museum, dated Bharhut to 150 BCE (personal communication).
- 2. Birrell 1999. Illustrations were added centuries later. Bruce Brooks says the first five books date to the fourth century BCE (personal communication)..
- 3. In West Asia, they occurred only rarely on Sumerian cylinder seals. See, for example, the Early Dynastic III seal depicted in Waterbury 1952, pl. 2, B, where the human-headed bird is on the lower left.
- Mycenaean and Minoan art does not include bird-bodied females.
- 5. Harpies, also human-headed birds, effected starvation through their disgusting habits.
- 6. Hellenistic sirens are shown in the Pergamon Museum. Alexander and his successors, the Seleucids, founded a number of cities in Central Asia including Taxila and Ai Khanum (Bernard 1994, pp 91 ff).

A STUDY ON THE AUSPICIOUS ANIMAL MOTIFS ON HAN TEXTILES IN ANCIENT CHINA

Zhang Wen 張文 Xu Chunzhong 徐純中 Wu Zhuo 吳焯 Qiu Yiping 邱夷平

hinese textiles have many animal motifs, found especially in combination with traditional Chinese cloud-designs. Such textiles were manufactured during the period of the Han 漢代 and Northern Dynasties (206 BCE - 589 CE), with many of the highest quality examples produced in the Eastern Han period, (25 - 220 CE). In earlier research, most scholars thought motifs such as the winged monster originated in Chinese traditional culture: such auspicious animals have other names, e.g., qilin 麒麟, tianlu 天禄, bixie 辟邪. Of interest though is the fact that similar depictions have been found in other places far away from China - Central Asia, Western Asia, and even in ancient Greece. The monster characterized by a wing and horn, which was called a griffin, has flown and hovered all over Eurasia. Some scholars have found that this phenomenon of the griffin can provide very important evidence about communication between East and West. Yet up to now, the winged monster in Chinese tapestry has never been compared with the griffin to determine what might be the similarities between them.¹ In this article then, we will explore the larger question of communication between East and West through the lens of depictions of this winged monster.

The manufacture in China of cloud-and-animal pattern textiles was very popular from 25 to 589 CE. From the standpoint of style and weaving technology, such textiles have much in common, two features in particular (Zhao 2005, p. 125). The first is that, almost without exception, they are warp-faced compound tabby weave: "a warp-patterned weave made up of a surface warp and complementary ... inner warps ... arranged in two or more series as well as one weft ... The ground and pattern are thus formed simultaneously, and the entire surface is covered by warp floats, which hide the weft" (Kuhn 2012, p. 523). The other feature is that the repeats along the weft direction will be much longer than in the warp direction. The warp repeats never extend more than 9 cm, whereas the

weft ones will be from 1/3 up to nearly all of of the cloth width (Zhao 2005, p. 132). There are many different kinds of animals in the designs on these textiles. To begin, we will classify in the table on the next page all the auspicious animals on the textiles by "species," the individual pieces often identified by the inscriptions on them.

All the textiles in the list represent some of the finest examples of world textile art. Most of them were manufactured during the period from the Han to the Northern and Southern Dynasties. Such silk textiles have been found in different sites, evidence for Silk Road trade across Eurasia, from Korea in the east to England in the west (Lesnichenko 1998). Of particular interest here are the textiles decorated with animal-and-cloud patterns which have been excavated at Silk Road sites and which we have listed in the table below. Most of them were found in northwestern China - Gansu Province and the Xinjiang-Uighur Autonomous Region. The combination of auspicious animals and inscriptions made them appropriate to commemorate the dead and ensure good fortune in the afterlife.

In the period of the Han Dynasty, there are many depictions of monsters with wings and horns, often in compositions with cloud patterns. It is possible that some of these monsters are embodiments of the Qiongqi 窮奇 or Xianyang 咸羊 described in the "Classics of Mountains and Seas" (Shan hai jing 山海 經) (Zhou 2010, p. 142), an amazing book about the geography and myths in ancient China.3 It seems likely though that the ultimate source for one of the winged monsters on the textiles is the creature with an eagle head and lion body known as a griffin or griffon (Hopkins 1960). Alternatively, some of the monsters on the textiles might be construed as winged carnivores or more specifically lions (without an eagle head) (Goldman 1960). The strange thing is that at the time these textiles were made, there could have been no lions in

Text continues on p. 106.

Table 1. A selection of early Chinese silk textiles described by motifs of auspicious animals and inscription text.

auspicious ammais and inscription text.				
Classification of auspicious animals	Textile description	Findspot ²	Date	
winged carnivore with two horns	'Changle Mingguang'長樂明光 (or 'Changle da Mingguang') (Enduring Joy and Shining Brightness). Includes carnivores and horse with rider (Fig. 1.)	Niya 尼雅, Minfeng 民豐	Eastern Han 漢代 Dynasty (25 – 220 CE)	
	'Yinian yishou changbao zisun' 延年益壽長葆子孫 (May your years be extended and long life increased, and your sons and grandsons be long preserved.) (Fig. 2)	Niya	Eastern Han Dynasty (25 – 220 CE)	
	jin silk with animal motifs in zig- zag or diamond frame (Fig.3)	Palmyra, Syria	Western and Eastern Han Dy- nasty (206 BCE – 220 CE)	
	dragon, phoenix, tiger and bird motif in an arched dragon frame (Fig. 4)	Dunhuang 敦煌, Gansu 甘肅	Northern dynasties (420 – 589 CE)	
winged lions without horn	'Deng gao ming wang sihai guifu shou wei guo qin' 登高明望四海 貴富壽為國慶 (Ascending to a height and looking clearly into the distance at the Four Seas, honors, wealth, and long life are what the state celebrates.), with animal and bird motif (Fig. 5)	Yingpan, Yuli, Xinjiang 尉犁县营盘	Eastern Han Dynasty (25 – 220 CE)	
winged composite beast with a single horn	'Wuxing chu dongfang li Zhong- guo' 五星出東方利中國(When the Five Planets rise in the East, the advantage will be to the Middle Kingdom). Images include birds and a lion or carnivore. (Fig. 6)	Niya	Western Jin 晉 Dynasty (265–317CE)	
three-winged composite beast with a single horn	weft-faced silk with animal motif, attached to a cotton robe. Im- ages include carnivore/lion and mounted archer. (Fig. 7)	Zagunluk 扎滾魯克, Qiemo, Xin- jiang 且末,新疆	Western Jin Dy- nasty (265 – 317 CE)	
composite beast possibly with horns	"Wanshi ruyi, yannian yishou." 萬事如意延年益壽 (May your wishes be granted, and may your years be extended.) Cloud pattern with humans and animals that in- clude birds, deer and lions. (Fig. 8)	Niya	Western Jin Dynasty (265 – 317 CE)	

winged deer	'En ze xia sui da shu 恩澤下歲大 孰' (May favors be bestowed and the harvest be a good one.) (Fig. 9)	Niya	Western Jin Dynasty (265 – 317 CE)
winged deer, winged lions or tigers	'Wannian fengyi' 萬年豐益 (May every year for ten thousand years have a good harvest.) (Fig. 10)		Eastern Han Dynasty (25 – 220 CE)
winged composite creature with antlers and a possible bird beak	pattern includes a wide range of birds, animals and fantastic creatures; found in tomb of Northern Liang royal heir Juqu Fendai (d. 455 CE). (Figs. 11a-c)	Astana 阿斯塔 那 Cemetery, Tomb 177, Turpan	Northern Liang 北涼 Dynasty (397– 445 CE)
winged and horned carnivores	'Han ren xiu wen yi you zisun wuji' 韓仁繡文衣右子孫無極(This was embroidered by Han Ren; may you have sons and grand- sons without limit.) (Fig. 12)	Loulan 樓蘭	Eastern Han Dynasty (25 – 220 CE)



Fig. 1. Jin silk inscribed "Changle da Mingguang" 長樂大明 光 (Enduring Joy, and Shining Brightness), excavated at Niya, Mingfeng, Xinjiang. 1:3 warp-faced compound tabby; warp count 176/cm; weft count 20/cm; pattern repeat in warp direction. After: Zhao and Yu 2000, p. 59, Fig. 21d.



Fig. 2. Detail of jin silk inscribed "Yannian yishou changbao zisun" 延年益壽長葆子孫 (May your years be extended and long life increased, and your sons and grandsons be long preserved.). Excavated at Niya; found attached to cotton pants. 1:3 warp-faced compound tabby; warp count 176/cm; weft count 24/cm; pattern repeat in warp direction) After: Zhao and Yu 2000, p. 32, Fig. 01.



Fig. 4. Warp-faced compound tabby with dragons, tigers phoenixes and birds on arched dragon frame. 4th-5th century CE. Found in Mogao Cave 17 at Dunhuang. After: Zhao 1999, p. 85.

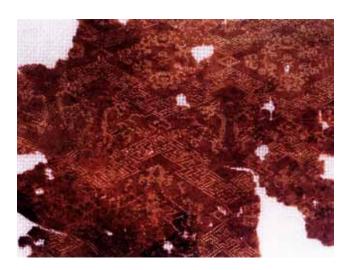


Fig. 3. Jin silk with animal in a zig-zag frame, found at Palmyra. After: Zhao 1999, p. 70.

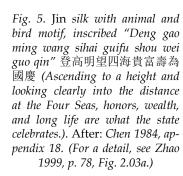






Fig. 6. Polychrome jin armguard, with inscription "Wuxing chu dongfang li Zhongguo" 五星出東方利中國 (When the Five Planets rise in the East, the advantage will be to the Middle Kingdom [China].), excavated in Tomb 8 at Niya, Mingfeng, Xinjiang. 1:4 warp-faced compound tabby; warp count 220/cm; weft count 24/cm; pattern repeat in warp direction. (See Kuhn 2012, p. 123; Zhao 1999, pp. 78-79). After: Zhao and Yu 2000, p. 63, Fig. 24f.





Fig. 7. Weft-faced tabby with animal motif, found attached to a cotton garment, Yingpan, Yuli, Xinjiang, tomb 8 (Cf. Kuhn 2012, p. 174, Fig. 4.3).



Fig. 8. Jin silk with cloud, animal and human motif, excavated at Niya, inscribed "Wanshi ruyi, yannian yishou" 萬事如意延年益壽 (May your wishes be granted, and may your years be extended.) After: Zhao 1999, p. 68



Fig. 9. Poychrome jin fabric, with winged deer and inscription "En ze xia sui da shu" 恩澤下歲大孰 (May favors be bestowed and the harvest be a good one.), excavated at Niya. After: Zhao 2005, color pl. 9.



Fig. 10. Jin silk depicting winged deer, winged lions or tigers and birds, with inscription "Wannian fengyi" 萬年豐益 (May every year for ten thousand years have a good harvest.). After: Chen 1984, appendix 20.





11c

11a

Figs. 11a-c. Warp-faced compound twill with complex design that includes many animals, Eastern Jin/Northern Liang dynasty, 4th-mid-5th century. Excavated from Tomb 177, Astana Cemetery, Turpan, the tomb that of Juqu Fengdai, governor of Turpan until his death in 455 CE. Collection of the Xinjiang Uighur Autonomous Region Museum, Urumqi. Fig. 11a, after: Li 2003, no. 37; Fig. 11b, photo 2009 Daniel C. Waugh; Fig. 11c, schematic drawing by Zhang Wen.





Fig 12. Jin silk with various animals including lions, caprids, and winged and horned carnivores, inscribed "Han ren xiu wen yi you zisun wuji" 韓仁繡文衣右子孫無極 (This was embroidered by Han Ren; may you have sons and grandsons without limit.) Excavated at Loulan. After: Chen 1984, appendix 19.

11b



Fig. 13. Glazed tile frieze depicting winged lion-griffin, from the Achaemenid palace of Darius I, ca. 510 BCE, Susa, Iran. Collection of the Louvre Museum. Photo © 2012 Daniel C. Waugh.

China, since the natural environment was unsuited for them to survive. As we know, the lions which were brought from Western Asia are not indigenous to China, and the lions with wings were found in China antedate the time when a real lion would have been seen there (Hornblower 1933).

So, what could have been the origin of the winged monster? The distinguishing features of the griffin point to it as a source: one type has wings, the other horns. The winged monster like a griffin which spread to China through the Eurasian steppe is a motif from Western Asia. It can further be divided into two kinds, one with bird or eagle head, the other a mammal's head; these features can be seen in various animals — the winged carnivore or lion, winged deer or ibex — which tend to merge into a single creature.

Let us begin with the origin of the winged carnivore or lion motif on the textiles, which resembles the typical griffin with lion head found in different areas in

Fig. 14. Lion griffin, felt appliqué from Ak-Alakha 3, Siberian Altai, Tomb 1, saddle cloth of horse No. 3, 4th–3rd century BCE. Collection of the Museum of Archaeology, Institute of Archaeology and Ethnography, Siberian Branch, Russian Academy of Sciences. Courtesy of Hayashi Toshiyo, Sōka University.



Western and Central Asia. The features of Achaemenid lion-griffins (Fig. 13) — the example here from ca. 510 BCE – include: (1) a lion head; (2) curling horns; (3) a horse ear; (4) a short mane that encloses the throat; (5) enlarged wings; (6) markings on the rump and buttock; (7) back legs of an eagle. This motif is then found in the nomad graves of the Siberian Altai in the 4th-3rd centuries BCE (Fig. 14), where one notes the markings on the rump and the pointed leaf-like tip of the tail. This western type of lion-headed griffin seems to be reflected in a Chinese sculpture of a winged monster from Luoyang 洛陽 dating to the Eastern Han Dynasty (Fig. 15a, b). Its appearance is largely that of the real animal, except for the single horn and beard-rather like the winged horse and ibex in Greek culture. So we might infer that the winged monster in Luoyang was influenced by Hellenistic or Bactrian models. Bactrian influences are known to have been important in China in the early centuries of the Common Era. That



Fig. 15a, b. One of a pair of stone winged lions, found near the River Luo, Luoyang. Collection of the National Museum of China. Photos by Zhang Wen.





Fig. 16. Woolen embroidery from the cemetery at Noyon uul, Mongolia, Barrow 6, late 1st century BCE – 1st century CE, depicting a horned lion-griffin. Collection of the Hermitage Museum, St. Petersburg. Courtesy of Hayashi Toshiyo, Sōka University.

said, we should note that the wings on the Luoyang sculpure differ from those in the Achaemenid images. The Achaemenid wings are large and extended, but in this sculpture the wings are small and folded back along the body, perhaps merely to suggest that this sculpture does not represent a real animal. Although as a whole the sculpture lacks the refinement of the best examples of Chinese work in this period, it does illustrate how the basic elements of the model have been given Chinese characteristics. Figure 16 depicts a textile fragment excavated in a Xiongnu tomb at Noyon uul in Mongolia (probably dating from the late 1st century BCE or 1st century CE). In this example, one can see elements found in the Achaemenid model such as big wings and the curling horn, although rendered in sketchy outline.

One can thus suggest a possible route of transmission of the griffin motif, which would explain how it could then appear in Han Dynasty textiles. The possible models could have come from Iran into Central Asia and then made their way through Xinjiang, reaching both Mongolia and Central China.

The griffin-like monster was very popular in China in the period following the end of the Eastern Han Dynasty and can be found in stone sculptures at mausolea during the period of the Six Dynasties (Yang 2006). Most scholars think that in China the winged monster is to be identified with the *tianlu* 天祿 and *bixie* 辟邪, which are mentioned even in in historical texts such as the *Hou Han Shu* 後漢書. Some scholars have suggested that images of these monsters, which were considered to be auspicious animals in China, may in fact have been based the art of the Eurasian steppe or central and even western Asia (Li 2004, p. 362; Bunker 1993; So and Bunker 1995, esp. Ch. 5).

A striking compound weave *jin* silk with "griffin imagery," produced in the Northern Liang

Fig. 17. "He" ritual vessel shaped like a "leopard-bird" (475 – mid-4th century BCE). Collection of the Shanghai Museum. Photo by Zhang Wen.

北凉 period, was found in an elite tomb in the Astana Cemetery in the Turpan oasis (Figs. 11a-c). The pattern includes various kinds of



animals, a least a couple of them seeming to represent birds (although in one case with four legs). Of particular interest are the composite "griffin" figures, with wings, clawed feet, pointed tails, antlers and snouts that in some cases curl up, the mouths open to reveal teeth. These various elements were common across the northern regions by the second half of the first millennium BCE and even at a very early stage can be found in China. For example, the figure that forms the body of a 5th-4th-century BCE ritual vessel (Fig. 17) can be called a bird-headed griffin: it has a bird's beak, a horse's ear, monster claws and wings. A rich nomad burial from the around the beginning of the 3rd century BCE in the remote Altai mountain region of Southern Siberia contained the body of a man whose forearm was tattooed with monster images [Fig. 18]. One of the beasts, a hooved animal that is probably in the first instance a horse, is shown with twisted hind-

Fig. 18. Tattooed human skin depicting a monster, from the right arm of a man buried in Pazyryk Kurgan 2 (Siberian Altai), 300– 290 BCE. Collection of the Hermitage Museum, St. Petersburg. Photo © 2006 Daniel C. Waugh.





quarters, a beak and exaggerated antlers, with raptor heads decorating them as well as the animal's mane. An elegantly designed gold headdress ornament [Fig. 19], found in Shaanxi Province and dated to the late 4th century BCE has been termed a "horse-monster." It too has a beaked snout, large antlers with the raptor heads (found as well on the tip of the tail) and a clearly articulated "horse" ear. Belt plaques such as one excavated at Aluchaideng in Inner Mongolia [Fig. 20], dated to the 3rd century BCE, frequently display composite beasts, some evoking carnivores, others hooved animals, with elaborate antlers decorated with raptor heads.

Given the early date of such examples (many made prior to what is normally considered to be the opening of the Silk Roads across the more southerly regions of Xinjiang), it seems reasonable to posit transmission via the steppe routes of the north, the connections



Fig. 19. Horse-monster, a gold headdress ornament, found at Nalingaotu, Shenmu Xian, Shaanxi Province, late 4th century BCE. Courtesy of Hayashi Toshiyo, Sōka University.

then becoming stronger with the emergence of the Xiongnu on China's northern borders. It is precisely in the north and northwest of China that most of the artefacts displaying these images have been found (Shen 2009, p. 389).

While the motifs on these textiles may have come from Western Asia, what can one say about the weaving techniques? These are warp-faced textiles, not the weft-faced ones typical of Western and Central Asia. The basic structure produces a colorful effect along the weft direction, since the warps float above the weft. Among the reasons for adopting the warp-faced technique is the nature of the basic material. The length and strength of the silk thread produced in China made it especially suited for the long warps. Some scholars think that the perfection of this technique in China rather than in other regions is to be explained by the fact that sericulture first developed there (Karasuma 2004, p. 29). The silk threads can be used directly for weaving, whereas other fibers like cotton and linen must first be twisted to increase their strength. A second important reason for the adoption of the warpfaced technique lies in the early development of looms probably starting with the body-tension or backstrap loom where one end of the warp threads would be attached to the weaver's waist belt, the other being tied to a tree or a peg. The resulting textiles had a face pattern expressed by the warp yarns, thus emphasizing their importance over the weft yarns (Karasuma 2004, p. 28; see also Kuhn 2012, pp. 53-57). The textile historian Zhao Feng 趙豐 further explains (1999, p. 71; see also 2005, p. 132): "The pattern unit is short in the warp direction, but longer in the weft direction. Studies of archaeological examples show that within a single pattern unit, the number of inner wefts or weft passes is below 80 in the warp direction. However, in the weft direction, one pattern unit may occupy the complete loom width."

The sophistication of the weaving techniques suggests that most of the textiles of interest to us here were probably produced in Central China. The treadle-operated loom, which succeeded the backstrap loom, sufficed for weaving intricate motifs as long as they were symmetrical and geometrical, or of a small pattern cycle (Chen 1984, pp. 204–05). However, motifs of a large pattern cycle or of an extremely complicated

Fig. 20. Belt plaque with crouching composite predator with antlers decorated with raptor heads. Gold with turquoise inlay. Ca. 3rd century BCE. Excavated at Aluchaideng, Inner Mongolian Autonomous Region. Collection of the Inner Mongolia Museum, Hohhot. Photo © 2009 Daniel C. Waugh.

structure, such as floral and animal designs. required different technology. The result was the development of the drawloom or heddle patterning loom as early as the period between the Warring States Period and the Han Dynasty, i.e., ca. 475 BCE and 220 CE (Chen 1984, p. 210; Kuhn 2012, pp. 55–57). The range and complexity of the patterns in Han-period textiles, including the images of fantastic beasts, attests to the high technical abilities of the weavers. Sometimes the number of weft yarns that needed to be lifted for each figure unit repeat reached two hundred or more (Chen 1984, p. 212).

The patterning loom was gradually brought to perfection during the first millennium of the Common Era. In "Rhapsody on the Loom" 織機賦 by Yang Quan 楊泉 of the Western Jin 晉 period (265–316) (Yang 1984), we find explicit descriptions of the material out of which the loom was made, the principles on which the loom was assembled and the process by which patterning was carried out. Of special interest is a passage that tells how weavers work in unison on a patterning loom:

The worker below lifts the ground harness and does the wefting while the worker above pulls up the patterning warp threads according to the figure design. As soon as a signal is given by one, it is echoed by the other, and it is through this close coordination between them that beautiful designs appear on the polychrome jin fabric one by one. [Quoted by Kuhn 2012, p. 58; see also Chen 1984, pp. 210–20]

Another Jin-period work, Lu Hui's 陆翽 "Record of Ye" (Ye zhong ji 鄴中記), gives a large list of motifs woven into textiles, a list which the author maintains is not exhaustive. This list points unmistakably to the increased capacities of the patterning loom and the ever wider application of the patterning technology.

One of the most evocative descriptions of weaving is in a literary work written by Wang Yi 王逸 of the Eastern Han — "Rhapsody on Women Weavers" (in Ouyang; Wang 1984; partial translation and summary in Kuhn 2012, pp 57-58). In this work, the author gives a comprehensive description of the patterning loom, using a lot of metaphor and similes, which make the work at once interesting and informative. The movement of the loom's parts is like the rising and setting of the sun and moon. The various parts of the mechanism are likened to "soldiers setting out on campaign," "rabbits' ears," and "fierce dogs." The warp threads "resemble a pond of clear water [where] fishes swim about [after bait], swallowing it." The cloud, animal and plant metaphors serve both to describe the technology and express the degree to which such patterns had come to be part of cultural expression by the time of the Han Dynasty. In the process of absorbing images such as the griffin though, the Chinese transformed it from a threatening or evil figure (as it would have been understood in a Western context) into an auspicious one.

The positive connotations of the monsters on the textiles are reinforced by the inscriptions woven alongside them. While most such inscriptions are very common felicitous expressions which cannot be associated with a particular historical context, there are some possible exceptions. Some scholars have found one of the textiles from from Niya (Fig. 6) to be of particular interest (see, e.g., Zhao and Yu 2000, p. 62; Yu 2003). On it are the characters "Wuxing chu dongfang li Zhongguo" 五星出東方利中國 (When the Five Planets rise in the East, the advantage will be to the Middle Kingdom). This piece apparently was part of a larger one, another fragment of which, found in the same tomb, has the characters "tao nan Qiang" 討 南羌 on it. This then might connect with the history of the war between the rulers of central China, its forces led by Xie Ai 謝艾 against the Southern Qiang 羌 in the fourth century. The ruler of Niya seems to have been among the participants in the expedition; thus, possibly this textile commemorates the event, was gifted as a reward, and then was buried with its owner.

There is more to be said by way of explanation for the popularity of the fantastic animals on the silks of the Han and subsequent periods and the way in which they are depicted. Han textiles include a great many kinds of animals: e.g., wolf, bear, deer, tiger, lion, dog, ibex, snake, eagle, camel and various birds. Some of them then were adapted to incorporate elements of the griffin from Western Asia that was represented there with an eagle or lion head. These fantastic creatures seem to have influenced the creation of a wide range of variants when introduced into the cultures of the northern nomads. There was a process of adaptation to the belief system (and the visual representations of it) concerning the animals which were familiar. When translated to Han China, the depictions then come to include a wolf with wings, deer with wings or a winged bear. Yet, as indicated above, some of the fantastic creatures retain key elements found in the proposed West Asian sources for them.

It is important to understand the cultural context of the belief systems within which the fantastic animals flourished. Traditional nomadic culture emphasized the importance of animals for human survival. Animals might be seen to have a protective function and in traditional shamanic belief connect the various levels of the cosmos, that which is below this world, this world of humans, and the heavens (Rowland 1962). The function of the shaman was to perform the rituals which would ensure the well-being of the community, rituals in which animals and animal spirits were invoked. There are parallels here with traditional Chinese beliefs and practices of sorcery, which can be documented, for example, in the Shang 商 and Zhou 周 dynasties and may be seen in the imagery on some of their bronzes. Thus one can suggest that there was an environment in which fantasic beasts could thrive, in the same way that they did among the steppe peoples of the north.

In particular, we should consider why lions and winged lions were popular during the Han Dynasty in China. Knowledge of the winged lion seems to have preceded any acquaintance with real lions. The latter are attested though in texts such as the Hou Han Shu 後漢書, Mu Tianzi zhuan (Biography of Mutianzi) 穆 天子傳, and Li Shizhen's 李時珍 (1518-1593) Bencao gangmu (Collection of materia medica) 本草綱目. The observation of real lions might well then have stimulated an interest in their mythical depictions. The major religious belief systems in China also help to explain why lion imagery would become popular. The adoption of Buddhism at the beginning of the Common Era meant the introduction of imagery in which lions appear as protective animals (Liu 2008, pp. 46-47). To represent lions with wings may well be explained by Daoist belief, in which there was an iconography of flying auspicious figures.

The winged lions might also have been seen as analogous to other traditional monsters in China, for example, the *yuren* 羽人, which is similar to a winged griffin (Wang and Liu 2008). According to Wu Min, a specialist on ancient textiles, many of the Chinese textiles with cloud design were produced during the Six Dynasties and Tang periods in the state of Shu 蜀 (now Sichuan 四川 Province) (Lesnichenko 1993). Coincidently, this was one of the places where the *yuren* was popular.

The griffin-like animals that originated in Western Asia might have had both good and bad connotations in various regions (Hancar 1952), but in China they were viewed only in a positive light. "These motifs began a new life in China, and acquired new meanings. At the same time, old associations disappeared and were forgotten" (Lesnichenko 1993, p. 8). The winged lions could be enlisted in the service of the dynasty to reinforce a message about the emperor's mandate from heaven. Eventually the lion-headed griffin was transformed into the Chinese auspicious monster, the tianlu 天禄 and bixie 辟邪. This example illustrates well the processes of translation of image and ideas across cultures.

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Notes

- 1. This is not to say, however, that there has been no attention to animal or monster depictions on textiles made in China and/or excavated at sites in China along the Silk Roads. In English, see, for example, Lubo-Lesnichenko 1993; Kuhn 2012 *passim*; Keller and Schorta 2001 (devoted to woolens found at Shanpula which must be of Central Asian origin). That there is as yet much to be done in tracing specific animal motifs that moved across Eurasia can also be seen in the article by Rosalind Bradford in this volume of *The Silk Road*.
- 2. Many silk textiles were found in the Lop-nor region of Xinjiang, notably at Loulan, the most important transit center along the eastern length of the Silk Road. Recent excavations have also produced significant textile finds at another ancient town, Niya (present Minfeng county), located not far from the Khotan oasis, along the southern branch of the Silk Road (see, in Chinese and English, Zhao and Yu 2000). The tombs at the caravan city of Palmyra, in Eastern Syria, have also preserved some textiles very similar to ones found at Loulan (Lesnichenko 1998/1995; Stauffer 1996; for their complete analysis, Schmidt-Colinet et al. 2000).
- 3. The tendency to connect the beasts on the textiles with those of Chinese tradition (rather than seek possible borrowings from further afield) can be seen in Li Wenying's discussion of the animal motifs in Kuhn 2012, pp. 152–54.

On the Issue of Silk Weaving in Genoese Kaffa and Textiles from the Belorechenskaia Kurgans

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t the end of the 19th century, Professor Nikolai I. • Veselovskii was excavating medieval kurgans near the villages of Berlorechenskaia, Andriukovskaia, and Kostromskaia in the Maikop District (Kuban region). The richest graves were being unearthed in the kurgans of the Belorechechenskaia group. Among the burial goods were imported silk textiles, Venetian and Syrian glass vessels, metal composite belts manufactured in the workshops of the eastern Crimea, and coins of the Golden Horde. Based on an analysis of the artistic style of the burial goods, the Arabic inscriptions on some artifacts, and coins, Veselovskii dated the burial complexes to the 14th-15th centuries (Veselovskii 1898, p. 2). The silk dresses and fabrics found in the Belorechenskaia kurgans are of particular interest, since they give one the opportunity to reconstruct the costumes of the medieval population buried in kurgans near the Belaia River.

Studying the materials from the Belorechenskaia kurgans is somewhat difficult because all the finds were divided by the Imperial Archaeological Commission between the Historical Museum in Moscow and the Imperial Hermitage in Saint Petersburg. "The distribution of materials was made according to the following principle: precious and beautiful objects were given to the Hermitage, and the ordinary ones to Moscow. As a result of this decision, even the assemblages from the same graves



were also separated. Out of 84 kurgans, 77 of them contained burial goods; 46 assemblages (complete or almost complete) went to the Historical Museum, 23 — to the Hermitage, and 8 were divided between the museums" (Levasheva 1953, p. 164). Moreover, not only were the burial goods assemblages divided but the artifacts as well — some fragments of the velvet caftan from Kurgan 20 went to the Historical Museum (GIM Inv. No. 37258) and some of them to the Hermitage (GE Inv. No. TB-373; GE Inv.No. TB-373).

The excavated textile was partially described in Veselovskii's published report (1898), valuable today for his *in situ* description of the finds. Though the discoveries were made over a century ago, the Belorechenskaia fabrics are still the most valuable sources of knowledge we have about imported textiles from this period in the North Caucasus.

Fifty years after Veselovskii's excavations, the Belorechenskaia materials were studied by Varvara P. Levasheva (1953). However, her work was limited to general descriptions of burial rite and goods, without a detailed analysis of each grave's assemblage as a complex of interrelated objects. Levasheva named the places of origin for several different fabrics but did not provide any supporting reasons. She came to the conclusion that "...fabrics found in graves are of only luxurious types. Almost all of them are of Oriental origin, with a majority produced in Iran, though Italian fabrics were used for a caftan from a female grave. Quite frequently there was also Chinese silk resembling kamkha" (Levasheva 1953, pp. 192-93). She offered reconstruction drawings of two sets of dresses. Accompanied by the descriptions, the information given on the dresses' cut has been taken for granted by other scholars and referenced in their publications (Ravdonikas 1990, pp. 70-71, Fig.19; Kramarovskii and Tepliakova 2009, pp. 29,

Fig. 1. Map showing location of Belorechenskaia. Source: Stielers Handatlas (1892), Blatt 49, reproduced in Wikimedia http://upload.wikimedia.org/wikipedia/commons/7/78/Kuban_district_ru.jpg.

31; 2010, pp. 471–72). This unfortunately led to the repetition of inaccuracies made by Levasheva in her reconstructions and has not added anything new to the already known data on the costume of the local medieval population.

Recently, five textile items were displayed in the exhibition, The Golden Horde. Its History and Culture, and published in its catalog, where Mark G. Kramarovskii suggested that fabrics discovered in the Belorechenskaia kurgans were produced in the Genoese city of Kaffa (Kramarovskii 2005, p. 93). He repeated this hypothesis in his later publications (Kramarovskii and Tepliakova 2009, p. 26; 2010, p. 463). However, his assumption that a technological analysis of the Belorechenskaia silks from the Hermitage part of the collection would support their having been produced in Kaffa remains unproven. He could not distinguish any feature that would point to the Crimean origin of the Belorechenskaia silks. In an article written in collaboration with Anastasiia N. Tepliakova, he stated that "according to the pattern design, the fabrics can be dated to the second half of the 15th century but the place of their manufacture has remained questionable," and that "all the fabrics studied, whose place of production is still undetermined, belong to the late stage of the Belorechenskaia kurgans that are nonetheless dated no later than the late 15th century" (Kramarovskii and Tepliakova 2010, pp. 464, 468).

Thus, scholars have had differing opinions on the cultural attribution of textiles from the Belorechenskaia kurgans. Veselovskii believed that the deceased were dressed in clothes made out of European fabrics. He wrote (1898, pp. 12-13) that "men and women had silk, brocade, and velvet garments in lilac, green but mostly in brown and dark yellow colors; it was either plain and striped, or decorated with flower designs, large and small free design, probably of Western European make." On the other hand, Levasheva believed that the majority of fabrics from the Belorechenskaia kurgans were produced mainly in Iran and China, with only one fabric, found in Kurgan 20, made in an Italian workshop (Levasheva 1953, pp. 192-93). The opinion of Kramarovskii and Tepliakova is not clear and somewhat contradictory. In some cases they suggest that the Belorechenskaia textiles were made in workshops of the Crimean city of Kaffa, in others they suggest Italy, Cairo, or Spain (Kramarovskii 2005),1 or, as indicated above, are uncertain about where they were produced (Kramarovskii and Tepliakova 2010, pp. 464, 468). Kramarovskii and Tepliakova's claims notwithstanding, there is no basis to conclude that silks from the Belorechenskaia kurgans were produced in the Crimea. But given the authors' attempt to tie these silks to Kaffa workshops, I would like to discuss this hypothesis in more detail.

Arguments supporting the idea that there was a silk industry in Kaffa have been made by both Irina Konovalova and Aleksandr G. Emanov, who analyzed the written sources of the 14th - 16th centuries (Konovalova 1993, pp. 335-38; Emanov 1995, pp. 53-54). According to Konovalova, reference to silk production in Kaffa can be found in Russian documents that recorded Kaffa "kamka-kufteri"; in massaria (the Treasury Ledger Book of the city of Kaffa) for 1386 that mentioned local Armenian and Georgian weavers; and in a work by Johannes de Galonifontibus, who noted in Kaffa silk and camlet weavers. Among other "Kaffa silks," Konovalova writes about khemka and sendal (kemeha de Kefe, çedalini de Chapha). But the distinctive characteristics she indicates as specified by the written sources are limited to the color and size of the fabric's décor (light green, dark green, purple, grass-colored, light green with small-size design, white with large-size design, etc.), which of themselves do not specific the textiles' provenance.

Ermanov (1995, pp. 53-54) argued as follows:

In Kaffa itself, earlier than anywhere else in the Eastern European periphery, was established its own silk industry. This follows from the writing of Johann de Galonifontibus who visited Crimea at the turn of the 14th-15th century. He wrote about '...the famous and populous town of Kaffa, the meeting place of merchants from all over the world... All Oriental languages are spoken here; once I managed to count 35 languages altogether... It is possible to find here the Genoese - town craftsmen, and the truly best masters on silk, camlet, and other outstanding crafts' (Galonifontibus 1980, p.14). ... Caffae massaria mentioned Armenian silk weavers (magistri camocatorum) (Balard 1978, p. 285). There is no doubt that raw and semi-raw silk and cotton were used in craftsmanship. It seems that with the development of silk weaving in Kaffa, the city not being simply a place of its re-exportation as it was assumed previously, ... should be connected the emergence of "Kaffa" taffeta and silk, both in crimson and other colors; the "Kaffa" ribbon and border known from the Old Russian sources, ... and with the existence of silk weaving in Kaffa should be connected a ritual garment sewed out of colorful Kaffa kemkha with the blue selvedge trimmed with gold (planeta camocati Caffe diversorum collorum cum frexio celesti bordato aureis) that was mentioned in a Genoese will, ... or an indication of the Kaffa sendal (cedalini de Kaffa) in one of the Ragusa Acts, or the familiarity with the Kaffa kamkha (Kemha de Kefe) by the compilers of the Turkish customs rules.

In other words, Emanov argued that the term "Kaffa" applied to certain silk fabrics — sendal, kemkha, and taffeta — which not only were reexported but were products of the city's own "silk industry," the existence of which is confirmed, in his opinion, by the writings of Johann de Galonifontibus.

Now Kramarovskii and Tepliakova admit (2010, p. 463) that "Kaffa silks, as well as other variations of local textile present a special attribution problem." At the same time, Kramarovskii has written, "We do not have any evidence about textile manufacturing on the main territories of the Golden Horde. Genoese Kaffa, perhaps, constitutes an exception but only at the end of the 14th century" (2005, p. 93). In support of this hypothesis, he cites some of the same written evidence as do Konovalova and Emanov and adds: "The Latin name for the Gate of Weavers, Porta Vonitche vel Filatorum, tells us about the presence of weaving in the city as a specialized craft but more likely it describes the place as a concentration of weaving workshops." Yet he is skeptical whether any of the written sources really can prove the point. Ultimately, he argues, one "must find the necessary archaeological proofs," none of which he has adduced. So in fact there is no hard evidence that would enable us to identify "Kaffa silks."

In discussing the hypothesis about Kaffa silk production, close attention should be paid to the names of fabrics in the written sources — camlet, taffeta, kemkha, and sendal. The fabrics named were produced in the wide territory from China to Europe. The written sources do not describe any specific identifying features of the "Kaffa"fabrics. Nor can be be sure whether "Crimean flax linen," as it is known from Rashīd al-Dīn, was delivered to Ilkhanate Iran, or whether it had some distinctive features (Rashīd ad-Dīn, p. 238).

According to Marco Polo, camlets were produced in Kalacha, the Province of Tangut (that is, probably the Gansu region in China): "In this city they manufacture beautiful camlets, the finest known in the world, of the hair of camels and likewise of white wool. These are of a beautiful white. They are purchased by the merchants in considerable quantities, and carried to many other countries, especially to Cathay" (Polo 1908/1914, p. 139). The technique of manufacturing camlet was adapted in Western workshops using the fleece of other animals, the Angora goat or fine-fleeced sheep. There is no evidence for the early technique of camlet manufacture. Written sources of the 12th-13th centuries describe camlet as a beautiful, pricey fabric with a smooth exterior used for making both male and female garments. The term "camlet" had a wide application to fine fabrics: without pile, in plain or satin weave, made of wool or silk threads, or a blend of both (Merkel and Tortora 1996/2007, p. 89). Emanov noted that white or colored camlet is often mentioned in the treasury accounting books of Kaffa and that Cypriot camlet was in high demand in the Black Sea region (Emanov 1995, pp. 47–48). However, he does not list any specific feature that would distinguish the Kaffa camlet from the Cypriot one. Thus, the evidence of Galonifontibus is the only reason to assume the production of camlet in Crimean weaving workshops. An indirect argument supporting the hypothesis about the production of wool fabrics in Kaffa may be Rashīd al-Dīn's mention of the sheepskin fur coats that were delivered to the Ilkhanate from the Crimea (Rashīd al-Dīn, p. 238). Obviously, sheep breeding could have produced raw wool for textile production.

In regard to the silk masters mentioned by Galonifontibus, we would emphasize that silk weaving was a highly specialized field. For example, from the mid-14th century, masters of the Venetian silk guild were divided between velvet weavers and the weavers of other silks. The latter were further subdivided into groups specialized in making satin on treadle looms who wove plain and simple-patterned silk, and masters who worked on drawlooms who wove complex figured silks, lampas, or damask (Monnas 2008, p. 8). It is not clear what kind of specialists were the silk weavers Galonifontibus describes. Among the Kaffa fabrics mentioned in other textual sources are taffeta, kamkha, and sendal. Taffeta and sandal are monochromic silk fabrics of a plain weave; kamkha is a term for monochromic fabrics with a pattern created by the interchanging of the main weaves used for making both pattern and ground.² As a rule, all three types of fabrics are woven with one warp system and one weft system, and are produced with one or two main weaves on a simple loom. It is hard to say what could be the specific technical features of the hypothetical Kaffa fabrics - tafetta, sendal, and kamkha - that would make it possible to place them into a special group of textiles. However, if a textile industry, in fact, existed in Kaffa, the silk masters described by Johann Galonifontibus probably would have belonged to the masters of satin (maestri del raso) specializing in the weaving of simple silk fabrics. It is not clear what technique was applied for "Kaffa" ribbons and border. In any event, so far, there is no evidence that could suggest the weaving of silk velvets or lampas in Kaffa. In England. the term "Kaffa silk," used in the 16th century, also referred to fabrics produced both in satin and damask, or fabrics imitating Kaffa silks "produced in the Low Countries as a silk and linen union, combining a silk or silk-and-wool warp with a flax weft" (Monnas 2011, pp. 250, 252).

It was an established practice for Italian cities to accept migrants who imitated silks of their specialization (Monnas 2008, p.17). Thus we might assume that silk weavers in the Genoese colony of Kaffa were the Genoese weavers of camlet, taffeta, kamkha, and sendal mentioned by Galonifontibus, even while we have to recognize that there are no criteria to distinguish the assumed Crimean fabrics from similar Genoese silks. Discoveries of archaeological textiles in present-day Kaffa/Feodosiia would be of no help unless a specific mark on a fabric clearly indicates Kaffa as the place of its production.

Although Kramarovskii (2005, p. 93) has suggested that technical analysis of silk fabrics from the Belorechenskaia kurgans will show that they were manufactured in Kaffa, he perhaps fails to realize that technological analysis may in fact not be sufficient for the attribution of archaeological textiles and the regional location of their production. Anna A. Ierusalimskaia has emphasized that while technological analysis is important for a general classification which in some instances may identify fabrics produced in the same center, it is not enough to identify the centers themselves (Ierusalimskaia 1992, p. 11). The most reliable feature in determining the place of a workshop is its identifying mark. But such cases are rare for medieval textiles. The majority of the preserved silks have been attributed on indirect evidence that includes a combination of stylistic, technical, and iconographic features and, when available, evidence from written sources (Monnas 2008, p. 17).

Fig. 2. A female costume from Belorechenskaia Kurgan 20. Reconstruction by Zvezdana V. Dode, drawing by Irina P. Oleinik.



It would be hasty to reject the notion of a weaving industry in the Crimea that could satisfy the needs of the ordinary population and produce simple silk fabrics for export. However, there are no grounds to discuss the presence of highly specialized local weavers there. And thus, more specifically, there is no basis to place workshops in the Crimea, namely in Kaffa, that could have woven the complex silk fabrics found in the Belorechenskaia kurgans.

To determine the place of manufacture of the Belorechenskaia fabrics, a thorough analysis should be conducted.³ All these fabrics should be descriptively catalogued and presented in a monographic study. But, for now, in the context of the hypothesis of the origin of the Belorechenskaia silks from Genoese Kaffa, I can but confine myself to discussing in greater detail the technological and ornamental features of the velvet caftan from Kurgan 20.

This caftan is undoubtedly the most notable find among the other textiles from the Belorechenskaia kurgans. In Kurgan 20, a costume of a deceased woman has been fully preserved: head dress, two caftans, and leather boots (Fig. 2; Color Plate VI); her clothing was supplemented by adornments and accessories (Veselovskii 1898, pp. 41–42). The outer caftan, which will be the subject of further discussion, was made of red velvet, with pile that combines both cut and uncut loops. The caftan was made out of velvet with a design in cut silk pile, textured with satin and bouclé areas, formed by a pattern weft, with a silk core S-twisted with a thin strip of gilt silver.

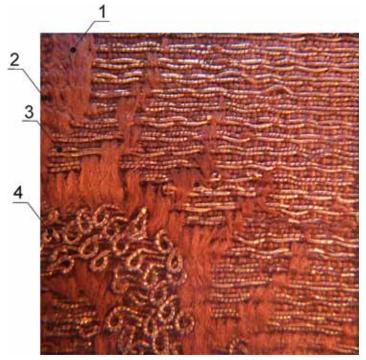
Scholars have defined the fabric of the caftan differently but did agree on its color. Veselovskii (1898, p. 41) believed that it was made of "lilac brocade with silver thread." Later, Levasheva (1953, pp. 188-89) described the same color but described the fabric as follows: "An expensive gilt aksamit Italian velvet of this dress initially was in lilac color, but now its shades had dimmed and turned overall in to the brownish tone." Tat'iana D. Ravdonikas (1990, p. 70) also suggested that "the initial lilac color of the velvet turned brownish by the time of excavations." However, the lilac effect noted by Veselovskii appeared as a result of the oxidation of silver threads that textured practically the whole surface of the fabric used for the caftan. Analyses of dyes recently performed in the Laboratory of Scientific and Technical Expertise by Liudmila S. Gavrilenko determined that the weft and pile threads of the fabric were dyed with carminic acid derived from cochineals (Kramarovskii and Tepliakova 2010, p. 472). Thus, the original color of the fabric was red.

A few words should be said about the terms "brocade" and "gilt aksamit velvet" used by

Veselovskii and Levasheva in regard to the type of the Belorechenskaia fabric. In Russian, the word "brocade," unlike in Western European terms, usually refers to fabrics with silk warp and silver or gold wefts, without specifying the type of fabric or the way of applying the metal weft (through the whole width or in certain patterned areas). Thus, it does not imply the fabric's structure or technique, and the term "brocade" cannot be applied to the Belorechenskaia fabric.

The "aksamit velvets" mentioned in the Russian written sources are a type of velvet decorated with a pattern, woven with the gold and silver threads [Klein 1925, pp. 34–35]. Russian medieval documents recorded structural features typical for imported fabrics, but in translation, these nuances had been transformed into descriptive definitions based on the visual perception of a fabric, more comprehensible for mentality of a Russian medieval man (Vishnevskaia 2004, p. 49). The term "gilt aksamit velvet" applied by Levasheva to the Belorechenskaia fabric fits the accepted Russian terminology; however, there is no historical context of its production and usage.

There are various kinds of velvet — with cut and uncut pile, with combinations of cut and uncut pile loops, with combinations of pile in different heights, and with areas of pile design contrasting with a smooth ground. To apply the term "velvet" to the Belorechenskaia fabric points to the technique in a Fig. 3. Structure of velvet from Belorechenskaia Kurgan 20: 1 - cut loops and 2 - uncut loops of the silk pile surface; 3 - textured satin; 4 - bouclé areas created with the patterned weft of a silk core Stwisted with a thin strip of gilt silver.



general way but does not reflect these specific features.

Western European historiography describes velvet fabrics with a metal bouclé weft by the Italian term "allucciolato" (Landini and Redaelli 1994, p. 189). I used it for attributing the Belorechenskaia fabric in a preliminary paper about this find (Dode 2010, p. 121). Kramarovskii and Tepliakova (2010, p. 468) attributed the Belorechenskaia fabric to another type of velvet, "a riccio d'oro" or "riccio sopra riccio," described by the Italian scholars Roberta Orsi Landini and Alfredo Redaelli. This suggestion is correct but needs some refinement. The Italian terms "allucciolato" and "a riccio d'oro" do not indicate a type of a fabric but the weaving methods that produce different effects. In the 15th century, the term "allucciolato" meant a luminous effect made by brocaded wefts raised in a shape of small gold loops spaced in intervals of velvet pile (Landini and Redaelli 1994 p. 189; Monnas 2008, p. 301), or as metal weft floats on the surface of a damask or satin (Monnas 2008, p. 302). For different types of velvets of the 15th-16th centuries woven in technique "a riccio d'oro," the gold or silver wefts were drawn as loops (similarly to "allucciolato"), but made them in bouclé for distinguishing the elements of design. Therefore, gold and silver loops, often made in different heights to the silk pile of a velvet, created three-dimensional effects in the design (Landini and Redaelli 1994, p. 189; Monnas 2008, p. 301). Strictly speaking, during the weaving of the Belorechenskaia fabric the method "a riccio d'oro" was used, but an indication of only the method does not cover all its technological aspects. Attempts to classify the Belorechenskaia fabric based on a single feature are ineffective.

Velvets woven in technique similar to the Belorechenskaia fabric were called in Italian terms of the 15th century "velluto broccato riccio sopra riccio," that is, *velluto* — velvet, *broccato* — brocade as an indication of the usage of the gold or silver thread, and *sopra riccio* — a combination of cut and uncut loops.

Therefore, in order to define a type of a fabric with a complex structure, all the techniques used for its weaving should be listed. With such an approach, the Belorechenskaia fabric can be described as a figured velvet with cut and uncut velvet pile and one supplementary metal weft forming details of the pattern with combination of dense metal loops and satin texture (Fig. 3). This kind of complex technique was used for producing a special decorative effect. Discussing the technique used in Italian fabrics of the 15th century, David Jenkins noted that "the velvet technique with its cut pile effect, its areas of brocading and the use of gold weft loops increased the aura of magnificence



Fig. 4. Venetian velvet of the late 15th century. The Metropolitan Museum of Art, New York. Rogers Fund, 1912 (12.49.8). Reproduced with the kind permission of the museum.

exuded by this design. Nowhere else was the technique used as fully to exploit sheer luxury for its own sake" (Jenkins 2003, p. 351). It seems that the Belorechenskaia fabric woven with gilt threads looked similar to the wellpreserved Italian velvet from the Metropolitan Museum of Art (12.49.8) (Fig. 4) which, according to Melinda Watt (personal communication), was produced in a Venetian workshop at the end of the 15th - beginning of the 16th century.

An important source for the cultural and historical

attribution of the Belorechenskaia fabric is its design, which is composed of a large flower with ogival petals, in the middle of which is a thistle or artichoke, the pattern also including a pomegranate (Figs. 5, 6). Textiles with such elements were extensively depicted in the works of Italian artists of the 15th century. As Jenkins pointed out, "In the early fifteenth century, plant forms in a variety of styles became dominant but these were eventually overtaken by a fashion for large pomegranate designs accompanied by elaborate foliage and undulating stems" (Jenkins 2003, p. 351). Richard Glazier noted that the artichoke was the main motif in figured Florentine textiles (Glazier 1923, p. 60). However, a particular design cannot be used with certainty as the criterion for establishing a weaving center. Judging by the extant examples, similar designs including artichoke or thistle motifs in the center of a flower with ovigal petals are equally present in Florentine and Venetian figured velvets. Glazier himself noted that the popularity of this motif in Italian art could be explained by its decorative value (Glazier 1923, p. 60).

Textiles with similar patterns can be seen in paintings of Italian artists of the 15th century who worked in Venice, such as Antonio Pisanello, Jacopo Bellini, Andrea Mantegna, and Antonello da Messina. The composition of decorative elements closest to those on the Belorechenskaia velvet can be found in the paintings of the Venetian artist Carlo Crivelli, who greatly contributed to our knowledge of designs in luxury fabrics (Glazier 1923, p. 63).

Silks with Italian designs, where the main pattern is the same flower as the one in the Belorechenskaia velvets with ogivally arranged leaves and artichoke motifs, can be found in the paintings of the Northern Renaissance artists, specifically in works by Jan van Eyck, Petrus Christus and Hans Memling. Two works of Hans Memling, St. Catherine (early 1480s) (Fig. 7, next page) and the Madonna with Child and Angels (after 1479) (Fig. 8) depict the same velvet fabric covering the throne. The main ornamental motif in it is a large flower with ogival leaves. The complex elements on either side of the flower and artichoke motifs fully match the décor of the Belorechenskaia fabric (Fig. 9). Such a detailed reproduction of ornamental elements was possible only when an artist had the real fabric in front of him. Another parallel gives a representation of a kaftan embroidered on the tomb cover of Maria of

Fig. 5. The Belorechenskaia textile. Reconstruction by Z. V. Dode based the surviving fragments (published in Lo Stile dello Zar [Milano: Skira, 2009], p. 152, no. 44).

Fig. 6. Pattern unit on a fabric from Belorechenskaia. It was reproduced twice along the width of the woven piece.



Fig. 7. Hans Memling. "Virgin and Child with Saints Catherine of Alexandria and Barbara." The Metropolitan Museum of Art, New York. Bequest of Benjamin Altman, 1913 (1440634). Reproduced with the kind permission of the museum.

Fig. 8 (right). Hans Memling. "Madonna and Child with Angels." National Gallery of Art, Washington, DC. Andrew W. Mellon Collection (1937.1.41).









Fig. 9. Textile décor of the complex setting of the outer edge of the flower with pointed leaves in paintings by Hans Memling and on a fabric from Belorechenskaia.

Mangup, where the cut of the cloth and décor of the fabric are similar to the those found in kurgan 20 (Fig. 10).

Lisa Monnas pointed out that at the end of the 19th century it was a common belief that velvet fabrics in the paintings of the Northern Renaissance artists were made in the Netherlands. However, after the research of Brigitte Klesse, who studied silks depicted in works of the Italian masters of the 14th century, and identified Italian, Spanish, Iranian, Egyptian, and Chinese examples, it became clear that the location of a textile workshop cannot be directly associated with the origin of a painting (Monnas 2008, p.19).

