

The *Silk Road*



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The Silk Road

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Cover: This mosaic embodies images from the current volume of the journal. The decorative frame is based the archaeological drawing made at Kulan by Serik Akylbek. Some of the rosettes are ones from that site; most of the rest have been copied from illustrations to other essays. The photo in the center is the White Pagoda at Qingzhou.

From the Editor's Desk, shown here in a candid photograph taken
17 January 2018

HAIL AND FAREWELL

Let me begin with the shorter and easier task, introducing the new editor of *The Silk Road*, before indulging in a somewhat discursive personal retrospective regarding the history of this publication and my involvement in it.

Beginning with the next volume for 2018 (its exact publication schedule to be determined), the editor of *The Silk Road* will be Justin Jacobs. Submissions and other correspondence regarding that volume and subsequent ones should be addressed to him, not to me. Any material still sent to me will be forwarded to him, he will set the guidelines for submissions, and determine what will be published. Another significant change connected with this transition is that **the journal will no longer be printed in hard copy after the current number.** It will continue to appear as an online, open access publication, but with a new Internet address. See the details below on p. x.

Justin M. Jacobs is Associate Professor of History at American University in what we in the Seattle area refer to (with some angst these days) as “the other Washington,” in the District of Columbia. Though he was trained primarily as a historian of modern China, his work on the political history of twentieth-century Xinjiang also led him into the study of foreign archaeological expeditions along the Silk Road during the late Qing and Republican eras. His first book, *Xinjiang and the Modern Chinese State* (University of Washington, 2016), analyzed the political strategies adopted by successive Han governors of Xinjiang after the 1911 revolution to maintain Chinese control over this non-Han borderland. He is currently writing a second monograph, “The Compensations of Plunder: How China Lost Its Treasures,” which examines Chinese and Uighur responses to foreign archaeologists and seeks to answer the question of why so many cultural artifacts ended up in Western museums. In preparation for this project, he has developed a multimedia scholarly outreach program, “Indiana Jones in History,” that includes college-level courses, regular public speaking engagements, a free twenty-one part documentary series (available on Youtube and IndianaJonesInHistory.com), and a companion book, *Indiana Jones in History: From Pompeii to the Moon* (Pulp Hero Press, 2017). He also hosts a podcast, “Beyond Huaxia” (available on iTunes), which he describes as “a college-level history of East Asia, minus debt, dorms, and diplomas.” It will draw on material from



several of his courses, with posts of new material once or twice a week over the upcoming year or so.

Of course, passing the torch is not necessarily a comfortable prospect, but I do so with the confidence that Justin brings to the task the qualities needed to take the journal well on in the 21st century. His introduction to the Silk Road and the history of the “Great Game” (of which the Western archaeological exploration of Inner Asia was part) came in some of my courses. In both our cases, broad teaching interests have served as a stimulus to our developing fascination with the history of the silk roads (among other things, he now teaches a course on the historiography of the Silk Road). I began at a further remove than he, and still contribute to the study of early modern Russian history. Justin is already way ahead of me in his mastery of the digital media of the new age, whose creative employment should help this publication to reach new audiences in the way that had been intended from the start. While I have brought to the task a good knowledge of Russian (of benefit to the many who cannot access the huge amount of important scholarship in that language), Justin brings to the journal something it has long needed, an editor who has a command of Chinese. If called on, I intend to continue to help with Russian translation. He combines excellent scholarship with an enthusiastic commitment to broad public education.

It will be up to him to establish where the journal will go in the years ahead. While not attempting to influence unduly what he will decide, I would like to review here where we have been — how this publication emerged, what its goals have been and should, I trust, continue to be, and what I would hope readers might agree we have managed to accomplish. To do this, I draw on an incomplete collection of old e-mails, which contain inspiration as well as some words of caution for others who are considering taking on the responsibilities of editing.

My involvement with the programs of the Silkroad Foundation began in 1998 by attending one of its first summer institutes in China, a program to study Buddhist art at the Mogao Caves in Dunhuang. In keeping

with the Foundation's commitment to public education, the goal of such programs has been to provide an educational opportunity for students and faculty who wished either to deepen their knowledge in an already-familiar area or broaden it. For me, this was a plunge into a new world, since I had committed to teaching my first course on the Silk Road the following year, but with practically no prior knowledge of the East Asian end of it. A few years later, the Silkroad Foundation provided support for me to launch an ambitious "Silk Road Seattle" project, whose website (despite needing expansion and updating now) continues to offer a range of materials for those who are teaching or learning about the historical exchanges across the Old World.

In correspondence about that latter project, the head of the Silkroad Foundation, Adela Lee, mentioned to me an upcoming "newsletter". My fateful response, on 7 November 2002, was: "As I was looking back through old mail, it occurred to me that I don't think I have ever seen your newsletter. Any chance I can be put on the mailing list?" Little did I know this was the start of an involvement that, arguably, changed my life. As Adela then explained, the goal of this project was that she and the volunteers enlisted to work on Foundation programs would produce two or three times a year a print (and freely accessible on-line) publication where each issue would contain a few "feature articles by specialists," interviews or profiles, some book notices, and news of upcoming events. Volume 1, No. 1, of the newsletter (28 pp.) then appeared at the beginning of 2003, with some articles of real substance and broad interest as well as a recognition of the importance of the Internet—information about "Silk Road Seattle" was included as well as an announcement of an experimental on-line Silk Road course which I was to offer for the Foundation.

However, getting from issue No. 1 to No. 2 proved to be a challenge. In the middle of the preparation for the next one, the volunteer who had agreed to edit it departed. The summer 2003 issue was shelved; only some unedited pieces for a new volume were in hand. Adela and I had been exchanging messages about possible ways to get contributions from the lecturers in the public series she was funding and the desirability of commissioning translations of important primary sources (which might or might not go into the newsletter). In this connection on 15 April 2003 I sent what I thought was a realistic assessment:

Of course anything like this does take some editing, and can potentially involve problems if the submission needs a lot of editing (as can often be the case with academics' material). But there are ways to deal with that, since you have enough academics connected with your activities who

might be strong-armed into occasionally taking on editorial responsibilities.

By autumn, in a flurry of exchanges about the work of my student assistant on "Silk Road Seattle" (Lance Jenott, now a Princeton Ph.D., who teaches at Washington University in St. Louis), on 1 October Adela wrote:

btw do you know if Lance will be able to help out with the newsletter? If not, then we have to start looking for [some]one right away. We have articles piled up and the fall one needs to go out also ... let me know soon about the situation.

Lance was not available. I responded the following day about other options for hiring student help (Adela promising to cover the cost):

... I am quite sure I can find someone here to do the job ... Obviously this is going to be very much a part-time thing — a burst of work and then a hiatus until the material for the next issue comes along, but that might well attract the right kind of help with the right skills.

So I reached an agreement with one of our Regional Studies M.A. students who was involved with our own program newsletter and ostensibly had command of publishing software needed to match the formatting standards set in *The Silk Road* No. 1. Adela had already obtained several articles on Sogdiana, which now was to be the focus of No. 2, and was anxious to move ahead quickly. But on 14 October (this would be a constant refrain over the next years), I had to tell her "I am overwhelmed with work through Th. but then will turn to the newsletter editing." No. 2 did eventually appear at the end of the year. Since my assistant had finished her program and received a job offer, she left rather abruptly. And, as it turned out, she had found the publishing software challenging. So I had to do a crash job of learning how to format the final digital copy to send to the printer in California.

Already the commitment of minimal time was expanding, as was the size of the publication, issue No. 2 occupying 56 pages (of work by a star-studded group of authors, among them Boris Marshak, Frantz Grenet and Étienne de la Vaissière). In fact Adela had to caution me (letter of 31 January 2004):

I am thinking that we should try to keep the newsletter shorter ... than our second one. Somewhere like 35-40 pages is good, anything longer than that is bit too much.

I must have promptly forgotten that admonition: over the years (with her tacit acquiescence) I would deliberately expand the publication to a 200+ page annual (in part naively thinking that a single issue a year would be less time-consuming to produce than two). The thematic scope of the enterprise also was expand-

ing, as No. 2 included articles on ethnography. Later, since in fact in the early going we had not done much with reviews, we began to include a lot about new publications. In our correspondence, Adela and I agreed that we should try to encourage junior scholars to publish with us and that we would like to broaden the range of contributors to include those from, e.g., Central Asia and Iran.

If there was such a thing as a vacuum in my schedule, the editing was surely going to find ways to fill it, with the end result that the “newsletter” became an annual book of some substance, whose production would occupy some months each year. I could expect little, if any, meaningful institutional support from a university that had more than once refused resources to host a leading academic journal on campus. With no help to be had, it became a one-person operation. Naively optimistic, I reported to Adela on 11 February:

My dept. has already come through with the Pagemaker software and the software that will let me move text in and out of pdf files. I have not tried the stuff out yet and probably won't immediately, but I should now be equipped to do all the editing of the next issue here on my machine. I am pretty sure I can master the stuff so that I will not need assistance and can do it all pretty efficiently once I get to the task. So there should not be a repeat of the expensive inefficiencies we experienced with no. 2.

Understandably, after the good start, Adela was impatient for results and the next issue, for which we were hoping to include some of the material that had been collected the previous year but never published. When she asked whether I had reviewed it, I had to respond on March 10 and 11:

I haven't had time. I will be pretty well tied up with my paper grading through til nearly the end of next week. Then we have a week before start of spring quarter. I assume I will really start getting up to speed on the next newsletter then. At the minute I am pretty brain dead.... There is still plenty of time to get this number out before the end of spring.

Adela's immediate response was to drive away the clouds of despair looming on my horizon. On 11 March, she wrote, “My grapevines told me that at lecture event in Berkeley last Monday, all they talked about was our newsletter. You should be very proud!” And she appended a note from a distinguished scholar at Berkeley (who would himself contribute to the next issue) in which he wrote: “By the way I hugely enjoyed the last number of the Newsletter. It was stellar from start to finish!” Of course good reviews were unlikely to diminish the scope of responsibilities and

in fact might have the opposite effect if one wanted not to disappoint.

So much for the “roots” of an undertaking that now is celebrating a decade and a half since its initial number appeared. This is a good time to take stock of what we have aimed to accomplish, how we have gone about it, and what some of the challenges are which remain.

We must begin with the fundamental question regarding the purpose of the publication. In keeping with the mission of the Silkroad Foundation, the imagined audience is still a general one of those who might be stimulated to learn about the “Silk Road”. Of course what exactly “Silk Road” may mean is part of the challenge, since our concept of it has tended to be much broader than much of the traditional writing about the subject would suggest. The journal has never been intended to replicate narrowly specialized academic periodicals, even if one goal has always been to have among the contributors established scholars and to encourage up-and-coming ones. So there always has been room here for a mix of contributions, some of which may indeed be rather detailed academic pieces, but all of which ideally would be accessible to even non-specialists. If possible, features aimed at highlighting resources that could be used in teaching and learning are part of the mix. The process of informing even the academics in our audience should involve where possible bringing to their attention work that they may not otherwise know (or may have been published in languages they do not read).

From the outset, there has been no formal process of peer review, such as one expects in the standard academic journals. We still solicit articles (a task which largely has devolved on me over the years), though we also receive (but have not been overwhelmed by) unsolicited submissions. Decisions on what to publish (as with any journal) ultimately rest with the editor, who in this case, for better or worse, has acted as the peer reviewer. I often see what I think is gold in material that could never find its way into a standard academic publication. But the perils of rarely seeking outside opinions may mean things slip through without acknowledgement that a subject has been thoroughly treated elsewhere. The lack of formal peer review does have the unfortunate consequence that junior scholars hoping to advance in their profession may avoid us, since their promotion will depend in the first instance on peer reviewed publication, however excellent (and widely cited) a piece might be which we would publish. Yet in some cases where there is a premium for academics in other countries to publish in a respected journal in English, we have been able to provide just such an opportunity. Many of the senior scholars we have solicited for contributions have politely refused to write for us, since they are already over-committed

to other publication projects. What I say here about the burdens of editing will hardly be news to them.

I am not persuaded that writing for a general audience comes naturally to most scholars, given the demands that producing first-rate original research places on them, and given the way in which academic culture determines career success. On the other side of the coin though, individuals who have not been subjected to the rigorous expectations of what the “academy” expects may fail to appreciate how even general writing should be well informed and balanced. The task then for the editor in this situation is to try to provide, as it were, a bridge between the two worlds. In practice this has often meant substantial intervention to help shape what ultimately appears in the journal, ensuring that there be proper introductions, transitions, conclusions, accurate references for those who might wish to pursue a subject further, and, of course, abundant illustrations to heighten the interest beyond words on the page. I am fortunate to have an extensive personal photo archive on which to draw to supplement illustrations the authors supply. Frequently I have created at least sketchy maps so readers will be able to place the focus of an article in a meaningful geographic context. I enjoy designing the cover.

The challenges in all this are compounded when there is a conscious effort to include work by authors from around the world who do not have native English. With the exception of Russian, which I am able and willing to translate, I have had to insist that submissions be in English. The advice here has always been—don’t worry if it is not perfect, as the editor is here to help. If we want your contribution, we will be happy to help polish it (a process which can take days of effort). The effort has been worth it. One of the most significant accomplishments over the decade and a half of my association with *The Silk Road* has been the broadening of our list of contributors both in terms of their personal and professional profiles and in the number of countries they represent. This is, in a sense, a two-way street, making available to Anglophone audiences work they might otherwise never see, at the same time that the editorial interventions and the potential for feedback from readers has to have some impact on the way contributors think about their work, the questions they address, and so on. Often the process has made it possible to acquaint authors with scholarship to which they had previously not had access. Granted, in our day one might argue this is a normal kind of interaction encouraged by many academic publications, international conferences and the like, but some of those we should hope we reach move outside of such networking.

A colleague of mine recently told me that one or another on-line publication platform can tell us not only

how many people may have accessed a digitized article but even how much of it they have read, whether they copied all or parts of it and so on. I’m afraid I have no such hard data to share, but let me at least give a sense of how we have tried to ensure our journal reach its audience and the degree to which we have been successful.

Very early in the going, we began to receive queries about subscriptions but had no mechanism in place (more importantly, no staff) to handle them. Initially, print copies were given out at events sponsored by the Foundation, and a modest number of mailings were sent to a few prominent academic programs. Over time the mailing list (all copies sent at no cost to the recipients) has grown to include a few dozen major libraries and museums around the world. Also a fair number of individuals have received the print copy—former author/contributors, participants from other Silkroad Foundation programs, and potential contributors whom we have been trying to cultivate (but who, alas, have not always taken the bait). Often one of my main tasks when going to conferences has been to fill my luggage with back issues of the journal to distribute with encouraging notes to potential authors.

The soaring cost of postage is one of the reasons this volume you are reading is the last one we will print on paper. One of the initial mailing bills for the newsletter was only slightly over \$100. Now with inflation in the size of the list, the weight of each volume, and the prices, postage alone for the most recent number exceeded \$3000, much of that because there is no reduced “media” rate for our now numerous international mailings. From the start, I have stuffed the envelopes, filled out the customs forms, taken the packets to the post office, with the exception of one year when I was away and persuaded a colleague to do the work in my absence.

Of course the digital revolution has finally reached the point where print copy (however much many of us like to have a physical book in our hands...) is neither necessary any longer, nor, as is increasingly true of libraries, desirable because of the storage and other costs. If something can be had in digital form these days, many libraries simply will refuse to consider a hard-copy alternative. This, not to mention the fact that, as with postage, printing costs have gone up, one reason of course being my purposeful increasing of the size of the journal and, in the recent numbers, the addition of color inserts. Ideally, we would have had color throughout, but that can be found only in the on-line version, as to print everything in color would be prohibitively expensive. I have often dreamed how nice it would have been to emulate *Saudi Aramco World* or *National Geographic*...

Certainly the journal is reaching many in the academic world, if citations in other publications and reports from Academia.edu are any indication. Even in places where local libraries may be very limited, anyone with an internet connection can find us. We have had the satisfaction of seeing a good many of our articles translated or summarized in Chinese. I am convinced that open access publishing such as we do is essential for all work academics produce, if there is to be any hope of reaching all those who might wish to read it. And we should hope that our audience is more than a handful of other specialists. But the economics of publishing “obscure” research certainly still impede progress in this direction. In the early going, developing an on-line presence for our journal did not always proceed smoothly (I was never responsible for learning how to do the basic web design), but once the framework was in place, my obligation expanded to posting the files for each new volume as it appears. I still agonize when a missing slash or un-closed angled bracket is the cause for a garbled result on the screen with the index pages.

Keeping up with technological change is a challenge for us who are well into their seventh decade and one of the main reasons I am delighted that Justin is taking over. While aware of the importance of digital communication, I am still very much anchored in the world of print books, a creature of the 20th (or is it 19th or 18th?) century, if you wish. Of course without the advances in technology, we could not have accomplished what we have. The editor can communicate with authors almost instantly and even with a frequency that may annoy both parties. After some mistakes by my making editorial interventions authors had not approved, I learned that two or three stages of proofing, communicated by e-mail, are essential. Not being a very good proof-reader myself after living too long with a piece, that has the advantage of shifting some of the responsibility for the final result to the authors themselves. Of course I still am mortified when I discover a dangling participle, split infinitive or typo that somehow escaped detection.

I learned early on that Pagemaker could not handle unusual fonts or characters (hence the first forays into including Chinese ideograms required I create small jpegs and carefully paste them into the formatted text...). And there also was a problem in the compatibility of my software with what the print shop was using, leading to a few instances of garbled rendering of special characters. At Susan Whitfield’s suggestion, I switched to InDesign, which now has a very extensive font selection and can handle almost any alphabet. Undoubtedly, for those who know the program better, there are ways to automate processes that I still tend to do “manually”. I tend to stick with what I

know works. Once I prepare the formatted file of the finished journal, the printer in California receives it in Dropbox. One of the most satisfying parts of the operation is the confidence I have that he and I are on the same wavelength about quality control. (For those who wonder, I can wholeheartedly recommend E. & T. Printing in San Jose, California.)

The on-line presence undoubtedly has had a great deal to do with the fact that many of our articles are now finding their way into course syllabi in universities and probably has contributed to my receiving more requests even from Middle School students to help them with their classroom assignments – a mixed blessing, as you might imagine. If there is one area where I would wish we could be doing more with the journal, it is in its “general education” function as a resource for materials that can be used in (or out of) the classroom. This is one reason for the exponential growth of my contributions to content, which tend now to occupy an unseemly amount of space in any issue. I write reviews if I am unable to solicit them (an area in which we have, however, had some success). The choice of what to review, however brief the comments, is somewhat unsystematic – but generally what I acquire and write about is on my shelf because it appeals to my rather general interests, ones that I hope a good many readers might share. Presumably in the new world of social media, including such reviews in blogs rather than waiting for the next issue of a journal is going to be the way to go. Maybe I am a blogger at heart, but trying to do it within the confines of an old media approach. I am an enthusiast for the study of history through objects, which means in the first instance through museum collections. Hence the number of “museum collection” reviews, many more of which are needed as museums on the whole are forging ahead so rapidly in making their collections available on-line. Articles specifically on pedagogy would not be out of place. I have tried more than once to solicit them, with no success, but, of course, there are other well-established outlets for them in publications such as *Education about Asia*.

During the two-plus decades I have been involved with various Silk Road projects, at least two important annual journals pertaining to our “field” proved unable to continue. While I don’t know all the details, clearly part of the explanation must lie in the inability of overburdened editors to meet demands of time and energy inherent in a regular publishing schedule. The technical demands of polishing certain kinds of research can be daunting. While there are many periodical publications which have the resources to ensure that good work appears without significant delay, other important work languishes for years before it sees the light of day. I think it is safe to boast that

the cramped and cluttered home office where *The Silk Road* originates has done rather well in getting things out without undue delay, sometimes even within short weeks of receiving them. The current volume is more than a month behind my self-imposed deadline, but in the world of academic publishing that is but a miniscule delay.

What we have accomplished to date with the journal should provide Justin with a foundation so that he will not need to build by starting with the basement and, in the absence of a blueprint, proceed somewhat by trial and error. That is, he should not have to repeat the process by which *The Silk Road* has evolved from a small but visionary newsletter, whose continuation and survival after the first number was somewhat in doubt, to the substantial annual of today.

If the journal is to thrive under its new editor though, it is essential that he receive many and good submissions and that those of you whom he approaches for an article or other kinds of help respond positively. Your contributions are important for a readership that, I think, is eager to explore new ideas and broaden its horizons. Given the many troublesome currents swirling in our world today, we have an obligation to share as widely as possible what we know that is based on sound analytical thinking. Lest you wonder, my editing has, incidentally, been *pro bono* work, for no financial compensation, since that way the resources of the Silkroad Foundaton could be devoted instead to developing the journal itself and to supporting the Foundation's other valuable educational projects.

But I have tired of the responsibility, have many other ways to contribute both in academic writing and in internet educational projects, and my family would like more of my time. Occasionally I write to colleagues how I have "lost the will to edit," and in-

creasingly find excuses to procrastinate. Gone are the days when I might find myself on occasion writing Adela soon after arriving in my office before 6 AM so as to get journal business out the way and still have time to prepare for an early lecture, or, heaven forbid, a faculty meeting in mid-afternoon. By retiring from regular teaching and departmental obligations in 2006, I freed up more time (guess what began to fill it...). "Retirement" certainly has not spared me from tossing sleeplessly in the wee hours worrying whether I will manage even to skim the many new books on my shelf which deserve at least a short review notice in the upcoming volume. In fact, the piles in the background beyond my desk include a great many which have yet to receive the attention they merit. Now is truly the moment for me to move on, for the sake of the journal if it is to flourish, and for the sake of those wanting my undivided attention.

That said, these have been some of the most rewarding years of my life thanks to my authors, who have broadened my own horizons, thanks to the opportunities which have been created for interacting meaningfully with many scholars around the world, and thanks to the stimulus of realizing that if I were to do the job well, I also needed to explore the silk routes at first hand in the perhaps vain hope I might somehow master at least a small part of the subject. Some of these processes, I trust, will continue, but perhaps at a more stately pace.

Will I miss all the rest? Certainly, but to quote the familiar verses by American poet Robert Frost: "I have promises to keep, and miles to go before I sleep."

—DW

Shoreline, Washington, USA
31 January 2018

This volume is dedicated to two individuals who have contributed in important ways to our understanding of the historic Silk Roads.

Susan Whitfield

Her vision and leadership over more than two decades (until her resignation last year) as Director of the International Dunhuang Project have brought together and made available to the academic world the treasures of the Silk Road and provided a model for international collaboration. Her contributions to public education in many books and exhibitions continue to engage new audiences eager to learn about Eurasian exchange.



Photo courtesy of John Falconer.

At a meeting with Xinjiang archaeologists in Keriya, 2011.

Adela Lee

Committed to public education about the Silk Road, she has set an example of how focused enthusiasm and the allocation of support can make a difference. The varied programs sponsored by her Silkroad Foundation, many of them benefitting from her direct, personal management, have helped to educate a generation of scholars and enhanced our universities' obligation to public education.



Photos courtesy of Charlotte Green Waugh.



Left: Learning archaeology with the other participants in the Silkroad Foundation's 2005 summer program in the Tamir Valley, Mongolia. Above: A rare moment of relaxation, in a Xibe family home, Almaliq, Xinjiang, 2005.

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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RAISING THE ALARM: DEFENSIVE COMMUNICATION NETWORKS AND THE SILK ROADS THROUGH WAKHAN AND CHITRAL

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One of the key elements of Imperial Chinese strategy towards the Pamir borderlands¹ was the garrisoning of troops at strategic locations [Fig. 1].² The garrisons were a tangible demonstration of the patron-client relationship, and the resulting peace and security enabled cultural, political and economic exchange along the Silk Roads. The garrisons were supported and augmented by a network of watchtowers along the connecting routes.³ Manned by small groups of men, often including local inhabitants, the watchtowers (*feng* 烽 in Chinese, *ri-zug* in Tibetan) could raise an alarm and send a signal of fire, smoke, or perhaps sunlight reflected on polished metal mirrors to alert the garrisons in case of trouble.

Supporting this network of garrisons and watchtowers required substantial expenditures of money, grain, military supplies and silk. Although un-

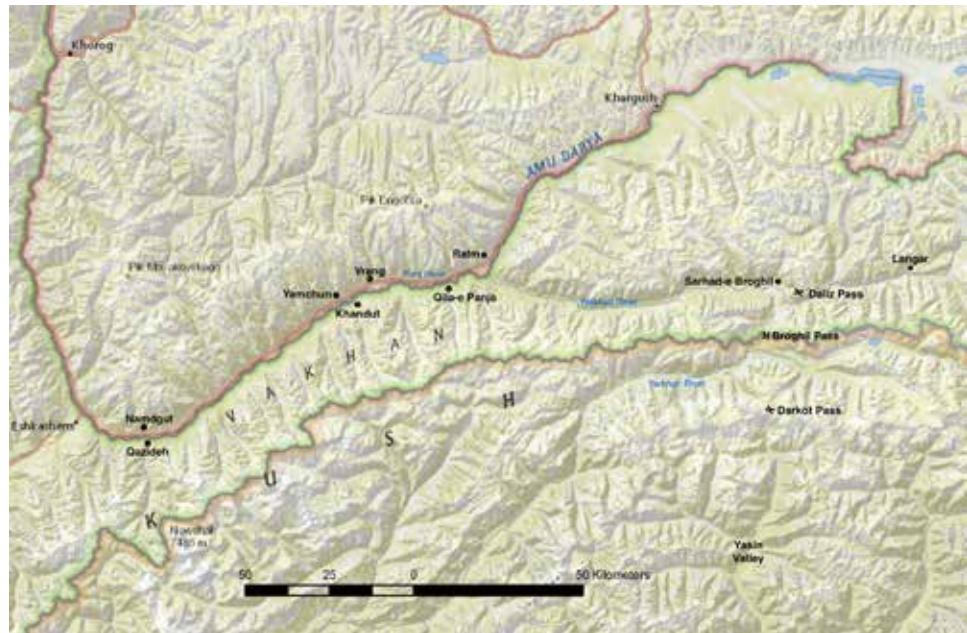
doubtedly less expensive and more practical than military conquest and direct rule, the system of supporting client states generated large flows of currency in the form of silver coins and bolts of silk flowing out of China and tribute and livestock into China.⁴ The flow of wealth coupled with the security infrastructure along the routes enabled commerce, politics and state formation to be woven into the complex, coherent network that today is identified as the Silk Roads (Brown 2014, p. 16).

In Wakhan⁵ massive stone and brick structures, locally termed *qalha* (fort) can be seen along both banks of the Panj River. On the Afghanistan side of the river, they are located from west to east at Qazideh,

Fig. 1. Wakhan and the Afghan Pamir, showing Pamir Borderlands. Map courtesy of Mareile Paley.



Fig. 2. Wakhan villages, passes and historic fort locations.



Qala Panja and Korkut. On the Tajikistan side, they are located at Namadgut, Yamchun and Ratm. Wakhi tradition ascribes them to *kofir* (non-Muslims) and more specifically to the kafir king QaQa, discussed below [Fig. 2].⁶

These forts were constructed on a base of flat stone slabs, and, except for the Qazideh fort, all have mud-brick walls above (Bubnova 2008, pp. 222–39; Hirai 2015, pp. 21, 42–43; Iloliev 2015; Miller 2009, pp. 37–43; Stein 1921, 1, pp. 68–69). Hirai noted that the Qazideh fort has lower walls than the other forts and more than 50 small rooms connected by a corridor, similar to Gandharan monasteries at Taxila (in modern Pakistan). Stein remarked on the use of regular brushwood layers interspersed between the mud bricks of the fort at Korkut, a construction technique used in Chinese and Tibetan forts along the Inner Asian Silk Roads.

The forts on the Tajikistan side of the Panj River have been more extensively studied than those on the Afghanistan side. Bubnova details the Russian and Soviet archaeological work and presents a comparative chronology that roughly dates the Namadgut, Yamchun and Ratm forts from the 3rd – 1st centuries BCE to the 6th – 8th centuries CE, with subsequent occupation in later periods. Iloliev comments in summary that although there is no specific datable evidence (such as wood for radiocarbon dating) to determine initial construction, the associated finds and contextual evidence suggest construction of the forts during the Kushan era, approximately 50 BCE – 250 CE.

The location and design of the Wakhan forts, built with massive walls and towers on high ground above narrow river corridors, comports well with a network of control over trade routes. One can envision the kingdom of Wakhan as described by the Chinese monk Xuanzang (Hsüang-tsang 玄奘), in the 7th century CE, with its ten Buddhist monasteries along both sides of the river. The capital Khandud and its marvelous monastery temple was in the middle of the kingdom (Xuanzang 1996, pp. 363–66) and the monastic cloister and caves of Vrang were opposite on the northern bank (Bubnova 1997). The series of

forts and towers along both sides of the Panj River provided the security infrastructure for the kingdom and for the monks and merchants crossing the high Pamir.⁷

To the south of Wakhan was the kingdom of *Balûr*.⁸ The kings of Balur, the Palola Shahis, were wealthy patrons of Buddhism, commissioning sumptuous bronze Buddha images and copying and preserving important Buddhist texts – the renowned Gilgit Manuscripts. Their “astonishing rich and flourishing Buddhist culture” (von Hinüber 2003, p. 35) also left a legacy of Sanskrit inscriptions and Buddhist art on numerous large rocks throughout the Gilgit region, which is today part of Pakistan.

Although the Palola Shahi dynasty is “unknown to ancient Indian historiography” (von Hinüber 2003, p. 36), the cultural, political and strategic significance of Balur for the Tang court is undeniable. The Chinese Imperial Commissioner described Balur and Wakhan as “the western gate of Tang” (Chavannes 2006, p. 150, n. 5). Although the Tang court maintained trade and diplomatic exchange with more than 20 western kingdoms, including Balur, Wakhan, Chitral, Udayana (Swat) and Kashmir, Tibetan soldiers passed unimpeded through Balur and Wakhan on their way to attack Kashgar and Khotan, two of China’s four major garrisons in the west (Beckwith 1987, pp. 29–34, 87–89, 116). In 722 CE, the Tibetan army occupied Little Balur, provoking a military response from the Chinese, who defeated the Tibetans in Balur. The Tibetans, however, did not go away and in 730 CE the king of Wakhan fled to Chinese territory where he requested military aid to counter Tibetan influence. In 737 CE, the Tibetan army captured the king of Little Balur, the entire Pamir region submitted to Tibet,



Fig. 3. Kansir fort, showing the long western wall and large tower at southwestern corner.

and all tribute to the Tang court ceased (Beckwith 1987, pp. 95, 111, 116). In 740 CE, the king of Little Balur married a Tibetan princess.⁹ The Tang Imperial Commissioner's fears of losing the western regions to Tibet were realized and the Tang court sent an army of 10,000 to re-take Little Balur.

The campaign, led by general Gao Xianzhi (Kao Hsien-chih, 高仙芝), is recorded in his biography.¹⁰ The army, equipped with horses, marched from Kucha to Kashgar to Tashkurgan. From there, they marched to the Pamir, most probably the present day Little Pamir in Afghanistan, where he divided his army into three. His strategic aim was to attack the Tibetan-occupied fort, which the Tang Annals call Lianyun (Lien-yun, 連雲), located near present-day Sarhad-e Broghil, which was and still is the easternmost village in Wakhan. The general sent 3,000 horsemen by the "Northern Gorge"; a second group went by the "Red Buddha Hall Road"; and the general himself and the Imperial Commissioner went via the "Kingdom of Wakhan."¹¹ The plan was to converge simultaneously on the fortress of Lianyun, where there were 1,000 Tibetan soldiers. About five km south of the fort the Tibetans had raised palisades behind which were another 8,000–9,000 soldiers. At the base of the fort flowed a large river, identified as the Wakhan River.

Lianyun

Aurel Stein visited the Sahad-e Broghil area of Wakhan in May 1906, on his second Central Asian journey. It was still "bitterly cold" in Wakhan, and snow covered most of the higher ground (Stein 1912, p. 72). On the morning of May 21, he left his camp at Sarhad-e Broghil, crossed the Wakhan River to its southern bank, and rode his horse up to Kansir fort above Korkut village. He returned to his camp at Sarhad-e Broghil that afternoon and the next morning departed for the Little Pamir. Stein noted that Lianyun must have been on the southern side of the river, but

Fig. 4 (right). Detail of the southern wall of Kansir fort, showing brushwood layers between mud-covered bricks.



Photos by Kimberley O'Neil, taken August 26, 2007.

assumed that the fort was "on the open alluvial plain which adjoins the [Wakhan] river at the mouth of the valley coming from the Baroghil [pass]." Finding nothing there, he wrote that "the exact position of Lien-yun thus remains undetermined" (Stein 1922, pp. 117, 122).

Kansir fort is perched at an elevation of 3784 m on a ridge about 500 m above the southern bank of the Wakhan River and west of the valley leading to the Broghil Pass [Fig. 3]. It takes about two hours to walk up from Korkut village to the fort, which is not visible from Sarhad-e Broghil. Kansir is impressive and remains as Stein described it.¹² It sits on a high rock outcrop with sweeping views over the long Sarhad Valley and the trails to the Northern Gorge route from the Big Pamir and the Daliz Pass route to the Little Pamir. As Stein mentioned, the construction is reminiscent of Tibetan-style forts such as those at Miran and Mazar-tagh in present-day China. The massive tapered walls, thicker at their base, are made of sun-dried mud bricks interspersed with small sticks, resting on a base of flat stones [Figs. 4, 5]. A

Fig. 5. The southwestern tower of Kansir, showing the stone plinth with mud bricks above.

Photo by Kimberley O'Neil, taken August 26, 2007.





Fig. 6. *Kansir fort perches on a rocky ridge above the Sarhad Valley.*

partial plaster of mud over the stone plinth remains. Radiocarbon studies of the brushwood that separates the sun-dried brick layers and of the sun-dried brick material itself would help determine a date of construction, but currently Afghan border authorities do not permit foreigners to visit Kansir because of its proximity to Broghil Pass and the Pakistan border [Fig. 6]. When I visited the fort in 2007, the southern tower, which looks toward the Broghil Pass (the pass itself is not visible from the fort), was the most intact. Three other wall segments were also intact overlooking the western side suggesting, as Stein surmised, that attack was feared from that direction, ascending from Korkut village.

West of and below Kansir fort on a grassy, level area not visible from the fort is a herders' settlement with a small, spring-fed stream nearby. The Wakhi herders from Korkut village

Fig. 7. *Impoundment pond near Kansir fort.*



told me that there was once a canal that brought water from the stream over a low saddle to Kansir fort. As one walks from the herders' settlement to Kansir, a line of partially-buried stones appears to be the faint remains of an old canal following the contour line around the ridge to the fort. A branch off this line descends to a now-dry impoundment pond, which is confined by a well-weathered earthen wall, about one meter wide. At the western base of the fort are what appear to be two more impoundment ponds, also dry. A water source, such as the ponds would provide, was necessary to make mud bricks used in construction and for troops manning Kansir fort. Excavation at the pond sites could yield clues as to when and by whom the ponds were constructed [Fig. 7].

Following the stream down from the herders' settlement, one comes to a northern spur ridge with a commanding view over Sarhad-e Broghil and the route from the Northern Gorge approach to the Sarhad Valley. Here on this ridge is an old fort known as Arzun,



Fig. 8. *Arzun fort on a spur ridge below Kansir fort, overlooking the Sarhad Valley and the steep side valley that is part of the Northern Gorge route.*

Fig. 9. *Detail of mud bricks at Arzun fort.*



All photos on this page by Kimberley O'Neil, taken August 26, 2007.

the same time as Kansir. The stream from the herders' settlement flows down steeply just east of Arzun fort. The fort guards the approach to the herder settlement and also to Kansir fort above. Perhaps Kansir fort was constructed later by Tibetans after their defeat in 747 CE, when Arzun fort proved too vulnerable. The forts require further study, but it seems certain that the fort of Lianyun mentioned in the Tang Annals should be identified with one or both of these two forts, Kansir and Arzun.¹³

It is also clear that Kansir is not just the single fort described by Stein, but rather is a complex of structures, including a lower, possibly earlier fort, a water supply system and ponds for storing water. Significant resources were utilized in constructing this complex. Knowing when it was built would help resolve the question of who was responsible. The strategic location of Kansir and Arzun makes clear their purpose of guarding the approach to Broghil Pass from any of the three routes mentioned in the Chinese account of 747 CE. The gentle, grassy Broghil Pass marks the present-day boundary between Afghanistan and Pakistan. From Afghanistan, the route over the pass leads into the upper Yarkhun Valley of Chitral and, via the Darkot Pass, into the Yasin Valley of the Gilgit River basin, where the Palola kings ruled.

Wakhi narratives about Kansir provide interesting corroborative details. The fort is said to have belonged to the kafir king QaQa. Additional QaQa forts at Qazideh in Afghanistan and Namadgut and Yamchun in Tajikistan and secondary locations associated with the sister of QaQa and QaQa's general(s) may date from the same era as Kansir fort. The QaQa forts are today woven into the social fabric through the ascription of the defeat of the kafir king by Ali, the fourth caliph succeeding the Prophet of Islam. Although the army of the Caliph al-Ma'mun campaigned against the Qaghan of Tibet and defeated Wakhan and Balur around 814-15 (Beckwith 1987, p. 162), it is historically impossible that Hazrat Ali, who died in 661 CE, could have been physically involved in the campaign. More interesting are the shared onomastics of the name QaQa with the Turkish title Qaghan and with the same appellation applied in Arabic sources to the kings of Tibet (Beckwith 1987, p. 160). This provides a basis for the interesting possibility that the present name QaQa may be a surviving reference to Tibetan kings.

Local legends of QaQa offer another tantalizing correspondence. Interviews I recorded at Sarhad-e Broghil state that "QaQa had a fort on the Korkot side" and that he "constructed a wall purely from the thorn *zakh*," which is the Wakhi name for sea buckthorn (*Hippophae rhamnoides*). This fits curiously

with the Tang Annals' description of a wall or palisade constructed by the Tibetan forces above the Lian-yun fort close to Broghil Pass. Sea-buckthorn is abundant in Wakhan, where it grows over 3 m in height with dense, stiff and very thorny branches. Present-day Wakhi herders use sea buckthorn for livestock enclosures. If cut and piled, it would form a dense and difficult to penetrate barrier.

Furthermore, Wakhi people in Sarhad-e Broghil state that the fort of QaQa's sister is on the opposite side of the river from Kansir, high on the northern ridge above Sarhad-e Broghil, where it overlooks the Northern Gorge route. Any troops approaching via that route would be seen and a signal could be sent to the Kansir fort. Like Chinese and Tibetan forts along the Silk Roads that had beacon towers for signaling if enemies approached, it appears that QaQa's sister's fort and other small forts or posts along the Pamir routes may have had a similar function. These smaller watchposts could signal to a larger force stationed at the Broghil Pass or to other forts in Wakhan downstream from Sarhad-e Broghil.

Watchposts along the Pamir routes

East of but visible from Daliz Pass, on a spur ridge about 15 minutes above the trail, is a square, walled structure, 6 x 6 m. Wakhi men described it as a *qalha* named *tope khana* (gun house). I made an initial site survey in 2016. The walls are formed of dry, flat, stacked stones, which have extensive lichen growth, indicating considerable age.¹⁴ The south and west walls are dilapidated. The northern and eastern walls are slightly less than one meter high; the north-eastern corner is the tallest remaining component, two meters high. The walls are 0.7 m wide. No wood was used in the walls as they were not tall enough to require wood for stability. In the eastern wall a slightly lower short section may have been a window or aperture. The fort has a range of view from Daliz Pass in the west to the now-abandoned Wakhi settlement of Langar in the east. Only a few men could have occupied the post at any one time. Its location is high enough above the trail to suggest its main function was as an observation and signaling post [Fig. 10].



Fig. 10. The northeastern corner and eastern wall of the Daliz watchpost, showing the view east up the Wakhan River valley. Photo taken September 3, 2016.



Fig. 11. Eastern wall of the Zangkuk watchtower.

Fig. 12. The northern wall of Zangkuk tower has been excavated by "treasure hunters". The eastern wall is bowed, but otherwise intact.

Both photos taken September 4, 2016.

Along the trail that parallels the Wakhan River between Sarhad-e Broghil and the Little Pamir, near a side stream and camping place called Zangkuk (*kuk* means spring in Wakhi) is a stone tower on a ridge about 350 m and one hour's climb above the trail. The location is obviously too far from the trail for anyone at the tower to hinder effectively anyone passing below. The tower has commanding views up and down the Wakhan River. Any movement in either direction along the trail between Sarhad-e Broghil and the Little Pamir would be detected from the tower, from which a visible signal could be sent either up or down valley [Fig. 11]. There is no water source near the tower, and anyone staying there would have to carry water uphill about 30 minutes from a stream in a lateral ravine called *Yupke Thur* (water ravine in Wakhi). Hence, it is unlikely that many people would stay there.

I made site surveys in 2007 and 2016. The tower is solid with no interior and is built of flat stones stacked horizontally, the layers interspersed with small branches, similar to the base of the Kansir fort, but with no external mud coating. The branches may be juniper, which grows abundantly nearby. The base is approximately 7 x 7 m, although the western side is about 10 m long. A right angle inset about half way along the southern side makes up the difference between the eastern and western sides. The tower is approximately 8 m tall and the structure tapers gradually to about 4 x 4 m at the top. A raised outer wall on the northwestern corner may be the remains of a battlement. The center of the top of the tower and portions of the western and southern sides (the uphill sides) have been dug into, obliterating any signs of usage that might have existed. According to local Wakhi men, this was done recently by "treasure hunters" [Fig. 12]. Illegal digging and excavation in



search of saleable objects is a concern in remote areas of Afghanistan, and Wakhan is no exception. The eastern side of the tower overlooks the Wakhan River and is intact. It is densely covered with orange lichen, indicating considerable age.

At the base of the ridge on which the tower sits, above and in close proximity to the trail along the Wakhan River, lies a second site. Only the base of a structure remains, which is obvious when viewed from above, but unnoticeable from the trail below. A wall of flat stones interspersed with small branches demonstrates a similar construction to the tower high above. This structure faces the trail, and anyone traveling on the trail would be exposed to attack from above, the distance short enough so that arrows could be used. This structure's location and its similarity of construction with the tower above point to a strategic function for both.

There are additional watchposts along the mountain trails between the Pamir and Sarhad-e Broghil (Mock 2016; Mock in press). Although these trails were used by the Chinese army when it attacked Lian-yun in 747 CE, Tibetan inscriptions at these watchposts show that they were used by soldiers serving the Tibetan Empire. The precise dates are not determined, but they must have been used during the period when Tibet extended its rule into the Pamir region, approximately mid-7th - mid-9th century CE. Their location at high points above the trails matches written descriptions of *ri-zug* or hill-stations used for signaling (Takeuchi 2004). The watchposts could signal to larger forts if they needed to raise an alarm, forming a defensive

network through the mountains from the Pamir to Sarhad-e Broghil.

In the mountain kingdoms of Wakhan, Balur and Chitral¹⁵ were villages, forts and monasteries where monks and merchants stopped on their journeys.¹⁶ A series of watchposts manned largely by indigenous soldiers formed a network connecting these small kingdoms. Starting from Wakhan one network continued south over the Broghil and Darkot passes to the kingdom of Balur (Mock 2013b). From Wakhan another network also continued over the Broghil Pass and along the Yarkhun River. Aurel Stein described a Chinese fort at Brep village in the Yarkhun Valley as having “a base or plinth of large uncut slabs, with masonry of sun-dried bricks superimposed,” which parallels the structure of the Kansir fort in Wakhan (Stein 1921, 1, pp. 46-47). The network of watchtowers continued past the important town of Mastuj and followed the Mastuj River to Chitral, which was the capital of the state of Chitral (*Military Report 1928*, pp. 71-72). From Chitral, a route continued along the Chitral and Kunar rivers south to meet the Kabul River near present-day Jalalabad, forming a direct link between Chitral and Kabul.¹⁷

Along the Yarkhun River in upper Chitral there were 14 traditional fire-signaling posts, called *phumbarash*¹⁸ in Khovar, the language of Chitral. They are discussed by Chitrali scholars, who cite local knowledge and a 1928 British military report on Chitral (Faizi 1991, p. 147; Beg 1996, p. 144; *Military Report 1928*, p. 112).¹⁹ The 14 “beacon sites” from Mastuj to Broghil and their locations as listed in the 1928 British military report are:

- | | |
|-----------------|---|
| 1. Lokap Dap | Left Bank ½ mile South of Mastuj Post Office. |
| 2. Mokul Dok | Right Bank 1 mile South of Khuzh. |
| 3. Chakal Unt | Right Bank 1 mile South of Istach. |
| 4. Marting Spur | Right Bank 1 mile North of Marting. |
| 5. Miragram Dok | Left Bank 1 mile North-East of Mehtari Bungalow Miragram. |
| 6. Paur Ridge | Right Bank 1 mile West of Paur. |
| 7. Wassam Dok | Left Bank 1 mile South of Wassam. |
| 8. Darband | Right Bank 2 miles North-East of Jhopu. |

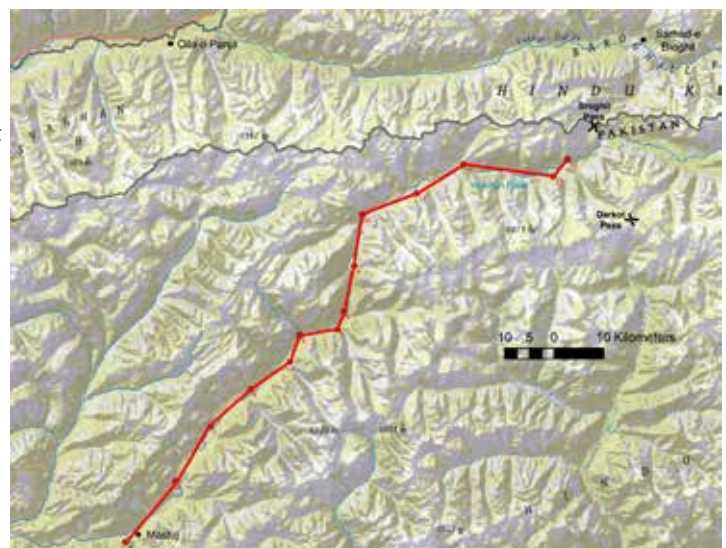
Fig. 13. Beacon signaling sites (*phumbarash*) in the Yarkhun Valley, Chitral. Based on the descriptions given in *Military Report 1928*.

- | | |
|-----------------|--|
| 9. Ichpirin | Left Bank 2 miles South of Dobargar. |
| 10. Yosh Kist | Right Bank 2 miles South of Shost. |
| 11. Pari Yor | Left Bank ½ mile South of Lasht (Imkip). |
| 12. Bajdong | Right Bank 1 mile East of Kankhun Kuch. |
| 13. Kotal Kash | Left Bank 4 miles South of Vedinkot. |
| 14. Rakang Hill | Left Bank 1 mile East of Vedinkot. |

These fire-signaling stations may have been a continuation of the signaling system that operated during the period of Chinese and Tibetan rivalry in the Pamir and Hindukush. Further study in Chitral would be useful, but access to the Yarkhun Valley is currently difficult to obtain for non-Pakistani citizens [Figs. 13, 14].

A confirmation of the link between the hill-stations for fire signaling in Wakhan and those in Chitral is provided by the shared use of the word *phumbarash*

Fig. 14. A watchtower at Shuwor Shir in Pakistan near the Broghil Pass. Photo taken August 19, 1997.



in both locations. A recent article on forts in Tajikistan Wakhan notes that there were “. . . control towers between [the forts], which allowed the guards to observe . . . the main road. They would report any potential danger by using an inter-towers alarm system, locally known as *pumbrsh* (firing arrows) . . . which used fire (at night) and smoke (during the day) to alert the commandants of the fortresses about suspicious movements on the road” (Iloliev 2015, p. 316). This shared word for fire signaling is not surprising, given the history of persistent contact and exchange between Wakhi-speaking Wakhan and Khowar-speaking Chitral from “very ancient” times up to the present (Morgenstierne 1926, p. 81, and 1973, pp. 433-44; Bashir 2001, p. 3).²⁰ The shared term²¹ for fire-signaling stations, coupled with the evidence for fire signaling during the Tang and Tibetan imperial periods points to a time when fire signaling was organized and employed in Wakhan, Chitral and Balur.²² As Takeuchi notes (2004, p. 55), “... small kingdoms, such as ... Little and Great Balur in eastern Tokharistan and the Pamirs – were allowed to retain their regimes under the Tibetan colonialists, but they had to pay tribute and supply troops when ordered to do so by the Tibetan authorities.” The detailed accounts in the Tang Annals demonstrate that the same held true under Chinese authority.

Conclusion

A series of large forts along the northern Tajikistan side and the southern Afghanistan side of the Panj River and along the Wakhan River in Wakhan date from the 2nd century BCE at the earliest to the mid-8th century CE. Tang Dynasty records show the significance of the kingdom of Wakhan and document a large military campaign to Wakhan in 747 CE. The Old Tibetan Annals provide separate textual confirmation of these events. The site of the fort Lian-yun involved in these accounts was not determined by Aurel Stein. Recent surface surveys of the site described in the Tang Annals indicate that the fort known today as Kansir is the location of Lian-yun, and that previously unknown monumental structures associated with the site were part of the entire fort complex. Field surveys also identified a series of towers and small outposts along the routes leading to the fort. These can be associated with watchtowers that sent signals to larger forts. A network of forts and towers existed along the Silk Roads during both Tang and Tibetan imperial periods. Old Tibetan inscriptions at several such sites show they were used by Tibetans, which provides a discrete range of dates for Tibetan occupation. The Silk Roads through Wakhan extended into neighboring states, including Palola/Balur (present-day Gilgit-Yasin) and Chitral.

A line of signaling posts through the upper Yarkhun Valley of Chitral shares the same indigenous name as signaling posts in Wakhan. This linguistic evidence suggests that the system of forts and signaling posts extended from the Little Pamir to the kingdom of Wakhan and on to the kingdom of Chitral, which finds confirmation in the on-site identification of a series of towers and outposts along those routes. Extrapolating from the Tang Dynasty Annals, it can be postulated that a network of forts and signaling posts existed along the Silk Roads throughout the western regions of the Tang and Tibetan empires, including Wakhan, Chitral, Palola/Balur. In rugged mountainous terrain, signaling towers provided the only practical means for alerting the garrisons at forts in these kingdoms. In return for maintaining security along the Silk Roads, the small kingdoms received recognition, wealth and security from their Imperial overlords.

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References

Ali 2014.

Abida Ali. *A Glimpse of the Past & its Existence in Present times: Studying Indigenous Knowledge in Disaster Risk Reduction in Gilgit-Baltistan*. Focus Humanitarian Assistance Research Report, Gilgit Pakistan.

Bashir 2001

Elena Bashir. "Khowar-Wakhi contact relationship." In: Dirk W. Lonner, ed., *Tohfa-e Dil: Festschrift Helmut Nespital*. Reinbeck bei Hamburg: Wetzler, 2001: 3–17.

Beckwith 1987

Christopher I. Beckwith. *The Tibetan Empire in Central Asia: A History of the Struggle for Great Power Among Tibetans, Turks, Arabs and Chinese During the Early Middle Ages*. Princeton: Princeton Univ. Pr., 1987.

Beg 1996

Rahmat Karim Beg. "Defence Organization of the Former State of Chitral." In: Elena Bashir and Israr-ud-din, eds., *Proceedings of the Second International Hindukush Cultural Conference*. Karachi: Oxford Univ. Pr., 1996: 139–45.

Benedict 2009

James B. Benedict. "Review of Lichenometric Dating and its Applications to Archaeology." *American Antiquity* 74/1 (2009): 143–72.

Brown 2014

Peter Brown. "The Silk Roads in Late Antiquity." In: Victor H. Mair and Jane Hickman, eds., *Reconfiguring the Silk Road: New Research on East-West Exchange in Antiquity*. Philadelphia: Univ. of Pennsylvania Museum of Archaeology and Anthropology, 2014: 15–22.

Bubnova 1997

Mira Alekseevna Bubnova. "Vrang – A Buddhist Cloister in Ancient Vakhan, VI–VII centuries." In: *Oriental Studies in the 20th Century: Achievements and Prospects: Abstracts of the papers of CIS scholar for the 35th ICANAS (Budapest, Jul 7–12, 1997)*. Moscow: Institute of the Oriental Studies of the RAS, 1/1 (1997): 67–68.