Fig 10. Embroidered portrait of Maria of Mangop executed in satin stitch. Grave cover, dated 1477. The Putna Monastery, Romania. After: Atasoy and Uluc 2012, Fig. 4.



The pattern and complex weaving technique of the Belorechenskaia fabric, typical for the decorative Italian velvets of the 15th-16th centuries, leave no doubt that this textile was manufactured in an Italian workshop. Its precise origin should, however, be further explored. In Italy, silk weaving enterprises established in various centers - Venice, Lucca, Florence, Milan, and Genoa - had their own standard measurement usually based on an arm's length (Monnas 2008, p. 17). Silks woven in these centers differed in their individual widths, and selvedge types, and to a lesser degree, in their repertoire of designs. Thus, in order to determine the origin of the Belorechenskaia fabric, one should define its key identifying features. Such an attempt was made by Levasheva, who based her work on information given to her by the restorer, Ekaterina S. Vidonova: "In the process of studying the fragments from the bottom part of the caftan, it became clear that the robe was cut from a single piece: selvedges were discovered in its seams; based on this, it was established that the width of the gold velvet fabric was 56 or 58 cm with selvedges" (Levasheva 1953, p.189). Citing the work of Vladimir K. Klein, where the author noted that Venetian velvets are characterized by the unusual size of the repeating pattern, up to 1 arshine 7 1/4 vershoks in height and 14 $\frac{1}{2}$ vershoks in width (that is along the whole width of a fabric in piece) [Klein, 1925, p. 37], Levasheva believed that the Belorechenskaia fabric belonged to the production of Italian workshops (Levasheva 1953, p.188). However, she did not suggest a specific center.

I believe that the Belorechenskaia fabric was woven by Venetian artisans, but to support this attribution, certain adjustments should be made to the information provided by Levasheva. In her work are several inaccuracies in converting the obsolete Russian measurements. It is known that one vershok equaled 44.5 mm; therefore, 14.5 vershoks equaled 64.5 cm, not 56-58 cm as she calculated. Also questionable is the width of the fabric: only the back of the Belorechenskaia caftan could be cut from the whole loom width. However, no single fragment from the caftan's back has been preserved. Thus, the width defined by Levasheva cannot be considered as the original one. It seems that either Levasheva or Vidonova calculated the size based on the reconstruction of the fabric's pattern but made some errors in measurements. In her article, Levasheva provided an illustration captioned as "pattern unit of the Belorechenskaia ..." (Levasheva 1953, p. 190, Fig. 7), but in fact, it is the reconstruction of a pattern. In reality, the pattern unit of the Belorechenskaya fabric was narrower than its width: 156 cm along the vertical line, and 31.9 cm along the horizontal line (Fig. 6). The pattern unit repeats twice along the width of fabric. Thus, the width of the fabric equaled 63.8 cm, which corresponds to the Venetian standard (Jenkins 2003, p. 347). This was the standard for Venetian velvets during the 15th century and it continued to be used into the 16th century, except in textiles made for export. Beginning from 1507, the width of all exported fabrics was 55.8 cm (Monnas 2008, p. 321, table 2, continued). By comparison, voided satin velvets made in Florence to imitate Venetian velvets were woven in a width of 65.6 cm (Monnas p. 320, table 2).

As mentioned above, the Belorechenskaia fabric was dyed with carmine acid. However, some carminic dyestuffs contain kermesic acid as well (Hofenk de Graaff 2004, pp. 64, 70). Different textile centers in Italy had special markers for velvets dyed in kermes. Venetian silks dyed with kermes had green selvedges with one gold thread, while Florentine silks dyed with the same dyestuff had selvedges containing two gold threads each (Monnas 2008, p. 319, table 1). The green color of the selvedge of the Belorechenskaia fabric indicates Venice as the source of this fabric. In Venice, a gold thread started to be woven into the selvedges from 1457; before that, only the green selvedge indicated the use of kermes. The absence of a gold thread from the selvedge of the Belorechenskaia fabric which was dyed with kermes allows us to accept the year 1457 as the terminus ante quem for the production of the fabric.

To conclude, parallels to the decorative elements of the Belorechenskaia fabric in paintings of Italian artists of the 15th century point to its manufacture in one of the Italian textile centers of that time. But its technological features narrow the space and time frame: the width of the fabric and green color of its selvedge point to Venetian workshops of the mid-15th century, before 1457. Fabrics with similar decorative elements continued to appear in European paintings during the early 1480s. It is not known when the velvet was acquired by those who buried their dead in the Belorechenskaia kurgans. In general, the grave from Kurgan 20 can be dated to the second half of the 15th century, but at present, there are no grounds for establishing a more precise date for it.⁴

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Notes

1. The catalog accompanying *The Golden Horde. History and Culture* exhibition is inconsistent. In its descriptive part, it indicates Kaffa as a possible place of production for silks No. 524, No. 525, and No. 528 (*Zolotaia Orda* 2005, p. 93). However, the catalog entries, name Kaffa as a place of manufacture only for silk No. 525. Silk No. 524 is considered to have been produced in Italy (p. 225), silk No. 516 (from the Belorechenskaia group) in Cairo for No. 516 (p. 224),

and No. 526 (also from Belorechenskaia) in Mamluk Egypt or Spain (p. 225). This is at odds with the authors' conclusion (p. 226): "Judging by a certain technical and ornamental similarity, fabrics Nos. 516, 524–526, 528 are possible to combine into one group of fabrics produced, probably, in Kaffa workshops."

- 2. In Russian, "kamkha" and "damask" both apply to the same type of fabric. Vladimir K. Klein, who studied imported *kamkha* fabrics in the collections of the Armory Chamber and Historical Museum in Moscow and their written descriptions in primary sources, came to the conclusion that all of them, except one fabric with a supplemental gold weft, had only one warp and one weft.
- 3. Karmarovskii and Tepliakova made an attempt at a technical analysis of the Belorechenskaia fabrics, the results published in Zolotaia Orda 2005. However, their technical descriptions, which omit important details, do not always reflect the real structure of the fabrics. For example, Tepliakova gives the structure of silk fabric No. 526 as follows, "By its technical features, this fabric is identical to the fabric of the cap [cat. No. 516 - Z.D.] but has a patterned weft" (p. 225). The description of the cap's fabric (cat. No. 516) states: "This fabric is similar to the fabric of a caftan (cat. No. 528). There is no patterned weft, and each face weft is a gilt one" (p. 224). The author ignores the obvious fact that if a structure of one fabric has a patterned weft, and the structure of another fabric does not have one, these two fabrics cannot be treated as identical. One may also question the accuracy of establishing a "similarity" between fabrics woven in different techniques. According to Kramarovskii and Tepliakova, the caftan's fabric (cat. No. 528) is made in lampas technique (p. 226). Now fabrics woven in this technique have a system of ground (warp and weft) threads and a system of patterned threads (supplementary warp and supplementary weft or wefts). The catalog description for the cap (cat. No. 516) does not specify what technique was used for its fabric (cat. No. 516), but since this fabric, as Tepliakova herself notes, lacks one of the wefts, the technique cannot be lampas. In sum then, the authors fail to describe typical technical features of the Belorechenskaia fabrics that could unite them and, at the same time, differentiate them from fabrics produced in other centers of textile industry.
- 4. Kramarovskii and Tepliakova date the Belorechenskaia kurgans on the basis of the coins found in them: "... out of three female graves discussed above, only one of them, a grave from kurgan 20, contained coins, the youngest of which belongs to the second third of the 15th century" (Kramarovskii and Tepliakova 2009, p. 30; 2010, p. 468). This statement leads to the erroneous dating of the female grave in Kurgan 20. Veselovskii indicated (1898, pp.40-41) that the coins were found only in one grave, Kurgan 12, presumably placed in a pouch in the box near the deceased's feet: "In the box, there was an open-work silver star, probably from the pouch with three Golden Horde coins ...)." And indeed, in another publication, Kramarovskii had accurately cited Veselovskii's description of the coins being in Kurgan 12 (Kramarovskii 2009, p. 464). At very least here then, on the basis of the coin evidence, Kurgan 20 must have a terminus post quem of some time in the second third of the 15th century.

THE TRADE IN HORSES BETWEEN KHORASAN AND INDIA IN THE 13TH - 17TH CENTURIES

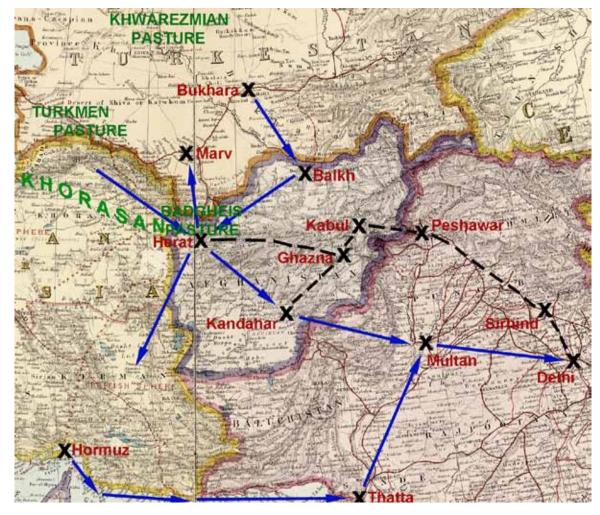
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This essay explores the history of the overland commerce in horses between Khorasan (northeastern Iran) and India in the 13th–17th centuries. The concentrations of nomadic peoples in Khorasan ensured an abundant supply of horses, and on the Indian end, continual military conflicts created a substantial demand. Yet invasions and plundering by nomadic tribes (the Nekudarids and various tribes in Afghanistan and along the roads of northwest India) were obstacles to the trade.

The horse trade in Eurasia has attracted considerable scholarly attention. Some of it has focused on China, where the demand for warhorses is considered to

Map showing the approximate route of the Khorasan-India Road and its connecting links (dotted lines), with the arrows suggesting schematically the directions of other routes. The base map published by Stanford in 1912 reflects, of course, early 20th-century realities. Source: Library of Congress http://memory.loc.gov/cgi-bin/query/h?ammem/gmd:@field%28NUMBER+@band%28g7420+ct001442%29%29.



have been one of the main reasons for the opening of the so-called Silk Roads, and trade in horses continued down through the centuries to be a central aspect of the relationship between China and its northern and western neighbors. Of particular interest here are the results of a conference entitled "Horses in Asia: History, Trade and Culture" held in Vienna in 2006 (Fragner et al. 2009). Several of the essays complement the present study but do not deal directly with the same issues. In particular, Ranabir Chakravarti wrote about demand and dealers in India, but only up to 1300. Ralph Kauz focused on exports via the maritime routes through the Persian Gulf, which was supplied mainly by horses from Arabia and southern Iran. A number of the articles concern the horse trade in China and Southeast Asia. Of more direct relevance to our subject, which is the northeast Iranian and central Asian horse trade on the overland routes, is an article published some time ago by Hirotoshi Shimo (1977) which explores the political and social situation of the Nekudarid nomads in Iran during the Ilkhanid period and helps clarify their role in the breeding and trade in horses in Khorasan.

Khorasan and its routes to India

Although the Mongol conquests at first ruined many cities along the Silk Road, the establishment of the Ilkhanid dynasty in Iran saw the restoration of some and the rise of others, among them Bastam, Herat, Samarqand, Sultaniyah, and Tabriz. East-West exchange flourished as never before thanks to the unification of much of Asia under Mongol rule.

Several important routes of trade and communication under the Mongols merit our attention here. From Kashgar, one branch of the Silk Roads went west via Samargand to Merv and Herat. From Herat the route continued west through Khorasan, traversing northern Iran through Sultaniyeh and Tabriz before passing through Asia Minor and ending in Constantiople (Pīrniyā and Afshar 1973, pp. 85-86; Afshar 1983, p. 765). A more northerly overland route (sometimes known as the "fur route") went through Mongolia and northern Xinjiang, with a branch down to Khwarezm below the Aral Sea, and continued on north of the Caspian to the capital of the Mongol Golden Horde at Saray on the Volga, before ending on the Black Sea. This route was important in part for its connection to areas of the Qipchaq steppes which were major producers of horses (Laufer 1919, p. 535).

Another, less-known route that we might term the "Khorasan–India Road" linked the Silk and the Fur Roads to the maritime Spice Route. It traversed some 127 parasangs (= 729 km) from Marv to Balkh. From there its route took it through the Darhabun pastures

and Badgheis (a rich stud for Khorasani and Mongol horse herds) and on to Herat, an additional distance of 84 parasangs (= 525 km) (Qazvīnī 2000, pp. 178-79). At Herat there were several options for continuing. One was to go on through Kabul, Peshawar, and Sirhind to Delhi (Kennedy 2002, p. 62a). Another was to head for Ghazna (modern Ghazni) or Kandahar, Multan (where there was customs house for horses), Sheshnoghar (another customs house) and Sind to the Indus delta at Thatta and "Bahr al-Sind" (the Sea of Indus = the modern Karachi Gulf) (Ibn Battuta 1998, I, pp. 366-68; Wassāf 1960, pp. 301-09). One could also reach the maritime route by going from Herat to Sistan, Mukran and the Persian Gulf. In the 13th - 17th centuries (until its conquest by the Europeans), Hormuz Island, as the principal station on this route, was controlled by the Muluk-e Hormuz (The Emirate of Hormuz Island). It was through here that the trade in horses from Oman, Yemen and areas of southern Iran on the Persian Gulf departed to the west coast of India (Teixeira 1902, p. 46; Ibn Battuta 1998, I, pp. 367-68; Dimashqī 2004, p. 261; al-Nadwi 1950/1933, pp. 110-11; Samarqandī 1946-49, pp. 777-83, 824-47; Kauz in Fragner et al. 2009, pp. 129-35).

Herat and its resources

The vast province of Khorasan enjoyed a variety of environments. Its plains had numerous pastures for horse training and nomadic life, and it was well located on the Silk Road. But its high snowy mountains were the main obstacles in the way of caravans in winter; so almost all of the trade journeys were postponed to the spring and summer.

The main bazaar of horse transport and the capital city of the Kart governors, Herat was surrounded by mountains, whose snows fed rivers like the Hari-rud (the river of Herat), Marghab and Hirmand, the main source of the fertility of the gardens and the famous grazing lands of Badgheis and Marvrud (Heravi 2007, pp.108-09; Qazvīnī 2000, p. 215). Turk and Mongol horse breeder nomads such as the Nekudari, Qaravonas, Oughani (Afghan), and other tribes had regularly camped and decamped there. After decades of plunder and attack, each one gradually took control of its own "yurt" (dominion and pasture). These tribes, which became almost like Persian natives, believed in Hanafi Sunni Islam and had economic relations with the "Tajiks" (the common name for native Persian peasants and townspeople). They thus shared an interest the exchange of manufactured commodities for agricultural and animal products (Homayun 1992, p. 229; Abrū 1939, p. 90).

Herat was an old and an important city, tracing its origin at least back to Achaemenid times. Although

it was ruined during Chinggis Khan's invasion, it was restored by its local rulers, in particular the Al-e Kart dynasty and in the 13th - 14th centuries became the flourishing capital city of Khorasan. Numerous professions and organized guilds, including ones related to horse riding and harnessing were to be found in bazaars of the city (Bākharzī 1992, p. 3). Herat had four principal bazaars, the most famous the "Bazaar-e Khosh" (the fine or the pretty bazaar). There was also another bazaar dedicated to horse exchange. There, the nomadic peoples from the Badgheis and even the Torshiz regions (modern Kashmar in Khorasan) came to offer their horses, some of which were the horses stolen by Qaravonas plunderers. In exchange, they purchased manufactured goods, especially metal wares (Ibid., pp. 51, 242; Abrū 1939, pp. 43-48). Thus, by the 14th century, Herat had been transformed from merely an exchange center for nomadic and urban products to a major city, and as such was the starting point for the Khorasan-India road. From Khorasan, presents such as horses, camels and even fruits were sent to the royal court of Tughlughid dynasty in Delhi (Ibn Battuta 1998, II, p. 146).

Studs along the road of Khorasan and in India

The most suitable grazing lands and greatest studs of Iran alongside the Silk Road were: Chaman-e Badgheis, Marghzar-e Radekan, Khabushan (modern Ghuchan) in northern Khorasan, Ghongqur-Olang,¹ Ujan (modern Bostan-abad), Dasht-e Mughan, and Chaldoran (in Ardabil province) (Marco Polo 1985, pp.266–67; Qazvīnī 2000, pp.173–78). The region of Siahkuh was somewhere northwest of Rey, and we may perhaps guess from the name that it was in hilly country suitable for pastoral nomads (Shimo 1977, p. 147). Until the late Safavid era, every spring there were 3000 grazing horses in studs at Basmenj (near Tabriz), Nisa, Hamadan, and 50000 other horses grazed in the pastures of Darband (a passage in the Caucasus mountains) (Chardin 1993, II, p. 496).

Malva province in central India was a corridor for transiting the imported horses to southern Indian provinces like Jajingar, which was considered to be the source of exported Indian elephants. Sometimes the merchants brought blond-, grey- or white-headed horses to exchange for the elephants. Horses in these colors were in demand by the Jajingar community (Tattavi and Qazvini 2003, VIII, p. 5153). In the mountainous region of Barkan situated between Sivi, Sitpur and Bakhar in India, were bred some good ("not less than Iraqi") colts with firm hooves suitable for riding in the mountains (Ma'sūm Bakkarī 2003, p. 130).

Horse breeds and their special applications

The most famous horse breeds in Persia in the 13th -14th centuries were Median (maybe the modern Kurdish species), Nisaiyan (a Parthian/Khorasanian breed used as workhorses in Khwarazm), Arabians from Arabia, Mesopotamia and Khuzestan, horses from Fars (the modern Ghasghaie, a Turkish breed2), and the breed of central Iran (Mazaheri 1993, I, pp. 36-39; Marco Polo 1985, p. 80; Fizgerald 1988/1935, pp. 459-60). According to some veterinarians' textbooks of the 13th - 16th centuries, each species had a special use, which meant that the horses were classified by such categories as "greyhound" or runners (Davande)3 (Nasawī 2005, p. 89), amblers or marchers (Ravande), for the mountains (Daghi), etc. Also, there were other divisions and designations like the horse's color, strain, manner of riding, and so on, that increased the number of criteria to more than 126 kinds (Faras-nāmah 1987, pp. 21-22, 161-65). In India, according to their breed and use, horses had been sorted out into four main categories: warhorses (Turkish, Qipchaq tribes' breed of Cumania), horses for routine riding (from the Badgheis region), racehorses (Arabians), and ceremonial horses (a pure Arabian breed) (Mazaheri 1993, I, pp. 36-39).

According to veterinarians and grooms of the 13th century, the best and the most expensive ones were the purebred greyhound (Arabian) horses from famous pedigrees: each tribe nominated their horses as their tribe's name. These breeds had made their riders proud, maybe because of their tall, wellmuscled, strong but lean gaskins and forelegs. Also they were very fast in galloping, attacks, and horse races so that they could seize from ten to one hundred other horses. Unlike the desert Arabians, these sturdy horses of the hills called *Atigh* (antique or pure) had stronger legs with firmer bones and better pedigrees. Since they were fed with dates and milk, rasing them was expensive. Their grooms also demanded higher fees for training them for war, celebration, hunting and ceremonial riding. They were then special gifts for the kings. Each pure Arabian horse could be worth as much as four thousand dinars (Faras-nāmah 1987, pp. 21-22). Ibn Battuta gave Sultan Mohammad bin Tughlugh two equipped horses, one worth 800 and the other 1600 dinars. In the Maldives, only the king and the ministers had the right, and of course the means, to own a horse (Ibn Battuta 1998, I, pp. 367-68; II, pp. 591, 609).

Kurdish horses of different tribes were of diverse breeds. They survived in mountainous, stony ecosystems, which made their legs lean, firm and well-muscled. Such breeds were useful for overweight riders, long distance journeys, polo and spear throwing. Indians bought Turkish and Cumanian horses, not only for their speed but also for their strength and their long strides on the march, since Indians used to cover their horses with heavy armor in war (*Faras-nāmah* 1987, pp. 21–22, 161–65).

The Akdash breed (crossbred and also loveable), probably developed from the Turkmen, Khorasani and maybe even Cuman horses, was the most patient and a suitable horse for heavily-equipped cavalry, and for riding over long distances. Bardun (Arabic: stump horses), Kowdan (also Arabic: slow and dunce) or Daghi (Turkish: mountain horses of Turkestan) were semi-wild species which Turkic nomadic people used to capture together with their colts in the spring and then trained them. This species was short but had strong bodies with long ears and very hard hooves, so that they did not need horseshoes. Though they were slow, they could survive long distances, and also performed well without rest on softer ground and in hot temperatures. There are quotes referring to some of them running 90 Parasangs (540 km) in "two nights and a day" (36 hours) without rest.

Though not considered to be a particularly desirable species, the Takharestanian or Afghan (mainly from northern Afghanistan) species usually had either a silver or dark red colored hide. It was, in fact, the best on winding paths and for *Boz-Keshi* (the sport in which teams of riders competed for control of a goat carcass).

Pied-colored horses had very special status among the imported horses, even in royal courts: many Indian miniatures show the Mughal sultans on pied horses. Although Safi, the veterinarian, had scorned this sort of horse, he also opined that Indian sultans chose the horses of this color since they were suited for sport. Besides, color variety was more common among Khorasanian, Turkish, and Turkmen horses due to the fact that there was no complete control on interbreeding in these mixed herds. However, Arabian horses sometimes bred hybrid colts called *Hajim* (from an Arab father and non-Arab mother) or *Meghraf* (vice versa) (Ibid., pp. 23, 36–41,139–40; Gīlānī 1997, pp. 36–37).

Until the 19th century, two breeds were raised in Bukhara and Kholam on the northern parts of the road of Khorasan. One was *Qara-Ba'ar* (or Uzbek), with its sub-species of: "Balkhi" (from Balkh = modern Mazar-i Sharif), "Qipchaqi" (from Sinjarak) and "Khanezād" (home-born) — all middle-sized, captured and sold in India for more than 50 rupees (see Table 1, p. 131 below). The other was the Turkmen horse from Turkmenistan and even from the Oman Sea (Afshar 2001, II, p. 239). The Uzbek was regarded as a suit-

able horse for travel, not for war. Turkmen horses had many sub-species, as each tribe had its favorite type. The Teke included the Ākhāl and Kur-öγli, both of whose horses were tall in stature with a pretty head, light bones, breeds swift and graceful for riding but not full-blooded. The Yomūt horses, on the other hand, had a smaller but stronger and magnificent body. The Kazakh horse originally was a semi-wild horse with a small body, long hair, large legs and heavy head. It could graze freely in all seasons and did not require provender. The preferred draught horse was a cross-breed, raised by the people of the Kokand region in Central Asia (Vámbéry 2008/1868, pp. 514–15).

The military policies of the sultans of India and their influence on the horse trade

In India, especially during the 13th - 14th centuries there were many, usually military or political, causes for dependence on the horse imports. Indian Muslim dynasties beginning in the Ghaznavid period (977-1186) usually derived part of their legitimacy from jihad (sacred war) against non-Muslim rulers. The Ghaznavids were the first Muslim government to rule both Khorasan and north-western India and controlled the trade on the neighboring roads. The Ghurid dynasty (early 11th century to 1215) also pursued similar policies. Their successors, the sultans of Delhi (1206–1290), moved their capital from Ghur to Delhi, which then made jihad expansion even more of a priority. Such warfare continued under the Khalajid (1290-1320) and Tughlughid (1320-1412) dynasties and peaked in the time of the Bahmanids (1347–1528). Hence from the early 12th century on, the horse was the main merchandise to be exported to India. Beginning in the time of the Delhi Sultanate, political stability depended on the loyalty of Turkish slave cavalry, whose need for mounts had to be met (Baranī 1957 pp. 120-21).4

The Khalajis were more successful than their predecessors in securing their civil affairs and founding a more stable political structure, but they continued the same expansive policy into Hindu regions. Whereas the Muslims tended to import horses via the Khorasan road, Hindu authorities obtained their mounts via the Indian Ocean. Under 'Ala al-Din Mohammad (1296-1316), there was the additional pressure created by his successful resistance to the Mongol invasions (Baranī 1957, p. 62; Sirhindī 1931, pp. 71–74; Badā'ūnī 2001, I, pp. 126-28). However, it was the Hindu-Muslim wars which continued into the late Khalajid period. Khosro-Khan of Gujarat originally was a Hindu of low caste who then converted to Islam and emerged as commander-in-chief. He revolted against the Khalajid sultan, returned to his Hindu faith and ascended the throne of Delhi in 1320. In the same year, a Muslim commander, Tughlugh-Shah, rose against him and brought down the Khalajid dynasty, an event that intensified the conflict between Muslims and Hindus, further increasing the demand for horse imports.

The export of numerous Khorasani slave troops to India increased in the Tughlughid era, so that by the late 14th century, Khorasanis came to dominate the royal court of Delhi. At the same time, the horse trade flourished both with Korasan and beyond it. As Ibn Battuta noted in the mid-14th century, a merchant named Muhammad of Tekrit in the bazaar of Ghaznah (modern Ghazni) was purchasing horses, camels, and arrows to donate them to Mohammad b. Tughlugh. Ibn Battuta had also seen him in Aleppo, Syria (Ibn Battuta 1998, II, p. 20). Such wandering merchants of the Silk Road were the main players in the strategic horse and weapons trade.

Tamerlane's expansion in the late 14th century and his hegemony throughout the central Silk Road over much of Central Asia, Khorasan and into northern India, despite initial destruction, created at least short-lived political unity throughout the region and gradually encouraged trade in the long run. While war subsided in northern India, the Ghazi (zealous) Bahmanid Sultanate arose in Deccan instead (Firishta1988, I, p. 306; Cambridge History 1958/1928, III, pp. 387, 394). Therefore, the destination of exported horses via the Khorasan-India Road moved from Delhi to Deccan with a consequent increase in their price. In the early 15th century, each stallion cost 100 Russian rubles in India (Nikitin 1994/1857, p. 9). During Sultan Taj al-Din Bahman-shah's reign - his epithet was Sultan-e Ghazi, "the zealous Sultan" - Muslim expansion reached its zenith in Vidjanyangara. As a result, commercial relations between Iran and Deccan strengthened (Tabātabā 1936, pp. 41-45; Firishta 1988, I, p. 312), so that merchants like Khaje Khalaf Hasan of Basra strengthened their position in the Bahmanid royal court. Originally, he was a horse merchant who helped Ahmad-Shah of the Bahmanid dynasty to ascend the throne. As a result, during Ahmad's reign Khaje Khalaf was appointed as Mlek al-Tojjar (the chief of the merchants) (Tabātabā 1936, p.48) and Vakile Omur-e Saltanat (chamberlain or minister for royal affairs) (Firishta 1988, I, p. 320). Consequently, the horse trade increased so that in the late 15th century seven to eight thousand horses were annually exported via the road of Kabul to various parts of India and even as far southeast as Narsinga (Barbosa 1865, pp. 89, 90–92; Babur 1890, p. 81). During the same time, fifteen to twenty thousand caravans left India towards Khorasan, so that the governor of Portuguese India, Albuquerque, in his letter to Don Manuel I, stated that "everyone who possesses a Persian horse can govern throughout Deccan and Narsinga" (Zanjānī 2003, p. 58).

For adjusting the prices and eliminating the black market, 'Ala al-Din, the sultan of the Khalajid dynasty, issued decrees about various merchandise including the sale of horses:

- 1. To write the name of merchants of Delhi and around the country in a register, and to command them to bring their merchandise into the city and sell it according to the "Royal Rate" (*Nerkh-e Soltani*) in the caravansary of justice (*Saray-e 'Adl*).
- 2. To determine the grade of quality of the horses and establish their prices under the direct supervision of the Sultan.
- 3. Horse merchants must not sell their horses to the brokers. Both sides must guarantee not to do so. Otherwise the punishment would be banishment, prison or even execution.
- 4. If it became clear that a horse sold at a price different from the Royal Rate, all the guilty and innocent brokers in the city were to be punished!
- 5. The above process had to be supervised closely and to be recorded monthly.
- 6. A daily list had to be completed about all the animal transactions in the bazaar of the city (Delhi as the main bazaar of livestock), and had to be observed by the Sultan. Spies of the bazaar also should determine the correctness and truthfulness of the contents of the mentioned lists. [Firishta 1988, I, pp. 385–87]

On one hand, the above orders attest to the extensive volume of transactions made in the bazaar of Delhi involving horses; on the other hand, the direct supervision of the royal court over the prices demonstrates the strategic importance of the horses in the Indian army and society. Some of the Sufi lodges like that of Sheikh Farid al-din Ganje-Shekar branded their horses as endowed. so that brigands did not dare steal them (L'ali Badakhshī, p. 488).

The Al-e Kart principality's economic policy for securing the Khorasan-India Road and for taking control of the studs

Like the Sultans of Delhi, the Al-e Kart principality emerged out of the Ghurid Sultanate. The first emir of the *Kart* dynasty was Malik Rokn al-Din b. Taj al-Din Kart's nephew and Sultan Ghias al-Din Ghuri's son-in-law and also the governor of Kheisar castle (modern Bamiyan, in northern Afghanistan). In the late 12th century during Sultan Jalal al-Din Khwarazmshah's reign in Herat and the Kusuyeh region, two emirs of the Kart family — Amir Fakhr al-Din and Amir Mahmud — held the appointment as *Janevardar*

(groom or breeder). At the time of the Mongol invasion of the region, some of the Kart families migrated with the nomadic people of their dominion to Transoxiana but then later returned. In the first Mongol invasions, Herat city surrendered to Toluy, son of Chinggis Khan, and the Kart dynasty then survived as a protectorate down to Tamerlane's time (15th century) (*Faras-nāmah* 1987, pp. 36–41, 23, 139–140; Gīlānī, 1997, pp. 36–37).

After the initial Mongol invasions, Mongol nomadic people, especially the Oughani (Afghan) tribe, were settled alongside the Turkmens and Nekudari Turk-Mongol nomadic clans. All of them were horse breeders with busy Kheil-Khaneh (open stables for horse herds among the nomads). In 1242, as a tax in kind, they donated livestock, especially horses, to the Mongols. Some Mongol janevardars named Ghabartu (or Ghumu), Sukru and Tatimur (or Matimur) were envoys to the governor of Badgheis to gather these types of taxes for Batu, the Mongol khan in Russia. They were obligated to provide Olay (Mongolian: horses for the Mongol postal relays) from the Herat region. This custom lasted down to the time of Malek Shams al-Din Kart, who abandoned it (Abrū 1938, pp. 88-89; Abrū 1995, pp. 38-39; Mubārakshāh 1927, pp. 48, 31; Heravi 2007, p. 153). While the numbers surely are exaggerated, according to some sources, an attack on Herat by Il-khan Abaqa resulted in the death of 450,000 horses. At very least the result must have been a blow to horse breeding in the region and led to a decline in the horse trade (al-Herawī 2004, pp. 311, 362; Badā'ūnī 2001, I, pp. 61-88; Vā'iz 2007, p. 48). In 1291 Il-khan Ghazan assigned Amir Nowruz, the main commander of his army, to revive Herat city and to restore its population. As a result of securing the trade roads and merchants' access to its bazaars, the city prospered.

The rise of the tribes and their role in horse breeding: A benefit or an obstacle?

As mentioned before, tribes were the main horse breeders and also were the major plunderers, but how and why? In 1261, Nekodar, the chief of the Mongol Nekudari tribe, revolted against the Ilkhanid government. His brother, Tebsin-Oghul, accompanied by Shams al-Din, was commissioned to suppress him and plundered the *keil-khanes* (stables) of the Oghani tribe in the Oghanistan, Andakhay and Mustang regions (al-Herawī 2004, pp. 193–94, 229–34, 253–55, 297–99; Abrū n.d., p. 234; Heravi 2007, p.145). During Rukn al-Din's reign (1278–1305) Nekudari tribesmen plundered the Malan plain near Herat and captured its people. In 1295 and 1299, commanded by Dava, a Mongol prince of the Chaghatai clan, Nekudari in-

vasions came from Central Asia via the Silk Road to Khorasan, Yazd and Mazandaran directly, and later from Samarqand to Gujarat, Kombay, Khorasan, Kerman, Fars and Khuzestan. Although the Kart governor and his Oghani nomadic troops helped the Ilkhanids to turn back the enemy, extensive plundering sustained by the herds of Kurdish, Turkish, Turkmen and Oghani tribes along these routes resulted in at least a temporary decline in horse exports to India (Wassāf 1960, pp. 363, 367-70, 492; Rashīd al-Dīn 1994, II, pp. 1265, 1271-72, 1296, 1306). These examples indicate that at that time Nekudari tribes were an obstacle to the horse trade. Similar raids continued later, at least until 1514, when Badi'a al-Zaman, the Timurid prince, invaded Herat and plundered many horses (Khwandmir 2001, IV, p. 396).

Ghazan Khan granted Bugha, the Nekudari chief, a dominion in Iraq and ordered his tribe to cease their banditry. Because of their ill-repute, sometimes they had been unjustifiably blamed for robbery by others. But they rejected his offer, migrated to Sistan, and took refuge under Malek Nasir al-Din, the governor of Nimruz's court. Later, they attached themselves to Malek Fakhr al-Din of the Kart dynasty in Herat, where he appointed them as administrators of the city quarters, bestowed on them arms and horses, and employed them as a common troops against the Maleks of Nimruz. Henceforward Ghurid, Sajzi (Sistani) and Nekudari ethnic groups made raids on the roads of Sistan, Farah, and Ghohestan. Thus the coastal road of Mukran (Baluchistan) to Sind was unsafe, and its rival road of Khorasan flourished.

To prevent the Nekudari tribe from migrating from Ghohestan (the mountanous region near Gharjestan) to Garmsir (Sistan), Ghias al-Din, the Kart ruler (1308–1329), defeated and removed the tribe's chief Awji-Bola (1316) and then plundered his tribe, especially its herds. Amir Yasavol, the Ilkhanid military governor of Khorasan, taxed citizens of Herat, taking many Arabian horses that cost fifty thousand dinars (Ibid., pp. 602–03, 627, 643–45).

During Abu-Sa'id's reign as Il-khan, the Nekudari tribe was settled as a borderland army. So the tribe was reinstated on the road to India as a source for more horses. Some of the Il-khan's troops rebelled, looted one of his horse herds, and took refuge in Ghias al-Din's court. So Ghias al-Din prohibited exporting the animals. Many nomadic troops such as Nekudaris, Sistanis, Khalaj Turks, Baluchs, and Afghans were appointed as overseer troops, although many of the Baluch nomadic people remained in the Ghohestan Mountains. These examples indicate that the Kart governors had decided to subjugate and benefit from tribes such as Nekudaris and Afghans. Since studs

were the most important logistical component for any army (without them war was impossible), both in daytime and at night scouts and sentries were posted to protect them (Abrū 1938, p. 265; al-Herawī 2004, pp. 672–96, 698–99, 663–72, 742–45).

At the same time in India, under Sultan Mohammad bin Tughlugh (1324–1351), the third sultan of the Tughlughid dynasty (1320–1412), the economy prospered. As was the case with other merchants, Shahab al-Din Abu-Raja, originally a horse merchant, was given authority in the Nosari region. By the Sultan's order many shade trees were planted alongside the roads; a hospice or a caravansaray was built for each stage along the routes and provided with necessary supplies (Sihrindī 1931, pp. 97–99). His contemporary in Khorasan, Ghias al-Din, was likewise concerned to secure the roads for the merchants on whom the prosperity of his territory depended.

The Afghans' role in horse commerce on the Khorasan road

From as early as 1299, Oughani (Afghan) nomads plundered horse studs throughout southern Iranfrom Shiraz, Kazerun, Hormuz, Shushtar, Zeidan, Khur-shif (near the port city of Bushehr) - and moved the horses to the Afghan realm in eastern Khorasan (Wassāf 1960, pp. 369–71). The location of pasture and horse studs in the Afghan territory was between Qunduz and Baghlan on the way from Bastam in Khorasan to India. In the mountainous region from Kabul to Kermāsh, Afghan brigands were robbing caravans like that with 4000 horses in which Ibn Battuta was departing to India, by the way of the Indian border custom-house in Shish-noghar (1341) (Ibn Battuta 1998, II, pp. 472-75). Moreover, the Afghans, thanks to the central geographical location of their territory, were horse traders in the road to India. An example is Bohlul, the founder of the Lodhi Sultanate in Delhi, who originally was a horse trader employed in the Indian army (around 1456) (Majumdar et al. 1960, pp. 186-91; Cambridge History 1958/1928, III p. 228).⁵ Later during Akbar's reign in India, prince Ologh-Beg plundered an Afghan caravan and was exporting horses via the road of Ghazni-Qandahar-Kabul toward India (Abu-'l-Fadl 2006, p. 382). During the Safavid period, the pasture of Zele-khan near Qandahar was a station for supplying horses and food for travelers (Sīstānī 2004, p. 444).

The impact of the collapse of the Ilkhanid kingdom on the horse trade along the Khorasan-India Road

The collapse of the Ilkhanid central government in Iran led the eastern tribes such as Nekudaris to submit to the Kart governors, so that the Kart principality in-

creased its ability to control the tribes and studs. However, the plurality of local authorities in Iran led to insecurity in the roads and a decline in the horse trade. Under Malek Hafez (1329–31) and his brother Malek Hussein (1331–69) the Ghurid ethnic group (in northern Afghanistan) dominated the affairs of the Kart court. The Sarbedarid principality (1335–86) arose in Sabzevar (in western Khorasan) and expanded to encompass the entire province. The emergence of of the Tugha–Timurids (1336–1409) as the last local Mongol principality in Iran, their rivalry with the Sarbedarids, and also Amir Ghazghan's and then Tamerlane's revolt in Turkistan (Central Asia) led to insecurity along the Silk Road.

Despite this insecurity, according to Ibn Battuta in 1341, horse, raisin, almond and slave exports continued from Khorasan to Multan and India. In some trade centers of this road such as Ghonduz, horse stealing was punished severely. There the thief had to return the horse and nine additional ones as penalty, and if he could not pay, he either would be executed or his children sold as slaves (Ibn Battuta 1998, II, pp. 443–44, 465).

The Ghurid party, which dominated in the royal court of Herat, decided to assassinate Hussein. When he emerged from his residence, some Ghurid men surrounded him. In response, he provoked them to seize some horses of Mongol nomads which had been brought to be sold in the Horse Bazaar of Herat. In the resulting fracas, Hussein seized the opportunity to flee toward Ashkalcheh Castle on his famous purebred black horse. Such examples indicate the importance of horses in the community of Herat (al-Herawī 2004, pp. 317–25, 330–32, 343–53).

The political and economic impact of Tamerlane's invasion of Khorasan

In 1376, Tamerlane's ambassadors came to Herat, an event that presaged a great historical change. Ghias al-Din announced his submission as a vassal of Tamerlane, although he was hardly rewarded for so doing: Miran-shah, Tamerlane's son, was sent to the Marghab and Badgheis plains, where he plundered the property of the nomads several times and took them off to his father's capital, Samargand, in 1380. This deprived the Herat principality of its main source of horses. He also conquered Torshiz castle (modern Kashmar) and its grassland environs that were ruled by the Sadidi family (Ali bin Sadid's sons) on behalf of the Kart governors of Herat. Although that region also had potential for horse breeding, its population was resettled elsewhere. Adding to the chaos, the ruler of the Golden Horde, Tokhtamysh, in alliance with a Chaghatai commander Ghamar Al-Din, attacked

Khorasan. After defeating them, Tamerlane ordered Miran-shah to execute Malek Mohammad and all the other members of the Kart royal family. So the century and a half of Kart rule ended, and the Khorasan-India road lay open to Timurid invasions (Ibid., pp. 322–53).

Studs and the horse trade on the central part of the Silk Road: the road from Asia Minor to Khorasan and India

Horse exports along the Khorasan-India branch of the Silk Road included not only those bred in Khorasan but also others from the Kipchaq steppe (north of the Black Sea and Caucasus), Asia Minor and Azerbaijan. When he traveled through the territories of the Golden Horde in the first half of the 14th century, Ibn Battuta saw in the "Azagh" (Azov) plains herds of horses in which the animals were so numerous as to sell cheaply at a price of 50 to 60 dirhams (one Moroccan dinar) per head. Most of those horses were "Akdash" (crossbreed). As a sign of their wealth in horses, some of their owners for each herd of 1000 would attach a piece of felt to a rod on their wives' carts. Some carts had as many as ten such felt pieces. These horses would be exported in herds of 6000 to India. Each merchant usually had 100 to 200 horses, with every 50 of them under the supervision of a ghashi (in India, kalwan), a drover. This trade was so important that Indian rulers such as Tughlugh-Shah rose to power after first being a kalwan and Amir-e Kheil, Master of the Royal Stable, at the court of the Delhi sultans (Ibn Battuta 1998, I, pp. 366-67; II, pp. 503-04; Wassāf 1960, p. 302).

Another source of imported horses to India via the Silk Road was Iran. The most important studs in the plateau of Persia were located in Azerbaijan, the Gorgan region (in the northeast of Persia), the northern Khorasan plains, Khotal (the northern Oxus region), and Khwarizm (northern Transoxiana) (Abrū 1985, pp.43, 45, 48). The Mongol invasion pushed more Turk and Mongol tribes toward Persia. Each of these nomadic groups chose at least two appropriate *chaman* (Farsi: pasture) or *marghzar* (Farsi: grassland) as their own *yurt* (Turk.: dominion) or *olang* (Mong.: grassland) (*Mongolian* 1995/1960, p. 33) and begun regular vernal and autumnal migrations between them (Clauson 1972, p. 203; Smith 1999).

The horse trade and conditions affecting prices

In India, each imported horse cost from 100 Indian dinars (25 Moroccan dinars) to more than 500 dinars. Though some of them were stolen by brigands in Sind, and in the customs house of Shesh-Noghar horse merchants had to pay as a toll 6 silver dinars and in Multan one fourth of their stocks, it was a profitable trade. Sultan Mohammad b. Tughlugh abrogated

tolls, and instead ordained that Muslim merchants pay the Islamic tax, *zakat* (from 2.5 to 5 percent of the total value) and non-Muslims the *oshriyyah* (tenth) (Ibn Battuta 1998, I, pp. 366–67; II, pp. 503–04).

The sources provide some information about individual merchants and officials and how their activity affected the trade. Just before Tamerlane's invasions, the traders from Badgheis came to Herat to sell their horses (Badā'ūnī 2001, I, p. 157). During the reign of the Tughlughid Sultan Firuz-shah (1389-91), a merchant from Khorasan, Shams al-Din of Damghan, was appointed as governor for the Indian province of Gujarat. He had to present 200 Arabian horses annually as well as other taxes to the royal court of Delhi (Ibid., I, p. 173). In 1547 Mirza Kamran, the governor of Herat, marched to Ghur and Kabul, meeting and plundering the horses of an arriving caravan so that every one of his warriors acquired two horses. Then he headed northwards to Ghazni. Between Qandahar and Badakhshan he learned that a caravan of many horses was coming to a spot named Barik-karan; so he seized them and brought them to Ghazni (Tattavi and Qazvini 2003, VIII, p. 5703).

In 1593, Akbar, the Mughal emperor of India, ordered an adjustment in the prices and banned the export of horses from his country, with exceptions requiring a written permit from the royal court (Badā'ūnī 2001, II, p. 273). During his battles on the road of Khorasan which linked the main pastures and cities such as Ghazni, Kahmard, Kabul, Badakhshan, and Andarab, by chance Akbar met a great caravan of horses from Iraq and Khorasan under the direction of Mir-seyved-Ali Sabzevari which was heading toward India. Akbar bought many of the horses at four or five times the going price in order to use them in his battles in the area (Abu-'l-Fadl 2006, p. 441). On another occasion when he was marching from Qandahar to Kabul, he bought many Iraqi horses from Turkmen merchants who were taking them India (Ibid. 2006, p. 360).

The Safavid court in Iran was very concerned about the apparently insatiable demand of the Mughals for horses and the impact this had on prices. According to one report, in the 17th century, Indian traders purchased annually in Kabul as many as 100,000 horses from Central Asia (Alam 1994, p. 209). In 1634, the Mughal ambassador Mir-Homai came to Isfahan to ask the Safavid ruler for horses to be exported to India (al-Zamān Qazvīnī 2004, p. 259). When an envoy from the court of Aurangzeb, the Mughal Sultan, came to Isfahan, Shah Abbas II expressed to him his displeasure at the constant need of India for horses (Afshar 2001, II, p. 100). In late Safavid Iran, the price of the horse was high because of the extensive exports to Mughal India and Ottoman Anatolia, exports

which required a royal permit (Chardin 1993, II, p. 739). Violations could be punished severely: when the Indian ambassador resident at the court of Abbas II bought 60 to 70 excellent horses without a permit, in a rage the Shah had them killed (Ibid., III, p. 1301).

Until 1812, there were customs houses along the road from Khorasan to India which collected taxes for horses exported from Turkestan: the rate in Peshawar was three rupees per horse, in Jalal-abad two rupees, in Kabul four rupees, in Bamian two rupees. Indeed, there is substantial evidence about the importance of the horse trade via Afghanistan to India from Central

Asia and Iran well into the early modern era, a subject that has been explored in detail by Jos Gommans (1994, 1999/1995) and goes well beyond the scope of our discussion here. It is no surprise then that the Governor of Balkh would send Turkish horses as a present to the governor of Kabul (Afshar 2001, II, p. 233). Until the 19th century, Uzbek horses from Central Asia were exported to Afghanistan and India and Turkmen horses to Iran (Vámbéry 2008/1868, p. 515).

A summary of selected data concerning the horse trade between Khorasan and India is presented in the following table.

Table 1: The origin, price and the volume of the exported horses to India via the Khorasan Road

Breed and origin of horse	Price in the origin bazaar	Price in the destination bazaar	Date and other details of transaction	Source
"A good horse"		Between 30 to 40 tenge (Chaghatai silver coin) at foot of mountains in Badayon, Amruhe and Sonbohl	reign of Ghiath al-din Bolbon (1266–87)	Firishta 1988, I, p. 264
Khwarizmid horse	A fine black horse costs 35 dinars in Khwarizm.	India	Owned by Ibn Battuta, around 1349	Ibn Battuta, I, p. 439.
horses of the first grade		between 100 and 120 <i>tenge</i> in the bazaar of Delhi	according to the price regulation policy of Kalajid Sultan 'Ala-al-din (1296-1316) and his clas- sification of the imported horses	Firishta 1988, I, p.386
horses of the second grade		between 80 and 90 <i>tenge</i> in the bazaar of Delhi		Firishta 1988, I, p. 386
horses of the third grade		between 65 and 70 <i>tenge</i> in the bazaar of Delhi		Firishta 1988, I, p. 386
horses of the fourth grade (pack-horse)		between 100 and 120 <i>tenge</i> in the bazaar of Delhi		Firishta 1988, I, p. 386
tall, pretty and tame Turkmen horse		between 20 and 100 <i>tele</i> (gold coin?) in the bazaar of Bukhara	Shaybanid dynasty (1500-99)	Afshar 2001, II, p. 252
a great caravan of horses from Kho- rasan and Iraq		sold to Akbar's army in Badakhshan at four or five times the normal price	Akbar, the Great Mughal, bought them for his royal stable	Abu-'l-Fadl 2006, p. 441.
Iraqi horses	bought from Turkmen merchants	at the sellers' desired price	Akbar bought all the 1000 horses.	Abu-'1-Fadl 2006, p. 360

Iraqi, Turkic, and cross-bred ("Mo- jannas")		at the sellers' desired price	Akbar bought all the 45 horses in 1593 in Delhi.	Badā'ūnī 2001, II, p. 155
full-blooded horse		65 tumens (650000 dirhams) equal to 250 French gold Louis coins	in the royal stable for Shah Abbas II 's horses of the first grade	Chardin 1993, III, p. 1225
horse of the sec- ond grade		more than 50 French gold Louis coins	in the royal stable for Shah Abbas II's horses of the second grade	Chardin 1993, III, p. 1225
horse of the other grades		less than 50 French gold Louis coins	In the royal stable for King Abbas's II horses of the other grades	Chardin 1993, III, p. 1225
very varied horses of different prices		sold for 30 to 80 tumens	19 th century	Sykes 2001, II, p. 794
good and very expensive Turk- men or horses of Khorasan		at least 200 tumens		Sykes 2001, II, p. 794
Uzbek middle- sized confiscated horse	In the bazaars of Balkh and Kholam cheaper than in Bukhara	7 to 20 <i>tele</i> (golden coin?) in the bazaar of Bukhara	Shaybanid dynasty (1500–99)	Afshar 2001, II, p. 252
Qara-Ba'ar (or Uzbek) with its breeds of: "Balkhi", "Qipchaqi" and Khane-zād (home- born)		50-200 rupees (old coins dating to the time of Mohammad Shah or Ahmad Shah)	19 th century	Afshar 2001, II, p. 239
Turkmen horse: Teke (Ākhāl and Kur-öγli) and Yomūt		100 ducats for an average Turkmen horse, up to 300 ducats for a good one. A minimum of 30 ducats each.		Vámbéry 2008/1868, pp. 514-15

Other factors stimulating the continuing need for horse imports into India

We have already seen how the military ethos and needs created a constant demand for important horses in India between the Mongol and Mughal periods. The statistics in Table 2, while vastly incomplete, give at least some idea of the scale of that demand. Horse ownership, riding and hunting were marks of elite status; the policies of jihad in Hindu regions pursued by the Delhi sultans and the Khalaji, Tughluqi and Bahmani dynasties in Hindu regions required large numbers of cavalry mounts. Of course many of these horses were killed in battle (Heravi 2007, p. 105), but it was impossible to replace them from native sources. The climate in India was not suited to horse breeding,

oats for feed were in short supply, and such subsitutes as fried peas and boiled milk simply would not do. Some Indian riders tended to gallop the horses to excess in the heat, which weakened and destroyed them (Abrū,1985, pp. 43–48; Barthold 1975, p. 17; Ibn Battuta 1998, I, pp. 366–67; II, pp. 503–04; Wassāf 1960, p. 302). Also the horse merchants used tricks to ensure the continuity of this trade: they exported the horses without shoeing them so their hooves soon wore out and the horses became useless. Sometimes the merchants or the breeders gelded the horses at the age of four, so that they could not be used for breeding in India (Wassāf, p. 302; Nagpuri MS; Mohammad MS, p. 56). So the nomads who bred the horses could be guaranteed of continuing demand.

Table 2: Quantity of horses in Iranian and Indian armies

Ownership	Quantity	Time and place	Source
Amir Ekhtiar al-Din, the head groom	30000 horses	reign of the Khwarizm Shah Sultan Mohammad (1200-1220) / Khwarizm	Ashtiani 2005, p. 40
Jöchi's present to his father Chinggis Khan	20000 white horses	Imported from Golden Horde to Fanakathon the bank of Oxus river	Juvayni 2006, I, p. 111
horses plundered from Hindus by Malik Nayeb	8000 horses	Artakal and Talang regions in India / 1310	
Kalajid Sultan 'Ala-al- Din (1296-1316)	some thousand horses	plundered in Diugir and taken to Deccan	Badā'ūnī 2001, I p. 120
Yaghi Basti, son of Amir Chupan	6000 horses	In grazinglands in Sah- and, foothills of moun- tains near Tabriz / 1340	Bidlīsī 1998, II, p. 43
Emir Mas'oud, the Sarbedar governor of Khorasan and Mazandaran provinces (1338-43)	14000 horses	in his royal stud in the provinces	Āmulī 1969, p. 189
Bahmanid Sultan 'Ala- al-Din (1375-78)	7000 or, according to some reports, 70000 horses	Telingana / 1388	Tattavī and Qazvīnī 2003, VII, p. 4362; al- Husaynī 2000, p. 274
Shahrukh, son of Tamer- lane	7000 horses	Given to him as the tax for security of Gilan Province	Yazdī 1999, II, p. 1231
Shir Khan, the Afghan king of Delhi 1540-45	900000 horses in his army		al-Husaynī 2000, p. 286

Horse breeding and markets in Central and Western Asia

As early as the 10th century, horses from Turkestan and Khotal (Afghanistan) were exported to Western Asia (al-Muqaddasī, II, p. 477). In the 13th century, Khwarizm and Ghohestan (western ranges in Khorasan province) exported to other places including India (Polo 1938, I, pp. 121-22). The horse of Khwarizm was among the least expensive and cost just four silver dinars where it was bred (Ibn Battuta 1998, I, p. 434). Khotal horses were also famous in Mongol Central Asia (Qazvīnī 1994, p. 602). At least from the time of the Chaghataid dynasty, the plains around Bukhara were suitable pastures for the local horse breeders (Wassāf 1960, p. 70). Under the Shaybanids in the 16th century there was a market on Mondays, Thursdays and Fridays located behind the Emam's gate of Bukhara for selling the Turkmen and Uzbek horses (the latter from Balkh and Kholam on the road of Khorasan) (Afshar 2001, II, p. 262). Some of these horses were exported to Kabul (Ibid., p. 241). Seventy-five percent of postal and fast running horses in Mughal India were imported directly from from Uzbekistan or from the Ottoman Empire via the road of Khorasan (Schimmel 2007, pp. 261, 283). There was a similar fair at Showra-Khan in Kyrgyzstan down into the 19th century (Vámbéry 2008/1868, p. 437). From 14th century on into the 19th, the bazaar for horse commerce in Herat was located behind the "darvazeye Qandahar" ("the gate toward Qandahar") and was the place where the most valuable horses imported from Bukhara were sold (Khwandmir 2001, IV, p. 541; Vámbéry 2008/1868, p. 354). Another important market for Central Asian horses was located in Kastamonu province (what is now Turkey, on the southern shore of the Black Sea) - the "Bazaar-e Asb-Forushan" ("the bazaar of horse sellers" (Ibn Battuta 1998, 1, p. 384). There is much additional evidence from the Mongol period onwards about the demand for Central Asian horses, which were exchanged for many different kinds of merchandise, including slaves from Tibet.

Conclusion

Because of the nomadic social structure of Ilkhanid society and its military appropriations, horse exportation from the Qipchaq steppe, Asia Minor, Azerbaijan,

and inner Iran and especially from Khorasan to India flourished in the 13th – 14th centuries. Western horses and Indian weapons of high quality were imported to Iran. Horses exported from Khorasan were usually of the Turkish and Kurdish breeds best suited for military activities. But valuable Arabian horses were commonly exported by the Kish and Hormuz principalities via the Indian Ocean, and were exchanged for the spices of India. So we have here both a trade focusing on military needs and a trade in luxury goods.

One phenomenon associated with the nomadic social structure of the communities along the trade routes was the banditry which had a direct influence on the trade. Nekudari and Oghani Mongol tribes played a twofold role: as the horse breeders but also as brigands on the Khorasan-India route and along the Silk Road. By the early 14th century, they increasingly became serious partners in this lucrative trade.

In the late 14th century, principalities such as Sarbedar (western Khorasan), the Tugha-Timurid (eastern Khorasan), the malek of Nimruz (Sistan and Baluchistan), Al-e Mozaffar (Yazd and Kerman), and Al-e Chupan (Azerbaijan) tried to take a larger share of the commerce along the Silk Road. However, the most important role was assumed by the Al-e Kart Principality (in southern Khorasan), which by virtue of its special political and military position could monopolize and guarantee the security of trade along the Khorasan-India Road. Its territorial policy was secured by loyalty first to the Ilkhanids and later to the Timurids. But the Kart rulers also were able to pursue independent economic policies and might defend the trade routes with the help of neighboring powers such as the Chaghataids or the Golden Horde. Even though in the 13th and 14th centuries they were expanding toward southern Afghanistan and Sind and were approaching the northern gates to India, they maintained close relations with the sultans of Delhi. This then helped them maintain their monopoly on the horse trade.

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Notes

1. A Mongol word that means: the stud of bay horses or hollow pasture, namely the modern Chaman Soltaniyyah (*Mongolian* 1995/1960, p. 33).

- 2. This was a Turkmen breed which usually had a white blaze on its forehead. It also is the name of a modern Turkis tribe in Fars province.
- 3. This breed could save the life of its rider because of its fast running.
- 4. For more detail, the standard work is Simon Digby, War-horse and Elephant in the Delhi Sultanate: a Study of Military Supplies (Oxford, 1971), which I have not been able to consult.
- 5. The pattern by which those involved in horse breeding and commerce leveraged that expertise for political advancement can be seen in various periods down into the 18th century. For that later period, see Gommans 1999/1995, esp. pp. 113ff, where he shows how horse traders became princes.

SAMARQAND REFASHIONED

Editor's preface

The historic cities of Central Asia are a never-ending source of fascination for the traveller. For here, after all, is the heart of the Silk Roads, the homeland of the Sogdian merchants and savants such as al-Biruni and al-Kashgari, where some of the great monuments of Islamic architecture were erected. The traveller, whether there for the first time or re-visiting familiar friends, may well wonder though, what, exactly, is it that one now sees. That is, to what extent do the city spaces and the historic buildings correspond to those which were there in an earlier era? And, to the extent that they do or do not, why? Elena Paskaleva's travel notes reflect on such questions, inspired by her recent trip to Uzbekistan.

If lured by the appeal of Silk Road travel to almost any place one might choose, be it Turkey, Iran, Uzbekistan, China..., arguably one should expect to witness the impact of modern development, for economic, political or other reasons. That is, to anticipate recapturing historic vistas and their buildings "as they once were" would undoubtedly be naive, even if such sites are now inscribed by UNESCO as part of "World Heritage." This hardly should come as a surprise. After all, "tradition" and "history" in a sense have always been moving targets. Sites that are still lived in or ones that are abandoned have never been immune to change, decay, re-building or "restoration," in general reflecting the priorities of those in whose times they are being altered. Sensibility about "preservation" and "restoration" of some original conception is a modern development and one fraught with controversy. Is there a standard of "preservation" or "conservation" which might be generally accepted, and if so, how then does one determine exactly how in practice it might be applied at a location where little that has survived to the present is arguably "original"? All too often, even with the best intentions, "restorations" end up constructing an imagined past or running roughshod over evidence that might point in a direction of a different answer to questions about what once was there.

Some of the most controversial examples of the modern treatment of historical sites may be found along the routes we term the "Silk Road." Modern development in China and Iran, for example, has raised grave concerns over the preservation of historically important remains. The issue is not merely one of undertaking projects to "modernize" living spaces and promote economic development, but often involves more complicated questions of perceptions about identity and tradition, where political regimes or economic interests have ideas which are at odds with what scholarly experts may advocate. How then are such matters illustrated in Uzbekistan?

It is well known that many historic Central Asian cities have various chronological layers, which often can be distinguished even on the superficial level of looking at a map. Students of the Russian colonial regime, for example, will point to maps showing regular grids of streets in the areas of a city that housed the Russian colonial population and administration, quite distinct from the irregular, narrow and meandering alleyways that characterized traditional city residential quarters. In Samarqand, the pre-Islamic Afrasiyab on what is now the outskirts sits alongside the area which was developed most fully under the Timurids, and that in turn abuts the Russian and Soviet colonial town. Arguably, since independence in 1991, we have entered yet another phase of city construction or re-construction, which can hardly be seen to respect any of these earlier delineations. If that is the case then, what is to be made of Samarqand's status on the UNESCO World Heritage list?

- Daniel C. Waugh

A Traveller's Impressions, August 2013

Elena Paskaleva

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Down through the centuries, Samarqand has inspired poetic superlatives for the richness of its location, its flourishing economic and cultural life, and its dazzling architecture. Travel brochures today invariably highlight the city's architecture and bazaars as one of the chief attractions of any adventure along the historic "Silk Road." As a historian of Timurid architecture, I find the city endlessly fascinating, having first been there in 2006. My visit again in August 2013

If it is said that a paradise is to be seen in this world, then the paradise of this world is Samarqand.

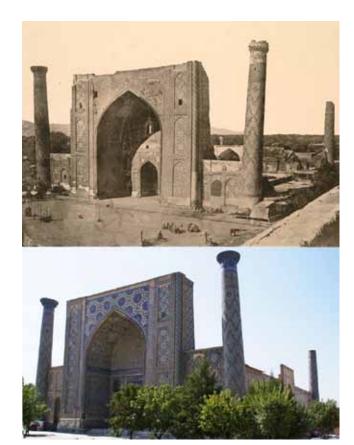
- quoted by 'Ata-Malik Juvaini (Boyle transl.)

highlighted how rapidly the urban landscape of this famous city is being altered, alas not necessarily for the better. What follows here are some impressions from that recent trip, ones which invite an examination of the policies that underlie the ongoing transformation. This is a subject that will reward future study in greater depth.

Fig. 1. The Ulugh Beg madrasa before 1910 (photograph by Friedrich Sarre, Denkmäler persischer Baukunst [Berlin, 1910] and in 2006 (photo by author). Note: Except where otherwise indicated, the photos which follow are by the author.

A little historical background is in order. Even though the city's history is very ancient, much of what attracts us to Samarqand traces its origins in the era when Timur/Tamerlane (d. 1405) had his capital there beginning around 1370. Clavijo, the Spanish ambassador from the king of Castile, who visited Samargand in the early fifteenth century witnessed dramatic changes that were underway. The mausoleum Timur had erected for his grandson, what we now know as the Gur-i Amir, had recently been completed, and work on the huge Friday Mosque, the Bibi Khanum, was ongoing. But the ruler's attention was not confined to building monumental religious structures. On his way to Samarqand, Clavijo had passed through Kesh (today's Shahr-i Sabz), where he described the imposing Ak Saray palace Timur had built. And, of particular relevance here is Clavijo's observations on the urban renewal project to create a main commercial thoroughfare through the centre of Samarqand that would be the focal point for the flourishing international trade that was being promoted by the ruler. The street was to be an integral part of the urban fabric, even though it came at a cost. As Clavijo reported (1928, pp. 278–80), Samargand citizens tried to claim compensation for their land and the houses levelled on Timur's orders, especially in the surroundings of the Friday Mosque and the bazaar. Timur's angered reply was that he was the sole owner of the land in Samargand and he could produce written evidence of this within a day.

Timur's successors, notably starting with his grandson Ulugh Beg (r. 1409-1449), continued to adorn the city with major buildings, even as, it seems, ones recently built (the Friday Mosque in particular is in question here) may already have begun to decay. By the 19th century, when we begin to get foreign travel accounts, drawings and photographs to document the state of the monuments, most of the great buildings were in ruins. Plans to rebuild or restore some of them were developed as early as the first Soviet years, but the most significant projects were not implemented until the last third of the 20th century beginning in the years prior to Uzbekistan's declaration of independence in 1991. Much of the Friday Mosque and the missing minarets on the Gur-i Mir were rebuilt; several mausolea in the Shah-i Zinda complex on the outskirts of the city were re-created from the ground up and missing elements of the upper facades "restored". These projects have been controversial, not in the least because it may be impossible to document precisely



what was "original" to the buildings that are now being "restored." Beyond the major buildings, now, as in Clavijo's day, portions of the old city are being levelled to create open spaces around Timurid buildings, though not, it seems, with the intent of integrating those buildings into the fabric of a living city.

Redevelopment around the Registan

Although the present layout of the Registan Square evolved during the 15th-17th centuries, the current state of the madrasas (Islamic religious schools) is the product of numerous restorations campaigns. The northern and southern facades of the Ulugh Beg madrasa (1417-1420), the oldest surviving monument on the square, were piles of rubble at the beginning of the 20th century, as testified by the photographs of Friedrich Sarre, published in 1910 (Fig. 1). Thus, its entire courtyard had to be rebuilt and the epigraphic program designed anew. The characteristic hauz (water tank) to the southeast was destroyed. One of the western minarets collapsed in 1870. In the autumn of 1918 it was noticed that the north-eastern minaret of the Registan façade had started to tilt. As a result, a lot of engineering effort went into the straightening of the original minarets along the Registan. The first reconstruction project was initiated in 1920 by Mikhail F. Mauer, the chief architect of Samargand since 1917, and A. N. Kuznetsov. After a decade of preparations

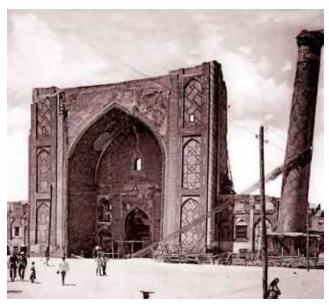


Fig. 2. The straightening of the northeastern minaret of the Ulugh Beg madrasa in 1932. (Source: http://mytashkent.uz/2012/12/09/k-80-letiyu-vypryamleniya-minareta-vladimir-grigorevich-shuxov/).)

(1922–1932), the northeastern minaret was straightened in 1932 (Fig. 2) based on the second plan by the Moscow engineer Vladimir G. Shukhov and with the technical assistance of G. I. Solov'ev (Masson 1968). In the 1950s E. O. Nelle produced the drawings for the straightening of the south-eastern minaret, the work executed by the engineer E. M. Gendel in 1965 (Kriukov et al. 2004, p. 574).

The earliest restoration work at the Shir Dor madrasa (1616–1636), the second oldest monument on Registan Square, was carried out by Boris N. Zasypkin and started in 1925. Unlike his later Soviet colleagues, in the 1920s Zasypkin was pleading for: "preservation of the monuments in the same manner as they came down to us." He insisted on collaboration with local craftsmen and masons, and on the usage of materials already found in the monuments themselves such as the original brick and locally produced alabaster (Iakubovskii 1940, p. 322).

What had been little more than a shell with a facade of the Tilla Kari madrasa (1646-1660), the new Shaybanid Congregational mosque in the 17th century, was re-built. The much-photographed dome one sees today was added during a long restoration campaign that ended in 1975 (Fig. 3). There are no existing photographs or drawings of the original dome.

In 1982 the Registan was revealed to the Soviet public in its presumed former glory, and the restoration team honored (Kriukov 1989, p. 102). The later Soviet

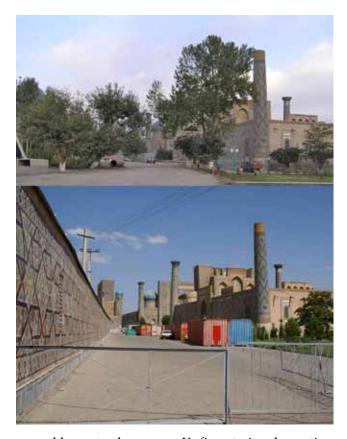
Fig. 3. The Registan in 1969 (top) and 1979, showing the rebuilding of the Tilla Kari madrasa. (Photos © Daniel C. Waugh)

restorations focused mainly on the rebuilding of the three Registan madrasas with reinforced concrete. The main scientific adviser, Konstantin S. Kriukov, believed that the exterior decoration was a sheer garment worn by the construction itself (Demchenko 2011, p. 73). Thus the refurbishment of all Registan madrasas with newly manufactured glazed tiling was merely a question of efficiency. The reinforced concrete dome shells were a manifestation of Soviet technological progress that would ensure the longevity of the madrasas beyond the frequent tremblors of Central Asian earthquakes.

In the summer of 2013, the visible impact of the Samarqand regeneration campaign is the clearance of "unattractive" mud brick housing and the creation of unobstructed vistas allowing tourists easy and strictly controlled access to the celebrated Timurid and Shaybanid monuments at the center of the Timurid city. The Registan wall was erected in the heart of the old town functioning as a demarcation line between the traditional mud brick houses and the three Registan madrasas. Large numbers of houses behind the wall were bulldozed and a new wide road was laid out in August 2013.²

The Registan wall starts at the tourist bus stop behind the Tilla Kari madrasa (17th century) and continues along the northern border of the square (Figs. 4, 5, next page), running parallel to the Ulugh Beg madrasa (15th century). In 2006 the bare bricks of the wall were not decorated (Fig. 6). In 2013, however, their enhanced touristic appeal bore superficial





resemblance to the square Kufic exterior decoration of the three Registan madrasas executed in the *banna'i* technique. In the *banna'i* technique, the brick is glazed only on one side in light or dark blue and arranged as decorative geometrical ornament. At present, the Registan wall consists of simple geometrical patterns (Figs. 7a, b) applied only on the side facing the square; the other side facing the old town has no decoration. The enormity of the wall is sporadically broken by a few wooden carved doors and windows, celebrating the modern equivalent of traditional Uzbek crafts-

Fig. 5. Composite image showing the north side of the Registan wall, with work underway on the new road and the destruction of the adjoining houses in August 2013.

Fig. 4. View along northern side of Ulugh Beg madrasa in 2005 (photo courtesy of Gwen Bennett) and after the erection of the wall in 2013.

manship. Although relatively new, the wall is in a very bad state of repair, due to rainwater from broken gutters. Its straight vertical lines have caved in at several spots, which has resulted in unusual curves and bulges with decorative bricks already breaking and falling down, and glazes wearing off.

However, if one walks through the threshold of the superficial wooden doors, the green serenity of the symmetrically trimmed fir trees on the side of the Registan Square is unexpectedly interrupted by the demolished houses with piles of broken chairs, tables and beds cluttered on enormous heaps of rubble on the other side of the wall (Fig. 8). Barking dogs could easily discourage any further explorations. The inquisitive tourist gaze is met by the surprised looks of a few local men chatting on a bench amidst the bulldozer noise and dust. The state of the houses is striking as it seems that their inhabitants have left a few moments before the bulldozers; the furniture is still in the rooms with feeble walls, ready to collapse. This regeneration campaign has resulted in the demolition of multiple residences, mainly in the

Fig. 6. On the left, south side of the Registan wall in 2006 soon after its construction but before the decorative tile work was added.



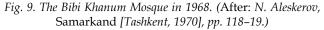




old Timurid town. Similar urban renewal campaigns have been going on in Samarqand since 2009,³ and only a few families have received compensations so far. Of course it is impossible to know what will replace the houses which I saw in their partially demolished state, although the observer who knows about the analogous process of "urban renewal" that is going on in another of the historic Silk Road cities, Kashgar in Xinjiang, would have little cause for optimism.

The Bibi Khanum and its surroundings

If one proceeds northeast from the Registan, following the route of the street first laid out by Timur's redevelopment of the city, one arrives at his great Friday Mosque (1399–1405), the Bibi Khanum, one of the masterpieces of Islamic architecture (Paskaleva 2012). At the nadir of its decay, it had been reduced to a core of the main sanctuary, its dome having collapsed and the *iwan* (monumental gate) of its façade reduced to a perilously suspended fragment. The small northern and southern mosques facing on the courtyard were also in ruins and without their domes (Fig. 9). Of the huge entrance *iwan* only the side pillars remained.



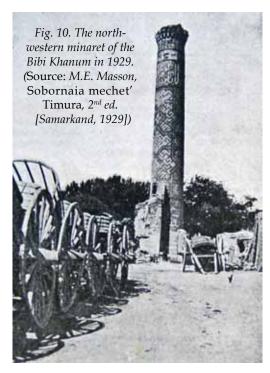




Figs. 7a, b. South side of the Registan wall in 2013.

Fig. 8. The old town behind the Registan wall (composite photo 2013).

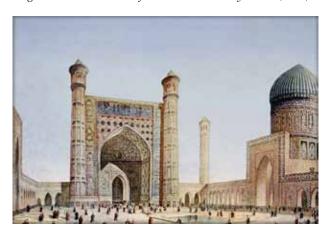




Nothing was left of the domed galleries that connected all these elements; only the north-western minaret had survived (Fig. 10). As observed during the reconstruction of the building, some pieces of original tile that had remained ended up discarded in heaps of rubble.

The Bibi Khanum Mosque was comprehensively studied by Sh. E. Ratiia in the 1940s. Ratiia drew up the first restoration plans based on its ruins and produced reconstruction watercolours (Fig. 11; Ratiia 1950). The renowned Soviet archaeologist and architect Galina A. Pugachenkova finalized the restoration plans for the mosque at the beginning of the 1950s. Further archaeological research was performed by L. Iu. Mankovskaia in 1967. After 1974 the restoration project was led by the architect Konstantin S. Kriukov, one of the most influential restorers in the Soviet

Fig. 11. Reconstruction of the Bibi Khanum by Ratiia (1950).



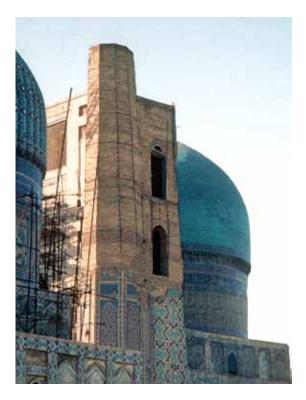
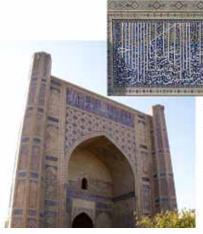


Fig. 12. View of the Bibi Khanum from the northeast, showing the newly constructed pylon of the main sanctuary whose upper part had not yet been re-decorated with new tiles. (Photo © 1991 Daniel C. Waugh).

period, who initiated the replacement of all brick loadbearing structures with reinforced concrete frames (Demchenko 2011, p. 73). Throughout the 1980s and 90s the collapsed domes of the side mosques were rebuilt with reinforced concrete and new tiling was inserted along the domes' ribbed outer shells. After 1985 the main sanctuary was adorned with massive pylons, decorated in mass-produced tiles (Fig. 12). By the end of the 1990s the epigraphic programs were executed anew. The new Koranic epigraphic band on the main sanctuary at Bibi Khanum contains Sura Al-Baqarah (The Cow), Aya 127/128 (Fig. 13, next page). It is interesting to note that exactly the same text can be found above the entrance to the Gok Gunbad Mosque in Shahr-i Sabz, initially commissioned by Timur's grandson Ulugh Beg (1435-36) and rebuilt after Uzbek independence. The present Koranic epigraphy of the exterior and interior of Bibi-Khanum, Gok Gunbad and other Timurid monuments, was designed by the Uzbek calligrapher Habibullah Solih. It is possible that during the restoration campaigns similar calligraphic templates were reused for completely different monuments, situated in different cities and dating from different centuries.

The Bibi Khanum southern small mosque is closed for tourists at the moment. There are pigeons living in the disintegrating vault of its entrance *iwan*.



The text in M. A. S. Abdel-Haleem's translation reads:

As Abraham and Ishmael built up the foundations of the House [they prayed], 'Our Lord, accept [this] from us. You are the All Hearing, the All Knowing. Our Lord, make us devoted to You; make our descendants into a community devoted to You. Show us how to worship and accept our repentance, for You are the Ever Relenting, the Most Merciful.

Fig. 13. The Koranic epigraphic band above the iwan of the main sanctuary of Bibi Khanum. (Photo by author and the detail courtesy of Gwen Bennett.)

Fig. 15 (right). View of the back section of the iwan screen of the Bibi Khanum, showing separation between it and the reinforced concrete of the towers, 2013.

The modern bricks forming the arch are falling down (Fig. 14). The northern small mosque, open to tourists, has been turned into a dusty, unwelcoming souvenir shop with wobbly floors and old unframed pictures hanging on the walls. The state of the main sanctuary is alarming. One can now see colossal holes between the two massive polygonal towers rebuilt in reinforced concrete and the back side of the *iwan* screen (Fig. 15). Rain water is continually penetrating the sanctuary through broken gutters. The dome had been severely damaged by the earth-

Fig. 14. The iwan arch of the southern small mosque of Bibi Khanum, with its disintegrating brickwork, 2013.

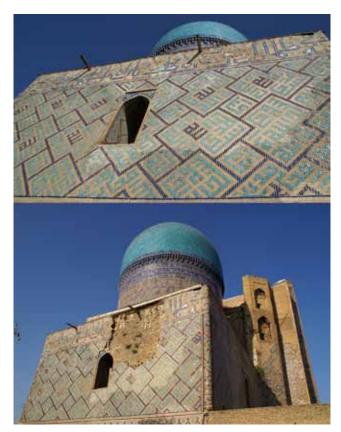




quake in 1897. The remnants of its shell were visible until the late 1960s; the present dome was rebuilt in 1979 (Fig. 16). The pigeons have now entirely taken

Fig. 16. The dome of the main sanctuary of the Bibi Khanum, still broken in 1969, and rebuilt but not yet tiled in 1979. (Photos © Daniel C. Waugh.)





over the dome. Entering the main mosque may soon require wearing a helmet.

A huge piece of the original Kufic script on the outer western wall of the Bibi Khanum sanctuary has vanished in the last five to six years (Fig. 17). The wooden gutters are broken, so that rain water flows directly along the wall. Moreover, the back side of the mosque is exposed to fumes and road vibrations from the traffic to the nearby Siyob bazaar (Fig. 18). The bazaar, which is in a sense emblematic of Samarqand, has always been a major tourist attraction. It is accessed currently through Chorraha Street, which runs right along the back of the Bibi Khanum sanctuary. The proximity of this narrow and yet very busy road with extensive fumes from old Soviet cars, is a real threat

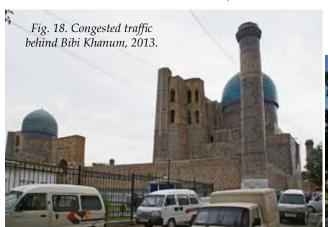


Fig. 17. Back side of the main sanctuary of Bibi Khanum in 2006 (top) and in 2013.

to the architectural substance of the building, its profound tile decoration and Kufic inscriptions. In the late 14th century Timur shattered numerous livelihoods in the area in order to clear the site for his magnificent mosque. The massive destruction of old urban fabric allowed Timur to decorate the exterior of Bibi Khanum with huge Kufic texts that could be read from a considerable distance, a novel approach in the Islamic world. The inscriptions are unique and together with the Kufic texts on the Yasawi Shrine in Turkestan (1390s) form the first examples of exterior epigraphic decoration in the history of Islamic architecture. Yet in 2013, the exterior Kufic inscriptions of the Bibi Khanum mosque are being allowed to disappear.

During the urban regeneration of Samarqand prior to the 2007 celebrations, the whole square between the Bibi Khanum Mosque and the Bibi Khanum Mausoleum (15th century) was completely refurbished. In 2005–6, the mausoleum, which had been reduced to ruins (Fig. 19), was adorned with a new pseudo-Timurid dome on a high drum and rebuilt facades with arched portals. The outer wall of the Bibi Khanum madrasa was built up above ground level with modern brick, to replicate the presumed position of the original *guldastas* (corner towers) (Fig. 20).

Fig. 19. The Bibi Khanum Mausoleum, early 20th century. (Source: Marakanda facebook https://scontent-a-pao.xx.fbcdn.net/hphotos-ash3/1381789_644965535547634_549468625_n.jpg.)



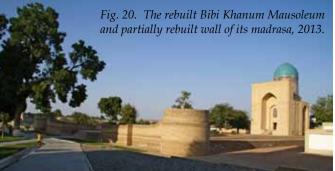




Fig. 21. Tashkent Road, late 19th or early 20th century and 2013. (Sources: Marakanda Facebook https://scontent-a-pao.xx.fbcdn. net/hphotos-prn1/72929_457441794305816_557072960_n. jpg>; photo by author.)

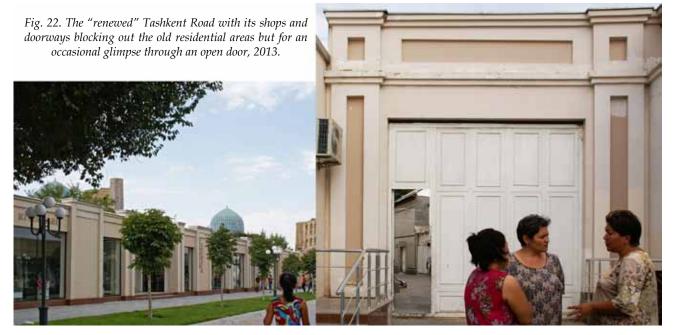
The Bibi Khanum Square is situated at the end of the Tashkent Road which connects the Registan Square with the Timurid Friday Mosque. It used to be the most vibrant trading hub of Samarqand with buzzling shops and caravan stalls (Fig. 21). There is no trace of this effervescent market at present. The new handicraft shops and empty low-rise office buildings erect-



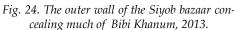
Fig. 23. The gate to the Siyob bazaar, 2013

ed along the Tashkent Road, as part of the Samarqand regeneration plan, evoke a painful sensation of loss and desolation. The shopping area is severed from the houses of the old city by yet another wall with occasional gates that offer quick glimpses into the life of Samarqand citizens (Fig. 22). In August 2013, very few tourists strolled down the Tashkent Road and were there not because of its welcoming atmosphere but out of sheer necessity: the road hosts one of the very few supermarkets in the old town and a post office.

The only witness to the buzzling entrepreneurial spirit of the Tashkent Road is the Chorsu, the market Siyob, to the north of the Bibi Khanum Mosque. The bazaar has been severed from its surroundings by a massive gate and a black metal fence in recent years (Fig. 23). The new additions to the Chorsu obstruct the view of the Bibi Khanum Mosque from the east for the tourists approaching from the Shah-i Zinda







necropolis (Fig. 24). The market stalls, apparently intended to entertain these tourists on their way from Shah-i Zinda to the Timurid mosque, are in a very dilapidated state. Most of the windows and doorframes are blocked with bricks (Fig. 25) or turned into a mini biomass landfill site with all the remnants of the daily garbage from the market.

Gur-i Amir and Ak Saray

The unimaginative approach of building walls at the Registan, along the Tashkent Road and around the Timurid dynastic mausoleum of Gur-i Amir

(early 15th century), reveals an attempt to push the local population away from the tourist sites and artificially cut through the organically grown neighbourhoods of the old Timurid city. This reality thus flies in the face of the underlying philosophy of a report drawn up by the Aga Khan Trust for Culture in collaboration with local authorities in Samarqand in 1996 (its focus was on the areas around the Gur-i Amir). At the outset, the report warned (Aga Khan 1996,

Fig. 27. Restorations of the main entrance to Gur-i Amir. On left, photo by Sergei Prokudin-Gorskii, 1905–1910; in center, in 1999; on right, in 2013. (Sources: Library of Congress http://lcweb2.loc.gov/service/pnp/prok/02200/02290v.jpg; © 1999 Daniel C. Waugh; author.)



Fig. 25. Market stalls between Shah-i Zinda and Bibi Khanum, 2013.

p. 5): "If individual monuments are exhibited at the expense of the surrounding urban fabric, their isolation can be detrimental to the unique character of the historic nucleus without really adding to the appreciation of the monuments themselves."

During the Soviet restorations (1943–1956) Zasypkin had opened up the area around the Gur-i Amir in order to create a stunning view of the whole complex, including the main octagonal mausoleum, the madrasa to the east and the *khanaqah* (Sufi lodge) to the west. The present urban situation is quite differ-

ent. In 2013, the Gur-i Amir wall encircles the whole complex. The wall's decoration, visible only on the side facing the mausoleum, is very sparse. A few geometric patterns of glazed brick executed in the *banna'i* technique adorn the otherwise rather blank wall clad in yellow brick. Several gates in the wall provide access to the adjacent streets of the old town (Fig. 26). In August 2013, new mud bricks were being made, presumably for the further extension of the wall.

When I saw the Gur-i Amir portal for the first time in September 2006, Iosif I. Notkin's 1950s brick restoration was intact (Fig. 27). In the 1950s the founda-



Fig. 26. Door along the Gur-i Amir wall, 2013.





tions of the gate had been stabilised with reinforced concrete and the damaged mugarnas (stalactite vault) restored (Kriukov 2004, p. 459). The first pictures by Prokudin-Gorskii from around 1910 show the state of the main entrance prior to the Soviet interventions. After September 2008 the whole iwan surface was tiled and a Koranic inscription was added above the archway. The text is Sura 'Ali 'Imran (The House of Imran), Aya 104. The addition of newly designed epigraphy seems to be a common practice in present Uzbekistan. The monuments turn into a landscape of layered restorations, each political regime leaving its own mark based on its own ideology. Unfortunately, the approach of Zasypkin, who insisted that all tiles be inserted by hand on the Gur-i Amir dome and was constantly present on the site to assure this was properly done, has been replaced by the desire to present mass-produced fictional works of art to the flocks of international tourists. The fact that this epigraphy is being added after the monuments had been listed by UNESCO as World Heritage in 2001 has been conveniently forgotten.

The newly rebuilt Ak Saray has recently opened its doors behind the Gur-i Amir complex (Fig. 28). The original Ak Saray (Fig. 29) was built under Sultan Ahmad (1469–1494) to the southwest of Gur-i Amir. As Pugachenkova observed in 1963 (p. 186), "The total lack of decorative covering of walls — all these features create a bare skeleton of a construction hardly likely to attract the attention of the wandering visitor." This makes one think that the present dazzling interior is largely a modern invention (Fig. 30; Color Plate

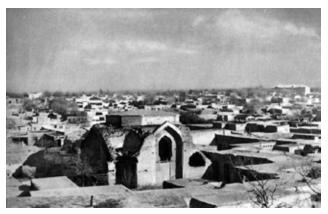


Fig. 28 (left). The Ak Saray after restoration, 2013.

Fig. 29. The Ak Saray prior restoration, undated photo. (Source: http://www.ast.uz/en/catalog.php?bid=74&sid=37&aid=215)

VII). A newly devised epigraphic band runs along the interior of the main chamber. The tourists are led from the Gur-i Amir mausoleum to the Ak Saray palace along elaborately decorated uninhabited houses (Fig. 31, next page) that have replaced the traditional residential architecture. The spookiness of their glassless windows and broken ceilings adds a flair of a bad, monochrome spectacle — much different from the splash of colour at Registan during the endless repetitions for the 'Melodies of the Orient' festival and the vibrant flags adorning the city center.

Fig. 30. The Ak Saray interior decoration after restoration, 2013.

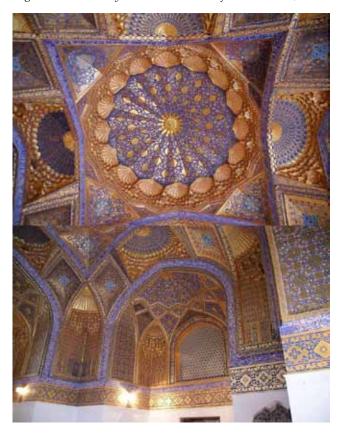




Fig. 31. The residential street behind the Gur-i Amir in 1979 (photo © Daniel C. Waugh) and rebuilt in 2013.



Fig. 32. Advertising for the "Melodies of the Orient" festival.

"Melodies of the Orient" Music Festival

The hectic speed of all regeneration activities, and in particular of the road that was being laid out in August 2013 behind the Registan, can be perhaps explained with the frantic preparations for the longadvertised 9th international biennial music festival "Sharq Taronalari" (Melodies of the Orient) (Fig. 32) that took place on 27 August 2013 on Registan Square.⁵ Even the director-general of UNESCO Ms. Irina Bokova attended the celebrations during her first official visit to Uzbekistan. In her address, Ms. Bokova said: "Cultures do not grow in isolation — they prosper through contact, they flourish through exchange."

Ironically, the Samarqand walls seem to be celebrating in particular the concept of isolation and destruction — the idea of shielding off the original old city fabric from the tourists.

Of course the use of the square for public performance was hardly new, as its sprucing up in earlier years created a stage for "sound and light" extravaganzas to appeal to the tourists, and rehearsals for events were common sights (Adams 2010). In August 2013, Registan Square was closed for tourists most of the time but for the hours from 12 noon until 3 pm. Needless to say that visiting the square during the early afternoon at temperatures above 40° C could be quite demanding even for the younger tourists. The closure was necessitated by the unending rehearsals for the "Melodies of the Orient" festival. The dancers had become a tourist attraction themselves. Hidden behind enormous white flags, numerous fences and stringent police control, the young men and women relentlessly performed their acts over and over again under the scrutiny of high officials who would regularly come to inspect the progress of the rehearsals (Fig. 33).





Fig. 34. The wall and gate behind the Ulugh Beg madrasa, 2013.

Most of the dancers would enter the Registan through the police checkpoint at the north-western corner of the Ulugh Beg madrasa. The checkpoint is set within yet another brick wall (Fig. 34). That wall makes impossible the exploration of the oldest Registan madrasa from the north. So, standing at the southwestern minaret of the Tilla Kari madrasa, the tourists find themselves trapped between two walls - the Samarqand Registan wall and the wall to the north of the Ulugh Beg madrasa. These walls are completely superfluous and have nothing to do with the original design of the square. Registan Square used to be the most pulsating spot in Samarqand for centuries, the real crossroad of cultures and religions, and not a confined encampment losing its allure among clouds of continuous construction dust.

Government and UNESCO priorities in the rebuilding of Samarqand

While this is not the place to explore in detail the official decision-making, even if documentation were to be available, at least a tentative outline is useful, in order that we might better begin to understand the dramatic changes being effected in Samarqand. Not the least of the interesting issues raised by a visit to the city concerns the relationship between the realities one observes and the mandates of UNESCO.

The historic centre of Samargand — "Crossroad of Cultures" obtained UNESCO World Heritage status in 2001. Interestingly, Samarqand was the last Uzbek city to obtain this status after Khiva (1990), Bukhara (1993), and Shahr-i Sabz (2000). UNESCO has had a Tashkent office since 1999 and collaborates closely with the Uzbek Ministry of Culture and Sport Affairs, and the Board for the Protection of Cultural Heritage. In its own words, the UNESCO office "has always corresponded to the priority orientations of the Government of Uzbekistan in the field of study, preservation and revitalization of tangible and intangible culture of the country." The Uzbek authorities "consider preservation and conservation of culture as one of the most important strategies of socio-economic and cultural development as well as the basis for forming a national

identity and ideology of the Uzbek youth in the conditions of transition."7 The 1992 Uzbek constitution (§49) postulated for the first time in the history of Uzbekistan that "cultural monuments are preserved by the state."8 This is in line with the UNESCO Convention on the Protection of the World Cultural and Natural Heritage (1972, §4), which entrusts cultural heritage to the state. Thus, in theory, Uzbekistan complies with international conventions and norms regulating heritage. During its 33rd session held on 20 October 2005 UNESCO initiated the celebrations which were to take place in 2007 on the occasion of Samargand's 2750th anniversary. State support for the event was secured by a decree issued by president Islam Karimov on 25 July 2006.¹⁰ One of the projects launched in preparation for it was the building of the Registan wall.

In its unflattering report from December 2007, UNESCO insisted on the development of a new management plan for Samarqand.¹¹ The major concerns of previous UNESCO reports¹² were: a) Lack of strategic approach to urban conservation; b) Lack of a proper management plan; c) Detrimental impact of new roads; d) Conservation of urban fabric.

One has to wonder whether measures initiated by the Uzbek government in subsequent years effectively responded to these concerns or rather promised to exacerbate the conditions about which UNESCO had expressed concern. In 2009-10, 3,762 million sum were reserved for the creation of 17.4 km new roads. 13 A ministerial decree from 7 June 2011 set the restoration and preservation goals for the city until 2015. The programme envisages the restorations of 22 historical sites in the Timurid capital. The two major sites to undergo a reconstruction are the Ishrat Khaneh (15th century) - 1.48 billion sum and the Bibi Khanum complex (late 14th - early 15th century) - 1 billion sum (= USD 460,000 at current exchange rate). It is worth recalling that these two monuments were deemed to be destroyed beyond repair in an inventory carried out in 1924 by the archaeologist Vasilii L. Viatkin and the architect Boris N. Zasypkin prior to the first Samarqand "restorations." The present site of the Ishrat Khaneh is being redeveloped (Fig. 35a, b, next page); large amounts of new brick for building that is imminent are stored in front of the main gate. It is already evident that that a new monument is being created in order to draw even more tourists. As far as the Bibi Khanum is concerned, in August 2013 there was no visible evidence of any reconstruction or repair work on the mosque itself. The present policy focusses rather on the attraction of international tourists, who are deemed to bring much needed foreign currency to the city. The Uzbek authorities have now set aside 6,140 million sum to be spent on the "development of new tourist routes, new tourism amenities

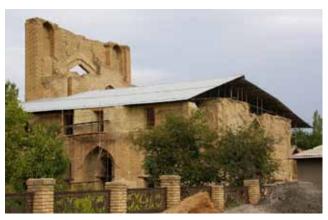


Fig. 35a, b. The Ishrat Khaneh under reconstruction, 2013, where the contrast with Pugachenkova's photo from 1963 demonstrates how much of the interior decoration is being created de novo.

and infrastructure services with the expectation of a 1.5 growth rate with '1.7 billion sums' expected in the state budget within 5 years." ¹⁴

On 1 February 2012, the Uzbek authorities submitted a state of conservation report in response to recommendations of the World Heritage Committee. In the report they state that "within the general plan, property preservation activities are developed for the condition analysis and partial preventative intervention into damaged or vulnerable structures of both large ensembles and separate monuments." The management framework was set to be completed by March 2012 and was submitted to the World Heritage Centre by 1 February 2013. The preparation of the plan was granted USD 50,000 from the Spanish Funds-in-Trust.

In 2013, the approved Management Plan named "Document on Management Frameworks and Processes for the World Heritage Property of Samarqand — Crossroad of Cultures" was praised by the World Heritage Committee as it provided "a clear and sound basis for preservation of the property and its buffer zone". The main conservation principle according to the plan is "to safeguard all the attributes that directly express or contribute to the Outstanding Universal Value (OUV)". The building of the new, wide road in August 2013 behind the Registan wall and the demolition of the adjoining houses was one of the first results of the adoption of this new plan.

Might one not read in the 2011-15 general plan for the conservation and rehabilitation of the historic city a short-sighted emphasis on developing tourism, without taking the necessary precautions to protect the monuments? At very least, the visitor to Samarqand today cannot but notice the discrepancy between statements promising a "sound basis for preservation" and "intervention into vulnerable structures," and the actual state of the greatest building commissioned by Timur — the Bibi Khanum Mosque. As



John Urry (2011) has observed "the tourist [is] a kind of contemporary pilgrim, seeking authenticity in other 'times' and other 'places' away from that person's everyday life" (Urry and Larsen 2011, p. 10). Is it possible for the tourists who would visit Uzbekistan to find any authenticity in the city of Samarqand anymore?

Acknowledgement

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Notes

- 1. The Uzbek SSR Hamza award (a high distinction) was given to Konstantin S. Kriukov as the main scientific advisor, Khudaikulov as leader of the production works, the architects A. Zainutdinov, I. Pinkhasov, the artist A. Stupin, the engineer Ia. Aradovskii and the master restorers M. Asadov, Anvar Kuliev, T. Kurbanov and Sh. Saifiev. For an overview of the restoration work in Samarqand, which specifically recognizes a good many of the other master restorers, see *Istoriia Samarkanda* 1969–70, II, pp. 390–406.
- 2. This road cannot be seen on the Google 2013 maps yet [accessed November 2013]
- 3. http://www.uznews.net/news_single.php?lng=ru&cid=30&nid=13885> [accessed November 2013].
- 4. A. A. Asanov was the construction engineer. His engineering project was published in 1972 in the Soviet volume celebrating Samarqand's 2500th anniversary (Asanov 1972). Ia. Aradovskii, A. Tsepenuk and Hamburg were also involved as engineers. Yu. Gorokhov was the main artist (Kriukov 1989, p. 104).
- 5. http://www.Samarqand.uz/rus/news/item/857 [accessed November 2013].
- 6. http://www.unesco.org/ulis/cgi-bin/ ulis.pl?catno =222869&set=5281242E_0_419&database=ged&gp=0&ll=1>[accessed October 2013].
- 7. http://www.unesco.org/new/en/tashkent/culture/ [accessed November 2013].
- 8. http://www.lex.uz/Pages/GetAct.aspx?lact_id=35869 [accessed October 2013].
- 9. http://whc.unesco.org/en/conventiontext/ [accessed October 2013].
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- 15. UNESCO document WHC-SOC-254. Samarqand Crossroad of Cultures (Uzbekistan)
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THE RENOVATED CENTRAL ASIA EXHIBIT IN THE STATE HERMITAGE MUSEUM

Julia Elikhina

State Hermitage Museum St. Petersburg, Russia

In February of 2013, the State Hermitage Museum opened its remounted exhibit of the art and culture of Central Asia after a hiatus of six years (Figs. 1, 2). The exhibit consists of two galleries: in one are works of art which originated on the territory of the Great Silk Road; in the second are archaeological artifacts found in the territory of today's Mongolia and Southern Siberia, Buddhist works from Mongolia and Tibet, and finds from Khara-Khoto and Dunhuang.

The Silk Road divided into two branches, northern and southern. For the southern oases, the Hermitage collection consists only of chance finds from Khotan. At the core of this collection is that of Nikolai F. Petrovskii. Various peoples inhabited Khotan: Iranians, Indians, Chinese, Turks and Tibetans; the written documents from Khotan are in Sanskrit, Prakrit, Khotanese-Saka, Tibetan and Chinese. The traditions and cultures of these people exercised a considerable influence on the emergence and development of the art in this region. A substantial part of the collection consists of terracotta objects (some two-anda-half thousand), found primarily in Yotkan (Elikhina 2008b). The most interesting is a vessel with three

Fig. 1. Gallery view. The mural displayed on the right depicts the Bodhisattva Mañjuśrī, from the cave temples at Bezeklik, Inv. No. Ty-776. See also Fig. 9.

handles in the form of standing lions. The vessel is decorated with numerous appliqués and stamps with an inscription which to date has not been deciphered (Fig. 3, next page). Scholars generally date the Yotkan ceramics to the 2nd–4th centuries CE (D'iakonova and Sorokin 1960, p. 33; Litvinskii 1995, p. 123; Gropp 1974, p. 298). Khotan is known for its jade (nephrite), which is superior in quality even to that of China. Jade was an export commodity, which means that among the chance finds, ones made of jade are few and date from various periods.

The question of what exactly was Yotkan remains open. Some scholars believe that it was the capital of the oasis (Stein 1907, I, p. 200; Gropp 1974, p. 21). Others have thought that a cemetery was located there (Trinkler 1930, pp. 35–37; D'iakonova 2000, p. 233). Apart from Yotkan, in the Khotan region are other centers: Ak-Terek, Ak-Sipil, Dandan-Uiliq, Rawak, etc.— Buddhist monasteries surrounded by settlements.

In addition to ceramic vessels, sculptures of people and animals, the art of Khotan includes abundant clay

Fig. 2. Part of the Tibetan collection. The case in the foreground displays the unique three-dimensional mandala of Bhaisajyaguru, mid-18th century, from the E. E. Ukhtomskii Collection (see Thurman and Rhie 1991, No. 134).



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and stucco relief depictions of buddhas and bodhisattvas, both in miniature and in large sculptures. Buddhism entered Khotan from India, and from the first centuries of the Common Era Khotan became one of the largest centers of Buddhism. Thus in Khotan, along with objects relating to local cults and cults which arrived from other regions, one finds numerous monuments of Buddhism. In 401 CE, the Chinese pilgrim Faxian spent three months in Khotan and recorded his impressions in his journal. He emphasized that in Khotan all inhabitants without exception were Buddhists. The number of monks was huge, and they were primarily adherents of Mahayana Buddhism. There were fourteen large monasteries, as well as many small ones; the largest monastery housed 3000 monks. West of Khotan was another large monastery. Its columns, beams, doors, and window frames were gilded, and the monks' cells were

also richly decorated. Faxian's description also mentions wood carving, mosaic and silvered elements of interior decor. The rulers of six regions would send as gifts to the monastery the rarest of precious stones. "The monastery is so beautifully decorated and grand," noted Faxian, "that words do not suffice to describe it" (Fa-hien 1957, p. 18). The architecture of the monasteries has



Fig. 3 (above). Vase with three sculpted handles. Terracotta, wheel-turned with the base separately attached, the handles shaped in moulds. H.: 28 cm. Khotan: Yotkan; 3rd-6th centuries CE. Acq. 1897 from the Coll. of N. F. Petrovskii. Inv. No. ΓΑ-2721.

Fig. 4 a (right), b (detail left). Votive plaque depicting the legend of the spread of sericulture to Khotan. Wood, mineral paints. 25 x 10 cm. Khotan: Dandan-Uiliq, 6th-8th centuries CE. Acq. 1897 from the Coll. of N. F. Petrovskii. Inv. No. ΓΑ-1125. (Peshchery 2008, p. 73)





not survived to our day, since they were built entirely of wood. The British expedition of Aurel Stein, which worked in the oasis in 1900–01, found only the foundations of temples and the remains of a stone stupa. Buddhism survived in Khotan until the beginning of the 11th century when in 1006 CE the Karakhanid Turks conquered the oasis (Elikhina 2008a, pp. 72–73).

Among the local cults, the most widespread was veneration of the god of weaving, whose images are portrayed on wooden votive plaques. One panel in the Hermitage depicts the god of silk and his suite (Fig. 4a, b; Color Plate VIIIa). The Avestan Yima/Jamshid was the first to teach humans industries and crafts. The depiction of the god of silk and protector of silkworms is probably to be connected with this personage and with this myth about the first mentor of mankind who taught it how to work the land, smelt and forge metals, weave a weft into a warp. Xuanzang



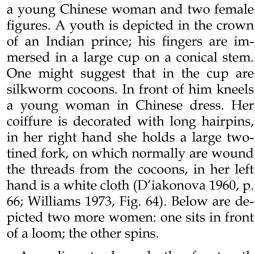
Fig. 5. Votive plaque depicting the god of weaving. Wood, mineral paints. 25 x 10 cm. Khotan: Dandan-Uiliq, 6th century CE. Acq. 1897 from the Coll. of N. F. Petrovskii. Inv. No. ΓΑ-1120. (Peshchery 2008, p. 72)

(600–664) writes about the presence in Khotan of the cult of the god of weaving and the dedication of a temple to him (Stein 1907, I, pp. 259-60, 279-80, 298, 300; III, Pls. LXI, LXIII).²

Sericulture and the production of silk textiles was an important

component of the economy of Khotan over many centuries. Silk production arrived in the Khotan oasis probably as early as the first century CE (Hill 2009, p. 467; cf. Lubo-Lesnichenko 1995, p. 63). According to Aurel Stein, at the beginning of the 20th century the oasis of Khotan was still the main producer of silk and silk textiles in East Turkestan.

As we can see more clearly in a second Khotanese panel, the painters depicted the god of silk was as a four-armed ruler seated on a throne (Fig. 5; Color Plate VIIIb). His lower right hand holds a cup in front of his chest; the lower left hand rests on his knee. In both of these Hermitage panels, the upper left hand holds what may be a mulberry branch. In the panel shown in Fig. 5, the upper right hand clearly holds a loom reed, the slotted plate through which the warp threads pass and which is used to push weft yarn into place. The god's suite shown in Figs. 4a and 4b includes youths,



According to legend, the fourteenth ruler of Khotan, Vijaya Jaya, married a Chinese princess, who brought cocoons in her coiffure (Hill 2009, p. 467; Rhie 1999, I, p. 259). The Chinese princess took an oath not to kill the moths. The local population made cloth from twisted threads of raw silk after the moths had left the cocoon, since killing any living being was a sin according to Buddhist precepts (Lubo-Lesnichenko 1995, p. 62). In this way silk production in Khotan began.

Russian diplomats played a significant role in the study of Khotanese antiquities. Nikolai F. Petrovskii (1837–1908) was Consul General in Kashgar from 1882–1902. In government service in Turkestan beginning in 1867, he became a collector of manuscripts and objets d'art. Academician Sergei F. Ol'denburg wrote: "... the brilliant discoveries of N. F. Petrovskii

began a new era in the archaeological study of East Turkestan..." (Ol'denburg 1911, p. 3). Petrovskii also compiled a detailed manuscript map of East Turkestan, on which he marked the ancient monuments known to him and indicated the distances between them. Travelers and scholars turned to him for advice and guidance and always received assistance. Beginning in 1892 Petrovskii regularly sent manuscripts which he had obtained in Khotan to the Asiatic Museum in Petersburg. (The Oriental Department of the State Hermitage was created in 1920, and the collections of the Asiatic Museum, except for the manuscripts and xylographs, were incorporated into the Hermitage collection.)

The Imperial Hermitage acquired Petrovskii's collection of artefacts in 1897. In addition, the museum houses a significant number of objects collected by Sergei A. Kolokolov, Sobolevskii and the engineers L.

Ia. Liutsh and Belinko. A few objects were acquired from students of Nikolai I. Veselovskii and Sergei E. Malov. Thanks to the efforts of these individuals, the museum houses a rare collection of more than 3000 archaeological artefacts.

The State Hermitage also houses small collections of material from the northern oases of the Silk Road: Kucha, Turfan, Karashar and Dunhuang. The collection from Kucha was brought by Mikhail M. Berezovskii (1848–1912), a zoologist by training. Berezovskii participated in fourteen expeditions, initially as a zoologist and botanist; from 1902–08 he directed expeditions to China and Central Asia as a geographer and ethnographer. He visited Subashi, Duldulokur, Kumtura, Kucha, Kizil and Kirish. The Russian Committee for the Study of Central and East Asia sent Berezovskii's expedition to Kucha to undertake archaeological survey in 1905. The research began in the vicinity of Kucha in September 1906, coinciding with the work of Paul Pelliot's French expedition. Berezovskii's main goal was to compile a precise, suitably large scale map of ancient settlement sites and Buddhist monuments. He gathered fragments of paintings and made watercolor copies of them; he collected clay sculpture, frag-

Fig. 6. Fragment of a mountain scene depicting signs of the zodiac and scenes of gift bearing. Loess, clay, glue-based pigments, painted on dry plaster. 83 x 177; 46 x 204; 46 x 177 cm. Kucha: Kizil, Cave No. 198. 6th century. Acquired by expedition of M. M. Berezovskii in 1905–06; transferred in 1930 from the Museum of Anthropology and Ethnography. Inv. No. Ky-821. (Peshchery 2008, p. 125)

ments of wooden Buddhist carvings, moulds for casting heads and separate parts of sculptures. He made large tracings of paintings and photographed sites and separate finds. Of particular interest are the photographs, which recorded the appearance of collapsed walls with painting, caves and inscriptions in Chinese, Tocharian and Turkic which have not survived to this day. The expedition completed its work in December 1907 (Vorob'eva-Desiatovskaia 2008, p. 119).