Bubnova 2008

_____. *Arkheologicheskaja karta Gorno-Badakhshanskoi avtonomnoi oblasti: Zapadnyi Pamir: (pamiatniki kamennogo veka-XX v), 2-e izd. ispravlennoe i dopolnennoe* [Archaeological map of Gorno Badakhshan Autonomous Oblast: the Western Pamirs: (monuments of the Stone Age – the 20th century.)], 2nd ed., revised and supplemented. Dushanbe: Universitet Tsentral'noi Azii, 2008.

Buddruss 1989

Georg Buddruss. "Kommentar zu einem Kivi-Vokabular aus dem sowjetischen Pamir." In Inge Wezler ed., *Studien Zur Indologie und Iranistik* Heft 15. Reinbek: Verlag für Orientalistische Fachpublikationen, 1989: 197–205.

Cacopardo and Cacopardo 2001

Alberto M. Cacopardo and Augusto S. Cacopardo. *Gates of Peristan: History, Religion and Society in the Hindu Kush*. Rome: Istituto Italiano Per L'Africa E L'Oriente (IsIAO), 2001.

Chavannes 1903/2006

Édouard Chavannes. *Documents sur les Tou-kiue (Turcs) occidentaux*. St. Petersburg, 1903. Internet edition <http://classiques.uqac.ca/classiques/chavannes_edouard/toukiue/chav_toukiue.pdf> (Quebec, 2006), last accessed 3 January 2018.

Dotson 2009

Brandon Dotson. *The Old Tibetan Annals: An Annotated Translation of Tibet's First History*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 2009.

Earley-Spadoni 2015

Tiffany Earley-Spadoni. "Landscapes of warfare: Intervisibility analysis of Early Iron and Urartian fire beacon stations (Armenia)." *Journal of Archaeological Science: Reports* 3 (2015): 22–30.

Faizi 1991

Inayatullah Faizi. "The Geo-Political Significance of the Southern Passes of the Wakhan Corridor." Ph.D. dissertation, University of Peshawar, Area Studies Centre (Central Asia), 1991.

Faizi 1996

_____. *Wakhan: A Window into Central Asia*. Islamabad: Al-Qalam, 1996.

Hansen 2012

Valerie Hansen. *The Silk Road: A New History*. New York: Oxford Univ. Pr., 2012.

von Hinüber 2003

Oskar von Hinüber. "The Magnificent Bronze of Nandivikramadityanandi: A Delight for the Beholder, A Worry for the Epigraphist." *Orientalia* 34/4 (2003): 35–39.

von Hinüber 2004

_____. *Die Palola Sahis: Ihre Steininschriften, Inschriften auf Bronzen, Handschriftenkolophone und Schutzzauber*. Mainz: Philipp von Zabern, 2004.

Hirai 2015

Go Hirai. *The Wakhan Corridor – In the Footsteps of Hsüang-tsang and Marco Polo: Nature and Inhabitants*. Tokyo: Kasumigaseki, 2015.

Hyech'o 1984

Hyech'o. *The Hye Ch'o Diary: Memoir of the Pilgrimage to the Five Regions of India*. Berkeley, CA: Asian Humanities Pr., 1984.

Ilioliev 2015

Abdulmamad Ilioliev. "King of Men: 'Ali ibn Abi Talib in Pamiri Folktales." *Journal of Shi'a Islamic Studies* 8/3 (Summer 2015): 307–23.

Kreutzmann 2016

Hermann Kreutzmann. "Pamir or Pamirs: Perceptions and Interpretations." In: Hermann Kreutzmann and Teji Watanabe, eds., *Mapping Transition in the Pamirs: Changing Human-Environmental Landscapes*. Chambray: Springer, 2016: 17–40.

Kreutzmann 2017

_____. "Historical Geography of the Pamirs." *Oxford*

Research Encyclopedia of Asian History. Oxford Univ. Pr., May 2017. On-line at <<http://asianhistory.oxfordre.com/view/10.1093/acrefore/9780190277727.001.0001/acrefore-9780190277727-e-46?rskey=35GITK&result=15>>, last accessed 3 January 2018.

Melzer 2014

Gudrun Melzer. "A Paleographic Study of a Buddhist Manuscript from the Gilgit Region: A Glimpse into a Scribe's Workshop." In: Jörg Quenzer, Dmitry Bondarev, and Jan-Ulrich Sobisch, eds., *Manuscript Cultures: Mapping the Field*. Berlin; Boston: De Gruyter, 2014: 239–79. Accessed via library subscription ProQuest ebrary, 8 May 2016.

Middleton and Thomas 2008

Robert Middleton and Huw Thomas. *Tajikistan and the High Pamirs: A Companion and Guide*. Hong Kong: Odyssey Books and Guides, 2008.

Military Report 1928

Military Report and Gazetteer on Chitral. Calcutta: Government of India Pr., 1928.

Miller 2009

Andrew Miller. *Tales from the Wakhan: Folklore and Archaeology of the Wakhan Corridor*. Kabul: Aga Khan Trust for Culture, 2009.

Mock 2011

John Mock. "Shrine Traditions of Wakhan Afghanistan." *Journal of Persianate Studies* 4/2 (2011): 117–45.

Mock 2013a

_____. "A Tibetan Toponym from Afghanistan." *Revue d'Etudes Tibétaines* 27 (October 2013) [Paris: CNRS]: 5-9. [This journal is freely available on-line at <<http://www.digitalhimalaya.com/collections/journals/ret/>>.]

Mock 2013b

_____. "Darkot Revisited: New Information on a Tibetan Inscription and mchod-rten." *Revue d'Etudes Tibétaines* 27 (October 2013) [Paris: CNRS]: 11–19.

Mock 2016

_____. "Tibetans in Wakhan: New Information on Inscriptions and Rock Art." *Revue d'Etudes Tibétaines* 36 (October 2016) [Paris: CNRS]: 121–41.

Mock in press

_____. "The Red Buddha Hall Road Revisited: New Information about the Tibetan and Tang Empires in Afghanistan Wakhan." *Revue d'Etudes Tibétaines* 43 (April 2018) [Paris: CNRS].

Morgenstierne 1926

Georg Morgenstierne. *Report on a Linguistic Mission to Afghanistan*. Oslo: H. Aschehoug, 1926.

Mu 1984

Mu Shunying. "Development and achievement of archaeology in Xinjiang since the Founding of New China." *Journal of Central Asia* 3/1 (1984): 55–72.

Ou-k'ong 1895

Ou-k'ong. *Voyages des pèlerins bouddhistes. L'itinéraire d'Ou-k'ong (751–790)*, traduit et annoté par MM. Sylvain Lévi

et Édouard Chavannes. Extrait du "Journal asiatique" [septembre-octobre 1895: 341–84]. Paris: Imp. nationale, 1895.

Richardson 1998

Hugh Richardson. "Names and Titles in Early Tibetan Records." In: idem, *High Peaks, Pure Earth: Collected Writings on Tibetan History and Culture*, Michael Aris, ed. London: Serindia, 1998: 12–24.

Skaff 2012

Jonathan Karam Skaff. *Sui-Tang China and Its Turko-Mongol Neighbors: Culture, Power, and Connections, 580-800*. New York: Oxford Univ. Pr., 2012.

Stein 1912

_____. *Ruins of Desert Cathay: Personal Narrative of Exploration in Central Asia and Westernmost China*, 2 vols. London: MacMillan, 1912.

Stein 1921

_____. *Serindia: Detailed report of Explorations in Central Asia and Westernmost China Carried Out and Described Under the Orders of H.M. Indian Government*. 5 vols. Oxford: Clarendon, 1921.

Stein 1922

_____. "A Chinese Expedition across the Pamirs and Hindukush, A. D. 747." *The Geographical Journal* 59/2 (1922): 112–31.

Turner 1962-1985

Ralph Lilly Turner. *A comparative dictionary of the Indo-Aryan languages*. London: Oxford University Pr., 1962–85 (includes three supplements, 1969-1985, to the original 1962-1966 edition, with internet updates to 2006). On-line at <<http://dsal.uchicago.edu/dictionaries/soas/>>, last accessed 3 January 2018.

Takeuchi 2004

Tsuguhito Takeuchi. "The Tibetan Military System and its Activities from Khotan to Lop-Nor". In: Susan Whitfield ed., *The Silk Road: Trade, Travel, War and Faith*. Chicago: Serindia Publications, 2004: 50–56.

Xuanzang 1996

Xuanzang. *The Great Tang Dynasty Record of the Western Regions*. (Taisho, Volume 51, Number 2087). BDK English Tripiṭaka 79. Translated into English by Li Rongxi. Berkeley, CA: Numata Center for Buddhist Translation and Research, 1996.

Notes

1. Pamir, a Wakhi word, refers to U-shaped high-elevation mountain valleys unique to Central Asia, where there are 14 named Pamirs in the vast mountainous plateau of the Pamir region. Pamir also refers to a mountain range largely inside today's Tajikistan. The term Pamir Knot refers to the area where the Pamir, Tien Shan, Kun Lun Shan, Karakoram and Hindukush ranges meet. To cross from Kashgar or Yarkand to Balkh or Bamiyan, one traverses the Pamirs. Chinese Buddhist pilgrims over 1000 years ago used the term *Bomiluo* (Po-mi-lo, 波謎羅) and once across, they arrived in the small

kingdoms of the Pamir borderlands. For a more detailed cultural geographical perspective, see Kreutzmann 2016.

2. This Tang Dynasty strategy was employed widely and not limited to the Pamir. Jonathan Skaff's fascinating study of Tang China's relations with its Turko-Mongol neighbors and the "patrimonial political networking" involved is applicable to China's (and Tibet's) strategies and relations in the Pamir (Skaff 2012, pp. 288-300).

3. Stein (1912, pp. 152-53) described watchtowers at Miran along the southern Silk Road west of Dunhuang. Takeuchi (2004, p. 55) studied them in detail and suggested they also existed along the southern route of the Silk Road including "Little and Great Balur ... and the Pamirs". Mu Shunying (1984, p. 65) mentions Han and Tang dynasty beacon towers along the northern and southern routes of the Silk Road. Dotson (2009, pp. 56-57) links the Tibetan hill stations with "red fire raising stations" that are mentioned in the Old Tibetan Annals.

4. Valerie Hansen (2012) and Jonathan Skaff (2012) discuss this in their recent studies. Although Skaff's main focus is on China's relations with the Turko-Mongols to the north, his study demonstrates similar customary political relations throughout Inner Asia, including the Tibetan empire. Hansen's study of the archaeological and textual record from important locations along the Silk Roads leads her to conclude that "Silk Road trade was largely the byproduct of Chinese government spending" (p. 111).

5. Wakhan, the homeland of Wakhi-speaking Wakhik people, lies along both banks of the Panj and Wakhan rivers east of Ishkashim to the highest settlement at Sarhad-e Broghil. Once an autonomous polity, Wakhan was bisected along the Panj River by the Anglo-Russian Boundary Settlement of 1895 (Kreutzmann 2017). Today the northern side of the Panj River is in Tajikistan, and the southern side is in Afghanistan.

6. QaQa is the local Wakhi pronunciation. In Persian and Arabic, the name QahQahah is associated with a *div* (demon) and Qahqahah was a demon killed by Rustam in the Shahnamah. The legend of *Qa Qa-e jodu* and his fort at Hissar near Dushanbe is well known in Tajikistan (Middleton and Thomas 2008, p. 122). For more on QaQa in Wakhan, see Mock 2011 and Iloliev 2015.

7. Xuanzang (Hsüan-tsang 玄奘) passed through Wakhan in 645 CE on his way back to Khotan. In his translator's introduction, Li Rongxi describes Xuanzang's caravan: "He brought with him as many as six hundred fifty-seven books bound in five hundred twenty bundles that he acquired in India, carried by twenty packhorses" (Xuanzang 1996, p. 2).

8. Beckwith (1987, p. 30, n. 97), working with Tang Dynasty Annals, notes that Balūr is the correct reading of the Chinese name, not the more common "Bolor". Working with the Gilgit Manuscripts and a remarkable series of inscribed bronze statues, von Hinüber recognizes Patola as the Sanskritized form of the geographic term Palola, from which Balur is derived. He notes that Palola is the correct name of the dynasty that ruled in the Gilgit area from the 6th through the 8th centuries (von Hinüber 2004, Introduction, Die Palola Shahis).

9. The Lady Khri ma lod was married to the *Bruzha rje*, or Lord of Bruzha, the title the Tibetans conferred on him. Such marriages resulted in *zhang dbon* relationships, in which the Tibetan king was *zhang* or uncle, and the local king who married the princess was *dbon* or nephew (Richardson 1998, p. 16; Dotson 2009, pp. 31-37).

10. Found in *Jiu Tang Shu* (舊唐書, Old Tang History), Ch. 104; translated into French by Édouard Chavannes (1993/2006, p. 154). Stein (1922) interprets the Chinese narrative in conjunction with his (Stein's) 1906 visit to Wakhan. Beckwith (1987, pp. 130-33) offers a revised reading of the original biographic narrative.

11. For more on this remarkable military campaign, see Mock 2016.

12. Miller's description (2009, pp. 42-43, 60) has Stein visiting the site in "the late 19th century" and Stein "observing ... Buddhist painted plasterwork in some areas", neither of which is accurate. As indicated above (n. 10), Stein visited only in 1906 on his second Central Asian journey and made no mention of painted plasterwork of any kind.

13. Dr. Go Hirai, a Japanese physician, visited Wakhan on mountaineering expeditions in 1969 and 1971. From 1999 until 2011 he made 11 visits to Wakhan and the Afghan Pamir and also to Tajikistan Wakhan. He visited Kansir fort and equated it with Lian-yun (Hirai 2015, pp. 41-42).

14. For more on the use of measurements of size and extent of lichen growth on rocks for dating the age of archaeological features, see Benedict 2009.

15. The Chinese names for Wakhan, Balur and Chitral were *Hukan* (Hu-k'an, 鑞侃), *Bolü* (Po-lü, 勃律) and *Juwei* (Kiu-wei, 拘緯). See Mock 2013a, pp. 5-6 for more on the name for Wakhan. For more on the name for Balur, see note 8 above. Kiu-wei is analogous to Kivi, which, as Buddrus noted (1989, p. 197), is the Wakhi word for the Khovar language of Chitral.

16. Chitral was visited by Buddhist pilgrims Xuanzang 玄奘 in 645 CE (Xuanzang 1996, p. 366), the Korean Hyecho 慧超 in 727 CE (Hyech'o 1984, p. 50) and Wukong (Wu-k'ung, Ou--k'ong, 梧空) in 751 CE (Ou-k'ong 1895, p. 348). The pilgrims Song Yun (宋雲) and Hui Zheng (Hui Sheng, 惠生) may have passed through Chitral in 519 CE (Hyech'o 1984, p. 9).

17. The Chitral Valley provided a direct but perhaps more dangerous link between Balur and Kabul (Cacopardo and Cacopardo 2001, pp. 28-29; 52). The longer southern route along the Indus River and through Gandhara was likely more commonly used. It is interesting to note, however, that a unique Buddhist script, known as Gilgit/Bamiyan, is attested only from those two places (Melzer 2014), indicating there was direct communication between them, by one or both of the two routes.

18. The Khovar word *phumbarash* is etymologically related to the Indo-European and Sanskrit word for fire, *pūr*. Similar words in neighboring languages are Pashai *pūr* and Panjabi *phaabar*, both meaning a bonfire (Turner 1962-85, p. 429). The 'm' in the Khovar word seems to be an artifact of assimilation to the articulation of the following 'b' (Bashir, personal communication).

19. Faizi names only nine posts, whereas Beg and the British military report list 14. Faizi apparently conflated a list and map of nine British-established signals posts with the mention of older, indigenous fire-signaling beacon towers.

20. Vrang village in Tajikistan Wakhan had a family of Khowar/Kivi speakers (Buddruss 1989, p. 205), and a number of clans in Chitral trace their origins to Wakhan (Faizi 1996, p. 48). The apparent borrowing and application of the Wakhi word for Khowar as a name for Chitral in the Tang Annals, as mentioned in n. 15 above, further underscores the close linkage between Wakhan and Chitral.

21. A cognate word, *puberanch*, occurs in the Burushaski language of Hunza for fire-signaling posts, which are also known in the Hunza Valley (Ali 2014, pp. 21-22).

22. Fire beacon signaling was a widespread cultural practice throughout the ancient Near East. The earliest known example is from Middle Bronze Age Syria, c. 1800 BCE (Earley-Spadoni 2015, p. 22).



CARAVANSERAIS IN THE GOLDEN HORDE

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The creation of the postal relay (*jam*) service was one of the unquestionable achievements of the Mongol Empire. The written sources tell us how, for rapid travel of emissaries, Khan Ögödei ordered, "We shall...provid[e] post-station masters [*jamučin*] and post-horse keepers [*ula'ačin*] from the various units of a thousand of different areas, by setting up a post station at every stage, by not allowing the messengers to move freely among the population unless on urgent business, but instead by having them ride in haste through the post stations." His brother Chagadai, responsible for the Mongol territories in the center of Asia, responded: "I shall have post stations connecting with yours. Also, from here I shall send messengers to Batu [in the Golden Horde—EZ], and Batu shall have his post stations connected with mine... Of all the measures, the one concerning the establishment of post stations is the most appropriate that has been proposed" (*Secret History*/de Rachewiltz 2004, I, pp. 214–15; *Sokrovennoe skazanie*, 2002, p. 153).

Travelers in the 13th century noted the existence of *jams* along the entire route from the Itil (the Volga region) to the Mongol capital Karakorum. The Franciscan John of Plano Carpini writes (Dawson 1980, pp. 60–61; Carpini and Rubruck 1957, p. 74):

We made the whole journey at great speed.....And so we started at dawn and journeyed until night without a meal, and many a time we arrived so late that we did not eat that night but were given in the morning the food we should have eaten the previous evening. We went as fast as the horses could trot, for the horses were in no way spared since we had fresh ones several times a day, and those which fell out returned..., and so we rode swiftly without a break.

As William of Rubruck noted, the post stations were not always the same distance apart (Rubruck/Jackson 1990, p. 140; Carpini and Rubruck 1957, p. 123):

On occasions we changed horses two or three times in one day; on others we would travel for two or three days without coming across habitation, in which case we were obliged to move at a gentler pace.

Thanks to the availability of such road stations, Carpini managed to traverse a distance of some 5000 km in 105 days and Rubruck in 101 days (including stopping for 12 days) (Dolbe 2010).

The postal stations established by the Mongols did not require stationary dwellings. Marco Polo writes of this when describing the journey of his father Niccolò and uncle Maffeo from Ukek to Bukhara: "...They found no towns or villages but only Tartars with their tents, living off their beasts" (Polo/Latham 1958, p. 35; Polo 1955, p. 45). The institution of the Mongol postal system survived almost unaltered into the 20th century. The Russian explorer and traveler Petr K. Kozlov, who visited Mongolia in 1908, described the postal stations then (Kozlov 1948, p. 30):

The Mongol stations...were established in this manner: along roads at certain points, primarily in settlements, are five to six yurts with Mongol postal riders who have no other occupation than the post. An official with a red ball on his cap is the supervisor along the Urga route, which includes eleven stations and extends 335 *versts* [ca. 357 km]. Each station in its turn has a manager, the *tzan-gin*, and his assistant. The Mongol postal station is provided with several dozen or even hundreds of horses and eight to ten postal riders. When necessary, both the personnel and horses are relieved or augmented; however, as a rule only the number of horses might be increased. The positions of the manager and the riders of the station usually are hereditary...These Mongols have no other responsibilities.

The situation was quite different in those parts of the Mongol Empire where there already existed traditions of sedentarism. Here caravanserais were built in which travelers could accommodate themselves in comfort. Marco Polo described in detail and with admiration the route stations in China (Polo/Latham 1958, pp. 150–51; Polo 1955, p. 121):

When one of the Great Khan's messengers sets out along any of these roads, he has only to go twenty-five miles and there he finds a posting station, which in their language is called *yamb* and in our language may be rendered 'horse post.' At every

post the messengers find a spacious and palatial hostelry for their lodging. These hostelries have splendid beds with rich coverlets of silk and all that befits an emissary of high rank. If a king came here, he would be well lodged. Here the messengers find no less than 400 horses, stationed here by the Great Khan's orders and always kept in readiness for his messengers when they are sent on any mission. And you must understand that posts such as these, at distances of twenty-five or thirty miles, are to be found along all the main highways leading to the provinces of which I have spoken. And at each of these posts the messengers find three or four hundred horses in readiness awaiting their command and palatial lodgings such as I have described. And this holds good throughout all the provinces and kingdoms of the Great Khan's empire.

The Mongol Empire was a unique bridge connecting the countries of East Asia and Europe: it encompassed almost the entire length of the Great Silk Road. The expansion of international trade under the protection and sponsorship of the central authority necessitated the restoration of existing and the construction of new post houses in all the lands drawn into this process. In the pre-Mongol period in Iran, Central Asia, Asia Minor and Transcaucasia there was already a developed system of caravanserais; in the 13th-14th centuries many of them continued to function and new ones were also built.

First as part of the empire and subsequently as an independent state, the Golden Horde was an active participant in the international trade. Its territory was the connecting link between the countries of the Mediterranean and the East. Goods from the Mediterranean lands entered through the Black Sea ports of Caffa (Feodosia), Soldaia (Sudak), Azak (Azov) and Akkerman-Montecastro (Belgorod-Dnestrovskii). The caravan routes extended eastward to the lower Volga and especially to Sarai. There were several routes from Azak to the Volga. One went through the steppe to Madzhar with a branch to Derbent, then to Hajji-Tarkhan and beyond along the Volga and Akhtuba to Sarai. Another went up the Don to the point closest to the Volga, then downriver along the Volga. There also were routes along the Kuma and Kuban rivers (Fedorov-Davydov 2001, p. 205). From Sarai and Hajji-Tarkhan caravans crossed the steppe to Saraichik and thence to Khwarazm and further east and south, all the way to China and India.

While there is evidence in various written sources, it is archaeological finds which reveal most about the trading connections of the Golden Horde. Goods from India, China, Iran, Central Asia, Egypt, Syria, Asia Minor and Transcaucasia all came to the Golden Horde. Wares from Western Europe traveled through Venice

and Genoa to the Crimean ports and Azak. The Volga trade route connected the region along the river with the Bolgar polity and the Russian principalities (Fedorov-Davydov 2001, pp. 203-25; Nedashkovskii 2009, 2016; Schamiloglu 2009). The policies of the khans facilitated the development of trade, creating the most favorable conditions for it to flourish. Ata-Malik Juvaini, the Persian administrator and historian of the Mongols, wrote about Batu: "And merchants from every side brought him all manners of wares, and he took everything and doubled the price of it several times over" (Juvaini/Boyle 1958/1997, p. 267; Tizengauzen 1941, p. 22). Contemporaries also noted the safety of the trade routes in the Golden Horde and more generally in the empire. The Florentine merchant Francesco Balducci Pegolotti wrote: "The road you travel from Tana [Azov] to Cathay is perfectly safe, whether by day or by night, according to what the merchants say who have used it" (Yule 1913-1916, 3, p. 152; also quoted in Fedorov-Davydov 2001, pp. 203-04). German A. Fedorov-Davydov (2001, p. 224) has eloquently characterized the position of commerce in the Golden Horde:

...It would be no exaggeration to say that the Golden Horde was a great trading power of the Middle Ages and that its trade was carried out mainly in cities and via cities. For all of the weighty consequences of the Mongol invasion and the creation of the Mongol state, including the Golden Horde, doubtless the huge significance of these events lay in the establishment of contacts between East and West. The first transcontinental journeys connected the Mediterranean with Central Asia and China. The Golden Horde was positioned between the world of the European states of the West, the Slavic world, Central Asia and the lands of the Far East. The Turko-Mongolian ethnos was the connecting link. The dialog of the West and East received a powerful new impulse in the 13th-14th centuries.

Caravanserais should have existed in the Golden Horde, which was such a mighty trading power, and through the lands of which caravans passed in an unending procession. To date though, not many are known and those almost exclusively in its Asian territories.

Long before the coming of the Mongols caravanserais existed on the territories of Khwarazm and Southern Kazakhstan which then in the 13th century became part of the Golden Horde. Some of them were abandoned on account of the Mongol conquests, but some were restored and used in the period of the Golden Horde. Certain of these structures were studied by the Khwarazm Expedition. Located on the trade route between Urgench and Bukhara, the caravanserais of Ishan-Rabat, Saratash and Dash-kala, active from

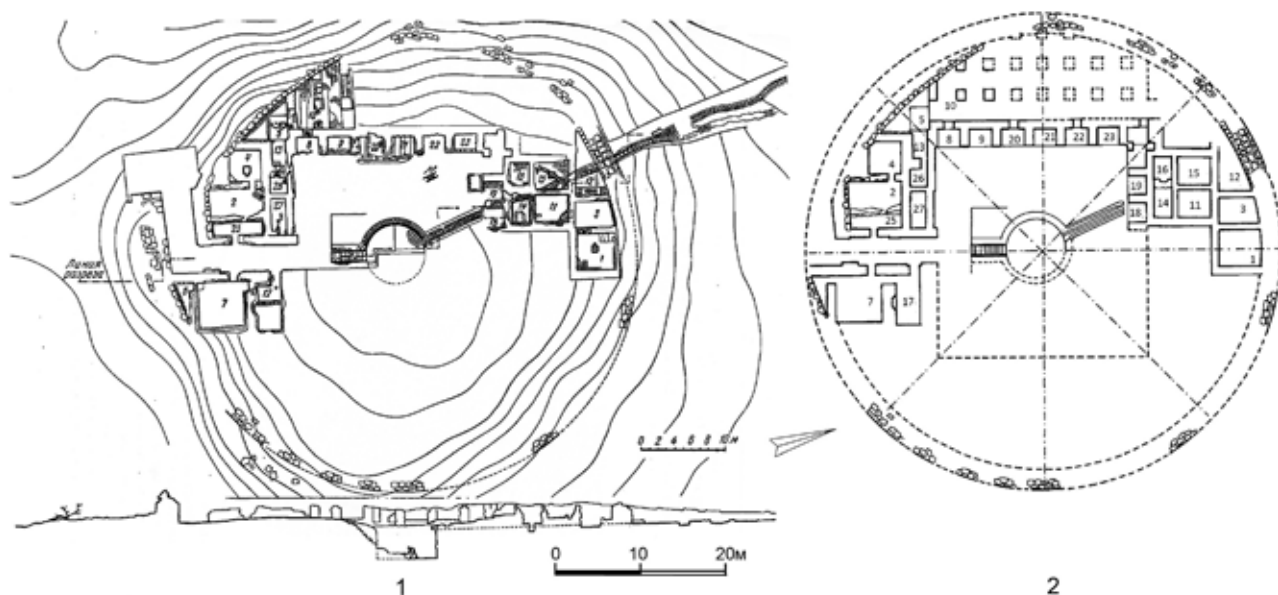


Fig. 1. Caravanserai Talaikhan-ata: 1) Plan and section (by M.S. Lapirovo-Skobko); 2) Reconstruction of plan (by S. G. Khmel'nitskii).

the 9th–12th centuries, no longer functioned under the Mongols (Lokhovits 1975, 1979). The expedition also examined the post stations along the caravan route connecting Khwarazm with Southern Turkmenia and Iran (Tolstov 1958, p. 31–33, 36; Vishnevskaja 1958, pp. 431–66): the sites of Dev-kala, Orta-kuiu, Talaikhan-ata and Ak-Yaila, all of which were built under the Khwarazm shahs and belong to the group of circular caravanserais typical for Khwarazm. The excavations showed that two of these caravanserais, Talaikhan-ata and Orta-kuiu were restored in the 14th century and were actively used for their original purpose (Vishnevskaja 1958, p. 440). The excavated structures of the inner part of Talaikhan-ata date to the period of the Golden Horde.

The building of this caravanserai is a perfect circle 60 m in diameter [Figs. 1, 2]. The exterior walls are made

of square slabs of shell-limestone approximately 2.5 m thick. The entrance, a corridor 3.7 m wide, was located in the southwestern part of the building. It goes from west to east, tangential to the exterior wall and at about 10 m turns in a right angle and then goes north to its exit into the courtyard. The walls of the corridor are made of shell-limestone and fired brick and bridged with a vault. In the center of the building is a square (24 x 24 m) courtyard, whose surface is covered with finely crushed brick. In the center of the courtyard is a round (7.1 m diameter, 3.55 m deep) cistern (*sardob*) [Fig. 2.5], whose walls are made of fired brick set in alabaster mortar. From the south a stairway entered the cistern and from the north a water channel [Fig. 2.4] whose walls were made of brick and covered with lime mortar. Built to collect rainwater for the cistern, the channel began 80 m from the wall of the caravanserai.

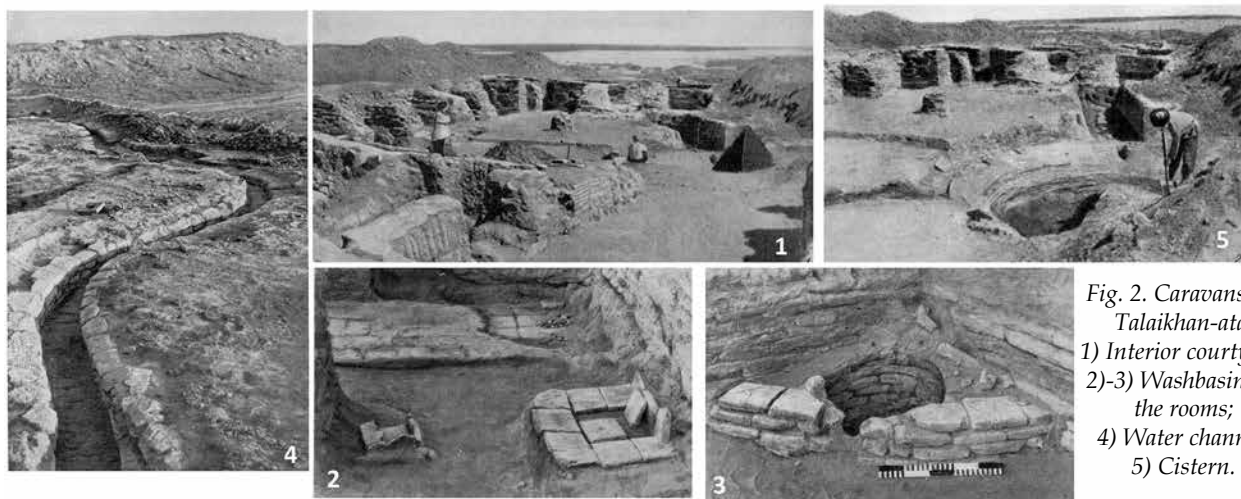
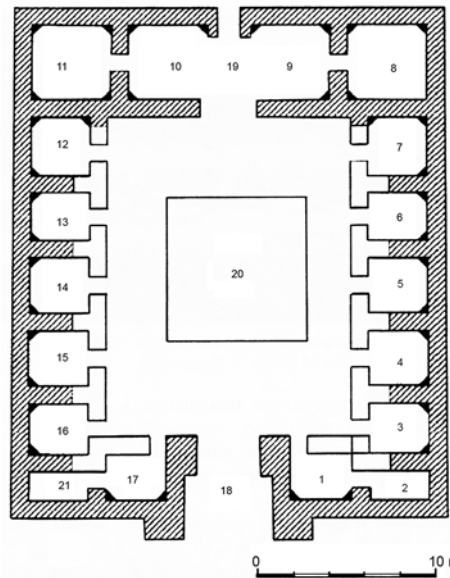


Fig. 2. Caravanserai Talaikhan-ata: 1) Interior courtyard; 2)-3) Washbasins in the rooms; 4) Water channel; 5) Cistern.

Fig. 3. The suburban caravanserai at Jend (after K. M. Baipakov).

Along the western and northern sides of the courtyard were iwans measuring 2.75 x 2.1 m. The lower parts of their walls were made of limestone slabs, and the upper parts rubble-filled masonry of fired and sun-dried brick, with fired brick sheathing the wall. The iwan walls were plastered with alabaster mortar, the floors paved with brick, and the ceilings were vaulted. Behind the iwans, the rooms were arranged in two to three rows. The entrance into the inner chambers were through a single iwan, not one for each of them. The chambers were small, with the largest measuring 5.4 x 5.5 m. The round shape of the building dictated that the rooms had either a triangular or trapezoidal plan. Flanking the entrance were units consisting of three rooms. Some of the rooms, probably work space, were absolutely empty. In the living quarters were stoves, tandoors, and wash basins (Fig. 2.2-3). Unfortunately, this interesting building has been only partially excavated, so that its layout is known only in its most general features. Next to the caravanserai were kilns for firing the brick used to build the rooms from the period of the Golden Horde.

Individual structures of the 13th-14th centuries have been studied as well at other locations in the Asian part of the Ulus Jöchi. In Jend, a major urban center of the Blue Horde which existed prior to the Mongol period, are three buildings which scholars have indicated were caravanserais (Baipakov 2016, pp. 402-03). Two of them are located on the territory of the city and so far have been studied only *de visu*. These are small (19 x 19 and 17 x 17 m) square buildings with an interior courtyard in the center. The suburban caravanserai, located outside the exterior wall of the



shahristan, is rectangular and measures 30 x 25 m [Fig. 3]. In the front wall is an entrance ca. 3.2 m wide, framed by a massive (8.8 x 3.3 m) portal (*peshtak*). It leads to the inner courtyard (18 x 14 m), around the perimeter of which are the living quarters and work and storage chambers. On both sides of the entrance and attached to the façade wall are units of square (3.3 x 3.1 m) rooms, connected with small rectangular chambers in the corner of the building. They have a single exit into the courtyard. Along both side walls are five square rooms identical in size, each of which has a doorway into the courtyard. In the wall opposite the main entrance is a second, narrower exit from the building, ca. 2 m in width. Attached to this wall are four large (ca. 4.3 x 4.3 m) square chambers, grouped in pairs. Each of the square chambers was roofed with a cupola. In the center of the courtyard is a square raised platform, probably intended for the unloading of goods.

The shrinking of the Aral Sea has revealed new discoveries: at the beginning of the 2000s on the dry seabed was discovered a settlement of the second half of the 14th century which was dubbed Aral-asar (Baipakov 2016, pp. 403-04). Scholars have hypothesized that this settlement had arisen next to the walls of a caravanserai built on a route which connected the southern and eastern Aral littoral with the northern one. However, only extensive excavation can confirm this hypothesis.

The best studied route is that between Khwarazm and Saraichik, which had a network of caravanserais and, according to the written sources took from 20 to 40 days to traverse (Tizengauzen 1884, pp. 242, 307-08; Fedorov-Davydov 2001, p. 214) [Fig. 4]. This

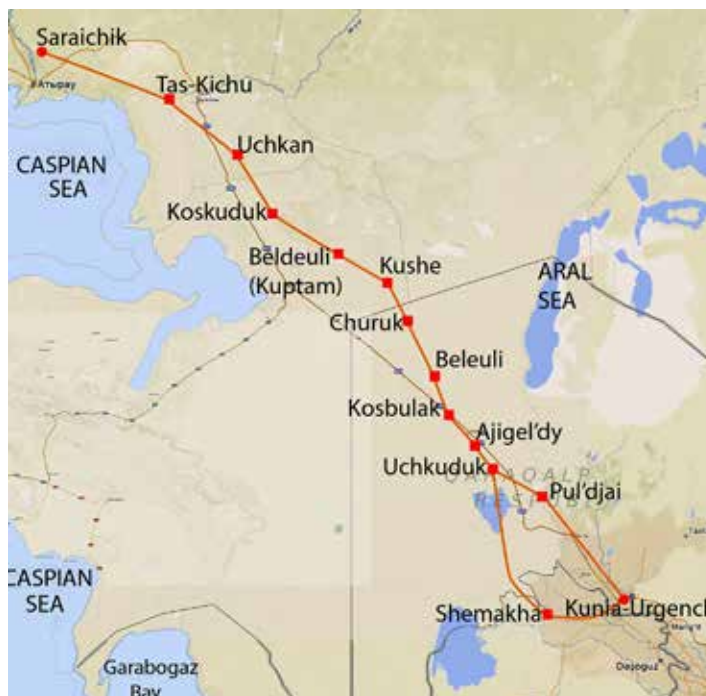
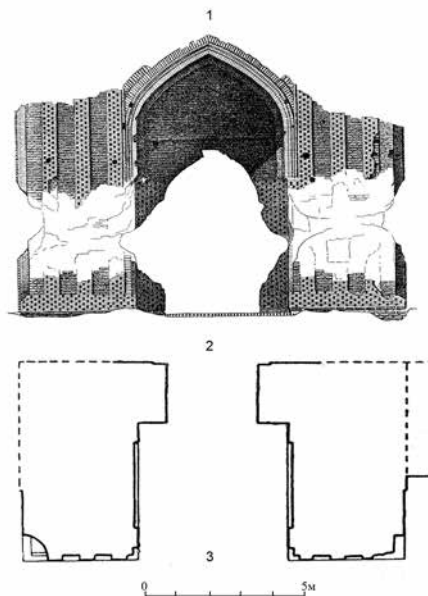
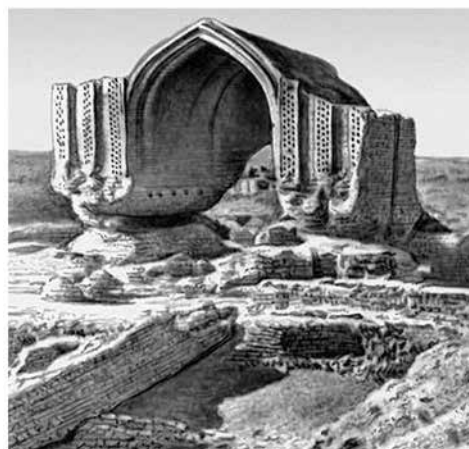


Fig. 4. The locations of the caravanserais along the route across the Ustiurt plateau from Khwarazm to the north end of the Caspian Sea.

Fig. 5. The portal of the caravanserai of Urgench:
 1) Overall view;
 2) Drawing of the façade;
 3) Plan (according to M.S. Lapirov-Skoblo).



route began in Urgench. No building of what unquestionably was caravanserai in Urgench has been studied, but for the well preserved large portal with a pointed arch which the local population has dubbed the “gate of the caravanserai.” This structure was briefly described by Aleksandr Iu. Iakubovskii in his book *The Ruins of Urgench* (1930, pp. 63–64); in 1952 excavations were carried out there by the Khwarazm Archaeological and Ethnographic Expedition and the results published (Tolstov 1958, pp. 224–29; Vakturskaia 1958, pp. 467–94; Lapirov-Skoblo 1958, pp. 529–42). The portal is made of fired brick set in lime mortar. It is a massive, rectangular-plan structure with a large pointed arch—i.e., a typical Central Asian *peshtak* [Fig. 5]. Two pylons, measuring 3.74 x 5.93 m each, support the 4.5 m-wide vault. On the front, the vault was open, and its height up to the crown was 8.1 m. On the rear it is enclosed by the vault wall, in which was cut a 3 m wide opening also topped by a pointed arch. The upper part of the portal, including the spandrels of the arch, has not been preserved. The portal was lavishly decorated by unglazed polished brick and majolica [Fig. 6]. The façade of each pylon is divided by three pilasters, whose surface is embellished with designs: the bricks formed a decorative pattern, each pair laid lengthwise separated by the insertion of a terracotta tile. These projecting pilasters form three Pi-shaped frames; the spaces between them were filled with terracotta tiles with carved ornament and turquoise glaze. The tiles had fallen off and were found in the rubble at the base of the portal (Fedorov-Davydov 1958, pp. 519–20). The decoration of the vault of the niche was reasonably well preserved. Geometrical ornament was created from unglazed yellowish-rose color terracotta tiles of various sizes.

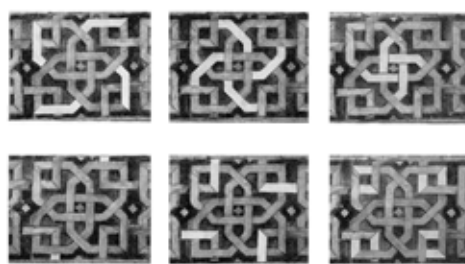


Fig. 6. The architectural décor of the Urgench caravanserai: 1) The facing on the vault of the arch; 2-3) Majolica tiles (according to M. S. Lapirov-Skoblo).

The cells between its bands were filled with a mosaic of carved turquoise, deep blue and white majolica.

The excavations revealed that the portal (probably as well the entire building) was built in the first half of the 14th century. A trading street with many shops led up to it (Fedorov-Davydov 1958). These trading stalls came later but their location and long-lasting existence (to the 17th century) on this spot is indirect confirmation of the fact that the building to which the portal belongs indeed could have been a caravanserai.

The next location where a caravan could stop for the night is the ancient settlement site of Shemakha-kala, located 60 km west of Kunya-Urgench on a projecting spur of the Ustiurt Plateau (M.-Sh. Kdynniazov 2015, pp. 40–43). Sergei P. Tolstov wrote that “in the first instance it is an early medieval fortress-town, enclosed at some point by a rectangle of strong walls with huge towers” (Tolstov 1948b, p. 311). In his opinion, the town was destroyed by the Mongols, but in the 14th century it again began to flourish and continued to exist to the 16th–17th centuries. Iu. P. Manylov considers that Shemakha-kala is the same as the Zamjan *rabat*, “the gate of the Turks,” mentioned by the 10th-century

author Ibn Fadlan (Manylov 1979, p. 95). There were several routes leading beyond through the Ustiurt. Ibn Fadlan mentions as the last stop before the plateau a place called Jit, which probably is to be identified the caravanserai of Kulanly (10th-11th centuries), located 30.5 km northwest from Shemakha (Manylov 1979, pp. 95-97).

Then we kept a straight course and plunged deep into the realm of the Turks through a barren, mountainless desert. We met no one. We crossed for ten days. Our bodies suffered terrible injuries. We were exhausted. The cold was biting, the snowstorms never-ending. It made the cold of Khwarazm seem like summer time. We forgot all about our previous sufferings and were ready to give up the ghost.

Such was Ibn Fadlan's dramatic description of his crossing the Ustiurt (Ibn Fadlan/Montgomery 2014, p. 201; Kovalevskii 1956, p. 125). As this description indicates, there was no habitation along the entire route. The caravan traveled by the shortest route (ca. 400 km), which took 10 days. One can reconstruct the entire route of Ibn Fadlan across the Ustiurt as follows: it began in Jurjania (Urgench), passed through Zamjan (Shemakha-kala), Jit (Kulanly), skirted the Barsakelmes basin on the west and came out at one of the northwestern exits descending from the Ustiurt plateau (Manylov 1979, pp. 95, 99).

The Arab traveler Ibn Battuta, who crossed the Ustiurt in 1333 also fails to mention any caravanserais (Ibn Battuta/Gibb 1958-2000, 3, pp. 539, 541; Tizengauzen 1884, p. 308):

From this place [Saraichik] we went on for thirty days by forced marches, halting only for two hours each day, one in the forenoon and the other at sunset. The length of the halt was just as long as the time needed to cook and sup *duqi*, and this is cooked with a single boiling...Everybody eats and sleeps in his wagon while it is actually on the move... It is the custom of travelers in this wilderness to use the utmost speed, because of the scarcity of herbage. Of the camels that cross it the majority perish and the remainder are of no use except a year later, after they are fattened up. The water in this desert

Fig. 7. The catchbasin at Kokty-kudyk.

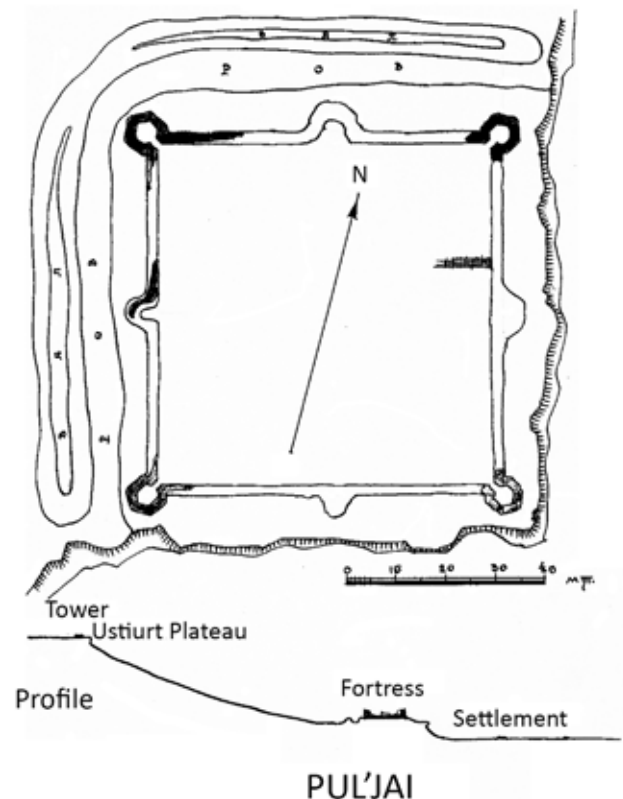


is at certain known waterpoints, separated by two or three days march, and is rainwater [in surface pools] and shallow wells under the sand.

Referring to Ibn Battuta's description of shallow wells with rainwater, M. D. Kalmenov suggested that these are the "diggings" known down to the present, artificial cone-shaped catchbasins 15-20 m in diameter [Fig. 7]. Since they could exist only in sandy areas, that scholar has been able partially to reconstruct the route of Ibn Battuta from Saraichik to the area to the north of the river Emba, and then after crossing the Emba at the ancient ford of Bokashi, through the Sam sands already on the Ustiurt and finally through the plateau to Khwarazm (Kalmenov 2012, pp. 65-66).

There was another route through the Ustiurt in the 14th century. North of Shemakha is a convenient natural ascent, Shibindy, 12-15 km from which is the settlement of Pul'jai (Manylov 1972, p. 119; Manylov and Iusupov 1982, p. 180). The site includes a fort from the pre-Mongol era [Fig. 8], an unfortified settlement of the 13th-14th centuries and a cemetery (O.-Sh. Kdyrni-iazov 2016, pp. 81-83). A caravanserai located in the unfortified settlement has been partially studied. Its walls are constructed of dressed limestone slabs set in lime mortar. The building is rectangular, measuring

Fig. 8. The fortress of Pul'jai: plan drawn by V. I. Pentman (Nauchnyi arkhiv Instituta etnologii i antropologii im. N. N. Miklukho-Maklaia Rossiiskoi akademii nauk, f. 142).



33.75 x 16.8 m. Its western and northern corners are flanked by round towers (*gul'dasty*) 1.5 m in diameter which had been erected at the same time as the walls and whose masonry is tied in with that of the walls. The eastern and southern corners were strengthened at a later date by rectangular buttresses (1.2 x 1.3 and 1.5 x 2.0 m). In the middle of the northwestern wall, 10.8 m from the western corner, is the entrance, framed by a portal which projects from the line of the walls. The rectangular pylons which were uncovered flank a 2.2 m wide space, in the middle of which is a 1.5 m wide passage paved with stone slabs. Nine chambers were cleared inside the structure, among them a hall and vestibule with stone foundations, a grain storage compartment, and living quarters with heating ducts (*kany*). Alabaster lattices (*pandzhara*) were found within the chambers, which indicates there had been windows. Scholars believe that in its plan the building at Pul'jai is analogous to caravanserais of the eastern shelf of the Ustiurt dating from the 10th to the beginning of the 13th centuries. Archaeological material indicates that it could have been built in the pre-Mongol period, then rebuilt and actively used in the Golden Horde era (M.-Sh. Kdyriniazov and O.-Sh. Kdyriniazov 2015, pp. 130–31; 2016, pp. 82–83).

At the same time there were square or almost square Ustiurt structures with rooms arranged around a courtyard. In Pul'jai we have an elongated rectangular building which might have been entirely roofed over. The existence of windows suggests as much. However, it is premature to reach any conclusions until the completion of excavations and the publication of a plan of the entire structure.

An entire chain of caravanserais which were actively functioning in the 14th century supported the caravan route that began approximately 30 km from Pul'jai [Fig. 4]. Beginning then, communication between the states of Central Asia and the Golden Horde and subsequently the Russian state was almost uninterrupted, as is evidenced from the official letters of Central Asian rulers to Russian tsars and documents which reflect trading connections (Kalmenov 2012). There were two routes: maritime and overland. The sea route traversed the Caspian from Mangyshlak to Hajji-Tarkhan, then to Astrakhan, and the overland route passed through the Ustiurt to the Ural and Volga rivers (Bizhanov and Lokhovits 1969, p. 52; Astaf'ev 2010, pp. 77–96, 132–44). Judging from archaeological material, both routes were operating in the 14th and probably in the 15th century. In the 16th and first half of the 17th century, only the maritime route was used, since the steppe route was unsettled due to raids by the Kalmyks. Starting in the second half of the 17th century, embassies and trade caravans began to use the overland route (Kalmenov 2012, pp. 67–68).

The first written information about the route through the Ustiurt describing its wells and structures is that by the 18th-century historian and regional specialist Petr I. Rychkov (1762). This route continued to exist in the 19th century, when it was dubbed the "old Nogai road." Many scholars, military and civil officials, and travelers have noted the wells and remains of ancient structures along the caravan route. All of those who studied the region were especially impressed by the caravanserai of Beleuli with its beautifully preserved portal. In 1899, a member of the Imperial Russian Technical Society, the well-known photographer Mikhail N. Chernyshevskii, took the first photograph of the Beleuli portal (Zhukova and Levteeva 1976).

The first archaeological study of the monuments of the Ustiurt was carried out in 1946 by the Khwarazm Expedition. Aerial survey revealed the locations of caravanserai ruins at Uchkuduk, Bulak, Kosbulak, and Beleuli (Tolstov 1947, p. 178; Vakturskaia and Vorob'eva 1952, p. 629; Arzhantseva 2016, p. 202). At that time the architects Vadim I. Pentman and Mark A. Orlov drew a plan of the caravanserai of Beleuli, made drawings of the façade with its portal and cross-sections of the portal and towers. Sergei P. Tolstov dated the structures on the Ustiurt to the period of the Khwarazm shahs, that is the 10th–11th centuries.

The Khwarazm Archaeological and Ethnographic Expedition continued to work on the Ustiurt in 1950. Having departed from Saraichik, the expedition studied the caravanserais at the Tas-kichu (Tashkeshu) ford on Sagyz River, and Koskuduk, Churuk, Beleuli, Kosbulak and Uchkuduk on the Ustiurt Plateau (Tolstov 1958, pp. 14–18; Arzhantseva 2016, p. 204). Tolstov summarized what was accomplished (1958, pp. 18–19):

The result of the exploratory trip was to reveal the character of the most important structures (caravanserais, wells, fords, etc.) of the medieval caravan road from Khwarazm to Eastern Europe, to determine more precisely the direction of that road and date its individual structures, among which were discovered previously unknown first rate examples of Central Asian architecture. The study of the caravanserais enabled us to collect material which demonstrated the common characteristics of all these structures at the same time that they varied in building techniques and construction. The general uniformity of planning, layout and individual details of construction is evidence of the approximately simultaneous building of the structures as a single complex for the infrastructure along the route. Their creation, it seems, occurred at the beginning of the flourishing of the Khwarazm state in the 11th–12th centuries, when the commercial and political interests of Khwarazm connected it with the Volga region and Eastern Europe.

In other words, this detailed study dated the buildings a century later than had previously been assumed.

Excavations in the caravanserais on the Ustiurt were carried out in the 1960s–70s by Ermek B. Bizhanov. At the caravanserais of Bulak and Kosbulak the excavations uncovered ceramics and numismatic material from the 13th–14th centuries. However, Bizhanov was unwilling to abandon the previous conclusion about the earlier date of the buildings and concluded that, while built in the era of the Khwarazm shahs, the caravanserais were used most intensively in the period of the Golden Horde (Bizhanov and Lokhovits 1969, pp. 54–59; Bizhanov 1970, p. 56).

In 1975–78, an expedition organized by the archaeological section of the Institute of History, Language and Literature of the Karakalpak branch of the Uzbek SSR Academy of Sciences studied all the caravanserais of the central Ustiurt located within the boundaries of Karakalpakia. This work, published in detail, demonstrated conclusively that they must date to the Golden Horde period (Manylov 1982; Manylov and Iusupov 1982).

The sites are located in a chain along an almost straight line leading from the southeast to the northwest starting at the northern edge of the Barsakelmes salt waste. The distance between caravanserais Uchkuduk and Koskudik is about 170 km. Uchkuduk is the caravanserai closest to the eastern shelf of the Ustiurt; it is an almost square building measuring 31.7 x 28.45–65 m [Fig. 9.1]. Its walls are 75–85 cm thick, constructed with a facing of dressed stone slabs cemented by alabaster mortar. The space between slabs is filled with stones and the cement. The corners of the southern façade wall have decorative round towers 1.85 m in diameter. The exterior of the towers is plastered with alabaster mortar. In the center of the southern wall is a passage 4.7 m wide which narrows down to 3.9 m. A portal whose pylons protrude somewhat (40–50 cm) from the surface of the wall frames the entrance. The passage leads into an inner courtyard measuring 18–21 m, in the center of which is a well (diameter ca 1.5 m) faced with stone slabs.

The rooms are in a single row around the entire perimeter of the courtyard. On each side of the entrance is a nearly square chamber (4.2 x 3.9 m) with an adjoining small open room resembling a narrow corridor, which, as the excavations at Beleuli showed, was a stair-well. Seven residence rooms each are arrayed along the eastern and western walls. The corner rooms nos. 1 and 15

have somewhat larger measurements (4.2 x 3.8 m), while the size of the remaining rooms is 3.75–3.90 x 2.9–3.0 m. All of them connect with the courtyard via smooth passageways. The interior of all the rooms is more or less uniform: in them is a wide low (20 cm) bench along two or three walls and a stove (stove pit). The floors are dirt. Some rooms were heated by braziers, as evidenced by traces of calcification (*prokalenosti*) on the floor.

Attached to the northern wall of the building is a narrow elongated chamber measuring 26.9 x 3.8 m. In the center of its southern wall is a passage 1.1 m wide, which seems to have been framed by a portal whose pylons projected 25–35 cm from the surface of the wall. Inside the chamber were the remains of arch springers ca. 60 cm wide which protruded 40 cm from the surface of the wall and a pile of stone blocks of trapezoidal shape from which the arches had been constructed. Iurii P. Manylov suggested that the chamber was covered by seven cupolas (Manylov 1982, p. 98; Manylov and Iusupov 1982, p. 172). However, it seems to me that the given chamber, which unquestionably was a stable for animals or a storage area, more likely had a vault resting on supporting arches.

In all of the excavated chambers were piles of small (23–18 x 20–17 x 7–5 cm) tiles of shell-limestone with which, it has been suggested, the cupola and vault roofs were constructed. Some rooms contained fragments of unglazed terracotta tiles with carving, which could have decorated the vault of the portal niche (Manylov and Iusupov 1982, p. 172).

West of the caravanserai is a stone quarry, and to the southeast are three wells which had been described by earlier scholars. Now the wells have been filled in,

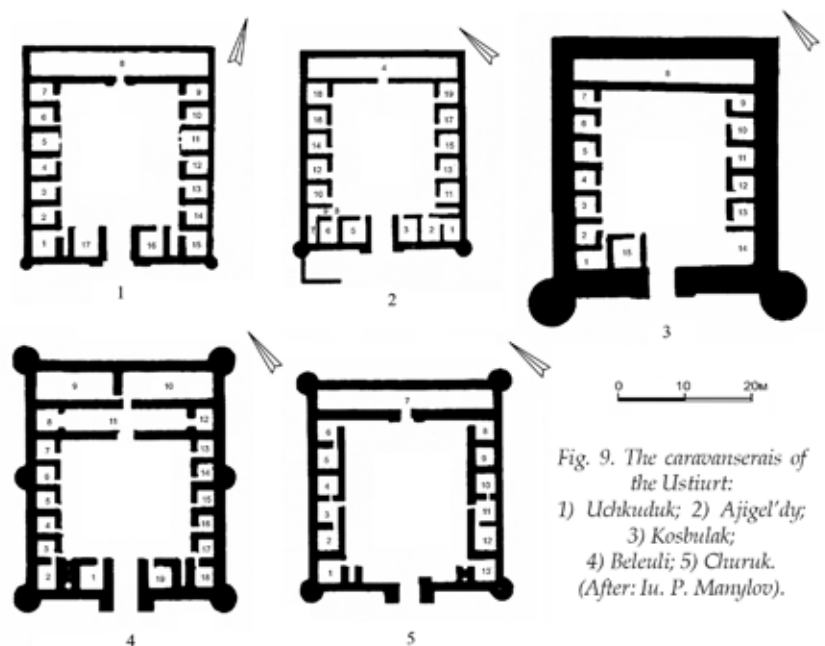


Fig. 9. The caravanserais of the Ustiurt:
1) Uchkuduk; 2) Ajigel'dy;
3) Kosbulak;
4) Beleuli; 5) Churuk.
(After: Iu. P. Manylov).

though the depth of one of them measured prior to its filling was 21 m (Manylov 1982, p. 98).

The next caravanserai is 25 km to the northwest, located at the bottom of a large basin. It is called Ajigel'dy after the name of the basin and the wells located there, but the publications by the Khwarazm Archaeological and Ethnographic Expedition call it Bulak. Ajigel'dy has a plan that is almost identical with that of Uchkuduk, but it is constructed of brick [Fig. 9.2]. The building measures 29.3 x 24.3 m. The corners of the façade wall are flanked by round towers 1 m in diameter; in the middle of the wall is an entrance 3.8 m wide. The pylons of the portal, 1.2 m wide, project 60 cm from the wall. Inside the building, the chambers are arrayed around the inner courtyard (19.3 x 15.3 m) and open out into it through smooth passages 0.8–1.2 m wide. The rooms built against the southwestern façade wall have somewhat larger measurements (2.7–3.2 x 3.4–3.5 m), while the rest of the rooms are almost square and measure ca. 3 x 3 m. In the living quarters are benches and stoves, and two of the rooms have wash basins. Attached to the northern wall is a long narrow chamber (22.5 x 3.8 m), which in all likelihood was a stable for animals. It is connected with the courtyard by a passage 1.3 m wide. Attached to the exterior of the western wall of the caravanserai is a Г-shaped wall, which encloses an additional area (for goods or animals).

The next caravanserai, located another 33 km along the route, is Kosbulak. It is also made of brick; its walls are 2.8–3.8 m thick [Fig. 9.3]. The diameter of the towers attached to the corners of the façade wall reaches 6.4 m. The entrance in the middle of the southwestern wall is 3.7 m wide, framed by pylons (2.95 x 0.4 m). The plan of Kosbulak differs very little from the caravanserais already described: in its center is a courtyard measuring 18.6 x 27 m containing living quarters and work or storage chambers attached to the exterior walls. Left of the entrance is a square room of somewhat larger size (no. 15) and a narrow rectangular chamber which was a stairwell (no. 1). The other rooms along the side walls are square, measuring ca. 3.5 x 3.5 m. Inside the rooms are benches and stoves, and some walls have clay plastering. Opposite the entrance, along the northeastern wall is a stable measuring 26.4 x 3.6–4.2 m.

In a large basin, 54 km to the northwest, is the best known archaeological complex Beleuli, which consists of a caravanserai, a cistern, wells, quarries and cemeteries. What survives to this day of the caravanserai's portal can be seen at a distance of 10–12 km (Manylov 1982, p. 100). The site made an impression on all who have studied it and on travelers who described it in their notes. Petr I. Rychkov in 1762 was the first to describe it. Sergei P. Tolstov also noted the unusual



Fig. 10. Beleuli, drawing by V. I. Pentman (Arkhiv IEA RAN, f. 142).

nature of the structure and considered it to have been built at the end of the 10th–11th century, thus making it the earliest monument of medieval stone architecture in Central Asia.

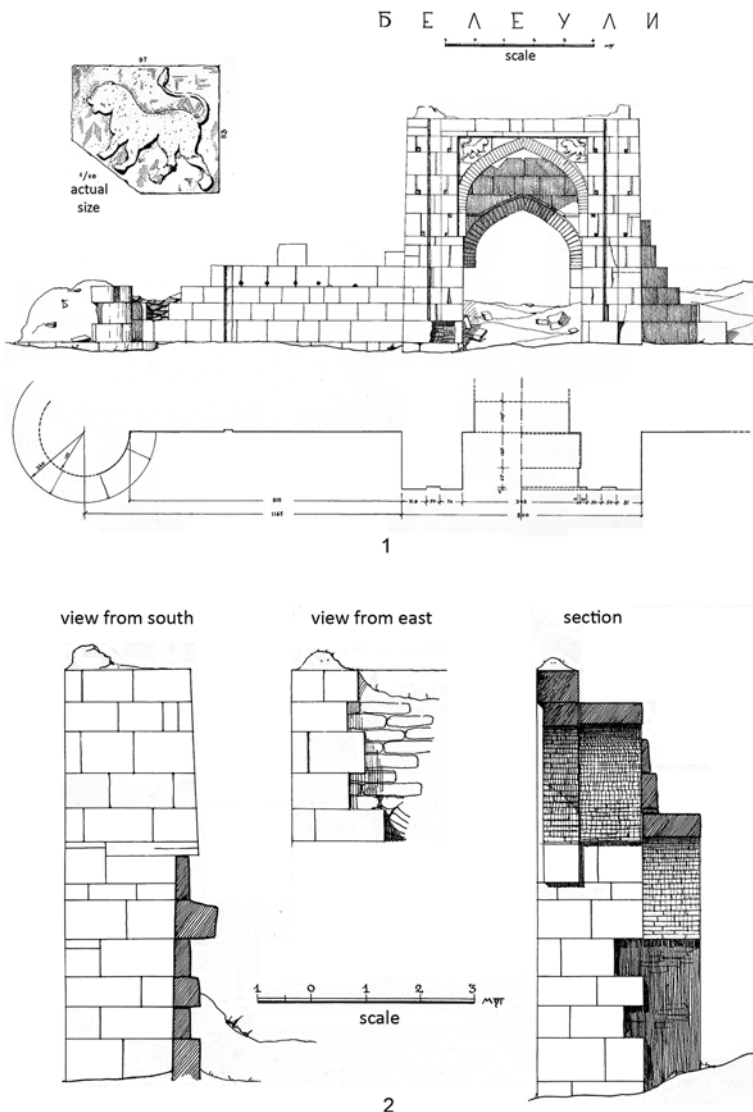
The building of the caravanserai is rectangular and measures 35.3 x 29 m [Fig. 9.4]. The walls are 1.0–1.2 m thick, erected from limestone slabs of various sizes, with the facing sides of the slabs carefully smoothed. The spaces between the slabs are filled with crushed stone and lime mortar. All four corners of the building have been strengthened by round solid towers 3.2 m in diameter. In the middle of the northwestern and southeastern walls are two semi-towers 2.7 m in diameter whose masonry is not integrated with that of the wall. All the towers are constructed of specially worked curved slabs. A portal preserved at present to a height of 7.66 m frames the entrance to the caravanserai in the middle of the southwestern wall [Figs. 10–13]. According to the measurements obtained by the Khwarazm Expedition, the height of the portal was 9.6 m (Manylov 1972, pp. 102, 104; Manylov and Iusupov 1982, pp. 174–75). The high, pointed arch rests on pylons measuring 2.0 x 1.9 m and covers an area of 3.9 x 1.9 m. The height of the crown of the arch is 6.66 m, and the rise from its impost is 2.8 m. On the inner side it is bounded by a gable wall in which was a passage, also roofed by a pointed arch ca. 4.6 m high. On the spandrels that flank the arch were stone bas-reliefs of lions, which were still there until 1972 but now have been lost. The vault of the portal niche apparently was decorated by underglaze-painted polychrome majolica tiles forming a design of straight and braided lines in white, turquoise and ultramarine colors.

The plan of the building in many ways repeats the plan of the other caravanserais of the Ustiurt, but with some distinctive features. In the center is a courtyard measuring 19.3 x 17.8 m. On each side of the entrance is a square (3.7–3.8 m²) chamber, attached to which is a narrow (1.2–1.3 m) stairwell with remains of a stone stairway. In the southern and western corners are living quarters consisting of two joined rooms. Beyond,

along both the northwestern and southeastern walls are five separate rooms which open only into the courtyard. All the rooms are square, measuring 2.9 x 2.95 m. In some rooms are the remains of door lintels 1.6 m high. The height of the walls of the chambers has been estimated to have been about 2 m (Manylov 1972, p. 102; Manylov and Iusupov 1982, p. 174). In the living quarters were benches, stoves and a system of heating ducts.

Along the northeastern wall, as in the other monuments, is a narrow workroom, which at Beleuli is divided in two by a perpendicular wall. Between it and the courtyard is another such corridor-like chamber (no. 11), into which doors open from the side rooms nos. 8 and 12. Keeping in mind that all of the caravanserais were built following one and the same plan,

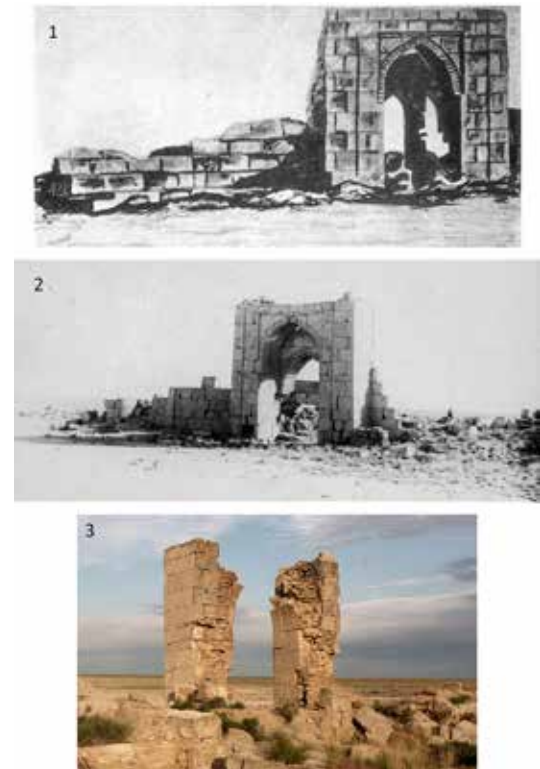
Fig. 11. Beleuli: 1) Façade and outline of the portal wall; 2) Views from the side and section of the portal; drawn by V. I. Pentman and re-captioned here (Arkhiv IEA RAN, f. 142).



one can propose that chamber 11 is a later addition, serving as additional storage space. For that reason, it is connected to the living quarters.

The excavations of the 1970s demonstrated that there had been many mistakes in the original interpretation of this monument. First of all, the ceramic and numismatic material found there reliably dated it to the 13th-14th centuries, not earlier, as had been suggested previously. In describing the reliefs on the portal, Tolstov proposed locating analogies in Sasanian Iran, an interpretation that has been repeated in later studies. Iurii P. Manylov and Nariman Iu. Iusupov cite as closest analogies the panels depicting lions on the portals of the Ak-Sarai palace in Shahrasiabs (1380-1405) and the Shir Dor medrese in Samarkand (1619-1639) (Manylov 1970, p. 102; Manylov and Iusupov 1982, p. 175). However, both of those monuments were built later than Beleuli, and the panels on them are mosaic of glazed tiles. In my view, closest stylistically are reliefs of carved stone that originated in Armenia. Animals—a sheep and a bull—are depicted on the spandrels of the Armenian caravanserai Selim. The southern *han* at Ani, built by Tigran Onenets in the 13th century, is decorated with snakes and lions. A well-known drawing by Grigorii G. Gagarin shows a caravanserai of the 17th-

Fig. 12. Photographs of Beleuli: 1) 1899, by M. N. Chernyshevskii; 2) 1950, taken during the Khwarazm Archaeological and Ethnographic Expedition (Arkhiv IEA RAN, f. 142); 3) contemporary view.



18th centuries in Erevan, on whose spandrels are lions (Khalpakhch'ian 1971, pp. 187, 201–08). Thus the suggestion of Galina A. Pugachenkova that “some master invited from Armenia or Azerbaijan participated in its [Beneuli's] construction” seems to have some basis in fact [Pugachenkova and Rempel' 1958, p. 33].

Citing the presence of stairs, Tolstov describes (1948a, p. 347; 1948b, p. 264) the Beleuli caravanserai as a two-story building. But in this case, one instead can agree with Manylov, who proposed that the stairs lead onto the roof of the chambers, and the building was a single-story one (Manylov 1972, p. 104; Manylov and Iusupov 1982, p. 176). Similar stairs to the roof are known on other monuments, for example, in the completely preserved caravanserai Sultan-khan in Asia Minor, and also in the caravanserais Daia Khatyn and Al Asker (Pribytkova 1953, pp. 92–106; Pugachenkova 1958a, pp. 230–41, 223–25; Khmel'nitskii 1992, pp. 182–87; 1996, p. 293; Stierlin 1998, pp. 73–75).

Other objects to be associated with the caravanserai Beleuli were located around it. Four wells, lined in the upper part with stone slabs, had been dug in front of the façade wall, their depth reaching 43 m (Vialov 1934, p. 157). During the study by the Khwarazm Archaeological and Ethnographic Expedition in 1946,

stone water channels were found at the wells [Fig. 13.4] (Tolstov 1948b, pp. 263–64). Fifty meters to the northeast were eight cisterns for collecting rainwater. Five stone quarries, the source of the building material, were found not far from the monument. Also nearby was an extensive cemetery.

Fifty-four km to the northwest of Beleuli is the caravansaray of Churuk, which had been mentioned by Rychkov. It measures 31.7 x 29.5 m. On all four corners are round towers 2.8 m in diameter [Fig. 9.5]. The walls and towers are constructed of limestone slabs in the same technique as at Beleuli. The 3.5 m wide entrance is in the southwestern wall. Pylons of the portal are rather substantial, measuring 2 x 2 m. Along both the northwestern and southeastern walls are 6 residence rooms, two of which were isolated from the others with an entrance only onto the courtyard, while the others form units of two or three connected rooms each. The rooms measure 3.7 x 3.3–3.8 m. The interiors of the living quarters are like those in the other monuments.

Along the northeastern wall is a storage room or stable measuring 27.3 x 3.4 m. Its entrance, in the center of the wall, also had a small portal. In the center of the building is an open courtyard measuring 24.8 x 19 m.

In all of the rooms were heaps of small tiles of shell-limestone and also fired bricks. The scholars who have studied the site suggest that the vaulted ceilings of the rooms were constructed of this material (Manylov 1972, p. 110; Manylov and Iusupov 1982, p. 179). In the southern and western corners of the building are the remains of stairs 1.1–1.3 m wide. Several wells, a quarry and a cemetery were found in the vicinity of the caravanserai.

At 46.5 km to the northwest on the border with the Sam sands in a small depression are the Kiushe (Kushe) wells. On the northeastern edge of the depression are the remains of a caravanserai (Astaf'ev 2010, pp. 78–79). Its walls were made of fired brick, which then was entirely pillaged for the construction of structures placed atop graves in the 18th–19th centuries. The exploratory trenches made in the walls enable one to discern approximately the shape of the building, which was square and measured 25 x 25 m. The next well along the route, Turush, is 36 km from Kiushe, and in another 17 km are the wells of Beskudyk (Bel'deuli). At the bottom of the depression there were a caravanserai and five wells, two of them filled with sand but three still retaining water (Astaf'ev 2010, p. 79; Kalmenov 2013, pp. 48–49).

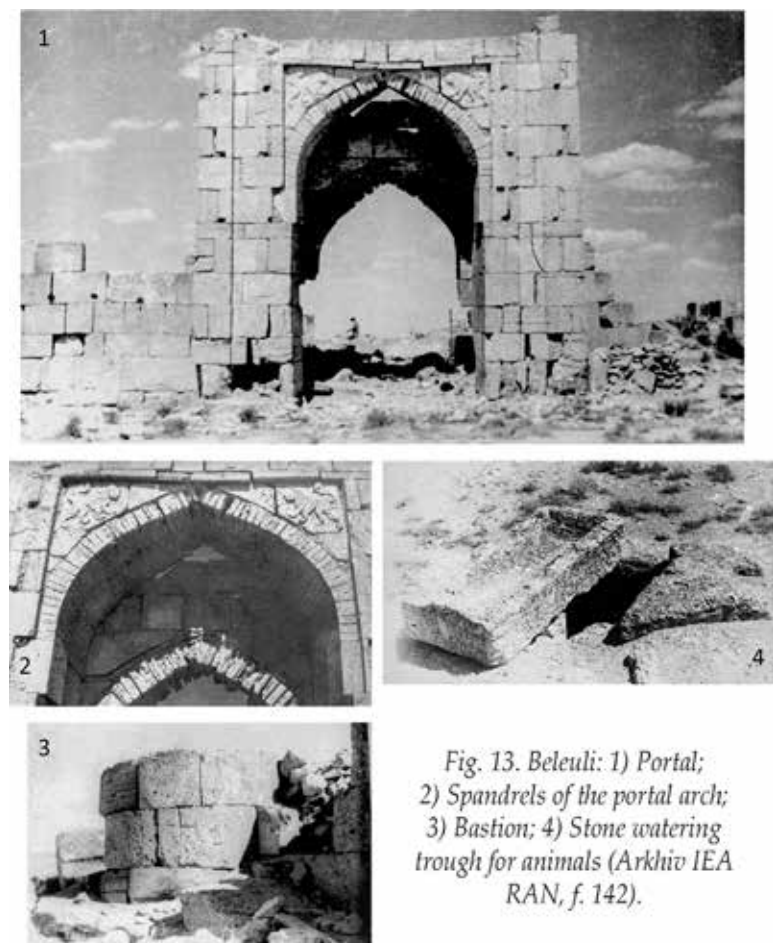
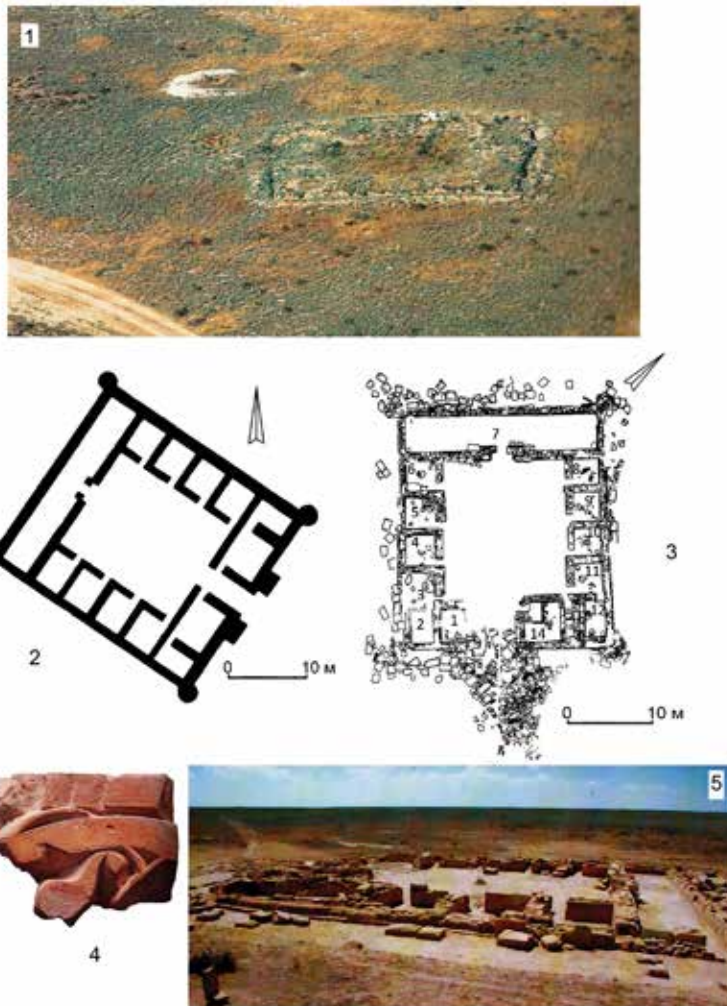


Fig. 13. Beleuli: 1) Portal; 2) Spandrels of the portal arch; 3) Bastion; 4) Stone watering trough for animals (Arkhiv IEA RAN, f. 142).

Fig. 14. Caravanserai Bel'deuli: 1) Aerial photo; 2) Plan drawn by A. E. Astaf'ev; 3) Excavation plan by Z. Samashev and M. Kozha; 4) Carved terracotta; 5) Overall view following excavation.

The caravanserai Bel'deuli (Koptam) was examined by the staff of the Mangistau Historical-Cultural Reserve and a plan of the monument and its description compiled on the basis of the walls visible at the surface (Astaf'ev 2010, pp. 79–81; Kalmenov 2007, pp. 280–81; 2013, pp. 48–49). The building was entirely excavated in 2011 (Kozha and Samashev 2014, pp. 486–98). It is rectangular, measuring 27 x 24 m [Fig. 14]. Its exterior walls are sheathed in large dressed slabs and blocks of limestone, joined by alabaster mortar. The masonry of the walls of the chambers is composite, making use of unfired and fired brick and faced with stone slabs. The corners of the building have round towers 2 m in diameter. An entrance ca. 3.65 m wide is in the middle of the southeastern wall. Remaining from the portal is the foundation of a pylon 2.1–2.2 m wide which projected 80 cm from the surface of the wall. In the heap of stones from the portal were found terracotta revetment tiles with Arabic letters and vegetal ornament.

In the center of the building is a broad (13.7 x 14.9 m) courtyard, around whose perimeter are rooms. On each side of the entrance are square chambers measuring 4.4 m. The one on the right was residential; that on the left was occupied by a mosque. Its floor is paved with stone slabs and covered with a layer of plaster. Along the lateral walls were located residence rooms, five to a side. The corner rooms nos. 2 and 12 are somewhat smaller than the others and connected with rooms 3 and 11, forming two-room units. The remaining cham-



bers, which have a standard size of about 3.2 x 3.3 m, open only onto the courtyard. In the living quarters are remains of benches and stoves. Attached to the rear wall is a storage room or stable (no. 7) measuring 22 x 3.7 m. Its entrance probably was framed by a portal arch. Between chambers 12 and 14 at the southeastern wall is the narrow chamber 13 with stairs leading to the roof. As with the other caravanserais, Bel'deuli dates to the first half of the 14th century.

Koskuduk is the last of the caravanserais along this route within the bounds of the Ustiurt, located on the edge of the plateau at its northwestern extremity. The Khwarazam Expedition studied Koskuduk in 1950 (Tolstov 1958, p. 16), and subsequently the staff of the Mangistau Historical-Cultural Reserve drew a plan of it (Astaf'ev 2010, pp. 83–86; Kalmenov 2007, pp. 279–80; 2013, pp. 50–53). The building is nearly square and measures 41.6 x 40.8 m [Fig. 15]. The walls are

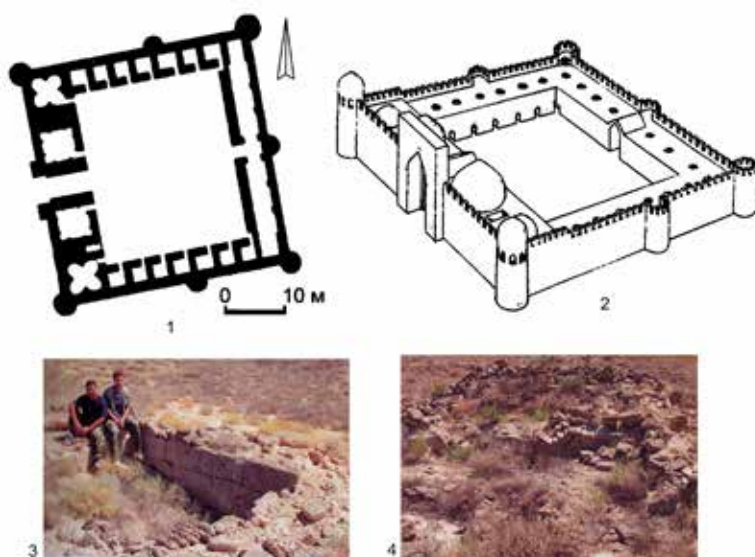


Fig. 15. Caravanserai Koskuduk: 1) Plan; 2) Reconstruction by A. E. Astaf'ev; 3–4) remains of rooms.

constructed of rubble-fill masonry using large dressed slabs of limestone. The exterior walls are 1.2–1.5 m thick. All four corners of the building are flanked by round towers, and semi-towers have been built in the center of the lateral and rear walls. The towers on entrance façade and the three intermediary ones have a diameter of 3.3 m, and the corner towers on the back of the building a diameter of 4 m. The entrance is 3.8 m wide, located in the center of the western wall. There are remains of pylons of the portal, 2.7 m side, which protrude from the façade wall 1.2 m. The distance between the pylons is 4.8 m, the depth of the arch 2.5 m. The entrance passage is 7.2 m long and leads into a wide courtyard measuring 30.5 x 25.5 m.

Flanking the entrance are two large square rooms (5.7 x 5.7 m) whose plans are mirror images of each other. The walls of these chambers have been preserved up to the height of 2.5 m, which made it possible to determine the nature of their roofing. Up to a height of 1.5–1.7 m from floor level, the walls are composed of massive slabs, set vertically. Above them begins the vaulted roof, made of small limestone slabs, dressed to resemble bricks. The chambers have arched niches in the wall and the squinches on which the cupola rested. The corner rooms are cross-shaped. They were also covered with cupolas but of a smaller size. The cupolas rested on the semi-domes of the bays in the corners of the rooms. Between the rooms attached to the façade wall were stairwells 1.2–1.3 m wide. The steps which have been preserved make it possible to calculate the probable height of the roof as 5.5–6 m (Astaf'ev 2010, p. 86; Kalmenov 2013, p. 52). Attached to the eastern wall is a storage room (or stable?) 3.6 m wide. Leading into it is a central passage (2.5 m), beyond which is a vestibule separated from the left and right wings of the chamber by arched doorways. The springers of the arches are 1 m wide and protrude from the wall 50 cm; the span of the arches was 2.8 m. Those side chambers in turn are divided into four parts by arched bays. The authors of the excavation report suggest that the room was covered with cupolas (Astaf'ev 2010, p. 86; Kalmenov 2013, p. 52). However, it seems to me that the given chamber might have had a vaulted roof on supporting arches. Several stone structures are located next to the Koskuduk caravanserai.

The next point along the given caravan route is the springs of Uchkan (Ushkan), lo-

cated beyond the edge of the Ustiurt Plateau 86 km from the Koskuduk caravanserai (Tolstov 1958, p. 16; Astaf'ev 2010, p. 88). In the opinion of Andrei E. Astaf'ev (2010, p. 88), there should be one intermediate caravanserai on that route, but to date it has not been located.

The next caravanserai, Tas-kichu (Taskeshu), is located on the Sagyz River at a man-made stone ford. The Khwarazm Expedition studied the building in 1950 (Tolstov 1958, pp. 14–15); in 2008–2010 the Atyrau Regional Center of History and Archaeology undertook partial excavations there and published the results in a very general way (Kol'tsov et al. 2010, pp. 25–33; Kol'tsov and Kol'tsova 2016, pp. 49–51). The building is constructed of fired brick that measures 30 x 30 x 5 cm. The thickness of the exterior walls is 1.25 m, the interior walls 0.95 m. Its plan is a square 55 m on a side [Fig. 16]. The corners are fortified with massive round towers. On the exterior in the middle of the western wall is the foundation of an attached semicircular tower. It appears that not only the corners but also the walls were fortified with towers constructed of trapezoidal-shaped bricks. The entrance to the building was on the southern side. In the center is a 30 x 30 m courtyard. The excavations uncovered 7 residence chambers along the western wall. The rooms are 3.7

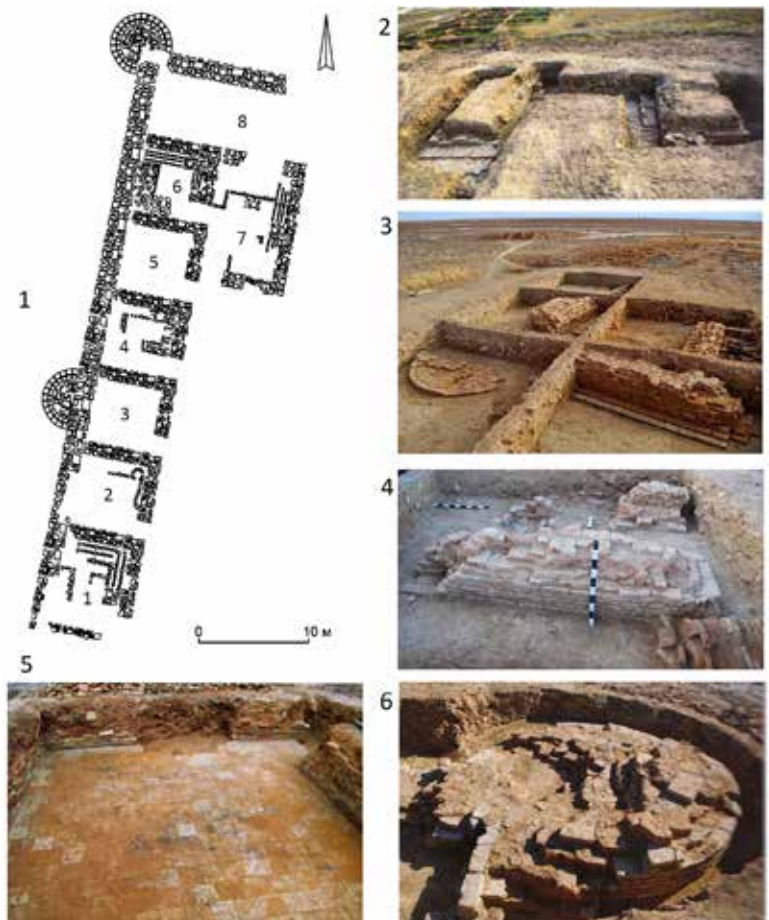


Fig. 16. Caravanserai Tas-kichu: 1) Plan; 2) Portal; 3) Excavation of bastion; 4) A residence room; 5) A floor; 6) Corner tower.

x 3.7 m squares, all of them opening out to the courtyard. In these living quarters are benches and stoves of varying configurations; in some of the benches are heating ducts. A long narrow chamber for work-related activity was attached to the northern wall. Thus, in spite of the fact that the caravanserai Taskeshu has been excavated only partially, one can be confident that it had the same plan as all the analogous structures on the Ustiurt caravan route. The building is securely dated by ceramic and numismatic material (coins of the 1330s–1390s were found).

Thus, the survey of the caravanserais of the Ustiurt route so far studied provides evidence that they all have a single type of plan (see Table 1 for a statistical summary). These are single-courtyard structures, square or nearly square in shape, with a single entrance. Along all four walls is a single sectioned row of chambers. Beleuli alone had two rows of structures along the northwestern wall, but in my opinion that is the result of a later addition. The caravanserai Koskuduk is distinguished by the presence of four large, probably communal chambers roofed with cupolas which were attached to the front wall. Otherwise there is minimal difference. Some of the buildings were constructed of stone (Uchkuduk, Beleuli, Churuk, Koptam, Koskuduk), the rest of brick (Azhi-gel'dy, Kosbulak, Kushe, Taskeshu). They differ in the number of towers: Uchkuduk, Azhi-gel'dy and Kosbulak have towers only along the main façade; at Churuk and Bel'deuli, there are towers fortifying all four corners; and at Beleuli, Koskuduk and Taskeshu there are semi-towers in the center of the lateral walls and (at Koskuduk) in the rear. Thus, one can certainly agree with Sergei P. Tolstov, who considered that these structures were built at the same time as a single complex (Tolstov 1958, p. 19).

The (eastern) caravan route just described was not the only one on the Ustiurt in the Golden Horde period. The western route, leading from Urgench to the Mangyshlak Peninsula, had been known at least since the Khazar period. It also had caravanserais, but all the structures that are known date to the pre-Mongol

period (Astaf'ev 2010, pp. 56-60, 132–40). One should note that this route has been less well studied.

Caravans went on to the Volga region from Saraichik. Ibn Battuta covered that route in 10 days (Ibn Battuta/Gibb 1958-2000, 3, p. 539; Tizengauzen 1884, pp. 307–08); according to Pegolotti and the Anonymous Tuscan, the route from Sarai to Saraichik took 8 days by land and water (Fedorov-Davydov 2001, p. 214). However, on this stretch to date no remains of caravanserais have been located. Surprisingly not a single such rest house is known either on the Lower Volga or in the towns or in their surrounding areas, although undoubtedly such existed there. The explanation for this can be the still insufficient research concerning all the monuments of the Golden Horde along the Lower Volga. The density of Golden Horde remains along the shores of the Volga and Akhtuba in that region is very large. All of them seem to be settlements of larger or smaller dimensions, but the specific purpose of such settlements so far has not been established. It is entirely possible that among them are to be found suburban caravanserais.

To date no caravanserais have been found on the Don, Kuban or Kuma rivers. Most likely this is to be explained by the still insufficient study of Golden Horde monuments in those regions. However, contemporaries frequently noted the security of the roads in the Golden Horde, as we have noted in citing Pegolotti. Ibn Arabshah also wrote: "There used to advance convoys of travellers from Khwarizm making the journey in wagons, securely without terror or fear, as far as the Crimea—a journey of about three months" (Ibn Arabshah/Sanders 1936, p. 77; Tizengauzen 1884, p. 460). Thus one can propose that rest facilities in the Golden Horde would not necessarily have had the appearance of forts as was the case in Iran, Central Asia, Armenia and Anatolia. Caravanserais could consist of several small houses with chambers for pack animals and goods, and in the steppe, they could simply be yurts.

On the western end of the caravan route, in the Crimea, only one building is known which tradi-

Table 1. Comparative Features of the Caravanserais on the Ustiurt Caravan Route

Caravanserai	Measurements	Wall material	Wall thickness	Number of towers	Tower diameter	Measurement of courtyard	Number of living and utility rooms	Number of storage rooms
Uchkuduk	31.7 x 28.45 m	stone	0.75-0.85 m	2	1,85 m	18.0 x 21.3 m	16	1
Ajigel'dy (Bulak)	29.3 x 24.3 m	brick	0.65-0.9 m	2	1,05 m	19.3 x 15.3 m	16	1
Kosbulak	39.0 x 33.5 m	brick	2.8-3.8 m	2	6,4 m	18.6 x 27.1 m	14	1
Beleuli	35.3 x 29.0 m	stone	1.0-1.2 m	6	3,2 m	19.2 x 17.8 m	16	3
Churuk	31.7 x 29.55 m	stone	1.1 m	4	2.7-2.8 m	24.8 x 19.0 m	12	1
Bel'deuli (Koptam)	27.0 x 24.0 m	stone	1.0-1.2 m	4	2.0 m	13.7 x 14.9 m	16	1
Koskuduk	41.6 x 40.8 m	stone	1.2-1.5 m	7	3.3-4.0 m	30.5 x 25.5 m	18	1
Tas-kichu	55 x 55 m	brick	1.25 m	6 (?)	4.0 m	30 x 30 m	17	1

tionally has been considered a caravanserai from the Golden Horde period. The structure is on the southern edge of Solkhat. Vasilii D. Smirnov (1886, pp. 273–302) was the first to advance this idea. He proposed that the ruins of a huge structure, which the local population called the “Han-Serai” was the remains of a posthouse or *han*. Indirect confirmation of this was its location not far from a village named “Tamgadzi”, i.e., “customs house”. It is possible that this is the only *han* which Evlia Chelebi encountered in “Eski Kyrym” (Evlia Chelebi 2008, p. 118).

In 1925, Il’ia N. Borozdin undertook some excavation there, which provided what is to date the most complete description of this site (1926, pp. 287–92). The building has a pentagonal shape (a rectangle with one corner cut off) [Fig. 17]. Its walls are made of badly worked local limestone set in lime mortar, with wooden frames inserted for greater stability of the masonry and proper alignment of the various parts of the building. In their upper parts can be seen hollowed out areas into which the ends of wooden beams had been inserted to support the roof of the first-floor chambers. In Borozdin’s opinion, the chambers along

the walls might have been two-story; in which case the beams served as the underpinning for the floors of the second-level rooms. At the corners of the monumental walls were tower-like appendages. The overall area of the building was about 2500 m². The structures found in two excavated trenches suggested that the courtyard was paved with slabs, and along the perimeter of the walls was a colonnaded gallery (foundations for the bases of columns were found). A water channel which lay below the pavement possibly led to a fountain in the middle of the courtyard. Smirnov, citing the evidence from the old inhabitants of the area, located the gate in the southwestern corner of the building. He believed that it had been decorated with carved doorjambs. Indirect evidence that the entrance could have been framed by a richly decorated portal was the discovery not far from the site of a huge “one sazhen or more, stone entirely inscribed by carving” (Smirnov 1886, p. 283). Later descriptions of this site (Iakobson 1964, p. 106; Kirilko 2013, pp. 92–93) contain no new information.

Thus, even though the Golden Horde was a great medieval trading power, such an important element of international and domestic trade as rest houses or caravanserais is only minimally in evidence across its large territory. One can speak only of the structures on the Ustiurt caravan route, which are connected with the Central Asian (Khwarazmian) architectural school. As far as the other regions of the Ulus Jöchi are concerned, locating caravanserais in them and studying this type of building is one of the important future tasks of Golden Horde archaeology.

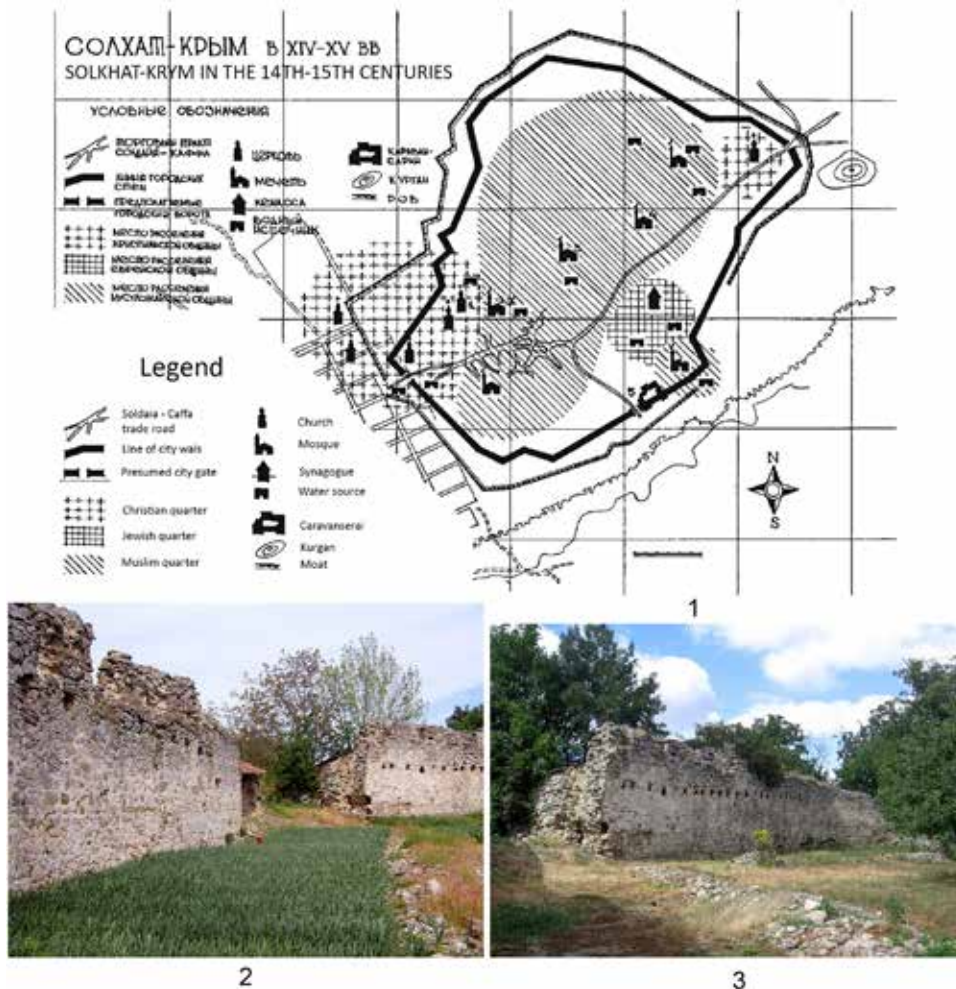


Fig. 17. The caravanserai in Solkhat:
1) Plan of Solkhat (after M. G. Kramarovsii);
2-3) Walls of the structure.

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References

List of abbreviations

IGGO *Izvestiia gosudarstvennogo geograficheskogo obshchestva*

KhAEE *Khorezmskaia arkheologicheskaiia i etnograficheskaiia ekspeditsiia*

VKF *Vestnik Karakalpakskogo filiala AN UzSSR*

ZRGO *Zapiski Russkogo geograficheskogo obshchestva*

ZVOIRAO *Zapadno-Vostochnoe otdelenie Istoricheskogo Rossiiskogo Arkheologicheskogo obshchestva*, Vol. 1, vyp. IV. 1887.

Arzhantseva 2016

Irina A. Arzhantseva. *Khorezm. Istoriia otkrytii i issledovaniia. Etnograficheskii al'bom* [Khwarazm: the history of discovery and research. Ethnographic album]. Ul'ianovsk: "Artishok", 2016.

Asta'ev 2010

Andrei Asta'ev. *Puti torgovykh soobshchenii epokhi srednevekov'ia na territorii Aralo-Kaspiiskogo vodorazdela* [Routes of trade communication in the Middle Ages on the territory of the Aral-Caspian watershed]. Mangistau, 2010.

Baipakov 2016

Karl M. Baipakov. *Drevniaia i srednevekovaiia urbanizatsiia Kazakhstana*. Kn. 3, ch. I. *Urbanizatsiia Kazakhstana v XIII – pervoi polovine XV v.* [Ancient and medieval urbanization of Kazakhstan. Book 3, pt. 1. Urbanization of Kazakhstan in the 13th – first half of the 15th century]. Almaty, 2016.

Bizhanov 1970

Ermek B. Bizhanov. "Iugo-vostochnyi Ustiurt. Nekotorye itogi i perspektivy arkheologicheskogo izucheniia" [South-eastern Ustiurt. Some results and perspectives of archaeological study]. VKF, 1970, № 3: 54-57.

Bizhanov and Lokhovits 1969

_____, and Vladimir A. Lokhovits. "Ustiurskii karavannyi put' iz Khorezma v Vostochnuiu Evropu i Povolzh'e" [The Ustiurt caravan route from Khwarazm to Eastern Europe and the Volga region]. VKF, 1969. № 2(36): 52-59.

Borozdin 1926

Il'ia N. Borozdin. "Solkhat." *Novyi vostok*. № 13-14 (1926): 271-301.

Carpini and Rubruck 1957

[John of Plano Plano Carpini and William of Rubruck].

Puteshestvie v vostochnye strany Plano Karpini i Rubruka [The journey to the eastern countries by Plano Carpini and Rubruck]. Moskva: Gos. izd-vo. geograficheskoi literatury, 1957.

Dawson 1980

Christopher Dawson. *Mission to Asia*. Toronto, etc.: Univ. of Toronto Pr. and Medieval Academy of America, 1980.

Dolbe 2012

Vyacheslav Dolbe. "O skorosti i marshrute predvizheniia puteshestvennikov serebryi XIII veka na puti iz Saraia-Batu v Karakorum i obratno" [On the speed and route of travel of mid-13th century travelers on the way from Saray-Batu to Karakorum and back]. Riga, 2012. On line at: annales.info/step/dolbe/2karakorum.htm, last accessed 26 October 2017.

Evliia Chelebi 2008

Evliia Chelebi. *Kniga puteshestviia. Krym i sopredel'nye oblasti* [Book of travel. Crimea and adjacent areas]. Simferopol', 2008.

Fedorov-Davydov 1958

German A. Fedorov-Davydov. "Raskopki kvartala XV-XVII vv. na gorodishche Tash-kala" [Excavations of the 15th-17th century quarter at the ancient settlement of Tash-kala]. *Arkheologicheskie i etnograficheskie raboty Khorezmskoi ekspeditsii 1949-1953. Trudy KhAEE*. T. II. Moskva: Izd-vo. AN SSSR, 1958: 505-29.

Fedorov-Davydov 2001

_____. *Zolotoordynskie goroda Povolzh'ia. Keramika, torgovlia, byt* [Golden Horde cities of the Volga region. Ceramics, trade, everyday life]. Moskva: Izd-vo. Moskovskogo universiteta, 2001.

Iakobson 1964

Anatolii L. Iakobson. *Srednevekovyi Krym. Ocherki istorii i istorii material'noi kul'tury* [Medieval Crimea. Essays on the history and history of material culture]. Moskva-Leningrad: Nauka, 1964.

Iakubovskii 1930

Aleksandr Iu. Iakubovskii. *Razvaliny Urgench* [The ruins of Urgench]. *Izvestiia Gos. akademii istorii material'noi kul'tury*, t. 6, vyp. 2. Leningrad: GAIMK 1930

Ibn Arabshah/Sanders 1936

Ahmed Ibn Arabshah. *Tamerlane or Timur the Great Amir*. Tr. by J. H. Sanders. London: Luzac, 1936 (on-line: <https://archive.org/details/TamerlaneOrTimurTheGreatAmir-AhmedIbnArabshah>).

Ibn Battuta/Gibb 1958-2000

Abu Abdallah Ibn Battuta, *The Travels of Ibn Battuta A.D. 1325-1354*. Tr., ed. and annotated by H.A.R.Gibb; tr. completed by C. F. Beckingham; index by A. D. H. Bivar. 5 vols. (Hakluyt Society, Publications, 2nd ser., vols. 110, 117, 141, 178. 190). London: Hakluyt Society, 1958-2000) (reprint of Vols. 1-3, New Delhi, 1993).