The most interesting item from the Kucha oasis, from Kizil (Cave No. 198), 6th century CE, is a painting from the cave ceiling depicting the heavenly sphere with the signs of the zodiac and scenes of the presentation of gifts to the Buddha (Fig. 6; Color Plate IXa). The signs of the Greek zodiac are placed on a grayblue background in the space between two chains of mountains, where trees grow and animals are grazing (Samosiuk 2008, pp. 123, 125).

After World War II part of the German collection (several of the finds made by Albert Grünwedel) ended up in the Soviet Union. A number of these objects are now in the Hermitage, including fragments of murals from Kucha and Turfan. One of them depicts a jataka tale about the benevolent prince-turtle (Fig. 7; Color Plate IXb). In one of his previous births, the Buddha was a turtle. Once he swam to the shore to rest. Merchants who were passing by mistook his shell for dry land and built a campfire on it. The frightened

Fig. 7. Jataka about the benevolent prince-turtle. Loess, straw, glue-based pigments painted on dry plaster. 28 x 22 cm. Kucha: Kizil, Cave of the Musicians (No. 38), 5th–6th century. Acquired by expedition of Albert Grünwedel; ex-Collection of the Ethnological Museum, Berlin, prior to 1945. Inv. No. ВД-628. (Grünwedel 1912, p. 67, Fig. 136 [sketch]; Peshchery 2008, p. 428)

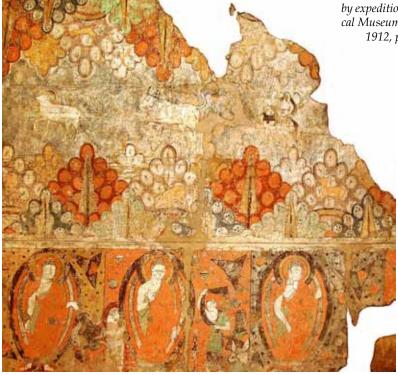


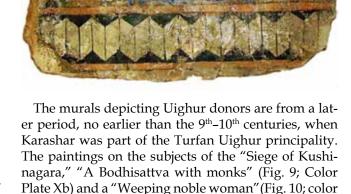


Fig. 8. Mahasattva (Vyaghri) Jataka. Loess, straw, glue-based pigments painted on dry plaster. 45.5 x 38.5 cm. Karashar: Shikshin, Cave No. 5a, 6th-7th centuries. Acquired by the First Russian Turkestan Expedition, 1909–10; transferred in 1930 from Museum of Anthropology and Ethnography. Inv. No. ШШ-776. (Grünwedel 1912, p. 198, Fig. 446; D'iakonova 1995, p. 83, Pl. XII; Peshchery 2008, p. 180)

turtle jumped into the water to quench the flames, but then, taking pity on the merchants, transported them to the opposite shore. This motif is frequently encountered in the paintings on the vaults in the Kizil caves (Samosiuk 2008, pp. 427–28).

The next gallery is devoted to the art of Karashar. The First Russian Turkestan Expedition, headed by Academician Sergei F. Ol'denburg, worked in 1909–10 at Karashar, located between Turfan and Kucha (D'iakonova 1995). Some of the finds are also from the collections of the Russian diplomats N. N. Krotkii and A. A. D'iakov (Popova 2008, p. 175). In the collection are fragments of murals, clay sculpture and manuscripts. The earliest painting, dated to the 6th century CE, depicts scenes from the Mahasattva Jataka (Fig. 8; Color Plate Xa), a very popular motif from the previous births of the Buddha Śākyamuni, who sacrificed his body to a hungy tigress with cubs.

Fig. 9. Bodhisattvas and monks. Loess, straw, glue-based pigments painted on dry plaster. 101×108 cm. Karashar: Shikshin, building K-9e, 8^{th} – 10^{th} centuries. Acquired by the First Russian Turkestan Expedition, 1909–10; transferred in 1930 from the Museum of



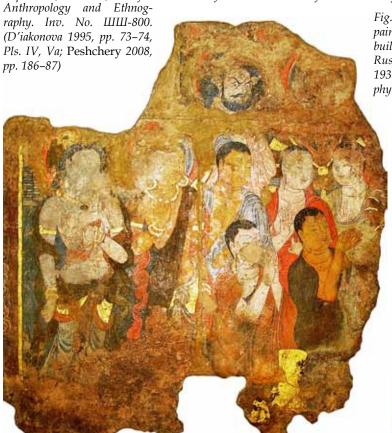


Fig. 10. Weeping lady. Loess, straw, glue-based pigments painted on dry plaster. 87 x 65 cm. Karashar: Shikshin, building K-9e, 9th-10th centuries. Acquired by the First Russian Turkestan Expedition, 1909–10; transferred in 1930 from the Museum of Anthropology and Ethnography. Inv. No. ШШ-801. (D'iakonova 1995, p. 74, Pl. VI; Peshchery 2008, pp. 188–89)





image on cover), from the monastery site of Shikshin (Shorchuk), all date to that period. These paintings show the process of sinicization of the style of painting and its closeness to the art of the Tang era (Samosiuk 2008, p. 178; cf. D'iakonova 1995, pp. 27–28).

Russian scholars and explorers made important contributions to the study of Turfan. The first Russian scholar who devoted attention to its ancient monuments was Albert E. Regel. In his report in 1881 to the Geographical Society, he mentioned "finds of ancient ruins." When in 1895 on their journeys in East Turkestan Vsevolod I. Roborovskii and Petr K. Kozlov obtained ancient manuscripts, the Academy of Sciences established a special commission for developing archaeological collections from Chinese Turkestan. In 1898 the Commission dispatched to Turfan an archaeological expedition headed by the curator of the Academy of Sciences Museum of Antropology and Ethnography, Dmitrii A. Klements, primarily to study the sites of Toyuk-Mazar and Indikut-Shar. The brief stay in Turfan offered Klements no opportunity to conduct excavations, but he described and photographed monuments, drew plans, made tracings and rubbings. In 1907, the doctor from the Russian consulate in Urumqi, A. I. Kokhanovskii, collected Turfan antiquities and manuscripts.

In 1909–10, Ol'denburg's First Russian Turkestan Expedition worked in Turfan, examining there some dozen freestanding Buddhist temples and grottoes. Ol'denburg concluded that it was essential to undertake there in the future carefully planned excavations and draw a detailed map of the town of Yarkhoto. The

Fig. 11. Praṇidhi (The Taking of the Vow). Loess, straw, glue-based pigments painted on dry plaster. 370 x 227 cm. Turfan: Bezeklik, 11th century. Acquired by the First Russian Turkestan Expedition, 1909–10; transferred in 1930–31 from the Museum of Anthropology and Ethnography. Inv. No. Ty-775. (Peshchery 2008, pp. 214–15; http://www.hermitagemuseum.org/html_En/04/b2003/hm4_1_27.html)

expedition also examined the Taizan stupa near Astana and a number of monuments at Sengim-ogiz, Bezeklik and Toyuk-Mazar. Subsequently Sergei E. Malov worked in Turfan, collecting there Old Turkic manuscripts in Uighur. In February and March 1915, Ol'denburg and B. F. Romberg, who had participated in the Second Russian Turkestan Expedition, again visited Turfan and obtained there dozens of frag-

ments of manuscripts written in Uighur, Sogdian and Chinese (Popova 2008, pp. 207–08).

Of the greatest interest is a large, multi-figured composition from the 11th century which decorated the walls of a cave temple at Bezeklik: "Pranidhi" ("The Taking of the Vow") (Fig. 11; Color Plate XI), in which the donor vows to follow the teaching of the Buddha, and as a reward requests protection for himself and his heirs. In this scene the Buddha is shown in the center of the painting, and the kneeling donor in the lower right corner. This subject was at that time one of the most common in the murals at Bezeklik, to the extent that it almost became kind of a cliché. Most of the best preserved panels with this subject lined the walls of Cave Temple No. 9 (20). The German expeditions took them to Berlin, but during World War II, since they had been too large to remove for safekeeping, they were destroyed by a bomb. The Hermitage painting is thus now a rare example of this scene.³ In this painting one sees the combination of the Chinese traditions of the Tang era and the blossoming of Uighur art, which created its own distinctive expressive style (Pchelin 2008, p. 210).

A unique work is the painting depicting the Bodhisattva Mañjuśrī (Fig. 12, next page; Color Plate XII), one of the eight great bodhisattvas who were especially venerated in the oases of East Turkestan. Mañjuśrī is seated on a lion, in his right hand he holds a *zhui* staff, in his left a transparent vessel with the blooming branch of a wild plum (*mei-hua*). His head is surrounded by a nimbus; in the crown is a miniature figure of the Buddha Amitāyus. A numerous suite surrounds



the Bodhisattva; in the left section of the composition are mountains and temples - probably Wutai shan, the location in China where Mañjuśrī resided. On the right is a larger scale figure of Vajrapāni. His attributes are a fly whisk and vajra (Rudova 2008, pp. 216-17). This image, in whose iconography are the attributes of other Buddhist divinities, enables one

Fig. 13. Fragment depicting the life of the Buddha Śākyamuni. Loess, straw, glue-based pigments painted on dry plaster. 107 x 243 cm (Note: the two sections shown here have not been reproduced in the same scale). Turfan: Sasyk-Bulak, 13th century. Acquired by the First Russian Turkestan Expedition, 1909-10; transof Anthropology and Ethnography. Inv. No. Ty-703. (Tibetan Art: Towards a Definition of Style, J. C. Singer, P. Denwood [London, 1998], pp. 80-85; Peshchery 2008, pp. 232-33)

Fig. 12. The Bodhisattva Mañjuśrī. Loess, straw, glue-based pigments painted on dry plaster. 339 x 232 cm. Turfan: Bezeklik, 11th century. Acquired by the First Russian Turkestan Expedition, 1909-10; transferred in 1930-31 from the Museum of Anthropology and Ethnography. Inv. No. TY-776. (Peshchery 2008, pp. 216-17)

to see the complex processes occurring in Central Asian Buddhism in the 10th-11th centuries. In addition to paintings, the exhibit includes a number of sculptures from the Bezeklik grottoes.

Apart from the monuments from Bezeklik, the exhibit provides examples of art from other regions of Turfan: Sasyk-Bulak, Astana, Toyuk-Mazar, etc. Thus, from the ruins of the Buddhist monastery at Sasyk-Bulak comes a very fragmentary painting with scenes from the life of the Buddha: the attack of Mara, the Great Departure, the tonsure, and several others (Fig. 13; Color Plate XIII) (Pchelin 2008, p. 212). This painting dates to ferred in 1930-31 from the Museum the 13th century and can be identified

> as in the "Tibetan" style, if one may speak of such in reference to that period. This style was the dominant one in Western Tibet and Khara-Khoto; the painting in the Buddhist temple in Karain the same style (Kiselev et al. 72). However, it is well known Tibetan classical style in paintpeared only in the mid-15th cen-



tury. All the works created prior to that period are distinguished by marked Nepalese and, in all likelihood, Indian influences (Jackson 1996, pp. 103–31; Thurman and Rhie 1991, pp. 61–62).

Ol'denburg's Second Russian Turkestan Expedition was organized specifically to study the Mogao ku complex of Buddhist cave temples, the "Caves of the Thousand Buddhas," located 25 km southeast of the city of Dunhuang in Gansu Province. Russian travelers in the second half of the 19th century had passed through Dunhuang on more than one occasion. In 1879 Nikolai M. Przheval'skii was there, and in 1894 Vsevolod I. Roborovskii, although neither of them undertook any special studies (Popova 2008, pp. 253, 255).

The beginning of construction of the monastic complex at the "Caves of the Thousand Buddhas" traditionally is dated 366 CE; the last caves were carved and decorated in the 14th century. The Mogao complex includes several hundred grottoes, carved in the loess conglomerate of the precipitous bank of the river. The synthesis of architecture with painting and sculpture which decorated the walls and had been brought from

India transformed the structures into a unique monument both in regard to their grandeur and distinctive artistic achievement and the complexity of the Buddhist philosophical concepts embodied in them.

Over the millennium-long history of this important Buddhist site the art of Dunhuang underwent a significant evolution: the plan of the caves changed as did the stylistic features of the monuments. The sculpture of the early caves right up to the 6th century CE developed under the influence of Gandhara. In addition though, one can see in the caves borrowings from other cultural centers located along the Silk Road. The art of Dunhuang reached its peak of development in the 8th century, that is, the Tang Dynasty period in China when art experienced a great efflourescence. The complex phenomenon of Chinese Buddhism, shaped completely by that time under the influence of local beliefs and cults of China itself, achieved here its most brilliant and complete expression. Its pantheon, worked out in detail, was based on sutras translated into Chinese from Sanskrit by Indian, Central Asian

and Chinese scholar-pilgrims in the 5th-8th centuries. It was precisely in the 8th century that Pure Land Buddhism, at the core of which lies the belief in the Buddhia Amitābha, became especially prominent at Dunhuang. The grandiose panoramas of the Pure Land of the Buddha Amitāyus covered the walls of many of the grottoes painted in this period. No less inspiring were the depictions of the Bodhisattva Avalokiteśvara saving those in distress, illustrations of the "Lotus Sutra" (Rudova 2008, p. 256).

The collection brought by the Russian expedition from Dunhuang is rather small, numbering some 350 items. These are fragments of wall paintings and paintings on silk and paper, sculpture, votive banners and textiles. In spite of its fragmentary nature, the Hermitage collection from Dunhuang is representative of various periods of the development of the site, which makes its significance equivalent to that of the huge collections of Aurel Stein and Paul Pelliot. In the Hermitage is a group of outstanding monuments: a mural depicting the disciples of the Buddha, painting on silk with portrait likenesses of donors, the sculptured head of a bodhisattva and a fragment of a votive ban-

ner depicting donors. All these works date to the period of the greatest efflouresence of the Mogao grottoes in the 7th–8th centuries and have no exact equivalents in other collections in the world (Rudova 2008, p. 260).

The collection of works from Khara-Khoto, the dead city abandoned by its inhabitants in the 14th century, is unique. This city was one of the twelve military-administrative centers of the Tangut state of the Western (Xi) Xia (982–1227). The Tanguts, a people of Tibeto-Burmese origin, had settled in the region of the great bend of the Yellow River in the 8th century. In 1227, the Tangut state was destroyed by the Mongols (Samosiuk 2008, p. 315; *Lost Empire* 1993).

On 22 May (4 June) 1909, the expedition of Petr K. Kozlov opened a remarkable suburgan (stupa), whence came all of the finds. Buddhist painted and sculptured works date from the 11th–14th centuries; they reflect the essence of the culture of the Tanguts, whose art drew upon both Chinese and Tibetan traditions. One of the most distinctive art works from Khara-Khoto is an image of Green Tara (Fig. 14; Color Plate XIV) on a

Fig. 14. Green Tara. Silk tapestry, kesi technique. 105 x 52.5 cm. Khara-Khoto, 12th century. Acquired by the Russian Mongolia-Sichuan Expedition, 1907–09; transferred in 1934 from the Museum of Anthropology and Ethnography. Inv. No. X-2362. (Rhie and Thurman 1991, No. 23; Lost Empire 1993, pp. 40–41; Samosiuk 2006, pp. 282–83; Peshchery 2008, pp. 346–47)





Fig. 15. Xuan U, the Lord of the Northern Palace (Quadrant) of the Heavens. Silk tapestry, kesi technique. 71 x 47 cm. Khara-Khoto, 12th century. Acquired by the Russian Mongolia-Sichuan Expedition, 1907–09. transferred in 1934 from the Museum of Anthropology and Ethnography. Inv. No. X-2465. (Lost Empire 1993, pp. 244–47; Samosiuk 2006, pp. 355–57; Peshchery 2008, pp. 354–55)

textile woven in the *kesi* technique ("incised silk," a particular type of Chinese tapestry). This image can be attributed to the Tibetan school of the Tangut tradition. The goddess is seated on a lotus; above her are the five Transcendent Buddhas and flanking her two Taras: the benevolent Aśokakāntā, with a yellow body, and the blue angry Ekajaṭā. At the stem of the lotus are genuflecting nagas; above and below the composition are additional miniature figures of heavenly musicians and dancers (ḍākinis) (Samosiuk 2008, p. 346; *Lost Empire* 1993, pp. 140–41).

The painted depiction of Xuan U — the lord of the northern palace (quadrant) of the heavens — is a typical Chinese image (Fig. 15; Color Plate XV) and among the finds from Khara-Khoto is unique for its connection with Daoism. He is shown seated on a cliff with his suite, which is difficult to identify in the complete absence of any analogies. Probably one can see here the constellation of the Great Bear (Beidou), which

ruled over death, Xiu (the Void), which governed matters connected with lamenting and tears, and Wei (the Roof). A Tangut donor is depicted in the lower corner of the thangka (Samosiuk 2008, p. 354).

The Hermitage exhibit includes finds from the Noyon uul barrows in Mongolia, which are associated with the culture of the Asian Huns (Xiongnu), one of the best known nomadic peoples of antiquity. Even today the name "Hun" evokes a derogatory stereotype of militarism, barbarism and unchecked cruelty: "...when the savage Hun will grope in the pockets of corpses, burn cities and drive herds into churches, and fry the flesh of our white brothers..." (Aleksandr Blok). In Chinese memory the Huns for a long time symbolized treachery. Many centuries later the Chinese poet Li Bo (701–762) wrote: "...Battle to the Huns is as plowing to the farmer: yet again bones bleach in the fields..."

The first information about the Xiongnu is to be found in Chinese works dating from the last centuries BCE. At the end of the 3rd and beginning of the 2nd century BCE the Xiongnu created a nomadic empire, headed by the *shanyu* — the supreme ruler, commander-in-chief, arbiter of the law and priest. The Xiongnu had a powerful army and frequently carried out raids on neighboring territories and terrorized China. After decades of dominance in Inner Asia, in the first century BCE the Xiongnu polity began to collapse. In the first instance this was due to internal strife and to wars with neighboring tribes. In 80 BCE the Wusun came over to China; in 72 BCE the Dingling and Wuhuan rebelled; in 62 BCE the Xiongnu were defeated by the Chinese. In 59 BCE a civil war broke out amongst the Xiongnu with renewed force and finally tore asunder their state. The Xiongnu split into northern and southern branches, and the leader of the southern Xiongnu, the shanyu Huhanye, in 55 BCE acknowledged the suzerainty of the Chinese emperor. The northern Xiongnu occupied the territory of today's Mongolia.

At the start of the first century CE, for a short time the Xiongnu regained their previous power and independence; from 9 to 48 CE incursions into China were renewed, and the Han found themselves in crisis. In 48 CE, the Xiongnu again split into northern and southern halves, the latter subject to China. In 93 BCE, a large part of the Xiongnu entered into a tribal confederation under the power of the Xianbei.

The unification of pastoralist tribes which took place at the end of the 3rd century BCE under the Xiongnu played an important role in the history of Inner Asia. The Xiongnu conquests at the turn of the 3rd century BCE, which encompassed a huge region from the Enisei River to Manchuria and from northern China to Lake Baikal, removed barriers in the path of ethnic

and cultural contacts and resulted in the creation of new forms of material culture. Not coincidentally written tradition associates specifically with the Xiongnu the origin of many tribes and peoples in later times. It would be no exaggeration to say that the era of the Xiongnu was the connecting link between "primitive" cultures and civilization. Many historians believe that the Xiongnu conquests in Inner Asia and then the collapse of the Xiongnu polity gave rise to the so-called "Great Migration of Peoples," as a result of which the Huns appeared in Europe and carried out devastating raids, achieving their apogee under the remarkable leadership of Attila. It is not impossible that precisely the appearance of the Xiongnu accelerated those historical processes which led to the fall of the Western Ro-

man Empire and were the catalyst for the formation in Europe of new social relations which would last for centuries.

Among the best known archaeological assemblages of the Xiongnu are the cemeteries in the mountains of Noyon uul in northern Mongolia (100 km north of the capital of Mongolia, Ulaanbaatar) (Rudenko 1960; Miniaev and Elikhina 2009). These cemeteries are located in three forested valleys: Gudzhirte, Tszurumte and Sutszukte. The main part of the collections of the State Hermitage comes from eight barrows whose construction is roughly similar and most of which date to the first century CE. They had a square mound oriented in the direction of the compass and a square burial pit from 6 to 13 m deep. At the bottom of the burial pit a floor was laid on which a double chamber was constructed with a coffin in the internal chamber. The floors were covered with carpets, the walls draped with textiles. In the corridors were placed the burial inventory. Even though all of the Noyon uul barrows were robbed back in antiquity, a great deal of valuable evidence remained. Archaeological materials from Novon uul provide information about the burial rituals and economy of the Xiongnu, about their resi-

Fig. 16. Polychrome silk, 175 x 46 cm. China, Han Dynasty (206 BCE–220 CE). Noyon uul (northern Mongolia), barrow no. 12. Acquired by the expedition of P. K. Kozlov, excavated by S. A. Teploukhov; transferred in 1934 from the Ethnographic Section of the Russian Museum. Inv. No. MP-1330. (Trever 1932, p. 35, Pl. 15)



Fig. 17. Textile fragment. Embroidered silk. 38 x 26 cm. China, Han Dynasty (206 BCE–220 CE). Noyon uul (northern Mongolia), Barrow No. 6. Acquired by the expedition of P. K. Kozlov, excavated by S. A. Teploukhov; transferred in 1934 from the Ethnographic Section of the Russian Museum. Inv. No. MP-1665.

dences and domestic furnishings, about their clothing and adornments, about the techniques used in processing of various materials, about their weapons and military affairs, about their pictorial art, beliefs and international relations.

The finds from Noyon uul are masterworks of the ancient craftsmen which all specialists agree belonged to the Xiongnu "elites." Of the greatest interest are the textiles, which are distinguished by a variety of ornament and techniques, and the felt carpet. The Noyon uul collection contains eighteen types of polychrome textiles (Fig. 16), seven types of damasked textiles and sixteen types of embroideries (Fig. 17), which, taken together, emphasize the importance of connections with China. The Hermitage exhibit includes objects of daily life, parts of a wheeled vehicle, fragments of a loom, various decorations made of silver, gold and jade, lacquered cups, fragments of a casket and a number of other items. Many of them are Chinese, but there also are objects produced locally. The exhibit includes clothing sewn by the Xiongnu themselves that was suited to the nomadic way of life. A woolen hanging suggests a connection between the Xiongnu and Bactria.



The noted scholar of the Transbaikal region, Iulian D. Tal'ko-Gryntsevich, made the pioneering discovery in 1896 of Xiongnu archaeological monuments in Russia near the city of Kiakhta. Now Xiongnu archaeology is being actively pursued by scholars from various countries. The excavations of the Noyon uul barrows are connected with the name of Petr K. Kozlov (1863-1935), a noted Russian explorer of Inner Asia and student of Nikolai M. Przheval'skii's (1839-88). Following an accidental meeting with Przheval'skii in 1882 he received an invitation to participate in the Fourth Central Asian Expedition. To do this Kozlov had to enroll as a volunteer in the army, since Przheval'skii staffed his expedition entirely with soldiers. From 1883 to 1926 Kozlov participated in six large expeditions to Mongolia, Western and Northern China and Eastern Tibet, three of them under his leadership.

His final expedition to in 1923–26 was unable to meet its primary goal of exploration in Tibet. Political intrigues made it difficult for him even to leave Urga (today's Ulaanbaatar). Forced to concentrate on the study of Mongolia, Kozlov decided to excavate the barrows of the Xiongnu elite in the mountains at Noyon uul. The opening of the tombs resulted in new scientific discoveries of world importance. In all of the cemeteries, the expedition counted 212 barrows, of which they excavated eight. The barrows were excavated under the supervision of Sergei A. Kondrat'ev, except for one which was studied by Sergei A. Teploukhov. Evaluating the results of the expedition, Kozlov wrote: "In the Hentei Mountains of northern Mongolia we excavated and studied two-



thousand-year-old, deeply buried graves, the tombs of the Huns. Specialists consider them to be among the most valuable of the archaeological monuments discovered in the first third of the 20th century."

After the Xiongnu various people occupied the territory of today's Mongolia: the Xianbei, Toba, Juan-Juan, Turks, Uighurs, Khitans, Kyrgyz. Over the centuries various cultures, languages and religions succeeded one another and interacted there. The collection of archaeological monuments of Mongolia in the State Hermitage is varied, encompasses the period from the first centuries CE through the middle of the 14th century, and contains exhibits relating to the cultures of many of these peoples. Among the objects from the Turk period, the most interesting is a stone head with a runic inscription dated to the 6th-8th centuries which has not yet been deciphered and translated (Fig. 18). It is unique, since in Mongolia only one similar sculpture has been preserved that has a runic inscription. The exhibit includes several objects of daily life and weaponry: arrowheads, a helmet, a fragment of armor scales. That kind of armor, both for soldiers and for horses, was widespread among various peoples across all of Inner Asia.

Part of the exhibits is dedicated to the written culture of the Mongols embodied in historical monuments. Mongolian writing appeared at the beginning of the 13th century, borrowed from the Uighurs and going back through Sogdian to Aramaic. In 1206 Chinggis Khan (1165–1227) was proclaimed Khan over all Mongolia, thus establishing the most powerful nomadic empire in the world, in which one of

the first tasks was to create a system of writing and introduce laws. Among the earliest monuments of mongolian writing is the "Chinggis" stone (Fig. 19), whose inscription mentions Chinggis Khan by name. The stone was found at the beginning of the 19th century in the settlement of Khirkhira in southern Siberia.

Fig. 18. Head of a Turk with a runic inscription. Granite. H.: 43 cm. Turkic kaghanate in the territory of Mongolia, 7th -8th centuries. Inv. No. MP-4195.

Fig. 19. The "Chinggis" stone. Granite. 210.5 x 66 x 21.5 cm. ca. 1224/5. Found near Khirkira in Transbaikalia in the beginning of the 19th century. Brought to St. Petersburg in 1829; transferred in 1936 from the Asiatic Museum of the Academy of Sciences. Inv. No. 5M-728. The inscription translates as: "When, after the conquest of the Sartaul people, Chinggis Khan assembled the noyans of all the Mongol ulus in the place called Bukha-Sujihai, Yesungke shot an arrow 335 sazhens." (http://www.hermitagemuseum.org/html_En/12/b2003/hm12_3_1_5.html; Dschingis Khan 2005, p. 27)







Figs. 20, 21a-b. Two rectangular paizas. Cast silver with incised inscriptions and gilding. 30 x 9; 29.5 x 8.8 cm. Mongol Yuan Dynasty (1279-1368), last third of 13th century. 1) found in Minusinsk district of Enisei guberniia, 1845; 2) (recto and verso shown), found at village of Niuki, lower Selenga River, western Transbaikalia, 1853. Inv. Nos. 5M-1134, 1121. (Smirnov 1909, Figs. 31-32; 29-30; Kramarovskii et al. 2000, pp. 110, 209-10; Dschingis Khan 2005, pp. 27, 29). The identical inscriptions read: "By the power of Eternal Heaven, let the name of the Khan be revered. He who does not show respect shall be guilty and die."

These territories in the 13th century first belonged to the elder brother of Chinggis Khan, Khasar (1164?–1213?) and then to his heirs. They then became part of the ulus of Jöchi, the oldest son of Chinggis.

Among the other examples of Mongolian writing are fragments of a 14th-cen-

tury birchbark manuscript found on the Volga River. An iron and two silver *paizas* (Figs. 20, 21a-b, 22), Mongol passports or credentials of the 13th-14th centuries, employ the square writing which was used for official documents in the period of the Yuan Dynasty (1279–1368). Not only subjects of the empire but foreigners as well might possess such paizas — Marco Polo mentions them in his will. The square script was invented in 1269 by the 'Phags-pa lama (1235–80), the mentor of Khan Khubilai (1215–94). Inscriptions in the square script are also found on Yuan Dynasty paper money. Other paizas have inscriptions in Chinese, indicating that they were made for use in Yuan China.

The exhibit illustrates the material culture from the town of Karakorum, the ancient capital of Mongolia (1221–64), brought back by the archaeological expedition of Sergei V. Kiselev (1905–62) which worked there in 1948–49 (Kiselev et al. 1965; for more recent excavations, *Dschingis Khan* 2005, pp. 127–95). These

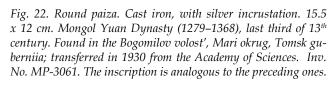






Fig. 23. Bowl. Thickly glazed Blue Ware (Jun Ware). D.: 23 cm. China, 12th-13th centuries, Song period (960-1279). Karakorum. Acquired by the expedition of S. V. Kiselev 1948-49; transferred in 1963 from the USSR Academy of Sciences Institute of Archaeology. Inv. No. MP-3131. (Kiselev et al. 1965, p. 220, Fig. 122.1)

objects are evidence of the relatively high level of urban culture of the Mongols in the 13th century. While Karakorum was a Mongol city, the capital of a nomadic empire, it was created in all probability under the influence of Uighur and Chinese cultures. A significant part of the finds originate in China and Korea, al-

though objects produced locally

are also represented.

Fig. 24. Mirror. Cast bronze. D.: 15 cm. Korea: Koryo Dynasty (935-1392), 13th century. Karakorum, the capital of the Mongol Empire 1221-64. Acquired by the expedition of S. V. Kiselev 1948-49; transferred in 1963 from the USSR Academy of Sciences Institute of Archaeology. Inv. No. MP-3143. (Kiselev et al. 1965, p. 283)

Many envoys from all over the world traveled to the Mongol court. Travelers such as the Flemish Franciscan monk William of Rubruck and the Persian official and historian 'Ata-malik Juvayni left descriptions of Karakorum. Archaeological finds confirm that Karakorum was a cosmopolitan town. It was especially famous for its palace, in front of which was erected a silver fountain-tree, from which flowed grape wine, kumiss, mead and rice wine. The city had twelve temples (Buddhist and Daoist), two mosques and one Nestorian Christian church; it is often cited as an example of Mongol religious tolerance. Most of the Mongol khans never completely abandoned their ancestral shamanism, although at times they supported Buddhism and several of them married Christians. The exhibit displays a number of objects of daily life, fragments of murals from a Buddhist temple, dishes, and ornaments. While some of the objects were made in Karakorum by craftsmen the Mongols conscripted, others were imported. Chinese master craftsmen were famous for their ceramics, which predominate among those found at Karakorum (Fig. 23), but represented as well is the work of Korean craftsmen (Fig. 24).

The city suffered from frequent raids, destruction and fires. It lost its political significance already be-







Figs. 25, 26. Roof tile caps. Glazed pottery. D.: 12 cm; 22 x 12 cm. Mongolia, 14th century. Kondui settlement site, Southern Siberia. Acquired by expedition of S. V. Kiselev in 1957-58; transferred in 1963 from the USSR Academy of Sciences Institute of Archaeology. Inv. Nos. MP-3069, 3070. (Kiselev et al. 1965, pp. 350-52)

fore the end of the 13th century, and at the end of the 14th century was burned and completely destroyed. In 1586 on the location of the ancient capital Abatai-khan (1554-88) erected Erdeni Zuu, today the oldest extant Buddhist monastery in Mongolia.

Architectural fragments of the 14th century analogous to those from Karakorum come from Kondui, located on the territory of today's Chita region (Figs. 25, 26; Color Plate XVIa). This remote site of what was probably a palace of one of the Chingizids was excavated by Kiselev's expedition in 1957 (Kiselev et al. 1965, pp. 325-69).



Fig. 27. The Medicine Buddha (Bhaiṣajyaguru; Mong.: Otochi). Cast bronze, gilded and engraved. H.: 29 cm. Mongolia, 18th century. School of Zanabazar. Transferred in 1934 from the Ethnographic Section of the Russian Museum; ex-Coll. of E. E. Ukhtomskii. Inv. No. Y-529.

At the end of the 17th century in connection with the conquest of the territory of Mongolia, the Manchus inaugurated

a new phase in the spread of Tibetan Buddhism. A substantial role in this process was played by the head of the Buddhist religious establishment, the first Bogdo-gegen Zanabazar (1635-1723) who was also a remarkable sculptor and a lama. After his death his pupils continued the work, using his casting moulds. The Hermitage has one of Zanabazar's own creations, which is in the exhibit, and several sculptures attributed to his school (Fig. 27; Color Plate XVIb), some of which are also on display. By the second half of the 18th century, however, practically no sculpture was being made in Mongolia. Instead it was imported from China, where it was mass produced. Many Chinese master craftsmen also worked in Mongolia itself. In 1701 in Inner Mongolia at Dolonnor, a summer residence was erected for a Beijing lama who headed the Buddhist religious establishment in China. Mass production of Buddhist sculpture began there using the repoussé technique. The Hermitage collection includes brilliant examples of the Dolonnor style, among them statues of Maitreya and Ushnisha Sitātapatrā (Thousand Armed Goddess of the Great White Umbrella), and a phurba ritual dagger (Fig. 28). The best of these are on display.



Fig. 28. Phurba (ritual dagger). Brass, repoussé and cast, inlaid with turquoise incrustation, chasing. Inner Mongolia, 18th-19th centuries. H.: 104 cm. Acquired in 1934; ex-Coll. of P. K. Kozlov. Inv. No. KO-278.

Mongolian painting is rather poorly represented in the collection of the Hermitage, but the thangkas there illustrate important features of local iconography. Among them are depictions of the Bogdogegen, the war god Dalkha, the White Elder, Geser, and the goddess of wealth Bahaputra Pratisara, who came to be venerated in Mongolia and was also considered to be the bringer of children. Buddhism spread from Mongolia to Buriatia and Kalmykia; thus the exhibit includes Buriat thangkas. A unique silver sculpture in the repoussé technique was presented by Buriat clerics to the tsar on the occasion of the 300th anniversary of the Romanov Dynasty (Fig. 29). It is one of several such gifts on display.

Fig. 29. Buddha Amitāyus. Silver, repoussé and cast. H.: 48 cm. Buriatia, early 20th century. From the private rooms of Emperor Nicholas II in the Winter Palace, a gift from the Buddhist clergy for the celebration of the Romanov Dynasty's 300th anniversary. Inv. KO-384.



Silver was highly valued in Mongolia and Buriatia, where it was used to cast seals for Mongolian officals and in the making of women's adornments, belt accoutrements and women's headdresses. Small bronze sculptures of Chinese and Mongolian craftsmanship and objects of nomadic daily life — belt accoutrements including a knife and chopsticks, cups and pouches for them, belts, *gau*-reliquaries (portable shrine boxes) — and also helmets of the Mongolian elite are on display.

The gallery of the art of Tibet reflects the complex nature of the culture, which arose on the intersection of the cultures of India, China and Inner Asia. Tibetan Buddhist art is international, since it spread among the Chinese, Tanguts, Mongols, Buriats, Kalmyks, Tuvans, Bhutanese, and the inhabitants of Sikkim, Nepal, Mustang and Ladakh. Tibetan art embodies a refined spiritual world of Buddhist culture, a combination of symbols and signs which are well understud by every adept. Buddhism began to spread in Tibet in 7th century, and up until the middle of the 20th century there was no secular art at all. In spiritual practices the adept identified himself with the divinity to such a degree that he could interact with him and receive counsel. The divinity, the color of its body, its pose, gestures and adornment all had a specific meaning well understood by each adept and pre-determined by iconographic and iconometric rules and also by the structure of the Buddhist pantheon. All the monuments (painting, sculpture and ritual objects) were made in monasteries which were the centers of the spiritual culture.

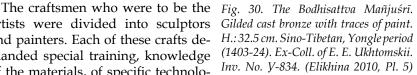
artists were divided into sculptors and painters. Each of these crafts demanded special training, knowledge of the materials, of specific technologies and of the canons. The "lost" wax technique was used for making bronze sculpture. Artists observed strictly iconographic and iconometric canons in which were described the rules for the depiction of divinities and their size. In the iconography of Tibetan Buddhism the position of hands and the pose of the divinity also had particular meanings. The pantheon of Buddhist divinities was quite broad. It included buddhas, angry and benevolent deities, idams (protectors) and images of the outstanding representatives of the Buddhist clergy.

The core of the Hermitage's holdings of Tibetan art are the collections assembled by Prince Esper E. Uktomskii (1861–1921), the explorer Petr K. Kozlov (1863–1935), Aleksandr K. Fabergé (1876–1951, the second son of the famous jeweler), and the orientalists Iurii N. Rerikh (1902–60) and Boris I. Pankratov (1892–1979).

Ukhtomskii was a Russian noble, diplomat, publicist, poet, translator and collector. The family of the princes Ukhtomskii was a branch of the Riurikid house, including in the ancestors of the female line the founder of Moscow, Prince Iurii Dolgorukii, and Khan Batu, the first ruler of the Golden Horde. The father, Esper Alekseevich (1834 or 1832-1885) was a naval officer, who participated in the defense of Sevastopol' and circumnavigated the globe in the corvette Vitiaz'. He sailed on the frigate Askol'd to Nagasaki, was a Captain First Rank (1870), from 1881 an assistant naval attaché in Austria and Italy, and a founder of the Society of Russian Oriental Steamshipping which had routes to India and China. His mother, Jenny Alekseevna (née Grieg, 1835-70) was the granddaughter of the admiral of the era of Catherine the Great, the hero of the battle of Chesme, Samuil K. Grieg.

E. E. Ukhtomskii graduated from the Historical-Philological Faculty of St. Petersburg University, traveled extensively, and on several occasions visited Kalmykia, Buriatia, Mongolia and China. In 1890–91 he accompanied the heir apparent Tsarevich Nikolai Aleksandrovich to the Orient, a trip which he described in detail in his writings. Since he was a cham-

berlain at the Imperial court, he had extensive connections and suppliers in those regions. Several times in the period from 1886 through 1890 he was in the East. He visited "Buddhist monasteries in Transbaikalia, traveled through Mongolia from Kiakhta to the Great Wall, was in Buddhist sanctuaries in Peking," and published descriptions of his travels in Russkii vestnik. Throughout his life, in studying the culture of Inner Asia, Ukhtomskii strove to achieve significant political, economic and cultural rapprochement between Russia and the East. To this end were devoted his published works, his travels and the collection he assembled, which was considered the most valuable collection of works of Buddhist art in Russia prior to the Revolution of 1917. It contains unique and stylistically and





chronologically varied monuments (e.g., Fig. 30; Color Plate XVIc), which provide a most complete picture of Buddhist art and the Buddhist pantheon. Ukhtomskii's collection initially was in the Ethnographic Section of the State Russian Museum, where its first curators were the collector himself and his son Dii Esperovich (1886–1918). In 1934 part of the collection, some 2000 items, was transferred to the Oriental Department of the State Hermitage, where it is housed today.

Bronze Buddhist sculpture of Tibet is rather well represented in the Hermitage. In the center of the gallery is a sculpture mandala of the Medicine Buddha, Bhaiṣajyaguru, a unique work which has no analogue in museums in Europe and America (Thurman and Rhie 1991, No. 134). The mandala consists of fifteen small statues and representes a cosmic model of the universe in the center of which is the Buddha and which is oriented toward the directions of the compass in accord with iconographic canons.

Today Tibetan craftsmen still make Buddhist objects according to the medieval canons, and, as earlier, the identities of the artists and sculptors remain anonymous. Overall Tibetan art expresses the idea of love and compassion. A contemporary Tibetan lama, Tartang Tulku Rinpoche, has written: "In order to appreciate Tibetan art, it is necessary to take one's own measure, to comprehend the fact of one's existence and the quality of one's awareness—that is, everything that is manifest in oneself. Tibetan art is part of this miraculous process of discovery-manifestation, but is neither commentary on it nor an attempt to represent an alternative. If someone completely understands this art, that then means that he may be deemed a Buddha..." (Tartang Tulku Rinpoche 1994, p. 143).

The re-opening of the Hermitage galleries of Central Asian art is a significant event in the cultural life of St. Petersburg and offers visitors an additional incentive to visit one of the world's great museums.

About the author

Julia (Iuliia Igorevna) Elikhina graduated from the Department of Mongolian and Tibetan Philology in the Oriental Faculty of St. Petersburg State University. Her *kandidat* dissertation in history (PhD equivalent) was expanded into a recent book (in Russian) on the cults of the main bodhisattvas and their terrestrial reincarnations in the history and art of Tibetan Buddhism. Since 1988 she has been on the staff of the State Hermitage Museum where she is Curator of Tibetan, Mongolian and Khotanese collections (including archeological materials from Noyon uul, Karakorum, etc.). She is the author of more than 50 articles. In addition to her monograph on manifestations of Bodhi-

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Notes

- 1. In the captioning of the images, selected references to the earlier publication and description of the objects have been provided, where one can often find full descriptions. No attempt has been made here to provide a complete bibliography of all previous publications. In a number of instances, the dates given in the publications vary and may differ from the ones provided here. -ed.
- 2. The plaque Stein found (Pl. LXIII; British Museum no. 1907.1111.73), also from Dandan-Uiliq, depicts the story of the silk princess in horizontal (landscape) format; see http://www.britishmuseum.org/research/collection_online/collection_object_details.aspx?objectId=6516&partId=1&searchText=Dandan+Uiliq&page=1. The reverse of

- a different panel (Stein's Pl. LXI) depicts what likely is the god of silk (not a Bodhisattva, as Stein suggests; cf. Williams 1973, p. 150). http://www.britishmuseum.org/research/collection_online/collection_object_details/collection_image_gallery.aspx?assetId=1083980&objectId=6514&partId=1#more-views.
- 3. The pranidhi paintings taken to Berlin are reproduced in A. von Le Coq, Chotscho. Facsimile-Wiedergaben der wichtigeren Funde der Ersten Königlich Preussischen Expedition nach Turfan in Ost-Turkistan (Berlin: Dietrich Reimer, 1913), Pls. 17–29; several are also reproduced in better quality images in Xinjiang shiku: Tulufan Baizikelike shiku 新疆 石窟: 吐鲁番 伯孜克里克 石窟 (Urumqi: Xinjiang renmin chubanshe; Shanghai: Shanghai renmin meishu chubanshe: [1990]), pp. [219–27]. It is not clear which cave might have contained the painting now in the Hermitage, although that might be determined from as yet unpublished expedition reports.

- translated by Daniel C. Waugh

DISTANCE LEARNING AND THE MUSEUM: THE ARTS OF THE ISLAMIC WORLD AT THE METROPOLITAN MUSEUM IN NEW YORK

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Masterpieces from the Department of Islamic Art in The Metropolitan Museum of Art. Ed. Maryam D. Ekhtiar, Priscilla P. Soucek, Sheila R. Canby, and Navina Najat Haidar. New York: The Metropolitan Museum of Art; distributed by Yale University Press, New Haven and London, 2011. xvi + 431 pp. ISBN 978-0-300-17585-1.

Tow that the newly refurbished galleries devoted to the arts of the Islamic world at the Metropolitan Museum and the accompanying book have been available for two years, a conventional review hardly makes sense. As editor of this journal, I had hoped for a review in our previous volume that would have combined observations about both the book and the new galleries, but tragic circumstances (mentioned in my editorial preface to the current volume of this journal) prevented that from happening. In the meantime, Emine Fetvaci (2013) has provided precisely such a review, and, of course, there are other assessments of the new galleries, notably one by David Roxburgh (2012).1 A very nice, 11-minute video showing the new galleries and narrated by curators Sheila Canby and Navina Haidar explains the concept behind the new installation http://www.youtube.com/watch?v=nz-s4ah- wwf8> and certainly encourages a visit.2

My goal here is a bit different from that of such distinguished specialists on Islamic art: how might one who is not a specialist learn about the subject if, like this reviewer, he or she has not yet had the opportunity to visit the Met? Part of the answer, of course, could lie in exploring resources other than the Met. However, the remounting of its famous collection, considered to be one of the most comprehensive in any museum, and the appearance of this book are a good reason to focus primarily on what that one institution provides.

At the outset, one must recognize that Islamic art as a "subject" is so ill defined that any attempt to study "it" is fraught with difficulties. Someone as knowledgeable and thoughtful as the late specialist on Islamic art, Oleg Grabar, grappled seriously with

the question of how to define it and ended up wth an answer that in some ways is too vague to serve as a guide.³ Let's start by reviewing what Grabar had to say in a short essay (1976b) that appeared in conjunction with the opening of the Met's previous installation:

...[I]t is foolish, illogical and historically incorrect to talk of a single Islamic artistic expression. A culture of thirteen centuries which extended from Spain to Indonesia is not now and was not in the past a monolith, and to every generalization there are dozens of exceptions.

He then went on to single out three aspects of "Islamic art" which he found to be distinctive. It is "an art at the service of a society. Practically all ... artistic activities were ... directed to making daily, public or private, life more attractive or more exciting... Islamic art is characerized by an aesthetic deomocratization." Secondly, it was an art "concerned with surface decoration" or "ornamentation," which often emphasized geometry in the designs. Thirdly, it is an art in which "a whole ... subsumes an almost infinite number of parts which are virtually independent of each other," in which there is "a tension between parts and whole." Grabar stressed that it was very difficult to explain in any convincing way the why of these features. At very least it was clear to him that "Islamic" art does not necessarily embody something specific to Islam as a religion, even if religious views and practices contributed in important ways to the formation of the arts of the Islamic world.

Grabar (1976a) reviewed that earlier Met installation, a review which seems to have had an impact on

the thinking underlying the new one by the Met and is worth quoting here:

There are two striking characteristics of any large collection of Islamic art. One is that nearly all items in it have a practical function which does not require the technical elaborations of forms which normally concern the art historian....
[T]he functions involved are always those of daily life: washing, pouring, eating, keeping perfumes, reading, playing chess, sitting, writing. We could conclude that the creative energy involved in Islamic art is an entirely gratuitous addition to the setting of life, a pure pleasure of the senses, whose peculiarity is that it was extended to a far greater number of techniques and social levels than most other traditions.

...[A] second characteristic of a large collection like the Metropolitan's [is]: many objects within it are remarkably alike in technique, size, shape, style and decorative theme. To put it another way, it is as though there are no masterpieces, no monument which emerges as being so superior to others within a comparable series that a qualitative or developmental sequence can easily be built up...

These remarks suggest that the monuments of Islamic art may not really belong in an art museum whose setting detaches them from their purpose....This requirement of a context is important in that the objects lead constantly to the architectural setting in which they could be used. [My emphasis – DW.]

So, what is one to make of a book and collection containing "masterpieces" of an art, which arguably had no masterpieces, objects which perhaps "do not really belong in an art museum." Has the Met risen to the challenges posed by the limitations of museum display? For the viewer and learner, those challenges are all the greater, especially if approaching the subject and the collection at a distance, mediated by the printed page and, importantly, by the museum's online resources, about which I shall comment at length.

The curators at the Met and the authors who have contributed to this book deliberately (perhaps wisely) have avoided committing themselves to any kind of limiting definition of their subject, which in practical terms has been determined first of all by the existence of a curatorial department in the museum. What we have here is arts spread across a huge world in which Islam became either the dominant religion or one of the most important ones, but in which regional variation and the creative adaptation of other artistic traditions produced an art that may share much but also be infinitely varied. The Met's previous installation was pioneering in its attempt to display this diversity and

yet invite the viewer to tease out some of the connecting threads. The new installation seems to maintain that general goal but by its arrangement of the objects and the placement of the galleries vis-à-vis adjoining galleries within the museum, may now invite the viewer to think about other kinds of unifying threads and contextualization not envisaged by the curators several decades ago. As both Fetvaci and Roxburgh have noted with approval, the new galleries do provide a much better architectural "feel" for the context of the art than did the old ones. Clearly there is no single path to understanding and appreciation of this collection, even if one can walk through the galleries in the numbered sequence or read through this book in pretty much the same sequence.

The book is arguably a masterpiece for its genre, which may not in fact have been intended to be read straight through. Repetitive information in often consecutive entries suggests they might have been conceived as separate points of focus, a kind of reference work, especially since one object and the next may in some respects be so different. As Fetvaci has emphasized, the book presents not merely a review of the current state of knowledge regarding the history of the collection and many of its objects but also contains new insights which will be of value even to specialists in the field. One of the important contributions that she notes will be valuable for the specialist is the consistent effort throughout to provide transcriptions of any texts on objects and their translation. So we get the Quranic quotations, the Persian poetry, the felicitations, the craftsmen's credits.

The team of contributors to the volume is a distinguished one, each author given some freedom in how he or she might present the subject. The organization of the material is both chronological and geographical, corresponding both to the organization within the galleries themselves and that in what is currently considered a standard published treatment of Islamic art.4 After opening chapters on the history of the collections and the thinking behind the new installation, the book contains a chapter on the art of the early Caliphates, then switches to regionally focused chapters: Spain, North Africa, Western Mediterranean; Eastern Islamic Lands (9th-14th centuries); Egypt and Syria (10th to 16th centuries); Iran and Central Asia (15th to 19th centuries); the Ottoman court; and finally South Asia (14th to 19th centuries). Each of these chapters covers a lot of ground chronologically; so despite the regional focus, which in any event embraces a lot of "micro-regions," naturally there is substantial variation over time reflecting both internal developments and the assimilation of external influences. Some "Islamic art" indeed was produced not for Muslims but for non-Muslims within Islamic polities or for export; and objects never intended for non-Muslims sometimes were appropriated to non-Islamic uses (e.g., for Christian church vestments).

Each chapter opens with a summary essay that tends to emphasize political history and places at least some of the objects in their historical context. The complexities of political history can defeat most general readers, since so much has to be compressed for such essays. Some of the essays (and the descriptive paragraphs which accompany each individual object) stand out for their ability to focus the reader on that which is really important and interesting. For example, Stefano Carboni opens the section on Egypt and Syria (p. 136) with a concise listing of the features of the art: "symmetry, repetition, overall patterning and abstraction" and then immediately illustrates these points with reference to a single object before proceeding to treat others with reference to the political history. Walter Denny's essays on individual Ottoman objects are gems of insight and contextualization (see, e.g., p. 306, cat. No. 215; p. 311, No. 220), without overloading the reader with the often abstruse detail so favored in art historical writing, including other entries in this book.

All told nearly 300 objects are described in the book, the selection striking for its rich inclusion of manuscript and textiles. The emphasis throughout is on what we might term "luxury items," something that reflects the collecting interests of the wealthy patrons of the Met (and more genereally those who have collected Islamic art). So we do find here some of the most costly and technically most brilliant examples of these arts: "masterpieces" may not be a misnomer, Grabar's observation notwithstanding. From the book alone then, it would be difficult to test his idea about the "democratization" of art, even if arguably many of the objects were produced for urban elites and not just for the rulers and their courts.

The book has exquisite color photographs (the new photography for the book is credited to Anna-Marie Kellen and Katherine Dehab). Ironically, to my mind it is in this realm of illustration that some of the "problems" with the presentation in the book rest. The authors quite appropriately cite analogous examples either in the Met's own collection or in other museums, examples which, however, are not illustrated here. At least this reader would have wished to see some of the most important ones here alongside the Met's "masterpieces." A second drawback of the book's illustration is that in particular for the ceramic dishes, we generally are given only one view, looking straight on at the vessel from above. This flattens the three-dimensional object in ways that can quite distort our appreciation of it. In many cases, it would be important to have side views, not only to show the shape but what is often significant decoration and inscriptions (about which there often is commentary in the descriptive texts).

While there are a few carefully chosen color photographs of Islamic architectural "masterpieces" (the Taj Mahal, the Alhambra....), there is nothing here to place the individual art objects meaningfully into the kind of architectural context which Grabar, rightly, I think, felt to be essential. Verbal description of those settings is here, but without the pictures to go with them, only the already well informed reader will be able to contextualize the objects. To have fragments of architectural decoration (as is true of so many collections of Islamic art) torn from their contexts is to present them in a void. Here are examples to illustrate what I mean.