Ibn Fadlan/Montgomery 2014

Two Arabic Travel Books: Abū Zayd al-Sīrafī, Accounts of China and India. Ed. and tr. by Tim Mackintosh-Smith; and Aḥmad

- ibn Fadlān, *Mission to the Volga*. Ed. and tr. by James E. Montgomery; eds. Philip F. Kennedy and Shawkat M. Toorawa. New York: London: New York Univ. Pr., 2014.
- Juvaini/Boyle 1997
 ‘Ala-ad-Din ‘Ata-Malik Juvaini. *Genghis Khan: The History of the World Conqueror*. Tr. by J. A. Boyle, with a new introduction and bibliography by David O. Morgan. Seattle: Univ. of Washington Pr., 1997 (1st ed., Manchester, 1958)
- Kalmenov 2012
 Murat D. Kalmenov. “Karavanni trakt cherez plato Ustiurt (analiz pis’mennih istochnikov) [The caravan route through the Ustiurt Plateau (analysis of written sources)]. *Voprosy istorii i arkhologii Zapadnogo Kazakhstana*, 2012. № 1: 65–70.
- Kalmenov 2013
 _____. “Zolotoordynskie karavan-sarai Mangistau” [The Golden Horde caravanserais of Mangistau]. In: *Priaral’e na perekrestke kul’tur*. Samarkand: Mezhdunarodnyi institut tsentral’noaziatskikh issledovani, 2013: 47–54.
- Kdyrniiazov 2015
 Magomed-Sharif Kdyrniiazov. “Gorodishche Pul’zhai (Gorod i step’ Aralo-Kaspiia)” [Pulzhai hillfort (The town and steppe of the Aral-Caspian region)]. *Kazakhskoe khanstvo v potoke istorii* [The Kazakh Khanate in the flow of history]. Almaty, 2015: 127–40.
- Kdyrniiazov 2016
 Omar-Sharif Kdyrniiazov. “Mechet’ i karavan-sarai Pul’zhaia” [The mosque and caravan-sarai of Pulzhai]. In: *Dialog gorodskoi i stepnoi kul’tur na evraziiskom prostranstve. Istoricheskaia geografiia Zolotoi Ordy. Materialy Sed’moi mezhdunarodnoi konferentsii, posviashchennoi pamiati G.A. Fedorova-Davydova*. Kazan’–Yalta–Kishinev, 2016: 81–84.
- Khalpakhch’ian 1971
 Oganēs Kh. Khalpakhch’ian. *Grazhdanskoe zodchestvo Armenii (zhilye i obshchestvennye zdaniia)* [Civil architecture of Armenia (residential and public buildings)]. Moskva: Stroizdat, 1971.
- Khmel’nitskii 1992
 Sergei G. Khmel’nitskii. *Mezhdū arabami i tiurkami. Arkhitektura Srednei Azii IX–X vv.* [Between the Arabs and the Turks. Architecture of Central Asia in the 9th–10th centuries]. Berlin-Riga: Continent, 1992.
- Khmel’nitskii 1996
 _____. *Mezhdū Samanidami i mongolami. Arkhitektura Srednei Azii XI–nachala XIII vv. Ch. 1* [Between the Samanids and the Mongols. Architecture of Central Asia in the 11th–early 13th centuries. Pt. I]. Berlin-Riga: Gamajun, 1996.
- Kirilko 2013
 Vladimir P. Kirilko. “Zolotoordynskaia arkhitektura Kryma (obshchee i osobennoe)” [Golden Horde architecture of the Crimea (the common and the distinctive)]. In: *Srednevekovaia Evraziia: simbioz gorodov i stepi. Materialy II Mezhdunarodnogo Bolgarskogo foruma. 21–23 maia 2011 g.* Kazan’, 2013: 84–100.
- Kol’tsov et al. 2012
 Petr M. Kol’tsov, Kermen P. Kol’tsova, Amandyk Garifolla, Murat S. Kasenov, and Serik O. Kuanysh. “Raskopki mezhdunarodnoi arheologicheskoi ekspeditsii srednevekovogo karavan-saraia Taskeshu v Zapadnom Kazakhstane” [The international archaeological expedition’s excavations of the medieval caravan-sarai Takeshu in Western Kazakhstan]. In: *Vestnik Prikaspiia: arkhelogiia, istoriia, etnologiia*. Vyp. 3. Elista: Izd-vo. Kalmykского gos. universiteta, 2012: 25–33.
- Kol’tsov and Kol’tsova 2016
 _____. and Kermen P. Kol’tsova. “Srednevekovi karavan-sarai Taskeshu v Zapadnom Kazakhstane” [The medieval caravanserai Taskeshu in Western Kazakhstan]. In: *Materialy pervogo Madzharskogo arkhelogicheskogo foruma. Arkhelogiia Evraziiskikh stepei*. Vyp. 23. Kazan’, 2016: 49–53.
- Kozha and Samashev 2014
 Murat Kozha and Zainolla Samashev. “O raskopkakh karavan-saraia Beldeuli” [About the excavations of caravan-saray Beldeuli]. In: *Voskhozhdenie k vershinam arkhelologii. Sbornik materialov mezhdunarodnoi nauchnoi konferentsii “Drevnie i srednevekoviye gosudarstva na territorii Kazakhstana,” posviashchennoi 90-letiiu so dnia rozhdeniia K. A. Akisheva*. Almaty: Institut arkhelologii im. A. K. Margulana, 2014: 47–58.
- Kozlov 1948
 Petr K. Kozlov. *Mongoliia i Amdo i mertvyi gorod Khara-Khoto* [Mongolia and Amdo and the dead city of Khara-Khoto]. Moskva: Gos. izd-vo. geograficheskoi literatury, 1948.
- Lapirov-Skoblo 1958
 Mikhail S. Lapirov-Skoblo. “Portal razvalin karavan-saraia na gorodishche Tash-kala v Kunia Urgenche” [The portal of the ruins of the caravan-sarai in the ancient settlement of Tash-kala in Kunya Urgench]. In: *Arkheologicheskie i etnograficheskie raboty Khorezmskoi ekspeditsii 1949–1953. Trudy KhAEE*. T. II. Moskva: Izd-vo. AN SSSR, 1958: 529–43.
- Lokhovits 1979
 Vladimir A. Lokhovits. “Karavansarai verkhnego Khorezma” [The caravanserais of Upper Khwarazm]. In: *Etnografiia i arkhelogiia Srednei Azii*. Moskva: Nauka, 1979: 112–18.
- Manylov 1979
 Iurii P. Manylov. “O puti Ibn Fadlana iz Khorezma cherez plato Ustiurt” [On the route of Ibn Fadlan from Khwarazm across the Ustiurt Plateau]. *Sovetskaia arkhelogiia*, 1979. № 2: 92–100.
- Manylov 1982
 _____. “Arkheologicheskoe issledovanie karavan-saraev tsentral’nogo Ustiurta” [Archaeological research on caravanserais of the central Ustiurt]. In: *Arkhelogiia Priaral’ia*. Vyp. 1. Tashkent: Fan, 1982: 93–122.
- Manylov and Iusupov 1982
 _____. and Nariman Iu. Iusupov. “Karavan-sarai Tsentral’nogo Ustiurta” [Caravanserais of the central Ustiurt]. *Sovetskaia arkhelogiia*, 1982. № 1: 170–82.
- Nedashkovskii 2009
 Leonard F. Nedashkovskii. “Mezhdunarodnaia i vnutrenniaia torgovlia” [International and domestic trade]. In: *Istoriia tatar s drevneishikh vremen v semi tomakh*. T.3. Ullus Dzhuchi (Zolotaia Orda). XIII–seredina XV v. Kazan’, 2009: 277–87.

Nedashkovskii 2016

_____. "Mezhdunarodnaia i vnutrennaia torgovlia" [International and domestic trade]. In: *Zolotaia Orda v mirovoi istorii. The Golden Horde in World History*. Kazan', 2016: 608–16.

Polo 1955

Marco Polo. *Kniga Marko Polo* [The book of Marco Polo]. M.: Gos. izd-vo. geograficheskoi literatury, 1955.

Polo/Latham 1958

_____. *The Travels*, Ronald Latham, tr. and intr. Harmondsworth: Penguin, 1958.

Pribytkova 1953

Anna M. Pribytkova. "Karavan-sarai Daia-Hatyn" [The caravanserai Daia-Khatyn]. In: *Arhitekturnoe nasledstvo*, № 3. Moskva: Glavnoe izd-vo. stroitel'stva i arkhitektury, 1953: 93–107.

Pugachenkova 1958

Galina A. Pugachenkova. *Puti razvitiia arkhitektury Iuzhnogo Turkmenistana pory rabovladieniia i feodalizma* [The course of development of the architecture of Southern Turkmenistan in the era of slavery and feudalism]. Moskva: Izd-vo. AN SSSR, 1958.

Pugachenkova and Rempel' 1958

_____, and Lazar I. Rempel'. *Vydaiushchiesia pamiatniki arkhitektury Uzbekistana* [Outstanding monuments of architecture of Uzbekistan]. Tashkent: Gos. izd-vo. khudozhestvennoi literatury UzSSR, 1958.

Rubruck/Jackson 1990

The Mission of Friar William of Rubruck. His journey to the court of the Great Khan Möngke 1253–1255. Tr. by Peter Jackson; Intr., notes and appendices by Peter Jackson and David Morgan. London: The Hakluyt Society, 1990.

Rychkov 1762

Petr I. Rychkov. *Topografiia Orenburgskaia, to est' obstoiatel'noe opisaniie Orenburgskoi gubernii, sochinennoe Petrom Rychkovym* [Topography Orenburg, that is a detailed description of the Orenburg province, composed by Peter Rychkov]. Ch. II. Sankt-Peterburg, 1762.

Schamiloglu 2009

Uli Schamiloglu. "Torgovlia Ulusa Dzhuchi so stranami Sredizemnomor'ia." [The trade of Ulus Jöchi with Mediterranean countries] In: *Istoriia tatar s drevneishikh vremen v semi tomakh*. T. 3. *Ulus Dzhuchi (Zolotaia Orda)*. XIII–seredina XV v. Kazan': Izd-vo. "Rukhiat", 2009: 287–95.

Secret History/de Rachewiltz 2004

The Secret History of the Mongols: A Mongolian Epic Chronicle of the Thirteenth Century. Tr. with a historical and philological commentary by Igor de Rachewiltz, Vols. 1-2. Leiden and Boston: Brill, 2004.

Smirnov 1887

V[asilii D.] Smirnov. *Arkheologicheskaiia ekskursiia v Krym letom 1886 g.* [An archaeological excursion to the Crimea in the summer of 1886]. ZVOIRAO. T. I (1887): 273–302.

Sokrovennoe skazanie 2002

Sokrovennoe skazanie mongolov [The Secret Legend of the Mongols], tr. S.A. Kozin. Moskva, 2002.

Stierlin 1998

Henri Stierlin. *Turkey from the Selçuks to the Ottomans*. Köln: Taschen, 1998.

Tizengauzen 1884

V[ladimir] G. Tizengauzen. *Sbornik materialov, otnosiashchikhsia k istorii Zolotoi Ordy*. T. 1. *Arabskie istochniki* [Collection of materials relating to the history of the Golden Horde. Vol. I. Arabic sources]. Sankt-Peterburg, 1884. (Rev. ed.: *Istoriia Kazakhstana v arabskikh istochnikakh*. T. 1. *Sbornik materialov, otnosiashchikhsia k istorii Zolotoi Ordy: izolecheniia is arabskikh sochinenii, sobrannye V. G. Tizengauzenom prererabotannoe i dopolnenoe izdanie*. Almaty: "Daik-Press", 2005.)

Tizengauzen 1941

_____. *Sbornik materialov, otnosiashchikhsia k istorii Zolotoi Ordy*. T. 2. *Persidskie istochniki* [Collection of materials relating to the history of the Golden Horde. Vol. 2. Persian sources]. Moskva-Leningrad: Izd-vo. AN SSSR, 1941.

Tolstov 1947

Sergei P. Tolstov. "Khorezmskaia arkheologo-etnograficheskaiia ekspeditsiia Akademii nauk SSSR v 1946 g." [The Khwarazm Archaeological and Ethnographic Expedition of the USSR Academy of Sciences in 1946]. *Izvestiia Akademii nauk SSSR, Ser. ist. i filos.*, t. 4 (1947), № 2: 163–205.

Tolstov 1948a

_____. *Drevnii Khorezm* [Ancient Khwarazm]. Moskva: Izd-vo. Moskovskogo gos. universiteta, 1948.

Tolstov 1948b

_____. *Po sledam drevnekhorezmiiskoi tsivilizatsii* [Following in the tracks of ancient Khwarazmian civilization]. Moskva-Leningrad: Izd-vo. AN SSSR, 1948.

Tolstov 1958

_____. *Raboty Khorezmskoi arkheologo-etnograficheskoi ekspeditsii AN SSSR v 1949–1953 gg.* [The work of the Khwarazm Archaeological and Ethnographic Expedition of the USSR Academy of Sciences in 1949–1953]. In: *Arkheologicheskie i etnograficheskie raboty Khorezmskoi ekspeditsii 1949–1953. Trudy KhAEE*. T. 2. Moskva: Izd-vo. AN SSSR, 1958: 7–259.

Vakhturskaia 1958

Nina N. Vakturskaia. "Raskopki gorodishcha Urgench v 1952 g." [Excavations of the ancient settlement of Urgench in 1952]. In: *Arkheologicheskie i etnograficheskie raboty Khorezmskoi ekspeditsii 1949–1953. Trudy KhAEE* [Archaeological and ethnographic works of the Khwarazm expedition 1949–1953. Proceedings of the KhAEE]. T. 2. Moskva: Izd-vo. AN SSSR, 1958: 467–95.

Vakturskaia and Vorob'eva 1952

_____, and Militsa G. Vorob'eva. "Khronika rabot Khorezmskoi ekspeditsii Akademii nauk SSSR" [Chronicle of the Khorezm Expedition of the USSR Academy of Sciences]. In: *Trudy KhAEE*. T. 1. Moskva: Izd-vo. AN SSSR, 1952: 615–41.

Vishnevskaiia 1958

Ol'ga A. Vishnevskaiia. "Raskopki karavan-saraev Ak-iaila i Talaikhan-ata" [Excavations of the caravan-sarais Ak-yaila and Talaykhan-ata]. In: *Arkheologicheskie i etnograficheskie raboty Khorezmskoi ekspeditsii 1949-1953. Trudy KhAEE*. T. 2. Moskva: Izd-vo. AN SSSR, 1958: 431-67.

Vialov 1934

Oleg S. Vialov. "Kolodtsy i istochniki Ustiurta" [Wells and springs of Ustiurt]. *IGGO*. T. 66 (1934), vyp. 1: 146-75.

Yule and Cordier 1913-1916

Cathay and the Way Thither being a Collection of Medieval Notices of China. Tr and ed. by Henry Yule; new ed. rev. by Henri

Cordier. 4 vols (Hakluyt Society, Publications, 2nd ser., 33, 37, 38, 41). London: Hakluyt Society, 1913-1916. (Reprint, New Delhi, 1998).

Zhukova and Lefteeva 1976

Liudmila I. Zhukova and Larisa G. Lefteeva. "Ekspeditsiia v Sredniuiu Aziiu" [An Expedition to Central Asia]. *Pamiatniki Turkmenistana*. 1976, № 1: 24-30.

-- translated by Daniel C. Waugh

SASANIAN BISHAPUR AND ITS ROCK RELIEFS



Map source: <https://www.sasanika.org/wp-content/uploads/sasanika-map2.jpg>

In anticipation of the article by Pei Chengguo which follows in this number of our journal – his subject involving the importance of what was undoubtedly Sasanian silver coinage along the silk routes in China – I thought it would be useful to invite readers to explore other aspects of Sasanian history and culture. There are many good sources to assist in this (see the bibliographic note below).

Why should one care? Founded in 224 CE, when Ardashir I defeated the last of the Parthian rulers of the Middle East, the Sasanian Empire then lasted more than four centuries until its conquest by the Arabs. The Sasanian armies checked Roman expansion to the East, at the same time that they drew on Roman engineering expertise to help shape their impressive built environment. At its greatest extent, the Sasanian empire encompassed much of the Middle East, extending into Central Asia and occupying the ocean shore. It controlled major routes of Eurasian trade; its cultural influence reached far into East Asia. No study of the Silk Road would be complete unless it devoted significant space to Sasanian history.

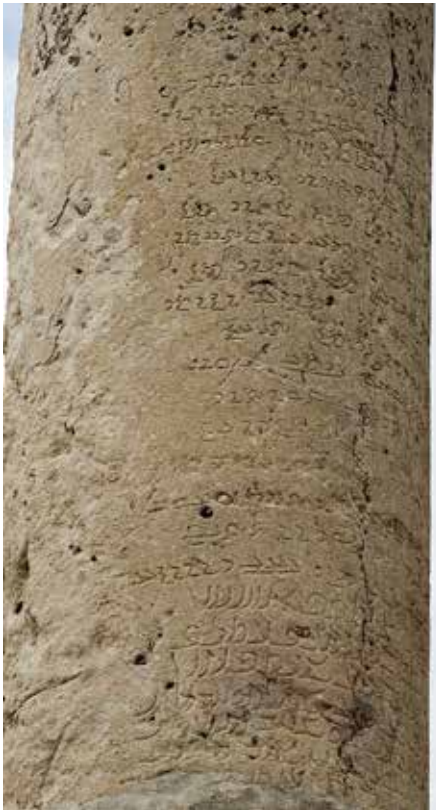
To travel in Iran, as I was privileged to do for about a month in 2010, brings one into contact with dramatic visual evidence of the Sasanians – remains of large palaces and forts, waterworks, and, among other things, a great deal of relief sculpture. The Sasanian kings lavished resources on public monuments proclaiming their relationship to their gods and their military victories. Among the most noteworthy of such relief sculptures are those at Bishapur, the new capital founded by Shapur I (r. 240–270) where the Shapur River emerges from the Tang-e Chogan valley at a key intersection of trade routes in southwestern Iran.

For further reading: A good introduction to Sasanian history is Touraj Daryaee, *Sasanian Persia: The Rise and Fall of an Empire* (London: IB Tauris, 2013, pb. ed.; first published in 2009). Daryaee is in the process of creating a major on-line resource about the Sasanians, “Sasanika: Late Antique Iran Project” <sasanika.org>, which will eventually include many articles, images, etc. There are some good general essays in Vesta Sarkhosh Curtis and Sarah Stewart, eds. *The Sasanian Era. The Idea of Iran, Vol. III* (London: London Middle East Institute at SOAS and British Museum, 2008). For Bishapur, see the elegant, short essay by Dietrich Huff with a wonderful aerial photo, in David Stronach and Ali Mousavi, eds., with photographs by Georg Gerster, *Ancient Iran from the Air* (Darmstadt: Philipp von Zabern, 2012), pp. 88–90. Generally authoritative if dense and sometimes a bit dated, but accessible on-line, are the articles in *Encyclopaedia Iranica*, in particular Edward J. Keall. “Bīšāpūr” [1989] <<http://www.iranicaonline.org/articles/bisapur-town>>, and G. Herrmann and V. S. Curtis, “Sasanian Rock Reliefs” [2002] <<http://www.iranicaonline.org/articles/sasanian-rock-reliefs>>. Jona Lendering’s “Livius.org: Articles on Ancient History” (see esp. <<http://www.livius.org/articles/place/bishapur/>> contains descriptions and a good many excellent images of most of the Sasanian reliefs (the reference designations being those of Vanden Berghe’s catalogue), but somewhat glosses over the ongoing arguments about interpreting certain of them.

-- Daniel C. Waugh

The walls of Bishapur.





Columns in the central square with Parthian and Middle Persian inscription suggesting they were once topped with a statue of Shapur I and erected at the time the city was completed in the 260s.



Temple possibly dedicated to water goddess Anahita.

Remains of a fire temple that had a huge dome.



Composite image of the "garrison" looking north.





Mosaics from the floor of the Bishapur "palace" now displayed behind dusty glass in the National Museum, Tehran.



The badly damaged Bishapur I relief on the left side of the river, commemorating, apparently, Shapur I's investiture and his first major victory over the Romans. It was modeled on the investiture relief (here on right) at Naqsh-e Rostam (near Persepolis), showing Ardashir I and the deity Ahuramazda.





The Bishapur 2 relief on the left side of the river, depicting in the center Shapur I presumably as he takes the Roman Emperor Vlaerian captive and accepts submission of Philip the Arab, while his horse is trampling the body of Emperor Gordian III. The upper image is a compsite.





Bishapur 3, the third of Shapur I's reliefs proclaiming his victory over the Romans. Shown in its setting on the right bank of the river. The image in the middle is a large composite from across the river; the details at bottom show the damage caused when an irrigation pipe was constructed along the cliff base in the 19th century.





Bishapur 4: Bahram II (r. 274–93) receives submission of a delegation of Arabs. The 19th-century irrigation pipe cut through the middle of the relief.



Below and right: Bishapur 5. Investiture of Bahram I (r. 271–74).





Bishapur 6, difficult to photograph except at an angle, depicts Shapur II (r. 309–79) receiving tribute in a victory ceremony.



The area along the river below the reliefs is a popular picnic spot today.



THE SILK ROAD AND THE ECONOMY OF GAOCHANG: EVIDENCE ON THE CIRCULATION OF SILVER COINS

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Xi'an, China

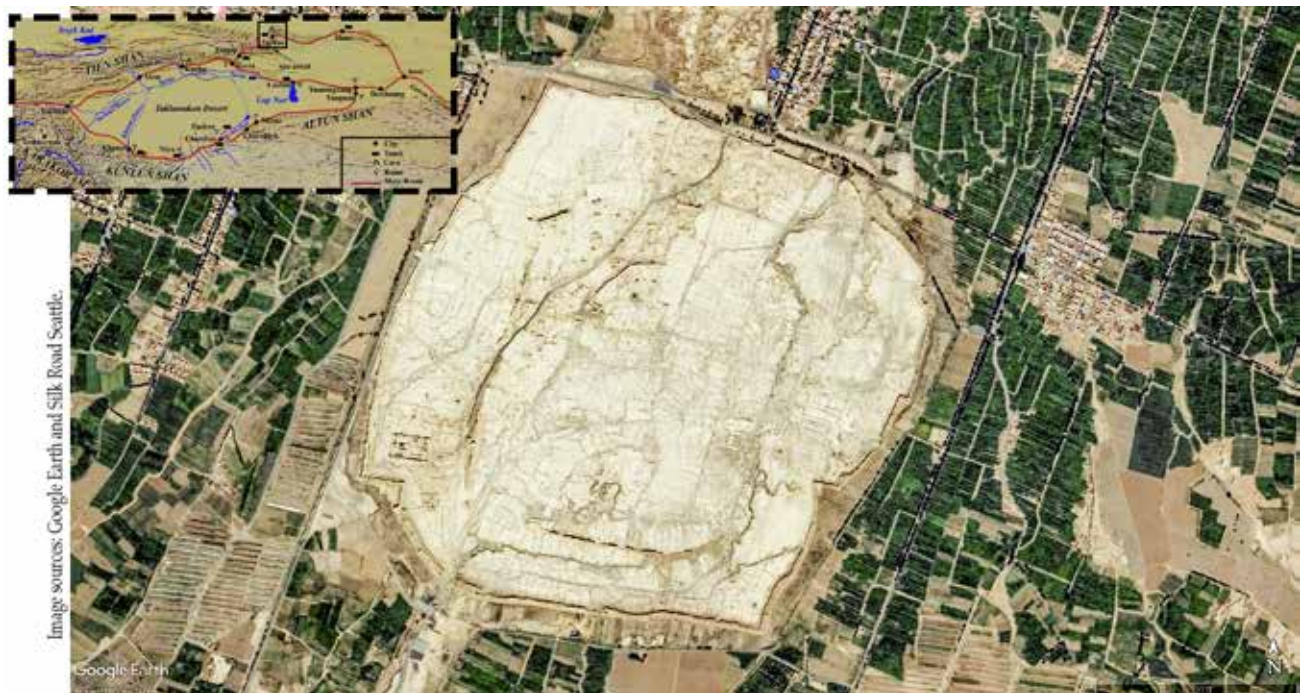
Finds of silver coins (in particular Sasanian ones) and their imitations have been made at the historic Silk Road sites in China (primarily in Xinjiang) starting with the archaeological explorations of the early 20th century. In the Turpan/Turfan 吐鲁番 area, the finds of these coins have come mainly from the old city of Gaochang 高昌 [Fig. 1] and the nearby Astana 阿斯塔那 and Kara-Khoja 哈拉和卓 tombs. In the scholarship relating to this coinage, the pioneering studies by Xia Nai 夏鼐 are of particular importance for their discussion of the distribution of the sites, the identification of the mints, and the possible ways in which this coinage was used.¹ However, much remains to be done for precise numismatic description and dating of the finds, the latter task hindered by the often vague or incomplete record of excavations. Among the disputed questions is the degree to which at least some of the silver “coins” are in fact locally produced imitations, but produced by whom and where is not clear. At least for the Turpan area, it seems that the percentage of imitations is relatively small. However, one es-

timate regarding what is by far the largest hoard of silver coins (found at Wuqia 乌恰 near Kashgar) is that perhaps as much as one-quarter of the nearly 1000 “coins” are imitations, not Sasanian originals.²

For determining the use of the coins, mentions of them in the documentary record are important. One of the best known examples is a document found in Astana Tomb No. 135 and dated 639 CE, written in Sogdian, in which payment for a female slave was made in what is clearly indicated to have been authentic Sasanian drachms [Fig. 2, next page].³ While there are some uncertainties in the documents on account of the terminology referring to coinage, there seems little doubt that at least in the Turpan region, references to silver coins are to the Sasanian ones. The Chinese term that is used after the year 550 for such coins is *wen* 文.

Among the very useful studies providing a framework for understanding the changes in currency usage

Fig. 1. Satellite image of the ruins of Gaochang, with inset showing location of Turfan area in top center.



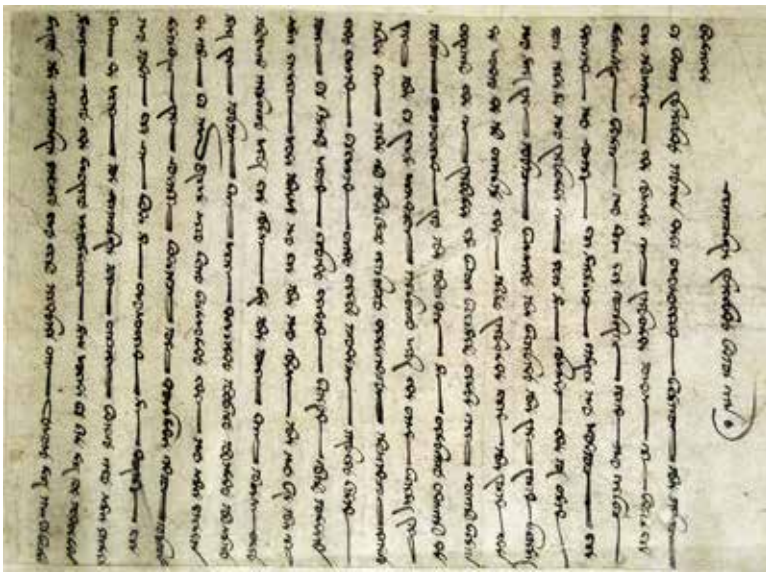


Fig. 2. A contract written in Sogdian for the purchase of a slave in the year 639 CE, unearthed in Astana Tomb No. 135. Photo courtesy of Daniel C. Waugh.

in Turpan is that by Lu Xiangqian 卢向前 (1992), whose periodization is as follows: carpet-based (367–482 CE), cotton cloth-based (482–560), silver coin-based (561–680) and copper coin-based (after 680). In his scheme, the silver coin-based stage could be subdivided into the period when only silver coin was currency (561–640) and the period when silk also began to be used as a means of payment (640–680). A somewhat simplified version of this periodization is the framework in which recently the American historian Valerie Hansen discussed the Turpan material as part of her broader survey of the place of coinage in the Silk Road trade in China and the impact of that trade on Turpan society (Hansen 2005, p. 303; 2011, pp. 95–96).

The role of the Sogdian merchants in the trade along the Silk Roads and in particular in the Turpan area has attracted a great deal of attention.⁴ In his study of Dunhuang and Turfan documents, Jiang Boqin 姜伯勤 (1994) analyzed how the Sogdians were using silver coinage in both places. The more recent work by Jonathan Karam Skaff (1998/1999) offers the most de-

tailed analysis in English regarding the finds of silver coinage in the Turpan region and its use, which in his argument peaked beginning in the 620s–630s.⁵ The assessments by the Gaochang State officials of the scale tax on commercial transactions and the disbursement of the coinage so collected in the form of salaries was, in his opinion, one of the main ways the coinage entered the local economy. However, some important aspects of the local system of taxation fell outside his purview, as is clear from the analyses of the tax system in the work of Sekio Shiro 關尾史郎, who argued that the scale tax constituted but a small portion of total tax revenues (Sekio 1994, p. 6).

In light of this work, we wish to address the following questions: In addition to the commercial tax levied on the Sogdians, what were other ways in which silver coins flowed into the local economy? Foreign merchants, envoys and other travelers might bring the Sasanian coins into Gaochang, but then they circulated locally amongst the civilian population, temples and government officials. Arguably, it was the local civilian population that was most involved in the circulation and use of the coins. If that was the case, then how did they acquire them? And apart from coinage, what else needs to be examined to provide a balanced picture of the functioning of the Gaochang economy? These issues are the focus of the following discussion.

There is considerable evidence that silver coins circulated routinely amongst the ordinary civilian population in Gaochang [Fig. 3]. Those employed in agricultural labor might use the coins for purchases or

Fig. 3. Silver drachms unearthed in Xinjiang: (left) obverse of Arab-Sasanian drachm with image of Khusro II and what appears to be overstamp of a Turkic (?) tamga, probably minted in the late 7th century; (center) reverse of Sasanian coin minted in Fars (S. Iran) or Ctesiphon (Iraq), possibly in regnal year 35 of Khusro II; (right) obverse of coin of Khusro II (590–628). Photos courtesy of Daniel C. Waugh.



receive payment in coin, pay their taxes in coin, and so on. For example, in the second year of Yanshou 延壽 (625), Tian Poji 田婆吉 rented several trees from Zhao Minger 赵明儿 for eight *wen* of silver coins; in the fourth year of Yanshou (627), Zhao Minger bought a craftsman with three hundred and eighty *wen* of silver coins; in the sixth year of Yanshou (629), Zhao Minger rented three *mu* 亩 (approx. 614 m²) of ordinary land from Zhao Bohuai 赵伯怀 with twenty *wen* of silver coins (Tang 1992–96, 2, pp. 240–42). Of course these transactions kept the coins in local circulation, whereas payment of taxes would reduce the amount of coins in circulation. There had to be external sources for maintaining that supply. There were various possibilities: compensation by the government for local production, transactions with merchants and travelers, or corvée compensated by the state. In another paper (Pei 2016b, pp. 56–65) we have examined how the government paid for locally produced wine that was then exported. One of the key areas involving payment was in the provisioning of foreign visitors traveling under government auspices, which will be the focus later in this paper.

The silk weaving industry in Turpan had developed since the age of the Sixteen Kingdoms (304–439 CE), when immigrants from the Central Plains fled disorders there, moving West through the Hexi Corridor [Fig. 4]. In the period of the Northern Liang 北凉 (397–439), the tax records begin to include items such as silk rent – collection of silk according to land assets, collection of silk according to the number of people per household, etc. The silk dyeing industry is documented in the period of Gaochang’s rule by the Kan 阚 family (second half of the 5th century) and obligations for payment of “official silk” continue in the period of rule there by the Qu 鞠 family (the 6th and first decades of the 7th centuries). As documented by Wu Min 武敏 (1987) from the official records, while it is not clear whether the government was much involved in

breeding the silkworms, it would buy or levy the cocoons and deliver them to the reeling craftsmen who in turn would receive “a considerable amount of *mi* 糜 [broom corn millet] according to their production of finished silk.” While the identity of the craftsmen is not specified, the evidence suggests production on a substantial scale under government auspices and payment in *mi*. In the late Qu period, the scale fee account of the Imperial Storehouse indicates that one Baijia Menzei “sold altogether in three transactions 170 *jin* 斤 [a unit of weight, 1 *jin* =1/2 kg] of silk, which required 2,720 *jin* of cocoons.” It is hard to imagine that one individual could have managed such a large transaction by himself. The evidence suggests the active involvement of merchants, “who would buy the silk directly from the producers and then sell it to foreign merchants.” Since such purchases from the local population would occur only irregularly, there would be no reason to draw up contracts which would have left a documentary record. The sale of silk could involve simply immediate payment in silver coin from the merchants traveling along the routes to the West.⁶

It is difficult to determine what the balance may have been amongst the various kinds of transactions involving silver coin which could explain how such coinage became available in Turpan. While he failed to provide specific examples, Moriayasu Takao (2007, p. 104) pointed out that along with the prosperity of long-distance trade and the frequent exchanges of trade caravans, merchants left their money and goods in the local society in various forms, such as transit duty, lodging fees, provisioning fees, purchase of other goods, repair charges, etc., which might promote

Fig. 4. Silk textile fragments found in Astana tombs, the one on right from Tomb No. 92. These date to the period of the Tang Dynasty and may have been woven locally. They are of interest for the “western motifs” of animals or birds in pearl roundels, designs popular, among other places, in Sogdiana.

Photos courtesy of Daniel C. Waugh.





Fig. 5. Agreement for buying a house, dated 613 CE. The unusual shape of such documents is due to their having been cut to create “burial shoes” for the deceased. That ensured they were preserved at the same time that it leaves many lacunae in the texts.

After: Selected Treasures of Turfan Relics, p. 116.

have existed.⁷ House purchase vouchers, which record transactions for the purchase of real estate, may help to answer that question [Fig. 5].

At present, four such vouchers are known from the period of the Gaochang State in addition to a voucher concerning the purchase of land. First of all, let us examine the relatively complete “Gaochang House Purchase Voucher of Sun Afushi 孙阿父师 in the Eighth Year of Yanshou (631),” which reads (Tang 1992–96, 2, p. 206)⁸:

On lunar November 18th of the Xinmao 辛卯 year of the eighth year of □□, Sun Afushi bought the house from Fan Xian 范显□□.

Three hundred wen of silver coins was paid for one house in the center of the city in the northeast district. Once the money was paid, the house was delivered.

The east side the house is separated from Guo Xiangxi’s 郭相慧 house by the courtyard wall; the south side faces the street, and the south side of the street is the courtyard wall of Guo Yangyang’s 郭养养 house.

[The west side of the house] is separated [from someone’s house] by the courtyard wall; the north side of the house is the courtyard wall of Zhai Zuohai’s 翟左海 house. Within the four quarters of the house [...].

If there is someone in the future who claims that the house is occupied and claims to be the owner of the house [...].

[...] If there is any burial gold found in the house, the house [...].

[...] The passage of the house which is used for transporting into it the firewood and forage and transporting out the waste still remains the same.

If there is someone in the future who claims that the house is occupied and claims to be the owner of the house, the landlord should be responsible for this. The two parties enter into a contract after the consensus is reached, and once the contract is concluded, neither side can go back.

If one party goes back, the party should pay the money which is as two times as the price of the house set in the contract to the other party who does not want to breach of contract. This is the private contract between the civilians and is valid for both parties. Each party should sign as evidence.

The person who wrote the contract: Jia □□.

the activity and development of local economy. Skaff (1998/1999) argues that “a major way for the silver coins to enter the local economy was through taxes on the Sogdian merchants.” He elaborates:

Although there is no documentary evidence, it is likely that merchants also used the silver coins to buy supplies and pay for transportation and lodging. Thus, by the means of governmental taxation of merchants and probably private transactions, Sasanian coins worked their way into the local economy. The silver coins became such a widely used medium of exchange that the government collected the land tax in silver specie, although those without coins could still pay their taxes in cloth. We can assume that governmental taxation of merchants was the most important means of bringing coins into the local economy... [p. 98]

However, he concludes that during the part of the 7th century when the Tang Dynasty government was still willing to accept silver specie in Turpan, “the coins appear to have been a minor component of the local government’s fiscal obligations” (p. 101).

Accommodation for travelers

Of particular interest to us here is the role coinage must have played in the arrangements made for visiting foreigners and traveling merchants. As Wang Su 王素 (2000, p. 540) has pointed out, even if direct evidence is hard to find, “the facilities of guest houses in the Gaochang State must have been very developed,” such inns made available by temples for visiting monks and nuns, by the Ministry of Soldiers, and by other government agencies. “At least so far, whether there were private inns in the Gaochang State is not yet clear,” although one might assume they should

Table 1: Table of Information in Gaochang House Purchase Contracts and House Land Purchase Contract

No.	Date	Contracting Parties	Type	Price	Location
1	584	Zhang Azhao 张阿赵; Monk Yuanhui 愿惠	Two houses	Five <i>wen</i> of silver coins	The east side of the house faces Zhang Acheng's 张阿成 house, the south side of street, the west side faces Zhang Zhaoyang's 张赵养 house, and the north side faces Zhang Acheng's house.
2	The seventh century ⁹	Zhao Huaiyuan 赵怀愿; Tian Liu Tong's 田刘通 son Afeng 阿丰	Two houses	Ten <i>wen</i>	Southeast district, the east side of the house is separated from Zhangjū Temple by the courtyard wall, the south side is separated from Zhao Huaiman's 赵怀满 house by the courtyard wall, the west side faces the street, and the north side faces the street.
3	The seventh century	Fan Abo 范阿伯; Zhu Alu 竺阿卢	House	Unspecified	Unspecified
4	631	Sun Afushi; Fan Xian □	One house in the center of the city	Three hundred of silver coins	Southeast district, the east side of the house is separated from Guo Xiangxi's house by the courtyard wall; the south side faces the street, and the south side of the street is the courtyard wall of Guo Yangyang's house, [...] is separated by the courtyard wall; the north side of the house is the courtyard wall of Zhai Zuohai's house
5	628	Zhao Shanzhong 赵善众; Sun Huibo 孙避伯; Fan Qingyue 范庆悦	Twenty <i>bu</i> of house land	Eight <i>wen</i> of silver coins	The house land is in Wucheng 武城xin's place, the east side faces the courtyard wall of Zhang Genu's 张客奴 house, the south side faces the courtyard wall of Shanzhong's 善众 place, the west side is separated from Zhao Haisiang's 赵海相 house by the courtyard wall, and the north side is separated from Zhang Yanshou's 张延守 house by the courtyard wall.

For comparison, here is a tabulation of information in other house purchase contracts from Gaochang:

These several contracts have features whose comparison may point to some connection with the establishment of inns for travelers. First of all, the location of all the houses is where traffic is convenient. For example, the house bought by Sun Afushi was in the northeast district, and the south side of the house faced the street; the house bought by Zhao Huaiyuan was in the southeast residential block, and both the west and north side of the house faced the street. Although the location of the two houses bought by Zhang Azhao was unspecified, the south side of the houses also faced the street. All the houses bought by these three people have the sides facing on streets which are in convenient proximity to the central area with a temple and square.¹⁰

Next, in three of the four house purchase vouchers (the contract of Zhang Azhao is incomplete; so we cannot tell in his case) there is a special instruction regarding whether gold was hidden in the house. While either the local population or transient merchants might have left such deposits, it seems more likely that the situation would arise when there was frequent turnover of residents. Given the substantial transient population in Gaochang at the time, the contracts might have been specifically addressing what was a common problem. With the exception of Zhu Alu though, the names of the contracting parties seem all to be Han Chinese.

Another aspect of the contracts may be suggestive here. Assuming Zhao Huaiyuan was a local resident, it would be reasonable to expect him to maintain con-

veniently situated houses such as those in the purchase document. Importantly, the price for his two houses was in fact much lower than what Sun Afushi paid for a single house. In fact, what Zhao Huaiyuan paid for two houses is similar what Zhao Shanzhong paid for twenty *bu* of house land. We might conclude then that the two houses bought by Zhao Huaiyuan had a small area with simple construction and equipment. In contrast, not only was the house bought by Sun Afushi very expensive, but also there was a special clause in the contract, viz.: "The passage of the house which is used for transporting into it the firewood and forage and transporting out the waste still remains the same." So it seems likely that Sun Afushi's house was equipped to handle large pack animals, such as camels and horses, which might be accompanying its lodgers. This would help explain why the price was quite high. If my inference is correct, this fully equipped house

bought by Sun Afushi might have been a private inn that would continue to engage in such business.

The merchants on the Silk Road with cargo carried by pack animals were undoubtedly the main lodgers of private inns. Moreover, merchants generally came in groups, which would mean they stayed in a building that might have had a large number of rooms [Fig. 6].¹¹ These foreign merchants lived in private inns, consumed food and other items, and paid for them



Fig. 6. Some of the impressive remains of Gaochang, the picture in the middle right showing the outside of the walls near the southern gate. Photographed in 2008; courtesy of Daniel C. Waugh.

with silver coins. So the consumption of merchants is an important way in which silver coins entered the local economy.

Payment for cartage

Turning now to another of the ways silver coins would have entered the local economy, let us look at a document “On the names of the civilians summoned to provide bullock carts and the given prices in Shichang County 始昌县 and other counties” (Tang 1992–96, 1, p. 428):

[...] [Someone provided the bullock cart] and was given six *wen* of silver coins. □□ Bao 保 provided one cow and was given eleven *wen* of silver coins.

[Someone provided two bullock carts]. Next, Sun Yan 孙延□ of Shichang County provided one cow and was given eleven *wen* of silver coins.

Anzu 安足 provided one cow and was given eleven *wen* of silver coins. [...]

[Someone] provided ten carts and one cow for riding and was given the short-distance price which was for fetching the Chang wood on the riverside. [...]

Names of the civilians summoned to provide bullock carts in Shichang County: Dong Anbo 董安伯 provided a cow and was given twenty-six *wen* of silver coins. [...]

[Someone was given] three *wen* of silver coins. Military Staff Officer Shiyou 师祐 provided one cow and was given twenty-six *wen* of silver coins. Liu Yanming 刘延明 provided one cart. [...] [Someone] provided one bullock cart.

[Someone provided] one [...] and was given thirty-nine *wen* of silver coins. Zhang Yanxu 张延叙 provided one cow and was given twenty-□ *wen* of silver coins. [...] thirteen *wen* of silver coins.

Daoming 道明 of Luo 罗 Temple provided one bullock cart and was given thirty-nine *wen* of silver coins. Zhang Bo'er 张伯儿 provided one bullock cart and was given thirty-nine *wen* of silver coins. Zhang Bo'er [...]

Zhang Boxiu 张伯臭 provided one cow and was given twenty-six *wen* of silver coins. Tang Huaiyuan 唐怀愿 provided one cart and was given [...] *wen* of silver coins. Tian Laide 田来得 provided one cow and was given twenty-□ *wen* of silver coins.

□ Haixi 海意 provided one cart and was given thirty *wen* of silver coins. And altogether eight bullocks were provided for Assistant Minister Shi Huantai 史欢太 to be carried to Wuqi 坞耆 and he was given the long-distance price....

The document shows that when the government requisitioned the cattle and the carts from the civil-

ians, the payment in silver coins to those providing bullock carts was divided into short-distance price and long-distance price. The long-distance payments were respectively thirteen *wen* for cart, twenty-six *wen* for cattle, and thirty-nine *wen* for cart and cattle; and the short-distance payments six *wen* for cart, eleven *wen* for cattle, and seventeen *wen* for cart and cattle. As Arakawa Masaharu (1989), who devoted a special study to this document, suggested, it is likely that this document dates from the Yanshou 延寿 reign (624–640). Since all the suppliers of long-distance carts and cattle were paid with silver coins in accordance with the regulations, no matter who they were (officials, civilians or monks), it is difficult to regard supplying of long-distance carts and cattle simply as the imposition of a heavy duty. The imposition of a long-distance horse tax had begun in the Zhongguang 重光 reign (620–624). The document we have here from the Yanshou period reflects a move away from the original compulsory requisition of horses for transportation to the hiring of long-distance carts and cattle and the stabilization of suppliers. This kind of reform made the proportion of the use of silver coins in the tax imposition increase. Moreover, worth emphasizing is the fact that size of the payments both for long-distance and short-distance hauling was not low.

Another document that reflects the royal government's payment of silver coins to civilians is one we refer to as the “Zhang Tuan'er 张团儿 Silver Coins Account” unearthed in Astana Tomb No. 388 (Liu 1997, pp. 73–75). This document has no calendar information, but the last part of the document about presenting the camelthorn firewood unearthed in the same tomb was in the twelfth year of Yanhe 延和 (613), so the date of the Zhang Tuan'er document may be close to it. The form of the document is to indicate sums paid in silver coins and the names of the recipients, with the amounts paid ranging one or two *wen* up to thirty *wen*. The recipients include officials, such as an assistant minister, a regular attendant, an interpreter, a military staff officer, etc., where the official positions are all noted before the names of the individuals. There are also names without indication of official position – “Zhang Tuan'er”, “Ma shamizi 马沙弥子”, etc -- who seem to be civilians. Others include a “Monk Fa□”, “Qulang Huanwu 鞠郎欢武”, “Qulang Caihuan 鞠郎财欢”, and so on. In some cases, the recipients are temples, e.g., “Yong'an Zhangling Temple 永安张令寺”, “Wulinku Temple 湾林窟寺” etc. There is no obvious connection between the amount paid and who the recipients are, but we may assume the document records compensation paid to officials, civilians, and temples for supplying goods or services. So, like the record of payment for supplying bullock carts, this document is also evidence as to how civilians would have been able to obtain silver coins from the government.

Table 2: Record of the receipts in silver coin from the sale of the temple's grain and the expenditures for which the money was allocated (Wu Zhen 1992/2009, pp.528-33).

1	Lunar October	Ten <i>wen</i> of silver coins was gained from ten <i>hu</i> of wheat and was used to buy □.
2	Lunar October	Thirty-eight <i>wen</i> of silver coins was gained from thirty-eight <i>hu</i> of wheat and was used to buy winter clothes for the temple.
3	Lunar October	Thirty <i>wen</i> of silver coins was gained from thirty <i>hu</i> of wheat and was used to buy five <i>hu</i> and one <i>dou</i> of □□□.
4	Lunar November	Three <i>wen</i> of silver coins was gained from four <i>hu</i> and five <i>dou</i> of millet and was used for daily expenses of the Winter Solstice.
5	Lunar November	Ten <i>wen</i> of silver coins was gained from five <i>dou</i> of wheat and fifteen <i>hu</i> of millet and was used to buy five <i>hu</i> of flax as the offerings of Buddha.
6	Lunar December	Five <i>wen</i> of silver coins was gained from seven <i>hu</i> of millet; one <i>wen</i> of silver coins was gained from one <i>hu</i> and four <i>dou</i> of millet and was used to buy flax.
7	Lunar December	Ten <i>wen</i> of silver coins was gained from sixteen <i>hu</i> of millet and was used to pay for the second part of the long-distance horse tax
8	Lunar January	Three <i>wen</i> of silver coins was gained from six <i>dou</i> of millet and two <i>hu</i> and nine <i>dou</i> of coarse rice and was used for New Year's Day.
9	Lunar January	Twenty-five <i>wen</i> of silver coins was gained from thirty <i>hu</i> of millet and five <i>hu</i> of coarse rice and was used to buy dung.
10	Lunar January	Thirty <i>wen</i> of silver coins was gained from twenty-six <i>hu</i> of millet and ten <i>hu</i> and five <i>dou</i> of wheat and was used to buy □ <i>hu</i> and nine <i>dou</i> of □□.
11	Lunar March	Three <i>wen</i> of silver coins was gained from three <i>hu</i> and nine <i>dou</i> of millet.
12	Lunar April	Sixty-nine <i>wen</i> of silver coins was gained from sixty-nine <i>hu</i> of coarse rice and was used to pay for lunar March's temporary collection of the official silk collected from the monks and the common people.
13	Lunar May	Three <i>wen</i> of silver coins was gained from three <i>hu</i> of coarse rice .
14	Lunar June	Six <i>wen</i> of silver coins was gained from five <i>hu</i> and four <i>dou</i> of wheat and was used to buy □□.
15	Lunar July	Three <i>wen</i> of silver coins was gained from two <i>hu</i> and seven <i>dou</i> of wheat.
16	Lunar August	Twelve <i>wen</i> of silver coins was gained from twelve <i>hu</i> of wheat and was used to pay for □'s [a certain month's] temporary collection of the long-distance horse tax.
17	Lunar August	Four <i>wen</i> of silver coins was gained from four <i>hu</i> of wheat and was used to buy two pieces of wood for repairing the bridge.
18	Lunar August	Eight <i>wen</i> of silver coins was gained from eight <i>hu</i> of wheat and was used to buy cart □.
19	Lunar August	Five <i>wen</i> of silver coins was gained from five <i>hu</i> of wheat and was used to buy one rim of a wheel.
20	Lunar September	One <i>wen</i> of silver coins was gained from one <i>hu</i> of wheat and was used to buy meat.

There were other possibilities for the local population to obtain coins, among them the production and provision of wine, which we will examine in detail in a later section of our paper.

The involvement of temples

The situation of temples, as suggested in the document just discussed and that cited earlier, was similar to that for ordinary laymen in Gaochang society: they too had to pay taxes and bear corvée, and they engaged in significant economic activity. As Wu Zhen 吴震 (1989/2009, 1990/2009, 1992/2009) has demonstrated, the temples had large-scale economic operations, in particular in the supply of grain and other agricultural products. He calculated that (excluding additional amounts that might have been traded through barter), one temple in a year received a total of 279 *wen* of silver coin for its grain, as detailed in Table 2 above. The units of measure are: 1 *hu* 斛 = approx. 1.7 bushels; one *dou* 斗 is about 1/10 of a *hu* (~a peck).

The majority of the income recorded here was used for the day-to-day expenses of the temple, the exceptions being that 91 *wen* was used to pay for the taxes of the royal government, such payments for the long-distance horse tax and the temporary collection of the official silk collected from the monks and the common people. As the table shows, the sales of grain also had significant seasonal differences. The sales in the six months of lunar February, March, April, May, June and July were significantly less than those of other months: there was no sale of grain in lunar February, and sales only once in each of the other five months, as one might expect because of the production cycle of local food crops. February to July was the main period for the growth of crops, and there would be new grain for storage only after the harvest period. As Wu Zhen has pointed out, the table does not record small amounts of grain used in barter trade or consumed by the people and dogs in the temple. In lunar

February, for example (not listed in the above table), there were three barter trades: “Four *hu* and eight *dou* of millet was used to buy two carts of camelthorn for managing □□ ditch”; “Two *hu* of wheat was used to buy □ carts of dung for the ditch field in the □ east”; and “Three *hu* of millet was used to buy one old *luoju* 洛举 [a tool for making bricks 砖]”. The amount of grain used in these deals was relatively small, but a similar amount of grain was used to exchange for silver coins in other months, for example, in lunar August “four *wen* of silver coins was gained from four *hu* of wheat and was used to buy two pieces of wood for repairing the bridge” (No. 17 in the above table), and in lunar September, “one *wen* of silver coins was gained from one *hu* of wheat and was used to buy meat” (No. 20 in the above table). Why did barter trade increase significantly in certain months? We might speculate that this is related to the number of foreigners in the market in different months. *Hu* merchants would try to choose the warm seasons and avoid the cold seasons for

long-distance transactions. Since lunar February was still in the cold season, the number of foreigners in the market would have been small, so there was more barter trade when silver coins were thus less abundant. In lunar August and September though, there were more Hu merchants coming to the market, so the grain was easily exchanged for silver coins. It is unlikely that the account tabulated above is complete, but it does reveal that the frequency of transactions during the year was not low and that it was easy to exchange even relatively small amounts of grain for silver coins. Most likely such transactions occurred only in the market, where they thus served as an important source for the income of temples in silver coins.

Moreover, as cited above in the document about payments for cartage, “Daoming of Luo Temple provided one bullock cart and was given thirty-nine *wen* of silver coins.” This is one of several such indications about the involvement of temples and shows that they had obligations similar to those of ordinary civilians, in return for which they could receive compensation from the royal government in silver coins at the long-distance short-distance rate.

Land tax

Let us now turn to the evidence about the role of silver coinage in the tax collection of the Gaochang State. Official records such as the *Zhoushu* 周书 state directly: “Tax is calculated on the basis of the area of the farmland and levied in the form of silver coins. If there is no silver coin, in the form of linen instead” (p. 915). Recent research that re-examines Turpan documents has questioned whether in fact that was the way the tax was collected in Gaochang.

Here are two of the key documents, which we will quote and then analyze. The first, dated 631, which we will call the Longzhi Account, reads as follows [Tang 1992-96, 1, p. 434]:

□ Longzhi 隆质 has four *mu* of land, Shi Azhong 史阿种 has four and a half *mu* 亩 and sixty *bu* 步 of land, He □yuan 和物愿 has sixty *bu* of land, Gao Yan □高延敢, Zhu Haizhong 朱海忠 has two *mu* of land, Fan Yuanhai 范元海 has three *mu* and forty *bu* of land, Feng Fangwu 冯方武 has five *mu* and sixty *bu* of land, □ Huairu □怀儒 has two and a half *mu* of land, Zhang Yuanyue 张元悦 has three and a half *mu* of land, Li Shanshou 李善守 has three and a half *mu* of land, Huang Nunu 黄奴奴 has two and a half *mu* and one hundred *bu* of land, Fan Qingyan 樊庆延 has two and a half *mu* of land, Jia Shanlai 贾善来 has two and a half *mu* and sixty *bu* of land, Kang Yanlong 康延隆 has seven *mu* of land, Xi Baoyue 系保悦 has two and a half *mu* of land.

On lunar June 7th of the Xinmao 辛卯 year of the eighth year of Yanshou, two *wen* of silver coins was paid.

Guangchang Temple 广昌寺 has four *mu* of land, Meng You□ 孟又□ has five *mu* of land, Zuo Wuxiang 左武相 has three *mu* of land, Bai Mu □ 白牧犊 has two *mu* of land, Tu Fabo 秃发伯 has four *mu* of land, Cao □□ 曹□□ has four *mu* of □, Yuan Yanbo 员延伯 has two *mu* and sixty *bu* of land, Zhao Zhongyang 赵众养 has four and a half *mu* of land, [...] Zhou Qinghuai 周庆怀 has six *mu* of land, Xia Yongshun 夏永顺 has three and a half *mu* of land, Jia Binu 贾婢女 has four *mu* of land, Fan Qinglong 樊庆隆 has two and a half *mu* of land, Liang Penghui 良朋悔 has three and a half *mu* of land,

On lunar June 7th of the Xinmao year of the eighth year of Yanshou, two *wen* of silver coins was paid.