Many museums have outstanding collections of ceramic tiles created by craftsmen in the Islamic lands. Among those that are most appealing are the lustreware tiles produced under the patronage of the Mongol/Ilkhanid rulers of Iran in the late thirteenth and early fourteenth centuries. A great many of those tiles were torn off the buildings by European collectors in the 19th century. One in the Met's collection (Fig. 1; for examples from other collections, see the image set at



Fig. 1. Lustre-ware tile, dated 1308. probably from the shrine of 'Abd al-Samad in Natanz, Iran. The birds' heads were broken off presumably by an iconoclast. Metropolitan Museum Accession No. 1912.12.44. Source: http://images.metmuseum.org/ CRDImages/is/weblarge/DP221326.jpg>.

the end of this article) came from the shrine of 'Abd al-Samad in Natanz, Iran, a building which is still remarkable for its largely extant tile decoration on the façade and the *mugarnas* (stalactite) dome over the tomb chamber (Figs 2, 3, next page). What one sees today on the lower part of the walls of that chamber though is only the plaster outlines of where the colored tiles were (Fig. 4). The book provides us with only a verbal description of this setting (p. 120, No. 77). Whether one might go as far as to wish for a "reconstruction" of that dado, the lower wall decoration of the tomb chamber, is another matter. Theoretically this would be easy enough to do by electronically cutting and pasting images of the appropriate tiles "back in place." We could be reasonably confident about the row of inscriptional tiles such as that in the Met,







The Ilkhanid shrine of 'Abd al-Samid at Natanz, end of first decade of the 14^{th} century (Photos © 2010 Daniel C. Waugh)

Fig. 2 (upper left). Main entrance portal. Fig. 3 (upper right). Muqarnas dome over tomb chamber. Fig. 4 (above). Present state of dado in tomb chamber with remnants of turquoise cross-shaped tiles and imprints of the now missing remaining tiles. The inscription band ran along the top. Fig. 5 (left). Tile panel of the type and approximate date and provenance of the Natanz shrine's tiles. In the collection of the State Hermitage Museum, St. Petersburg, formerly in the Museum of the A. L. Shteiglitz School of Technical Drawing, which also owned the inscription tiles from the Natanz shrine reproduced at the end of this article.

placed at eye level, even if there are gaps so that the Quranic texts are now fragmented. The exact identification of the smaller tiles that would have formed the star and cross pattern below it is a bit more problematic. Figure 5 here at least conveys a sense of what that array might have resembled.

The Ottoman craftsmen, especially those of Iznik in the 16th century, produced brilliant ceramics, combining motifs from Islamic tradition with motifs borrowed from, inter alia, Chinese ceramics. Iznik tiles covered large swatches of the walls of Ottoman palaces and mosques. In his description (p. 308, No. 217) of one such tile decorated with stylized leaves and flowers, Denny notes that a whole group with exactly this

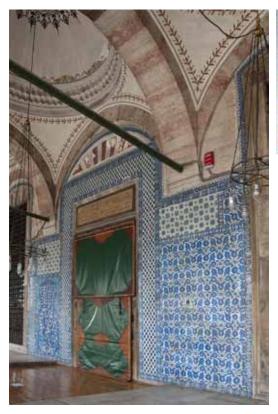




Fig. 6. The outside wall of the Rustem Pasha mosque, Intanbul, built in 1561, the Iznik tile panel on the right made up of tiles with the same design as that in the Metropolitan Museum collection. Photo © 2010 Daniel C. Waugh.

Fig. 7. Ceramic tile with Saz leaves. Metropolitan Museum Accession No. 1978.350. Source: http://images.met-museum.org/CRDImages/is/web-large/DP212534.jpg.



Fig 9 (above right). Muqarnas over the entrance portal of the anonymous mausoleum at Shah-i Zinda dated 1360/61.

Fig. 10 (right). Interior of Mausoleum of Shadi Mulk, dated 1372, showing muqarnas in the squinch of the transition zone to the dome. Photos © 1979 Daniel C. Waugh.



pattern can be seen on the exterior wall of the Rustem Pasha mosque in Istanbul, built in 1561. Interesting indeed, and why not show it so we can actually see how those tiles were used? (Figs. 6, 7)

My third example concerns *muqarnas*, defined here (p. 192) as "the honeycomb-like decoration that often adorns the interior curves of domes, niches, squiches, *iwans*, cornices and portals of Islamic buildings." Indeed, it is one of the most distinctive features of a broad array of the arts in the Islamic world, one which Grabar chose to illustrate his point about the whole subsuming its many parts (see, e.g., Figs. 2, 3 above). Nowhere does the book provide a clear illustration



Fig. Glazed ceramic tile of a muqarnas, 14th century, probably from Samarqand. Note that this image, from the Metropolitan Museum website, preserves the shadows created by the curved shape of the upper part. The image in the Masterpieces book has brightened the shadow, leaving an impression of a much flatter shape. Metropolitan Museum Accession No. 1920.20.120.189. Source: <http://images.metmuseum.org/CRDImages/is/ web-large/DP217218.jpg>.

of a *muqarnas* (the closest, from a distance and at a wrong angle, is in the photo of the Shaykh Lutfallah Mosque in Isfahan on p. 170, neither identified or explained). What we have is one "tile" (cat. No. 130), photographed here "head-on" and thus providing little sense of its three-dimensionality (Fig. 8). As the accompanying essay correctly explains, is undoubtedly a component of a *muqarnas*, very possibly from Samarqand and similar to those still preserved in the 14th-century Timurid mausolea of the Shah-i Zinda complex. Indeed, these could have provided perfect illustrations of this quintessentially "Islamic" feature of architectural decoration (Figs. 9, 10).

Certainly the readers of the book will wish to visit the museum, but short of or in advance of that opportunity will want to visit its website. The Met has pioneered in the effective use of the Internet to present its collections and provide an educational resource of endless potential (and already significant achievement). Anyone interested in art and culture can easily find guidance (or get lost surfing) in the museum's wonderful Heilbrunn Timeline of Art History, which links to all kinds of combinations of works of art by region, period, theme, dynasty, and more. Stefano Carboni (one of the contributors to the volume reviewed here and for some time a Met curator) told me several years ago that the museum's curators would discuss on a weekly basis the website and the timeline in order to plan its further development. Do other museums have this same level of commitment? Some certainly have moved in that direction, and at the very least full collections are now going on line.

Via the Timeline, one can put together a sequence of good overview essays that cover the same ground as the ones in this volume but arguably are more accessible in that they have been written primarily with the general audience in mind. When using the website, one can save links to favorites into one's "own" collection. Of course those who want ever more can grouse about what is missing in some of these generally very informative pages. For example, the page on "Takht-i Sulayman and Tile Work in the Ilkhanid Period," which deals with the great Ilkhanid palace in the hills of northwestern Iran, makes no mention of the pre-Mongol importance of the site, which surely has to have had some bearing on the Mongol decision to build there. The few photos are inadequate, and some explanation would be in order that some of what one sees in them has to be pre-Islamic. The web pages often contain a few bibliographic recommendations, one part of them offering links to pdf files of articles in the Met's Bulletin, links that, when I tried several of them, were all dead, a problem easily fixed.

Apart from all the riches of what is connected to the Timeline, the website now offers the opportunity to explore each and every gallery in the museum. For the Islamic collection, one can find links to a page which provides an overview of its history within the museum and archival photos of the displays (most also reproduced in one of the introductory essays to this book). The pages for each gallery have one or two panoramic photos of the installation as a header and then offer a set of links to a great many (but clearly not yet all) of the objects on view within that gallery. I think this is work in progress, where eventually the coverage will be complete. Depending on the particular room, to date this may mean information for anywhere from a few dozen to more than 100 objects. For each object there is a separate page, often containing multiple images (including, for example, the side and bottom views of the ceramic dishes, or closeup details), formal descriptive data and in the majority of cases a short descriptive paragraph focusing narrowly on the object itself. Those paragraphs are no substitute for the richer and longer ones contained in the book. In some cases — a noteworthy example the scientific manuscript, *Kitab suwar al-kawakib al-thabita* (Book of the Images of the Fixed Stars) of al-Sufi `Abd al-Rahman al-Sufi (903–986 CE) — the additional images beg for their own descriptive text. (Suppose the user wanted to know what all the other constellations are that are depicted in the al-Sufi manuscript?)

Unlike the book, the gallery pages do offer the opportunity to view more than *Masterpieces*. At least in the case of the Iran and Central Asia gallery 453, the objects on display include a lot of those items of daily life which Grabar would have appreciated for contextualization: spindle whorls, seal impressions, buttons, coins, a lid.... For many of these, there is as yet no descriptive text, leaving the user of the website to wonder what to make of them. Moreover, what these pages do not yet do is convey a sense of the way in which the objects are combined and juxtaposed in the actual displays. Roxburgh noted, for example, that certain cases grouped objects by color in ways that would be thought-provoking.

The main images for the objects include an excellent downloadable color photo of sufficient size and resolution so that it could readily be used for educational presentations (the Met specifically permits copying for such purposes, providing that a reference to the URL is provided). Those wishing to enlarge the images to see fine detail can bring them up in a viewer only available on the website that enables zooming way in for closeups that are remarkable for their clarity. This feature alone emphasizes how the website complements the book, since, despite the quality of the images in the latter, in too many cases (for example with miniature paintings), the reader simply cannot make out easily the details.

The gallery web pages for each object also offer links via thumbnailed images to analogous objects in the collection, or even, in a few instances, to analogous objects in other museums' collections. Yet there is much to be done here, for even within the museum's own collection, not all the appropriate links are in place (for example, the ceramics painted in the color-rich technique known as *mina'i*). Possibly this is a result of features by which the software selects only certain categories of key words. One would hope to see eventually much more of this kind of cross-referencing, especially to objects in other museums' collections, since that then would fill a lacuna in the book.

Finally, the gallery pages provide links to related material on the Met's website, primarily that linked via the Timeline: the general essays, specific topical essays, or simply the relevant section of the timeline itself. In some instances the general essays on a particular period or region of Islamic art include a few photographs of the architecture. Here though the potential is not yet fully realized, the photos often being of indifferent quality and not necessarily highlighting the aspects of the buildings which should be of greatest interest.

Even though there is still much to be done to convey architectural context, as reviewers have noted, the museum certainly has made a serious effort to provide what it can. One whole gallery (461) is the "Damascus room," a largely early 18th century room dismantled in its entirely from a wealthy family's urban dwelling and here reconstructed (with a lot of significant restoration in conjunction with the remounting of the exhibition), providing the viewer with a stunning idea of at least one architectural interior. What we get here is the architecture, the inscriptions on the walls, the displays in the cabinets of objects a family might have collected, divans, but otherwise no sense of the "draped universe of Islam," in Sheila Blair's felicitous phrase. The website allows one to view a lot of closeup detail, and there is a link to a brief schematic video leading a person from outside on the street into and through a house of the type where such a room would have been found. There is, however, no link to the video footage of the symposium held at the Met on the Damascus Room, which would be very informative for those wishing in-depth information.

Much has been made of the "Moroccan court" (gallery 456) which the web page describes as follows: "based on Moroccan late medieval design, [it] was constructed by craftsmen from Fez as an intimate interior court. ... [T]his area of repose and quiet reflection underscores the living heritage of the Islamic world. Here, original Nasrid columns define the patio space, and dadoes of custom-made glazed tiles in a traditional pattern frame a fountain that brings the sound of falling water to the galleries." In the other galleries there has also been an attempt with color selection, lighting, the placement of objects (for example, hanging of mosque lamps), choice of floor materials, and in one case installation of an authentic set of ceiling panels, to convey a feel for the context in which objects might have functioned.

David Roxburgh noted with a sense of relief, that the museum so far has made a conscious decision within the galleries to let the art speak for itself and not provide a lot of aids such as video displays. Not having used the audio guide one could get at the museum for the Islamic galleries, I cannot comment on its content, though if other museums' guides are any indication, it is likely that more can be learned about the selected objects from that narration than from the printed captions (or, one imagines, from the current short paragraphs on the website).⁵ One might hope that the informative texts of the published catalog would all be made available for listeners or those who might like to read them on-line.

I would not venture to outline here a specific path for the learner who might access the Met's collection only from the website or from it in combination with the printed catalog. There is a great deal to be said for serendipity. And the fact is that, as with any "comprehensive" collection of art, the learner is not going to get a quick fix. What the Met has provided is a rich array of resources to be sampled, savored and revisited. As the curators in that short introductory video to the new installation emphasized, there is much here — not the least being the exquisite beauty of the objects — to excite the imagination, invite exploration in depth, and, one might think, fundamentally change pre-conceptions the learner might have had concerning the cultures of the Islamic world.

References

Fetvaci 2013

Emine Fetvaci, rev. of Maryam D. Ekhtiyar et al., *Masterpieces...* and *The Art of the Arab Lands, Turkey, Iran, Central Asia, and Later South Asia* [the exhibition at the Metropolitan Museum], in *caa.reviews*, posted on-line (restricted access) to the College Art Association website, 13 October 2013 http://www.caareviews.org/reviews/2183, accessed 13 December 2013.

Grabar 1976a

Oleg Grabar. "An Art of the Object." In his *Islamic Art and Beyond. Vol. III. Constructing the Study of Islamic Art.* Hampshire: Ashgate Publishing, 2006, pp. 13–29 (first published in *Artforum* 14 (1976): 36–43). Available on-line at: https://archnet.org/library/pubdownloader/pdf/10174/doc/DPC1739.pdf, accessed 14 December 2013.

Grabar 1976b

_____. "What Makes Islamic Art Islamic?" In his *Islamic Art and Beyond. Vol. III. Constructing the Study of Islamic Art.* Hampshire: Ashgate Publishing, 2006, pp. 247–51 (first published in *Art and Archaeology Research Papers* 9 (1976): 1–3). Available on-line at <ttps://archnet.org/library/pubdownloader/pdf/10190/doc/DPC1755.pdf>, accessed 14 December 2013.

Roxburgh 2012

David Roxburgh, rev. of The New Galleries for "The art of the Arab Lands, Turkey, Iran, Central Asia and Later South Asia," The Metropolitan Museum of Art, New York, in: *Art Bulletin* 94/4 (2012): 641–44.

Notes

- 1. I have not seen the review of the Met's new installation by Nasser Rabbat ("What's in a Name? The New 'Islamic Art' Galleries at the Met," *Artforum* 50, no. 8 [January 2012]: 75–78) cited by Fetvaci. Unlike her and Roxburgh, Rabbat was critical of the Met's attempt to redesign the galleries to provide a sense of the architectural contexts within which the works on display might originally have been used.
- 2. The Met also has placed on YouTube several videos of full lectures and symposia presented in the museum's auditorium in conjunction with the reopening of the Islamic galleries. These are full length, filmed from the back of the auditorium with its large screen for the projections. The ones I have found so far (there may be others) include: A lecture by Maryam Ekhtiar entitled "Thematic Displays and Interconnections in the Islamic Art Galleries" ; a lecture by Christian Gruber, "The Praiseworthy One: Devotional Images of the Prophet Muhammad in Islamic Tradition" http://www. voutube.com/watch?v=sb5dvS1hWJs>; a symposium on the Damascus Room (gallery 461) http://www.youtube. com/watch?v=y9-2QteooMY>; a symposium on carpets http://www.youtube.com/watch?v=ELwoMPTsZ9I; a symposium on sculpture http://www.youtube.com/ watch?v=UDk0t8bV5wQ>; a symposium on Nishapur (where the Museum carried out excavations; gallery 452) http://www.youtube.com/watch?v=fPIpjcGAkXc.
- 3. In addition to the work cited below, see, for example, Oleg Grabar, *The Formation of Islamic Art*, rev. and enlarged

- ed. (New Haven; London: Yale Univ. Pr., 1987; original ed. 1973), esp. Ch. 1; idem, "Reflections on the Study of Islamic Art," *Muqarnas* 1 (1983): 1-14; and his challenging *The Mediation of Ornament* (Princeton: Princeton Univ. Pr., 1992).
- 4. Those who want a comprehensive treatment of Islamic art by some of the best specialists, in books which illustrate richly the architectural settings and objects drawn from a wide range of collections, might start with the two volumes in the well-known Pelican History of Art, now being published by Yale University Press: Richard Ettinghausen, Oleg Grabar and Marilyn Jenkins-Madina, *Islamic Art and Architecture 650–1250* (New Haven; London, 2001, a substantially rewritten and expanded edition of the earlier Penguin volume that appeared in 1987); Sheila S. Blair and Jonathan M. Bloom, *The Art and Architecture of Islam 1250–1800* (New Haven; London, 1995 [first published 1994]).
- 5. In this connection, it is worth quoting Fetvaci's conclusion:

The catalogue and the reinstallation together present the art and architecture of the Islamic world in much greater complexity than in the former installation, illuminating the multiplicity of visual traditions and the changes they went through over time. For the educated viewer, or one who visits the exhibition after having read the catalogue, these lessons are quite clear. One cannot help but wish that they had been made even more explicit, with further emphasis on use and meanings, by more detailed didactic materials (such as extended wall labels) in the galleries themselves.

Appendix

Inscription tiles from the shrine of 'Abd al-Samad at Natanz

Since I have made a point above about the desirability of depicting analogous examples from other collections, it seemed appropriate to collect here a good many of the lustre-ware inscription tiles that are generally assumed to have been removed in the 19th century from the shrine at Natanz. Regarding that removal of Ilkhanid tile work, see the article by Tomoko Masuya, "Persian Tiles on European Walls: Collecting Ilkhanid Tiles in Nineteenth-Century Europe," *Ars Orientalis* 30 (2000): 39–54, here esp. 41–44. While Matsuya indicates more than 40 tiles in the collection of the Victoria and Albert Museum in London were recorded as coming from Natanz, the only one I have found in their online collection database which clearly belongs in the sequence with those below is Accession No. 1485-1876, an inscription tile with the distinctive images of birds whose heads have been defaced. The the V & A database image set is not quite complete; but a great many tiles in that acquisition batch of 1876 are shown, and they are of a different design. Since the tiles from Natanz were dispersed and many lost, one should not expect adjoining tiles in the sequences below to connect and provide an integral inscription. They are depicted in the order in which they are displayed in the respective museums. I have not attempted here to provide full captioning data, but merely indicate the museum in which they are displayed where I photographed them under the limitations of gallery conditions in 2006, 2007 and 2012. The Victoria and Albert tile has been copied from the image in their collections database.

THE STATE HERMITAGE MUSEUM, ST. PETERSBURG







The British Museum, London





THE VICTORIA AND ALBERT MUSEUM,
LONDON



ource: http://media.vam.ac.uk/media/thira/collection_ images/2006AF/2006AF7295_jpg_l.jpg

Ashmolean Museum, Oxford

















REVIEW ESSAYS

RETHINKING CENTRAL ASIA: **A** REVIEW OF THE AGE OF THE STEPPE WARRIORS

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Christoph Baumer. *The History of Central Asia: The Age of the Steppe Warriors*. New York: I. B. Tauris and Co. Ltd., 2012, 302 pp. + plates, 12 maps. ISBN 978-1-78076-060-5.

The goal of this book and the three volumes which are to follow is to provide an overview of the history of Central Asia and to reveal long term trends and complex, interdisciplinary connections. This includes the formation of a complete overarching picture, in an effort to bring to light previously unknown facts, contextualize them within broader developments, and to refine interpretations of the past. These are worthwhile goals for any volume, especially one about a region that, in the author's opinion, has a dearth of source material for prehistory. To accomplish this for a region as immense as Central Asia would challenge any scholar – there is, in fact, a huge literature which must be mastered. It is not surprising then to find that the author was not always successful in meeting his goals.

Baumer brings to the task a broad range of experience in travel throughout the region, professional skills as a photographer, and an already extensive record of publication about various aspects of the history and cultures. Among the outstanding features of the book are its well thought-out organization, accompanied by wonderful photography and informative graphics, all published in lavish, large format. Baumer juxtaposes discussions of archaeological data and modern photos of "nomads," providing the reader an ethnographic perspective that highlights some of the continuities of cultures and lifeways in portions of Central Asia. An important emphasis is on the diversity of material cultures. The book thus has the ability to draw in new readers who are unfamiliar with the material cultures and prehistoric developments of Central Asia.

The volume opens with an overview of the geography and climate of Central Asia that includes excurses on the palaeontological evidence (for example, the fossils discovered by Roy Chapman Andrews) and a

discussion about the impact of geography and climate on history. Subsequent chapters are ordered sequentially from the Paleolithic through the Iron Age, with a final chapter focusing on the Greeks in Central Asia. Within each chapter is a detailed discussion of a chosen topic which highlights either a scholar, an archaeological site, or a specific theory. Examples include a discussion of the development of the bow, an examination of two remarkable petroglyph sites in the Mongolian Altai, a spotlight on Raphael Pumpelly (the pioneering excavator at Anau in today's Turkmenistan, and an excursus on the significance of deer stones). The underlying themes of the book are climate and its effect on humans, economics and trade, warfare, and burial customs.

In highlighting some of the most pressing issues in the archaeology of Central Asia, Baumer skillfully paints with a broad brush evidence from the archaeological record. Yet a spotlight on long-term trends often means that details and nuances are lost in discussions of this vast landscape. The author rightly notes that Central Asia is a broad, sparsely populated region of extremes. But just as variability is present in terms of climate, geology, and landscapes, there is also extreme variation in the degree of archaeological research and languages of publication in each of the respective countries. These issues present significant problems in the study of any single micro-region within Central Asia, and they intensify when the vast landscape of all of Central Asia is chosen as the unit of analysis. Scholars investigating this region, and who wish to account for the full corpus of data and most recent excavations and interpretations, must engage with the detailed local literature, in a host of different languages, coming from within this vast region. Baumer has clearly engaged with much of the literature produced by scholars in Europe and America on

the region but fails to incorporate important studies published in the region itself which have a bearing on the broader conjectures and conclusions and which underlie some of the newer analytical concepts which are transforming our understanding of Central Asia. For example, in discussions of the Eurasian steppe, semantics have begun to move beyond "nomads" as an all-encompassing category and toward investigations of degrees of mobility and multiplicities evident in the subsistence and economic regimes of pastoral societies (Cribb 1991; Chang and Koster 1994; Tkacheva 1999; Frachetti 2002; Anthony et al. 2005; Popova 2006; Frachetti and Mar'yashev 2007; Frachetti 2008a, 2008b, 2009; Frachetti and Benecke 2009; Hanks and Linduff 2009; Hanks 2010; Spengler et al. 2013; Ventresca Miller et al. forthcoming). These new directions of scholarship, including a focus on animal domestication, as well as pastoral and agro-pastoral economies (Hanks 2010), affect not only our interpretations of known data but, more importantly, shape the agendas of new fieldwork and the resulting data.

There is a tendency here to rely heavily on syntheses regarding different regions within Central Asia. But such works have often already glossed over much of the variability present in local micro-regions, and therefore do not qualify as good primary source material. In addition, there is a distinct focus not on the entirety of archaeological material, but on particular objects of material culture from an art historical perspective. This is especially problematic for discussions of social and cultural development when earlier periods of prehistory are addressed, and it explains why broad gaps are evident for certain regions discussed in the volume. For example, the appendix (pp. 308–09) aims to list the most important prehistoric and early historic cultures, but contains empty boxes for the Neolithic through Early Bronze Age across areas for which there is ample data available in local publications - eastern Kazakhstan, Minusinsk, Tuva, the Mongolian Altai, and Xinjiang.

Finally, there is a continued discussion of theories that resemble coherent myths — ideas and issues which many regional scholars have long since abandoned. These include discussion of the origins of the Indo-European language and homeland (for a critical analysis see Hanks 2001), intensive migrations (see Frachetti 2011), as well as any allusions to "mythical" peoples such as Amazonian warrior women (see p. 264). Scholars working in the region have repeatedly questioned these notions that have plagued Central Asian studies and have, in most cases, moved beyond these issues.

To illustrate the above-noted problems, I shall focus on the material of Chapter VI, which correlates

with my own research on the Bronze Age of northern Kazakhstan. Many studies of this core region of Central Asia paint broad and convincing pictures of its peoples, societies, and cultures. Yet from my perspective, the archaeological cultures of the Bronze Age Eurasian steppe are best compared to an impressionist painting. From far away the picture is one of crisp and distinct elements, allowing for easy discussions of separate entities. But up close, the crisp lines are decisively blurred, distinct elements break down, and the diversity of every daub of paint becomes visible.

The only way to remedy hindered perspectives of prehistoric Central Asia, such as those presented in Chapter VI, is to pay attention to the details and even seeming contradictions of the archaeological record by engrossing oneself in the minutiae of regional knowledge that is available. For example, Baumer discusses the separation of two Andronovo subcultures (Alakul' and Fedorovo) based on mortuary rituals, and then cites authors who have undertaken comprehensive summaries of the available data (Frachetti 2008b; Koryakova and Epimakhov 2007). While these compendia do not highlight variation in the mortuary realm, they do discuss variability, which is glossed over by Baumer. Furthermore, when local data is accessed, it becomes clear that scholarly views on the Andronovo vary considerably. Currently, a separation of Andronovo subcultures is not possible based on cremation and inhumation practices, and many researchers note that these body treatments were used by both groups (Matveev 1997; Stefanov and Korochkova 2006, pp. 15, 18, 128-29; Koryakova and Epimakhov 2007, p. 127; Kuz'mina 2008, pp. 160, 170). Great diversity is also evident between the Alakul' and Fedorovo subcultures based on burial construction. Which subculture had burial pits lined with wood? The answer depends on whom you ask, as scholars have stated that the Alakul' (Korochkova and Stefanov 2004), Alakul' and Fedorovo (Koryakova and Epimakhov 2007), or Fedorovo (Kuz'mina 2008) are buried within wooden enclosures (For critical discussion Ventresca Miller 2013, p. 162, Fig. 4.17). In order to move forward in the study of Central Asian history, we must present all the available data and question inherited narratives for the steppe. To create a compendium work that has longevity, it also would have been worthwhile for Baumer to engage with scholars working in the region to a greater degree. Furthermore, his sweeping perspective should provoke readers to explore the diversity of cultures, lifeways, and peoples in Central Asia, and look beyond generalizations about broad social and cultural processes in order to highlight individuals and local communities in the past.

The first installment of Baumer's The History of Cen-

tral Asia is a volume worth its weight in gold in terms of images alone, many of which are unprecedented for the region. While the author may not have had access to all of the critical scientific literature, he clearly gained entry to many regions and collections that are rarely accessed by foreigners. In the case of the site of Ayala Mazar in Xinjiang (pp. 123-33), the photographs are astounding, but how they were captured raises significant questions. The photographs are evidence that mummified heads were moved from their original locations (p. 125), that wooden figures "found lying on the ground" (Baumer 2011, p. 63) were placed in standing positions and discussed as "re-erected wooden figures" (pp. 124, 128), and that some items may have been collected and photographed at a later date (p. 133). However, it is unclear whether Baumer had permission to excavate or was part of a scientific team, as no brief reports have appeared in local journals (Xinjiang wenwu 新疆文物 — Xinjiang Cultural Relics) or broader scientific journals (Kaogu 考古 — Archaeology) in China. Instead this significant discovery was published only as part of a paper given to the Royal Asiatic Society (Baumer 2011) and lacks the recognition usually given to scientific collaborators or institutions from China. The combination of these issues should give scholars pause to consider whether Baumer may have moved human remains or other artifacts at the site without permission, or disturbed the site in any manner (e.g. standing up wooden figures for a photo). Hopefully these allegations are not true, as they would seriously tarnish the reputation of the author as well as his affiliated organizations.

About the author

Alicia Ventresca Miller received her Ph.D. from the University of Pittsburgh in 2013. Her dissertation focused on understanding the Middle to Late Bronze Age transition in the central Eurasian steppe, a time when shifts in patterns of settlement and mortuary practice occurred. This work expanded our understandings of pastoral societies in northern Kazakhstan, especially the detailed nature of social and biological communities in the past. Alicia is currently a postdoctoral fellow in the Graduate School of Human Development in Landscapes, Institute for Prehistory and Protohistoric Archaeology, Christian-Albrechts-Universität zu Kiel. Her postdoctoral research investigates human and animal mobility during the Bronze Age in the central Eurasian steppe through stable isotopic analyses.

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IN SEARCH OF THE GOLDEN KING

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Frank L. Holt, *Lost World of the Golden King: In Search of Ancient Afghanistan*. Berkeley; Los Angeles; London: University of California Press, 2012. xxi, 343 pp. ISBN 978-0-520-27342-9.

Frank Holt's most recent book is a detective story seeking clues to find a long-lost kingdom and its seeking clues to find a long-lost kingdom and its king. Ancient reports described an empire of a thousand cities but by the seventeenth century this picture had become "an exotic mise-en-scène" (p.22). The search began with the discovery of a single coin, but the range of tools enlarges steadily, drawing new detectives into the search. The book's subtitle identifies the general location of that once "lost world" where the kingdom of Bactria had flourished at the center of the Silk Road linking Greece, central Asia, and India in the wake of the conquests of Alexander of Macedon into the second century BCE. The value of coins as evidence produced a new tool for studying the past in general, numismatics. As coins from unknown locations were joined by archaeological evidence and historical analysis over the past three centuries, the lost world was found. Nine chapters in addition to an introduction and conclusion recount the adventure in a beguiling style that will captivate both non-specialists as well as specialists.

The author has been preparing for this study since his graduate work at the University of Virginia where his M.A. thesis was "The Golden King." He is a distinguished historian of the ancient world who has published seven books and more than sixty articles. One area of his expertise is numismatics: he is a distinguished numismatist who is passionate about proper use of coins but also every other tool necessary to uncover the past. Professor Holt shares his enthusiasm with students at the University of Houston where he was the first recipient of the Distinguished Lectureship in Teaching Excellence Award. His essays over several years for Saudi-Aramco World are testimony to his talent for engaging a general audience as well as specialists. These qualities are clearly evident in his engrossing account of the long and dangerous detective search in the Lost World of the Golden King.

The account begins with the discovery of the earliest clues: the discovery of ancient coins in Central Asia was the trigger for the search. The coins were genuine but the location of their minting was unknown. A considerable collection gathered by an advisor to Peter the Great of Russia — Count Jacob Daniel Bruce — spurred scholarly interest in the study of the coins. Three Greek words on a small silver coin prompted the serious Prussian scholar Theophilus Siegfried Bayer to research and publish his study *History of the Bactrian Kingdom of the Greeks, Together with the Ancient Tradition of Greek Colonies in India.* The source of the coin was uncertain — either Astrakhan or Kazan in European Russia — but the words were clear: "[a coin] of King Eucratides the Great." And, importantly, ancient surviving sources wrote of Eucratides who "ruled a thousand cities."

Four chapters trace the evolution of the scholarly use of coins, numismatics, based on the Greek word νόμισμα and the Latin word nomisma. Chapter One ("Checklist Numismatics") describes the nature of that evidence in the seventeenth century when coins were treasures collected for their worth as precious metals and as objects of fine art. "Collectors" were untrained often they were thieves — and the art of collection was dangerous. A French physician was successful when commissioned to expand the collection of Louis XIV, but when captured by Algerian pirates in 1674, he saved his twenty ancient gold coins only by swallowing them. The second chapter tracks the on-going "Dangerous Game: Framework Numismatics" into the eighteenth and nineteenth century when collection remained an enticing but dangerous occupation. A British veteran employed by the East India Company to improve its cavalry horses also was drawn to collecting Bactrian coins. His body was eventually found "dumped in an unmarked grave" (p. 34). The growing attraction of coins turned the trickle of Bactrian coins into a torrent (p. 27), and interest in the finds stimulated publication of examples. Scholars, working in the safety of their libraries, could now use the evidence of coins to insert them into an historical time frame. In 1843 Johann Gustav Droysen published his concept of a distinctive period within world history — the Hellenistic Age [*Geschichte des Hellenismus* II]. The kings named on the Bactrian coins could provide not only a temporal relationship but also an administrative correlation.

Chapter Three ("The Gold Colossus: Novelty Numismatics") centers on the spectacular find of a "golden 'monster' [coin that] migrated from its home under the armpit of a murderer" in Paris (p. 50). When that thief sought to sell it, "The buyer smoked, and the seller sulked, for a full twenty minutes, when suddenly the [seller]... snatched the check and handed over the [coin]. That night the expert never closed his eyes" (54). The search for coins remained precarious — as it does today — but the "Golden Monster" demonstrated an important development in the professional use of coins when it was housed in the Bibliothèque Impériale in Paris, allowing direct access to the evidence and indirect access through photographic images.

Consequently more scholars were drawn into the study of the evidence. Historians constructed long narratives by fitting together pieces of the "jigsaw" puzzle described in Chapter Four —"Telling Tales: Narrative Numismatics." Some became curious to discover the character of the images inscribed on the coins. As Professor Holt writes, "...we look into lumps of silver and gold to find their souls.... [The ruler depicted on them] becomes the sort of man whose life we can weave into a narrative largely of our own making, since we have no governing texts" (p. 84). "Narrative numismatics tells tales replete with heroes and histrionics....whether attested in any source or not" (p. 87). The result could be titled "Wishful Numismatics," although the author is kinder.

The complete reliance on coins for evidence also demonstrated the need for another kind of evidence. With Chapter Five ("Wanted – One Greek City: Archaeology") another tool joins that of the coins in the search for the kingdom that had produced quantities of coins but remained "lost." Excavation in the nineteenth century was revealing other lost kingdoms, those of Agamemnon and Nestor and Priam, for instance. However, scientific archaeology rather than illicit digging was slow to emerge especially in the unstable conditions in Afghanistan. Only in the second half of the twentieth century were major sites discovered and meticulously unearthed and recorded. One of the sites was the modern village of Ai Khanum located at the confluence of the Kokcha and Amu Darya – ancient Oxus –rivers. Evidence identified a major city with a palace complex. And among the finds were quantities of coins. The latest specimens antedating the destruction of the city soon after 146 BCE, bore the name of Eucratides, the image on the once single-known image on the Golden Colossus. Chapter Six ("Letters Here and There — Epigraphy") adds yet another tool to the search: archaeological finds included other written evidence such as inscriptions on potsherds, stone, papyrus and parchment. Reading these inscriptions (the Greek *epigraphé*) could not only confirm the evidence of the coins but also provide additional information. By the late twentieth century, consequently, numismatics plus archaeology plus epigraphy had combined to produce a fuller, more accurate history of both the coins and their context.

Sadly the continuing value of coins as treasures, the nature of their discovery and conditions in Afghanistan made them hostages. Chapter Seven reports "A Perfect Storm: Rescue and Revisionist Numismatics." Only six of fifty-seven recorded hoards found between 1821 and 1979 in both Bactria and India were recovered under controlled conditions (p. 136). Coins are auctioned, stolen — even from museums. Hoards are broken up. One means of protection has become available in modern technology such as X-Ray fluorescence spectrometry and precise electronic means of preserving the data provided by the coins themselves even after they have been stolen.

In spite of loss of evidence through theft and warfare, its quantity continues to expand, at times prodigiously. Recent challenges of a different nature are the subject of Chapters Eight and Nine. Akin to many disciplines devoted to study of the past, numismatics has focused on physical evidence, and archaeological excavation has swollen the quantity of those data. Computer technology provides a welcome means to sort and analyze data, and its success has pointed in new directions - for example, theoretical analyses of the results and the development of models to test the implications. Preservation and understanding of data is essential but a growing number of critics argued that the human element in the humancentered disciplines was disappearing; patterns were replacing people. In archaeology, counting the potsherds is useful but equally — or even more useful - is identifying who made the pots, why they were inscribed, and what caused changes over time. In addition to on-going excavation and analysis of finds, the "New Archaeology" calls for study of the relationship between people and their environment in an effort to describe the changing process over time that the material evidence demonstrates for people of all ranks in society.

In Chapter Eight, Professor Holt calls for "A New Beginning: Cognitive Numismatics I." Inasmuch as the evidence is coins, this chapter uses the "New Archae-

ology" to describe the people who mined the metals, worked the ore, created dies, shaped and engraved the coins, as well as those who supervised the process. In Chapter Nine ("Coins and the Collapse of Civilization") Professor Holt explores the role of those coins in the larger sphere of society after they left the mint: their uses by individuals, cities and kingdoms for essential purposes; the nature and breadth of their distribution. "Coinages reflect the societies that produce and use them"(p. 194). Change over time can reveal an increase in complexity but also indicate emerging weaknesses within a society. This chapter is a masterful portrait of Ai Khanum, the center of a kingdom that had links extending from Greece to India, and its fate. Its wealth was once evident only in a few precious coins whose origin was unknown. Engaging evidence produced by archaeological exploration uncovered a location and context for those coins. That evidence yielded other forms of written evidence, adding epigraphy to the research. New technology vastly increased the ability to store and share that evidence. More recently, a willingness to "forget for a moment the kings of Bactria and concentrate instead on the nameless and faceless people around them" (p. 162) reveals the changing nature of the world in Central Asia over several centuries following the death of Alexander of Macedon.

The presentation throughout is captivating, binding the account through excellent links from start to finish. Eucratides (THE Golden King), introduced in the first chapter, remains a force through the development of the disciple of numismatics and the book. Chapters are woven together chronologically from "The Adventure Begins" (I) to "Coins and the Collapse of Civilization" (IX). The splendid conclusion summarizes the three-

hundred-year adventure that involves "truths [which] have come and gone like guests at a dinner party some fascinating and full of enlightenment, others loud but lacking substance, all welcome for whatever they might inspire in the conversation" (p. 211). The adventure involves intricate detail, but the larger story is sustained. Particularly useful is fine use of questions throughout the book that focus the readers' attention. "What had happened to all these things? How could the soil of Central Asia yield so much ancient money and yet no monuments?" (p. 89) Answers are given in a fine balance between description and significance of the evidence. For readers wanting references, there are seventy-four pages of notes and thirty-one pages of bibliography. Plates and drawings are essential, and they are numerous and well chosen.

Who could predict that a single coin from an unknown location would produce the new discipline of numismatics, prompt archaeological exploration, and encourage historical research that resulted in the recovery of a lost kingdom that stood at the center of interaction of Greece and Macedonia with India? Just as significant is Professor Holt's account of these developments as an engaging and thoughtful detective story.

About the author

A specialist on ancient Greece and the Hellenistic world, **Carol G. Thomas** is Professor of History at the University of Washington (Seattle). Her books include *Alexander the Great in His World* (2006), *Finding People in Early Greece* (2005), and *Citadel to City State: The Transformation of Greece* 1200–700 BCE (2003).

A ROAD LESS TAKEN?

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Edvard V[asil'evich] Rtveladze. Velikii indiiskii put': iz istorii vazhneishikh torgovykh dorog Evrazii / The Great Indian Road: from the history of the most important trade routes of Eurasia. Sankt-Peterburg: Nestor-Istoriia, 2012. 296 pp + ill. ISBN 978-5-90598-793-9.

One opens a new book, especially one with such an intriguing title, by Edvard Rtveladze with great anticipation. He is a well-known archaeologist, for years the director of the important excavations at Kampyrtepa in southern Uzbekistan, author of a great many studies, and a serious student of numismatics. The range of his expertise on the early history of Eurasian exchange can be seen in his *Great Silk Road: An Encyclopedic Guide. Antiquity and the Early Middle Ages* (Tashkent, 1999), a popular illustrated book that deserves to be imitated by an equivalent for audiences who cannot read its Russian.

In his new volume, which was previewed in an article in *Anabasis* (Vol. 1) in 2010, Rtveladze wishes to convince his readers that there was a major transcontinental route of exchange (Fig. 1) which came into being and flourished in the centuries just before the opening of the "Silk Road" and then overlapping into the period when that more famous route was established. The center from which its connections ex-

tended was India, and it involved both land and water communications. While his main focus is on the routes that led west to the Black Sea, he notes at least briefly the evidence for an eastern extension up through northern Burma into southern China. He recognizes that there were other routes connecting India to the outside world but deliberately focuses on this northern one. While many kinds of "goods" traveled the route, instead of silk, the main valuable commodity was elephant ivory (a subject, I would note, which he never really develops). On the face of it, his scheme might seem to require that we re-think much of what we thought we knew about patterns and routes of interaction across Eurasia, but once one examines the details here, it turns out that the whole scheme has less to offer than author advertises.

On the positive side, the book relies on his extensive knowledge of the archaeology of Central Asia, at times to the extent of providing the reader with great (and not necessarily always very useful) detail. In fact,

to a degree, it seems, the whole purpose of the book is to underscore the significance of the work he has done in the area of the upper Oxus (Amu Darva) we know as northern Bactria. This, rather than India, is the real center of his "Indian Road" and gets most of the attention here, with an understandable emphasis on the site with which he has been intimately associated, Kampyrtepa, located on the river 30 km west of Termez. A lot of this evidence has been available in print for some time; so in many ways, for those who have studied the extension of

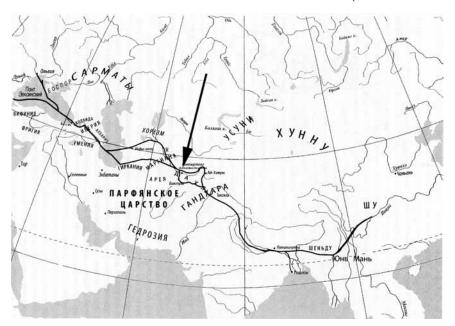


Fig. 1. Rtveladze's Great Indian Road (p. 8). The arrow points to the location of Kampyrtepa.

Hellenism or the spread of Buddhism into Bactria, there are few surprises, even if some of Rtveladze's datings may be raise some eyebrows as may also his confidence in his identification of certain sites with ones presumed founded or visited by Alexander the Great. He devotes considerable attention to Alexander's march, primarily in order to show that he knew of and followed this Great Indian Road. It is not without interest to compare Rtveladze's discussion of the Hellenistic sites with the treatment by Getzel Cohen in his new reference volume on them (see the review note elsewhere in this volume of *The Silk Road*). Cohen always leans on the side of caution concerning conflicting claims about the identities of certain settlements with ones mentioned in the Classical texts.

The problems with Rtveladze's book arise not so much on the Bactrian end, but rather as one moves on west, where his archaeological evidence thins out, there are often major gaps, and where speculation becomes a substitute for solid argument. To fill the lacunae, he repeats almost ad nauseum the cryptic information of a certain Pseudo-Scymnos (second half of the second century BCE) — brought to his attention by Pierre Leriche – regarding the presence in Phasis, the main city of Colchis on the Black Sea, of Bactrians and Indians who Rtveladze assumes must have been merchants (pp. 8, 17, 48, 129-30, 185, 188, 225, 242). For Rtveladze, this proves that the Great Indian Road functioned prior to the second century BCE, wending its way from India to Bactria, then to the Caspian, then across the Caucasus to the Black Sea. Of course that one text proves little, especially since the Indians and Bactrians are lumped under the designation "barbarians" and the implication seems to be that they were simply examples of the exotic "other" as far as the author was concerned.

Yes, there is archaeological evidence along the way, but whether it really demonstrates the existence of a major trade route is a good question, and the author himself admits that in various periods, only parts of this great highway could be traversed, given local political conditions. In his discussion of the various kinds of hard evidence concerning objects of distant origin - e.g., from the Hellenistic world of the Eastern Mediterranean, from Egypt or from other parts of the Roman Empire — the author continually uses the expression "it is not excluded that" (ne iskliucheno) to introduce what for him is the likelihood that products traveled on his Great Indian Road, even if for any of those objects there is no evidence they actually did. In support of such hypotheses, he continually reminds us that his route is the shortest and easiest one to the West from India and Bactria. Ergo, it must have been the preferred one. One of the problematic parts of such arguments is the assumption that hostile relations between the Parthians and their neighbors often blocked any meaningful exchange that might have gone through Parthian territory. To be sure, there is some textual evidence that was the case, but we do need to keep in mind that historically, bad political relations did not necessarily prevent commercial exchange across borders.

Of particular concern here is to establish the exact path of this Indian Road through Central Asia. There certainly is plenty of evidence in the upper Oxus region regarding important settlements, in which there is abundant material from the Graeco-Bactrian and Kushan periods, and where one can with some con-

fidence assert that there were active connections with India. Once there, however, how does one travel westwards? Rtveladze rejects the idea that going down the Oxus to Khwarezm was in the earliest centuries the main option that was chosen, in part because there is so little archaeologically documented coin evidence of the kind one finds in Bactria. Rather, he argues, the Kelif Uzboi (called the Oks in the ancient sources, which sometimes confused it with the Oxus), a tributary of the Oxus, provided the most direct route to Margiana, and from there one could travel directly west

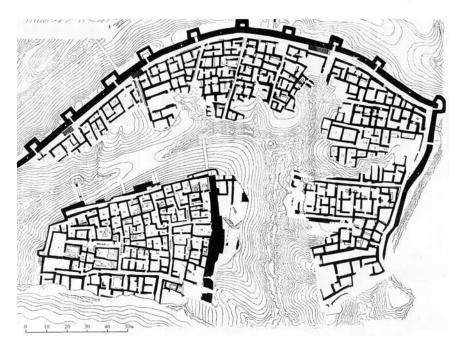


Fig. 2. Plan of the structures of the fortress at Kampyrtepa, drawn by I. Lun'kova and E. Kurkina (p. 197).

to the shore of the Caspian. The route then took to the sea, boats traveling around to the River Kura, which led into the interior of the Caucasus and allowed one to cross over to the Black Sea.

Some of his discussion here is certainly intriguing: where were the river crossings, where were the fortified sites created to defend those crossings? How long did it take to travel specific segments of the routes? Kampyrtepa (which he confidently argues in some detail is the Pandacheion of the Greek sources, a view others do not share) was one such site, and, whatever else one may say, clearly was important (Fig. 2). Moreover, he takes pains to establish that shipping on these Inner Asian rivers was common even way back in antiquity, which is one reason this "Indian Road" was important, travel on the water being much faster and easier than that on land. Unfortunately, the arguments here about the capacity of the locals as boatmen is at best shaky, since much is based on analogies from far outside the region or from later periods.

And how one might interpret the evidence from within is open to dispute. A sealing found at Karatepa with a depiction of an oared boat (p. 170) similar to those known to have existed in Mesopotamia is not necessarily a depiction of a local boat any more than the famous mural of the Chinese princess at Afrasiab from the 7th century CE can be said to depict a boat of a type used in Central Asia (pp. 171, 180). And to entertain us with accounts of how Sogdian merchants were known to have engaged in maritime trade hardly proves that they themselves were the mariners, even if that is what Rtveladze clearly wishes us to believe (pp. 181–85). Neither their history in maritime trade nor details about boat travel by a Russian military contingent in 1878 (pp. 174-76) can necessarily be used to extrapolate back anywhere from several centuries to two thousand years earlier.... Linguists will probably have a field day with his attempt to connect the "komar" people mentioned by Ptolemy as a living in Bactria with Strabo's use of the term to designate boats on the Black Sea and the boat terms (keme/kema) documented by 19th-century Russian explorers in Central Asia (pp. 172–74). My skepticism about his use of evidence aside, I readily admit that it is highly probable the rivers were used for transport, and that it is at least reasonable to posit that certain traditional kinds of water transport continued to be used with little change down through the centuries. Yet, granting the possibility for this means of communication falls short of demonstrating its actual use in early times.

One of the weaknesses of his argument lies in his treatment of the routes through the Caucasus. Indeed they seem to have been important, but evidence concerning that is rather summarily treated here. We know a lot from the Roman period, but what about earlier times? What Rtveladze gives us is primarily the terminus on the Black Sea (those couple of lines from Pseudo-Scymnos) with all too little in between, and rather vague information about travel by boat along the southern shore of the Caspian Sea. There are significant gaps needing to be filled here, and much more evidence required to document the degree to which the routes through the Caucasus were actually used.

The skeptic might also wish to question his interpretation of the archaeological material. At times he seems certain of dates where the stratigraphy is problematic or the objects were collected rather than carefully excavated (pp. 99–101). He seems to believe that objects identified with some distant culture for the most part must have ended up in another location through the agency of individuals from that culture who traveled and settled there. In too many cases, this is a bold assumption without any proof; such association of objects with specific ethnic or linguistic groups is a feature of old school archaeology that has come under question.

That there are some cryptic Kharoshthi alphabet inscriptions and strikingly some papyrus fragments with Brahmi inscriptions found at Kampyrtepa is important, of course, but for the former there would seem to be problems with the stratigraphy that might cast doubt on how early they are. According to the author, the papyri are the oldest Bactrian manuscripts found in Central Asia as a whole, dating to the first half of the 2nd century CE. These are the earliest finds of papyrus east of the Mediterranean and evidence of the use of papyrus by the Kushans (pp. 237–38). Are we to be sure though that those who knew the languages involved necessarily were transplants from India, any more than can we be sure that the papyrus must have come all the way from Egypt? This example of the papyrus illustrates his approach to the trade routes – he is aware of the extensive Indian Ocean trade connecting India with Egypt but dismisses that route, asserting instead that for Bactria the more likely route (much shorter and faster) which the papyrus would have traveled is through the Black Sea where it entered the "traditional route," the Great Indian Road at Phasis ("...ne tol'ko ne iskliucheno, no i eshche bolee veroiatno, chto eti papirusy dostavalis' iz Aleksandrii v Egipte cherez Sredizemnoe in Chernoe moria v Fasis, a uzhe ottuda traditsionnoi trassoi Velikogo indiiskogo puti v Baktriiu." – p. 240). Given the mention by Dio Chrisostom that Bactrians were to be encountered in Alexandria, naturally they too most likely got there via the same route (p. 188—"ne menee veroiatno i to, chto barktriitsy pronikali v Egipet po Velikomu indisskoi puti...")

As if to prove the Roman period connection along the Indian Road, Rtveladze then discusses a cryptic Latin-letter inscription found in a cave at a site known as Kara-Kamar (pp. 242-53). Most experts, among them Frantz Grenet, have asserted this is a modern fabrication. Rtveladze argues at great length that the inscription is ancient and that the cave, furthermore, was a Mithraeum, presumably to be connected with the remains of one of those Roman legions defeated by the Parthians. Part of the "proof" here is to invoke Homer Dubs's well-known theory about the Roman legionnaires having made it all the way to China. To top off this argument, Rtveladze speculates that the "Tit" (Titus) named on one of the murals at Miran (which he erroneously sites in the Turfan Oasis) might well be a descendant of one of those legionnaires (p. 252)..

A significant section of the book concerns the spread of Buddhism, regarding which, of course, there is considerable archaeological material from Bactria and points west. Given what we know about the numerous "capillary" routes where there is evidence of a Buddhist presence, we might wonder whether his "Great Indian Road" was in fact the main highway for the spread of Buddhism north. Rtveladze argues that Buddhism must have been known in northern Bactria at least as early as the second to first century BCE, even if its real spread dates later. He admits though that there is but little evidence for that earliest phase. In reviewing the evidence about the Buddhist temple excavated at Ayirtam, he suggests ("ne iskliucheno") that it may be the earliest Buddhist structure in northern Bactria (p. 214). He believes that terracotta statues of the Buddha found both at Kampyrtepa and Old Termez are the oldest Buddhist statuary found anywhere in Bactria and perhaps the oldest anywhere (pp. 210-11). The problems of the stratigraphy where the statue from Kampyrtepa was found may cast some doubt on this assertion though.

The book is attractively presented, with lots of maps and illustrations, though the images are not always clearly integrated with any discussion in the text, nor have the maps all been drawn specifically for their use here. In at least a couple of cases, the images are misidentified (on p. 104, the reconstruction drawing is not Seleucia on the Tigris but Dura Europos; the famous statue of the "Parthian Prince from Shami (Syria)" on p. 151 was actually found in Khuzestan province in Iran). There is also a section of good quality color plates with images mainly from the excavation at Kampyrtepa and including several dozen Graeco-Bactrian coins found there. The book has a bibliography, rather disappointing indexes of personal/ethnic and geographical names, and a brief summary in English.

There is much here to draw our interest, even if one is forced to conclude that his main thesis remains unproven. Is one to conclude that the whole venture here was the result of some perhaps misguided inspiration taken from the painter and mystical venturer into Tibet, Nikolai Roerich? The epigram on the opening page of the book quotes Roerich ("Alluring is the Great Indian Road"), who surely had in mind something different from Rtveladze, and whose painting of Viking ships ("Merchants from overseas") reproduced on that same page undoubtedly illustrates the Scandinavians' penetration of the Russian river networks. For those who are not familiar with the archaeological sites Rtveladze knows so well, the book will certainly open new doors (it already sent me to examining earlier excavation summaries). I doubt though that the "Great Indian Road" will acquire the currecy the "Silk Road" has, even as we should readily admit that the latter too conceals more than it reveals about the early history of Eurasian exchange.

Marshak on Sogdian Ceramics

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B[oris] I[l'ich] Marshak. Keramika Sogda V–VII vekov kak istoriko-kul'turnyi pamiatnik (K meto-dike izucheniia keramicheskikh kompleksov) / Sogdian Pottery of the 5th–7th Centuries as Historical and Cultural Phenomenon (on the methods of the study of pottery complexes), Sankt-Peterburg: Izd-vo. Gosudartsvennogo Ermitazha, 2012. 383 pp. ISBN 978-5-93572-454-2. (In Russian)

s indicated in the Preface written by his wife, A Valentina I. Raspopova (pp. 9–12), and translated in English at the end of the book (pp. 382-83), this work goes back about 50 years and was the Ph.D. thesis of the author, defended in 1965 (available for consultation at the Library of the Institute of the History of Material Culture in St Petersburg). It concerns the ceramic material of the "lower levels" of a residential quarter at Panjikent, a remarkable city of the Upper Zeravshan Valley in Sogdiana (nowadays in Tajikistan), abandoned at the end of the 8th century, and where numerous mural paintings were discovered in temples and in the rich houses of Sogdian merchants who were then trading between China and Byzantium. The author attempts to show the evolution of the pottery along with the main phases of the history of the city, established according to the construction, destructions or reconstructions of its rampart.

Raspopova mentions that almost no changes were made as far as the hypotheses, dates and conclusions that were advanced then, and that no publication subsequent to 1965 was added. She briefly mentions the existence of articles done along with this work, but unfortunately without precise references. One should then know that Parts I (pp. 13-57) and IV (p. 206-47) had been published almost identically in two articles of the author respectively in 1964 and 1961. She does not mention either - and this is unfortunate - her own article (1969) which concerns the "upper level" of the same residential quarter. I would also emphasize here that Boris I. Marshak, whom I often met and to whom I had posed the question, did not wish to publish this thesis, probably because he knew that it would take him fully as much time to revise it as it took him first to write it.

The author came from a long lineage of famous archaeologists and epigraphists of the School of St Petersburg. He directed for a long time and until his death the excavations at Panjikent. He is internationally known for his publications on the history of art of the Early Middle Ages. This book is of a quite different nature and reveals an unknown facet of this great scholar, marked with scientific rigor, using mathematical formulae in order to report the diversity of shapes and decorations and to make statistical analysis on the pottery discovered on the site. One should remember, of course, that the use of computer science and of database programs which hide similar calculus did not exist yet at that time.

The book consists of four parts and a short conclusion, and includes a great number of illustrations (172). One can only regret that no introduction or plan has been added in this publication that would in any way present the site and the residential quarter concerned here, especially the distinction made between the "lower" and "upper" levels.

Part I (pp. 13–57), already published in 1964, gives the stratigraphic and architectural description of the "lower levels" of area XII, a residential quarter next to the rampart, excavated by the author between 1955 and 1960, with soundings reaching the virgin soil. Marshak begins by mentioning the rare coins that have been discovered there: in the "upper level," seven Abbasid *fels* (760–762 CE) and a treasure of silver coins of the second half of the 8th century with the names of the governors of Bukhara and Samarkand; in the "lower levels," but apparently not *in situ*, an imitation of a coin of Peroz, dated by Smirnova (1963) to the end of the 5th – first half of the 6th century, found

under the wall of room 2 (which, as shown later by the author is related to the second period of construction), and a copper post-Kushan coin found in the sounding to the virgin soil which the author dates to the $3^{\rm rd}$ century but which could also, according to us, date to the $4^{\rm th}$ century or even later.

The author also explains the excavation methods used then (a spade's depth of 20 cm, or layer of 50 cm, unless clear strata could be followed). Four major periods of construction, including phases of repair or reconstruction and followed by phases of abandonment and/or destruction, have been highlighted. They are all linked with the rampart, from which historical hypotheses are established with reference to what is known of the history of Sogdiana from written sources. The re-use of the walls of the houses of the preceding period is frequent, and a second floor as well as all the typical elements of the architecture of the "upper level" (ceremonial main room, columns, niches, sofas, etc.) appear already during Period II.

The pottery issued from each of the major phases makes a *kompleks* which corresponds to a "ceramic period." Six such *kompleksy* (numbered from bottom to top) have been delineated. The author does not hide the fact that often successive *kompleksy* may be mixed together, or that attributions to one period rather than to the following should be revised since stratigraphy is extremely complicated, some of the rooms having been abandoned when others were still occupied.

K.I comes from a fill placed under the walls of a room (No. 17) linked to the first rampart of the city. This rampart, 2.2 m thick, made of raw bricks, had rectangular towers. The dating of K.I is ambiguous, the author considering it either as contemporary with the first rampart, or admitting indirectly that it comes from a previously existing settlement at that place.

K.II has only a little pottery and corresponds to a phase of abandonment or destruction of the first construction stage. Mixing with K.I is deemed possible.

K.III represents the pottery of the second major period of construction of the rampart, rebuilt partly on the ruins of the preceding one. The new rampart is made of bricks, rammed earth and pisé, and is much wider than the first one (5.7 m thick), sometimes including it where it is still extant. The walls of the previous houses are often re-used. Jars with plastered bottoms, one of which has stamps (the profile of a person) on the rim, belong to this *kompleks*.

K.IV corresponds to the progressive abandonment of the area, visible only on the houses but not on the rampart itself.

K.V/1 contains the pottery (in small quantities) of the third major period which is linked to a new recon-

struction of the rampart, since the preceding one had been destroyed on its upper part. The author considers that this is associated with a strengthening of the citadel on the site. The new rampart is now narrow, with square towers and arrow slits, and comparisons are made with Termez during the 5th-6th century and with Khorezmia during the 7th and 8th century. At that time, the houses seem to be temporary constructions, poor in material. The author mentions that, in some places, confusions with K.IV are possible, as would be confirmed by the presence of a silver and cornelian ring incised with a zebu found in the fill of rooms 24 and 25 which antedates the reconstruction of Period III. He later notes (p. 181) that V. G. Lukonin dates this ring not to the 5th century but to the 6th-7th century and considers it to be Iranian in origin.

K.V/2 represents the numerous and homogenous pottery found in an impressive layer of ruins (1.2 to 1.6 m thick) which covered all the constructions of Period III and has been found all over the city. At that time, there was no occupation in area XII, and there are breaches in the rampart. Above this thick fill, structures linked to the fourth period of construction were found. This is considered to have been the most important period in the history of the city, dated by O. G. Bol'shakov (1964) to the end of the 7th and first quarter of the 8th century. It was followed first by an abandonment, then by a partial repair dating to 740, before the total disappearance of the city a few years after 770. It should be stressed, though, that a later reoccupation is attested, as shown by the presence of a few glazed shards dating to the beginning of the 9th century, as well as of a shard of a cooking vessel with an Arabic inscription dated to the 9th-10th century (see Bentovich 1964). Since the fills had completely covered up the rooms of the previous houses, this fourth period is visible only in a massif or platform of bricks one meter high associated with its own fill and linked to a new repair of the rampart, made of bricks. Unfortunately, nothing is left of this rampart that later disappeared in the slope.

The pottery of this fourth period constitutes the **K.VI**, certain shards of which are close to those of the "upper level" of the 8th century. It is therefore dated to the second half the 7th century. Finally, the author mentions the presence of pits which are considered to be linked to the construction of one of the buildings of the "upper level" and which perforated the previous layers of the major fill. They contain, besides the pottery of K.V, some shards of the "upper level" and seven Sogdian coins of Bidian/Bilgä and of the "Queen of Panjikent." This allows dating these pits to the first quarter of the 8th century. In order to preserve an unmixed *kompleks*, it was decided to designate as **K.V/3** the pottery of these pits. One should notice here

that the author wonders about the contrast within these pits between the scarcity of the pottery of the 7th–8th century and the relative abundance of coins of this period. The Abbasid *fels* mentioned above were discovered on the floors of this upper building. He also mentions the presence of temporary constructions linked to the last rampart, but since their pottery only dates to the 8th century, they are attributed to the "upper level."

The extreme complexity of this description leads us to sum it up into a table, adding here the quantity of shards/vessels and the absolute dates (sometimes revised after the Ph.D. was defended) given respectively at the beginning and at the end (pp. 179–81) of Part II.

Table I. Summing up the data from Parts I and II

Kompleks / pottery period	Period of con- struction	Characteristics	Characteristics Dating		
K.I (dozens of shards)	Period I	Construction of the first rampart. No ceramics on the floors of occupation, but in the fill found under a room linked to the first rampart, which leads to infer the existence of a previous settlement. Post-Kushan coin dated to the 3 rd century		Middle of the 5 th century or 440-480	
K.II (>700 shards)	Abandonment of Period I	Period I and possible mixtures with K. I, rampart partially destroyed, little material. Immediately follows Period I. Relatively long period. Coin of Peroz (end of 5th-beginning of 6th century) under wall of room 2 dated to Period II.			
K.III (dozens of shards)	Period II	Major reconstruction of the ram- part (thick). Re-use of the walls of the preceding houses.	Long duration. Jars with stamped rims (profile of a person). Houses with second floor, sofas, niches, columns		
K.IV (>700 shards)	Abandon-ment of the houses of Period II	Rampart still existing	Silver ring now dated to the 6 th –7 th century found in a fill antedating con- struction of Period III.		
K.V/1 (dozens of shards)	Period III	Reconstruction of the upper part of the rampart (narrow), 5 th century. Possible confusions with K.IV.		Ca. 530-600	
K.V/2 (>1500 shards)	Abandonment of Period III	Thick layer of ruins all over the city. Mixing with K.IV possible at some places.			
K.V/3 (>1500 shards)	Pits made from the "upper level"	Mixed material	Sogdian coins (Bidian/ Bilgä, "Queen of Panjik- ent")	Second half of 6 th century, but mixed with "upper level."	

K.VI (pottery only partially studied)	Period IV	The most important period of the city. Repair of the internal face of the rampart, which later on fell down in the slope. Platform/massif of bricks.	Dated to the 7 th century (p. 177)	620–660. It has been added that the constructions date to the second half of the 7 th century, but the pottery dates to the first quarter of the 8 th century.
"Upper level"	Not dealt with here (but see Part IV)		Starts just before 720–730. Second half of the 8 th century.	Abbasid <i>fels</i> , etc.

Part II (pp. 58–181) is the main corpus of the book and deals only with the pottery of the different *kompleksy* of the "lower levels." K.VI disappears from this part, except briefly on pp. 176–80, because it had not yet been completely studied at the time when the book was written. The author gives a short review to remind what each *komplex* corresponds to, as well as an approximative figure for the number of shards concerned (see our Table I above).

After a quick presentation of the methodology used i.e. distinction between the material coming from the fills and that from floors or closed units — drawings of the complete vessels or of rare shapes, detailed descriptions, listing of the diagnostic elements, and statistical studies when the number of shards is sufficient, etc., the author begins his study of the pottery. It starts with the techniques of fabrication and then treats the different shapes of vessels (always giving preference to complete examples): i.e., successively, cups, table jugs, goblet-jugs, spouted jugs, jugs with a pinched mouth, rhytons, one unique amphora with gouge-grooved decoration, water jugs, pots with a large opening including jars, small jars and opened vases, flasks, rare shapes, vessels from earlier periods, handmade cooking vessels, wheel-turned cooking vessels, handmade table ware, lids, candlestick-lamps and pans. Along with the description of each of the shapes, he compiles a list of diagnostic criteria from No. 1 (p. 64) to No. 229 (p. 176), not counting those to which an alphabetic letter is given. Using diverse mathematical formulae as mentioned above, the author attempts to differentiate each kompleks and to establish the evolution of each type of vessel from period to period. This list, unfortunately, is not useful since it does not follow any logical order. It starts with technical criteria, then proceeds to shapes and either concerns the rim and/or the collar, and/or the handles, and/or the numerous types of decoration, or the temper, etc....Thus it is impossible to remember

what each figure stood for. The author is well aware of the problem and notices that the number of criteria increases after each season of excavations, becomes unwieldy, that drawings are necessary and that intuition also plays an important role. Furthermore and unfortunately, there are too often no references to the illustrations. Admittedly, many tables support the text, like studies of the percentages per period in order to find out the phases of appearance/disappearance or of maximal use of a shape, but they often deal with too large groups to be useful (for instance, cooking ware vs table ware or storage ware). Similarly, studies done on the proportions of the vessels in order to establish a typology lead the author to declare that rather than tree-like typologies, he prefers his tables, where all the diagnostic criteria for a vessel shape are disposed on the same level, because they show better, according to him, the links between all the variants. We must admit that these tables, like the mathematical formulae, are incomprehensible and do not highlight anything clearly. In our opinion, the deliberate intention to integrate at once all the criteria on the same level instead of proceeding by successive stages as in arborescent typologies does not emphasize the important characteristics which, on the contrary, are flooded in a tide of data. Furthermore, the author also considers that different potters' workshops may have had as determining a role as has chronology in the differences observed in the pottery, which renders the task even more difficult.

Throughout these pages, nevertheless, numerous comparisons are made, on the one hand with other Sogdian sites known at that time like Tal-i Barzu or Kafyr Kala, or with local ethnographic data, and, on the other hand, with other regions from Sialk to Sasanian Iran through the Achaemenids, Greeks and Parthians, and from Byzantium to Siberia and India, showing thereby the already vast knowledge of the author. One should note that he considers that there

is no influence of Sasanian toreutic on Sogdian ceramics, but rather either a Parthian or Achaemenid impact (p. 106, where he adds a reference [1971b] dating from after the original thesis of 1965) or a Parthian or Sasanian influence (p. 111).

All this study leads him to consider that there were two major stages in the history of the site. These stages, from p. 123 on, are associated with the periods of construction (stage 1 = Period I; stage 2 = Periods IV-V).

At the end of this part (p. 176), the author goes briefly back to K.VI linked with the last major reconstruction of the rampart. He gives only a quick description of the pottery, since its study is said to be incomplete. He mentions that it does not contain any shard close to those of the "upper level" as is the case in V/3, though four Sogdian coins with square perforation as well as a stamp on a jar in the shape of a Byzantine belt buckle come from this kompleks. He dates this to the 7th century, but the actual dates should be later, at least the end of the 7th and first quarter of the 8th century. The author also admits that it is not yet clear whether K.VI is homogenous or whether it should be divided into several phases. He notices that its pottery is different from that earlier, as evidenced both by technical considerations and by the shapes, slip and decoration (clay less tempered, slip either mat and rough or bright orange, not completely oxidized core, appearance of several registers of waves and grooves, disappearance of collars on jars, etc.), even if several shapes from the earlier periods still exist.

He now considers each *kompleks* as one period and proposes the following dating (pp. 179–80):

- the "upper level" should start just before the abandonment of 720–730;
- VI = ca. 620-660;
- V/3 = ca. second half of the 6th century;
- IV-V/1 to V/3 = should not have been longer than 50 years, i.e. ca. 530-600;
- between II and IV, however, a long period with several reconstructions while I and II succeeded immediately each other;
- the dates of I should be situated around 440– 480.

He then goes back to the absolute date of the second period of construction which he links here with K.III to V/3 (p. 180). This is certainly a paragraph added afterwards and the terminology used is confusing. Up until now, Period II was linked only to K.III. What is probably meant here is the second stage of the history of the site. Several examples of finds similar to those of the "upper level" dated to the 8th century are mentioned, like the stamps on the rims of jars, and here the date of the silver and cornelian ring with a zebu attributed to K.IV is corrected (6th-7th, instead of

5th century). One does not understand, though, how this can allow dating III–V to the 6th century, since we are dealing here either with intrusions from the upper level, or with some errors in the stratigraphy.

Finally, the major conclusions derived from the stratigraphy are underlined (p. 181): the site was founded around the middle of the 5th century and is rather poor at the beginning. Then the rampart is strengthened at the beginning of the 6th century. Around the middle of the 6th century, important changes occur in the economy of the city and the rampart is rebuilt. The last main reconstruction of this wall is dated to around the middle or the third quarter of the 7th century, when the construction of the "upper level" also starts. The great number of handmade vessels found in the city is said to be a proof of constant links with the villages around. Altogether, although some changes occur haltingly in the different kompleksy, the pottery shows a constant and regular evolution, a proof that the population did not change drastically.

Part III (pp. 182-205) tackles the question of Sogdiana altogether, including Kashka Darya, during the 5th and 6th century, a still obscure period, on the basis of comparisons made on the pottery of different excavated sites. The stratigraphy of Tal-i Barzu plays a major role, and the absence of statistical studies on all the other sites makes this study fragile, according to the author. He considers that, even though Sogdiana belongs then to one and same culture, the different potters' schools led to regional particularities. The middle and second half of the 6th century is the period when the Turks invaded the area and when a civil war broke out, so that many sites disappear at that time, but Panjikent put up exceptional resistance, the breaches in the rampart being dated to after V/3. One can only regret that the author did not make a comparative chronological table that would have summarized all these data and would have made the reading much easier. We propose one here (Table II, next page), and add to it the data coming from Part IV that concern the 7th and 8th centuries.

Part IV (p. 206-247) deals with the Sogdian pottery of the end of the 7th and early 8th century, and with the influence of the toreutic on it. Most of this chapter (from p. 219 on) was published in the author's 1961 article. This part, actually, is irrelevant to the title of the book, since it concerns the "upper level" or does not even deal at all with Panjikent itself.

The author uses the observations made before him by G. V. Grigor'ev (1940) concerning the major transformation that the pottery underwent after TB IV, especially the tableware which then adopts new shapes and decoration (pear-shaped jugs, shouldered cupgoblets, covering with mica, etc.) and which

Table II: Summing up the relative and absolute dates of Sogdian sites according to the author

Panjikent	Tal-i Barzu	Kafyr- Kala	Mug	Kaunchi	Kashka Darya	Absolutes Dates
	I			II		2 nd –4 th ccentury
	II					End of 3 rd -1 st half of 4 th century
	III					Short duration
I-(IV)	IV (starts before Panjiikent I)		2 nd phase		Many sites with material similar to Panjikent I-II	(IV^{th}) – 1^{st} half of 5^{th} , until 1^{st} half of 6^{th} century
V						Second half of 6 th century
VI						620-660 with additions: Architecture dated to the second half of the 7 th , and pottery to the first quarter of the 8 th century.
Pits of V/3 "Upper level" "New Pottery Style"	V	Potters' quarter				End of 7 th – early 8 th century. This has to be corrected to the middle of the 8 th century after the additions to the dates of VI.
	VI					Abbasid period (coins)

obviously copies metalware. According to Grigor'ev, this is due to influence from Sasanian Iran. At Panjiikent, this "new style" appears only after K.VI, therefore after the middle of the 7th and during the first quarter of the 8th century. The author makes comparisons with the pottery from other sites in Sogdiana like Chilek and Afrasiab, or in Kashka Darya, Chach and Ferghana and points out that it is often linked with finds of coins dated to around 700. He then concludes that the transition took place between the second quarter and the end of the 7th century, since the "new style" appeared only after the abandonment of the settlements and manors at the end of the 6th century. It is important to stress here that, since the author has himself corrected the dates of K.VI to the first quarter of the 8th century (see our Tables I and II), the appearance of this "new style" has to be postponed to a later period, i.e. not before the middle of the 8th century.

He then uses the numismatic data to reconsider the dates of Tal-i Barzu V and VI and notes the presence of a destruction layer followed by an abandonment all over Sogdiana around the middle of the 8th century.

Following Bol'shakov (1964), he links this observation with the Arab conquest of Qutaiba, followed by the Sogdian insurrection during the 730s, before Nasr-ibn Seyyar put an end to the rebellion and helped the Sogdians who had fled to Turkestan come back. The years 740–760, under Abu Muslim, were a period of peace and reconstruction. The final destruction of Panjikent, Tal-i Barzu or Varakhsha is dated to the years 770–780, when the Arabs put an end to the rebellion of Muqanna's partisans.

Then the author investigates the potters' quarter discovered at Kafyr Kala, where many vessels of the "new style" were found in proximity to large kilns. Several archaeologists worked on that area but no complete publication was done. He first reconsiders all the data at hand about the shape and size of the kilns. Then he underlines the new techniques of manufacture that are visible on the pottery, like the thinning down in facets of the bases of the vessels which he says were made from a lump of clay, and the rationalization of the decoration by the use of stamps, the sprinkling of mica on the external surface, or the presence of a white thick and polished slip. According to him, these new

techniques are, on the one hand, a simplification of the work for mass production, this pottery being found in a large area from Samarqand to Panjiikent, but, on the other hand, they make the production more complex, since an effort is made to copy metal vessels. He then proceeds to the description of each of the known shapes made in this "new style" (this is in the 1961 article): plates, cups-goblets with handle divided into three major types — I, shouldered with an oblique rim/collar; II, with a cylindrical shoulder; III, with a wavy rim — and jugs with a narrow neck.

He further compares them abundantly either with vessels shown on the mural paintings of the last period at Panjikent, or with the silver vessels from the collection kept at the Hermitage Museum and dated to the post- or final Sasanian period, or to vases discovered in Turkish graves in Siberia, or to those from Tang China, not forgetting to mention all the similar shapes discovered in Sogdiana or in Semirech'e. He emphasizes clearly that, while it is obvious that this new style of pottery copies metalware, the origins of the prototypes remain unclear because of the intensive relations between Iran, Sogdiana and China during the 7th (and, we might add, the 8th) century. He mentions metal vessels from the Hermitage Museum where surprising mixtures of influences are visible. He considers, however, that the decoration has clear local roots, even if some of the same motifs are to be found also in Iran or China. He describes in detail the stamped motifs (either geometric, vegetal or figurative) and supposes an evolution from the most realistic to the most stylized ones until they totally disappear during the 8th century, leaving only blank facets on the same shapes of vessels.

The jugs without sprinkles of mica but covered with a white polished slip have a decoration that was previously unknown and that reminds the author of carved wood, or of some specific designs on the mural paintings at Panjikent. To these jugs with white slip also belongs a small group with original anthropomorphic decoration. He finally adds small flacons to this new style of tableware, saying that they are all different and altogether rare items.

He sums up this review underscoring that this "new style" is very different from the pottery of earlier periods. He proposes that there were several centers of production to explain the scarcity of types II and III of the cups-goblets at Kafyr Kala, while they are rather numerous at Tal-i Barzu and Panjikent. He also describes the more common pottery found together with this new tableware in the kilns of Kafyr Kala, like water jugs, pots with wide opening or jars, some of which may have mica and decoration, in particular spouts in the shape of animals, or applied motifs in

the shape of palms/grape leaves at the base of the handles. The cooking ware has handles, is wheel-turned and sand tempered, but is rarely decorated. He ends by mentioning rare shapes.

As a result of his description of the pottery of the "new style", and of the comparisons he made, the author concludes that it does contain some features of the previous pottery and wonders whether its origins are to be found only in metallic vessels or if they could not be due to some avant-gardist potters' centers. He therefore wants to search for a similar evolution in the shapes that are not influenced by metal vessels. In any case, he observes a homogenization of the pottery all over Sogdiana at the end of the 7th century and first third of the 8thth century (but we repeat here that this date needs to be revised later, more probably to after the middle of the 8th century). This leads him to consider the 7th and 8th centuries as an intermediary stage in the history of pottery of the Early Middle Ages, enriched - especially in tableware - with influences coming from all the surrounding areas through the intensive trade going on at that time. He notes the absence of relations with India, though the same sprinkling of mica is known there at the same time. Finally, he mentions that a more important change happens in the 9th century with the disappearance of traditional shapes and the introduction of glazed

Conclusion (pp. 248-50). After a period, during the 5th and 6th century, of more or less domestic production where the potters' creativity played a major role explaining the differences in pottery from site to site, a "new style," copying metalware, is introduced all over Sogdiana at the end of the 7th and beginning of the 8th century. According to the author, the best key to understand these earthenware replicas is to study the local metalware, because Sogdian toreutic must have undergone considerable evolution due to the exchanges made with neighboring regions (Byzantium, Sasanian Iran, the Turks and China). The architecture and the intensity of the currency circulation at Panjikent itself underline the wealth and accomplishments of the city. The same can be said of other sites in Sogdiana like Varakhsha, Afrasiab or Shakhristan.

As shown by our review, the book is extremely dense, rich in illustrations and in valuable information, especially in the immense repertoire of comparisons the author provides. It is certainly understandable why V. I. Raspopova wished to publish it. Nevertheless, it is clear that the book is stamped by the date when it was written, that there are many problems of stratigraphy or of intrusions, and that, in spite of the efforts made by the author to demonstrate an evolution in the typology of the material from one period to

another, it is barely discernible, unless this residential quarter lived for a much shorter period than supposed originally. A great deal of new information has come up since then, including at Panjikent itself, and one can only regret that no important publication has ever been published on the pottery of the "upper level" since that of Bentovich in 1964. There are no illustrations in Raspopova (1969), and subsequently we have only the recent annual reports.

We mentioned at several occasions that the dates need to be revised and that, if only because of the corrections made by the author himself or by his wife for the dating of K.VI, the "new style" could not go back earlier than the 8th century. Recent excavations at Afrasiab/Samarqand confirm this point of view and indicate a date during the first Arab occupations, i.e. not before the second half of the 8th century (see, for instance, Grenet 2008a).

As far as the influences of toreutic on the "new style" are concerned, we noted the author's inclination to see in them those of the local Sogdian metalware rather than those of post-Sasanian Iran. However, the discovery a few years ago on the citadel of Kafyr Kala of an important number of bullae with various motifs, among them several Sasanian ones, has to be mentioned (Cazzoli and Cereti 2005 and review by Grenet 2008b), as well as recent publications on the Sasanian and post-Sasanian glass, or Islamic glass (Whitehouse 2005 and 2010), where identical shapes to those of this "new style" of pottery are attested.

About the author

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EXPANDING GEOGRAPHIC HORIZONS ALONG THE MARITIME SILK ROAD

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Hyunhee Park. *Mapping the Chinese and Islamic Worlds: Cross-Cultural Exchange in Pre-modern Asia*. Cambridge, etc.: Cambridge University Press, 2012. xxviii, 276 pp. ISBN 978-1-107-01868-6.

Park's book is a revision of her Yale dissertation (supervised by Valenia II) (supervised by Valerie Hansen). She sets out "to understand the extent of the geographic knowledge that existed between two of the principal actors that created this interconnected world of Asia, namely China and the Islamic world, as well as the processes by which they gained this knowledge over centuries of continuous contact" (p. 1) Specifically, her questions include: "What geographic information can be gleaned from Arabic and Chinese narratives: What are the formats and genres of geographic and travel writing that present these bits of information? What is their status as fact or fiction, and how can we evaluate that status? What new information can we find in each period, and how can we interpret it within the context of the Sino-Islamic contacts? What are the possible conduits of new information about other societies? Finally, in what ways did increased cross-cultural understanding broaden the overall world view of these two societies and lead to further cross-cultural contact?" (p. 13) In addition to textual sources, she considers material and visual evidence, especially maps. She brings to this agenda enviable linguistic ability in the major East Asian languages, Arabic, French, and at least some Persian. The agenda is ambitious, the results somewhat uneven.

While it is true that the book "is the first to treat both sides of the exchange equally, using a comparative analysis of major primary sources in Chinese, Arabic, and Persian," in a sense her task is the same one Ferdinand von Richthofen and a good many of his followers set when initiating the study of what he termed "the Silk Roads." The emphasis here is on great empires/civilizations. For Richthofen it was Han China and Rome; for Park it is China and the Islamic worlds, even if at various times fragmented politically. One consequence of this approach then is to downplay what comes between the bookends of Asia. While

one can appreciate her consicious decision for practical reasons of scope not to treat South and Southeast Asia, this then has to compromise what she says about the ways in which knowledge was transmitted. Moreover, if Richthofen seemed to focus too much on overland routes, Park consciously chooses to do the reverse, emphasizing the maritime connections. This is in fact a welcome change in emphasis from traditional treatments of "the Silk Roads." However, too often her downgrading of overland contacts seems forced, especially when she is discussing transmission of important knowledge that explicitly arrived via overland contacts. On the Chinese end, the south is privileged; the areas controlled by the northern dynasties after the fall of the Tang largely ignored. In the Islamic world, Inner Asia gets short shrift (even if some of the key intellectuals such as Mahmud al-Kashgarī and al-Bīrūnī, whom she discusses, were from Central Asia).

Another aspect of Park's approach which deserves emphasis involves her method for analyzing information in her sources. While she is concerned to provide a sense of context for the various sources, in the first instance her criterion for their value is a modern one: she specifies (p. 203, n.4), "when I refer to 'precise' or 'accurate' depictions, I mean those that are in accord with our modern-day understanding." Fair enough, but the resulting treatment of the material largely is a positivist one, often expressed in wishful thinking about how a given source somehow might be construed as evidence of a march toward greater understanding, deeper knowledge or the like. In the first instance here, the emphasis is on how political and economic considerations fueled a conscious effort to learn more about those on the other end of Asia. One might wish that she had tried to enter more deeply into the thought world of those who produced, quoted or copied the sources. To have done so might have widened our appreciation of how the old and the new often were combined in incompatible ways (if we judge by a standard of progress toward deeper and more accurate knowledge), and how in some cases the evidence reveals not how much people knew but rather how little. Insofar as there are problems here, they arise most frequently in the treatment of the relationship between text and image, a matter to be discussed more fully below.

Park divides the material by three major chronological periods — 750-1260, 1260-1368, and 1368-1500 and within them treats first Chinese perceptions of the Islamic world and then the converse, the perceptions of China in the Islamic world. To a considerable degree her periodization relates to the developments in maritime connections between east and west Asia, which as she notes, grew steadily after 750. Within that first period, initially the contacts seem mainly to have been in the hands of Muslims who came to China, but in successive sub-periods, while there was a growth of Chinese "direct" contact, trade came to involve intermediaries, with, she argues, a consequent decline in the transmission of information. She emphasizes what we have long known that the Mongol/Yuan period represented the acme of cross-Asian exchange of knowledge, but unlike many others who have focused on the Mongols as an overland empire, she stresses their interest in the maritime trade. One could quibble as to whether 1368 (the end of the Yuan) is the best dividing point between her second and third periods, given the fact that in the first third of the 15th century there were such important exchanges between the Timurids and Ming, and given the evidence of the Ming "treasure fleets." Most would agree that a period of decline in cross-Asian contacts followed, leading up to the appearance of the Europeans in the Indian Ocean. Of course, as we know, even that supposedly game-changing event has come under scrutiny from the standpoint of its impact on both the Indian Ocean exchange and the fate of the overland routes.

Even though, as Park readily acknowledges, there has been substantial scholarly attention to individual texts, for many readers her summaries and quotations from eyewitness sources or the surviving compilations that quoted them will be new and most welcome. One might wish, of course, for an appendix (or companion volume) with full texts in translation, and in some cases, parallel textual comparisons would have best illustrated borrowings and edits from one source to another.

The first of her significant Chinese authors is Du Huan 杜環, captured by the Arabs at the Battle of Talas in 751, an event taken here as seminal for certain issues of east-west exchange, even if (as Jonathan Bloom has stressed but Park chooses to ignore)

we should not necessarily believe the secret of paper manufacture came to the Islamic world only as a consequence of that battle.1 In the interpretation here (p. 29), the Arab-Chinese conflict in Inner Asia and the Tang withdrawal there and replacement by other polities (notably Tibet) meant the cutting off of the overland routes and stimulated the rise of the maritime routes in the later Tang period. One might well ask whether "this situation" in Central Asia (as opposed to the Arab conquest of Sogdiana) then explains "the disappearance of non-Chinese groups like the merchant Sogdians."2 It is helpful to know that Du Huan's "remarkably accurate and rich knowledge about the Islamic world" may largely reflect what he saw in Kufa, but the implication that one might then generalize from that perspective to other parts of the Islamic world is a bit misleading. Moreover, even if he conveyed a vague understanding of the vast extent of Arab conquests, at least from the evidence presented here there is no indication he was specific about those conquests having reached as far as the Iberian peninsula. Indeed, Park to some extent seems to contradict herself when she appropriately indicates that Du Huan's "Western Sea" probably meant for him the Persian Gulf.

Of primary importance for expanding Chinese knowledge of the West as maritime trade blossomed was a description called "The Route to the Foreign Countries across the Sea from Guangzhou" (Guangzhou tong haiyi dao 廣州通海夷道) compiled around the year 800 CE by Jia Dan 賈耽 and included in the New History of the Tang Dynasty (Xin Tangshu 新唐書). This is "the earliest extant document from either China or the Islamic world that describes the maritime route between Guangzhou and the Persian Gulf" (p. 32). Park conveniently illustrates on a schematic diagram the main places he mentioned, which seem to connect to two itineraries, one East-West and the other coming up from the east African coast and intersecting with it. Undoubtedly the itineraries reflect information obtained from Muslim merchants or sailors. She nicely juxtaposes (pp. 30-31) this scheme with a map illustrating locations in the Indian Ocean world where finds of 8th-10th century Chinese ceramics have been made, providing physical documentation of the trade.3

More problematic than Jia Dan's textual description is his *Map of Chinese and Non-Chinese Territories in the World* (*Hainei huayi tu* 海內華夷圖), which has not survived and at best can be "reconstructed" from evidence in a wood-block printed atlas of the end of the 11th century (and two somewhat later maps). While Park recognizes that such reconstruction may be seen as problematic, she optimistically concludes from the indications Jia Dan must have been a source

for the Song-era maps that his original "represented the [then] sum of geographic knowledge that existed in China." "Jia Dan's map may have contained even more information about foreign places than the evidence reveals. We cannot be sure if his map actually contained all seven of the routes to China that he describes verbally in a surviving written source … However, sources from the Tang period show that many maps about foreign territories existed then, including a map of India brought to China by Wang Xuance [王玄策] (flourished seventh century)… Unfortunately, all of these Tang maps are lost…" (p. 37)

Indeed, the reproductions of the Song-era maps, the first ones we actually do have, suggest that by the 12th century Chinese cartography was able to produce a remarkably accurate depiction of China. However, the "depiction" of foreign locations was confined to listing a selection of names in the margins. This is a perfect illustration of the point Cordell Yee emphasized in his (granted, controversial) treatment of Chinese cartography in the standard history edited by Harley and Woodward: namely that the textual traditions in geography took precedence in China, and texts were not necessarily "illustrated" accurately in maps.4 Park's introduction (p. 35) of Pei Xiu 裴秀 (224-271 CE), whose principles for drawing maps indeed seem to have been advanced even if we do not have concrete examples of their being put into practice, is somewhat misleading, as any discussion of the Chinese grid system that first appears on the Song-era maps needs careful explanation of the fact that it is not the scientific equivalent of the grid system theorized in the West by Ptolemy. It would have been helpful had Park specifically engaged with Yee's discussion of these matters, but instead she glosses over it, leaving us with the impression that textual description and mapping advanced in concert, even if not entirely overlapping in content. She assumes, for example, that Jia Dan, "who valued much of drawing precisely measured maps," "also used a grid system for his precise mapmaking" (p. 35).

Other than the maps which seem to have reflected official government initiatives, there are ones produced by Buddhist scholars in the 13th century intended to illustrate, if schematically, the important Buddhist sites visited by Xuanzang back in the 7th century. I am somewhat puzzled by Park's assertion that on them "country locations are plotted with relative accuracy when compared to written geographic sources" (p. 38). By this she seems to mean the newer written sources conveying knowledge of the Islamic world, not the written sources from a much earlier century which were the concern of the 13th-century authors of the maps. There is no reason to *expect* the maps should represent some kind of progress in a

scheme whereby geographic information was being updated, even if, true, the maps are the first which have survived in China that "graphically portray the overland routes to all the countries of the western regions which previously had only been described in written, rather than illustrated form" (p. 40). I cannot share Park's optimism that the Buddhist "Map of the Five Indian States in the West" (Xitu wuyin zhi tu 西 土五印之圖), specifically tied to Xuanzang, "bears realistic features such as a clear coastline outlining the triangular-shaped Indian subcontinent" (p. 40), even if she undoubtedly is correct that the distortion of all the land mass into a rectangle probably embodies the Chinese understanding of a "rectangular-shaped world" (importantly, one might add, a concept of a flat earth). The Buddhist "Geographic Map of the Land of China to the East" (Dong zhendan dili tu 東 震旦地理圖) does add to the older information some names - such as Arabia (Dashi) and Baghdad (Baida) - that must have come from more recent texts, but the fact that these few newer names are left floating in the southwest ocean may not simply reflect "limitations of space" (p. 42). There is no reason to think the cartographer would have known where to place them in any accurate visual sense other than "out there" on the fringes of the known world. In fact, Park later admits that "Chinese cartographers only drew maps of China proper accurately" (p. 58). I suspect to some extent Park's treatment of these maps, which embody a Buddhist world view that has little, if anything, to do with pre-modern political and economic concerns, may have been compromised in her book by editorial demands that she cut her text. Her separate article (2010) on these maps in fact does a better job of contextualizing them for what they are rather than emphasizing what they are not.

There is, however, every reason to believe that the well-documented expansion of maritime trade under the Southern Song contributed significantly to the information available in China about the Islamic world. It seems that in this period Chinese merchants were significant in at least the eastern region of the maritime trade, even as Muslim merchants from as far away as Siraf in the Persian Gulf were important figures in the Chinese ports. Officials involved in government administration of shipping compiled manuals, notably Zhou Qufei's 周去非 Notes from the Land beyond the Passes (Lingwai daida 嶺外代答) (1178) and Zhao Rugua's 趙汝适 Description of the Foreign Lands (Zhufan zhi 諸蕃志) (1215) (pp. 46ff). Zhou's book includes two chapters on the Islamic world in which, among other topics, he elaborates on religious beliefs and practices. His treatment of the sea routes parallels that earlier by Jia Dan but contains additional practical detail. Half a century after Zhou Qufei, as Superintendent of Merchant Shipping in Quanzhou, Zhao Rugua drew on his predecessor's account but supplemented it with other sources.⁵ His description of what is probably Baghdad is quite detailed, and he knew at least something about Egypt. Of course one might question whether his comment that the sources of the Nile were as yet unknown really demonstrates (as Park suggests) how "encounters between Muslims and Chinese went beyond commercial transactions and reached the level [of] cultural intellectual exchange" (p. 53). Hirth and Rockhill's statement about the Song interest in geography is certainly worth recalling here, if only to have provoked a possible rebuttal:

Geographical studies, though extensively applied to every part of China proper during the twelfth and thirteenth centuries, were treated with considerable contempt where foreign countries were concerned ... The knowledge of foreign countries was an obscure, unprofitable hobby, taken up only by a few officials whose special dutries disposed them to make these researches, and which in no way appealed to the public fancy. Confucian philosphers actually threw discredit on what was then known of the geography of foreign parts..." [Chau Ju-Kua, p. 38].

While Park stresses how Zhou and Zhao's accounts include "detailed sailing guides to the Islamic world" (p. 53), regrettably her decision not to focus on South and Southeast Asia leaves the reader to learn elsewhere what they wrote on those regions. Given the fact that the maps she discusses do such a bad job of depicting any of the coastal realities beyond China proper, one really would like to know more about what the texts contain, if Chinese readers were to be able "to imagine a series of ports that formed a line that stretched all the way to the Islamic world" (p. 54). Furthermore, one wishes for some additional information on the evidence for the distribution of the texts. Park makes the important point (p. 50) that wood-block printing opened the way for wide distribution of geographic information. Zhou's work was printed several times under the Ming (pp. 214-15, n. 86). But earlier? And, is it reasonable to conclude that wood-block printing necessarily "improved the quality of geographic knowledge that circulated" (p. 50) if such printing also disseminated what from the standpoint of "geographic knowledge" was a dated Buddhist cosmography embodied in the Song-era maps discussed above? Neither printing, nor for that matter literacy, can unequivocably be shown to be agents of progress. While Park cites de Weerdt's valuable recent article (2009) on Song maps, her summary footnote (p. 211, n. 42) regarding what de Weerdt says about their reception does not really do justice to that discussion. The issue of reception, which merits serious attention, involves more than just commentary by "politicians" (an anachronistic term) regarding foreign policy. The positioning of China with reference to vaguely defined foreign regions of arguably little intrinsic interest for Chinese intellectuals tells us much about the shaping of identity.⁶

Park opens her analysis of early Islamic geographical works by stressing that, unlike the inwardlyfocused Chinese, the Muslim geographers from the very beginning "conceived of a larger world, a feature of the worldview they inherited from Greek and Persian geographers before them." The respective maps are a clear indication of this: "Chinese cartographers only drew maps of China proper accurately, while Muslim cartographers could create world maps that plotted even distant China and its neighbors with relative accuracy" (p. 58). Of course "relative accuracy" is at best a slippery concept. Apart from the question of who had the tools and perspective with which to draw a world map, in looking at the weight given information about China within the larger corpus of Islamic geographic literature, one has to wonder whether China was any more central to Islamic geographers than was the Islamic world to their counterparts in China.

In reviewing the evidence from texts and maps, Park clearly is wanting to believe that amongst Islamic world geographers "information aggregated" (p. 90) in kind of progressive fashion, culminating in the "great syntheses" by al-Idrīsī and Yāqūt. In fact though, she cannot avoid the contradictions inherent in any scheme that imposes a modern standard of progress on pre-modern history, and she ends up admitting that after the 10th century, much of Islamic geography was derivative, updating of information was at best uneven, and the world maps "retained many inaccuracies" even as al-Idrīsī's "Ptolemaic framework contains accuracy to resemble modern maps"[!] (p. 90). As much as anything, the conundrums here (some easily avoidable) result from her tendency to want to treat "Islamic geography" as some kind of unified or unifiable entity, even as she obviously knows better and occasionally says as much.

I wonder whether her results would have been different had her publisher allowed her more space in which to expand her analysis of each individual source. Yes, she provides succinct and largely well-informed descriptions of the provenance of the sources and relevant facts of authors' biographies. But there seems to be no space here (or inclination) to move beyond "what the text contains about China" to a deeper contextualization that would really clarify each author's goals and method. A possibly fruitful way to clarify some of the issues would have been to adopt the distinction, developed by Aleksandr V. Podo-

sinov (1978) in a seminal essay 35 years ago, between what he called the chorographic and cartographic approaches to geographical information in pre-modern sources.7 His distinction is between what we might term a possibly subjective descriptive approach and an "objective" or scientific one. At the core of the cartographic approach is the use of astronomically determined precise coordinates for latitude and longitude, which for accurate two-dimensional mapping (as measured by a modern standard) has to include a methodology that accomodates the reality of a spherical earth. In the history of cartography, as Park's quotation above seems to suggest, Ptolemy's pioneering approach laid the basis for the development of modern cartography. Later, where she discusses the beginnings of Islamic cartography, somewhat unclearly she says that some "features of the Balkhī School maps resemble reconstructions of Ptolemy's longitudinal and latitudinal coordinates" (p. 77), even though one authoritative treatment of Islamic cartography insists that even those Islamic geographers who knew Ptolemy's work failed to apply it to the making of maps.8 It is important to distinguish between the inspiration Ptolemy provided that indeed sparked an effort among Islamic-world elites to measure more precisely geographic coordinates of key locations and any serious effort to translate this information into a scientific map. Park seems to be suggesting that the supposed "reliance on [Ptolemaic] precedent" was retrograde, and that, notwithstanding such an obsolete approach, somehow the mapmakers were able to incorporate new and more accurate information from first-hand observation. Yes, there is evidence of the latter, but did it really result in more scientifically constructed maps? At very least here one might wish for a clearer articulation of what could reasonably have served as the basis for the creation of maps that might match our modern expectations for accuracy.

In fact what the earliest extant Islamic maps depict is generally schematic, with the greatest detail derived not from any mathematically precise tables, but rather from chorographic sources, in the first instance itineraries. The itineraries themselves more often than not are composites, not records of single journeys. Such considerations then behoove us to treat with skepticism any attempt to reconstruct missing maps in order to find in them scientific cartography, starting with the supposedly pathbreaking one commissioned by Caliph al-Ma'mūn in the 9th century and ending with the one inscribed on silver for the Norman King of Sicily Roger II in the 12th century. That said, yes, as Park describes, we can and should appreciate what the creators and their patrons at least professed they were attempting to do, whether or not there is any hard evidence to prove that they achieved that result.

Al-Mas'ūdi's statement that Caliph al-Ma'mūn's map was superior to that of Ptolemy tells us really very little about either; it is important to remember that we have no example of Ptolemaic maps from Ptolemy's own time - only much later interpretations which may or may not accurately depict his intent. Even in cases where we know that the authors of geographical treatises in the Islamic world envisaged maps to illustrate them (and where maps that supposedly are those same illustrations or good copies of them are extant), it is clear that the mapping tended to be schematic. Maps may have served as mnemonic devices and, as Park suggests (p. 73) when she turns to their analysis, can help us to understand the conceptual world embodied in written sources. However, what were considered to be the more precise details (as was also true in the Chinese case) were contained in the accompanying texts.

Even though Park opens with al-Ma'mūn's project for compiling geographic information and speculates on his map, the more substantial first part of her chapter on the Islamic sources deals with the descriptive texts, beginning with the important Ibn Khurradādhbih, who became director of posts in the Abbasid Caliphate in the 9th century and complied a very influential description of routes and realms (Kitāb al-Masālik wa'l-mamālik). The great bulk of its itineraries lies in the central lands of the Caliphate. He did draw on information about several itineraries of Jewish merchants who traded across Asia all the way to China. And one small part of his book traces a maritime itinerary that contains a brief description of southeastern China, gives some sense of Chinese products, and at least hints at knowledge of lands further east.

What Park might have clarified in her discussion of Ibn Khurradādhbih is that the more fantastic stories he incorporates into the work (as opposed to the "objective" official account of routes) seem to have been insertions in the a second version of the book he produced for a different patron several decades after the first version. Thus, even with this one author, one may establish how different purposes could lead to results of greater or lesser value as measured by some modern standard. To recognize this might also then lead to a fuller treatment of the adab genres than Park provides — that is insofar as geographic information in the Islamic world really did become "popular" (as Park claims it did), its embellishment and transformation into other literary genres needs serious consideration. A rare exception is her brief discussion of the 10th-century writer Ibn al-Faqīh, offered here mainly to illustrate how "folkloric" approaches of such writers of belles lettres, while popular, contributed little to the progress of scientific geography (pp. 75-76). Likewise, the "Wonders of India" and "Thousand and One Nights" tales receive only passing mention (p. 64).

Ibn Khurradādhbih's treatment of China seems quite cryptic when compared with that in another text composed at the same time in the middle of the 9th century. The anonymous "Accounts of China and India" (Akhbār al-Sīn wa-l-Hind) has come down to us in a larger compilation of the early 10th century attributed to Abū Zayd, who, significantly, was from Siraf, a port on the Persian Gulf which figured prominently in the early trade with India and points farther east. In addition to the anonymous text, Abū Zayd obtained from other merchants, one a certain Suleyman, a good deal of information regarding the China trade and Muslim involvement in it. With generous quotations and summaries, Park conveys well the richness of this material. However, by extracting only the China information from the anonymous text (which integrates it thoroughly in a consciously comparative fashion with the material on India), she lessens our appreciation of that one source. 9 She merely emphasizes (p. 64) how striking it is that the text regards China as of equal importance with India, given the fact that China was more distant for an author based in the Middle East.

Abū Zayd's compilation includes specific, if not wholly accurate, information on the Huang Chao 黄 巢 rebellion in 874-884 CE. Importantly it resulted in the decimation of the foreign population in the major port of Guangzhou and may have contributed to what Park emphasizes was a "restructuring" of the maritime routes, long-distance travel all the way to the Middle East giving way to networked connections over shorter distances. Consequent to this, while Chinese knowledge of the Islamic world seems to have increased (the examples being in the works of Zhou Qufei and Zhao Rugua), "Middle Eastern knowledge appears to have declined."10 What she seems to mean here is that for a long time there were few significant additions to the body of information on China available in the Islamic world.

Park transitions to cartography by discussing al-Mas'ūdī's puzzlement over how remains from an Indian Ocean stitched-plank vessel might have ended up in the Mediterranean, the most likely explanation being a connection around the north of the "known world" via the encircling ocean which was commonly depicted on the circular world maps developed by the so-called Balkhī School of cartographers in the 10th-11th centuries. It is unlikely that they "mapped the entire known world, including China, *before* they composed regional geographic treatises and maps comparing different parts of the Islamic world" (p. 75, my emphasis). Moreover, it is hard to see in their largely standardized circular maps of the world as

they knew it "a quite accurate representation of Eurasia" (p. 76). Parts of it and North Africa, yes. Insertion of generalized symbols for geographical features such as mountains and seas is only the vaguest reflection of the incorporation of updated knowledge.

In the larger history of geography in the Islamic world, al-Muqaddasī and al-Bīrūnī loom large precisely because of their serious scientific credentials and methodologies. However, it is critically important that one not distort their accomplishments either in descriptive geography or in mapping. Al-Muqqadasī is the writer considered to be the most sophisticated and critical of all the Islamic geographers. He laid out carefully a scientific methodology (p. 77), but he confines his attention to the Central Islamic lands. His only mention of China is a somewhat confused designation of a "Sea of China" that may at one point include even all the Indian Ocean, and his maps (insofar as we have them) are amongst the sketchiest of all those attributed to the Balkhī School.11 Apart from his major study of India, al-Bīrūnī provides new information on China, which came to him, it seems, primarily via a Liao embassy that traveled via the overland routes to Ghazna in Afghanistan. Obviously this fact makes Park uncomfortable, where she is wanting to maintain that the overland routes were "no longer flourishing" (pp. 79-80). The world map attached to al-Bīrūnī's book on astrology is indeed of interest for features that differentiate it from those commonly found on the Balkhī School maps (pp. 78-80), but how far do we want to go in claiming it "more closely matches modern day representations"? It is highly schematic. India is shown as an extension of China projecting in Ptolemaic fashion around part of the Indian Ocean. Khurasan is China's neighbor to the north (hardly one of the "places close to China" in any geographic reality we would recognize). That the large land mass of the Ptolemaic tradition that extended eastward from Africa is gone is of real interest — the Indian Ocean opens into the encircling sea. But what does this tell us? Could it reflect some desire by the artist to create a symmetrical composition? Or does it illustrate that the more serious Arab scientists (al-Muqaddasī is explicit in this regard) were unwilling to plot on their maps or describe places about which they knew nothing? And this new representation of the Indian Ocean and Africa as a more modest peninsula oriented to the south was far from widely accepted, even if, as we shall see, it seems to suggest an important link to some significant later world maps.

Park is right to bring to our attention this and other world maps that depart from the dominant Balkhī School model, although her use of them at times seems forced. An example is the unique map attributed to Mahmud al-Kashgarī as the illustration to his impor-

tant study of Turkic dialects. Al-Kashgarī contributed incredibly important new information on Inner Asia, but beyond his apparent understanding that northern and southern China were ruled by different dynasties, does he really say much of substance about China? And there is reason to think that an illustrator other than al-Kashgarī added on the edges of his map the locations peripheral to the inner Asian regions that were al-Kashgarī's main concern. At very least, al-Kashgarī is yet another nail in the coffin in which one should bury attempts to downgrade the importance of overland routes.

Park deserves credit for bringing to our attention a very recent discovery, an early manuscript Book of Curiosities (Kitāb gharā'ib) which contains several maps including a not yet fully analyzed one that "illustrates the Silk Road extending across Central Asia without connecting to China" (p. 80).13 She seizes on this to suggest it reflects the "decline in overland trade" in the 10th and 11th centuries, although, as with the al-Kashgarī map, it is also evidence that "some partial overland contact between the Islamic world and China appears likely." In fact there is much more which might be said about the geography represented the maps of the Book of Curiosities, not the least being the suggestion that its compiler knew about an overland route extending from Northen India up into Tibet or through the mountains of Southeast Asia to China. Whether the maps themselves can be used as evidence about how active certain itineraries were is another matter, since they are highly schematic – the one of the Indian Ocean depicts an oval-shaped enclosed lake. The interesting fact that a map scale is in the margins of the world map is worth noting, although there is no reason to believe it had anything to do with the construction of the map itself.

That new information about China did in fact make its way into descriptive texts between the late 10th and 12th centuries, some of it attesting to the continuing importance of overland connections, can be seen from the important anonymous Persian text, The Regions of the World (Hudūd al-Ālam) (p. 81). While Park highlights the fact that it contains information on East Turkestan, a bit more is needed here to emphasize that the compiler's main source indeed seems to have been a northern one. And, if anything, his concerns focus more on Tibet than on China, which occupies in fact a rather small part of his world. Marwazī's 12thcentury work, as she appreciates but could even more fully explain, contains much more, some derived from simply repeating information in al-Bīrūnī, but also material that is new, undoubtedly derived from informants who used the maritime routes. Yet here as earlier, Park finds it difficult to accomodate how much evidence points in the direction of the continuing significance of overland routes: Marwazī "gained additional information through channels created by limited connections between the overland and sea routes at the time" (p. 82).