The second document, which we will call the Xianshou 显守 Account, consists of several parts, found in Astana Tomb No. 78, whose epitaph is dated 642. While the document is undated, it likely is from the same period as one of the other texts found in the tomb that is dated 634. The relevant text reads [Tang 1992-96, 2, p. 42]:

[...] Monk has ninety *bu* of land and needs to pay [...] *wen* of silver coins;

General Xianshou [...] □ has ninety *bu* of land and needs to pay three *wen* of silver coins;

[...] one and a half of silver coins;

General Xianyou 显祐 has half *mu* and three □□ of land and needs to pay three *wen* of silver coins;

Monk Daofa 道法 has half *mu* of land and needs to pay [...] of silver coins;

[...] half *mu* and fifty *bu* of land and needs to pay three *wen* of silver coins;

Feng Boxiang 冯伯相 has ninety *bu* of land and needs to pay three *wen* of silver coins;

[...] Xiang 相 half *mu* of land and needs to pay two *wen* of silver coins;

Wang Mingxi 王明慧 has forty *bu* of land and needs to pay [...] of silver coins;

Qu Wenyu 鞠文玉 has sixty *bu* of land and needs to pay two *wen* of silver coins;

Kang Du 康犊[...] needs to pay one *wen* of silver coins;

Zhao Xian'er 赵贤儿 has sixty *bu* of land and needs to pay one [...] of silver coins;

Zhai Xi'er 翟慧儿 has thirty *bu* of land and needs to pay one *wen* of silver coins;

Zhao Xinhui 赵信惠 [...] needs to pay one *wen* of silver coins;

Linghu Huanxiang 令狐欢相 has sixty *bu* of land and needs to pay [...];

Zhao Luoyuan 赵洛愿 has sixty *bu* of land and needs to pay two *wen* of silver coins;

Monk Haihui 海惠 has half *mu* and thirty *bu* of land and needs to pay [...] of silver coins;
 Jiuju 究居 has sixty *bu* of land and needs to pay one *wen* of silver coins;
 Suo Sengbo 索僧伯 has sixty *bu* of land and needs to pay one *wen* of silver coins;
 Si □□ 思鼓□ Temple has seventy *bu* of land and needs to pay two *wen* of silver coins;
 Monk Daokai 道铠 has sixty *bu* of land and needs to pay [...] of silver coins;
 [...] *bu* of land and needs to pay one *wen* of silver coins;
 Monk Tanxu 昙鬲 has half *mu* and thirty *bu* of land and needs to pay three *wen* of silver coins;
 [...] and needs to pay four and a half *wen* of silver coins;
 Langzhong 郎中寺 Temple has one *mu* of land and needs to pay four and a half *wen* of silver coins;
 General Lai 来[...];
 Monk Haixiang 海相 has sixty *bu* of land [...] □ *yi wen* of silver coins;
 Shan Xiu'er 善臭儿 has sixty *bu* of land and needs to pay one *wen* of silver coins;
 [...] *bu* of land and needs to pay one [...] of silver coins;
 □ Military Staff Officer Shanhai 善海 has sixty *bu* of land and needs to pay one *wen* of silver coins;
 Military Staff Officer Ke'er 客儿 [...] four *wen* of silver coins;
 Zhao Xian 赵贤 □□□ *bu* of land and needs to pay two *wen* of silver coins;
 Official He Zhuzi 何祝子 has thirty *bu* of land and needs to pay □□ *wen* of silver coins;
 Anseng Jiali 安僧迦梨 has half *mu* of land □□ two *wen* of silver coins;
 labor man Xi Xiang 恇相 has sixty *bu* of land [...];
 [...] You 祐 has sixty *bu* of land and needs to pay [...] one *wen*;
 [...] Zhenjia 镇家 has one *mu* of land and needs to pay □ *wen* of silver coins;
 Dianlu 典录 [civilian official] Qingjun 庆峻 has sixty *bu* of land and needs to pay one *wen* of silver coins;
 [...]
 Monk □ Song 嵩 has thirty *bu* of land and needs to pay half *wen* of silver coins;
 Ding Shaoyou 丁绍祐 [...] thirty *bu* of land and needs to pay half *wen* of silver coins;
 [...] half *wen*;
 Monk Haifa 海法 has sixty *bu* of land and needs to pay [...] of silver coins;

[...] one *wen* of silver coins;
 Liu 刘 [...] □ and needs to pay one *wen* of silver coins;
 laborer Yinnai 寅柰 has sixty *bu* of land and needs to pay one *wen* of silver coins;
 laborer Zhong'er 众儿 has sixty *bu* of land and needs to pay [...]
 [...] *bu* of land and needs to pay half *wen* of silver coins;
 Zhai Huaixiang 翟怀相 has sixty *bu* of land and needs to pay one *wen* of silver coins;
 Shenbao 申保 [...] *bu* of land and needs to pay one *wen* of silver coins.
 Next, Zhubu 主簿 [civilian official] Da Xixia 大惠夏 □ [...]

There are differing opinions about the interpretation of the first document, the Longzhi Account, ambiguous as it is regarding whether it records a regular land tax or some extra levy, and what the basis for the calculation of the payment was (two *wen* per household or only two *wen* for every 50 or so *mu* of land held by several households). Possibly the payment indicated is in lieu of long-distance corvée obligation.¹²

On the other hand, the taxation rates indicated in the Xianshou Account were relatively explicit: generally 4 *wen* or 8 *wen* of silver coins per *mu*, and in some instances, 4.5, 4.8, 5.3 and 6.9 *wen* per *mu*. Yet the document presents its own problems, given the fact that the rates levied per unit of land vary so widely. Scholars have been divided as to whether this reflects not assessment of total land possessed but rather assessment on cultivated official land as opposed to wasteland, where the differential rates may also say something about the degree to which officials, as opposed to ordinary laborers, actually cultivated the land they held (Tang 1982, p. 319; Lu 1983, p. 69; Miyazaki 1985, p. 85). Sekio Shiro (1988, pp. 125–26) even has gone so far as to suggest that the subject here is not land rent as such in 7th-century Gaochang, and that the document reflects a different method of calculation dating from the earlier Northern Liang period. In light of this evidence and the varying interpretations, it does seem clear that the levies of the Gaochang State were keyed to the output of farmland and the processed products, such as wheat, millet, wine, silk floss. etc. Some types of “land rent” could be paid in silver coin. It is of interest then to break down the different categories of revenue according to the objects on which the taxes were levied.

Payments in kind: rent wheat, millet and rice

It is the documents from the late period of the Gaochang State which clearly record the imposition of land rent and in particular refer to payments in kind

of rent wheat, rent millet and rent coarse rice. Some of the documents do not specify the amount of farmland involved, although one can infer that the rent was calculated differentially according to the amount of land that was farmed. There are payments of eight *dou* of millet and four *dou* of coarse rice, where the prices of millet and coarse rice were similar to those in the market. Other documents recorded simultaneously the amount of farmland and the amount of paid grain in each case, from which it can be calculated that the payment standard was three *hu* per *mu*. While early researchers believed that this was the payment standard for wheat, millet and other crops as land rent, Xie Chongguang 谢重光 pointed out that the payment rate of three *hu* per *mu* should be that for rent wine of a vineyard on waste land, and other scholars such as Sekio Shiro agreed (Xie 1989, pp. 82–83; Sekio 1993, p. 38). In fact the rate of payment for rent wheat and rent millet is not clearly indicated in the documents. The best estimate now, by Wu Zhen (1992/2009, pp. 541–42), is that land rent of common people was levied at one-tenth of their assets; this would seem to translate into a rate of three *dou* per *mu*. In fact fragmentary documents found in Kara-Khoja Tomb No. 91 from the Northern Liang 北凉 period (first half of 5th century) (Tang 1992–96, 1, p. 78) include one specific indication of a rate of three *dou* and seven liters of wheat per *mu*; one can assume this standard continued to be used later in the Gaochang State.

Rent wine

It seems that the imposition of rent wine had already existed in Gaochang since the Northern Liang era. All people who owned vineyards needed to pay rent wine, be they civilians, officials, monks, nuns or temples. The normal payment was in kind, a lone exception to this noted below. A number of documents from the period of the Gaochang State, while not explicit about the source of the rent, can be inferred to relate to payments rent wine at a rate of three *hu* per *mu* (Liu 1997, pp. 77–78; Tang 1992–96, 1, p. 445). Among those documents are two examples where the payment by Fa Song of Zhao Temple was three *hu* and two *dou*, which lets us estimate the area of vineyard assessed at one *mu* and sixteen *hu*.

Careful palaeographic analysis of the documents that we argue relate to rent wine reveals interesting details about the complexities of the collection system and the various destinations to which the rent wine was to be delivered, following government instructions.¹³ It was used for the consumption of imperial kinsmen, for the professional

service personnel in all gates of the capital city, the monument hall, wing-room, and other places, and for the sacrifices and alms-giving of the government. With one exception, which relates to a delivery for a foreign destination, the documents all point to domestic consumption. While there is no explicit indication that any payments were intended for support of foreign envoys who might be in Gaochang, as we will suggest later, one can infer from some of the provisioning documents that wine was involved.

There is only one example which clearly recorded the payment of rent wine with silver coins, a document recording “Payment of Rent Wine with Silver Coins Collected from Kang Baoqian 康保谦 in the Fourteenth Year of Yanshou [637],” where the amount paid was two *wen* of silver coins (Tang 1992–96, 2, p. 22). It is likely that the absence of other documents recording such a payment with silver is an indication this possibility occurred only toward the end of the Gaochang State; one might assume that such payments were but a small portion of the state’s tax revenue in silver.

Kang Baoqian’s payment merits additional comment. The possession of a vineyard obviously was a prerequisite for the payment of rent wine in the Gaochang State; farmland on which were levied rent wheat and rent millet did not pay rent wine. Some accounts record the area of the vineyard before the record of each household’s payment; in certain instances, while the area of the vineyard is specified, there is an indication of “no rent” because, one assumes, of some special exemption. Since Kang Baoqian had a vineyard and the obligation to pay rent wine, then why did he not pay the rent wine like others (in kind), but paid silver coins instead? In the same year when he paid retroactively the silver coins for rent wine due for the previous year, Kang Baoqian spent more than twenty *wen* of silver coins buying another vineyard [Fig. 7]. In the documents unearthed in the same tomb, there is an agreement which shows that Kang Baoqian spent

Fig. 7. The Astana cemetery and another of the documents recycled for a burial, this one a contract for the purchase of a vineyard. After: Selected Treasures of Turfan Relics, pp. 138, 116.



seven *wen* of silver coins and one *hu* and four *dou* of grain hiring Liu Sihai 刘祀海. Furthermore, there are documents which record Kang Baoqian's payment in silver coin of the taxes for camelthorn firewood supplied for the courier station and spun silk, all of which suggests that he was well supplied with silver coins. This should not surprise us, as his name indicates he was a Sogdian, whose family came from Samarkand. Presumably he was an astute businessman, buying another vineyard at a time when he already worked one and paying his taxes in silver coins, where he had managed to postpone the payment of his rent wine levy. One might infer that he would have been selling the wine produced in his own vineyard and then using the profit to pay the arrears of the rent wine levy in silver.

Taxes on commerce

As earlier scholars have emphasized, other sources through which the Gaochang State obtained silver coins included taxes on commercial transactions. The scale tax account found in Astana Tomb No. 514 (Tang 1992-96, 1, pp. 450-52) has attracted much attention, since it specifies a wide range of goods and names the individuals involved in the transactions. The goods included precious metals such as gold, silver, copper, chalcopryrite (a copper-bearing ore), spices, turmeric root, sal ammoniac, medicines, silk, etc. While the groups involved in the transactions included people from Qiuci 龟兹, Gaoche 高车, and Jushi 车师, as well as Han Chinese, the majority of those involved on both sides of commodity transactions were Sogdians. The royal government weighed the goods and taxed by weight but with differential rates depending on the type of goods. Payments were in silver coin although the total collected in any given year did not exceed 500 *wen* and thus did not constitute the government's main source of income.

Zhu Lei 朱雷 (1980/2000) has argued that scale fees were only one of several kinds of commercial taxes paid to the Gaochang State by merchants (mainly Hu merchants) and that Zang 臧 money was also a kind of commercial tax. However, beyond the fact that we know Zang money was stored along with the scale tax collections in the Imperial Storehouse, it is difficult to know exactly what this levy was (Tang 1992-96, 2, pp. 2-3). While there were undoubtedly other kinds of commercial taxes, Zang money seems not in fact to have been one of them. It may have been a penalty imposed on foreign merchants who were caught trying to avoid paying tax on private transactions (Song 2001/2003; Pei 2016a, pp. 146-47).

Expenditures

The paucity of documents makes it very difficult to calculate what the total revenues of the Gaochang



Fig. 8. One of the many documents of the Ministry of Soldiers unearthed at the Astana cemetery. After: Selected Treasures of Turfan Relics, p. 117.

State in silver coinage may have been. What we do know is that figures for expenditures of silver coin vastly exceed what we can document about revenues and thus lead to the conclusion that there was a great deal of income for which we cannot precisely account.

One kind of expenditure, which presumably was incurred with some regularity, was the purchase of horses from the neighboring nomads. Several documents concerning the purchase of horses by the Gaochang Ministry of Soldiers in the twenty-seventh year of Yanchang 延昌 (587) were unearthed in Astana Tomb No. 48 [Fig. 8]. Although many of the documents are incomplete, they contain a good deal of credible evidence about the size of the purchases of horses with silver coin. Wang Xinmin 王新民 who analyzed this material, concluded from six of the documents that from April to August in that year, the Ministry of Soldiers bought a total of 122 horses and spent 4,154 *wen* of silver coins (Tang 1992-96, 1, pp. 338-44). A seventh document, not included in that calculation but from the same year (no month specified) recorded the purchase of two horses for sixty-seven *wen* of silver coins. If an eighth document that is substantially incomplete is also included, then only in roughly half a year in 587, the Gaochang State entered into eight transactions in which it paid over 4000 *wen* of silver coins for horses.

Since there was a long period in which the Gaochang State recognized the neighboring nomadic rulers as their sovereigns, part of the revenues in silver coins



Fig. 9. Tomb figurines (*mingqi*) depicting foreigners on the Silk Road: (left). A groom, from Astana Tomb No. 206 of Zhang Xiong (d. 633) and his wife Lay Qu (d. 689); (right) a foreign monk or merchant, collection of the Gansu Provincial Museum, Lanzhou. Photos courtesy of Daniel C. Waugh.

was turned over to those nomads, the Tiele and the Turks. The historical sources indicate that the Tiele “constantly stationed important ministers in the Gaochang State, and if there were Hu 胡 merchants coming and going, (the minister) would levy a tax on the (Hu merchants) and send the tax to the Tiele” (*Suishu*, p. 1848). Subsequently, in the reign of Tong Yehu Qaghan of the Western Turkic Qaghanate (618–628 or 630), “all the kingdoms in the Western Regions were granted *Jielifa* [颍利发 a kind of rank or title of the Turkic Qaghanate] and one *Tuton* 吐屯 [a Turkic official] was sent to supervise and govern them and to urge the imposition of tax” (*Jiutangshu*, p. 5181). Although there is no explicit indication that the Turkic qaghan actually collected a commercial tax in Gaochang the situation probably was similar to that with the Tiele, who seem to have done so.

Expenditures in support of foreign visitors

There was a large number of foreigners in the Gaochang State, whose visits often were supported by the government [Fig. 9]. Wu Yugui 吴玉贵 (1990) calculated that it received up to 9300 official envoys in a single year, to which one must add the presence of foreign merchants, monks and others.¹⁴ While this example may be an extreme case, with the written account an exaggeration intended to emphasize the local ruler’s generosity, Xuanzang 玄奘 reports his courteous reception by Qu Wentai 麴文泰. When the pilgrim monk departed, the ruler gave him “a hundred *taels* 两 of

gold, thirty thousand *wen* of silver coins, five hundred *pi* 匹 of damask silk and spun silk, etc., which were used as the capital for the Master’s journey for twenty years, as well as thirty horses and twenty-five laborers.” (Hui Li 2000, p. 21). Obviously if the items other than silver coinage are converted into their silver equivalent, the grand total of the gifts was very substantial indeed. Royal expenditures for visitors, even if not on such a lavish scale, surely would have represented a significant item in the state budget.

This paper will now examine how in Gaochang food and wine were supplied for foreigners. A good many documents unearthed in the Astana and Khara-Khoja tombs provide evidence. Wu Yugui has analyzed several of them which pertain specifically to the provisioning of visiting Turks; an English translation of those documents can be found in an appendix to one of his articles (Wu Yugui 1990; for the translations, 1991/2012, pp. 29–40). He dates the texts in question to the later 6th and early 7th centuries and suggests that the documents may constitute “the provisioning record from a Gaochang guesthouse that received foreign emissaries.” In our analysis, we consider as well several other provisioning documents.¹⁵

Some of the documents specify precisely what kind of food was supplied, most commonly wheat flour, broomcorn millet and wheat bran, and in some cases parched flour and *mi* rice. Provisions also undoubtedly included wine and meat, although the documents are not so specific. With regard to wine, the evidence in part is to be deduced from the context in which provisioning documents are found, either along with separate documents pertaining specifically to wine, or sometimes copied on the reverse of ones that can be related to the levying of rent wine for domestic consumption. It seems clear that where wine was involved, the rent paid was given directly to foreign emissaries by the producers, not transmitted via a government intermediary. The provisioning documents generally indicate who provided the supplies and when, what the quantities were, and who the recipients were. While the quantities involved varied, the recipients ranged from individuals of higher rank to those at the bottom of the social scale; records of the supplies for foreigners are simply included in sequence with those directed to domestic consumers.

A close examination of certain documents pertaining to the provisioning of grain reveals some additional information about the way supplies were collected and distributed that in its turn sheds light on the nature of revenue collection by the Gaochang Government. Kara-Khoja Tomb No. 33 contains the following provisioning document relating to collections from one Zhongbao 众保 and others (Tang 1992–96, 1, pp. 238–40):

[...] Zhongbao 众保 transmitted orders to use twenty-two *hu* and five *dou* of parched flour which was delivered to Wang Chongzhen 王崇真 and Buhe 步呵 to supply for twenty-^[?] [...] official pack animals.

On the fifth day, General Tiannu 天奴 transmitted orders to use three *hu* of flour which was delivered to Kang Gousao 康苟扫 and Zhang Ayou 张阿祐 to supply for [...] Xi 奚, the prince envoy of He State 何国 [one of the nine oasis states in the Central Asia during the period of the Sui and Tang Dynasties, that is Nine Surnames of Zhaowu].

[Some] monk transmitted orders to use twenty-five *hu* of parched flour which was delivered to Official Shulai 恕赖 to supply for the government to tan two hundred and fifty pieces of sheepskins. And then Zhonglang 中郎 [official title] Jiazi 伽子 transmitted orders

[...] to use several *hu* of grain which was delivered to Yin Hei'er 阴黑儿 and Jia Baoshou 贾保守 to supply for Youdan 由旦 and other people, altogether 5 Tutun [Turkic official] envoys of Yiwu 堽昊 [today Hami in Xinjiang] as the food during the journey.

[in a different, smaller, hand:] delivered to Yan Youzi 颜有子 and Jia □'er 贾□儿 [...] And then Cheng Yuan 程愿 supplied one *hu* and three *dou* of wheat which was delivered to Linghu Xiaowen 令狐孝文 [...].

The only reference in the entire document to the supply of wheat as a grain is that in the final section, where it has been added in smaller characters. Flour and parched flour were not direct levied objects of land rent. If they were used for provisioning, where were they from? While my interpretation is somewhat speculative, given the fact that the document has lacunae and is incomplete, what we seem to have here is an indication that there was no difference in source or recipient when it came to supplying both un-processed and processed grains (flour and parched flour). If, as seems to be the case, the payers of land rent in grain were delivering some of it directly to the recipients as official provisions, then it seems that these same producers were delivering as well the processed flour. A fragmentary document obtained by Aurel Stein (now British Library OR.8212/982), seems to confirm that land rent could be paid in grain or in flour, and that such payment could be made either to a government department or to specified private individuals. Where land rent levies were being delivered directly to foreign emissaries, we can assume the latter were receiving them free of charge as part of the official provisioning the government provided.

What is the evidence for the provisioning of meat? As with the case for provisioning of wine, most of our evidence must be inferred from documents that spec-

ify measures or quantities, but do not name the product itself. The critical indicator in this case is the term *jin* (approximately 1.3 pounds), that seems to be used specifically to designate a quantity of meat. Key evidence is in documents found along with ones found in Astana Tomb No. 307 relating to provisioning of grain and taken into account above. There are two parts of a "Gaochang Account on Payment of Silver Coins" which read as follows (Tang 1992-96, 1, pp. 419-20):

(I)

Six *wen* of silver coins was paid to Baoshou 保受, and three *wen* of silver coins was paid to Hu'er 虎儿. And then on 30th, five *wen* of silver coins was paid to Xiao 孝 [...].

Several *wen* of silver coins was paid to Hongzhou 弘周, three *wen* of silver coins was paid to Hu'er, and four *wen* of silver coins was paid to Pipi 皮皮. [In the latter half of May], there was two hundred and sixty-four and a half *wen* of silver coins in total. And then on June 1st, eleven *wen* of silver coins was paid to Pipi. And then six *wen* of silver coins was paid to Baoshou, one *wen* of silver coins was paid to Xiao Zhongzi 孝忠子, and one *wen* of silver coins was paid to Baoshou.

And then on 2nd, five *wen* of silver coins was paid to Er'er 儿儿, five *wen* of silver coins was paid to Hongzhou, and three *wen* of silver coins was paid to Xiaozhong 孝忠. □□□

(II)

[...] And then four *wen* of silver coins was paid to Hongzhou. And then on 14th [...]

[Several *wen* of silver coins was paid to Pipi?] And then nine *wen* of silver coins was paid to Hongzhou and Hongzhou still owed half a *jin* [of meat?]; and then two *wen* of silver coins was paid to Zhang Qianchong 张谦忠; and one *wen* of silver coins was paid to Hongzhou 弘周. And then on 15th, seven *wen* of silver coins was paid to Hongzhou since Hongzhou supplied two *jin* of Chang meat 羴肉; and then five *wen* of silver coins 4 was paid to Hu'er. And then on 16th, eight *wen* of silver coins was paid to Qianzhong 谦忠, and two *wen* of silver coins was paid to Yang 养 [...].

Before proceeding to analysis of the texts, we should first note that in the absence of any official titles for the recipients of the payments, we might assume they were ordinary civilians. As far as the quantities of coins paid out are concerned, the total paid to four individuals on June 1 was 19 *wen*; on other days 12 *wen* possibly was normal. However, there is an added line (in a different hand) indicating a total of 264.5 *wen*, which likely was for half a month, given the fact that accounts in Gaochang apparently were kept on a semi-monthly basis.

The reverse of the second of these is a provisioning document relating to a certain Huya Duzi 虎牙都子 and others, in which the quantities of whatever was provisioned are measured in *jin* (for its translation, see Wu Yugui 1991/2012, p. 33). We may assume then that both sides of the document related to provisioning of meat, measured in *jin*, where at least in one instance the subject is specified as a particular kind of meat ("Chang meat"). The reverse of the first part of the document quoted above is a text about the purchase of sheep for sacrifices, in which the key phrase is: "buy a sheep, which is converted to ninety-nine *jin* of payable meat." So the government was in the business of obtaining meat from civilians for its various purposes. And since meat was not included as one of the levies in kind paid by the population, silver coins were used to pay for it. However, it also seems likely, as a close reading of the Huya Duzi document shows, that only some members of an embassy might receive the meat gratis, whereas others probably would have had to pay for it themselves in silver coin. An analogous situation might be that recorded in another provisioning document from Astana Tomb No. 154 (Tang 1992–96, 1, p. 368), which details special allocations for certain high-ranking officials in a way that suggests they received the provisions for free, even though we can infer that those of lower rank, including members of an embassy, might have had to purchase specialty food items in the market.¹⁶ It is entirely possible that such purchases were quite sizeable and thus added significantly to the inflow of silver coinage into the Gaochang State.

The foreign merchants from the West and the flow of coins

Apart from envoys, the foreign merchants in the Gaochang State certainly were important as a source of silver coinage, a fact that has long been known and need be only treated in summary fashion here. The most frequently cited source regarding their involvement in commercial transactions is the scale fee record, "The Gaochang Account on Weighing Money by the Imperial Storehouse," to which one should also add the "Gaochang Book for Registering Names of Caomo Mentuo 曹莫门陀 and Others" (unearthed in Astana Tomb No. 31 which dates from ca. 620). In particular, the individuals involved can be identified as Sogdians, whose surnames specify which Central Asian city was their home. The first of these documents lists 16 individuals with the surname Kang (from Samarkand), 10 He (Kushaniyah, north of the Zaravshan River), 6 Cao (Kabudan), 5 An (Bukhara) and one Shi (Chach/Tashkent); that is a total of 38 Sogdians.¹⁷ The great majority of the transactions recorded in the document involved Sogdians, 13 of the cases ones in which they were the only contracting parties. The second document, the name register, includes 45

Sogdians, 33 of them with the surname Cao.¹⁸ While there is other evidence about Sogdians who were permanent residents of the Turpan region, as Skaff has suggested (1998/1999, p. 95), since for the most part the individuals listed in the scale fee document were each involved in but a single transaction, they "appear more likely to have been itinerant, moving from oasis to oasis buying and selling goods in search of profit." Presumably then they required accommodation while in Gaochang, but, unlike the envoys who figure in the provisioning records discussed above, these Sogdian merchants do not appear in such records. They were private caravaneers, not official emissaries, and thus presumably had to arrange accommodation at their own expense. One might hypothesize that they made such arrangements through contacts in the resident Sogdian community with individuals such as Kang Bouqian, whose sales of wine might have been to the visitors. Resident Sogdians were engaged in hunting, planting grapes, making wine and other activities in the settlement. However, agricultural activities are little in evidence in the imagery of the Sogdian funeral beds found in China, suggesting that perhaps this was but a minor part of their activity. If that is the case, then presumably purchase of produce from other Turpan residents would have been essential.

The nature of these transactions though, has left little trace in the written record. One of the rare examples which reflect what we assume may have been a common occurrence is in a provisioning document from 622 specifying that "Kang Jiang 康将 buy three sections of meat, together with his own twelve pieces of meat and one *hu* and five *dou* of flour, for rewarding fifteen Hu customers." While some of the other recipients named in this document seem to be of high status, the allocation specified here for the fifteen Hu is quite modest, probably no more than a day's food for that number of individuals. Unlike the more prominent recipients, who appear in a number of other entries, these fifteen Hu are mentioned but once. As earlier analysis has indicated, they must have had other options for accommodation and provisions: there were private inns such as the one we have posited belonged to Sun Afushi, and as Wu Zhen has shown (1989/2009; 1990/2009; 1992/2009), there was considerable expansion of agricultural production by temples, which must have gained a substantial share of the market for grain and whose income in silver coins undoubtedly came at least in part from such market transactions. The private transactions involved may well have involved payment in silver coins.

Conclusion

What may seem to be a rather narrowly focused study about the sources and circulation of silver coinage in the Gaochang State has broader implications for our

study of the historic silk roads and their impact on local societies. Earlier literature has tended to focus on the long-distance commerce which passed through the Turpan region, largely in the hands of foreign merchants, as a source for the influx of silver coinage via the imposition of taxes on commercial transactions that were paid to the state. A close examination of the extant Turpan documents suggests a number of other ways in which silver coinage would have entered local circulation and been used for various kinds of payments, not all of which had to do with the long-distance trade. That said, many aspects of this economic activity at least indirectly relate to communication and economic activity along the Silk Road: the purchase of real estate, the expansion of agricultural production, the provisioning of travelers, be they merchants or emissaries.¹⁹

The degree to which the local oasis urban economy was based on commerce, as opposed to agriculture is one of the major issues on which there has been substantial disagreement.²⁰ In her analysis of the Silk Road trade, Hansen maintains that whatever the size of that trade, its impact on local economies such as that of Turpan was minimal (see e.g., Hansen 2010, p. 640). However, she also has provided a useful framework for distinguishing the different degrees to which certain social groups would have been involved (Hansen 2005a). In arguing that one finds evidence for the “commercialization” of the local economy (as indicated by the use of silver currency), she adduced some examples of how even ordinary people (“those least affected by the Silk Road Trade”) employed that currency in fulfilling certain obligations, even if the international trade as such was not the main source of their livelihood. In this regard, the evidence of several leasing documents involving agricultural resources such as a jujube tree and vegetable gardens is of interest (Tang 1992–96, 1, pp. 279, 292, 385, 446). The lessees paid in coin. There is good reason to think that the production of jujubes and the development of vegetable gardens in these examples may well have been in the first instance not to serve local consumption but rather to meet a market demand from the foreigners who were passing through.

What we have tried to do in this essay is deepen the understanding of how that local economy functioned in a period when arguably it was flourishing not simply because of the long-distance trade or active promotion by the local government but because there were markets supplied by local production and serving both local needs and catering to those of transient foreigners. An example of the limitations of stressing just the long distance trade in particular commercial products is the rise and fall of the silk industry in Gaochang, where it seems to have boomed at a time that

the silk from Central China was less available. Yet when stability was re-established under the Tang Dynasty and the central production of silk again became dominant, the broadly based local economy in Gaochang seems not to have suffered.²¹ The limitations of documentation present a real challenge, of course, for learning about the functioning of the day-to-day economy; obviously more study (and, might one hope, the unearthing of new evidence), is needed. But we should at least hesitate to assert that such economies were dominated *either* by commerce, *or* by agriculture, as both were important and very much interconnected.

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References

Arakawa 1989

Arakawa Masaharu 荒川正晴. “Koji-shi ko shokoku no enko-sha uhi ni tsuite 麴氏高昌国の遠行車牛について—Gaochang muou nian chja shi chang deng xian cheniuzi ming ji gei jia wenshu 高昌某年傳始昌等縣車牛子名及給價文書 [On the Long-Distance Cattle Wagons of the Gaochang State in the Reign of the Qu Family: A Study of “The Record of Items of Cattle Wagons and Price Documents in Shichang and Other Counties in a Year in the Gaochang State]. *Tulufan chutu wenwu yanjiu hui huibao* 吐魯番出土文物研究会會報 [Journal of the Turpan Unearthed Cultural Relics Research Association], Nos. 16, 17 (1989): 1–4, and 4–6.

Arakawa 2003

_____. *Oashisu koka to kyaraban kōeki* オアシス国家とキャラヴァン交易 [The oasis countries and the caravan trade]. Tokyo: Yamakawa Shuppansha, 2003.

Enoki 1974/1993

Enoki Kazuo 榎一雄. “Ming mode Suzhou 明末的蘇州” [Suzhou at the end of the Ming Dynasty]. In: *Uno Tetsuto sensei hakuju iwai kinen tōyō-gaku ronsō* 宇野哲人先生白壽祝賀記念東洋学論叢 [Memorial Festschrift for Professor Uno Tetsuto.

- Symposium of Oriental Studies] Tokyo, 1974; reprinted in: *Enoki Kazuo chosaku shu* 榎一雄著作集 [Collected Works of Enoki Kazuo], Vol. 3 (Tokyo: Kyuko Shoin, 1993): 163-66.
- Enoki 1985/1993
 _____ “Sichou zhi lu guoji maoyi shi de tezhi 丝绸之路国际贸易史的特质” [Characteristics of the History of the International Trade on the Silk Road] (drafted in 1985). In: *Enoki Kazuo chosaku shu* 榎一雄著作集 [Collected Works of Enoki Kazuo], Vol. 5, Tokyo: Kyuko Shoin, 1993: 3-10.
- Hansen 2005
 Valerie Hansen. “The Impact of the Silk Road trade on a local community: The Turfan Oasis, 500-800,” in Etienne de la Vaissiere and Eric Trombert, eds. *Les Sogdiens en Chine*. Paris: Ecole Francaise d’Extreme Orient, 2005: 283-310.
- Hansen 2010
 _____ 韩森. “Cong Tulufan, Sama’erhan wenshu kan sichou zhi lu shang de maoyi 从吐鲁番、撒马尔罕文书看丝绸之路上的贸易” [Trade on Silk Road Viewed through Turfan and Samarkand Documents], In: Xinjiang Tulufan xue yanjiu yuan 新疆吐鲁番学研究院 [Xinjiang Turfan Academy], ed. *Tulufan xue yanjiu - di san jie Tulufan xue ji ouya youmu minzu de qiuyuan yu qianxi guoji xueshu yantaohui lunwen ji* 吐鲁番学研究——第三届吐鲁番学暨欧亚游牧民族的起源与迁徙国际学术研讨会论文集 [Turfan Studies: Proceedings of the Third International Academic Symposium on the Study of Turfan and on the Origin and Migration of Eurasian Nomadic Peoples], Shanghai: Shanghai Shanghai guji chubanshe, 2010: 623-40.
- Hansen 2011
 _____ “The Place of Coins and their Alternatives in the Silk Road Trade.” In: Shanghai Bowuguan 上海博物館編, ed. *Sichou zhilu guguo qianbi ji silu wenhua guoji xueshu taolunhui wenji* 丝绸之路古国钱币暨丝路文化国际学术研讨会论文集 [Proceedings of the Symposium on Ancient Coins and the culture of the Silk Road]. Shanghai: Shanghai shuhua chubanshe, 2011: 83-113. Chinese translation, 114-35.
- Hansen 2017
 _____. *The Silk Road: A New History with Documents*. New York; Oxford: Oxford Univ. Pr., 2017.
- Hou 1989
 Hou Can 侯灿. “Gaochang gucheng zhi 高昌故城址” [The Site of the Ancient City of Gaochang]. *Xinjiang wenwu* 新疆文物 [Xinjiang Cultural Relics] 1989/3: 1-10.
- Hui Li 2000
 Hui Li 慧立. *Da Tang Ci’en Si Sanzang fashi zhuan* 大唐慈恩寺玄奘法师传 [Biography of Xuanzang]. Beijing: Zhonghua shuju, 2000.
- Jiang 1994
 Jiang Boqin 姜伯勤. *Dunhuang Tulufan wenshu yu sichou zhi lu* 敦煌吐鲁番文书与丝绸之路 [Dunhuang and Turpan Documents and the Silk Road]. Beijing: Wenwu chubanshe, 1994.
- Jiutangshu* 1975
Jiutangshu 舊唐書 [Old History of the Tang Dynasty]. Beijing: Zhonghua shuju, 1975.
- de la Vaissière 2005
 Étienne de la Vaissière. *Sogdian Traders: A History*, tr. by James Ward. Leiden; Boston: Brill, 2005.
- Li 2003
- Li Jian, ed. *The Glory of the Silk Road: Art from Ancient China*. Dayton: The Dayton Art Institute, 2003.
- Liu 1997
 Liu Hongliang 柳洪亮. *Xinchu Tulufan wenshu jiqi yanjiu* 新出吐鲁番文书及其研究 [Newly Unearthed Turfan Documents and Their Study]. Urumqi: Xinjiang renmin chubanshe, 1997.
- Lu 1983
 Lu Kaiwan 卢开万. “Shilun Qushi Gaochangguo shiqi de fuyi zhidu 试论麹氏高昌国时期的赋役制度” [On the Taxation and Corvée System of the Gaochang State in the Reign of the Qu Family]. In: *Dunhuang Tulufan wenshu chutan* 敦煌吐鲁番文书初探 [A Preliminary Study of Dunhuang Turpan Documents]. Wuhan: Wuhan dasxue chubanshe, 1983.
- Lu Xiangqian 1992
 Lu Xiangqian 卢向前. “Gaochang Xizhou sibainian huobi guanxi yanbian shulue—Dunhuang Tulufan wenshu jingji guanxi zhongshu zhiyi 高昌西州四百年货币关系演变述略——敦煌吐鲁番文书经济关系综述之 [A Brief Comment on the Evolution of Monetary Relations during Four Centuries in Gaochang - A Summary of Documents on the Economic Relations between Dunhuang and Turfan]. In: Idem, ed. *Dunhuang Tulufan wenshu lungao* 敦煌吐鲁番文书论稿 [Dunhuang and Turfan Manuscripts]. Nanchang: Jiangxi renmin chubanshe, 1992: 217-66.
- Marshak 2002
 Boris I. Marshak. “Central Asia from the Third to the Seventh Century.” In: Annette L. Juliano and Judith A. Lerner, eds. *Nomads, Traders and Holy Men Along China’s Silk Road*. Silk Road Studies VII. Turnhout: Brepols, 2002: 11-22.
- Marshak and Negmatov 1996/2003
 _____, and Numan N. Negmatov. “Sogdiana.” Ch. 10 in: *History of civilizations of Central Asia*. Vol. III. *The crossroads of civilizations AD. 250 to 750*. B. A. Litvinsky et al., eds. Paris: UNESCO, 1996: 233-80. (In Chinese: *Zhongya wenming shi* 中亚文明史, tr. by Ma Xiaohe. Beijing, 2003).
- Miyazaki 1985
 Miyazaki Junichi. Haseiki izen no To-Urufan chiho no nogyu seisan ni suite 八世紀以前のトゥルファン地方の農業生産について” [On Agricultural Production in Turpan Area before the 8th Century]. *Bukkyo daiga daigakuin kenkyu ka kenkyu hogaoku* 仏教大学大学院研究科研究報告 [Research Bulletin of College for Postgraduate Buddhist University] 13 (1985): 75-91.
- Moriyasu 2007
 Moriyasu Takao 森安孝夫. *Shirukurōdo to Tō teikoku* シルクロードと唐帝国ドと唐帝国 [The Silk Road and the Tang Empire]. Kobo no sekaishi, 5. Tokyo: Kodansha, 2007.
- Pei 2013
 Pei Chengguo 裴成国, “‘Gaochang zhubu Zhang Guan deng chuanguong zhang’ zai yanjiu 高昌主簿张绾等传供帐>再研究” [A Re-examination of the “Gaochang Supply Account of Zhang Guan and others”]. *Xiyu yanjiu* 西域研究 [Studies on the Western Regions] 2013/4: 67-73.
- Pei 2016a
 _____. “Sichou zhilu yu Gaochang jingji——yi Gaochang

guo de yinqian shiyong yu liutong wei zhongxin 丝绸之路与高昌经济——以高昌国的银钱使用与流通为中心 [The Ancient Silk Road and the Economy of the Gaochang Kingdom: From the Perspective of Usage and Circulation of Silver Coins under the Gaochang]. *Xiyu Wenshi* 西域文史10 (2016): 127-69.

Pei 2016b

_____. "Gaochang Zhang Wushun deng putao mushu ji zujiuzhang zaiyanjiu — jianlun Gaochangguo putaojiu de waixiao 〈高昌张武顺等葡萄亩数及租酒帐〉再研究——兼论高昌国葡萄酒的外销" [A Further Study on 'Gaochang's Account on the Area of Vineyards and Rent Wine of Zhang Wushun and Others' and on Wine Export of the Gaochang State]. In: *Tulufan xue yanjiu yuan* 吐鲁番学研究院 [Turpan Academy of Sciences], *Tulufan yu sichou zhilu jingji dai gaofeng luntan ji di wujietulufan xue guoji xueshu yantao hui lunwen ji* 吐鲁番与丝绸之路经济带高峰论坛暨第五届吐鲁番学国际学术研讨会论文集 [Proceedings of Turpan and the Silk Road Economic Belt Summit Forum and The Fifth International Symposium on Turpan Studies]. Shanghai: Shanghai guji chubanshe, 2016: 56-65.

Rong et al. 2008

Rong Xinjiang 荣新江, Li Xiao 李肖 and Meng Xianshi 孟憲實, comp. *Xinhua Tulufan chutu wenxian* 新获吐鲁番出土文献 [Newly Unearthed Documents in Turfan]. Beijing: Zhonghua shuju, 2008.

Sekio 1988

Sekio Shiro 關尾史郎, "'Monzyo' to 'seisi' no Kosyokoku" [The Gaochang State in "Official History" and in "Documents"]. *Toyoshi Kenkyu* 東洋史研究 [The Study of Oriental History] 47/3 (1988): 119-32.

Sekio 1993

_____. "Torufan syutudo Kaosyokoku zeisei kankei monzyo nokisoteki kenkyu(5) トゥルファン出土高昌国税制関係文書の基礎的研究(五)——一條記文書の古文書学的分析を中心として" [The Basic Study of the Documents Concerning the Taxation in Kao-Ch'ang Excavated from Turfan: A Paleographic Analysis of Tiao-Chi-Wen-Shu (5)], *Niigata daigaku Jinbun Kagaku Kenkyū* 新潟大学人文科学研究 [Study of Cultural Science of Niigata University] 83 (1993): 21-70.

Sekio 1994

_____. "Torufan syutudo Kaosyokoku zeisei kankei monzyo nokisoteki kenkyu(7) トゥルファン出土高昌国税制関係文書の基礎的研究(七)——一條記文書の古文書学的分析を中心として" [The Basic Study of the Documents Concerning the Taxation in Kao-Ch'ang Excavated from Turfan: A Paleographic Analysis of Tiao-Chi-Wen-Shu (7)]. *Niigata daigaku Jinbun Kagaku Kenkyū* 新潟大学人文科学研究 [Study of Cultural Science of Niigata University] 86 (1994): 1-26.

Sha 1998

Sha Zhi 沙知, *Dunhuang qiyue wenshu jijiao* 敦煌契约文书辑校 [The Techniques of Editing Dunhuang Contract Documents]. Nanjing: Jiangsu guji chubanshe, 1998.

Sheng 1999

Sheng Yuyun 盛余韵 (Angela Sheng). "Zhongguo xibei bianjiang liu zhi qi shiji de fangzhi shengchan: xin chanpin jiqi chuangzhi ren 中国西北边疆六至七世纪的纺织生产: 新产品及其制人" [Textile Production in China's Northwest Fron-

tier during the Sixth to Seventh Century: New Products and Their Creators]. *Dunhuang Tulufan yanjiu* 敦煌吐鲁番研究 [The Journal of Dunhuang and Turfan Studies] 4 (1999): 323-73. (Translation of "Innovations in Textile Techniques on China's Northwest Frontier, 500-700." *Asia Major*, 3rd ser., 11/2 [1998]: 117-60).

Skaff 1998/1999

Jonathan Karam Skaff. "Sasanian and Arab-Sasanian Coins from Turfan: Their Relationship to International Trade and the Local Economy" *Asia Major*, 3rd ser., 11/2 (1998): 67-115. (Chinese translation in *Dunhuang Tulufan yanjiu* 敦煌吐鲁番研究 [The Journal of Dunhuang and Turfan Studies] 4 [1999]: 419-63).

Skaff 2003

_____. "The Sogdian Trade Diaspora in East Turkestan during the Seventh and Eighth Centuries." *Journal of the Economic and Social History of the Orient* 46/4 (2003): 475-524.

Skaff 2005

_____. "Documenting Sogdian society at Turfan in the seventh and eighth centuries: Tang Dynasty census records as a window on cultural distribution and change." In: Étienne de la Vaissière and Éric Trombert, eds., *Les Sogdiens en Chine*. Paris. École française d'Extrême-Orient, 2005: 311-41.

Song 2001/2003

Song Xiaomei 宋晓梅. "Duguan wenshu zhongde Zang qian yu Gaochang duiwai maoyi zhongde jige wenti 都官文书中的减钱与高昌对外贸易中的几个问题" [Zang Money in the Documents of Gaochang Capital Officers and a Series of Questions about Gaochang's External Trade]. *Xiyu yanjiu* 西域研究 [Western Regions Studies] 2001/4; reprinted in Idem., *Gaochangguo — gongyuan wu zhi qi shiji sichouzhilu shangde yige yimin xiaoshehui* 高昌国——公元五至七世纪丝绸之路上的一个移民小社会 [The Gaochang State: A Small Immigrant Society on the Silk Road During the 5th to 7th Centuries] (Beijing: Zhongguo shehui kexue chubanshe, 2003): 372-95.

Suishu 1973

Suishu 隋書 [History of the Sui Dynasty]. Beijing: Zhonghua shuju, 1973.

Tang 1982

Tang Zhangru 唐長孺, "Xinchu Tulufan wenshu jianjie 新出吐鲁番文书简介" [A Brief Introduction to the Newly Excavated Turpan Documents]. *Dongfang xue bao* 東方學報 [Oriental Journal] 54 (1982); reprinted in Idem., *Shanju cunqao* 山居存稿 [Manuscript Collection in Mountain Residence] (Beijing: Zhonghua chubanshe, 1989): 310-32.

Tang 1992-96

_____, ed. *Tulufan chutu wenshu* 吐鲁番出土文书 [The Documents Unearthed in Turfan]. 4 vols. Beijing: Wenwu chubanshe, 1992-96.

Tsumura and Yamauchi 2003

Tsumura Makiko and Yamauchi Kazuya. *Sasanian and Arab-Sasanian silver coins from Xinjiang: Sasanian Type Silver Coins in the Xinjiang Museum*. Silk Roadology: Bulletin of the Research Center for Silk Roadology (Shiruku Rodo-gaku kenkyo), 19. Nara: Nara International Foundation, 2003.

Tyler-Smith 2006

Susan Tyler-Smith. *Review of: Tsumura and Yamauchi 2003*. In: *The Numismatic Chronicle* 166 (2006): 484-86.

Wang 2004

Helen Wang. *Money on the Silk Road: the Evidence from Eastern Central Asia to c. AD 800*. London: British Museum Press, 2004.

Wang Su 2000

Wang Su 王素. *Gaochang shi gao. Jiao tong bian* 高昌史稿. 交通编 [Gaochang's history. An edited compilation]. Beijing: Wenwu chubanshe, 2000.

Wu Min 1987

Wu Min 武敏. "Cong chutu wenshu kan gudai Gaochang diqu de cansang yu fangzhi 从出土文书看古代高昌地区的蚕桑与纺织" [Research on Sericulture and Textiles in the Ancient Gaochang Area Based on Unearthed Documents]. *Xinjiang shehui kexue* 新疆社会科学 [Xinjiang Social Science] 1985/5: 92-100.

Wu Yugui 1990

Wu Yugui 吴玉贵. "Shilun liangjian Gaochang gongshi wenshu 试论两件高昌供食文书" [An Analysis of Two Gaochang Provisioning Texts]. *Zhongguo shi yanjiu* 中国史研究 [Journal of Chinese Historical Studies] 1990/1: 70-80.

Wu Yugui 1991/2012

Wu Yugui 吴玉贵. "Turks in the Gaochang Provisioning Texts." In: *Chinese Scholars on Inner Asia*. Luo Xin, ed. Roger Covey, translation editor. Bloomington, IN: Indiana University Sinor Research Institute for Inner Asian Studies, 2012: 1-40 (Original: "Gaochang gong shi wenshu zhong di tu jue 高昌供食文书中的突厥." *Xibei minzu yanjiu* 西北民族研究 [Northwest Journal of Ethnology] 1991/1: 46-66.

Wu Zhen 1989/2009

Wu Zhen 吴震. "Tulufan chutu Gaochang mousi yueyong hu dou zhangli qianshuo 吐鲁番出土高昌某寺月用斛斗帐历浅说" [A Brief Analysis of Account and Calendar of Monthly Usage of Hu and Dou in a Temple in the Gaochang State Excavated from Turpan]. *Wenwu* 文物 [Cultural Relics] 1989/11; reprinted in: *Wu Zhen Dunhuang Tulufan wenshu yanjiu lunji* 吴震敦煌吐鲁番文书研究论集 [A Collection of Wu Zhen's Articles on Dunhuang and Turfan Manuscripts] (Shanghai: Shanghai guji chubanshe, 2009): 568-82.

Wu Zhen 1990/2009

_____. "Siyuan jingji zai Gaochang shehui zhong de diwei" 寺院经济在高昌社会中的地位" [The Status of the Temple Economy in Gaochang Society]. *Xinjiang Wenwu* 新疆文物 [Xinjiang Cultural Relics] 1990/4; reprinted in: *Wu Zhen Dunhuang Tulufan wenshu yanjiu lunji* (Shanghai, 2009): 556-67.

Wu Zhen 1992/2009

_____. "Qishiji qianhou Tulufan diqu nongye shengchan de tese - Gaochang siyuan jingji guankui 七世纪前后吐鲁番地区农业生产的特色——高昌寺院经济管窥" [Characteristics of Agricultural Production in the Turpan Area around the 7th Century: From the Perspective of the Temple Economy in Gaochang], Vol. 1 of *A Study on the History of Economic Development in Xinjiang* [新疆经济开发史研究] (Xinjiang renmin chubanshe, 1992); reprinted in *Wu Zhen Dunhuang Tulufan wenshu yanjiu lunji* (Shanghai, 2009): 526-55.

Wu Zhen 1996/2009

_____. "Tulufan chutu quanqi wenshu de biaocong kaocha 吐鲁番出土券契文书的表层考察" [A Survey of the Voucher and Contract Manuscripts Unearthed in Turfan]. *Dunhuang Tulufan yanjiu* 敦煌吐鲁番研究 [The Journal of Dunhuang and Turfan Studies] 1 (1996); reprinted in *Wu Zhen Dunhuang Tulufan wenshu yanjiu lunji* (Shanghai, 2009): 409-44.

Wu Zhen 1999/2002

_____. "Asitana-Halahahezhuo gumuqun kaogu ziliao zhong suoajian de huren 阿斯塔那 - 哈拉和卓古墓群考古资料中所见的胡人." *Dunhuang Tulufan yanjiu* 敦煌吐鲁番研究4 (1999): 245-64. In English, as: "Hu" Non-Chinese as They Appear in the Materials from the Astana Graveyard at Turfan, tr. by Valerie Hansen and Zhang Guangda. *Sino-Platonic Papers*, No. 119. Philadelphia: Univ. of Pennsylvania, July 2002.

Xia 1957/2017

Xia Nai 夏鼐. "Zhongguo zuijin faxian de Bosi Sashan chao yinbi 中国最近发现的波斯萨珊朝银币" [Newly Found Sassanid Persian Silver Coins in China]. *Kaoguxuebao* 考古学报 [Journal of Archeology] 1957/2: 53-64, 116-17; reprinted in *Xia Nai Wenji* 夏鼐文集 [Collected Works of Xia Nai], 5 vols. (Beijing: Shehui kexue wenxian chubanshe, 2017): Vol. 2.

Xie 1989

Xie Chongguang 谢重光. "Qushi Gaochang fuyi zhidu kaobian 麹氏高昌赋役制度考辨" [Textual Research on the Taxation and Corvée System of the Gaochang State in the Reign of the Qu Family]. *Beijing shifan daxue xuebao* 北京师范大学学报 [Journal of Beijing Normal University] 1989/1: 80-88.

Yan 1967

Yan Wenru 阎文儒. "Tulufan de Gaochang gucheng 吐鲁番的高昌故城" [The Ancient City of Gaochang in Turfan]. *Wenwu* 文物 [Cultural Relics] 1962/7-8: 28-32+ 1 pg. ill.

Zheng 1995/1997

Zheng Binglin 郑炳林. "Tang Wudai Dunhuang zhongzhi linye yanjiu 唐五代敦煌种植林业研究" [Research on Forestry in Dunhuang in the Period of the Tang Dynasty and the Five Dynasties]. *Zhongguo shi yanjiu* 中国史研究 [Journal of Chinese Historical Studies] 1995/3: 32-38; reprinted in *Idem., Dunhuang guiyijun shi yanjiu* 敦煌归义军史研究 [Study of the History of the Army of Righteous Return in Dunhuang] (Lanzhou: Lanzhou daxue chubanshe, 1997): 192-204.

Zhoushu 1971

Zhoushu 周書 [History of the Zhou Dynasty]. Beijing: Zhonghua shuju, 1971

Zhu 1980/2000

Zhu Lei 朱雷. "Qushi Gaochang wangguo de 'chengjiaqian' - Quchao shuizhi lingshi 麹氏高昌王国的'称价钱' - 魏朝税制零拾" [Weighing Price in Kingdom of Gaochang in the Reign of the Qu Family: A Detailed Study of the Taxation System in the Reign of Qu Family]. *Wei Jin Nan Bei Chao Sui Tang shi ziliao* 魏晋南北朝隋唐史资料 [Historical Materials of the Wei, Jin, Southern and Northern Dynasties and Sui and Tang Dynasties] 4 (1980); reprinted in *Idem., Dunhuang Tulufan wenshu luncong* 敦煌吐鲁番文书论丛 [Collection of Dunhuang Turpan Document Studies] (Lanzhou: Gansu renmin chubanshe, 2000): 69-81.

Zhu Yingrong 1990/2006

Zhu Yingrong 朱英荣. "Qiuci jingji yu Qiuci wenhua 龟兹经济与龟兹文化" [The Qiuci Economy and Qiuci Culture]. *Xinjiang daxue xuebao* 新疆大学学报 [Journal of Xinjiang University] 1990/3: 29–41; reprinted in *Qiuci wenhua yanjiu* 龟兹文化研究 [The Study of Qiuci Culture], Vol. 1 (Urumqi: Xinjiang renmin chubanshe, 2006).

Notes

1. Xia's collected works (1957/2017) contain reprints of his most relevant essays; in particular his "Newly Unearthed Sassanid Persian Silver Coins in Turpan, Xinjiang" and "Summary on Sassanid Persian Silver Coins Unearthed in China." Discussion of other studies of this material and references to the work in Chinese may be found in Pei 2016a.

2. A catalogue of the Wuqia and one other recently discovered hoard has been published in Japanese (Tsumura and Yamauchi 2003), but as a reviewer has pointed out, in part because of the poor condition and inadequate cleaning of many of the specimens, its accuracy and detail are somewhat compromised (Tyler-Smith 2006). The approximation is that by Stephen Album, (cited here from Hansen 2011, p. 97; Album's essay in Chinese is published in the same conference volume). Note that the Arab-Sasanian coin depicted on the left in Fig. 3 is one found at Wuqia. For additional observations on some of the problems regarding our knowledge of the Sasanian coins in China and in particular those from Turfan, see Skaff 1998/1999, esp. 69–77, where, *inter alia*, he makes some critical observations about the reliability of Xia Nai's data. Citations to Skaff are to the English original of his article, not its Chinese translation.