More important are her generalizations (which beg, however, for refinement) regarding on the one hand the uneven distribution of information about the Far East in Islamic sources (areas closer to China tend to have more on it) and on the other hand the sharing of that information. What is needed here is clearly articulated genealogies of traditions within the world of Islamic geography, which might then enable us to come up with something analogous to what Boris N. Zakhoder years ago (1962, 1967) did in determining how for a number of important Islamic geographers there was a common core of a "Caspian collection" of information on Eastern Europe. A related example is what Tibbets does in his stemmata illustrating the relationships among the manuscript traditions that preserve the work of the Balkhī School (History of Cartography 1993, esp. pp. 113, 138). Even if the emphasis is on sharing (with an eye to "progress" as defined largely by the accumulation of new material), there also needs to be a clear articulation of the limits to progress. It is possible to document how different authors describing the same important region might take very little from a supposedly authoritative predecessor whose work they knew and in effect approach the task of description *de novo*.¹⁴

For Park and many authorities, the work of the early geographers in the Islamic world culminates in al-Idrīsī and Yakūt, whose syntheses incorporated much of the earlier material and added some that was new. In light of what she has already described in some detail with an emphasis on accuracy and "modern" features, how are we to parse Park's enthusiastic take on the vision of al-Idrīsī's patron, Roger II, the Norman king of Sicily in the mid-12th century? His interest in geography, we are told, "sounds like an expression of the kind of scientific curiosity beginning to awaken in Christian Europe," which "eventually would replace older standards of geography, whose approach to making world maps was symbolic, fanciful, and myth-based rather than scientific" (p. 83). Yet did this vision really translate into something so forwardlooking, any more than did the apparently scientific visions of Caliph al-Ma'mūn or al-Muqaddasī? This may sound heretical, but, as Gustave von Grunebaum long ago (1962) articulated for a different set of examples, maybe the best way to characterize the indeed impressive accomplishments of al-Idrīsī and Yakūt is as a kind of "cultural classicism," efforts at encyclopedic compilations which, rather than looking forward, are anchoring in place a body of knowledge that, if anything, might end up closing the doors to real innovation stimulated, among other things, by cultural borrowing.

What we find in al-Idrīsī is systematically organized compendia of geographic information region by region, where possible based on whatever new information he could acquire, but including contradictory information if he could not decide which source was correct. For each region there is a map, drawn to a standard that allows the regional maps to be connected into a very large one covering al-Idrīsī's world. That said, however, while he drew on and modified the earlier work based on Persian and Greek sources (notably Ptolemy) as corrected by earlier Islamic scientists such as al-Khwarezmī, al-Idrisī's maps are not constructed by what we would consider to be modern scientific methods. Park makes this fairly clear in stating that what we find here is "a rough means for plotting longitudinal and latitudinal location" (p. 84), where the emphasis certainly should be on the "rough." But notwithstanding her assertions that both the reconstructed large world map (based on the sectional maps) and the single circular world map are the "first extant world maps that drew most of Eurasia and North Africa with detail and accuracy," the reader begins to lose confidence as she admits most of what he knew about China was largely based on old information. "Like the Balkhī School and al-Bīrūnī maps, al-Idrīsī placed Central Asia north of China, which is roughly correct, and follows the Greek tradition of locating the legendary places of Gog and Magog northeast of China..." (p. 84). Certainly it is difficult to recognize in al-Idrīsī's world anything close to what we would understand as the contours of India and southeast Asia, and his Africa extends all the way to the east, encompassing most of the Indian Ocean.

As Irina G. Konovalova, who has carefully analyzed all of al-Idrīsī's information for Eastern Europe, emphasizes, the nature of his (and other medieval geographers') methods renders absurd any attempt to locate many of their toponyms on a modern map, since so often the specific details on those earlier maps can be comprehended only within the framework of a mental construct the pre-modern author had devised for a given region. Such constructs may have little to do with with "geographic reality" as we would know it. Each of al-Idrīsī's regions then must be subject to minute analysis, the results of which are likely to show wide variation in terms of anything we might think of as "accuracy." ¹¹⁵

One of the most challenging aspects of the tasks Park has set for herself is to be able to demonstrate cultural exchange. Texts may suggest how in China or in the Islamic world compilers of information about the other drew upon the knowledge of those who had been there. Some of the informants are known to us, but many are anonymous and their role suggested largely by somewhat vague indications that the sizeable communities of merchants or seamen could be valuable sources. Oral transmission of practical information about navigation, what products were available in various ports, or what rulers presided over them is one thing. Communication by translation of geographic treatises compiled within the other cultural region and the exchange of scientific knowledge of how to construct maps is another matter. Indeed, before the Mongol period, as Park recognizes, there is little evidence of such exchange. Since many aspects of cultural exchange in the Mongol period have been thoroughly studied (as Park communicates), my comments here will focus primarily on cartography. This will require looking beyond the chronological boundaries of the Yuan Dynasty.

Modern maps generally have a well-defined projection, a scale, and place objects with reference to a grid (graticule) marking latitude and longitude. Discussions of progress in cartography then naturally focus considerable attention on the use of a grid, what it may have meant to the cartographer, and whether or not it developed autonomously within a given culture or might instead have been borrowed. While one can hypothesize the use of a grid for drawing maps where we may have only a description that seems to suggest such a "scientific" approach (for example, in the map project of Caliph Ma'mūn), one needs to look most closely in the first instance at surviving maps, which may, of course, be much later in date than when the grid was first used.

For China, the first such surviving map is on a 12thcentury (Song period) stele, where the grid of uniform squares likely was superimposed on a map drawn originally by ground survey methods. The grid here served not as the framework on which to construct the map but rather simply as a device allowing the viewer of the map to measure distances. Since there seems to have been no compensation for curvature of the earth by any kind of sophisticated projection of the geographic data, naturally the accuracy of measurements using the grid might be only approximate and probably worse the farther away one moved from the center of the map. Even though Park sides with those who believe this (p. 35), one can only speculate whether the use of the grid on this Song map had anything to do with the sensible instructions for good map making laid out by Pei Xiu back in the 3rd century or whether Jia Dan in the 8th century might also have used a grid.16

In western Asia, while latitudinal climate divisions which could be matched with numerical latitudes can be traced back at least to Ptolemy, the earliest extant Islamic maps with a grid illustrate the works of the 14th-century geographer Hamdallāh Mustawfī, although in manuscripts of a later century. In one case the grid covers the land areas on a circular world map where the cartography seems to be related to the scheme devised by al-Bīrūnī for depicting the Indian Ocean (see above). In another case (the manuscript apparently from the 16th century), where there is much more detail, the grid has been used to position names of locations, one to a square, presumably roughly where numerical coordinates would place them. As Tibbets has pointed out though, this use of a grid is quite crude, since there is no sense of adapting it for the curvature of the earth, and the results are certainly not very precise. What is claimed to be the earliest case of an Islamic map's having a properly adjusted graticule with curved lines for longitude is on a map illustrating the works of another 14th-century geographer, al-Umarī, but it seems almost certain that the graticule was added no earlier than the late 16th century and likely reflects a European borrowing.¹⁷

The earliest extant map produced in China that displays with reasonable accuracy (by modern standards) regions in the Islamic Middle East and Central Asia dates from the Yuan (Mongol) period. It has only the barest representation of geographic features but lays out on a regular grid the names of cities and the divisions of the Mongol Empire in approximately the locations we would expect on a modern map. While the map allegedly is based on a late Yuan Dynasty one, its modern survival is in a version included in a compilation published by Wei Yuan 魏源 in 1842, which contains in the first instance maps based on modern European cartography but also includes some apparently fanciful reconstructions of earlier Chinese ones. Perhaps because of this context, Cordell Yee ignored the purported Yuan map which Wei claimed he had copied with only minor emendations from the 14th-century source. In fact, this map had long attracted attention of European scholars, who apparently accepted it as authentic.18 As Park explains (and illustrates on p. 143), the map is strikingly similar to one of the maps of Hamdallāh Mustafī, dated to around 1330 (though known only from a 16th-century copy) and possibly related to work done two decades earlier in the atelier of the Ilkhanid Grand Vizier Rashīd al-Dīn and the even earlier work of a geographer who worked under Ilkhanid patronage, Zakariyā b. Muhammad al-Qazwini. The question that scholars have argued over is which of the maps might have influenced the other. Further, what relationship might this idea of a gridded map have to the one illustrated by the 12thcentury Song stele? While Park is hesitant to take sides on these questions, she nonetheless concludes that at least there must have been "some kind of information

exchange between geographers in both societies and the transfer of the new coordinate system from Iran to China during the Mongol period" (p. 144). As she notes, neither map indicates longitudes and latitudes. Certainly, as she elaborates, there is ample contextual information concerning projects beginning back under Khubilai in which Muslim experts were involved, projects which show how cartography from the Muslim world *could* have influenced the Yuan map. What we cannot know is what role, if any, Chinese might have had in the production of this map beyond translating captions for it.

It would have been worthwhile here, I think, had she gone a bit farther and cited Jonathan Bloom's incisive comment relating to the question of whether Islamic and Chinese map grids could have influenced one another. His particular interest is architectural plans which must have used grids, but he also connects this with gridded maps and argues for the transmission of the models from East to West.

The effective use of maps and architectural plans demands not only that some people be able to draw them but also that other people be able to decode them, and there is no indication that Chinese and Iranian cartographers and builders shared any vocabulary of spatial representation. Increased contacts with China [in the Mongol period] may have presented Chinese gridded maps to Iranian eyes, but that did not guarantee that Iranian viewers were privy to how they were meant to be read...In short a series of crisscrossed parallel lines might have very different functions and meanings in different cultural contexts.¹⁹

The existence of the Yuan-period map and the other evidence we have about the employment of Muslim experts in China makes it clear that Islamic cartography at least to some degree must have been known in East Asia, a knowledge that then continued down into the early Ming period. The most famous of the maps that reflect this is one compiled in Korea in 1402 known as the Kangnido (The Map of Integrated Regions and Terrains and of Historical Countries and Capitals), which drew heavily on Chinese sources but also obviously used some western, Islamic source. Park and others understandably analyze it as a way of extrapolating what "Chinese geographers" might have come to understand about the more distant world beginning back in the time of Khubilai. The map centers on a huge China; in the east is a very large Korea, both shown with considerable detail and accuracy. As with the earlier Chinese cartographic traditions, the contours of Southeast Asia bear no resemblance to reality, nor does India.20 The western quarter of this map is the one which has attracted great interest, its source (judging from the toponyms transcribed from Arabic and Persian and the contours) surely from the Islamic tradition. On it one can see a recognizable Arabian peninsula and Red Sea, a rather distorted but partially recognizable Mediterranean, and the Nile River extending north from the Mountains of the Moon on an Africa that deceptively has a rough approximation of the contours of Africa as we know it today — that is, somewhat triangular shaped, with open ocean to its south and west. While the Persian Gulf here bears little correspondence to what one might expect from earlier Islamic cartography, on the whole one can see how Islamic maps could have served as the basis for this depiction of "the West" (see Kauz 2013).

In her discussion of the Kangnido map, Park elaborates on the Islamic parallels and indicates what seems to be known about the possible Chinese sources (which, however, are not extant). Her discussion of the first ever (on an exant map) depiction of "the whole of" Africa could use some clarification though. She does suggest sensibly that the effort to fit everything into the rectangular format could explain some of the choices made by the cartographer, at the same time that she indulges in pure speculation: "perhaps the content [of the map] derived from the firsthand observations of some Muslims who sailed around the African horn" (p. 105). In support of this tantalizing possibility, she cites the pseudo-historical claims by Gavin Menzies at the same time that she says there is so far no evidence to prove his contentions about Chinese having sailed around Africa before the Portuguese. In another place (pp. 148-50), she cites al-Umarī's account about a maritime expedition sent out by the Sultan of Mali to see how far one could venture in the encircling sea. However, that proves little, since the vessels vanished; if they discovered anything, we cannot know what it might have been.

In fact, a close examination of the Africa of the Kangnido map shows that it relies on a source that had even a garbled idea of the Nile (shown as flowing into the Red Sea), and no information whatsoever on points anywhere close to the southern tip of the continent. The schematic representation of the source of the Nile is just that, schematic, and a huge lake is shown in the center of the continent. This is surely short of a map with "detailed, colored illustrations of the African continent," nor can we consider that the Mediterranean Sea on the map is "quite precise," even if one might allow some margin for interpretation in stating that the map has "fairly accurate contours" (pp. 105-06). Yet the map is hugely interesting, seeming to represent a somewhat awkward splicing of cartographic material from two conceptually very different traditions. And, as Park shows, the tradition represented in this map continued well into the Ming era — that is, Chinese maps did not simply revert to a focus only on China (p. 166).

Not surprisingly, the evidence this provides to illustrate cultural projects in East Asia under the Mongols has its analogues in the Ilkhanid realm of the West (where Hamdallah Mustawfi, a native of Qazwin, worked). As Park indicates, the cultural projects overseen by Rashīd al-Dīn at the beginning of the 14th century provide vivid evidence of cultural exchange (pp. 131–38). While we can but speculate about his lost work on geography (Park would like to believe it actually was completed), we certainly can get an idea of the breadth of his geographic purview from his pioneering effort at compiling world history. He surely had Mongol sources brought directly from the court of the Great Khan in China. He knew a lot about Yuan institutions, although, and here I think we need to be somewhat more cautious than Park is, his information about earlier Chinese history was cryptic, and the depictions of Chinese rulers that illustrated his manuscript are largely a kind of "orientalist" fantasizing of real Chinese imperial garb.21 His information on Buddhism seems to have derived from an account by a Kashmiri monk. That he devotes attention to the subject at all is remarkable. The illustrations to that text though are again a kind of curious orientalizing fantasy that mixes styles and motifs from several different artistic traditions. The artists seem not to have had in hand (or been willing to use) genuine Buddhist art. The overall picture then is that of a kind of awkward splicing of traditions and information, exactly what one might expect of cross-cultural exchange where the two parties to it came at the material from such different perspectives and traditions.

A somewhat different perspective on what cultural exchange East and West under the Ilkhanids might have produced is to be found in the relatively recently discovered miscellany The Treasury of Tabriz (Safineh-yi Tabrīz) compiled and copied apparently by one Abū 'l-Majd primarily in the 1320s. Park focuses on its map (pp. 140-41), which has clear affinities with the 13thcentury one attributed to al-Qazwini, but without any discussion of why the manuscript of The Treasury is so interesting.22 As she notes, its map does include a few place names important in the Mongol period that were not on the earlier map and distinguishes northern and southern China, older information that in the Yuan period was anachronistic once China had been unified. Yet there is little here to suggest any kind of profound transmission of new knowledge about the Far East. While the map may have been intended to illustrate a couple of very short texts about climates and regions, as Sonja Brentjes has observed, the information in those texts and on the map does not always agree. Brentjes also notes a number of unusual

features of the map, some positive ("towns in Turkestan and Afghanistan are mostly placed correctly"), but much distorted ("in Europe, Africa, western Asia, Arabian peninsula the localities are often misplaced"; "the Gulf of Bengal [Bahr al-Hind] goes far to the north (6th climate)..."). The manuscript also contains brief descriptive geographical material on Tabriz and its immediate surroundings.

So there is little here to suggest more than a passing interest in the geography of the wider and contemporary world. While the compiler was interested in some of the recent Ilkhanid political history and the history of Tabriz, much more of his attention was devoted to literature: he copied a lot of poetry and literary criticism. He had some interest in astronomy and astrology (represented in a treatise by the famous Ilkhanid astronomer Nasīr al-Dīn Tūsī), the occult and mysticism. He also copied some advice (wisdom) literature. The manuscript is so important because it provides a rare, nearly intact snapshot of the range of interests of a member of the educated Persian elite who was not, however, a scholar on the level of Rashīd al-Dīn.

This is the kind of contextualization that can help enhance our appreciation of where the geographic knowledge of the "other," which is the focus of Park's book, really fits. It is exactly such contextualization that Yee emphasizes is needed if we are to understand what cartography meant in China beyond merely the drawing and printing of some maps which may or may not, by modern measure, be deemed accurate: "In effect, the map serves as a substitute for reality, implying a high degree of formal likeness. But in accordance with Chinese aesthetic theory, the physical world and the psychological become fused. Physical descriptions are intertwined with acts of perception ... cartographic forms were meant not only to reproduce but to express" (History of Cartography 1994, pp. 162-63). Might this be the case in the Islamic world? Not necessarily, but to ask that question might evoke some interesting answers.

There is much more to be said about Park's book. For example, I met here for the first time Wang Dayuan 汪大渊 (1311–50) who wrote about travels along the routes all the way to Africa which Park would like to believe he actually saw (as she indicates, there are doubts about how far west he may have gone) (pp. 114–18). Her treatment of the records from the Zheng He 鄭和 voyages of the first third of the 15th century is of interest, even if one may be uncomfortable with her implication that one can read real geography off the schematic navigation maps preserved in Mao Yuanyi's 茅元儀 *Treatise of Military Preparation (Wubei zhi* 武備志) of 1621. In short, as the reader may sense, I have found her book to be immensely stimulating.

She has accomplished a lot of what she set out to do. Yes, she might have gotten more out of some of her reading (and perhaps thereby modified her analytical approach). Had she had more helpful editors, I think some of the inconsistencies could have smoothed over. As one who cannot read the sources in the original Arabic or East Asian languages, I should be the last to suggest additions to her bibliography, though in at least one case, such would have helped avoid a significant mistake.²³ It would have been nice to have had a more complete index.

Of course the big topic here is that designated by her sub-title: cross-cultural exchange. Even to attempt to give it justice would require a whole set of volumes, so that the relevant evidence from art, literature, various intellectual disciplines and technology might be treated in depth. To contextualize any one area of exchange with at best only passing reference to the many others is a practical necessity for a dissertation project such as this. The result though left this reader wondering how much "exchange" really is represented by her evidence concerning geographic knowledge. Yes, one can speculate, for example, that "in the open international atmosphere of seaport Quanzhou, where local Chinese regularly interacted with many foreigners, some of them probably recalled diverse geographic ideas originating in ancient periods in order to break from the authoritative Chinese-centered worldview" (p. 115). Arguably too much of the emphasis here is on geographic knowledge for purely practical economic or political purposes; in fact we get too little of what may have constituted the "Chinese-centered worldview" or, what one can reasonably posit was an Islamic (or Iranian, or Arab) one. A listing of products available in a far-off place may have practical value, but is obtaining them going to change either one's perception of oneself or of the other culture? A Muslim map with a poorly drawn China off on the fringes of a world centered on Arabia or Iran hardly can be construed to indicate that there was much interest in the "other" any more than does a Chinese map listing the names of a few western locations in its margins. A travel account by someone not familiar with the local languages is no more likely in pre-modern times to tell us of meaningful exchange than it would in our own time.

The instances where it might be possible to find some deeper level of interaction and understanding arguably are few though they may, of course, be highly significant. However, if, as seems to be the case, on both ends of this "exchange" there was a "decline" in knowledge of (and interest in) the other by the time one arrives in the 16th century, then might that not have to raise questions about how *meaningful* was the exchange that had earlier taken place? Lurking in the

background here are the concerns of so much of the traditional scholarship whose standard for assessment is the modern world. Ostensibly this was the starting point for the noted Arabist Sir Hamilton Gibb (1955) when he addressed the question of what constitutes conditions for successful borrowing from one cultural sphere to another. But his analytical approach went beyond just holding up a modern standard. Borrowing, he argued, is a sign of cultural vitality, but for borrowings to take and be creatively re-worked and integrated into the receiving culture, it is necessary that there be a predisposition for their reception. On the face of it, in certain very specific circumstances there was a remarkable growth of geographic knowledge thanks to active contacts between China and Islamic west Asia, but if it seems not to have developed into a mature plant in either place, then we might possibly discover that the soil and climate in which we might have hoped it would flourish were better suited to a different species.

About the author

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Notes

- 1. She cites Bloom 2001, where he analyzes the story about the transmission of paper-making technology via prisoners taken at Talas. However, she ignores the fact that he then (see pp. 43–45) questions this tale in favor of an argument about the acquisition of that knowledge in Central Asia and the Middle East well prior to the battle.
- 2. While Park and others refer to Étienne de la Vaissière's masterful treatment of the Sogdians, where he very carefully analyzes the evidence about the reasons for the end of Sogdian overland trade to China, what tends to escape notice is the fact that his concern is specifically with the Sogdian trade. I think he leaves open the question of whether other overland trade routes were important, ones that may not be connected necessarily with Sogdian activity. See de la Vaissière 2005, Part 4.
- 3. While commenting in any detail on this evidence is clearly not Park's purpose (she is following expert opinion here), one might wish to interject a note of caution regarding what the mere presence of some Chinese ceramics excavated in the Middle East may suggest. One can show an apparent rise and fall of such imports by doing a statistical time series from any excavation site (such as Siraf), but the absolute percentage of recovered Chinese ceramics from any of these Middle Eastern sites tends to be quite small compared to the very large quantity of ceramics produced in the Middle East and found at the same sites. At Siraf, for example, in what appears to be the peak period of the importation of Chinese ceramics, the first quarter of the 9th century, they constitute less than 1 % of the finds, even if this represents a severalfold increase over the percentage for the preceding decades. And that bump in the statistics is but a brief one. See Hodges and Whitehouse 1983, esp. pp. 145-49; for the detailed analysis of the ceramics, see Tampoe 1989. Should we read this as evidence for a "dramatic" increase in the maritime trade with China? Evidence from one site in Yemen for a somewhat later period is more impressive, though still less than 4% of the ceramic finds (Rougeulle 2004, p. 215; see also Zhao 2004). Of considerable relevance for any study of this subject is the evidence about the spread of Islamic-world imitations of Chinese wares, which apparently are more numerous than the actual Chinese examples. While Park appreciates (e.g., p. 45) the evidence underwater archaeology is providing about the capacity of ships trading from China to carry large quantities of ceramics (as evidenced in part by the size of some cargoes that have been recovered), some caution is also needed in what conclusions this may support regarding increased trade with West Asia - to gloss over the Southeast Asia connections is to miss a lot. So far we know little about the ultimate destinations of such cargoes,

which surely in many cases must have been short of the Middle East. See, for example, Flecker 2002, pp. 132–33.

Unfortunately, Park somewhat garbles (pp. 65–66 and notes 32–35) the information we have for two of the really important wrecks, known respectively as the Intan and Belitung ships, for the locations where they were found. It is easy to conflate the information about them (I have done so myself), in the process confusing what is known about their structure (for Intan, we can only hypothesize, for Belitung we know much more; the two, according to Flecker, were most likely of different construction and provenance) and attributing the cargo of one to the other. For the Belitung wreck, which is perhaps the best one to support her arguments about trade to the West, it is too bad she saw only the preliminary reports, which now have been supplemented by the substantial volume *Shipwrecked* 2010.

- 4. See Yee's several essays in *History of Cartography* 1994, especially starting on p. 65, for his development of ideas about a new approach to the study of Chinese maps. See also the enthusiastic review by Paul Wheatley (1996), which explains why Yee's approach is so interesting.
- 5. Zhao's work has long been known (and is much cited) from Hirth and Rockhill's copiously annotated translation (*Chau Ju-Kua* 1911).
- 6. It would also be useful for the earlier Tang-period to explore the subject self-perception with reference to the "other" by looking at belles lettres. See, for example, Schafer 1951, which Park does not cite.
- 7. For those who do not read Russian, there is a summary of the important points in the long review Podosinov wrote with Leonid Chekhin (1991) on *The History of Cartography*, Vol. 1.
- 8. See the explicit statements by Gerald R. Tibbetts in *History of Cartography* 1993: "One thing not taken up by Arab scholars was Ptolemy's chapter on the construction of geographical map projections... The link between Ptolemy's mathematics and actual map production seems never to have been made. The impetus Ptolemy's work gave to the Arabs, however, does seem to have aroused an interest in map production..." (pp. 94–95), and "al-Istakhrī and Ibn Hawqal [key representatives of the Balkhī School of cartography DW] show no interest in projections or mathematical astronomy. Neither do they mention longitude and latitude in any form, or any sort of map construction" (p. 115). On the response to Ptolemy's listings of geographic coordinates though, see the good summary in Anton M. Heinen's chapter on geography in *Different Aspects* 2003, esp. pp. 472–77.
- 9. For the integral text in English translation, see *Arabic Classical Accounts* 1989, pp. 33–57.
- 10. In support of this statement, Park refers to an important article by Kenneth Hall (2004), ignoring, however, one of his most important points, which is that the Southeast Asian component of that trade deserves attention it has not received by historians who have traditionally emphasized the Middle Eastern or Chinese ends of the route. In other words, much of what he says implicitly undermines her approach, something that perhaps was inconvenient to admit. The important subject of the changing emphases

in the geographic focus of writers in southeastern China regarding the maritime routes has been treated extensively by Roderich Ptak, whose work is listed in Park's bibliography, even if it is not clear she has absorbed some of his nuanced observations (see, for example, Ptak 2001).

- 11. For a translation which includes images of the maps, see Muqaddasī 2001.
- 12. This is one of the points made by Andreas Kaplony (2008) in a valuable article which Park cites even if she may have missed that detail.
- 13. I think she might gotten more out of the two articles she cites: Johns and Savage-Smith 2003; Rapoport 2008.
- 14. An example is in Irina G. Konovalova's careful analysis of the descriptions of the Black Sea by al-Idrīsī, Ibn Sa'īd and Abū al-Fidā (Dzhakson et al. 2013, summarized on p. 277). Each author had his own purpose, which governed his selection of data. Of course this *could* be interpreted as progress, in that it reflects conscious decisions about the use of evidence, where one might at least assume alternatives were available and examined first.
- 15. See Dzhakson et al., esp. p. 199. All three authors, who have written extensively on early concepts of geographic space, offer in this book stimulating ideas about newer approaches to understanding pre-modern geography which, if applied to the material Park covers, could move us well beyond her traditional methodology. Konovalova's section in *Imagines Mundi* is devoted to Islamic geography, with a particular focus on al-Idrīsī, on whose material concerning Eastern Europe she has also published an annotated text edition and a separate monograph. It would be difficult to recognize the Black Sea as we know it from al-Idrīsī's sectional map of it, even though he had at least some very good sources of information from those who had been there.
- 16. Compare the treatment of this topic by Cordell Yee in *History of Cartography* 1994, esp. pp. 46ff.
- 17. See the discussion by Tibbets in *History of Cartography* 1993, pp. 148–50. He reproduces the Mustawfi maps on pp. 150 and 152, and al-Umarī's map on p. 153, where, however, the graticule is not visible. Park's reproduction of that same map shows the lines clearly, probably enhanced by her source, Fuat Sezgin, who apparently suggests that the graticule dates to the 14th century.
- 18. Emil Bretschneider (1967/1888, Vol. 2) published it with transliterated names and devoted a lengthy analysis to identifying them with known locations. He calls it the "only interesting map in Wei Yuan's book and dismisses the others as "pure inventions of his fancy" (p. 4, n. 785). Park discusses

- this map on pp. 100–103 and 142–44. Unlike in the book, where her discussion is broken up into different sections, she provides a more coherent treatment of the map in a separate essay (2013). She does not cite Albert Herrmann's long appendix to Hedin 1922, which reproduces a number of the earliest maps from China. The Yuan one is on Pl. 8, facing p. 278, with a facsimile of the original Chinese print and a parallel version with translations of all the captions on it. He suggests that it must be a Chinese translation of a western, probably Arab map, perhaps via a version on which the place names had been written in Mongolian.
- 19. Bloom 2008 (in the final typescript version of this book which I am using, the quotation is on p. 59). Park cites Bloom's article even if not engaging with this conclusion of his.
- 20. Park is explicit about this, even though she then overemphasizes "accuracy" when discussing the areas the map depicts further west: "The map jams the Indian subcontinent between China and the Islamic world, depicts Southeast Asian countries as small islands, and omits a complete coastline between China and the Islamic world" (p. 122).
- 21. For a valuable analysis of the illustrations to Rashīd al-Dīn's history, see Blair 1995.
- 22. Her source here is Qiu 2011. The article contains what appears (in the pdf file I have seen) to be a very poor reproduction of the map and is devoted mainly to the identification of the geographic names written on it. There is a facsimile edition of the whole manuscript which I have not seen and Park does not cite. Neither does she use the very informative collection of articles edited by Seyed-Gohrab and McGlinn (2007). The brief description of the geographic content in the latter is on pp. 56–58 and specifically on the map, pp. 208–09, esp. n. 290, quoting the analysis by Sonja Brentjes.
- 23. In the early 15th century, the mission of Ch'en Ch'eng to the Timurid ruler Shāhrukh met him in his capital Herat (not Samarkand; cf. Park, pp. 168–69), and Ch'en Ch'eng's remarkable description is of Herat. In describing this mission, unusually for her Park seems not to have read the original text, the Herat section of which is available in English translation in Rossabi 1983. And she might have been inspired to write more about it, had she read the careful analysis published by Felicia Hecker (1993), who demonstrates how precise the descriptive material is and how impressive it is that Ch'en was able to transcribe a good many Persian words accurately, even if it is likely he did not know the language.

New Research on Sacred Places in Central Asia

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Yasushi Shinmen, Minoru Sawada, and Edmund Waite, eds. *Muslim Saints and Mausoleums in Central Asia and Xinjiang*. Monde Caucasien et Tatar – Asie Centrale et Haute Asie, vol. 3. Paris: Jean Maisonneuve, 2013, xvi + 242 pp. ISBN 978-2-7200-1187-0.

This volume is a long-awaited contribution to the **■** study of sacred places (*mazars*) in the Ferghana Valley and Xinjiang, and also serves as a starting point for comparisons between the sacred places of Central Asia and other sacred places around the world. The essays are based on studies presented at the International Conference on Mazars in Ferghana and Xinjiang held in Tokyo on 26 and 27 November 2005, and have been updated to reflect the scholars' analyses and additional research since then. Most significantly, the volume seeks to integrate both historical and anthropological approaches to the study of sacred places, an endeavor which is necessary when considering the sacred places of this region where traditional written sources must be combined with oral accounts as well as other non-traditional sources. All the articles are in English making the work of scholars from China, France, Japan, Kazakhstan, Russia, and Uzbekistan accessible to an English-speaking audience and in some instances for the first time. Notably several of the authors incorporate Chinese historical sources that often go unmentioned in English-language scholarship.

The volume is divided into four parts with sections devoted to "Classification," "Sources and Literature," "Case Studies, Prophets, Imams, and Sufis," and "Mazar Ritual Activities and Gender." There are 42 pages of photographs and diagrams in an appendix, which adds a vital visual element to the individual articles and allows the unfamiliar reader an opportunity to visualize the sacred sites under discussion.

Five of the authors collaborated in the summers of 2004 and 2005 on a joint Japanese-Kazakh-Uzbek project extensively surveying the shrines of the Ferghana Valley. Minoru Sawada's article, "Towards a Classification of Mazars in the Ferghana Valley," offers a summary of their research and an attempt to divide

the different types of mazars into categories based on the religious person with whom the sacred place is associated. At the end of his article he lists 135 sacred places and provides detailed location information. Looking at the role of gender, Nadirbek Abdulahatov classifies the shrines associated with women in the Ferghana Valley into categories based on the shrines' names. He describes the natural features of many of these shrines, the motivations of the women who visit those shrines, the rituals that women perform, and the symbolic nature of the shrines. It is important to note, as in some of the other articles of this volume, that women often make up the vast majority of pilgrims to shrines whether or not the shrines are named in honor of a female. The motivations for making such pilgrimages as well as the rituals that women perform are not limited just to mazars named in honor of female saints and other historic women, as might be assumed from reading this article alone. One might wonder that the tomb of Safid Bulan is shown in figure 9.5 in a photograph attributed to the author, since men are clearly and emphatically restricted from entering that space.

As a complement to Abdulahatov's article, Rahilä Dawut, presents a detailed picture of pilgrimage among women in Xinjiang. She also makes a classification system for the mazars she considers in her fieldwork. Her explanation of the motivations behind female pilgrimage and her detailed description of ritual practices at mazars are particularly rich. She points out that while many of the shrine custodians are male, the majority of the pilgrims are female. Also, she mentions important connections to Buddhism and Nestorian Christianity.

Ashirbek Muminov's article, "The Sacred Places of Central Asia," outlines the major obstacles in studying those shrines, provides a lucid description of the

significance and value of their study, and notes many of their important and unique features. Yayoi Kawahara focuses his article on the specific shrine place of Qutayba ibn Muslim in the Ferghana Valley. He seeks to understand the situation of the mazar based on his research in 2004, as well as introduce some of the oral traditions and historical documents associated with the shrine. Kawahara describes both some of the oral legends he collected during his interviews at the shrine and the historical documents that the shrine custodian had given him permission to view. This article highlights the necessity to incorporate both oral and written sources found at the mazars when trying to understand the historical and contemporary significance of shrine places and the way that they were regulated and maintained both within larger political systems and by locals. Yasushi Shinmen and Yoyoi Kawahara also situate the mausoleum of Buzurg Khān Tora within the history of the region based on their fieldwork at the shrine. This article is valuable in that it traces the historic significance of Buzurg Khān and his travels and attempts to track how this relates to his shrine in local lore and society.

Some of the articles look at the intersection of religion and politics. Alexandre Papas' article emphasizes the importance of closely reexamining the policies and activities of the 17th century religious and political leader, Afāq Khwāja, in order to understand the religious landscape of Eastern Turkestan today. Jianxin Wang expands on the significance of mazar worship for the Uyghur people of Xinjiang, providing a detailed description of ten major shrines in the Turpan Basin. Wang intertwines a discussion of what is considered specifically Uyghur Islam and culture with the distinct political situation in Xinjiang. Five of the ten shrines have official legal status, while the other five are more just "sight-seeing" places since they lack the appropriate buildings or officials that would allow them to register.

Thierry Zarcone revisits the question of classification with the specific case of determining how to describe Sulaiman Too in the city of Osh. He refers to it as an "atypical mausoleum" since it does not contain what he considers a true mazar. He looks to historical references and suggests that the term *qadam-jāy* or "place of arrival" is better suited to describing this major pilgrimage destination in the Ferghana Valley. He also discusses Sulaiman Too as a place of the cult of jinns.

Because the mountain itself is sacred and pilgrims follow a specific path stopping at predetermined stations along the way, Zarcone explains that Sulaiman Too is a prime example of an "itinerary-pilgrimage" with a planned route, in contrast to other shrine places that emphasize the centrality of circumambulation of a mausoleum or sacred object.

Trying to divide sacred sites into categories can be problematic because many of the sites have changed over time, and as noted by the authors of these articles, the ways in which people view and utilize the sites overlap. This is not always immediately obvious to the researcher. Subsequent studies could potentially overlook the complexity and diversity of such sites if too much emphasis is placed on rigid classifications, which might then diminish the shrines' significance. The benefit of establishing these initial categories, however, is to provide a starting point from which we can make comparisons both within the region and beyond. Sergey Abashin uses his case study of the Mazar of Boboi-ob to tease out some of these same concerns. He argues that no single classification system will satisfy the interests of all scholars and that the sacred places under consideration are typical only in that they are diverse, multidimensional, inconsistent, and sometimes even contradictory.

Overall, the articles in this volume speak to the central significance of mazar worship in Central Asia. Cataloging the diversity and intricacies of these shrines, as well as understanding the historic trajectory of them, leads to questions about the role of gender, ethnicity, and politics in the dynamics of religious beliefs and practices. Incorporating non-traditional sources and oral accounts with traditional written sources and seeking an interdisciplinary approach, as did the authors in this volume, will set a precedent for the study of shrines and local Islam in Central Asia and Xinjiang and open up opportunities for new analyses and comparisons in other parts of the world.

About the author

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A TREASURY OF OLD IMAGES FOR THE STUDY OF INNER ASIA

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V[aleriia] A[leksandrovna] Prishchepova. *Illiustrativnye kollektsii po narodam Tsentral'noi Azii vtoroi poloviny XIX-nachala XX veka v sobraniiakh Kunstkamery* [Illustrated collections on the peoples of Inner Asia from the second half of the 19th – beginning of the 20th century in the collections of the Kunstkamera]. Sankt-Peterburg: "Nauka," 2011. 452 pp. ISBN 978-5-02-038269-5

important collections of resources for the study of ■ Central Asia have too often lain neglected for want of published guides to their contents. V. A. Prishchepova's book is thus to be applauded, as it opens the way now for research in the extensive image collections housed in the Peter the Great Museum of Anthropology and Ethnography (the Kunstkamera) in St. Petersburg (not to be confused with the city's Russian Museum of Ethnography). Even though the Kunstkamera began to aquire photographs and drawings not long after the Russian conquest of Central Asia, since the emphasis was on objects, little was done to systematize and describe the image collections. As anyone who has looked through old photo albums can appreciate, unless the pictures in them were properly captioned at or near the time when the photos were taken, proper identification of subjects and the locations where the photos were taken can be a formidable, if not impossible task. Other major collections that include photographs of Central Asia (for example, the Royal Geographical Society and the British Library in London) have a lot yet to accomplish in this cataloguing process.

While she readily admits that much work is yet needed, Prishchepova has made an impressive start. She begins by contextualizing the early photography in Central Asia within the larger history of the development of photography in Russia. Chapter 2 describes the history of the growth of the Kunstkamera collections, and Chapter 3 provides biographies of key figures responsible for the visual documentation of Central Asia, either as organizers of projects or as artists and photographers.

Among those of particular interest are N. Orde (variously referred to as Orden and most commonly Hordet), K. N. de-Lazari, and S. M. Dudin. For the first

(pp. 58-68), there is not even enough information for a biography. While he has been identified as French, Prishchepova argues from analysis of his captioning on his negatives that he likely was a Russian citizen if not ethnically Russian. Hordet's photos are amongst the best known of this early documentation from Central Asia, as they are represented in several Western collections and have appeared in various publications. De-Lazari (pp. 68-74, 140-50) was an administrator in Kazakhstan and became a correspondent for the museum, which houses a remarkable collection of his photos of Kazakh life.

Samuil Martynovich Dudin-Martsynkevych (pp. 83–102, 154–164) left what is undoubtedly the largest and most widely ranging set of images amongst these early recorders of Central Asia. Plucked from a period of Siberian exile for revolutionary activity, he was enrolled by V. V. Radloff in 1891 in his expeditions to Mongolia, for which he drew and photographed the important finds, including the famous Orkhon inscriptions. He then made his career working in the museum as the curator for the Turkestan collections. Of particular interest for the history of the "Silk Roads" is the extensive work in did in Samarkand in 1905-8, drawing and photographing the Timurid monuments and assembling a large collection of fragments of their ceramic tiles. In 1909 and again in 1914-15, he was the photographer for S. F. Ol'denburg's Turfan and Dunhuang expeditions. Unfortunately plans for properly publishing his material on the mausoleum complex at Shah-i Zinda in Samarkand never were realized, and most the drawings (but apparently not the photos) he made there seem to have disappeared. To date apparently only isolated examples (but ones stunning for their quality) have been published from among the hundreds of photos he took on the Ol'denburg expeditions.2

It is of some interest, of course, to consider which photographers are apparently (judging from the index) not represented in the Kunstkamera collections. There were, of course, a good many Europeans who visited Central Asia and whose work is in Western collections. Among the Russian photographers who left noteworthy images are I. Volzhinskii and I. Vvedenskii, the latter having taken striking pictures of the historic architecture in Samarkand. A particularly noteworthy omission for the Kunstkamera is Sergei Mikhailovich Prokudin-Gorskii, who pioneered in color photography a century ago, and whose color and black-and-white pictures of Central Asia have all been made available on the Internet by the Library of Congress.3 The pioneering Central Asian (Uzbek) photographer Hudaibergen Divanov also seems to be missing from the Kunstkamera collections.4

Prishchepova begins her Chapter 4 with a classification of the Kunstkamera collections by thematic content. Subheadings under each of the main ethnic groups include: anthropological types, representatives of ruling elites, traditional occupations, transportation, etc., and these in turn are broken down into further topics. Thus one can identify, e.g., what collections contain photographs of camel transport or of textile manufacture. Apart from the main ethnic groups we think of today (Uzbeks, Kyrgyz, etc.), there are sections for Central Asian Jews, Roma (Gypsies), and Indians. Following this listing, she highlights some of the most interesting kinds of visual information the collections contain.

She then discusses the challenges of establishing the history of individual images and the proper identification of their subjects and where they were taken. While the photographers often themselves wrote captions on the negatives, such indications are usually cryptic and generic. Among the more interesting examples where Prishchepova's work has borne fruit are images of the family of the famous Kazakh ethnographer Chokan Valikhanov (p. 229–37). Ultimately it was the opportunity to consult with his heirs which provided the key to identifying the individuals in some striking pictures taken at the time of a family wedding.

A separate section of this chapter (pp. 237–44) deals with the history of the pioneering collection of Central Asian photographs in the *Turkestanskii al'bom* produced on the initiative of the Turkestan Governor-General K. P. fon Kaufman in the early 1870s. This was part of one of the more ambitious and productive "Orientalist" undertakings by any Imperial power, where scholars, artists and photographers were all enlisted to record the indigenous peoples.⁵ Perhaps best known are the paintings fon Kaufman commissioned by V. V. Vereshchagin. The *Turkestan Album*,

four large portfolios (in a total of six volumes) was printed in only six or seven copies, and remains one of the most valuable and comprehensive of all the Central Asian photo collections. By some great stroke of good fortune, the Library of Congress acquired one of the sets in 1934 (the early Soviet government had been selling off large chunks of the various imperial collections) and has now, unlike the Kunstkamera, digitized all the pages and all the individual photos and drawings on them and made this material freely available in both web-size or high-resolution images.⁶

Although the author is obviously well aware of the dangers of assuming photographs and drawings represent "objective" evidence about their subject matter, she has no interest in a kind of post-colonialist or post-modern politicized "deconstructing" of this evidence. Even where so often photos were carefully posed, many with studio backdrops, she feels that one can extract from them a great deal of valuable information on Central Asian realities. She devotes a considerable effort to contextualizing the visual material with reference to verbal descriptions left by scholars, officials and travelers.

Photographs of Bukhara form a significant part of the Kunstkamera's collection and were of particular interest when first taken, since Bukhara had previously been so little visited by Europeans. Prishchepova devotes a long chapter to them and in particular explores the challenges of identifying the individuals in the many striking images of the Emir's family and the members of his court.

Her final chapter describes the ways in which the press and popular journals depicted Central Asia. An interesting part of the museum's collections consists of articles, clippings, lithographs, and the like, which were responsible for creating a popular image of what for Russians was still an exotic "Orient."

Her book concludes with a bibliography, personal name, ethnographic and geographic indexes, a list of the some 100 illustrations in her text (most decent black-and-white, and also a section of good color plates of paintings and colorized photos), and a tabular catalogue of the Kunstkamera's Central Asia image collections. This latter includes the archival deposit number, the name of the collector or donor, the acquisition year, the ethnic group represented in the images, the place where the collection was made. The majority of the material is either photographic prints or negatives. Drawings and paintings are a distinct minority. The book is entirely in Russian, but the author has published an article in English that provides information on specific topics illustrated in the collections.7

Her work on the cataloguing of the collections has been accompanied by a Ford Foundation funded project to put the collections on-line. Indeed, one can now find thousands of images from the Kunstkamera's collections on its website but ones, alas, all disfigured by a large copyright "watermark" across their middle.8 Fortunately it is possible to zoom in on the images to see in and around the watermark what is often remarkable detail. However, to see any of the images properly would require that one place an order with the museum. I do not know whether it would provide them for non-profit educational purposes free of charge (as do a number of other repositories).

If we project ahead, what might the ideal future regarding preservation, cataloguing and accessibility of image collections for Central Asia hold? Such collections are huge and fragile; simply ensuring their survival requires the investment of significant resources. Many institutions are working on major digitization projects, with some (notably the International Dunhuang Project at the British Library) taking the lead in trying to bring together scattered material on-line. Ultimately what we should really want is a coordinated and linked worldwide collection catalogue that would enable any researcher to search out and compare images from different periods and angles. The value of this for studies of costume or architecture is obvious. Where photographs may reveal important evidence about climate change or the deterioration and subsequent re-building of important sites, it would be of immense help to be able to see views taken from the same perspective. Some initiatives are already juxtaposing recent photos with the historic ones precisely for such purposes. To be able to access such an image bank at least for on-screen viewing and for projection for educational purposes is very important if we are to learn from these visual resources as much as they have the potential to offer.

Notes

1. Among the best published examples of Hordet's work are those in Ergun Cagatay, Bir Zamanlar Orta Asya (Istanbul: Tetragon, 1996), pp. 51, 62-63, 72-75, 79-81, 86-87. He includes a range of other large-format historic photos, by N. Veselovskii, I. Volzhinskii, G. Krivtsov, P. Nadar, V. Kozlovskii, I. Vvedenskii, L. Poltoratskaia, M. Nekhoroshev, G. Pankrat'ev, and A. S. Murenko, not all of whom are represented in the Kunstkamera collections. A few of Hordet's photos (unattributed) are reproduced somewhat badly in Chloe Obolensky, The Russian Empire: A Portrait in Photographs (New York: Random House, 1969), nos. 405, 413, 414, along with at least one of Vvedenskii's (no. 412) among the several for Turkestan. A selection of Hordet's photos is also available on the website of the Anahita Gallery http:// www.anahitaphotoarchive.com/19th-and-early-20th-c-prerevolutionary-photography/f-hordet>.

- 2. Presumably his photos (unattributed) were used for site illustrations in the Hermitage Museum's exhibition catalogue Peshchery tysiachi budd. Rossiiskie ekspeditsii na Shelkovom puti. K 190-letiiu Aziatskogo muzeia. Katalog vystavki (Sankt-Peterburg: Izd-vo. Gos. Ermitazha, 2008). A collection of the Turfan expedition photos was transferred from the Kunstkamera to the Hermitage in the 1930s. L. N. Menshikov, "Samuil Martynovich Dudin (1863–1929)," IDP News no. 14 (on-line at: http://idp.bl.uk/archives/ news14/idpnews 14.a4d#4>) indicates that Dudin's photos from the Mogao Caves at Dunhuang were to have appeared in the Shanghai edition of the Russian collections of Dunhuang manuscripts, but I have not seen those volumes to check. On Dudin, see also the essay by Elena Kordik, "A Mission to Central Asia - S. M. Dudin's Journey in 1900-1902 to Bokhara, Samarkand, and Beyond," originally published in Hali 123 (2002) (on-line at http://www.tcoletribalrugs. com/article4.html>, with a gallery of his photos included in the generous selection of historic images from Central Asia http://www.tcoletribalrugs.com/zOldPhotos-101.html), and Kate Fitz Gibbon, "Turn of the Century Art Photographer and Ethnographer S. M. Dudin" , with an accompanying selection of his photos http://www. anahitaphotoarchive.com/Home/Photographs/dudin>.
- 3. See "Prokudin-Gorskii Collection," http://www.loc.gov/pictures/collection/prok/>.
- 4. For him, see "Hudaibergen Divanov First Central Asian Photographer" http://www.anahitaphotoarchive.com/19th-and-early-20th-c-pre-revolutionary-photography/divanov-first-central-asian-photographer.
- 5. On this project, see Daniel Brower, "Islam and Ethnicity: Russian Colonial Policy in Turkestan," in Daniel R. Brower and Edward J. Lazzerini, eds., *Russia's Orient: Imperial Borderlands and Peoples*, 1700–1917 (Bloomington; Indianapolis: Indiana University Press, 1997), esp. pp. 122–30. For fon Kaufman's biography, see Prishchepova's sketch, pp. 122–25.
- 6. A description of the Turkestan Album and links to a translation of its introduction and to the photos may be found at http://www.loc.gov/rr/print/coll/287_turke- stan.html>. What apparently was a separately published collection of some of the same material, Tipy narodnostei Srednei Azii, has also been digitized by the Library of Con-http://www.loc.gov/pictures/item/61057703/. For quick, searchable access to most of the Library's historic photos of Central Asia, go to the main picture collection page http://www.loc.gov/pictures/. The Kunstkamera does not have a complete set of the Turkestan Album (a copy is in the Russian National Library in St. Petersburg) but only the volumes on industries and the ethnographic images. There is, however, a separate album issued in 1873 that covers Khiva (Vidy i tipy Khivinskago khanstva) which is not registered as a separate holding in the Library of Congress and apparently does not duplicate the material in *Turkestanskii* al'bom.
- 7. V. Prischepova, "A View from the Outside: *Urda, Jalab, Bachcha* (by the MAE RAS Photograph Collections of 1870–1920)," *Manuscripta Orientalia: International Journal for Ori-*

ental Manuscript Research (St. Petersburg) 12/1 (2006): 43-68

8. The searchable access page for the Central Asian collections, in English, is at http://www.kunstkamera.ru/kunst-catalogue/index.seam?path=62%3A3496381&c=PHOTO&cid=1330520. The page links to more than 9500 images. There are also a small collection of "ethnographic post-cards" for Central Asia < http://www.kunstkamera.ru/kunst-catalogue/index.seam?path=14&c=ARTS&cid=1330608. Unfortunately the Russian Museum of Ethnography http://eng.ethnomu-path=14 dex = ARTS&cid=1330608.

seum.ru/>, which has extensive Central Asian collections, including photographs, apparently has not yet put much of its material on-line.

9. For example, "The Journey to Khiva, the world heritage in Silk Road through old photographs," part of Digital Silk Road Porject, National Institute of Informatics (Japan) http://dsr.nii.ac.jp/khiva/en/03architecture.html, and the recent expedition of the International Dunhuang Project that revisited sites recorded by Aurel Stein and provided new photographs taken from the same locations and angles as his (see "On Stein's Tracks in the Taklamakan," *IDP News* No. 39 http://idp.bl.uk/archives/news39/idpnews_39.a4d).

BOOK NOTICES

Ouya lishi wenhua wenku 欧亚历史文化文库 [Library of Eurasian History and Culture]. Ed. by Yu Taishan 余太山. Lanzhou: Lanzhou daxue chubanshe, 2010 -

Silk Road studies as an academic subject have fascinated many readers. Scholars in various disciplines including myself have written about it, ranging from narratives of historical development of the trade and cultural exchanges all over Eurasia to archaeological excavations at specific sites on the steppe and in the desert. However, the first-hand reports and research on excavated sites and items are mostly written in the languages of the countries — China, Russia, and the Central Asian states – where the archaeological work has been carried out. Moreover, that publication has been spread in journals of different regions over many decades. Thus it is a daunting task to locate the reports and essays even for those read Chinese, Russian and some of the Central Asian languages. Much research and analysis by the scholars who have worked on the archaeological sites is not available to English readers.

Fortunately for scholars who read Chinese, a series on Eurasian history, one hundred volumes in total, is being published by Lanzhou University Press. The editor-in-chief, Yu Taishan, at the Institute of History, Chinese Academy of Social Sciences, is a well known scholar in the field of Eurasian history. All the volumes, monographs or collections of articles, are published in Chinese in book format for the first time. Most of the books have been written by Chinese scholars who excavated the archeological sites or studied the documents and art works which have been discovered, but some of them are translations from English, Russian, Japanese, etc. The topics of the series include archaeological, textual, and linguistic studies of the regions ranging from northeastern Asia all the way to Mongolia, Xinjiang and the Tibetan Plateau. The significance of the series is that it brings together research done by numerous Chinese scholars in various regions and academic centers over the last four or five decades, and introduces other studies on Eurasia written in several different languages. Therefore, the series provides a solid base for young scholars in China to begin their study of different regions of Eurasia when still acquiring language skills to read the primary sources for serious research of their own. For sinologists who are interested more than Han Chinese culture, this is also a good collection for exploring the neighbors of the Chinese cultural sphere.

Chen Gaohua 陈高华, one of the outstanding scholars on Mongolian history in China, contributes to the series a volume *Yuanchao shishi xinzheng* 元朝史事新证 [New evidence of historical events during the Yuan Dynasty]. Wang Binghua 王炳华, who carried out archaeological excavations in Xinjiang for half a century, also has several important reports published here in *Xiyu kaogu wencun* 西域考古文存 [Collection of archaeological reports on the Western

Regions]. Tianshan jiayan 天山家宴 [Family Banquet at the Tianshan Mountains] by He Julian 贺菊莲 studies culinary art, domestic labor, horticulture, and viniculture of Xinjiang by examining excavated figurines, murals, utensils, and even actual food stuffs such as resins, walnuts, jujubes, cookies and dumplings which are referred to in literary texts. Among the translations is a book by Ahmad Shah, a surgeon of British India, who published Four Years in Tibet in 1906 about his experience in Lower Tibet (Ladakh and Ali regions). It contains vivid descriptions and sketches of all kinds of people, clothing, and utensils of daily life. The book has been translated by Zhou Xiangyi 辛哈著 and edited by Xu Baiyong 周翔翼, into a very readable Chinese version with beautiful original illustrations.

In short, this is a series that merits the attention of students of Central Asia and the Western Regions.