3. A better photograph of the document is in Li 2003, p.118. For a translation, see Hansen 2017, pp. 181–82. Li on p. 120 also reproduces and explains a loan agreement of Zhang Haihuan, dated 665 (from Astana tomb no. 4), in which the amounts loaned are in silver coins.

4. The standard, broad history of the Sogdians in English is that by de la Vaissière 2005. Skaff (2003, 2005) analyzed in some detail the census and other documentary data for the Sogdian presence in Turpan. For an extensive bibliography of the publications about Sogdians in China, see *Xinxi yu cankao* 信息与参考 [Information and Reference] 2015 /11 (总第 21 期), an annual published by the Dunhuang Academy, pp. 137–70.

5. Marshak (2002, pp. 15, 18) pointed out that in about 509 CE, Sogdiana was incorporated into the newly established Hephthalite Empire. Around that time locally minted coins stopped being used in Sogdiana due to an influx of Sasanian coins supplied by Persia to the Hephthalites. Sogdian merchants soon brought these Sasanian silver coins to China. In the second half of the sixth century, with the rise of the Turks and their protection of the Sogdian caravans, the flow of the Sasanian coins increasingly passed along the northern routes of the Silk Road. This then could help explain how in the late 6th century, silver coinage became the main currency in the Gaochang State. See also the detailed discussion of these issues by Skaff 1998/1999, pp. 81–86.

6. It is worth emphasizing here that the scale fee record, while extremely valuable for what it tells us about a certain part of the commerce in Turpan, is limited when it comes to transactions involving silk, which commonly would not

have been sold by weight and thus not entered in the record. This may be one explanation for why Valerie Hansen's analysis emphasizing what she sees as a relatively small volume of "Silk Road" trade would seem to underestimate what may actually have been occurring. See Skaff 1998/1999, p. 93.

7. If Wu Yugui's (1990) estimate of Gaochang's annual reception of official envoys numbering up to 9300 people is accurate, accounting for one quarter of the total population, that alone would have taxed the ability of the town to accommodate all of them.

8. In the quotations from documents which follow, the symbol □ will indicate where a character is missing or unclear, and [...] will indicate where there is a larger lacuna in the text.

9. On dating issues, see Wu Zhen 1996/2009.

10. Information about the shape and structure of the Ancient City of Gaochang can be seen in Yan 1967 and Hou 1989. Surviving in the southwest of the existing outer city are the remains of a temple, around can be seen the remains of the southeast residential block and the northeast residential block. Around the temple is a square where the sellers might have displayed goods and where transactions might have taken place.

11. By analogy here, in the Sogdian homeland "the shopkeepers and craftsmen lived in two-storey houses with several rooms, but mainly did business and worked in rented shops and workshops located in wealthier areas. Coins have often been discovered in these shops" (Marshak, in Marshak and Negmatov 1996/2003, pp. 242–43). If house leasing for business purposes was common amongst the Sogdians in Central Asia, they might also have done the same in Turpan. While there is no specific evidence of Sogdian period caravanserais, it is possible that the courtyards of Sogdian castles served such a function (see de la Vaissière, pp. 191–93).

12. For the various interpretations see Pei 2016a, p. 141.

13. My detailed analysis of the documents can be found in Pei 2016a, pp. 148–53.

14. Although the many so-called "official envoys" were in fact a grouping of private caravans, the difference between the envoys and separate trade caravans was not large and the numbers of individuals involved in the latter fairly substantial. (See Enoki 1974/1993, pp. 163–66).

15. For a listing of the documents and specific references and for details of my analysis, see *ibid.*, pp. 153–62.

16. There is some disagreement over whether the difference in who received the food gratis was related to the identity of the envoys (Wu Yuqi 1990, p. 76) or whether the basis for a differential calculation was a matter of personal food intake (Wang Su 2000, p. 562).

17. Skaff gives a higher total of 41 and thus a somewhat different breakdown of the family names (1998/1999, p. 94); his statistics are the ones cited by Hansen (2005, p. 291; 2017, p. 161). For the surname identifications, see Wu Zhen 1999/2002, p. 4.

18. Cf. Wu Zhen (1999/2002, p. 5) who cites somewhat different statistics from this document, a total of 41 Sogdians, at

least 28 of whom had the surname Cao. His study also deals with the evidence about permanent Sogdian and non-Sogdian foreign residents of Turfan, as does Skaff 2003 (with a focus on the Sogdians).

19. In any such consideration, there is always the question of what goods might best be included in "Silk Road" trade, as opposed to those which might arguably be the concern mainly of the domestic economy (on this distinction, see, e.g., Arakawa 2003, pp. 10-13). Where, for example, does one put wine, which elsewhere in Eurasia clearly was a good that was traded over long distances even as it was consumed locally? Of course in this case, one important difference might be in the modes of transportation which were most commonly used to transport goods. Roman wine consignments, after all, would have been cargo in rather large ships.

20. Japanese scholarship has focused on these issues; see the different opinions by Mano Eji, Matsuda Hisao, Mori Masao and Moriyasu Tako, cited in Pei 2016a, pp. 166-67, notes 206-09. It is important to recognize that generalizing for all of the oasis states may be misleading, since there were regional differences. For example, see Zhu Yingrong's analysis (1990/2006, pp. 161-63) of the commodity economy of the Qiuci Kingdom, where a local focus only on agriculture would have been insufficient to support the construction and decoration of the grottoes and other civic projects. See also the comments of Wang 2004, pp. 93-94.

21. It would be a mistake, of course, to assume that local production, some of it intended for the international market, simply withered away at the onset of the Tang period. There is plenty of evidence to the contrary (see Sheng 1999).

THE CENTRAL ASIAN TIES OF A TENTH-CENTURY MUSLIM RULER IN EGYPT

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The sultans who ruled Egypt and Syria between 648 AH/1250 CE and 792/1390 were born in Central Asia or were direct descendants of Central Asians. The earlier Tulunid dynasty (254–92/868–905) was founded by the son of a Central Asian named Tulun who had been brought into the Islamic world to serve in the ‘Abbasid caliph’s military as a *mamluk* (slave soldier). There is very little evidence that in either period these military rulers highlighted their Central Asian origins through titles or the use of symbols specifically tied to their family origins (Treadwell 2017, p. 37). An exception is the policies of one Muhammad ibn Tughj ibn Juff (323–34/935–46), the grandson of a Central Asian-born mamluk, who established rule over Egypt and Palestine of the dynasty known as the Ikhshidids (323–58/935–69).

Evidence to demonstrate Ibn Tughj’s memory of his family’s Central Asian origin can be found in two types of historical data. The medieval narrative sources record how Ibn Tughj sought from the ruling ‘Abbasid caliph in Baghdad an honorific title (*laqab*) at a time when holding a caliphal granted *laqab* was considered prestigious. What made his request unique was that he wanted the title, al-Ikhshid, a Central Asian pre-Islamic title. The first half of this article will analyze that story.

The second historical source is numismatic, that is, a coin struck by Muhammad ibn Tughj in Egypt. As the second part of this article will show, the coin includes a design which is uniquely Central Asian and is evidence that memory of symbols from a pre-Islamic Central Asian world survived in that of 4th/10th century Egypt. In analyzing this coin, we will first consider how one can (and cannot) use numismatic evidence.

Political Background

In 358/969, Sunni ‘Abbasid Egypt was conquered by the Fatimids, an Isma‘ili Shi‘ite dynasty. During the preceding 35 years Egypt, Palestine and occasionally other parts of Greater Syria was governed by one family (or its leading military figure) known as the Ikhshidids.

Al-Ikhshid, whose full name was Abu Bakr Muhammad ibn Tughj ibn Juff, was the third generation of his family to serve the ‘Abbasid caliphate.¹ His grandfather, Juff, was among the mamluks imported from non-Islamic Central Asia, probably the Ferghana region. His father, Tughj, began his career in Iraq where Muhammad b. Tughj was born on 15 Rajab 268/8 February 882. Tughj went on to serve the Tulunid dynasty of Egypt and Syria. He held the governorships of Damascus, Tiberias, and Aleppo and was one of the most important Tulunid generals.² Muhammad b. Tughj gained his first administrative and military experience during this period, serving as governor of Tiberias for his father (Ibn Sa‘id 1899, p. 5).

In 292/905 the ‘Abbasid general Muhammad ibn Sulayman ended the Tulunid dynasty. Tughj successfully transferred his allegiance to Muhammad ibn Sulayman and was rewarded the governorship of Aleppo. This momentary change in fortune came to naught as Tughj’s new patron was arrested and charged with withholding tribute from the caliphal court. The general, Tughj, and his two sons Muhammad and ‘Ubayd Allah were all imprisoned (Ibn al-‘Adim 1951, p. 91; Ibn Taghri Birdi 1943/3, p. 135). Tughj died in prison in 294/906, while his sons were released shortly thereafter.

Political intrigues in Baghdad in 296/908 forced Muhammad ibn Tughj to flee to Syria, where he found a new patron.³ Within a year Ibn Tughj was in Egypt continuing in the service of the same man and later his son. His career took another step forward when another governor of Egypt made him governor of Amman and the region east of the Jordan River. Career opportunities continued to improve for him as he built up marriage alliances and political ties with key figures in Baghdad. He established a stronger administrative and military record with another stint in Egypt and then the governorship of Damascus. This line of progress culminated with his appointment as the governor of Egypt with a letter reaching Fustat (part of modern Cairo) on 7 Ramadan 321/31 August

933 to that effect. Muhammad ibn Tughj was in Damascus at the time and sent an agent to Egypt as his representative.⁴ Thirty-two days later, the 'Abbasid caliph named someone else as governor of Egypt and Muhammad ibn Tughj's first governorship ended without his ever entering the country.

In Baghdad, the 'Abbasid Caliph al-Qahir (320–22/932–34) was blinded and removed from office on 6 Jumada I, 322/29 April 934 and al-Radi (322–29/934–40) was proclaimed the new caliph. By 323/935 political and economic conditions in Egypt had reached an almost anarchical state. The troops of the appointed governor were rioting over their lack of pay; the homes of the financial minister were being looted; the son of a former governor was attempting to establish his own governorship; the populace of Fustat was suffering economic tribulations; and bedouin raids on agricultural settlements had increased. In the middle of the crisis, news of the appointment (or technically, reappointment) of Muhammad b. Tughj as governor reached Egypt. The promotion of the governor of Damascus was the result of his connections in Baghdad including important marriage ties (for details, see Bacharach 1975, pp. 592–94). The situation in Egypt deteriorated further before his arrival with a rebellion of pro-Fatimid military forces in Egypt calling upon the Shi'ite Caliph-Imam in North Africa for military aid.⁵ This time Muhammad b. Tughj went to Egypt with a contingent of his own troops.

Upon his arrival, Ibn Tughj quickly set about establishing his control. By the end of 324/November 936 Ikhshidid forces had effectively defeated the pro-Fatimid forces. Due to their own internal problems and the leadership in Egypt of Muhammad ibn Tughj and his effective successor, the African eunuch, Kafur, the Fatimids would not attack Egypt again until the country found itself facing serious political and economic problems in 358/969 (for an overview, see Lev 1988). To ensure continuity and stability within Egypt, Ibn Tughj accepted the former governor and treasurer into his administration and moved against raiding tribal groups and looters, making looting a capital crime. He then used the revenues coming into his hands to build up his own military forces. Arguing from silence is always dangerous but the lack of references to internal economic problems in Egypt during Muhammad b. Tughj's years as governor creates the impression that he was successful in establishing relative peace and prosperity.⁶

The title al-Ikhshid

One piece of evidence that Muhammad b. Tughj's sense of association with Central Asia was strong, although there is no evidence he ever went there, involves the elaborate title he sought for himself from his nominal

overlord, the Caliph al-Radi in Baghdad. In 326/938 Ibn Tughj asked the caliph for an honorary title (*laqab*), specifically for the *laqab* al-Ikhshid. The granting of a *laqab* was not unusual, but it was normally associated with a particular military or political event. For example, slightly earlier a eunuch and military leader in Baghdad received a *laqab* for his victory over the Fatimids. Another very important military family in Iraq, the Hamdanids, received their *laqabs* for their military actions on behalf of the 'Abbasid caliph, and the Buyids, another extended family but this time with Shi'ite tendencies, when controlling Baghdad forced the Sunni 'Abbasid caliph to award them their *laqabs*. Muhammad ibn Tughj did not receive his *laqab* al-Ikhshid for a specific military action, nor was he in a position in Iraq to force the caliph to award it. He acquired it through bribery, gifts, court connections, and possible threats to support the Shi'ite Fatimids in North Africa. Not only was the method by which Muhammad ibn Tughj acquired his *laqab* unusual, but also so was the title.

The most common *laqab* for powerful figures in the 'Abbasid world were formed by an appropriate descriptive noun, e.g. *Sayf* or sword, combined with *al-Dawla* (implying the State or, in this case, the caliph's government). Buyids, Hamdanids and even an earlier 'Abbasid wazir had *laqabs* in which the second part was *al-Dawla*, but Muhammad ibn Tughj did not. It is possible that the acquisition of a *laqab*, which included *al-Dawla* implied a relationship in which the individual was, theoretically, a defender of the caliph and the 'Abbasid caliphate. While Muhammad ibn Tughj fit the latter definition in his role as defender of Sunni lands against the Isma'ili Shi'ite Fatimids, he was not in Baghdad protecting the reigning caliph. Muhammad b. Tughj specifically requested the *laqab* al-Ikhshid that is, a title held by pre-Islamic Central Asian rulers.

When Ibn Tughj's request for this title reached the reigning 'Abbasid caliph al-Radi, the caliph asked his chamberlain what the term meant. He was informed that it referred to the "King of the Farghanians," just as other titles were applied to kings of other peoples (Ibn Sa'id 1899, p. 23; Ibn Taghri Birdi 1944/4, p. 237). The caliph then replied that as Muhammad ibn Tughj was descended from a Farghanian, that is from his grandfather Juff, "we will not be stingy with him on this account" (Ibn Sa'id 1899, p. 23). The wording in the chronicles suggests that it may have been a put-down by the caliph and his court (Bates 2001, p. 284). Muhammad b. Tughj was thus invested with this unique honorific title along with appropriate gifts from the caliph, and henceforth, was known as al-Ikhshid.⁷

The official designation of the title al-Ikhshid reached

Fustat in Ramadan 327/July 939 although unofficial word had arrived in the Egyptian capital at least nine months earlier (Bates 2001, p. 284; Al-Maqrīzī 1991, p. 131). Upon receiving official word, Muhammad ibn Tughj ibn Juff had his new title “al-Ikhshid” proclaimed from all the pulpits in his lands during the Friday noon sermon (*khutba*) and written on all his correspondence. It would be another three years, 330/942, before the title al-Ikhshid appeared on his coinage (see Bacharach 2006, pp. 43–54). Ibn Tughj’s widespread use of his new title reflects the importance and prestige 4th/10th century Muslim rulers in the lands from Egypt to Iran attached to acquiring a *laqab*. What made this governor of Egypt unique among all his contemporaries is that he sought a title associated with Central Asia and his specific family. Memory of the title could have easily passed down from his grandfather to his family to himself as part of the oral traditions of his own origins. His having knowledge of his biological Central Asian roots may be unusual but is easy to accept in a society where emphasis is on oral transmission. The availability of visual material tied to Central Asia would have been extremely limited, which makes the second example so rare.

Numismatic background

One of the most notorious assassinations in Western history is the murder of the Roman general Julius Caesar on the Ides of March (March 15) 55 BCE by Brutus and Cassius and a band of conspirators. Shortly thereafter a coin with an inscription and images was produced in Rome by Brutus [Fig. 1]. The obverse (heads) of the coin includes an image of Brutus and his title as Imperator which meant “honored military commander”. The reverse includes the date “Eid Mar” for the Ides of March with a cap between two daggers. It would be easy to interpret the images and inscriptions as a denunciation of Brutus and Cassius (the two knives) for murdering Julius Caesar, but a knowledge of Roman iconography would lead to the reverse conclusion. The “cap” on the coin is the Roman symbol of liberty, and the coin proclaims that the death of Caesar was done in the name of protecting “liberty” and the Roman Republic.



Fig. 1

It is often possible to read inscriptions on coins and describe images and geometric designs, but their meaning is dependent on understanding the historical and cultural world in which the coin was struck. This is true for all coins, and in that sense numismatics is an ancillary science where the interpretations are dependent on data from other fields such as history, art history, etc.

Coins associated with the Islamic world from the end of the 1st century AH /7th century CE to the 13th/20th can be grouped into four general categories. The vast majority are gold and silver coins struck by Muslim rulers which used Arabic script, included limited geometric designs, and lacked human and even non-human images and, it was claimed, followed Islamic law. Copper coins were considered a local currency and were not as restricted in what was included on the coins but tended to follow the same guidelines. A fourth category for which there was no term in the pre-modern Islamic sources constitutes commemorative or presentation pieces where none of the preceding rules applied. These issues could be in any metal, include unusual inscriptions and designs, and even human images. Whatever the unique circumstance involved in their production, memory of that event was quickly lost and almost never recorded in the narrative sources. The struck metal “presentation” object quickly became part of the circulating supply of money and was traded as if it was just like all the regular gold, silver and copper coins. One such presentation piece from 4th/10th century Egypt is the subject of what follows [Fig. 2].

A Numismatic Presentation Piece

This particular coin was first studied by the Israeli scholar Ariel Berman (1981). The obverse carries the caliph’s *laqab* “al-Radi billah” in the center, while the margin includes the *shahada* in the form “There is no deity except God, Muhammad is the Prophet of God.” The reverse margin identifies Misr as the mint, which was the name used for the mint in the capital (Fustat) as well as for the province of Egypt. The obverse center includes only one name, Muhammad. This has to be Muhammad ibn Tughj as he was the only governor of Egypt during the caliphate of al-Radi. The space above the name Muhammad [Fig. 3] is filled by a symbolic



Fig. 2



Fig. 3

device, which I originally considered some sort of a spade-like geometric design.

Based upon a limited but general knowledge I called the device illustrated in the design a *tamga* (Bacharach 2006, pp. 28–30).⁸ Discovering what this particular *tamga* represented illustrates the power of serendipity. Working from standard library sources and focusing exclusively on Eastern Mediterranean lands, that is the geographic areas where Muhammad ibn Tughj had been militarily and diplomatically active, I found a different design, labeled a *tamga*, which was known from the copper coinage of Ibn Tughj's most famous Turkish predecessor in Egypt, Ahmad b. Tulun (254-270/868-884). How contemporaries understood the meaning of that symbol is not known nor is its origin (Grabar 1957, p. 32; Treadwell 2017). The closest numismatic material from the Mediterranean world related to the *tamga* illustrated on the coin above was the large M found on Byzantine copper *folles*, but they ceased production by 831 CE (Grierson 1963, p. 68). Both the dating of the *folles* and the obvious differences in design make it unlikely that the Byzantine coin was a model or inspiration for Muhammad ibn Tughj's issue. At that point I concluded that the design was meaningful to someone and the memory of what it represented was lost before anyone recorded it in a text.

Shortly before submitting the final version of my manuscript on Ikhshidid coinage to the American University in Cairo Press I was in Tashkent, Uzbekistan, giving a series of presentations. After one lecture, Dr. Gaybullaboboyorov showed me a series of pre-Islamic copper coins from Samarkand, on which, to my amazement, was the model for Muhammad ibn Tughj's *tamga* [Fig. 4, on the left]. My astonishment only increased when Internet and library searches on this coinage revealed that the *tamga* design was Central Asian and relatively common.

According to one Russian scholar, the proper Chach (Tashkent) type are the coins with a characteristic "pitchfork-like" symbol on the reverse and an image or a bust of the ruler, or a lion with risen paw on the obverse (Brykina 1999). The same *tamga* was also used

on a number of pre-Islamic coins minted in Samarkand while other designs, which served as *tamgas*, appeared on coins from Tashkent, Samarkand and other Central Asian pre-Islamic mints. Dr. Boboyorov informed me that the rulers of Chach did not use the title Ikhshid, but used other titles such as *Tegin* and *Tudun*. She then pointed out that the spade design *tamgas* on the coins of Chach can only be found on those minted by Turkic rulers.⁹ This information strengthens the argument that there were ties between the *tamga* used by Muhammad ibn Tughj and his family's Turkic roots in Central Asia.

Conclusion

Scholars have been able to establish the names of ten Ikhshids who ruled Samarqand from the mid-seventh to the mid-eighth century (see Zeimal' 1994). The title was also held by rulers of Chach/Shash (Tashkent) and the Ferghana Valley, the specific area from which Juff, Muhammad ibn Tughj's grandfather originated (Brykina and Gorbunova 1999). In the earlier periods the title was rendered on the coins by the Aramean heterogram MLK' and on later issues in Soghdian (Brykina 1999). How many could read these inscriptions more than a century after the Muslim conquests is questionable, but memory of the title must have been retained and transmitted from generation to generation. Otherwise how could a Muhammad ibn Tughj, a Turkic ruler in Egypt of Central Asian origin, have ever come up with a request for it from the caliph in Baghdad? Based upon medieval narrative sources, we do know that some at the 'Abbasid court in Iraq knew that the title "al-Ikhshid" was associated with pre-Islamic rulers in Central Asia, even if the caliph himself was ignorant. How many in al-Ikhshid's Egypt knew of the title's Central Asian origins and its association with governing? I am confident that for the vast majority of ruled Egyptians it was a meaningless title in a language other than Arabic. I also believe that some of al-Ikhshid's military who were themselves of Central Asian origin may have heard the title or of the title, but who they were and how many will never be known.

What is more amazing is that somehow a visual memory of that specific Central Asian *tamga* was carried to Egypt. Was a Central Asian coin or banner passed from Juff to his son to Tughj and then to his son with the proper Muslim name Muhammad, the future al-Ikhshid? We will never know how Muhammad ibn Tughj became aware of this specific *tamga* design and its association with rulers in Central Asia.

Fig. 4



Since the presentation piece does not have the *laqab* al-Ikhshid inscribed on it, the coin must have been minted before 330/942 when the name *al-Ikhshid* was inscribed on all gold and silver Ikhshidid coins. But exactly in which year this particular presentation was struck cannot be determined. Unless some undiscovered narrative source appears which treats the issue, an extremely unlikely probability, we will never know which year the coin was issued.

Another important question which cannot be answered is for whom the coin was struck, this in contrast to our understanding of why the Brutus Ides of March coin was produced. Was the coin with its Central Asian *tamga* part of the gifts (bribes) sent to the Caliph al-Radi when Muhammad ibn Tughj requested the *laqab* al-Ikhshid? Was this a subtle message that Ibn Tughj understood that, just as this specific *tamga* was associated with pre-Islamic rulers from his ancestral homelands, the title he requested had the same association? Unfortunately, appropriate historical data are lacking to answer these questions. We can only conclude that the title al-Ikhshid and the coin with this specific *tamga* demonstrate how strong the memory of Central Asia was with Muhammad ibn Tughj, a 4th/10th century ruler of Egypt and the third of his line to reside far from his ancestral homeland.

About the author

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References

al-Kindi 1912

al-Kindī. *The governors and judges of Egypt or Kitāb al-‘Umarā’ wa-Kitāb al-Quzāt of al-Kindī: together with an appendix derived mostly from Raf‘ al-īṣr by Ibn Ḥaḡar*, ed. by Rhuvon Guest. E. J. W. Gibb Memorial Series, vol. 19. Leiden: Brill, 1912.

Al-Maqrīzī 1991

Aḥmad Ibn-‘Alī al-Maqrīzī. *Kitāb al-Muqaffā al-kabīr*, ed. Muḥammad Ya‘lāwī. 8 vols. Beirut: Dar al-Gharb al-Islamī, 1991.

Bacharach 1975

Jere L. Bacharach. "The Career of Muhammad ibn Tughj al-Ikhshid: A Tenth Century Governor of Egypt." *Speculum* 50 (1975): 586–612.

Bacharach 2006

_____. *Islamic History Through Coins: An Analysis and Catalogue of Tenth-Century Ikhshidid Coinage*. Cairo; New York: American Univ. in Cairo Press, 2006; second rev.

ed., 2015, available free at <<http://www.aucpress.com/images/9781617975202.pdf>>.

Bates 2001

Michael L. Bates, "The Expression of Nobility in the ‘Abbasid Caliphate, 218–334 H./833–945 C.E." [Working title: 12 January 2001; unpublished paper].

Berman 1981

Ariel Berman, "Additional Information on the Coinage of Egypt during the Governorship of Muḥammad ibn Tughj al-Ikhshid." *Israel Numismatic Journal* 5 (1981): 69–72.

Bianquis 1998

Thierry Bianquis. "Autonomous Egypt from Ibn Ṭūlūn to Kāfūr, 868–969." In: Carl F. Petry, ed. *Cambridge History of Egypt*, Vol. 1: *Islamic Egypt, 640–1517*. Cambridge: Cambridge Univ. Pr., 1998: 86–119.

Brykina 1999

G[alina] A. Brykina. "Chach." In: *Central Asia in the Early Middle Ages: Coins of the Region*. Tr. from *Sredniaia Aziia v rannem srednevekov’e*, ed. G. Brykina. Moskva: Nauka, 1999. On line at: <http://www.kroraia.com/ca/c_chach.html>, last accessed 16 November 2017.

Brykina and Gorbunova 1999

_____, and N. G. Gorbunova. "Ferghana." In: *Central Asia in the Early Middle Ages: Introduction to the history of the regions*. Tr. from *Sredniaia Aziia v rannem srednevekov’e*, ed. G. Brykina. Moskva: Nauka, 1999: 93–95, 104–111. On line at <http://www.kroraia.com/ca/eh_ferghana.html>, last accessed 16 November 2017.

Duri 1960

A. A. Duri, "Amīr." *The Encyclopaedia of Islam*, 2nd ed., Vol. 1. Leiden: Brill, 1957: 439.

Grabar 1957

Oleg Grabar. *The Coinage of the Tulunids*. Numismatic Notes and Monographs, No. 139. New York: American Numismatic Society, 1957.

Grierson 1973

Philip Grierson. *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection* (3 vols. in 5. Washington, D.C.: Dumbarton Oaks, 1966–1973): Vol. 3 in 2 pts.: *Leo III to Nicephorus III 717–1081*.

Ibn al-‘Adīm 1951–1968

Ibn al-‘Adīm. *Zubdat al-Ḥalab min ta‘riḫ Ḥalab*, ed. Sāmī Dahhān. 3 vols. Damascus: Institut Français de Damas, 1951.

Ibn Khallikān [1970]

Šams al-Dīn Ibn Khallikān. *Wafayāt al-a‘yān wa anba’ al-zaman*. 2 vols. Bulag, 1299/1881; *Ibn Khallikan’s Biographical Dictionary*, tr. William MacGuckin de Slane, 4 vols. London: Oriental Translation Fund, 1970; orig. ed. 1842–1871.

Ibn Sa‘īd 1899

‘Alī ibn Mūsa Ibn Sa‘īd, *Mughrib fi hula al-Maghrib*, 2 vols., Bk. 4. Knut L. Tallqvist, ed. Helsingfors-Leiden: Brill, 1899.

Ibn Taghrī Birdī 1943/3, 1944/4

Abū al-Maḥāsin Yūsuf Ibn Taghrī Birdī. *‘Al-Nujūm ‘al-*

Zāhirah fi mulūk Miṣr wa-'al-Qāhirah. Vols. 3, 4. Cairo: Dar al-Kutub al-Misriyah, 1943, 1944.

Lev 1988

Yaacov Lev. "The Fatimids and Egypt 301-358/914-969." *Arabica* 35/2 (1988): 186-96.

Treadwell 2017

Luke Treadwell, "The Numismatic Evidence for the Reign of Aḥmad b. Ṭulūn (254-270/868-883)," *al-Uṣur al-Wusta* 25 (2017): 14-40.

Zeimal' 1994

E[vgenii] V. Zeimal'. "The Circulation of Coins in Central Asia during the Early Medieval Period (Fifth-Eighth Centuries A.D)." *Bulletin of the Asia Institute*, N.S., Vol. 8 [1994]. 245-67.

Notes

1. The most extensive biography of Muhammad ibn Tughj al-Ikhshid is Bacharach 1975, from which most of the following is taken.
2. Details on the career of Tughj b. Juff can be found in Ibn Sa'īd 1899, pp. 4-11; Ibn Khallikān 1881/1970, 2, pp. 53-54, and in translation, 3, pp. 218-19; Ibn Taghrī Birdī 1943/3, pp. 235-44.
3. His new patron was Abu'l-'Abbas al-Bisam, and among Muhammad ibn Tughj's duties was carrying his master's hawk during the hunt (Ibn Sa'īd 1899, p. 7).

4. Beginning with reign of the Caliph al-Ma'mun, it was not uncommon for appointees to send representatives while they stayed in the capital (Duri 1957, p. 439).

5. A summary of these conditions can be found in Bianquis 1998, pp. 112-13. The seriousness of the Fatimid threat is downplayed by Yaacov Lev (1988, p. 193) who believes that the Fatimid expedition of 307/919 marked the last serious military attempt to conquer Egypt before 358/969. I believe that for contemporaries the possibility of the Fatimids invading Egypt or, at least, supporting rebellious factions in Egypt was very real and Muhammad ibn Tughj was able to use that potential threat to his advantage once he consolidated power.

6. There was a minor pro-Shi'ite revolt in Egypt in 330/942 while al-Ikhshid was in Syria. The revolt came to naught and did very little to upset the general tranquility of the period (Al-Kindi 1912, pp. 294-95).

7. There is a modern Egyptian analogy from the 19th century when the Ottoman governor of Egypt Isma'il [1863-1879 CE] bought his unique title Khedive from the Ottoman sultan.

8. Most scholars of Central Asia spell the word *tamga*, which I will use, rather than *tamgha*.

9. Personal e-mail 10 May 2006 from Dr. Gaybulla Boboyorov.

DÉCOR OF THE EIGHTH-CENTURY TURKIC RULERS' RESIDENCE IN THE CITADEL OF KULAN TOWN

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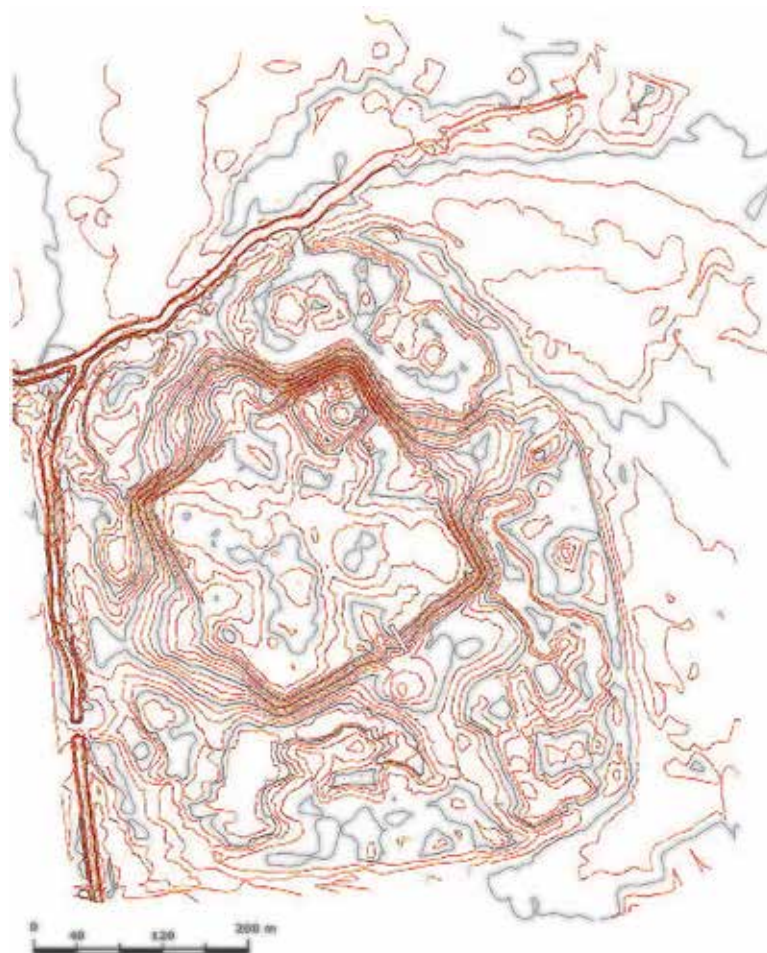
This essay presents preliminary results of excavation during 2015 at the ancient settlement site of Kulan, located in southeastern Kazakhstan. In particular, the focus was on two palatial chambers in the citadel, which stratigraphy indicates date to the 8th century. The first of these chambers, presumed to be part of the palace of the Turgesh ruler, contains two arched portals covered with remarkably well preserved carved clay that extends as well along the walls. The second chamber has remnants of mural painting and graffiti which are sufficient to allow some reconstruction of the depicted figures and their costume.

The ancient settlement of Kulan (also known in the archaeological literature as Tarty and Lugovoe) is one of the best known and most thoroughly excavated sites in the southwestern Jetysu (Semirech'ye) region of southeastern Kazakhstan. The city was frequently mentioned in the medieval Arabic and Persian geographical and historical texts. Its location is the Ryskulov County of Jambyl Region on the northeastern edge of the modern village of Kulan on the bank of the Karakat River, a tributary of the Shu (Chu) River (Baipakov 2002a, p. 83). Following the lead of Wilhelm Tomaschek, the great expert on the history and geography of Central Asia, Vasilii V. Bartol'd (1966, p. 49) had located the medieval Kulan here, an identification which has never been questioned in the subsequent literature.

The Semirech'ye Archaeological Expedition (SAE) headed by Kemal A. Akishev began excavation at the site in the 1960s. One of its units opened trenches in the citadel and studied several residences in the area adjoining the settlement (Baipakov 1966). However, neither then nor later was the excavation systematic even though the site and its analogues were nominated for the UNESCO "World Heritage" list. Thus,

the excavation reported here, begun in 2015, aimed to examine both the exterior and interior of the citadel in order to establish a proper chronology from the stratigraphy and provide a clear idea of the architecture. Moreover, the project included the drawing up of a topographic map of the entire settlement contained within the walls and selective excavation outside of the walls. [Figs. 1, 2]

Fig. 1. Topographic plan of the central ruins of Kulan.



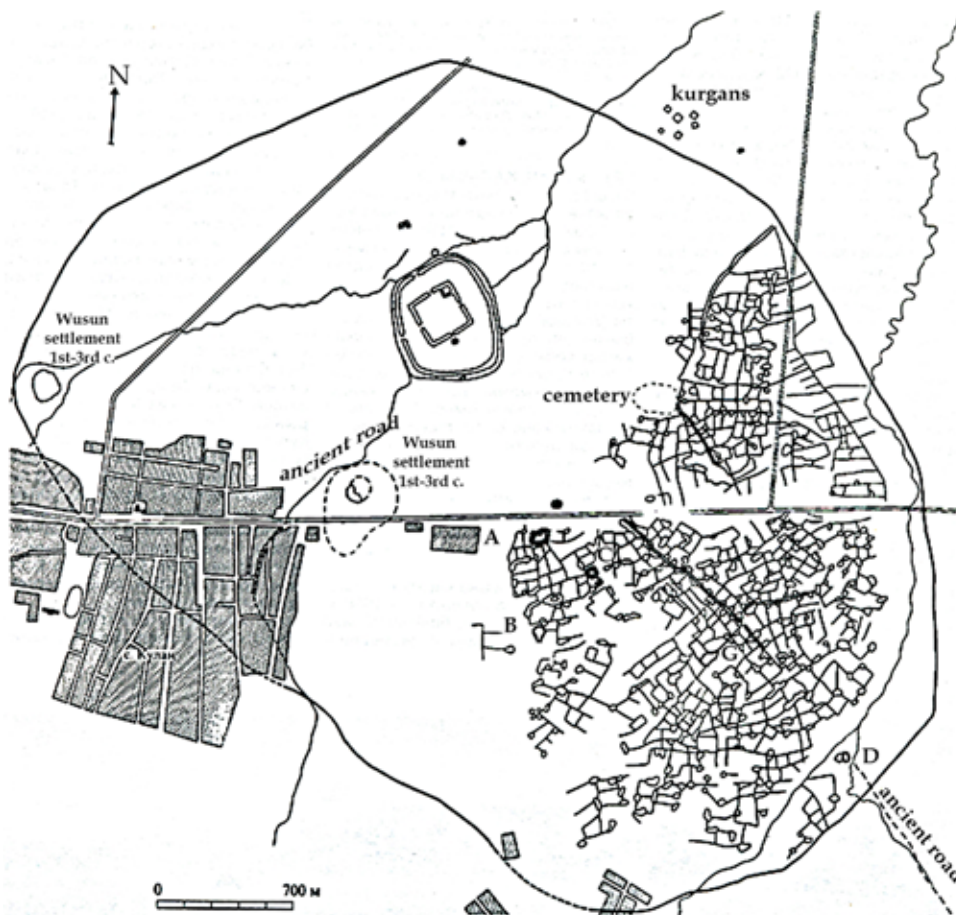


Fig. 2. Plan of the central ruins (the beled) of Kulan inside the "long walls".

a radius of 45 m. and a height of ca. 5 m. Probably this is the remains of fortification assemblages connected with the entrance.

The NE entrance can be made out as a shallow gully 20 m in width and 1 m deep, flanked by towers on both sides. Twenty meters to the east from the line of the gate where towers had once stood is a rather poorly defined mound. The ruins of fortified structures in front of the gate form a substantial rectangular area measuring 85 x 45 m and extending along a line from SW to NE with a median height of 4 m.

The most developed and strongly fortified structure among all the four gates of the shahristan is the NW entrance, located, as in the cases of the others, in the center of

its corresponding wall. At the location of the passage is a 20 m wide shallow gully, 1.2 m deep. The gate is flanked by two towers; 40 m to its NW can be discerned a second row of towers. The ruins of the entrance complex form a gently sloping area measuring 80 x 60 m and 8 m high.

Straight main streets connect the gates, situated directly across from each other. Where the street was located is a shallow gully 25–30 m wide and up to 1 m deep, overgrown with thick grass. On the northern side of the intersection of the streets is a depression where the central square of the settlement was located.

As we can see, in this part (i.e., the shahristan and citadel), Kulan is a typical settlement of the *tortkul* type, that is "a square or rectangle with entrances in the middle of all four sides." The main streets connecting the gates directly opposite one another form a central square where they intersect. Such a foundational plan is characteristic for settlement structures of Eurasia from the time of the camps of Roman legions to the early Chinese urban residences. It can be seen in the Islamic plan of shahristans of such large Central Asian cities as Merv and Bukhara. A good many examples of it can be hypothesized for the topography of central city cores now buried by later layers, such as the medieval Kazakh settlements of Sairam, Otrar, and Taraz. Such a plan is clearly in evidence in the topography

Questions Regarding the Topography

Even though questions have been raised regarding the applicability of the "theory of the tripartite structure of medieval cities" (citadel, shahristan [~residential area] and rabad [~suburb]) to the settlements of Semirech'e and in particular to Kulan, that scheme is the one we have followed in our research to date.¹

The central part of the site (the "shahristan") is a square mound whose corners are oriented to the cardinal directions and measures along the crest of the side slopes 216 x 220 m. Its median height is 11.5 m and highest point 12.5 m. The citadel is located in the northern corner and measures 47 x 43 m. In the center of its upper area is a depression ca. 25 m in diameter and 2.5 m deep. The elevation above the surrounding area is 13 m².

There are four entrances into the shahristan, located opposite one another, each in the center of its respective wall. The SE entrance is in the form of a shallow gully 20 m wide and 1.5 m deep. It is flanked by two towers, the traces of which can be easily discerned. In front of the entrance is a raised area, triangular in shape, measuring 65 x 50 m and 4 m high. The SW entrance has a two-meter depression. On the southern side are the remains of a tower in the form of a rounded mound. In front of the entrance can be made out a raised area, semicircular in shape, with

of Nujiket, Aspara, Kostobe, Ornek, etc., which ceased to be occupied in the 12th–14th centuries (Baipakov 2002a, pp. 101, 221, 307).

In the literature describing Kulan are differing views concerning the third part (the rabad) of what is considered characteristic of the topography of a medieval city [Fig. 2]. We are dealing here with part of the town whose perimeter has well defined remains of fortification walls, extending 1900–2000 m with a height of about 2 m and width of 20–25 m. Around its exterior is a moat now about 2 m deep and up to 10 m wide. This wall is 100–150 m from the wall of the central rectangle (the “shahristan”). On this area between the walls, the territory of what we consider is the rabad, are mounds with various configurations up to 5 m high. Very likely it contained several small settlements. Apparently the building up of this area occurred later than that of the sharistan/tortkul with the citadel.³

The area of this territory, as estimated by Nurzhanov and our survey, covers about 15 km² and has the shape of an irregular oval with axes 4.7 x 4.4 km (Nurzhanov 2010, p. 143). Traces of its buildings are more or less well preserved only in a few areas. The largest of a number of separate residences, the so-called “residence G”, has been excavated. Inside it were panels decorated with carved clay displaying a variety of ornamentation. In the ornamental composition of one of the walls of the corridor-like passage into the chamber, the excavators even determined that there was a Biblical subject depicting Adam and Eve at the Tree of Knowledge (Baipakov 1986, pp. 121–35; Baipakov et al. 2001, pp. 41–42, 109–15; Baipakov and Ternovaia 2004, p. 31).

While details of the topography and chronology can be worked out only following more systematic excavation, it seems likely that the town of Kulan in certain historical periods could have been the center of what the medieval sources term a *rustaq*, a cluster of settlements within an integrated region, located on the tributaries of the middle reaches of the River Shu. In the 10th–12th centuries a number of small population centers could have been part of it, the ancient settlement sites in the form of tortkuls located now near the contemporary villages of Enbekshi, Karakystak, Zhalpaksaz, Kyzylwharua, and Kuragaty (Baipakov 2002a, pp. 289–305). It is likely that Merke to the east of Kulan and Zhul’shub to the west were neighboring rustaqs. The town of Kulan itself experienced all the basic stages of development of towns in Semirech’e: it first emerged as the camp of the local feudal ruler; the tortkul with a citadel and with castles and palaces located around it (6th–8th centuries) later developed into a small medieval town—a shahristan with a rabad and in some areas densely developed suburbs (9th–13th centuries).

The Archaeological Excavations; Stratigraphy

The most complete data on the stratigraphy of the vari-

ous objects at Kulan, accumulated over a half century of its study, are in the article published in 2002 (Baipakov 2002a, 283–89). A stratigraphic trench dug in the citadel and occupying 30 m² yielded three consecutive building layers or horizons (BL). The lowest, ca. 2 m thick, was dated to the 7th–8th centuries. The middle one is up to 1.5 m thick and dated 9th–10th centuries. In the uppermost and last one, apparently about a meter thick, are the remains of walls of fired brick and fragments of glazed ceramics from the 11th–12th centuries.

A stratigraphic cut also was entered in the southern wall of the shahristan. It showed that the general thickness of the cultural layer there was 5.3 m, below which was a platform made of parallelepipeds of stamped clay (*pakhsa*). On it was erected a wall made of large blocks of pakhsa layered with adobe measuring 50 x 25 x 10 cm. Two construction periods were evidenced in the wall. In the structure of the adjoining cultural layer, in contrast to the structure of the cultural layer of the citadel, two levels were discerned. Leveled and compressed building remains with traces of fire constituted the foundation of the “second” one. The structure from the second building layer was preserved up to a height of 3 m.

Probably because the stratigraphic trench opened in the citadel provided little expectation of quickly locating impressive artefacts, the emphasis in the archaeological study of Kulan has been on digging the “homesteads”, the monuments of “suburban construction”. Thus, the published information includes short descriptions of the results of excavations of three “homesteads” on the territory of the suburban zone: A is a “castle”, B a “winery”, and C is a “palace”. However, no stratigraphic data are provided; the chronology of the structures is given very generally as 8th–12th and 7th–10th centuries. In all likelihood that merely indicates the period during which one or another of the structures might have existed.

Of course the citadel is usually the core around which a town would first develop. Later it would be the place where the most prestigious and functionally defined structures would be built. In Central Asia, it is precisely the study of the citadels of ancient and medieval settlements which provides the most telling archaeological material. More often than not, to be found there are the most representative materials for the history of fortification, architecture and art, and the answers to many questions about the history of the emergence and development of the town. This then was the rationale for the focus of the excavations begun in 2015 and extending over the next seasons, which indeed yielded remarkable results.

Some Results of the 2015 Field Season

In August 2015 a trench was opened on the NW side of the citadel, initially with an area of 15 x 20 m², later extended another two meters to the SE and NW. It was assumed that the trench would encompass both a part of

Fig. 3. Pottery complex from the toilet (bodrab) in BL 1.

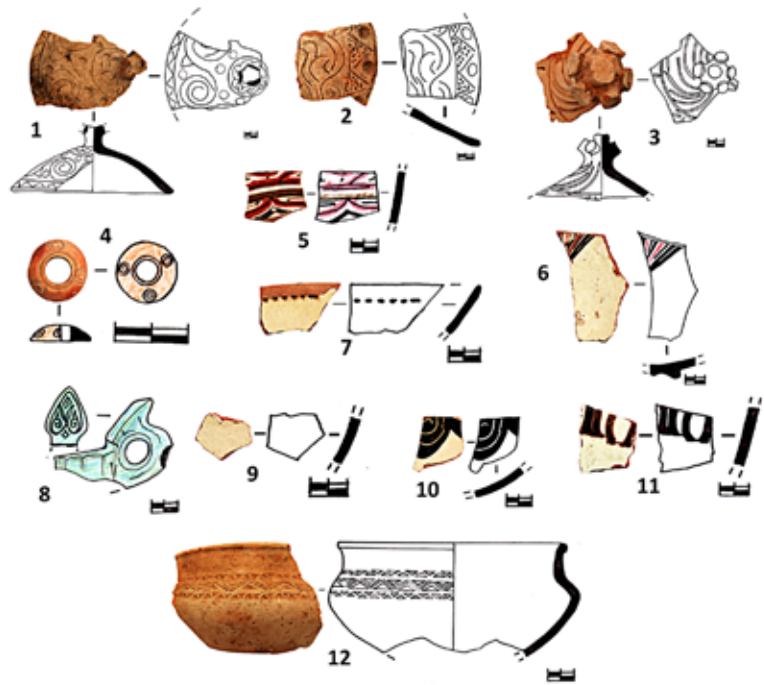
the exterior wall and an area inside of it, which taken together would provide sufficiently representative material to determine the stratigraphy and chronology of the citadel and the nature of its architectural complex.

The stratigraphy that was uncovered in Trench No. 1 is as follows. The uppermost layer (Level 1) has a loose bed of sod resting on a compact bed of the remains of a ruined building. Clearing of the horizontal surface revealed the outlines of nine grave pits in which were found the remains of five children and four adults. The skeletons were oriented with the head at a slight angle from N to NW, the faces turned to the SW, that is, the direction of the *qibla* (Mecca). This fact, along with the complete absence of any grave goods, indicates that these are Muslim graves. It is quite common to find that after a town has been abandoned and its remains become a large mound, it later is used as a cemetery. These late grave pits frequently cut through the structures of the upper construction horizon (BL 1). (In the preliminary publication, they are designated as BL 3 [Khazbulatov et al. 2016]). All the bones from these graves were removed and reburied in a special secluded location.

The walls of the monumental structure in BL 1 emerged already at a depth of 0.6 m. Within the boundary of the excavation trench were found the complete outlines of three rooms, whose corners are oriented in the cardinal directions. Two of them were but noted (not excavated). The exterior NW fortress wall, which was the exterior wall of the citadel, had completely disintegrated; it is likely that its lower levels can be fixed at a later date.

The structures of this upper (that is, final) construction horizon (BL 1) could be traced in the excavation in the form of rather ill-defined fragments of walls, sections of roughly surfaced floors and openings of toilet-pits. However, it was still possible to determine that in the final period of the occupation of the citadel, several buildings had been erected here on the ruins of the lower, foundational horizon (BL 2). Their remains over a period of many centuries had been erased and swept off the surface of the platform which had been constructed out of the ruins of the earliest buildings of the citadel. Only the fill of the rubbish pits/toilets remained from that uppermost building horizon, material which made it possible to date it to the 10th–11th centuries [Fig. 3].

The careful cleaning of the surface of the excavation along the top of the second level revealed the outline of the walls of BL 2 and the intact masonry of its structures. The bricks which filled the upper part of



the spaces of the structures in main area of BL 2 were rectangular, measuring 48=47 x 20 x 10 cm, along with bricks measuring 53 x 23 x 11 cm. That is, both new bricks and the bricks of the earlier structure were used for fill. Thus the ruins of the ancient citadel (BL 2) were recycled into the platform for construction of the final (“Karakhanid”) building horizon (BL 1).

The contours of major walls could be made out following the clearing on the surface of this platform. The structure which emerged turned out to belong to a monumental building which, it seemed, occupied the entire area of the citadel (40 x 40 m). Its ruins, as could easily be imagined, shaped the main topography of the citadel, apparently forming a “cirque” of various rooms arrayed around a wide central courtyard.

Fig. 4. View of the excavated rooms of the Kulan palace.



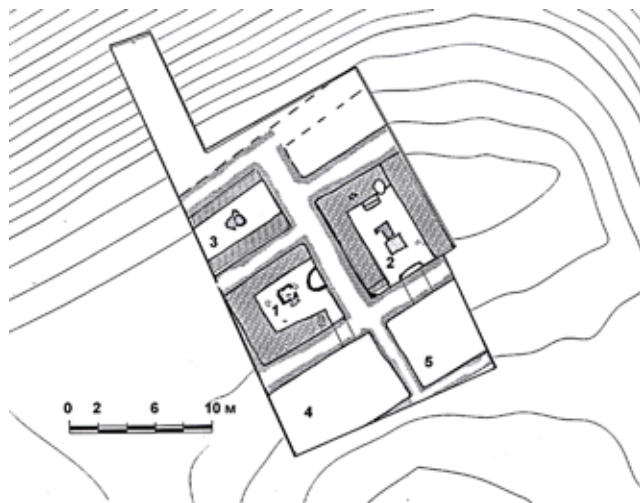
Within the excavated area were the remains of six rooms [Figs. 4, 5], three of which were entirely cleared during the 2015 field season (Nos 1, 2, 3). The rooms are aligned on a NE to SW axis, with the corners oriented in the cardinal directions with only slight deviations. The walls are composed of adobe brick, made of yellow clay mixed with lumps of gray clay. The rectangular bricks measure 48 x 20 x 10 cm and 53 x 23 x 11 cm. The thickness of the walls varies from 1.4 to 2.1 m. It appears that the north-western wall of the structure was the exterior fortress wall of the citadel. The rooms attached to it have very substantial walls while the walls on the side of the courtyard are somewhat thinner.

Although as yet details of the plan of the entire building are not clear, two chambers (Nos. 1 and 2) of those cleared in the excavation of 2015 are of unquestionable interest [Figs. 4, 5].

Chamber No. 1 is rectangular, measuring 6.6 x 5.7 m. The upper part of the space within the chamber was filled to a depth of about 1.5 m with masonry made of adobe brick of the same format as the bricks of BL 2. Then there was a layer of rubble from pieces of those same bricks which came from the walls of the chamber itself. The upper floor of the chamber is 2.65 m below the top of what has been preserved of the walls. Along the NW, SW and SE walls is a low bench, 1.2 m wide on the NW, 1.9 on the SW and 1.2 on the SE, widening to 1.4 m to the SW. The walls were covered in a single layer of plaster 2-3 cm thick, which has survived only in a few sections. In many places it has been thoroughly damaged by the digging of rodents.

In Chamber No. 1 of BL 2 are two floor levels, which mark two construction periods of the entire architectural complex (for convenience, we will conditionally term them SP1 and SP2, the first/lower and second/upper levels connected with certain changes in the interior of the structure). So far we have cleared this chamber down to floor SP2.

Fig. 5. The excavation trench opened in the Kulan citadel in 2015.



The surviving height of the NE wall is 2.75 m, its length 5.7 m and its width 2.1 m; the NW wall is 6.6 m long, 1.4 m wide and 2.5 m high. The SW wall of the chamber has been cleared so far only along its interior face, with the rest left under a protective strip for future excavation. The wall has survived up to a height of 2.4 m. The SE wall is 6.6 m long, 1.9 m wide and 2.0 m high. The mixed structure of the masonry of this wall and the absence of plaster on it suggests that it had been re-built. The adobe bricks are only in its upper part; probably this is repaired masonry. The lower part of the wall is compacted brown and yellow soil. The entrance to the chamber is in its SE corner. It has no distinctive features and probably had been built later (at the time of SP2), following the rebuilding of the walls. The width of the entrance is ca. 1 m.

The walls of the chamber were richly decorated with carved clay [Figs. 6, 7, 8, next pages]. The designs were carved in specially prepared high quality plaster, applied as a 4 cm thick layer of smoothed adobe. The designs were carved directly on location, following, of course, a preliminary sketch. The upper relief cornice is a narrow moulding shaped from the thickest layer of plaster, which gives the whole composition a depth of relief. Then the panel was painted in red (with ochre?).

The unique preservation of the carved panels enables one to reconstruct at least the overall decorative scheme of this obviously exceptional chamber. As an approximation, what survives in situ on the walls is one-sixth to one-eighth of the entire decoration. Given the losses, details such as, for example, the tympana of the arches which crown the frames of the portals, so far cannot be faithfully reconstructed.

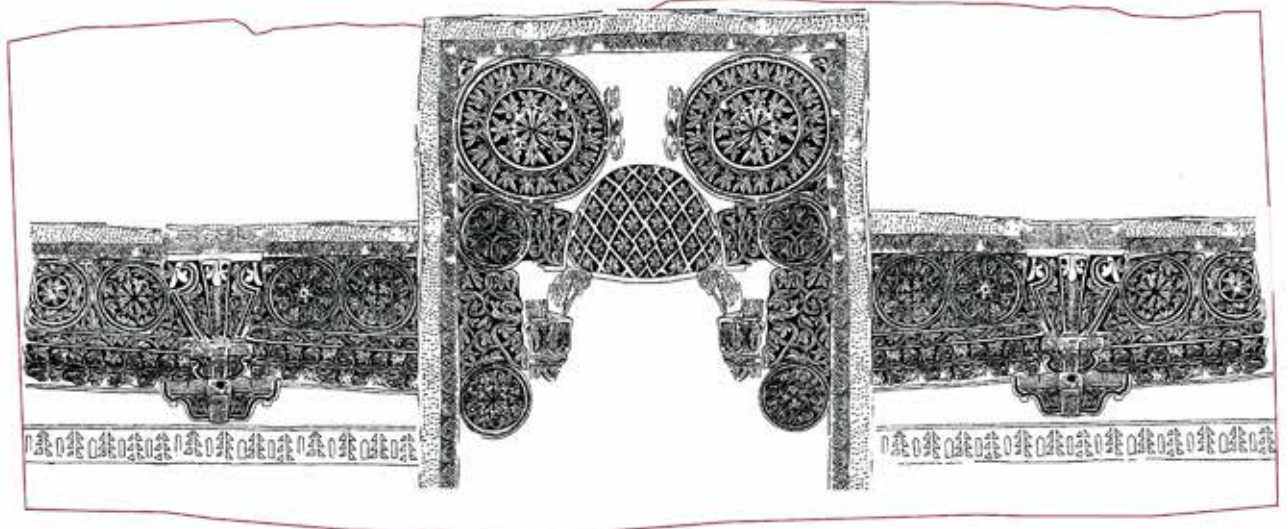
Increasingly, scholars have come to understand that it is not the individual elements of ornament but their larger composition which embodies the meaning of the decoration. If such is the case, then to understand and reconstruct the compositional structure of the decoration should make it possible to arrive at an understanding of the semantics of separate elements and the purpose of a room. The ornament of semantically charged wares of traditional crafts such as carpets, coverlets, dishes, and walls of residential and religious structures, etc. embodied the image of a balanced, harmonized, bright and richly saturated world, the kind of world which its traditional culture, personified by its inhabitants -- its creators and users -- wished to see. For example, in Central Asian ornament "net-like" and "medallion" ornamental compositions were the most popular ones. If the net-like compositions (*bendi-rumi*) create the image of an ordered world space, the medallions represent the main giver of life, the sun: round rosettes or medallions traditionally symbolized the sun, which blessed and protected and embodied the desire for all good things (Giul' 2013, pp. 41-49). The braiding of vegetal and flower motifs in eastern ornament is the depiction of the garden of Paradise, of a world that resembles it, a world which

every religion promised people as part of its ideological system.

The overall composition of the decorative scheme of Chamber No. 1 seems to have been as follows. In the center of the opposing NE and SW walls the panels of carved clay framed “rectangular portal frames with arches”. For convenience we will label the portal on the SW wall “A” [Fig. 6] and that on the NE wall “B” [Fig. 7]. From the edge of the portal frame along the entire perimeter of the wall is a decorative band of carved clay approximately 1.1

m wide. Its lower edge is at a height of 30–35 cm above the top of the bench SP2. The panels of carved clay have been preserved on the SE wall, beginning from the frame of “portal A” and extending to the western corner of the chamber, and on the NW wall from corner to corner. But here two sections have been destroyed—in the northern corner and approximately in the middle of the wall, and on the NE wall, from the northern corner to the frame of

Fig. 6. View of the SW wall of Chamber No. 1 with Serik Akylbek's reconstruction drawing of décor.

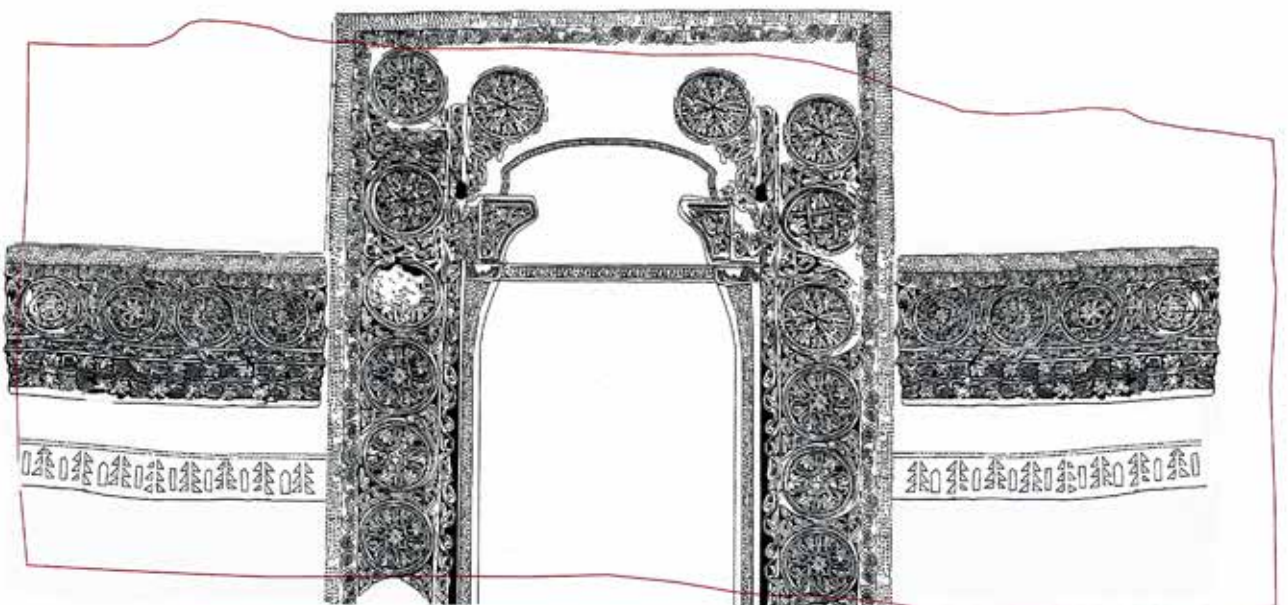


“portal B”. The decorative frames of the “portals”, the modeled colonettes and other decorative details were all carved in wet clay.

Portal B on the NE wall survives up to the height of 2.65 m and is 2.2 m wide. The upper part of the frame has been lost. The side panels are 0.5–0.6 m wide and consist of two narrow framing relief borders, a wide field filled

with large round rosettes (28 cm in diameter) and a narrow interior border with a continuous sinuous grapevine. Within the portal is a shallow (0.20–0.25 m) niche, flanked on the sides by two colonettes whose capitals apparently supported the arch of the niche [Fig. 7].

Fig. 7. View of the NE wall of Chamber No. 1 with Serik Akylbek's reconstruction drawing of décor.



At 1.6 m above the floor are projections that resemble the impost of an arch. They project 20 cm, are 10 cm wide, and are decorated on the edges with "pearl" beading and filled with sprouts of vegetation. The "colonnette" of the arch becomes wider at the top (the height of the extant part of the colonnette is 0.75 m; it is 1.1 m above the floor), and then it transitions into a "capital" (whose height is 0.2 m). The colonnette is decorated with "scales" and the capital with pearls. At a height of 1.5 m is a cross-beam 7 cm wide, which connects the span of the arch (its width is 1.1 m) at the point of intersection of the impost and the

capitals. The impost and cross-beam do not abut the tympanum; there is a space of 2 cm.

The flat inner wall of the niche is very sooty; it lacks decoration. In front of the niche on the floor was a layer of gray ash mixed with charcoal. Under this layer is a free-standing stove of semicircular shape whose flat side is directly adjacent to the niche. Its inner surface is strongly calcified; ash was collected on the southeastern bench at the entrance. In the center of the chamber is another

Fig. 8. View of the NW wall of Chamber No. 1 with Serik Akylbek's reconstruction drawing of décor.

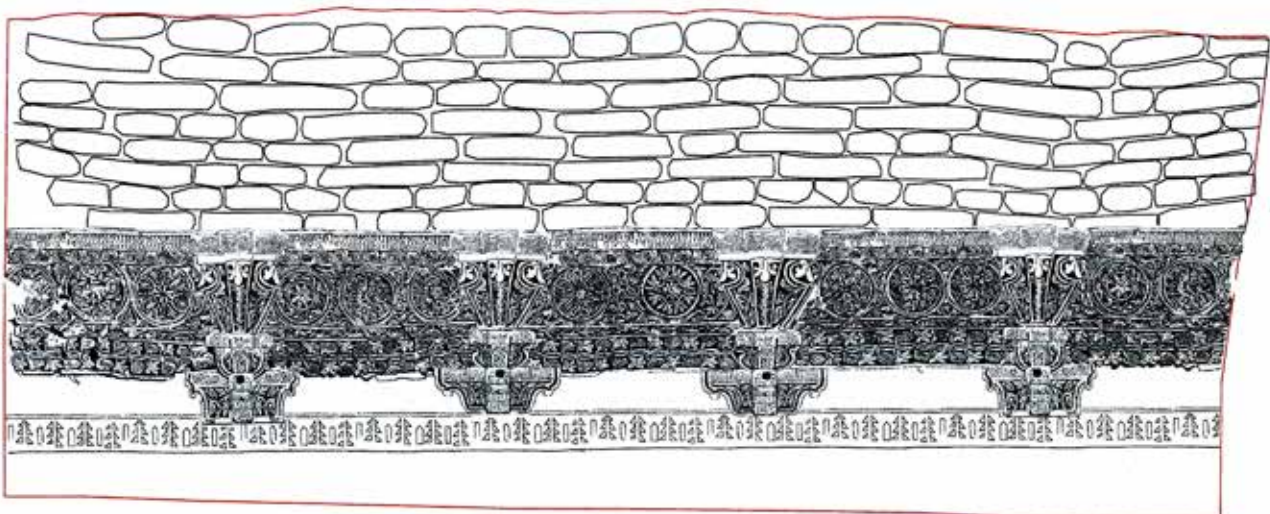




Fig. 9. The panel fragments from the left part of portal A.

free-standing stove, roughly square in shape measuring 1.15 x 1.0 m, with 0.25 m thick walls adobe brick in a single row. Its extant height is 0.13 m. Next to the SE side of the stove is an accumulation of ash. Here an ash pit with charcoal was cleared.

Portal A on the SW wall is 2.6 m wide and has been preserved up to a height of 2.1 m, with a depth of 0.2 m. From the frame of the portal survive a piece of the right vertical panel 1.6 m high and 0.5 m wide and a tympanum on which is a large (0.54 m diameter) round rosette [Fig. 6]. As a minimum three additional rosettes (half the size, 23–26 cm) were inscribed on a field of vegetal tapestry on the vertical side panels [Fig. 9]. In the center of the portal is a flat arched niche 0.2 m deep whose surface is covered in an angled net of rhomboid cells with five-petaled flowers in the center. The niche has an arched shape; it is framed along the sides by two $\frac{3}{4}$ colonnettes with capitals on which the vault of the arch rests. As is known, the filling of decorative surfaces with a “rhomboid net” was a widespread decorative device. For example, preserved

Fig. 10. The decorative borders.



fragments of a similar net in the décor of the SE niche of the corridor (Chamber B) in the palace of homestead “G” at Kulan was originally interpreted as the depiction of the Biblical “Tree of Knowledge” (Baipakov and Ternovaia 2004, p. 28, Fig. 15).

The horizontal ornamental band of carved clay around the perimeter of all the walls of the room is about 1.1–1.05 m wide and consists of several bands:

1. At the top is a relief cornice which protrudes from the wall some 5–7 cm. It consists of two horizontal elements—a sharply projecting beam up to 10 cm wide with a surface covered with arc-like depressions which give it a “scaly” appearance. Below is a flatter (but still projecting some 0.5 m from the surface of the carved panel) strip 7–8 cm wide decorated with elements that look like “flower buds” [Fig. 10.1].
2. The main carved panel, a wide strip (28–30 cm) with round rosettes in pearl roundels.
3. Between smooth lines, a narrow strip of wavy grapevine, with symmetrically projecting half palmettes [Fig. 10.2].
4. A band with two strips of alternating clusters of grapes and leaves, 18 cm wide.
5. Below it, a band of smooth plaster with no decoration, 0.25–0.27 m wide.
6. Lastly, the bottommost band with a solid row of merlons 0.2 m wide [Fig. 10.3]. Such crenellation crowned the walls of castles and fortresses of the 6th–8th centuries and later (9th–10th centuries) became decorative elements emblematic of their exterior appearance. Attesting to this is their frequent discovery in excavation of actual castles in Tashkent, Taraz and Turkestan and the well-known depictions of early medieval castles (on the Anikov plate [Hermitage Coll., Inv. No. S-46], the mural painting of Panjikent, etc.). The depiction of crenellation on the Kulan band is analogous to the depictions of these elements on bricks from Dabusia and Rabinjan [Fig. 11] (Rempel’ 1961, p. 133, Figs. 52.2, 52.4, 52.5).

Fig. 11. Bricks with the imprints of merlons and ceramic rosettes. (After: Rempel’ 1961, Fig. 52).





Fig. 12. Some rosettes from the walls of Chamber No. 1.

Colonnets with figured capitals “support” the carved panel extending “from portal to portal” in three places (in the part which has been preserved). Against a background band with round medallions, they rest on the upper cornice and, it seems, are positioned as though they are behind the band with the crenellation. Whether or not this was the intent of the creator of the decorative scheme of this chamber, the impression is that beyond the top of a fortress wall with merlons can be seen the top of an iwan,

Fig. 13. Rosettes in the décor of ossuaries of the 8th century. (After: Rempel’ 1961, Fig. 27).



whose roof rests on columns with intricate carved capitals. Thus, the decorative band on its walls in fact is the upper carved frieze with round rosettes located at the very top of the iwan façade under the roof.

On the preserved panels we have noted a total of 32 rosettes (in some cases fragmentary). But it is entirely likely that originally they numbered 66! Thus, the main decorative element in the shaping of the appearance of Chamber No. 1 is the round, ornamental rosette/medallion in various combinations with grape clusters and leaves. Moreover, the variety of their graphic execution is striking. If one looks closely, with any two rosettes apparently composed of similar elements, one can discern differences in detail [Fig. 12].

The ornament of the frieze under the ceiling in the form of a decorative strip with rhythmically distributed large rosettes placed on a field of intertwined stems was especially popular in the Near East in the Middle Ages, and its origins in all likelihood are to be sought in the art of the Ancient East. Later such bands of ornamental composition were widespread in the décor of various kinds of wares and were transferred to the walls of homesteads and palaces.

In neighboring Sogd, the walls of the temple buildings of the 6th–8th centuries, whose interiors were replicated in the décor of the external walls of ossuaries, usually were decorated with large rosettes with rays, contained in various kinds of frames [Fig. 13]. But it appears that they predominated as well in the decorative scheme of residences, public and palace chambers. An example is the décor of stucco and terracotta of the palace at the site of Varakhsha, which is considered to be a kind of encyclopedia of pre-Islamic decorative art. Around the time of the Arab conquest it developed a distinctive style as a kind of local response under the obvious influence of the art of the Hellenistic Black Sea region and Ancient East (Shishkin 1963, p. 170). Along with rich ornamentation in the décor of the palace were figures of animals and people in bas-relief which constituted at some point compositions whose meaning has now been lost. But certain ornamental compositions lend themselves to persuasive reconstructions. As the director of the excavations, Vasilii A. Shishkin, wrote (1963, p. 168), one of the numerous borders “consists of ornamental circles, combined smoothly with curling tendrils that have tooth-edged leaves in clusters. Only one of the circles of this border could be found. It quite definitely recalls the ‘wheel of the law’ (‘dharma chakra’)—the ancient symbol of the sun which figures in Buddhist art as the symbol of the Buddha (in the reliefs of Barhut, Sanchi, the temple of Sur’ia and other sites in India), and is preserved in the decorative art of Varakhsha, possibly as a vestige recalling those times when Buddhism had penetrated the territory of Central Asia.”

And another variant of the ornament consists of round rosettes, which, incidentally, do not duplicate one another (!) and are present in a large number of variations, ones which are distinguished by a heart-shape, the number of the petals, their style, etc. The triangular areas between the rosettes are filled with varied palmettes. This ornament, along with the star-like one already mentioned, was one of the most widespread types of décor and is encountered in several variants, differing in scale, the number of rosettes, the nature of the decorative scheme located between them, etc.

Down to the present, analogous ornamental compositions are especially popular in traditional decorative arts. They can be seen until very recently in the ornament of Kazakh wooden chests and cupboards for dishes and produce. The varied rosettes fill Pi-shaped frames of woven wall carpets (“Tuskiiz”) in Kazakh yurts (*Kazakhskie traditsii* 2002, pp. 162–63). They are also common in the décor of Kyrgyz, Uzbek and Tajik wooden wares. They can be found on wooden household furnishings and on the walls of homes of Indo-Iranian peoples in remote valleys of the Hindukush (Kalter 1991, Fig. 150, p. 137; Fig. 190, p. 154; Klimburg 1999, 2, Figs. 574–75).

For example, in Bukharan embroidery, such medallion decorative compositions are known by the popular term *lochak-turpush* (Giul’ 2013, pp. 41–49). In them, the main decorative features are variously composed rosette-medallions that are rounded inside. These rosettes are identified by the Arab word *shams*—the sun. It can be a single large rosette in the center of the embroidered field of a *suzani* or represented in two to three rows with from nine to twelve rosettes of varying design. The term for the entire square or rectangular field of the *suzani* is the Arabic word *polak/folak*, the sky or space (in the sense of the “world-space”). Overall, the ornamental composition of the *suzani* symbolizes the “world as a garden of Paradise, illuminated by the blessedly eternal sun.” There is no reason to think that in ancient times the meaning of analogous compositions was any different.

The Ceiling of Chamber No. 1

As indicated earlier, Chamber No. 1 is approximately square in plan, measuring 6.6 × 5.7 m. Given that on the level of the original floor no bases for freestanding columns were found, then it was logical to suppose that there was a wooden cupola “*ruzan*”-type ceiling. However, our attention was drawn to a strange feature of the construction of the upper edge or plinth of the horizontal decorative panel on the NW wall. The adobe masonry here is of the most common kind (the so-called “English bond”), with alternating courses of bricks laid lengthwise along the face (“stretchers”) and with courses where the bricks are perpendicular to it, the ends facing out (“headers”), thus ensuring that the bricks would be solidly anchored in the wall. Here in the northern corner we observed that in the

“header” row, located uppermost on the edge of the clay panels, the short sides are protruding from the surface of the wall, and in that row are regular gaps (where bricks had been lost?) [Fig. 8]. Furthermore, on the NE and SW walls, which form the corners with the NW wall, where there is a surface layer of fine-grained yellow plaster are obvious traces of tapering extending up to the upper corners of the NW panel. That is, on the SW and NE walls in the right and left corners of the portals the finely grained yellow binding plaster is missing and in its place is a layer of soot. Moreover, the preserved edges of this plastering, it seems, have a characteristic slope from the place where the cornices of the carved panels connect above to the central vertical axis of the portal niches [Fig. 14]. These details are evidence that the given chamber could have been covered with a light, tent ceiling, the lower edge of which rested on a “shoulder” of bricks which ran along the very top of the decorative clay panel, and a top which rested on longitudinal beams extending from wall to wall. The too wide span of the ceiling would lead one to suppose that the lateral sloping faces were supported above on two longitudinal beams and that, in addition, in the middle there was a horizontal part of the roof (that is, the peak was truncated), in which was a smoke hole and skylights. Only with such a construction of the ceiling would no plastering of the walls above the decorative panels be needed (as we can see all along the southwestern wall), and in the corner where the walls meet.

The Decorative Scheme of Chamber No. 2

Chamber No. 2 is rectangular, measuring 7.7 × 6.8 m. Unlike Chamber No. 1, it extends along a SE-NW axis and

Fig. 14. Lines drawn in the corners indicate where the wooden roof was fastened to the walls of Chamber No. 1.



has brick masonry reaching all the way from the floor to the top of the walls—that is, it is the foundation for structure BL 1. As a result, the interior, which has benches of varying heights, steps, podiums and the remains of flanking walls, is preserved rather well. The extant height of the walls is 3–3.5 m, their thickness 1.8–2.1 m. The walls in this room were covered with a 3 cm thick layer of plaster and were smoothed over with a thin layer of alabaster (*kyr*). The plastering of the lower part of the walls up to 1 m had been damaged by moisture and salts; the upper part for the most part survived but has significant gaps where the plaster has fallen away and also damage due to burrowing rodents and insects.

The NE wall was cleared along its interior face, the remaining part left for future excavation. The entrance into the room is in the center of the SE wall. Along the NE, NW and SW walls are benches, 0.55 and (the NE one) 0.4 m high. The width of the “main” (NW) bench is 1.8 m, and that of the others 1.4 m. A two-step stair one meter wide rises in the center to the central, honorific place on the bench. In the middle of the room, close to the entrance, is a square podium measuring 1.1 x 1.05 m and 0.2 m high.

All the walls of this room have *drawings*, and, outlined in black on the white alabaster background, are designs in a wide band at chest height. The upper part of the band is occupied by vegetal ornament of tendrils and branches. The walls have graffiti depicting human figures and images of the animal world and birds.

In its layout and decorative scheme, this chamber can be interpreted as a throne room from the first construction period [Fig. 5, rm. 2]. Unfortunately, the original drawings have been but poorly preserved, which can be explained, it seems, by two reasons. First of all, probably, the initial instability (poor quality) of most of the colorants which were used, except for the black (in fact only it can be seen on some parts of the wall).⁴ Secondly, the progressive leaching of salt on the surface of the walls played a major role in the loss of the painting, as did, possibly, the entire filling of the room with adobe brick during the next construction phase. However, the painting on the western part of the hall (located farthest away from the edge of the mound), on the SW and especially the NW wall (where one posits the

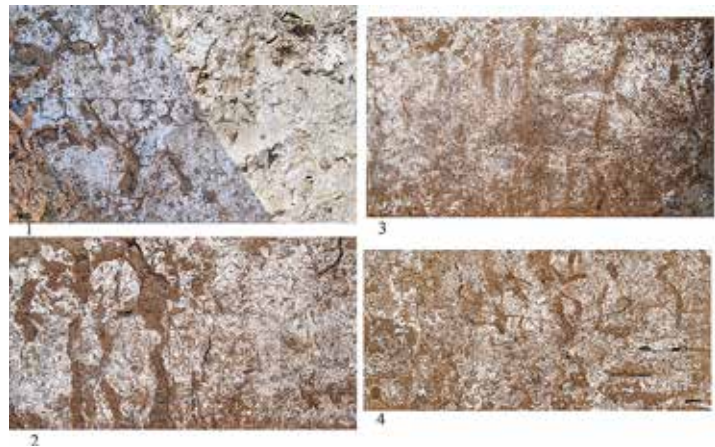


Fig. 15. Depictions (faintly discernable in the photographs) on the walls of Chamber No. 2: 1) the NW wall; 2) the SW wall -- Group I; 3) the SW wall -- Group II; 4) the SE wall.

throne was located) suffered less. The images on the SE wall were damaged as well by the cutting of an entrance into it during the excavations (only a single graffito has been preserved there). Lastly, part of the surface was damaged by burrowing animals and by the roots of plants.

The drawings were made on the alabaster surface of the walls approximately at chest level [Figs. 15, 16]. Unfortunately, for the most part what has survived

Fig. 16. The depictions on the walls of Chamber No. 2: 1) the NW wall; 2) the SW wall; 3) the NE wall; 4) the SE wall. Roman numerals mark the separate groups discussed in our text.



are the ornamental motifs (horizontal dividing strips with rows of pearl roundels that are so common in the painting of neighboring Ustrushana and Sogd [Belenitskii 1973; Al'baum 1975; Sokolovskii 2009])⁵ [Figs. 15.1, 16.1]; in a number of instances the solid background field of vegetal tendrils and medallions. Only on the NW wall have the heads of two individuals been preserved [Fig. 16.1], and on the SW wall the painted eye pupils on the face of the ruler. One can assume that for the painting of the decorative borders and the background more stable colors were used. Another explanation is possible too: the painting of the walls was only begun but not finished, and the artist succeeded in laying on only a single color.⁶ Unfortunately, the chemical analysis of samples of the colorants has not yet been carried out.

Some (short) time after the drawing of the images (possibly when they had begun to fade) on all four walls, inscribed by an amateur artist using the blade of a knife, were *graffiti* in a different artistic style, in a number of instances, undoubtedly, to create a planned composition. These graffiti (for the most part, very primitive) in many places are directly superimposed on the decorative lines of the early painting but do not become part of their composition (thus, on the NE wall they cover the horizontal band of drawn “pearls”; and on the opposite, NW wall, the only graffiti among the remains of the painting (a dog and some kind of large animal) is carelessly “chopped” into them, etc.) [Fig. 16.1]. Taking into account the few remains of paint on the more significant individuals of the SW wall, the one which is significant for us (that is, the pupils of the ruler and, apparently, his spouse), and as well the greater realism and mastery in the execution of the

two latter images [Fig. 16.2], one can suppose that the contours of these drawings retain the original outline by the artist and later were carelessly renewed and supplemented (cf. similar “renewing” in early Turkic petroglyphs [Cheremisin 2011]).

Unfortunately it is very difficult to reconstruct the program of the paintings on account of their very poor state of preservation. Judging from the NW wall (where the two horizontal dividing rows of lines with pearls are), the vegetal motifs and individuals were positioned at several levels [Fig. 16.1]; on the SW wall the remains of the field of tendrils are above the line of the graffiti. The graffiti are what is better preserved on the walls, which allows us to be more confident in their interpretation in a number of instances.

One can suggest that the portrait in the SW wall, likely that of the ruler and his consort [Figs. 16.2; 17.1,2], was originally rendered in color within the indicated contours (thus, the painting of the pupils of the man has been preserved), and then somewhat renewed. In support of this hypothesis is the more professional and realistic manner of their depiction compared to the rendering of the other graffiti. The remaining incisions on this and the other walls are executed in a style that is very close or identical to that of early Turkic rock drawings.

The *graffiti of the SW wall* include four compositions, which form a single horizontal sequence [Fig. 16.2]. In them all in all are seven anthropomorphic personages (the sacred number); for the six largest of them, the significant (possibly, decisive) role in the identification of the image is to be found in the headdress and details of the coiffure.

Look first at *Group I* consisting of four anthropomorphic figures located on the left part of the wall and facing left. On the left is the ruler, who, judging from the pose (leaning left [as seen by the viewer] toward his supposed spouse), was depicted as seated (naturally then the same can be assumed is the case with his wife). Alas, only the upper part of these figures has been preserved [Fig. 17.1]. Their heads, shown almost in profile, are what is most carefully rendered (presumably following some kind of model); the faces are wide with massive rectangular jaws. Thrown over their shoulders is an original head-dress shaped as a cap with folded wide rims (apparently with slits) and a rather high semi-egg-shaped crown. On the left edge of the rims hang a pair of ribbons, whose lower edge has a jagged fringe. A similar kind of head gear is known from the 9th–10th centuries among the Turkic Uighurs who settled in the north of Xinjiang (Yatsenko 2000, Fig. 65.16). The narrow eyes retain pupils

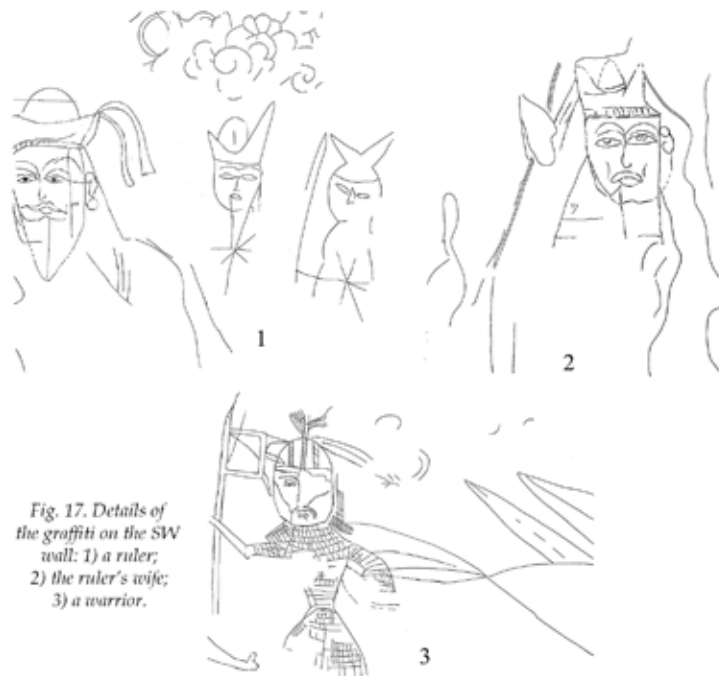


Fig. 17. Details of the graffiti on the SW wall: 1) a ruler; 2) the ruler's wife; 3) a warrior.

painted in black. The horizontal moustaches, it seems, are oiled, and the left one bends upwards. On the left cheek, turned toward the viewer, can be seen a small tattoo, analogous to that on the faces of Turkic men depicted in the barrow of the second half of the 7th century at Shoroon Bumbagar in Northern Mongolia (Yatsenko 2014, Fig. 5.4-6). The long hair falls down across the back (possibly, following ancient custom, it was plaited into a braid), and there is a long and wide beard that comes to a point. In the ears are (gold) wire, hoop-shaped earrings. The dress caftan has been rather carelessly thrown on the shoulders but retains its fold to the left; one can see a hanging, long and, apparently, wide left sleeve whose edges have two strips of embroidery. The proposed consort of the ruler [Fig. 17.2] directly adjoins her husband on his right side. Her face, as with him, is turned to her right, but is not so carefully drawn as that of the man. She wears a three-horned headdress, which was usual for female rulers, as can be seen from depictions on Turkic coins of Central Asia (Chach) (Yatsenko 2013a, Fig. 9.4). As with the male figure, the headdress has a jagged fringe along the bottom hem. A long mantle hangs from its horns; its lower edge has not been preserved. In back of the ruler, to the right, are two male figures of lower status: they stand, and their height is approximately half that of the ruler.

Behind the ruler, to his left, stand two male figures who are 2–3 times shorter than he and are rendered very schematically. These apparently are young individuals (they lack moustaches and/or beards such as are emphasized on the other men on this wall). On their heads are two very similarly shaped headdresses with two long and sharp projections made clearly of hard material (felt or leather), since they do not droop or hang down. The one in front (closer to the ruler) has the more complex of these headdresses; in its center is a small semi-spherical crown. The rear and less significant personage apparently is an armed bodyguard (he holds a spear), and his two-horned headdress is simpler without the crown. Such headgear has been documented both in the northern and southern oases of neighboring Xinjiang from the 2nd–3rd to the 8th centuries CE (Yatsenko 2000, pp. 311–12, Figs. 58.5, 60.12).

The central *Group II* on this wall consists of three individuals [Fig. 16.2]. Its composition is not entirely common for Turkic and Central Asian art. The core of the composition is a pair of men, the left one of which is clearly the more prestigious. His figure is more substantial (more precisely, while of equal height to the second one, who is standing, the first man apparently is sitting), in that his head is twice as large and his left hand extends in the direction of the standing figure. His headdress is very interesting: a semicircular cap with three parallel jagged strips. This headdress

is known only in the paintings from the same period from the Kucha oasis in Xinjiang (Yatsenko 2000, Fig. 60.6). He also has a rather long and pointed beard (not only just long, as with the ruler) and shorter moustaches. The collars are delineated on his clothes and on the right shoulder is possibly a rectangular buckle for a cloak.

In front, back to him, stands the second man with his face turned toward the seated individual [Fig. 17.3]—a soldier in a helmet with a plume and ribbons dangling from the crest, dressed in long lamellate armor (all of its plates are rendered primitively but in detail). This is a possibly younger individual (he has long drooping moustaches but no beard). This image is the most detailed one of all the graffiti in the hall. Its left hand, possibly, rests on a sword that has not been preserved. He holds in the right hand a banner on a spear (?) shaft. The banner is small, with three points. This type of banner is well known from early medieval petroglyphs of southern and eastern regions of Kazakhstan and the Baikal region, where we see it held by a rider (Samashev 1992, Fig. 180; 2006, pp. 120, 128). A foot-soldier holds such a banner in one of the engravings of Eshkiolmes (Baipakov et al. 2005, Fig. 237). This pair of men, it seems, represent a notable and the soldier who serves him. However, whether the episode depicted in *Group II* is intended to be realistic is rather dubious on account of the third figure whose body leans against that of the standing soldier. This is a very large (half human height) bird (clearly not a raptor), standing with its back to the men, but with its head turned toward them. Judging from the “military” context, what we have here is some kind of Turkic epic scene, where a bird rather often appears as a herald (Hamaiun among the Bashkirs and others).

Group III also is very interesting. Here are inscribed seven wild ungulates of varying degrees of preservation (the sacred number). A rather large sun disc occupies the center of the composition, flanked by mountain goats (two addorsed pairs in the upper register and one more a bit lower). In the lower register are two larger deer, depicted in a different style. Finally, in *Group IV* (if you please, the most primitive in its execution and preserved only fragmentarily) is a scene an archer on foot, probably accompanied by a dog, hunting two or three ungulates. To his left stands what appears to be his horse.

Graffiti of the NW wall are in its center, covering a band of painting that has not been preserved in that section [Fig. 16.1]. Unfortunately, both figures are badly damaged. Here the incising was done rather carefully and in a style that differs from that on the other walls. On the left is a running dog, to the right of which is a (probably fantastic) being with a long tail and very long ears that faces in the opposite direction.

The graffiti on the NE wall [Fig. 16.3] consist of two groups. All of the individuals face left. On the left, *Scene I* has been preserved only fragmentarily. However, one can suggest that here are two persons and some rather large artefacts. The man from whom the legs have been preserved moves left; in his hands he holds some kind of dangling object. On him can be seen the hem of a fastened garment with characteristic semicircular nobs known in Sasanian Iran from the 4th century and soon spread in the south of Central Asia (Tocharistan) (Yatsenko 2006, p. 216, Figs. 158.25a, 168, 189.48-49). On the right is possibly a female figure (there are fragments of a long garment with many fine pleats). To the right of *Scene II* are several (no fewer than 7) figures of mountain goats of various sizes, all of which face left.

Only the duo of a man and a large bird has survived from the graffiti of the partially destroyed SE wall [Fig. 16.4]. The bird (which most resembles a peacock) is rather carefully drawn in profile (especially its head). On its body is an image of a front-facing man, with a beard, moustaches and wearing a low cap. Also drawn on the body of the bird, apparently, was the figure of a running ungulate (?) in profile. Possibly these large images of a bird and a man are connected and reflect a popular folkloric motif of the flight of a hero on a magic bird.

One may assume that all the graffiti were inscribed on the walls of the hall in a brief period and are to be connected with a single conceptual scheme or pictorial program (in any event, all of the main compositions have been drawn in a single row, are not superimposed on one another, etc.). However, they were executed in different styles by different individuals.

The realia depicted in the graffiti, in particular specific details of costume, entirely support the dating of the palace of the Kulan citadel to the 8th century. The fact is that there are no known analogies from the earlier 6th and 7th centuries to three of the four types of original headdresses in the "throne hall" (cf. Yatsenko 2014, 2013a, 2009, 2010, 2013b, 2004), which of course is no accident. However, all of them, as already noted, are known in neighboring Xinjiang (!): one in the Kucha oasis (and an earlier one in the Niya oasis) and among the Uighurs who settled there in the 9th century (the head-covering of the ruler on the SW wall). This is no surprise, since the contribution of the Xinjiang oases to the costume of the early Turks has been noted previously (Yatsenko 2013b, pp. 593-94). On the other hand, at the beginning of the 9th century, the Arab forces already had reached Kulan, and it is unlikely that a place remained in the official residence for an analogous array of motifs (in clay and in the graffiti). Hence we are to conclude that the creators of this complex were the *Turgesh*, whose kaghanate arose in the

first half of the 8th century.

The Ceiling of Chamber No. 2

The preservation of the walls to a height of 3.5 m enables us to explain the roofing system of Chamber No. 2. At a height of 2.1 m from the level of the benches in the walls are located the bases of what we suppose were grooves or mortises for beams or trusses of a tent-like wooden roof. The height of the mortises is 0.6-1.1 m, their width 0.2-0.25 m. A wooden tent ceiling has been reconstructed by Leonid V. Gurevich over a religious or altar chamber in the castle of Aktepa-Yunusabad in the early medieval Tashkent oasis and for the altar chamber of a religious complex of ancient Kanka. Such a tent ceiling has also been proposed for the square Chamber No. 14 (4.85 x 4.85 m) of the Balalyktepa castle of the 6th-7th centuries (Northern Tocharistan) (Gurevich 1990, pp. 73, 74). There, at a height of 1.2-1.3 m above the benches, the walls were covered with painting depicting scenes of feasting. Above the upper edge of the painting along its entire perimeter are traces of the supports for a wooden ceiling. The surface of the walls ended above this. The reconstruction depicted a dark chamber with a low, truncated tent ceiling where an eternal flame burned on a central altar.

Traces of beams inserted in the walls and placed at a distance of 50-55 cm from each other at a height of 2.6 m. were found in the "Red Hall" (12 x 7.85 m) of the palace at Varakhsha (7th-8th centuries), which, in the opinion of Gurevich was an altar room for religious purposes. There too he reconstructed a wooden tent ceiling. One should also mention Chamber No. 6 in the plan of the cult complex of the Kostobe palace in the vicinity of Taraz as one of the monuments with a very similar tent ceiling (Baipakov and Ternovaia 2004, p. 9).

A high pyramidal ceiling was characteristic for a specific type of cult structure of Sogdia in the pre-Islamic period. Their architectural appearance reflects the more complex decorative elements of ceramic ossuaries, which feature a high pyramidal cover. In the prototypes (of religious buildings), the ceilings, undoubtedly, were constructed of wood. It is possible that inside they were decorated with carving, and on top was installed the sculpture of a deity, as has been shown on a number of examples (*Kul'tura i iskusstvo* 1991, pp. 67, 69).

Thus one has good reason to suppose that the excavated Chamber No. 2 also was representative and could have fulfilled the function of a hall for ceremonial receptions, the enactment of religious rituals and collective meals in the presence of the local ruler, the lord of the castle.

The cleared chambers lack artefacts, except for a few

fragments of ceramic vessels from atop the benches of Chamber No. 3. Before their completion, the chambers were carefully cleaned; no traces of destruction or fire have been found.

Conclusions

The excavations on the citadel have opened part of a monumental structure akin to a castle with chambers that had various purposes, among them cult activity. The representative chambers found in the palace complex of Kulan town are unique in that they have comparatively well preserved decorative elements and ornamental compositions, wall painting and graffiti with discernable motifs which show various aspects of the artistic culture of the local inhabitants.

The stratigraphy and also the character of the depictions on the walls of the chambers partially excavated on the Kulan citadel suggest that the structures date to the 8th century. The study of this part of the town is at its beginning stages and has some analogies in the construction of buildings with the functional characteristics of a temple, although it is still premature to determine the function of many of the rooms.

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References

- Akylbek, Smagulov and Yatsenko 2016
- Serik Sh. Akylbek, Erbulat A. Smagulov and Sergei A. Yatsenko. "Dekorativnoe ubranstvo rezidentsii tiurkskikh pravitelei VIII v. v tsitadeli g. Kulan" [The Décor of the 8th-Century Turkic Rulers' Residence in the Citadel of Kulan Town]. In: *Kul'turnoe nasledie Eorazii (s drevnosti do nashikh dnei)*. *Sbornik nauchnykh statei*. Ed. B.A. Baitanaev. Almaty: Institut arkheologii im. A. Kh. Marulana, 2016: 29–66.
- Al'baum 1975
- Lazar I. Al'baum. *Zhivopis' Afrasiaba* [Afrasiab Painting]. Tashkent: Fan, 1975.
- Baipakov 1966
- Karl M. Baipakov. "Rannesrednevekovye goroda i poseleniia Semirechia" [The Early Medieval Cities and Settlements of Semirech'e]. *Izvestiia Akademii Nauk Kazakhskoi Soiuznoi Respubliki. Serii obshchestvennykh nauk* 1966/2: 68–84.
- Baipakov 1986.
- _____. *Srednevekovaia gorodskaiia kul'tura Iuzhnogo Kazakhstana i Semirechia* [The Medieval City Culture of Southern Kazakhstan and Semirech'e]. Alma-Ata: Nauka, 1986.
- Baipakov 2002a
- _____, ed. *Svod pamiatnikov istorii i kul'tury Respubliki Kazakhstan. Zhambyl'skaia oblast'* [Corpus of Monuments of the History and Culture of the Republic of Kazakhstan]. Jambyl Region). Almaty: NIPi PMK, 2002.
- Baipakov 2002b
- _____. "Gorodishche Kulan" [The Kulan Ancient Settlement]. In: Baipakov 2002a: pp. 283–89.
- Baipakov and Ternovaia 2004.
- _____, and Galina A. Ternovaia. *Reznaia glina Jetysu* [The Carved Clay of Jetysu]. Almaty: CREDO, 2004.
- Baipakov et al. 2001
- _____, Zukhra Sh. Shardenova, and Svetlana Ia. Peregudova. *Rannesrednevekovaia arkhitektura Semirech'ia i Iuzhnogo Kazakhstana na Velikom shelkovom puti* (The early medieval architecture of Semirech'e and Southern Kazakhstan on the Great Silk Road). Almaty: Gylym, 2001.
- Baipakov et al. 2005
- _____, Aleksei N. Mariashev et al. *Petroglify v gorakh Eshkiolmes* [Petroglyphs in the Eshkiolmes Mountains]. Almaty: OST – XXI vek, 2005.
- Bartol'd 1966
- Vasilii V. Bartol'd. "Otchet o poezdke v Sredniuiu Aziuu s nauchnoi tsel'iu 1893–1894 gg." [Report on the Trip to Central Asia with a Scientific Purpose in 1893–1894]. In: *Idem, Sochineniia*, Vol. 4. Moskva: Nauka: 19–91.

- Belenitskii 1973
Aleksandr M. Belenitskii. *Monumental'noe iskusstvo Pendzhikenta: Zhivopis', skul'ptura* [The Monumental Art of Panjikent: Painting, Sculpture]. Moskva: Iskusstvo, 1973.
- Cheremisin 2011
Dmitrii V. Cheremisin. "Neskol'ko nabliudenii nad graffiti Gornogo Altaia" [Some Observations on the Graffiti of Mountain Altai]. In: *Drevnee iskusstvo v zerkale arkheologii*. Ed. Vladimir V. Bobrov. Kemerovo: Kuzbassvuzizdat, 2011: 152–66.
- Giul' 2013
El'mira Giul'. *Sady nebesnye i sady zemnye. Vyshivka Uzbekistana: skrytyi smysl sakral'nykh tekstov* [Gardens of Heaven and Gardens of Earth. The Embroidery of Uzbekistan: The Hidden Meaning of the Sacred Texts]. Moskva: Izdatel'skii dom Mardzhani, 2013.
- Gurevich 1990
Leonid V. Gurevich. "K interpretatsii pendzhikentskikh 'kapell'" [On Interpretation of Panjikent 'Chapels']. In: *Kul'turnye sviazi narodov Srednei Azii i Kavkaza. Drevnost' i srednevekovie*. Ed. Boris A. Litvinskii. Moskva: Nauka: 67–89.
- Kalter 1991
Johannes Kalter. *The Arts and Craft of the Swat Valley. Living Traditions in the Hindu Kush*. London; New York: Thames and Hudson, 1991.
- Kazahskie traditsii 2002
Kazahskie natsional'nye obychai i traditsii. Al'bom [Kazakh National Customs and Traditions. An Album]. Almaty: Phillips Petroleum Kazakhstan Ltd, 2002.
- Khazbulatov et al. 2016
Andrei R. Khazbulatov, Serik Sh. Akylbek, et al.. "Nauchno-issledovatel'skie raboty na gorodishche Kulan v 2015 godu" [The Scientific Work in Kulan Ancient Fortress in 2015]. In: *Arkheologiya, etnologiya i muzeologiya v sisteme sovremennogo vysshego obrazovaniia: Materialy mezhdunarodnoi nauchno-metodicheskoi konferentsii 'VIII Orazbaevskie chteniia'*. Ed. A. B. Kalyshev. Almaty: Kazuniversitet, 2016: 218–22
- Klimburg 1999
Max Klimburg. *The Kafirs of the Hindu Kush: Art and Society of the Waigal and Ashkun Kafirs*. 2 Vols. Stuttgart: Steiner, 1999.
- Kosolapov and Marshak 1999
Aleksandr I. Kosolapov and Boris I. Marshak. *Stennaia zhivopis' Srednei i Tsentral'noi Azii* [Murals of Central and Inner Asia]. St-Petersburg: Formika, 1999.
- Kozhemiako 1959
Petr N. Kozhemiako. *Rannesrednevekovye goroda i poseleniia Chuiskoi doliny* [Early Medieval Cities and Settlements of the Chu Valley]. Frunze: Akademiia nauk Kirgizskoi SSR, 1959.
- Kul'tura i iskusstvo 1991
Kul'tura i iskusstvo drevnego Uzbekistana. Katalog vystavki. [Culture and Art of Ancient Uzbekistan. An Exhibition Catalogue]. Ed. Vladimir K. Veremeiuk. Bk. 2. Moskva: Vnesh-torgizdat, 1991.
- Nurzhanov 2010
Aranbai A. Nurzhanov. "Topografiia srednevekovykh gorodov Chu-Talasskogo mezhdurech'ia" [The Topography of the Medieval Cities of the Chu – Talas Interfluv]. *Izvestiia Akademii nauk Kazakhskoi SSR. Ser. obshchestvennykh nauk* 2010/1: 142–54.
- Rempel' 1961
Lazar I. Rempel'. *Arkhitekturnyi ornament Uzbekistana. Istoriia razvitiia i teoriia postroeniia* [The Architectural Ornament of Uzbekistan. The History of Its Development and Theory of Its Construction]. Tashkent: Gos. izd-vo. khudozhestvennoi literatury. 1961.
- Samashev 1992
Zainolla S. Samashev. *Naskal'nye izobrazheniia Verkhnego Priirtysh'ia* [The Rock Depictions of the Irtysh Basin]. Alma-Ata: Gylym, 1992.
- Samashev 2006
_____. *Petroglify Kazakhstana* [Petroglyphs of Kazakhstan]. Almaty: Öner, 2006.
- Shishkin 1963
Vasilii A. Shishkin. *Varakhsha*. Moskva: Izd-vo. Akademii nauk SSSR, 1963.
- Sokolovskii 2009
Vladimir M. Sokolovskii. *Monumental'naia zhivopis' dvortsovogo kompleksa Bundzhikata* [The Monumental Painting of the Palace Complex of Bunjikat]. St.-Peterburg: Izd-vo. Gos. Ermitazha, 2009.
- Yatsenko 2000
Sergey A. Yatsenko. "Kostium" [Costume]. Sec. 3 in: *Vostochnyi Turkestan v drevnosti i rannem srednevekov'e. (Vol. IV). Arkhitektura. Iskusstvo. Kostium*. Ed. Boris A. Litvinskii. Moskva: Vostochnaia literatura, 2000: 296–84.
- Yatsenko 2004
_____. "The Costume of Foreign Embassies and Inhabitants of Samarkand on Wall Painting of the 7th c. in the 'Hall of Ambassadors' from Afrasiab as a Historical Source." *Transoxiana: Journal Libre des Estudios Orientales* 8 (June 2004). <http://www.transoxiana.org/0108/yatsenko-afrasiab_costume.html>, last accessed 2 November 2017.
- Yatsenko 2006
_____. *Kostium drevnei Evrazii (iranoiazychye narody)* [Costume of Ancient Eurasia (the Iranian-Speaking Peoples)]. Moskva: Vostochnaia literatura, 2006.
- Yatsenko 2009
_____. "Early Turks: Male Costume in the Chinese Art. Second half of the 6th – first half of the 8th cc. (Images of 'Others')." In: *Transoxiana: Journal Libre des Estudios Orientales* 14 (August 2009) <http://www.transoxiana.org/14/yatsenko_turk_costume_chinese_art.html>, last accessed 2 November 2017.
- Yatsenko 2013
_____. "Some Observations on Depictions of Early Turkic Costume." *The Silk Road* 11 (2013): 70–81.

Yatsenko 2014

_____. "Images of the Early Turks in Chinese Murals and Figurines from the Recently-Discovered Tomb in Mongolia." *The Silk Road* 12 (2014): 13-24.

Notes

1. For details about the issues involved, see the longer, Russian version of this article: Akylbek, Smagulov and Yatsenko 2016.
2. The measurements of the Kulan shahristan given in the 2002 publication *Svod pamiatnikov* are a third larger – 300-320 m. Apparently this difference is to be explained by the measurements having been taken along the base of the walls, not along the crest (Baipakov 2002a, p. 285).
3. Cf. the views of Aranbai A. Nurzhanov (2010), who provided details of the topography not presented in the earlier literature, but apparently believes this area was the shahristan, not a rabad.

4. Among the sizing paints (with a binder of gum from fruit trees) which were used for mural painting in the 5th-8th centuries in Inner Asia, the black (obtained from charcoal from plum, grape etc. or from soot), along with ultramarine and chalk-white, was mixed with the strongest binding solution (Kosolapov and Marshak 1999, pp. 41, 44; Sokolovskii 2009, pp. 65, 94).

5. These roundels are limited to the contours, but clearly not formed from a stencil and thus often are somewhat deformed.

6. It is difficult to imagine that the original intent was to paint using only black on a white background. In any event, this is entirely uncharacteristic for pre-Islamic Inner Asia.

-- translated by Daniel C. Waugh

LIGHT ON THE LIAO

In summer 2009, I was fortunate to participate in a summer seminar, "China's Northern Frontier," co-sponsored by the Silkroad Foundation, Yale University and Beijing University. Lecturers included some of the luminaries in the study of the Liao Dynasty and its history. In traveling through Gansu, Ningxia, Inner Mongolia and Liaoning, we traversed much of the heartland of the Liao Empire (907–1125), founded by the first of its dynasty, the K(h)itan Abaoji in what is now Liaoning Province. At its peak, the Liao Empire controlled much of North China, Mongolia and territories far to the West. When it fell to the Jurchen in 1125, its remnants re-emerged as the Qara Khitai off in Central Asia, where they survived down to the creation of the Mongol empire (for their history, see the pioneering monograph by Michal Biran). While they began as semi-nomadic pastoralists, the Kitan/Liao established five capital cities of considerable size. The rich architectural legacy and stunning artifacts excavated in recent years from Liao tombs attest to their involvement in international trade and the sophistication of their cultural achievements. As with other states established in "borderlands" they drew on many different sources to create a distinctive culture which is now, after long neglect, being fully appreciated.

These pictures touch but a few high points, leaving much else for separate exploration, which, it is hoped, they will stimulate readers to undertake on their own. The history and culture of the Kitan/Liao merit your serious attention, forming as they do an important chapter in the larger history of the silk roads. With the exception of the map and satellite image, the photos are all mine, a very few taken in collections outside of China, but the great majority during the seminar in 2009. Captioning is minimal, but the bibliographic essay at the end provides leads for learning more about the Liao and finding many of the same images with descriptive text in various catalogs. Where there is an image or discussion in a published catalog, I have indicated as much with an abbreviation and page number next to my photos.

– Daniel C. Waugh

Map credit: Kradin et al., in *The Silk Road* 12 (2014): 90.