- Xinru Liu Professor of History The College of New Jersey

Lushun bowuguan guan cang wenwu xuancui. Gu yin dudiao sujuan 旅順博物馆馆藏文物选粹 • 古印度雕塑卷 [Ancient Indian sculpture: Precious cultural relics collected by the Lushun Museum]. Editor-in-chief Guo Fuchan 郭富纯; Associate editors Wang Sizhou 王嗣州, Xu Yuanyuan 徐媛媛 and Tao Sha 陶莎. Dalian: Dalian ligong daxue chubanshe, 2012. [vi] + 114 pp. ISBN 978-7-5611-7251-3.

Ancient Indian sculpture, Volume 7 in the series of *Precious* cultural relics collected by the Lushun Museum, was published by Dalian University of Technology Press in August 2012. It contains a careful selection of 106 sculptures.

The Buddhist statues of Ancient India in the Lushun Museum were obtained during Ōtani Kōzui's first expedition. From November 1902 to January 1903, he visited India, Pakistan, and Afghanistan where he acquired many Buddhist sculptures and some other kinds of historical relics. Some of the Buddhist statues were sent to Lushun and kept in the Lushun Museum in 1917. Most of them are carved from stone, and only a few made of stucco. These sculptures can be classified as reliefs and as individual statues. With the passing of time these statues may have lost their original artistic value, but they still have high value for further research.

This book consists of an introduction and the photos of the sculptures. Based on the latest research results in China and abroad, the introduction describes the development of the art of ancient Indian Buddhist sculpture and explains the origin and classification of the sculptures collected by the Lushun Museum. The photographs for the most part are full-page images, with smaller pictures of details where Seated Goddess of Harvest. Kushan Period. 19.3 x 11.9 x 4.9 cm. Cat. No. 14, p. 16.

appropriate. The material sheds light on the origin, evolution and development of the Buddhist art in ancient India and Afghanistan. The illustrations reflect the original features of these statues faithfully. Captioning provides details regarding the identification, date and size. In some cases the site at which the obiect was uncovered is specified. While most of the information is in



Chinese, there is brief captioning, a table of contents and an index in English. The book offers much of value for scholars.

 Xu Yuanyuan 徐媛媛 Museologist, Lushun Museum Dalian, Liaoning Province

All of the following book notices have been written by Daniel C. Waugh.

David Jongeward, Elizabeth Errington, Richard Salomon, and Stefan Baums. *Gandharan Buddhist Reliquaries*. Gandharan Studies, I. Seattle: Early Buddhist Manuscript Project; Distributed by University of Washington Press, 2012. xii + 331 pp. ISBN 978-0-295-99236-5.

This large format volume with its excellent illustrations (most in color) inaugurates a new publication series by the Early Buddhist Manuscript Project at the University of Washington, complementing the now well-known ongoing series of text volumes. The goal here is to broaden the study of the Gandharan material by contextualizing the manuscript finds on a broader canvas.

David Jongeward of the University of Toronto has written the first three chapters and compiled the tabulation of the reliquaries in the appendix. He explains the significance of the reliquaries (which, as he points out, too often have been relegated to a minor place in exhibitions of Gandharan art), discusses Gandharan sculptural images of the last days of the Buddha relevant to contextualizing them, and surveys the reliquaries, of which more than four hundred examples are represented here. Elizabeth Errington's contribution is to describe the important collection of them in the British Museum. Richard Salomon analyzes the inscriptions that are on some 10 percent of them. He approach is a systematic

formulaic analysis, which produces very interesting insights into the societies and thought world of the individuals who commissioned the reliquaries. Stefan Baums provides a catalog of all the inscriptions with updated readings and translations.

A number of the reliquaries are well known — for example, the exquisite gold one from the Bimaran stupa 2, which decorates the title page here and is, granted, exceptional. The most common material from which they are formed is stone, usually carefully carved and polished. Many these are little known, scattered in collections in Pakistan and accessed there with the generously acknowledged assistance of Abdul Samad. A large number of the reliquaries are now in Japan, and many which are now properly described and published here are in various private collections around the world. Over time undoubtedly more will be added to this corpus, but now there is a classification scheme into which they can easily be inserted. To have all the currently known inscriptions properly published and translated in this one volume is also of lasting value.

Two reliquaries from Bimaran stupa 2 in Afghanistan, the inscriptions on the steatite one recording the "donation of Sivaraksita, son of Mujavada." Collection of the British Museum, 1900.0209.1 and 1880.27, respectively Nos. 353 and 332 in this tabulation. Photos © 2009 Daniel C. Waugh





Chinese Silks. Edited by Dieter Kuhn. Chinese edition edited by Zhao Feng. Foreword by James C. Y. Watt. Contributions by Chen Juanjuan, Huang Nengfu, Dieter Kuhn, Li Wenying, Peng Hao, Zhao Feng. Translations by David Andrew Knight, Craig Shaw, Nicholas Morrow Williams. New Haven; London: Yale University Press; Beijing: Foreign Languages Press, 2012. xx + 571 pp. ISBN 978-0-300-11103-3.

I have but sampled this elegantly produced, large-format volume which is another installment in the informally constituted Yale University Press series of books encompassing large portions of the arts of China. The chronological range is from the beginnings of silk production through the Qing. The subject matter ranges from techniques of production to discussion of artistic motifs. One of the virtues of the book is to devote attention to excavated contexts, which are so important for dating and establishing regional patterns of use.

This is very much a product of Chinese scholarship The editor, Dieter Kuhn, contributes but an introductory overview chapter, which helps compensate for the traditional and, alas, artifical, organization of the subsequent material by dynasty. Zhao Feng, who is probably the best known of the other authors to those who do not read Chinese, has written the three chapters spanning from the Sui to the Yuan. Since a good many of the subjects here undoubtedly are controversial — for example, the question of the chronology of the development of technically advanced looms — one must expect that other experts might wish for some different interpretations.

The volume is supplied with chronological tables, excellent maps, a very helpful glossary of textile terms (both Chinese and English), index, notes and bibliography. The numerous high-quality illustrations include primarily color photos of the silks but also a drawings to explain looms, weaves or patterns. A great many of the examples are famous and familiar pieces, but there are others which I have seen here for the first time.

This volume should find a place on many shelves (as it already has on mine) as a basic reference work for years to come

Journal of the Royal Asiatic Society, Vol. 23, No. 2 (April 2013), pages numbered 149–389: *Textiles as Money on the Silk Road*.

It is not uncommon nowadays for academic journals to devote a whole issue to a single theme, but rare are the cases such as that here where the result is a volume of lasting importance that will be consulted over and over. Three workshops, the first in 2007, brought together contributors to the project and shaped the results, which means that this is genuinely a team effort. The guiding lights for the undertaking, Helen Wang, Valerie Hansen and Rong Xinjiang, and all the other distinguished contributors have not only provided answers to questions students of the Silk Roads have long had about what actually was the role of silk, where did it

end up and how was it used once it got there, but provided an invaluable reference tool about textile terminology, changing values and different sorts, price equivalents, and much more. The focus is on the period of the Tang Dynasty (618–906), under which textiles (not just silk) were one of three major currencies (the others being coins and grain), and where, as the articles show, the relative importance of them might vary over time and space. The Tang found it impossible to supply sufficient coins even if coins tended for the most part to be the money of account. One of the great virtues of this collection is to bring together in both Chinese and in English translation a lot of the relevant source evidence. As Eric Trombert documents in his splendid concluding essay, by around the 11th century, silk had ceased to be an important currency along the "Silk Road."

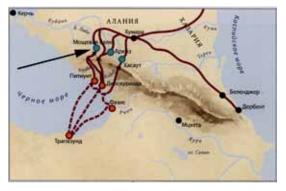
I shall merely list the articles below and not attempt to summarize them. For those whose libraries have online subscriptions, the journal will be readily available, the online version including in color the photos of the various kinds of textiles illustrating Feng Zhao and Le Wang's contributions. Copies of individual articles may purchased (or rented) via: http://journals.cambridge.org/action/displayIssue?jid=JRA&volumeId=23&seriesId=3&issueId=02, and information about purchasing the entire volume may be found at <journals@cambridge.org>. Unfortunately, some wallets may be too slim to afford it. The volume deserves to be made available at no cost to any and all who would use it.

Contents:

- Introductory materials (Sarah Ansari, Helen Wang, Valerie Hansen).
- Helen Wang. "Textiles as Money on the Silk Road?"
- Angela Sheng. "Determining the Value of Textiles in the Tang Dynasty In Memory of Professor Denis Twitchett (1925-2006)."
- Feng Zhao and Le Wang. "Reconciling Excavated Textiles with Contemporary Documentary Evidence: a Closer Look at the Finds from a Sixth-Century Tomb at Astana."
- Chang Xu. "Managing a Multicurrency System in Tang China: The View from the Centre."
- Masahiro Arakawa. "The Transportation of Tax Textiles to the North-West as part of the Tang-Dynasty Military Shipment System."
- Binghua Wang. "A Study of the Tang Dynasty Tax Textiles (Youngdiao Bu) from Turfan."
- Valerie Hansen and Rong Xinjiang. "How the Residents of Turfan used Textiles as Money, 273–796 CE"
- Qing Duan. "Were Textiles used as Money in Khotan in the Seventh and Eighth Centuries?"
- Eric Trombert. "The Demise of Silk on the Silk Road: Textiles as Money at Dunhuang from the Late Eighth Century to the Thirteenth Century."
- Feng Zhao and Le Wang. "Glossary of Textile Terminology (Based on the Documents from Dunhuang and Turfan)."

A[nna] A[leksandrovna] Ierusalimskaia. *Moshchevaia Balka: neobychnyi arkheologicheskii pamiatnik na Severokavkazskom shelkovom puti / Moshtcevaya Balka: an unusual archaeological site at the North Caucasus silk road.* Sankt-Peterburg: Izd-vo. Gosudarstvennogo Ermitazha, 2012. 384 pp. ISBN 978-5-93572-447-4.

Moshchevaia Balka, the archaeological site which is the focus of this book, occupies an important place in histories of the Silk Roads that look for evidence in Western Eurasia about the early transcontinental trade. For it was here, in an obscure mountain valley of the northwestern Caucasus that a striking array of silk textiles were found along with some fragments of Chinese writing, all dating, it seems, to the 8th–9th centuries CE. The site has been associated with



The author's map (p. 88) of the "North Caucasus Silk Road," the arrow indicating the location of Moshchevaia Balka.

the Alans, who were also important in the steppe zone north of the Black Sea. While bits and pieces from the burials at Moshchevaia Balka were collected (without any precise archaeological documentation) starting over a century ago, and the site was much looted in more recent times, it was only with the gathering of much of that material in the Oriental Department of the Hermitage and then in the late 1960s and early 1970s the proper excavation of what remained that the real significance of the material became clear.

Its study has been most closely associated with the author of this book, a textile specialist who has worked at the Hermitage for more that half a century and here summarizes her long study of Moshchevaia Balka in the twilight of a productive career. Apart from many articles relating to the material, she has published a short Russian exhibit catalog (*Kavkaz na Shelkovom puti* [The Caucasus on the Silk Road] [1992] and a longer catalog in German (*Die Gräber der Moščevaja Balka: Frühmittelalterliche Funde an der nordkaukasischen Seidenstrasse* [München: Edition Maris, 1996]). The latter, which is still in print, is important, in that it contains formal descriptions of all the textiles and many of the other finds, illustrated with 72 black-and-white and 16 color plates (a total of 228 separate images).

As Ierusalimskaia explains, the new volume in Russian reviewed here is complementary to the German one but does not simply replace it. She notes that the new volume organizes the material differently and incorporates a lot of new material from research over the ten years since the

publication of the German volume. In fact, a comparison of the two texts reveals relatively little that is new — much is a word-for-word replication of the earlier volume. While she does refer to more recently published literature, some on important finds elsewhere in the Caucasus that show Moshchevaia Balka to be far from unique, it is not clear she has accepted the implications of some of that research which might force reconsideration of earlier conclusions she had reached. A proper review of the current volume must be left to specialists on textiles and the archaeology of the Caucasus.

That said, we can be very grateful for this beautifully produced book, which offers a good introduction to Moshchevaia Balka and the history of its study and highlights by detailed description many of the most interesting artefacts. Its extensive illustration incorporates many of the valuable black-and-white drawings that had earlier appeared in the German volume, but then goes well beyond what is there. Here we find some images of the current galleries in the Hermitage containing the material, including "reconstructions" of the garments mounted on mannequins, and extensive, often very detailed, color illustration of the finds, images superior to the black-and-white ones in the German volume.

The artefacts include some metal and wooden objects, where, interestingly, it seems for the most part only damaged or partial ones (not those which still would have been functional) were placed in the graves, presumably to represent symbolically the real implements or vessels. One of the more intriguing finds is a glass shard probably from a pitcher, which has a fragment of a Hebrew inscription on it. There are a good many small, rather crudely carved wooden boxes that she argues probably were containers for amulets.

The textiles are largely small fragments, though there is one spectacular tunic of silk (probably Syro-Byzantine)

Two of the textiles, a man's cap with paired jugs, and a detail of the caftan with the simurghs (pp. 185, 237).





with pearl roundels, each containing an image of a senmurv. Ierusalimsakaia argues that in the first instance the imported silks were payments made in small pieces (in an economy that did not use coin) to the local authorities (Alans) who collected duties from those wishing to transport their goods across the passes. The particular route was one that opened as an alternative to others that for one reason or another had been blocked. The way that the small pieces of silk were used to decorate garments (often, it seems, without any particular concern for the integrity of the designs and not just on garments of the elite) suggests to her (oddly, I think) that the local population may not have appreciated the high monetary value of the textiles. Her analysis often leaves open the provenance of some of the pieces. Clearly some of the silk is of Byzantine origin, some "provincial" but some also likely from elite workshops of the capital. There also is silk produced, it seems, in Sogdiana or even farther east, in China. She suggests that Byzantine silks may well have influenced the designs of ones produced in Sogdiana. Presumably further analysis when new techniques of provenancing textiles have been applied will make greater precision possible.

Her final section deals with the evidence regarding the apparent presence of a Chinese traveler (merchant?), who left a fragmentary piece of painted silk (apparently part of a Buddhist image, though it shows only a rider passing through mountains), another fragment with a sutra text, and part of a page of what she (and the China specialists she has consulted) considers to be a travel diary recording expenditures for wheat. Of course there is nothing here which otherwise identifies the owner or connects him with the silks found in the burials of what would seem to be the local inhabitants. While we have other evidence about the probable presence of Sogdians on the Black Sea, we must be cautious about drawing sweeping conclusions concerning long-distance travel and exchange, however important and interesting this and other material from the Caucasus may be.

Materialy po istorii kochevykh narodov v Kitae III-V vv. Vyp. 4. Di i Tsiany 氐羌 [Materials on the history of the nomadic peoples in China, 3rd-5th centuries. Vol. 4. The Di 氐 and Qiang 羌]. Perevod s kitaiskogo, predislovie i kommentarii V. S. Taskina. Moskva: Izdatel'skaia firma "Vostochnaia literatura," 2012. 496 pp. ISBN 978-5-02-036513-1.

Vsevolod Sergeevich Taskin (1917–1995) earned an enviable reputation as a prolific translator of Chinese historical sources into Russian. As A. N. Khokhlov explains in his informative biographical tribute to Taskin at the end of this book, Taskin's road to becoming one of the most distinguished Russian China specialists was a long and eventful one. He was born in Transbaikalia, and his family re-located to Harbin in Manchuria, along with the many other Russians who emigrated there following the Bolshevik Revolution, swelling the large community of Russians who were employed on the Chinese-Eastern Railway that had been built under the tsars. The young Taskin acquired excellent

Chinese and worked in various capacities as a translator, along the way (after the Japanese takeover of Manuchuria) also acquiring Japanese. With the Chinese Communist assumption of power, Taskin and his family left, first settling in Kazakhstan and then in the mid-1950s ending up in Moscow, where in 1957 he joined the staff of the Institute of Chinese Studies. In 1968, he defended his kandidat (Ph.D. equivalent) dissertation on the Chinese sources for the history of the Xiongnu, whose publication in two volumes (Materialy po istorii Siunnu [po kitaiskim istochnikam]. Moscow, 1968, 1973) continues to be cited in most of the Russian work on the Xiongnu. Over the years, his other annotated translations included (with R. V. Viatkin) Sima Qian's 司馬遷 Shiji 史記, Ye Longli's 葉隆禮 Qidan guo zhi 契丹國志, and eventually the four volumes on sources on the "northern nomads" (vols. 1-3 published in 1989, 1990 and 1992), culminating in this posthumously published final volume of that series.

This volume, not quite complete at Taskin's death, has been edited from his typescript dated 1994, much of the work of checking against the Chinese sources having been done by G.S. Popova and M. Iu. Ul'ianov, with the result under the overall editorship of S. V. Dmitriev. It contains Taskin's historical introduction focusing on the activity of Fu Jian 苻健, the founder of the Former Qin/Di kingdom, translations from Fang Xuanling's 房玄齡 Jinshu 晉書 [History of the Jin Dynasty], Chs. 112–119, extensive notes, a bibliography mainly of Chinese sources (authors and titles given in Cyrillic transcription, with Russian translations of the titles), an index (the names and terms in both transcription and Chinese characters), and a one-page guide to the terms for measurements of length, volume and weight.

Since none of Taskin's earlier translations are in print, but given the fact that they are so frequently cited in the Russian literature, having a reprint of all of them would be a great boon.

Siuan'-tszan. Zapiski o Zapadnykh stranakh [epokhi] Velikoi Tan (Da Tan si iui tszi). Vvedenie, perevod s kitaiskogo i kommentarii N. V. Aleksandrovoi. Moskva: "Vostochnaia literatura," 2012.463 pp. ISBN 978-5-02-36520-9.

This annotated translation of the account of Xuanzang's journey to India, *Great Tang Records on the Western Regions* (*Da Tang xiyu ji* 大唐西域記), is the first complete one into Russian. The translation is based on the Beijing edition of 1955, but also takes into account variant readings of the text [Taisho, Vol. 51, No. 2087] published in the Chinese Buddhist Electronic Text Association's Chinese Electronic Tripitaka Collection, 1996.

Alexandrova provides an introduction to Xuanzang's life and journey, discussing among other things the genre of the text, stereotypical aspects of its geographic descriptions and its reception. Rather than repeat some details, she refers readers to her previously published articles and book *Put' i tekst. Kitaiskie palomniki v Indii* [Journey and text. Chinese pilgrims in India] (2008). Her explanatory annotation occupies over 70 pages, with Chinese (and, where relevant,

Sanskrit) equivalents for terms, place names, etc. The notes range from simple definitions of terms to longer discussions of the possible identification of locations. Her bibliography includes standard literature and earlier translations in French and English (but not that by Li Rongxi published in 1996). There are indexes of personal names, geographic and ethnographic names, terms, and plants, in each case, as appropriate, with the Chinese and Sanskrit equivalents provided in parentheses. Two maps provide a clear indication of Xuanzang's route once he had left Central China, and there is a brief summary in English.

I have not attempted to compare her translation with those available in English, nor am I able to check against the original Chinese. The book is nicely produced and should be of great value for those who can read Russian.

Sarah Searight. *Lapis Lazuli: In Pursuit of a Celestial Stone*. London: East & West Publishing, 2010 (reprinted 2013). xii + 228 pp., 32 plates (168 illustrations). ISBN 978-1-907318-030.

I was led to this book by an article in *Saudi-Aramco World*, which continues to be a wonderful source of material for general readers, educators and their students (Richard Covington and Peter Sanders, "The Celestial Stone," in the March/April 2013 issue, pp. 24–36). Searight was obviously one of their main sources for their introduction to the history (early and modern) of the production, trade in and uses for the striking blue stone whose main source has always been a remote region in what is now northeastern Afghanistan. Artefacts incorporating lapis lazuli (either as stones or when powdered to make paint) have been found all over the Afro-Eurasian world going back thousands of years and provide some of the best evidence for the antiquity of long-distance trade well antedating the opening of the "Silk Roads."

In often gushing and rambling prose larded with abrupt digressions, Searight, a travel professional and journalist who also holds an M.A. in Islamic Art, relates her passion for the stone, which led her to follow it to its sources and to visit the locations where the art incorporating it may be seen. She obviously has done her homework and seems to know everything about production, processing, art and craft techniques and more. For the early history, one source which she credits is Georgina Herrmann's unpublished Oxford DPhil thesis ("The source, distribution, history and use of lapis lazuli in Western Asia from the earliest times to the end of the Seleucid period," 1966), which I now am anxious to read, especially in that it includes exploration of the sources of lapis in Afghanistan in an era when it was still possible to travel safely there.

Searight has negotiated with lapis dealers in the dusty markets of South Asia, visited museums that hold some of the most elegant and famous pieces that were fashioned into jewelry and other objects that embodied great wealth, power and religious authority (think King Tut or the treasures of Ur), and visited sites whose murals incorporated lapis into pigments (think the Buddhist caves at Kizil or Orthodox churches in Turkey or the Balkans). While the images are

small, the many color illustrations in her book are of high quality and are suggestive of ways one might well follow the "celestial stone" along its paths, if wanting to illustrate for students the extent of long-distance communication in the pre-modern age.





(top) Lapis lazuli carved relief medallions in a gold pectoral, Sasanian Iran, ca. 5th-6th century CE. Collection of the Riza Abbasi Museum, Tehran.

(bottom) Fresco of St. Bartholomew, against a lapiz lazuli background, drum of cupola, Church of Hagia Sophia, Trabzon (Trebizond), Turkey, mid-14th century.

Photos © 2010 Daniel C. Waugh

Ancient Iran from the Air. Edited by David Stronach and Ali Mousavi. Photographs by Georg Gerster. With contributions by Elisabeth Beazley, Georg Gerster, Michael Harverson, Dietrich Huff, Ali Mousavi, David Stronach, William M. Sumner and Tony J. Wilkinson. [Darmstadt/Mainz: Verlag Philipp von Zabern, 2012]. (Published with the aid of a generous subvention from the Roshan Cultural Heritage Institute.) 192 pp. ISBN 978-3-8053-4453-1 [Updated version of edition first published in German as Irans Erbe in Flugbildern von Georg Gerster (Mainz, 2009)].

This exquisite, large format volume is one of the most inspiring books to enter my personal library in many a year. I suppose my reaction in the first instance is personal, in that in 2010 I had a chance to visit many of the sites included here. Had I been able to study this volume ahead of time, I would have gone better prepared. Now as I read through the book I find many of my lingering misconceptions about what I saw being corrected, and I can barely wait for an opportunity to return.

As the photographer, Georg Gerster writes in his "Afterword" (p. 183):

For those who might ask "Why, for Heaven's sake, continually see the Below from Above?" I can only respond with a very pedestrian answer: one sees "more" from above than on the ground. In particular, this "more" in aerial views of archaeological digs frequently advanced the understanding of a site: what can only be observed piecemeal on the ground suddenly comes together to form a unified whole.

In the first instance, yes, we have the superb color photographs by Gerster - known as the preeminent master of aerial photography for archaeology - taken between April 1976 and May 1978. Their sharpness might suggest he used a large-format camera, but in fact he was shooting 35 mm Kodachrome slides. The photos document landscapes and sites which now, some three decades later, may have changed in important regards; his images in turn can be compared with those of the pioneer of aerial photography in Iran in the 1930s, Erich F. Schmidt (published in 1940 as Flights Over Ancient Cities of Iran). For almost any of the archaeological sites, the pictures provide a contextualizing perspective that simply cannot be obtained from the ground where one often (as, for example, in the cases of Bishapur and Firuzabad) has difficulty distinguishing the basic contours of what sprawls over seemingly flat terrain. Not the least of the wonders here are the ways the photos illuminate the rich and varied landscapes, helping us to understand the relationship between settlement and water supplies.

The book offers much more than photos though, as each of the sections has substantial introductory and explanatory text written by some of the most eminent archaeologists who have worked in Iran. They have interspersed with the photos some reconstruction drawings and site plans which help the reader then identify specific items in the photos. The volume can serve as an updated introduction to Iran's rich history starting back in prehistoric times and the history of discovery and excavation down to and including very recent re-thinking about sites that earlier had been

mis-identified or mis-interpreted. Apart from historic settlements and monumental structures, there are interesting discussions of the *qanat* system of underground water channels, and a concluding chapter bringing together information about vernacular architecture. The good selected bibliography will guide the reader to explore in more depth, as surely she or he will be inspired to do.

To illustrate Gerster's point about the value of aerial views, compare the images here. The top one was taken (by Daniel Waugh) in 2010 from roughly the middle of the now somewhat overgrown site of the one-time Sasanian capital of Bishapur in Iran, looking in the same direction as Gerster's aerial photo (p. 88), which not only reveals the city's remains but provides an excellent sense of its relationship to the landscape. The Shapur River emerges from the Tang-e Chogan gorge, at the mouth of which on the cliffs is an important set of rock reliefs celebrating Sasanian victories.





Getzel M. Cohen. *The Hellenistic Settlements in the East from Armenia and Mesopotamia to Bactria and India.* Berkeley; Los Angeles; London: University of California Press, 2013. xvi + 435 pp. ISBN 978-0-520-27382-5.

This volume completes Cohen's ambitious trilogy, which began in the West and now ends in Central Asia and India.* Reviewers (quoted on the dust jacket) have understandably lavished praise on the previous volumes: "a major piece of scholarship"; "standard reference work"; "monumental compendium." Surely they will not be disappointed in this concluding installment.

As Cohen explains in his preface (p. xiii), he has "taken note of places for which there is evidence for the presence or the possible presence of Greeks or Macedonians." In other words, colonies that are well documented are included, but so also are locations where there is a reasonable presumption of a Hellenistic presence. After brief chapters explaining the sources and providing an overview, the bulk of the book moves geographically roughly from West to East, each settlement introduced with a concise history, followed by what in effect is a bibliographical essay on highlighted subjects that may include location, name, topography or city planning, fortifications, coins.... Many of these "bibliographical" entries are substantial discussions of controversial issues, informed not only by his reading of the literature and sources but also by personal communications with other eminent scholars. There are ten appendices (Founders; Settlements... attributed to Alexander; Toponyms...etc.), a substantial bibliography, an index and several well-drawn maps

In short, Cohen's volumes have to be the first stop for many kinds of explorations of the history, archaeology, numismatics, geography (...) of the Hellenistic world. Of course, any enterprise such as this fixes the knowledge at the *terminus ante quem* of the final revisions and publication date. Apart from checking ongoing reference databases, one might wish for an online version of Cohen's magnum opus, where it would require a team of scholars to build on the foundations he has laid singlehandedly.

* The earlier volumes are: *The Hellenistic Settlements in Europe, the Islands, and Asia Minor* (1995) and *The Hellenistic Settlements in Syria, the Red Sea Basin, and North Africa* (2006), both published by University of California Press.

K[ubat] Sh[akievich] Tabaldyev. *Drevnie pamiatniki Tian'-Shania* [Ancient Monuments of the Tian-Shan]. Bishkek: V.R.S Company; Universitet Tsentral'noi Azii, 2011. 320 pp. ISBN 978-9967-26-422-9.

It would be easy to miss this very informative book, since the publications sponsored by the Aga Khan's Central Asian University are not widely known, and its orientation for a popular audience might well mean academic publications would not give it the time of day. The author is an experienced archaeologist, who did his graduate work at the Siberian Branch of the Russian Academy of Sciences and has been leading excavations in Kyrgyzstan since 1987. He is currently a professor at the Kyrgyz-Turkish University "Manas." His publications include three books and dozens of articles, one of the books (cited frequently here) on the barrows of the medieval nomads in the Tian-Shan.

Apart from his sponsorship of the University of Central Asia, with campuses in Kyrgyzstan and Tajikistan that emphasize professional training, the Aga Khan has been a strong advocate for the preservation of and education in the cultural history of the region. This book is part of that effort, intended to educate a general audience in the early history and culture and encourage the development of public awareness of the need to protect archaeological and historical sites. Clearly the author is very well informed about the results of a broad range of archaeological work not only in Kyrgyzstan but also well beyond its borders. If some of the work being published in Central Asia has had an infortunate tendency to focus on that which is confined to the boundaries of the modern state (even if they rarely correspond to any historical boundaries), that criticism does not apply here. Tabaldyev is very careful to indicate where there are interpretive disputes, comfortably draws parallels from farther afield, and explicitly warns against falling into the trap of assuming one can identify the ethnicity of ancient peoples from their archaeological remains.

What we get then is a nicely presented general introduction, accessible to the archaeologist and non-archaeologist alike, sketching in several largely chronologically arranged chapters various periods for which archaeological evidence has been found, starting well back in prehistoric times. Each chapter has illustrations — drawings of excavations and artifacts and then a section of quite decent color photographs. At the end of each chapter is a short section of notes with full citations of work the author explicitly discusses, even if these listings by no means encompass all that one might really wish to consult for a given topic. There is a glossary of important terms at the end of the book.

Some chapters, especially in the second half of the book have syncretic or topical content. For example, one contains primarily excerpted quotations from Mahmud Kashgari's famous dictionary - the selection including words pertaining to aspects of daily life common amongst the Kyrgyz and any passages in which he explicitly refers to the Kyrgyz. There is a chapter which brings together the rich array of achaeological sites around Lake Son-Kul (not far from the Torugart Pass), an area that was and even today is important for its summer pastures and for its location on important trade routes. One of the sites in that area to which he devotes a chapter is Tash Rabat, where the imposing stone edifice in a valley north of the lake has been the subject of much debate by scholars concerning its real purpose. Tabaldyev cautiously comes down on the side of its having been a stopping place for caravans, even if the form of the architecture does not resemble that of the ordinary caravansaray.

Another chapter discusses the importance of food rituals, juxtaposing evidence from burials with a discussion of the ones that still prevail in important social gatherings where the cuts of meat are hierarchically apportioned to the guests. While the author invokes the epic "Manas" and often provides interesting details from ethnographic field work, he

is careful not to assume one can necessarily read back from such material to interpret the archaeological record. He notes how the advent of Islam changed some of the cultural traditions (for example, rituals about burial). Even though conservative Muslim leaders in Kyrgyzstan today are battling against the persistence of customs which they deem "un-Islamic," one gets the sense that Tabaldyev is quite comfortable with the idea that such traditions still have a place as part of the national heritage.

Those who track carefully the rich archaeological literature on these areas of Central Asia will probably find little new here, the possible exception being results of some of the excavations of the most recent decade. Here one is introduced to Wusun and Turkic graves, Runic inscriptions (some recently discovered), petroglyphs, mazars and much more. I would imagine that for most readers this nicely presented survey will be hugely informative and open the doors to further exploration of regions where, as the author readily admits, there is as yet so much work yet to be done to document the early history.

A[ndrei] Iu[r'evich] Alekseev. *Zoloto skifskikh tsarei v sobranii Ermitazha* [Gold of the Scythian rulers in the Hermitage collection]. Sankt-Peterburg: Izd-vo. Gosudarstvennogo Ermitazha, 2012. 272 pp. ISBN 978-5-93572-459-7.

Presented merely as a large format album, this volume might be dismissed as simply yet another of the endless stream of publications drawing on the famous collection of Scythian gold in the Hermitage. Alekseev, who has published on a major excavation of a Scythian site writes a nice introduction on the history, art and discoveries; each artefact is provided with a descriptive paragraph. What makes this volume different and worth having though are the remarkably detailed close-up color photographs, almost all of them taken by V. S. Terebenin and stunningly reproduced. Since one assumes handling the objects and examining them with a magnifier is out of the question, as the summary blurb about the book indicates, these images indeed will have to be "useful even for specialists."

Kanat [Zulkaryshuly] Uskenbai. *Vostochnyi Dasht-i Kypchak v XIII-nachale XV veka: Problemy etnopolitiches-koi istorii Ulusa Dzhuchi* [The Eastern Kypchak Steppe in the 13th-beginning of the 15th centuries: Problems of the ethnopolitical history of the Ulus of Jöchi]. [Series:] Istoriia i kul'tura Zolotoi Ordy, vyp. 17. Kazan': FEN, 2013. 288 pp. ISBN 978-5-9690-0205-0.

It is difficult to keep up with the flood of publications out of Kazan' these days on the history of the Dasht-i Kipchak and especially that of the northwestern part of the Mongol Empire commonly called the "Golden Horde." The author's path to scholarly distinction began in the pedagogical institute of his hometown Semei (formerly Semipalatinsk) in Kazakhstan. He defended his *kandidat* (Ph.D. equivalent) dissertation in 2003 in the Valikhanov Institute of History and Ethnology (now located in Astana). The

revised dissertation is now appearing in print thanks to the Sh. Mardzhani Institute of History of the Academy of Sciences of the Republic of Tatarstan, which has a Center for Studies of the History of the Golden Horde.

As the author indicates, the "ethnopolitical" history of the eastern regions of Kypchak Steppe under the Mongols is quite controversial, given the cryptic and sometimes contradictory information in the written sources. Readers who tend to think of the Golden Horde only in connection with its rule over Russia and Ukraine should remember that its territories extended far to the east into Central Asia. Its history can be understood only by taking into account the complicated relations between its eastern and western parts.

The main chapter headings are:

- 1. Historiography and primary sources.
- 2. The conquest of the Dasht-i Kipchak and creation of the Ulus of Jöchi.
- 3. The Ak-Orda [White Horde] and Kok-Orda [Blue Horde]: sources and historiography.
- 4. The khans and *oglany* of the left wing of the Ulus of Jöchi in the 13th century.
- 5. The "dark age" of the rulers of the Horde.
- 6. Urus Khan and his khanate.
- 7. The khans of the Eastern Dasht-i Kipchak at the end of the 14th and beginning of the 15th century.

Other reviewers will have to comment on whether his careful examinaton of this history yields any surprises. Suffice it to say that he has read closely all the primary sources and juxtaposes the key passages in them that merit close analysis. His coverage of the secondary literature is impressive: not only the literature in Russian, Tatar and Kazakh, but also Western scholarship (Allsen, Golden and others), with which he actively engages. Uskenbai's book merits a careful reading.

Erbulat A[kizhanovich] Smagulov. *Drevnii Sauran* [Ancient Sauran]. Almaty:"ABDI," 2011. 436 pp. ISBN 978-9965-832-16-1.

This large-format, generously illustrated volume contains a great deal that may be new to those interested in the medieval history of southern Kazakhstan, and, fortunately for those who do not read the Russian, it includes a several-page summary in English.* It is intended to complement an earlier volume which laid out some of the historical background and planning for the excavations reported here (K.M. Baipakov, E. A. Smagulov, *Srednevekovyi Sauran* [Medieval Sauran], Almaty, 2005). To some degree both volumes are part of a campaign by the archaeologists and their supporters to have what they are now terming the "Sauran Archaeological Complex" declared a protected archaeological park.

While medieval written sources mentioned Sauran among the important cities of the region, until modern times, there was no clear idea of what exactly was its location (or locations, as it turns out). Excavation in remains of a walled Sauran, close to the Syr-Darya River (reported in the earlier book) did not contain layers antedating the 14th century, even though an older city of that name was attested. Further archaeological survey and now the excavations of



Map showing location of Sauran (adapted from p. 27)

the most recent decade at Karatobe, a few km southeast of Sauran have demonstrated Karatobe to have been the older city, whose residential quarters showed developed city planning, and continuity of settlement down into the 14th century, at which point it was abandoned in favor of the smaller walled site closer to the river. Moreover, the survey of the larger region demonstrated a wider settlement zone and uncovered very interesting evidence about the larger agricultural region and its irrigation systems.

The largest part of this book focuses on the excavations of the residential areas in Karatobe, with significant results even if so far only for a fraction of the total area of the city center. There is detailed discussion of the structure of the

Excavation area 1. Unit 1 SG 3, at Karatobe (p. 232)



houses, heated by tandoors and with masonry "sofas" along the walls of many of the rooms. The housing types are similar to those excavated at Otrar, one of the better known medieval cities of southern Kazakhstan. The author traces the development of this architecture back to much earlier forms in Central Asia and suggests it originated in the adaptation of forms of nomadic dwellings on carts to sedentary life. Other analogies here that are of interest are with the cities of the Volga region of the Mongol Golden Horde, although there the residential quarters had more of an open plan.

Following the discussion of the architecture is a well-illustrated review of the artefacts recovered in these recent excavations — metal wares, ceramics, some glass, coins, etc. Given that this evidence is still rather fragmentary and in need of supplementing from additional excavation, to a considerable degree the material is presented as a descriptive catalog, leaving broad conclusions for some future time. The richly illustrated examples of ceramics (presented in color photos) will certainly be useful for scholars who cannot read the details. Determining whether there was a distinctive local ceramic production is a task for future analysis. The coins too are shown in good color images and properly described in tabular form, but they are relatively few and largely mixed chronologically in the disturbed strata of the excavation, making it difficult to use them for precise dating.

In some ways the most interesting parts of the book are in the introductory chapters, the section on water supply and irrigation expecially compelling for its story of how the previously unanticipated large extent of the underground karez system has now been documented for this region.** The important interpretive themes established in the early part of the book (but not fully developed in the analysis of the detailed evidence later) concern perceptions about nomadism and sedentarism, where the author and many of his colleagues now come down firmly against the idea that the two were antithetical and argue instead that in Central Asia (certainly in these regions of Kazakhstan) there is much more of a syncretism of both. To speak of "marginality" of the economy (as sedentary authors and Eurocentric scholars have tended to do with reference to a nomadism) is simply wrong. There is every evidence from the region of Sauran that socio-economic developments there were not vastly different from those in other regions of Asia that earlier generations of scholars have declared to be more "civilized."

Building on this idea is the summary of evidence regarding one of the critical questions that any study focusing on material of the 12th-15th centuries would need to answer: what was the impact of the Mongol invasions? Citing evidence from Termez and Otrar, both of which have been extensively excavated, Smagulov states in no uncertain terms that the archaeology at these important cities has turned up no evidence whatsoever to demonstrate catastrophic destruction at the time of the Mongol invasion in ca. 1220. In other words, the oft-cited account by Ata-Malik Juvayni that justifies Chinggis Khan's decision to attack the territories the Khwarezm Shah, unleashing rivers of blood when he destroyed Otrar, comes under question. In the absence of archaeological evidence then, three interpretive possibilities present themselves: 1. that the invasion was not as

catastrophic as assumed and/or did not affect residential areas; 2. that the medieval authors writing about the invasion hugely exaggerated its impact; or 3. that archaeology is incapable of turning up evidence to identify the layers that can be associated with a catastrophic invasion. The author dismisses this third possibility, which then leaves us needing to take seriously the need to reassess the impact of the Mongol invasions. One might add here as an aside (this is not in Smagulov's account), that ongoing research about the fate of Baghdad at the hands of Hülegu a generation later is raising similar doubts about the extent to which we should believe the written accounts.

There seems so far to be nothing in the excavations of the Sauran complex that would support a picture of destructive invasion by the Mongols. What we do have here then is evidence to begin to write the history of one of the many important cities in Central Asia which flourished under Mongol rule. That is not to say that the Mongols did not have an impact. At least one element of traditional architecture, the presence of domestic altars in many of the dwellings, seems to have died out in the Mongol period. The author argues, granted speculatively, that this may have been due to the more widespread adoption of Islam under Mongol rule and thus the disappearance of pre-Islamic local cults (not necessarily vestiges of Zoroastrianism). That there seems to be at least a brief hiatus in development of the city around the end of the third quarter of the 13th century might be connected with the Mongols, not on account of the initial invasion of half a century earlier, but on account of the internecine wars that resulted in new incursions. When the residents of "old" Sauran eventually moved in the 14th century to the town's newer location, possibly that can be attributed to local political rivalries, but more probably, the author suggests, it reflects a documented change in climate where the water levels in the Syr Darya (and thus the Aral Sea) dropped. Quite simply, it became too difficult to supply the older Sauran with water. The newer settlement, even if only a few km away, was better situated to be supplied by the karez system. Interestingly, this climate change had the opposite effect on the Caspian Sea, causing its water levels to rise, and this then may explain the contemporaeous shift in the location of cities of the Golden Horde (most notably its capital Saray, which was moved up the Volga).

In sum, there is much in this book to encourage further reading in the very extensive and excellent archaeological literature of recent years that has been appearing in Central Asia and questioning many of the old assumptions about its medieval history.

Notes

* See also the author's "Sauran Medieval Archaeological Complex in South Kazakhstan," *Transoxiana* 13 (August 2008), on-line at http://www.transoxiana.org/13/smagulov-sauran.php, accessed 15 December 2013.

** For a detailed discussion of the research on the karez system, with good illustrations, see Renato Sala and Jean Marc Deom, "The 261 Karez of the Sauran Region (Middle Syrdarya)," *Transoxiana* 13 (August 2008), on-line at http://www.transoxiana.org/13/sala_deom-karez_sauran.php.

Religiia v istorii narodov Iuzhnoi Sibiri i Tsentral'noi Azii. Chast' II: Epokha srednevekov'ia. Khrestomatiia [Religion in the history of the peoples of Southern Siberia and Inner Asia. Part II: The Middle Ages. An anthology]. Compiled by P. K. Dashkovskii. Barnaul: Izd-vo. Altaiskogo gosudarstvennogo universiteta, 2012. 307 pp. ISBN 978-5-7904-1223-3.

This volume is the sequel to one published in 2008 covering the period of Late Antiquity. Intended as a textbook, it should nonetheless be useful for an introduction and overview of an important subject. The selections, all from previously published scholarship, are organized under the following headings: 1. The spread of proselytizing religions in Inner Asia; 2. The world view of the Turkic-language population of the Saian-Altai and adjoining territories in the early Middle Ages; 3. The religious factor in the history of the Kimaks, Kypchaks and Khitans; 4. The traditional world view and world religions among the Mongols. Most of the selections are by noted specialists who publish in Russian (e.g., Litvinskii, Kychanov, Kliashtornyi, Bartol'd), at least one (by May) is in a Russian translation, and three (one by Maenchen-Helfen, two by Golden) are in English. At the end are a list of the essay and report topics for the course on this subject at the Altai State University and a 35-page bibliography that includes a significant section of works in languages other than Russian.

Sebouth David Aslanian. From the Indian Ocean to the Mediterranean. The Global Networks of Armenian Merchants from New Julfa. Berkeley; New York; London: University of California Press, 2011. xx +366 pp. ISBN 978-0-520-26687-2.

It would be a shame if students of the Silk Roads passed this book by, thinking that the chronology implied in the title falls beyond what has too commonly been accepted as "the end of the Silk Roads." Reviewers have heaped praise on Aslanian for his extraordinary diligence in bringing to bear on his subject a huge range of challenging archival material that previously has been little used (if at all). In searching out documents scattered from Cadiz to the Philippines and everywhere in between, he has been able to provide here an analysis of the dynamics of the Armenian trade networks of the 16th through the 18th centuries which goes well beyond the work in previous studies (many of them still very valuable and by excellent scholars).

He is not so bold as to suggest he has exhausted the subject. Surely much more is to be found in the archives, one of the key ones in Venice not even accessible to him. Few scholars though are ever likely to take the pains to master the New Julfan dialect of a lot of this material, without which the texts cannot be understood. Who would have thought before now to seek out information on the Armenians from the archives of the Inquisition in the Philippines, the source of a number of fascinating biographies that enable us to map the travels of Armenian agents? The training of the agents in the Armenian networks involved formal study, some of

it in a school in the Isfahan suburb of New Julfa concerning which little documentation has been preserved (Edmund Herzig had previously examined the records there kept in the New Savior Monastery). Yet a copy of a key textbook published in the late 17th century has survived (at the Bodleian), with its overview of markets, prices and goods across Eurasia and its concentrated lessons in accounting methods which were highly sophisticated and obligatory to master for those who signed the *commenda* contracts.

The subject here is the Armenian networks linked to New Julfa, where the merchants of Old Julfa were forcibly resettled by Safavid Shah Abbas I at the beginning of the 17th century. As has been well documented by Herzig, Rudolph Matthee, Ina Baghdiantz McCabe and others, while already established in the Persian silk trade, the Armenians then assumed a key role in managing it for the Safavid government. The accepted wisdom in dealing with the Armenian merchant communities, which were be found all across Eurasia, has been to describe them as a "diaspora," a designation which Aslanian argues is inaccurate, in that it misrepresents some of the features of how they operated and fails to provide an analytical framework in which to explore the dynamics of how they functioned. He prefers instead a networking model of what he terms "circulation societies," a scheme developed under inspiration from Fernand Braudel, Claude Markovits and Francesca Trivellato, among others.

Important features of the Armenian network include the way that it was so closely tied to the "home office" in New Julfa, the use of *commenda* arrangements as the legal mechanisms connecting those who financed the trade from the center and their agents who were responsible for its operation in far-flung locales, and the crucial importance of well-developed communications networks. Invoking analyses of "social capital," Aslanian devotes considerable attention to the way trust and reputation were established, without which the functioning of these networks would have been impossible, even though there also were formal institutional mechanisms that could ajudicate if contracts were broken.

Aslanian strongly disagrees with those (such as McCabe), who have argued there was something like a unified Armenian "company" (analogous to the European joint stock companies) in the 17th century. These were family firms, managed in patriarchal fashion, whose employees were mostly recruited from within the closely knit society of New Julfa. He also disagrees with McCabe (and others) as to when the decline of the New Julfan merchants set in, arguing that they still prospered down to the middle of the 18th century, when the Afghan conqueror of Persia, Nadir Shah, finally set upon them and effectively decimated New Julfa. Even though there were several far-flung geographic circuits of the Armenian trade, the crucial one, focused around the Indian Ocean world suffered irretrievably with the decline of both the Safavid and Mughal empires. With the decimation of New Julfa, no center emerged to take its place.

In his concluding chapter, Aslanian compares the Armenian network with those of the Indian Multani merchants and of the Sephardic Jews, a comparison which highlights a good many similarities but also significant differences. Such comparison then raises interesting larger questions which, I

think, might be asked about earlier periods and other communities that were involved in the Eurasian trade historically, even if it may well be the documentary base for studying those earlier periods is too thin to provide satisfactory answers. Might we, for example, find something in the analytical approach here that would give us new insights into the Sogdian or early Muslim trade networks? At very least, by considering the often rich detail here about the scale of the Armenians' trade and the impressive itineraries followed by the Armenian agents (see esp. pp. 140-43), we may wish to reconsider the question of when to write the end to the history of the Silk Roads. We now can develop a much more nuanced idea than ever before about such topics as the consequences of European expansion into Asia, the interrelationship between maritime and overland routes, and the relationship between central nodes and their peripheries. Those interested in pre-modern communication, where the modes of travel in many ways changed so little over many centuries, will find a lot that is useful here, especially in Aslanian's tabulation of travel times, routes and agents for commercial correspondence across the world in which the Armenian agents operated (pp. 106-08, 112-17).

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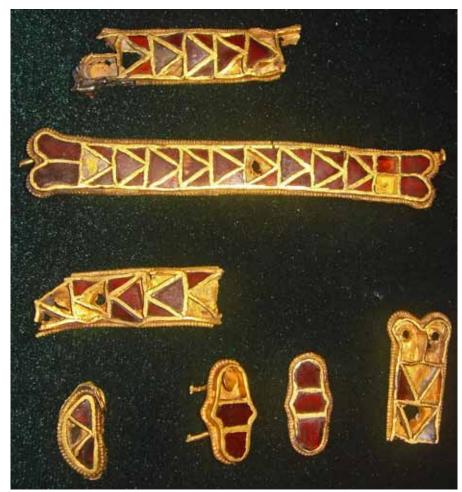
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 - b. (Ibid., p. 17). Decorative plates with elongated and protruding stones. Inv. nos. 2002.21.21-24. Photos by author.
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Plate I



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Plate II



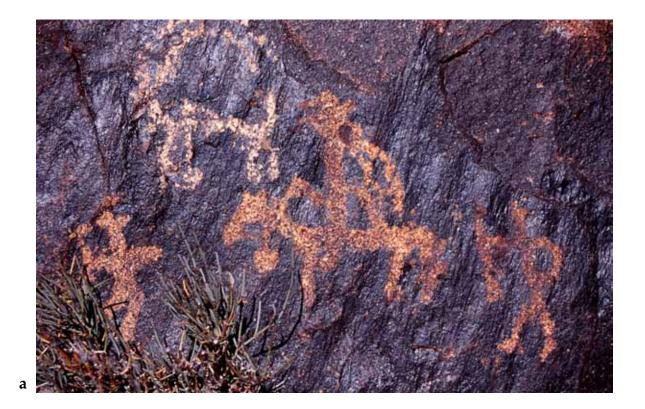
Plate III





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Plate IV







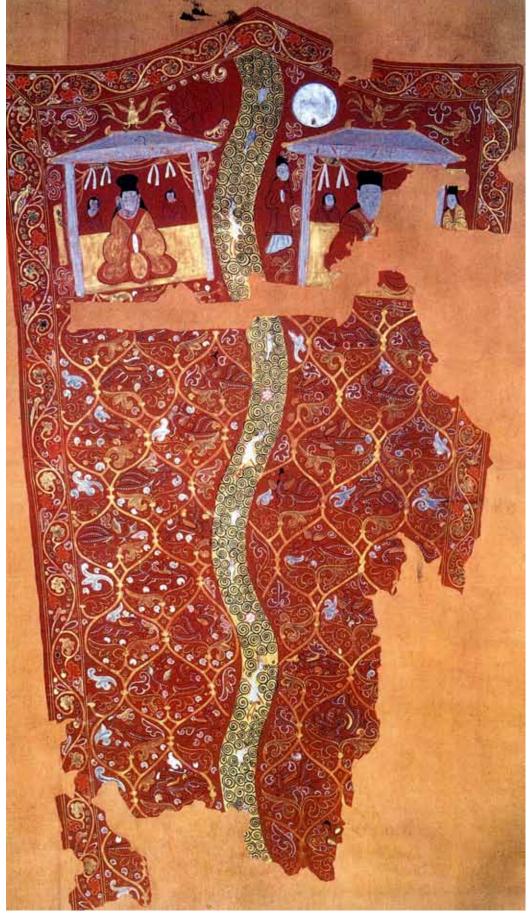




Plate VII

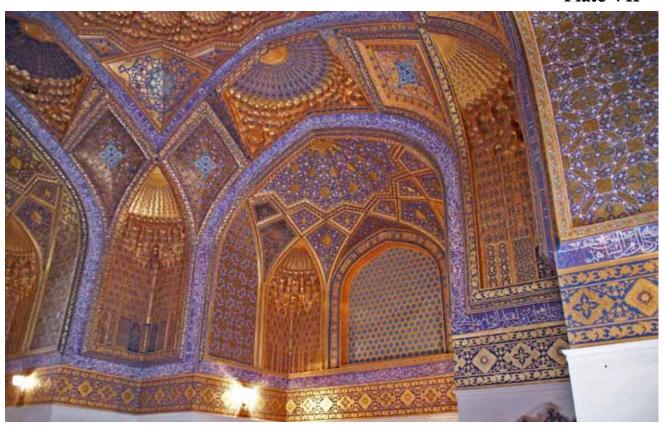




Plate VIII





Plate IX



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Plate X



Plate XI



Plate XII





Plate XIV

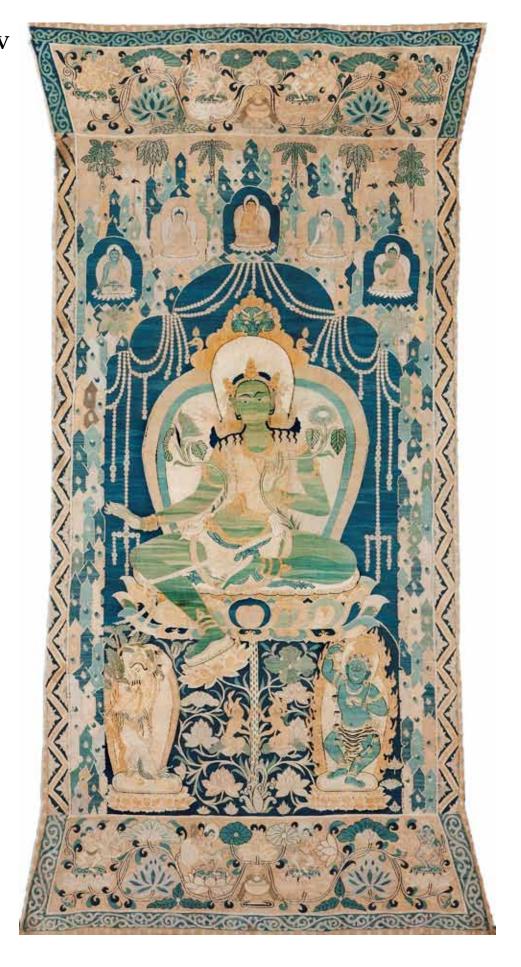


Plate XV



Plate XVI







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