THE "WHITE PAGODA" IN THE LIAO ANCIENT CITY OF QINGZHOU

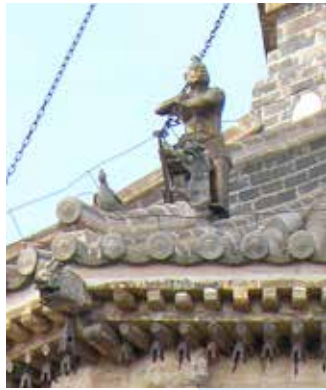


Images:
Google
Earth

Nestled in a valley leading into a mountainous region, Qingzhou was an important site for the Liao, since a number of the imperial tombs were located nearby (unfortunately, not open to us in 2009, but see Steinhardt 1997, pp. 256-63 for details). Today, as with most of the Liao cities, all that remains on the surface are the walls, with the exception of the "White Pagoda", erected by dowager empress Zhangsheng in 1047, clearly visible in the Google Earth photo.



The pagoda's exterior displays many of the decorative features common to Liao masonry pagodas. At the time of the restoration in 2009, some of the original sculptures, bells and mirrors were placed on display in the Balinyouqi Museum.



Attached to the top and the upper levels of the pagoda were more than 800 mirrors, which, when struck by the sun, would have suggested light radiating from within.

Liao architects were known for their inventive elaboration of bracket sets in their wooden buildings (on the *right* here the facade of the famous Liao temple at Fengguosi). In the White Pagoda, the brackets were rendered as a decorative element in brick.



Sculpted relief on the exterior includes symbolic representations—the elephant and lion—the bodhisattvas Samantabhadra and Manjushri, apsaras, and guardian deities flanking doors and windows.

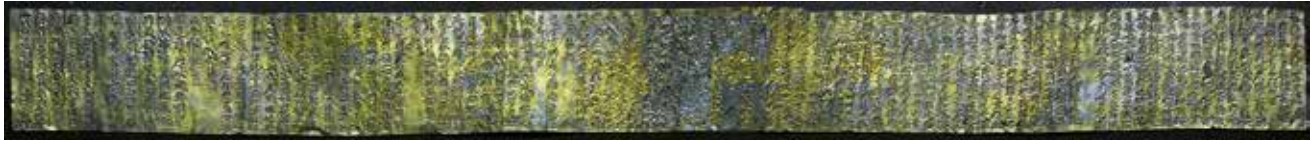




Steles recorded (here on the *left*) the names of the craftsmen and information on construction procedures for the pagoda, and (on the *right*) the names of officials and Buddhist clerics who had sponsored the work and donated relic deposits.

The pagoda is of particular interest for the contents of its relic chamber, opened in 1989 during extensive restorations, the artefacts now on display in the Balinyouqi (Balin Right Banner) Museum (see GS, esp. pp. 74-79, 242-51, 266-69). The donations of precious offerings included a range of aromatics and numerous miniature pagodas containing scriptures. Streamers, some rather roughly cut out of silk in human form, were attached to each miniature pagoda.





As Hseuh-man Shen explains (GS, pp. 244, 248, 250), the copper sheet, *second from bottom on right*) was rolled to form a core for the woodblock-printed *dharani* shown below it. At *top* here is the 112 cm-long gilded silver scroll with other *dharani* texts; below it a detail of one portion. On both the copper core sheet and above it on the gold sheet, the main texts are in Sanskrit. One of the silk wrappers, shown *above*, is inscribed with an indication that these sutra texts are “relics”.

The texts include the *Dharani inside the Cavity of Chattra Parasols* and excerpts from the *Great Dharani Sutra of Stainless Pure Light*. This emphasis connects Liao Buddhism with that in Korea and Japan. See also Youn-mi Kim’s important long essay in *The Journal of Song-Yuan Studies*.





The relics included swatches of silk, a silver spoon engraved with an inscription referring to eternity, fine porcelain dishes, some filled with lilac blossoms, and others containing a range of exotic aromatics attesting to the long-distance contacts of the Liao: sandalwood, cinnamon, cloves, nutmeg, betel nuts, frankincense. See the tabulation of the inventory in GS, p. 78.



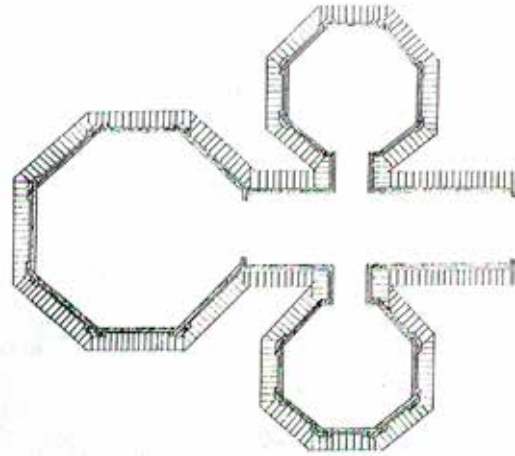
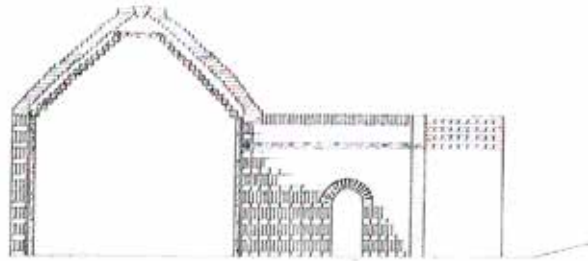
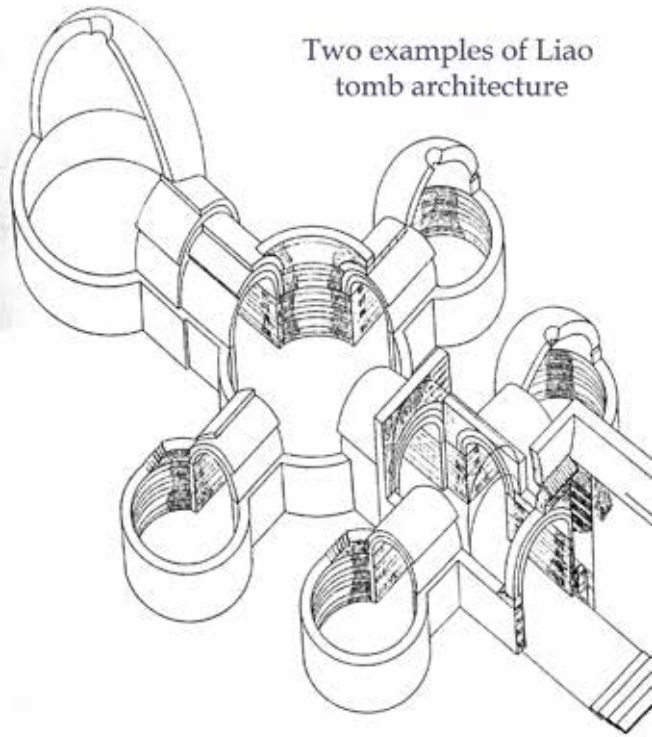


Deposits included an elegant gold-sheathed wooden statue of the Buddha Shakyamuni and three depictions of the Buddha in *parinirvana*, the one below recovered in the local community after it had been removed from the pagoda in modern times. For the Buddha in *parinirvana*, see NM, p. 120.



Liao tombs and burial customs display, as one might expect, a combination of borrowed features and elements of Kitan indigenous traditions. In keeping with their imperial pretensions, the Liao adopted many aspects of Chinese funerary display (in the same way that the Xiongnu, centuries earlier, had done in Mongolia). Typical for the Liao burials of the elite was enclosing the body in a suit of mesh and placing a sculpted mask with stylized features over the face. Some burials contained wooden manikins into which relics of the deceased would be placed. The elite burials, famously that of the Princess of Chen and Xiao Shaoju, have yielded an astonishing array of “Gilded Splendor”, including crowns and gilded silver dishes. Not least in interest is the presence of glassware imported from the Middle East and a great deal of jewelry incorporating carved amber whose raw material was imported all the way from the Baltic Sea.

Two examples of Liao tomb architecture



A cutaway reconstruction of part of a Liao tomb in the display at the Aohan Banner Museum which also includes some of the tomb paintings shown below, their position in the original tomb sketched here in the model. Steinhardt 1997 devotes a major section of her book (Chs. 10-13) to tomb architecture and mortuary practice.



Within the brick burial chamber was normally a wooden sarcophagus, the architecture of which might follow Chinese models or resemble a nomad yurt. For the afterlife, miniatures of domestic furniture might be provided, and the body placed on a raised bed within the chamber. Some burials included elaborately decorated wooden coffins (for that *on the left below*, see AK, pp. 107–11), others much simpler ones, in this case one containing a wooden manikin.







The range of funerary traditions can be seen clearly here. On the one hand, there is a cremation urn shaped like a nomadic yurt and decorated with deer. The cover slab for a burial *on the left* displays the constellations, and the two rare examples of Liao wood carving represent two of the four animal symbols for the cardinal directions which were common in central China beginning in the time of the Han Dynasty. See GS, pp. 118-19, 198-205; for the urn, the inscribed slab and the epitaph under it, TC, pp. 83, 144-45.



While it seems unlikely that the sculptured and painted decoration of tombs provides us with portrait likenesses, any more than do the masks, nonetheless, the imagery may convey an accurate sense of many aspects of actual Kitan life. For the two carved slabs below, from the tomb of Mme. Xiao and her husband Yelü Woli, see *GS*, pp. 210-13; *TC*, pp. 126-29.





Of course most of this imagery follows established convention, the *lower sculpted panel on the left* here almost identical in its pose with one of the paintings on the wall of a tomb excavated in Aohan Banner (see AK, p. 95). The poor preservation of many of the paintings often makes it difficult to see detail and requires a lot of digital "cleaning" of photographs.



The Aohan Banner Museum displays a remarkable array of murals removed from locally-excavated Liao tombs. Unfortunately, in 2009 while there, our visit was cut short by an electrical outage during a thunderstorm; so the examples here were photographed in a nearly-dark room using a flash. Reproductions of these and other paintings in the collection can be found in SG, pp. 228-61. My digital "cleaning" of the images to reveal detail in some cases desaturates what remains of the color on the originals. The pictures commonly show scenes of feasting either during the lifetime of the deceased or at the time of the funeral. We see attendants including a man carrying a bow, and musicians.





The remarkable image here *on the left* shows a funeral feast, with a draped coffin in the foreground, the curious head above it probably representing either the funeral mask of the deceased or, more likely, a wooden manikin. In the scene *below*, a man plays the panpipes while another individual performs a ritual in front of what probably represents one of the Chinese-style wooden sarcophagi. We can learn a lot from these paintings about food preparation, the scenes probably a reasonably accurate representation of real kitchens. Tableware shown in such tomb murals often is exactly like that which has been preserved in collections of Liao ceramics and metalwork (see GS, pp. 308-09).





In the painting *above*, a patron (the deceased?) looks on while a bowmaker works on a recurve bow for which some of the bone strengthening pieces are laid out on the ground next to the pans whose steam presumably was being used to bend the wood.

A few of the paintings show somewhat paradisaical landscapes, this one inhabited by a tiger, which might, of course, have been a real sight in areas of East Asia known to the Liao.



The Princess of Chen's crown, *upper left*
(see GS, pp. 102-03; ZJ, pp. 168-69).





Above: see GS, pp. 300-01; ZJ, pp. 133, 135.
Below: NM, p. 93.



Above: see NM, p. 103;
Below: ZJ, pp. 98, 100-01; NM, p. 85.





The Princess of Chen's exotica included Baltic amber necklaces (*above and detail below*) and glass from the Islamic Middle East (*top and bottom right*). See GS, pp. 172-73, 330-33; NM, pp. 128-29. For the hairpin on right, GS, pp. 156-57.





These brilliantly-colored ceramics, some designed in imitation of leather flasks, are but a part of the ceramic production by the Liao craftsmen. Also a subject for much more study are the famous statues of *luohans* discovered at Yizhou, traditionally dated to the Liao period but maybe now needing to be given a later date.



RECOMMENDED READING ON THE LIAO

These books are essential:

1) The pioneering study of Liao history and society by Karl A. Wittfogel and Feng-Chia-sheng, *History of Chinese Society. Liao, 907–1125* (Philadelphia, 1949), based on careful analysis of the written sources.

2) The magnificent catalog for the landmark exhibition, *Gilded Splendor: Treasures of China's Liao Empire (907–1125)*, ed. by Hsueh-man Shen (Asia Society, 2006), which included many of the objects depicted on the pages here. At the time of the exhibition, there was a very extensive website illustrating much of what was in it, but unfortunately that is no longer available.

3) The special issue of *The Journal Song-Yuan Studies* (Vol. 43 [2013]), edited by Valerie Hansen, François Louis and Daniel Kane, which contains important recent scholarship on the Liao. In particular, note the essays on trade and relations with the Muslim world by King and Biran, Hansen's chapter on gifting as an important mechanism of exchange, Louis' essay on burial customs, and Kim's monograph-length essay on Liao Buddhism, based in the first instance on her careful study of one of the major sites, the Chaoyang North Pagoda. Readers of *The Silk Road* may remember a photo essay on that remarkable structure and its relic deposit (Vol. 9 [2011]: 53–70). On burial practices, apart from Louis' article here, see the very interesting one on manikin burials by Hsueh-Man Shen in *Artibus Asiae* 65/1 (2003): 99–141. Louis has another insightful article, on the symbolic role of precious metals amongst the Liao elite, in *The Journal of Song-Yuan Studies* 33 (2003): 71–109.

An important study based on biographies of those who served or interacted with the Liao, careers which demonstrated the fluidity of exchange across the borders with China, is Naomi Standen, *Unbounded Loyalty: Frontier Crossings in Liao China* (Honolulu, 2007). Standen and Gwen Bennett have written a very valuable article (in *Modern Asian Studies* 48/6 [2014]: 1519–65), explaining how, in displaying Liao material, Chinese regional museums (many being the ones visited in 2009) have had to grapple with the official views regarding the supremacy of Han Chinese culture throughout the country's history.

The standard work in English on Liao architecture, including city planning, the impressive pagodas and temples and the elaborate tombs, is Nancy Shatzman Steinhardt, *Liao Architecture* (Honolulu, 1997). My choice here to focus on the pagoda at Qingzhou leaves untouched the large and very significant subject of timber architecture which she discusses *in extenso*. Russian and Mongolian archaeologists have been documenting the extent to which the Liao invested huge resources in fortifying their northern frontier in Mongolia. See the articles in *The Silk Road*, 9 [2011]: 104–21; 12 [2014]: 89–97; 13 [2015]: 95–103.

On Liao ceramics, there is a valuable analytical classification and discussion of production sites which at least formerly could be downloaded from the Internet: Jing Lu, *Liao Ceramics between 907 AD and 1125 AD in Northern China*, Ph.D. diss., Eberhard-Karls-Universität, Tübingen, 2009. She has now published a book in Chinese on the subject. For the Yizhou *luohans*, see the substantial article in Wikipedia <https://en.wikipedia.org/wiki/Yixian_glazed_pottery_luohans>, which has the key references regarding their history and dating. The examples in my pictures are the *luohans* in, respectively, The British Museum, The Musée Guimet, and the University of Pennsylvania Museum of Archaeology and Anthropology.

Apart from *Gilded Splendor*, there are a good many other catalogs (the abbreviations listed below) that contain Liao material, including objects depicted on the previous pages:

AK – Adam T. Kessler et al., *Empires beyond the Great Wall: The Heritage of Genghis Khan* (Los Angeles, 1993), Ch. 4, pp. 89–120.

GS – *Gilded Splendor*

While the catalogs in Chinese unfortunately do not even have captioning in English, the quality and range of the illustrations is generally excellent; these books include a good many of the objects illustrated above:

NM – Nei Menggu bowuguan 内蒙古博物院 [Inner Mongolia Museum]. *Wenming zhi lu: Zhongguo beifang caoyuan gudai wenming lansheng = Cultural tour: spectacular sight of the northern grassland civilization in ancient China* 文明之旅：中国北方草原古代文明揽胜 [Huhehaote Shi]: Nei Menggu bowuguan, [2009]. The special exhibit in the

Inner Mongolia Museum , at which several of the photos above were taken. The museum has a number of other publications focusing on its Liao collections.

SG – Shao Guotian 邵國田. *Nei Menggu Aohan bowuguan* 內蒙古敖漢博物館 [The Aohan Inner Mongolia Museum]. Hulunbeier: Nei Menggu wenhua chubanshe, 2004. The catalog of the important collection of the Museum of the Aohan Banner in Inner Mongolia, including the paintings from locally excavated tombs.

TC -- Tang Cailan 唐彩蘭. *Liao shangjing wenwu xie ying* 遼上京文物攝英 [Liao Shangjing Cultural Relics]. Huhehaote: Yuan fang chubanshe, 2005. The Balinzouqi collection in the Chifeng City Museum.

ZJ – Zhang Jingming 張景明. *Zhongguo bei fang cao yuan gudai jin yinqi* 中國北方草原古代金銀器 [Ancient Chinese Silverware in the Steppe Lands] (Beijing, 2005). On metalwork (even if not necessarily of Chinese manufacture...) of the northern borderlands

TAMED BY RELIGION: CENTAURS IN GANDHARA

A UNIQUE SCULPTED NECKLACE OF A GANDHARAN SCHIST BODHISATTVA MAITREYA
IN THE ASIAN ART MUSEUM, SAN FRANCISCO

Ulf Jäger

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Scholars of South Asian and Central Asian Buddhist Art and of the Buddhist art of the Kushan period (i. e. Gandharan Art from the northwest of

modern Pakistan and Afghanistan, dating from the 1st to 4th / 5th century CE) have long recognized that the artists of ancient Gandhara created Buddhist images by melding classical Mediterranean Greek and Roman art with Indian art and the Buddhist faith. This artistic development first emerged in the Hellenistic culture of Bactria with the cultural influence of Alexander the Great and his successors in the independent Graeco-Bactrian kingdoms who ruled the region after his death until ca. the late first century BCE. Later on, the Kushan Empire stimulated trade and connection with the Roman Empire by the sea and land routes to the West, known today as the Silk Roads, and brought late Hellenistic and Roman art, and possibly artists from the West, to create the arts of Gandhara.

The art of Gandhara very likely was the first to show the Buddha as a human being. The way this East-West / West-East cultural marriage worked out is still under debate (Luczantis et al. 2008). While intermingling Hellenistic-Roman with Iranian and Indian religious beliefs and arts, many gods, goddesses and fabulous creatures from the Mediterranean West reached Gandhara (Stančo 2012). Many of these prominent Hellenistic-Roman gods, goddesses and heroes and the syncretism with their eastern, i.e. Iranian and Indian, counterparts have often been discussed, but centaurs in particular have not, despite Ladislav Stančo's contribution to this subject in his outstanding study of 2012 (Ibid., pp. 82–83).

While visiting the Asian Art Museum, San Francisco, in 2014, this author encountered a standing image of the Bodhisattva Maitreya from the Avery Brundage Collection (Inv. No. B60 S597) wearing a carved necklace with two confronted centaurs holding a bead-like reliquary (Asian Art Museum 1994, p. 24) [Fig. 1]. I found this Bodhisattva statue, carved of schist, and most likely dating to the 2nd to 3rd century CE, to be of particular interest, since it posed the question about the place of centaurs and their meaning in the art of Gandhara and in the pre-Islamic arts of Central Asia.



Photo courtesy of Daniel C. Waugh

Fig. 1. The Bodhisattva Maitreya, Gandhara, 2nd to 3rd century CE. Asian Art Museum, San Francisco, Avery Brundage Collection, B60 S597.



Fig. 2. Details showing the different depictions of Gandharan bodhisattvas' necklaces: a) The Maitreya in the Asian Art Museum, San Francisco; b) Los Angeles County Museum of Art, Nasli and Alice Heeramaneck Collection, M.83.105.1; c) National Museum of Korea, Seoul, jng7013; d) From the Monastery of Shahbaz-Garhi, Pakistan, Musée Guimet, Paris, AO2907; e) Seattle Asian Art Museum, Eugene Fuller Memorial Collection, 44.63.

This standing Bodhisattva Maitreya, carved of dark-grey schist, is made in a distinctive style, known very well from Gandhara, where it very likely was a cult image originally part of a chapel in a Buddhist monastery. Due to its sophisticated artistry which can be seen in the rendering of the folds of its garment, it is one of the finest of its kind, despite the fact that it now lacks the feet. Usually all such Bodhisattvas wear rich jewellery, but while this figure holds the typical water flask, its necklace is absolutely unique. It shows two confronted centaurs holding a faceted bead-like pearl that probably is to be understood as a reliquary [Fig. 2]. Usually the necklaces of Gandharan Bodhisattvas end in two confronted monster, dragon, or *makara*-heads holding a faceted pearl or reliquary-box (Tissot 1999). Our two centaurs are shown crouching, their legs turned under their elongated bodies. Both wear bracelets on their upper arms, and each of them holds with one hand a rope-like handle of the pearl or reliquary-box. Both centaurs are male with curled hairdos.

One has to wonder about the religious meaning of having centaurs instead of monsters holding a pearl-like bead or reliquary. Before addressing this question, for context it is important first to review images and mythology about centaurs, starting with the Greek and Roman traditions (Schiffler 1976) and then as found in art objects from Greater Gandhara and other pre-Islamic regions (Bethe 1921; Dumézil 1924; Meyer 1883/2011; Padgett 2003).

The origin of the religious concept of the centaurs in Greek and Roman mythology is old and much deba-

ted. Created by Zeus, the centaurs were a wild tribe of riders, living in the mountainous regions of Thessaly. The centaurs were thought to have the upper body of a human and the lower body of a horse. Being wild, rude and war-loving, as well as extremely fond of wine and women, they often engaged in conflict with humans. One widely known story related how the centaurs got in fight with the Lapiths at a wedding ceremony, an event famously depicted on temple friezes, notably in that epitome of Greek sculpture, Phidias' 5th BCE century metopes for the Parthenon that are now in the British Museum (Jenkins 2006, p. 146) [Fig. 3]. The emphasis here is clearly on the wild, beastly

Fig. 3. A centaur battles a Lapith. Marble metope (South XXXI) from the Parthenon. British Museum Acc. No. 1816,0610.15.

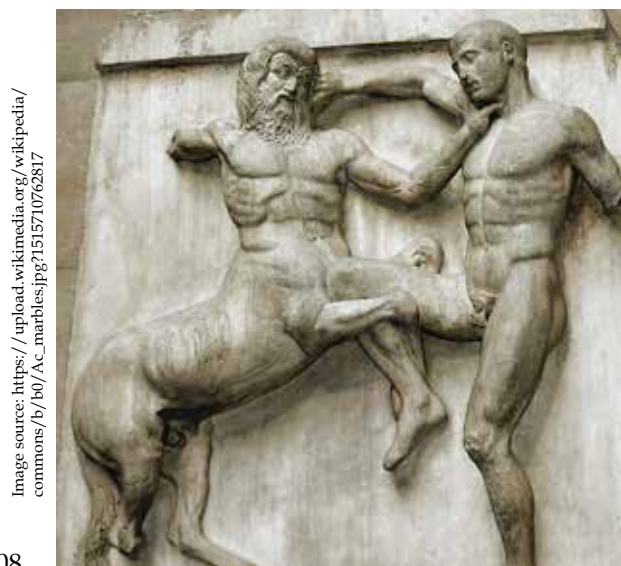


Image source: https://upload.wikimedia.org/wikipedia/commons/b/b0/Ac_marbles.jpg?1515710762817



Fig. 4. Chiron instructs the young Achilles, wall painting from Herculaneum, 1st century CE. Naples Archaeological Museum, Inv. no. 9109.



Image sources: https://upload.wikimedia.org/wikipedia/commons/6/6e/Chiron_instructs_young_Achilles_-_Ancient_Roman_fresco.jpg; https://upload.wikimedia.org/wikipedia/commons/9/96/Apollo_Chiron_Asklepios_MAN_Napoli_Inv8846.jpg

Fig. 5. A centaur between the god Apollo and Asklepios, 1st-century CE mural from the "House of Adonis" (VI.7.18 Pompeii). Naples Archaeological Museum, Inv. no. 8846.

and rude nature of the centaurs, who take special delight in fighting humans (Kahler 1949, p. 87; Bremmer 2012).

A number of paintings from the Roman period, preserved in the ruins of Pompeii and Herculaneum, point to a different perception of centaurs. Perhaps the best known example is that of Chiron, or Cheiron, of different parentage than the other centaurs, who became the teacher of heroes such as Herakles, Achilles, Asklepios and Jason. A painting from Herculaneum depicts him as a wise and fatherly figure instructing the young Achilles (Kelsey 1908) [Fig. 4]. How tame a centaur could be can also be seen a first-century CE mural from the "House of Adonis" in Pompeii showing a centaur between the god Apollo and Asklepios (Dorigo 1971, Fig. 3) [Fig. 5]. According

Fig. 6. Dionysos with two centaurs on a composite capital from Italy, ca. 230 to 280 CE. Isabella Stewart Gardner Museum, Boston, Accession no. S10s6.



Image source: <https://www.gardnermuseum.org/experience/collection/13228>



Image source: http://www.britishmuseum.org/collectionimages/AN00707/AN00707480_001_1.jpg

Fig. 7. Centaur females pulling the chariot of the goddess Nike, on a Gnathian kantharoid krater (detail). The British Museum, Accession no. 1856.1226.15.

to myth, Chiron was the father of medicine and surgery, here transmitting that knowledge to the famous physician Asklepios, son of Apollo.

Given their fondness for wine, drunkenness and women, it is no surprise that since Hellenistic times centaurs were also consorts of Dionysos, the god of wine, ecstasy and death. A composite capital for a column, dated between 230 and 280 CE, now in the Isabella Stewart Gardner Museum in Boston, depicts Dionysos and two centaurs. (Vermeule 1981, p. 235, Fig. 196) [Fig. 6].

Centaur might be female and could have families. Among the early examples, from the period of the peak of Hellenistic art, late 3rd-early 2nd century BCE, is a Gnathian krater (drinking cup) depicting the goddess Nike in her chariot being drawn by two centauresses (Webster 1996, Frontispiece and p. 24) [Fig. 7].



Image source: <https://archaeology-travel.com/wp-content/uploads/2015/01/berthouville-treasure.jpg>

Fig. 8. Detail from silver-cup found in a hoard at Berthouville, France, 1st century CE. Bibliothèque nationale de France, Département des monnaies, médailles et antiques, Paris.

A number of silver-vessels with decorative scenes, so important in Hellenistic and Roman art, show centaurs in what we might imagine are scenes of domestic bliss, for example on a first-century CE cup from the spectacular hoard found at Berthouville, France, where a centaur and a centauress are surrounded by erotes (cupids) (Lapatin 2014, pp. 46–54, Figs. 26, 27) [Fig. 8]. The Roman poet Ovid (43 BCE–17/18 CE) in his “Metamorphoses” (XII, 210ff) was one of the first to tell of centauresses and complete families of centaurs with children. The particular connection of the female of the species with women in the Roman period can be seen in a mosaic from El Djem (ancient Thysetrus) in Tunisia, depicting two centauresses holding a crown over a nude woman (Vilimkova 1963, Fig. 49) [Fig. 9].

To sum up this evidence, it is clear that there was a wide range of beliefs about centaurs from the Hellenic into the Roman period, where on the one hand they were emblematic of the wild and uncivilized, but on

Fig. 9. Centauresses on a 1st–2nd century CE mosaic from El Djem, Tunisia. Bardo Museum, Tunis.



Image source: <https://i.pinimg.com/736x/9b/1a/3f/9b1a3f6a2476a3b1a72ccc4159b152a2--female-centaur-roman-mosaics.jpg>



Image source: http://www.persee.fr/rendre/illustration/jds_0021-8103_2001_num_2_1_11_0256_0000_1.png

Fig. 10. Detail of silver goblet found at Bajaur, Pakistan, depicting a centaur abducting a woman.

the other they might exhibit charm, convey wisdom and be found in peaceful contexts. Whether one can speak of a clear chronological line leading from one to the other is uncertain. Readers can consult the outstanding dissertation by Georg Morawitz (2001) for the best treatment of this transition. With this background in mind, let us now turn to the evidence regarding centaurs in the arts of the eastern Hellenistic realms of Central Asia and the art of Gandhara during the Kushan period.

The transmission of the concept of the centaur must have taken place early in the history of contact between Greeks, Central Asian intermediaries and Indians after Alexander the Great’s march to the East. Unfortunately we are not blessed with many depictions of centaurs from the eastern Hellenistic part of Central Asia predating the Kushan period, that is, prior to the early Common Era. Suggestive about the transmission though are the objects found in a Parthian-era hoard at Bajaur in northwestern Pakistan, i.e., in the ancient region of Gandhara (Baratte 2002). One of the many silver vessels in this hoard is a goblet with raised relief depicting centaurs, which is analogous stylistically to the one found at Berthouville in France and probably dates to some time in the last century BCE. Unlike the Berthouville cup, however, this one depicts the male centaurs abducting the Lapith women [Fig. 10]. Where it was made is uncertain, but undoubtedly it is an import from the West.

Definitely Graeco-Bactrian—i.e., Hellenistic—is a gilded silver buckle from the region of Samarkand in Uzbekistan depicting the centaur Nessos in combat with a hero, convincingly identified as Herakles

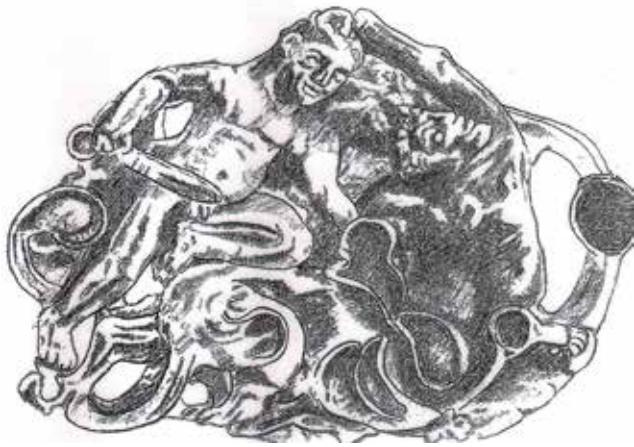


Image source: Boardman 2015, p. 108, Fig. 58, after photograph in Abdullaev 2008, Fig. 1.

Fig. 11. The centaur Nessos fighting Herakles on a gilded silver buckle, said to have been found close to Samarkand, Uzbekistan, 3rd to 2nd century BCE, Tashkent Museum of Fine Arts.

by Kazim Abdullaev (2008) [Fig. 11]. The scene is one of the canonical twelve deeds of Herakles, and as such, emphasizes the wild and beastly character of the centaurs. The buckle is not easy to date, as it stems from an unauthorized dig, but it may be assigned to the 3rd to 2nd century BCE.

More widely known is a remarkable group of ivory rhytons from the Parthian capital Nisa in Turkmenistan. The Nisa rhytons, carved of Indian ivory, very likely were made in the Graeco-Bactrian kingdom in the second century BCE, but this is still under debate. One of them shows a protome in the shape of a centaur, the curled wings possibly later additions (Masson and Pugachenkova 1982). The variety of images decorating rhytons is considerable, and they



Image source: http://jameelcentre.ashmolean.org/media/collection/w425/Collections/Single_Objects/EA_1963/EA_1963_0000/EA_1963_28-a-1.jpg

Fig. 12. Bronze rhyton in shape of a centaur holding a goat; 3rd to 2nd century BCE, found at Ishkuman, northern areas of modern Pakistan. Ashmolean Museum, Oxford EA1963.28.

are to be found in various cultures all across Eurasia. Another example, also well known, is a bronze rhyton found by Sir Marc Aurel Stein at Ishkuman, west of Hunza in today's northern Pakistan [Fig. 12]. It shows a standing centaur holding a tiny goat in his hands. This hybrid centaur-rhyton might have been made by a Graeco-Bactrian workshop for invading Saka nomads. The Ashmolean Museum dates it to the 3rd-2nd century BCE (cf. Errington et al. 1992, No. 95).

Images of centaurs also appeared on textiles along the Silk Roads in Central Asia. The most famous example is the depiction of a trumpet-playing centaur on a tapestry found in a cemetery at Sampula near Khotan in the southwestern part of the Tarim Basin (today in the Xinjiang-Uyghur Autonomous Region of China) [Fig. 13]. Originally a wall-hanging, the textile was recycled by its later, i.e., last owner and



Photos courtesy of Daniel C. Waugh

Fig. 13. Recycled textile depicting a centaur playing a long trumpet and an armed warrior, from Tomb 1, Graveyard 1, at Sampula, close to Khotan. Xinjiang-Uyghur Autonomous Region Museum, Urumqi, Inv. no. 84LSIM01:C162.

changed into a pair of trousers. The Chinese scholars offered only a rather broad date range for the tomb, 2nd century BCE to 2nd century CE (Wieczorek and Lind 2007, pp. 213–14). As the textile fragment also shows a standing spearman, which might be an early Kushan warrior (?), a more realistic date for the original wall hanging is a date in between the late first century BCE to the early first century CE. If this were the case, then the centaur playing a long trumpet might stem from a late Graeco-Bactrian workshop in northern Bactria, i.e. northern Afghanistan or southern Uzbekistan. The genre of musical instrument playing centaurs takes us into the sphere of the cult of the Greek god of wine, ecstasy and death, Dionysos.

This connection helps us to understand the interest Indians showed in the Greek centaur, since they could connect it to their concept of divine beings they called *gandharvas*. These *gandharvas* play the role of celestial musicians in Hinduism and Buddhism and, like the centaurs, also share a certain interest in wine, women and feasting. Even if for the most part the Indian *gandharvas* are thought to be half bird and half humans, some also are thought to be half human and half



Photo courtesy of Daniel C. Waugh

Fig. 14. Detail of Bodhisattva sculpture, Gandhara. From the Monastery of Shahbaz-Garhi, Pakistan, 1st – 3rd century CE. Musée Guimet, Paris, AO2907.

horse (Canoy 1936; Dumézil 1924; Garrett 1871/1971, pp. 218–19; Krishna Murthy 1985; Meyer 1883/2011; Pattanaik 2003, p. 74; Sansonese 1994). Significantly, the necklace of the Gandharan Bodhisattva in the Musée Guimet illustrated above in Fig. 2d and shown here as Fig. 14 has *gandharvas* holding the jewel-like reliquary.

There are some additional examples of Gandharan sculpture depicting centaurs. A now fragmentary one, carved from schist in the 2nd–3rd century CE, depicts a female centaur, i.e. a centaress, is now in Chandigarh in India (Dar 1999/2000, p. 35; Boardman 2015, p. 123) [Fig. 15]. This fine centaress wears a folded chiton and has a friendly smile, but how she might have been viewed by her creator is impossible to say, since we know nothing about the iconographic program at a stupa in which, presumably, she was placed. The same is true for the male centaur, again a fragment and headless, now in the Lahore museum in Pakistan, which was also once part of the image program of a stupa (Ingholt and Lyons 1957, p. 156, and Fig. 391) [Fig. 16].

Kurita Isao (1998/2000, Vol. 2, pp. 235–36, Nos. 705s, 706) has published two more fragmentary male centaurs, one in a European private collection playing a small drum and wearing a palmette-like loin cloth, and another in a loin cloth holding a small fire altar or incense burner with a sculpted flame on top and with little wings on his upper legs. Both are carved from the typical grey schist of Gandhara and date to the 2nd–3rd century. These two Gandharan centaurs are peaceful, one playing a small drum, the other obviously offering incense, and give the impression they are devout Buddhists.



Fig. 15. Fragment of a schist sculpture of a centaress, Gandhara, 2nd – 3rd century CE, Museum Chandigarh, India.

Image source: Dar 1999/2000, p. 35, Fig. 37.



Fig. 16. Fragment of a schist sculpture of a centaur, Gandhara, 2nd – 3rd century CE, Lahore Museum, Pakistan.

Image source: Ingholt and Lyons 1957, p. 156, Fig. 391.



Image source: Rahman and Falk 2011

Fig. 17. A seal and its impression from Gandhara showing a centaur, 1st-2nd century CE. Aman ur Rahman Collection, Emirates.

In reviewing Gandharan images of centaurs, we should keep in mind that there are a number of seals depicting them, presumed to date to the Kushan period of the 1st-3rd century CE. Part of the Aman ur Rahman collection, these six seals show centaurs walking and holding a spear, or a branch (Rahman and Falk 2011, pp. 93-94) [Fig. 17].

The seals presumably point to a secular context for the centaur images, but we have one additional Gandharan image suggesting an analogy in a religious context which may lead us back to our starting point, the necklace on the San Francisco Maitreya. Prior to World War II, in the collections of the Museum of Ethnography, Berlin, was a damaged Gandharan schist slab that possibly did not survive the war, though it may still be located in the collections of the Museum für Asiatische Kunst. We know it only from the publication by Albert von Le Coq (1922, Vol. 1, p. 20, Pl. 17b; see also Dreyer et al. 2002). The relief shows two confronted male centaurs and a person in between holding a reliquary [Fig. 18].

Returning then to the necklace of the San Francisco Maitreya, we can only wonder why its artist did not show the usual makara heads as a motif on the necklace, choosing instead two slender centaurs holding a jewel or reliquary. Surely the artist and those who commissioned the work must have had a reason. Might the Gandharan artist have known of the change in character of centaurs from wild and beastly to mild and friendly in the arts of classical Greek and Roman art? Certainly possible. I would be so bold as to ven-



Image source: von Le Coq 1922, Vol. 1, Pl. 17b.

ture that those two centaurs made special sense in that they would demonstrate how such formerly wild, beastly and war-loving centaurs could be tamed by the religion of Mahayana-Buddhism.

In fact none of the Gandharan images of centaurs which we have so far been able to locate are warlike and beastly, suggesting that under the Kushans and the influence of Buddhism, they had uniformly acquired a new role. The transition to this perception began under the Greeks, when centaurs came to be associated with the cult of Dionysos. From there it was but a small step to find them pacified by the Buddha in Gandhara, where they became pious followers of the Blessed One. The transmission of both ideas about centaurs and their images from West to East was part of a process whereby many aspects of Hellenistic culture reached Central Asia and India. One need but think of the objects in the so-called Begram Hoard, discovered back in the 1930s and in more recent times exhibited all over the world (Cambon 2002). The Begram Hoard offered an internal perspective on the wealth and cultural horizons of the Kushan Empire. In addition to the famous gypsum models for Hellenistic silverware (Menninger 1996), it contained Roman bronzes from the eastern provinces of that empire, very likely from Alexandria in Egypt. The hoard found more recently at Bajaur in northwestern Pakistan has now disappeared into a private collection, but we have the excellent study of its contents by François Baratte (2002), an expert on Roman metal wares, which highlighted one of its most interesting objects, the silver goblet depicting centaurs. So it is reasonable to assume that the creators of Gandhara's Buddhist art could draw upon a wide range of media depicting centaurs in their various roles.

So the stimulus of seeing the necklace on the superb statue of Maitreya in the San Francisco museum has led us over a winding path across Asia, inviting a good many hypotheses regarding transmission and transformation of centaur images as they were incorporated into the belief systems of cultures far from where they had come. Only new scholarly excavations and discoveries of centaurs from Afghanistan and Northwestern Pakistan can substantiate my theory that Gandharan Buddhism tamed the centaurs, but perhaps this short article will provide a catalyst for such future exploration.

Fig. 18. Two confronted centaurs with a destroyed human figure in the centre, Gandhara, 2nd - 3rd century CE (?), formerly Museum für Völkerkunde, Berlin.

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References

- Abdullaev 2008
Kazim A. Abdullaev. "A Bactrian Gold Buckle with a Contest scene between a hero and a centaur (Herakles and Nessos?)." *Parthica* 10 (2008): 135-50. (On-line at <https://www.academia.edu/6865013/A_BACTRIAN_GOLD_BUCKLE_WITH_THE_CONTEST_BETWEEN_A_HERO_AND_A_CENTAUR_HERAKLES_AND_NESSOS_2008_PISA-ROMA>, last accessed 10 January 2010).
- Asian Art Museum 1994
Asian Art Museum, San Francisco. *Catalogue: Selected Works*. San Francisco: 1994.
- Baratte 2002
François Baratte. *East and West. A Central Asian Hoard from the Parthian Era..* London: Melisande, 2002. (Revised translation of "Orient et Occident: le témoignage d'une trouvaille d'argenterie d'époque parthe en Asie central," *Journal des savants* (Paris), juillet-décembre 2001). (On-line at <http://www.persee.fr/doc/jds_0021-8103_2001_num_2_1_1645>, last accessed 12 January 2018.)
- Bethe 1921
Erich Bethe. "Kentauren." In: *Paulys Realencyclopädie der Classischen Altertumswissenschaften* (RE), Vol. XI.1. Stuttgart, 1921: Sp. 172-78.
- Boardman 2015
John Boardman. *The Greeks in Asia*. London: Thames & Hudson, 2015.
- Bremmer 2012
Jan N. Bremmer. "Greek Demons of the Wilderness: the case of the Centaurs." In: Laura Feldt, ed., *Wilderness in Mythology and Religion: Approaching Religious Spatialities, Cosmologies, and Ideas of Wild Nature*. Berlin; New York: de Gruyter, 2012: 25-53. on-line at <https://www.academia.edu/8663688/Greek_Demons_of_the_Wilderness_the_case_of_the_Centaurs>, last accessed 10 January 2018.
- Cambon 2008
Pierre Cambon. "Begram: Alexandria of the Caucasus, Capital of the Kushan Empire." In: Fredrik Hiebert and Pierre Cambon (eds.) *Afghanistan. Hidden Treasures from the National Museum, Kabul*, Washington, D.C.: National Geographic, 2008: 145-61.
- Canoy 1936
Albert Canoy. "Le concept mythologique du gandharva et du centaure." *Museon* 49 (1936): 99-113.
- Carter 1999/2000
Martha L. Carter. "A Note on a Sarapis-like bust in the Neck-lace of a Gandhāran Bodhisatta Sculpture in the Norton Simon Museum." *Silk Road Art and Archaeology* 6 (1999/2000): 9-18.
- Dar 1999/2000
Saifur Rahman Dar. "The Sikri Sculptures: Prolegomena on an Exceptional, but Unstudied, Collection of Gandhāran art in the Lahore Museum." *Silk Road Art and Archaeology* 6 (1999/2000): 19-43.
- Dorigo 1971
Wladimiro Dorigo. *Late Roman Art. A Study of Pictorial Records. 30 BC - AD 500*. London: J. M. Dent, 1971 (originally published as *Pittura tardoromana*, Milano: Feltrinelli, 1966).
- Dreyer et al. 2002
Caren Dreyer et. al., eds. *Dokumentation der Verluste. Bd. 3. Museum für Indische Kunst*. Berlin: Staatliche Museen zu Berlin, 2002.
- Dumézil 1929
Georges Dumézil. *Les problèmes des Centaures: Etudes de mythologie comparée indo-européenne*. Paris: Geuthner, 1929.
- Errington et al. 1992
Elizabeth Errington et al., eds. *The Crossroads of Asia. Transformation in Image and Symbol in the Art of Ancient Afghanistan and Pakistan*. Cambridge: The Ancient India and Iran Trust, 1992.
- Garrett 1871/1971
John Garrett. *A Classical Dictionary of India. Illustrative of the Mythology Philosophy Literature, Antiquities, Arts, Manners, Customs &c. of the Hindus*. 2 vols. Madras: Higginbotham & Co., Madras, 1871. (Reprint: Akademische Druck,- und Verlagsanstalt, Graz: Akademische Druck,- und Verlagsanstalt, 1971).
- Ingholt and Lyons 1957
Harald Ingholt and Islay Lyons. *Gandharan Art in Pakistan*. New York: Pantheon, 1957.
- Jenkins 2006
Ian Jenkins. *Greek Architecture and Its Sculpture*. Cambridge, MA: Harvard Univ. Pr., 2006.
- Kähler 1949
Heinz Kähler. *Das griechische Metopenbild*, München: Münchner/F. Bruckmann, 1949.
- Kelsey 1908
Francis W. Kelsey. "Codrus's Chiron and a painting from Herculaneum." *American Journal of Archaeology* 12/1 (1908): 30-38.
- Kurita 1998/2000
Kurita Isao. *ガンダ-ラ美術 Gandāra bijutsu = Gandhāran Art*. 2 vols. Tokyo: Nigensha, 1998-2000.

- Murthy 1985
K. Krishna Murthy. *Mythical Animals in Indian Art*. New Delhi: Abhinav, 1985.
- Lapatin 2014
Kenneth D. S. Lapatin, ed. *The Berthouville Silver Treasure and Roman Luxury*. Los Angeles: The J. Paul Getty Museum, 2014.
- von Le Coq 1922–1933
Albert von Le Coq. *Die Buddhistische Spätantike in Mittelasien*. 7 vols. Berlin: Reimer, 1922–1933.
- Luczantis et al. 2008
Christian Luczantis et al., eds. *Gandhara. Das buddhistische Erbe Pakistans. Legenden, Klöster und Paradiese*. Mainz: von Zabern, 2008.
- Masson and Pugachenkova 1982
Mikhail E. Masson and Galina A. Pugachenkova. *The Parthian Rhytons of Nisa*. Firenze: Sansoni, 1982.
- Menninger 1996
Michael Menninger. *Untersuchungen zu den Gläsern und Gipsabgüssen aus dem Fund von Begram (Afghanistan)*. Würzburg: Ergon, 1996.
- Meyer 1883/2011
Elard H. Meyer. *Indogermanische Mythen*. 2 vols. Berlin: Dümmler 1883-1887. (Reprint: Hamburg: Severus, 2011).
- Morawitz 2001
Georg Morawitz. *Der gezähmte Kentaur: Bedeutungsveränderungen der Kentaurenbilder in der Antike*. München: Biering & Brinkmann, 2001.
- Padgett 2003
J. Michael Padgett. "Horse Men: Centaurs and Satyrs in Early Greek Art." In: Idem et al., eds., *The Centaur's Smile. The Human Animal in Early Greek Art*. Princeton, NJ: Princeton Univ. Art Museum; New Haven and London: Yale Univ. Pr., 2003: 3–27.
- Pattanaik 2003
Devdutt Pattanaik. *Indian Mythology: Tales, Symbols, and Rituals from the Heart of the Subcontinent*. Rochester, VT: Inner Traditions, 2003.
- Rahman and Falk 2011
Aman ur Rahman and Harry Falk. *Seals, Sealing and Tokens of Gandhara*. Monographien zur Indischen Archäologie, Kunst und Philologie Vol. 21, Studies in the Aman ur Rahman Collection, Vol. 1. Wiesbaden: Reichert, 2011.
- Sansonese 1994
J. Nigro Sansonese. *The Body of Myth: Mythology, Shamanic Trance, and the Sacred Geography of the Body*. Rochester, VT: Inner Traditions, 1994.
- Schiffler 1976
Birgitt Schiffler. *Die Typologie der Kentauren in der antiken Kunst*. Frankfurt am Main: Lang, 1976..
- Stančo 2012
Ladislav Stančo. *Greek Gods in the East. Hellenistic Iconographic Schemes in Central Asia*. Prague: Karolinum, 2012.
- Tissot 1999
Francine Tissot. "Jewelry in Gandharan Art: images and reality." In: Michael Alram and Deborah E. Klimburg-Salter, eds., *Coins, Art, and Chronology. Essays on the pre-Islamic History of the Indo-Iranian Borderlands*. Österreichische Akademie der Wissenschaften, Philosophisch-Historische Klasse. Denkschriften, Bd. 280. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 1999: 399–413.
- Vermeule 1981
Cornelius C. Vermeule. *Greek and Roman Sculpture in America. Masterpieces in Public Collections of the United States and Canada*. Malibu, CA: J. Paul Getty Museum; Berkeley: Univ. of California Pr., 1981.
- Vilimkova and Wimmer 1963
Milida Vilimkova and Hed Wimmer. *Roman Art in Africa*. London: Hamlyn, 1963.
- Webster 1966
Thomas B. L. Webster. *Hellenismus*. Baden-Baden: Holle, 1966. (Tr. from *The Art of Greece: The Age of Hellenism*).
- Wieczorek and Lind 2007
Alfried Wieczorek and Christoph Lind, eds. *Ursprünge der Seidenstraße. Sensationelle Neufunde aus Xinjiang, China*. Mannheim: Reiss-Engelhorn-Museen; Stuttgart: Theiss, 2007.

AN ANALYSIS OF THE EARLY UNIFIED SILLA BAS-RELIEF OF PEARL ROUNDEL, TREE OF LIFE, PEACOCKS, AND LION FROM THE GYEONGJU NATIONAL MUSEUM, KOREA

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The subject of this study is a horizontal granite monolith with a bas-relief of three roundels in the collection of the Gyeongju National Museum 國立慶州博物館, Gyeongju 慶州, Korea, which has been called a “Stone with Lion and Peacock Designs” 獅子孔雀紋石 [Fig. 1]. Two roundels are well preserved — one with the “pearl-roundel” rim, the other with a plain rim. Both contain an axial tree and animals. The third and largest of the three has been effaced, preserving only faint traces of its pearl roundel. The original purpose and meaning of this artefact has until now been enigmatic. It has received no serious scholarly attention; the display label merely suggests that it is an eighth-century object of the Unified Silla 統一新羅 period (676–935), of “possible Persian” or “Sogdian” origin. Despite the existence of direct and indirect evidence in the material and written record regarding possible foreign influences, the historiography of the Unified Silla era tends to obscure what is perhaps its most defining feature, a great openness to cultural exchange and synthesis.

By examining the designs and the symbolic representation in these roundels, this study hopes to demonstrate the real message that the carver intended to communicate and establish his identity. The analysis takes us on an inquisitive journey across various cultural realms and religious spheres along the wider reaches of Silk Road in the 7th–8th centuries. The conclusion here may help to unravel the mystery

surrounding this stone bas-relief and its historic significance in the land of Silla and beyond.

Collection History and Current Condition of the Granite Slab

Nothing is known about its original location and purpose. The earliest mention of the slab is in a memoir of Koizumi Akio (1897–1993), a Japanese museum staff member working in Korea during the Japanese occupation period (1915–1945) (Koizumi 1986, p. 165). On a single page, he narrates how he saw it in 1922 at the Seogyong-sa 西慶寺 Buddhist temple in Gyeongju in front of the main hall and heard from the temple’s Japanese abbot that it was amongst the rock debris of the ruined old city wall in the vicinity before its removal to the temple.¹

Research for the current article uncovered five photographs in the collection of the National Museum of Korea taken at the temple some years before 1915 [Fig. 2, next page].² These plates reveal that the condition of the granite slab differed little from its present state. It seems that prior to the time the photos were taken, an attempt had been made to smooth the entire rock surface by cutting off the reliefs but for some unknown reason stopped after the fatal defacement of the leftmost roundel.

Fig. 1. “Stone with Lion and Peacock Designs.” Gyeongju National Museum, Coll. No. gyeongju-1241.



Photo courtesy of Gyeongju National Museum.

NO無1136-10



Fig. 2. Two of the five dry-plate photographs, with earlier inventory numbers, National Museum of Korea. (Left) The stone displayed upright (Coll. No. 032420). (Right) The stone correctly displayed in a horizontal setting (Coll. No. 022822).



Uneven and jagged, the monolith now measures (at its maximum) L 306.5 x H 79.5 x W ca. 40 cm. Reconstruction of the damaged roundel suggests that its original height could have reached more than 100 cm. The diameters of the roundels and beads (slightly uneven and flattened) are respectively 67 and 5.5 cm for the leftmost one, 50 and 4.3 cm for the middle one, and 39.5 cm for the smallest (which lacks pearls on the rim), on the far right [Fig. 3].

Analysis of Two Roundels

1. A Pearl Roundel with a Tree of Life and a Pair of Peacocks [Fig.4].

The Pearl Roundel

Formed of 19 round beads, it is undoubtedly related to the pearl-roundel ornamental tradition of Sasanian Iran (224–651) and the city-states of Iranian Sogdia, a tradition whose origins can be traced back to the an-

cient Near East and Achaemenid Persia (559–330 BCE) (Domyo 1987; Compareti 2003/2006, 2009; Mode 2002; Lendering n.d) [Fig. 5, next page]³. It became popular worldwide along the Silk Road and had a far-reaching influence particularly on textiles in Central Asia and the Far East. The role of Sogdia and its mercantile activities along the Silk Road have been singled out for the spread and popularity of the pearl roundel (Zhao 1992; Compareti 2003/2006; Rong 2014; Xu and Zhao 1996/1991; Lerner 2005). Sogdian penetration into Gyeongju, the capital city of Silla, has been pos-

Fig. 4. Pearl roundel in the middle from Fig. 1.



Fig. 3. Measurements provided by the Gyeongju National Museum, October 2015

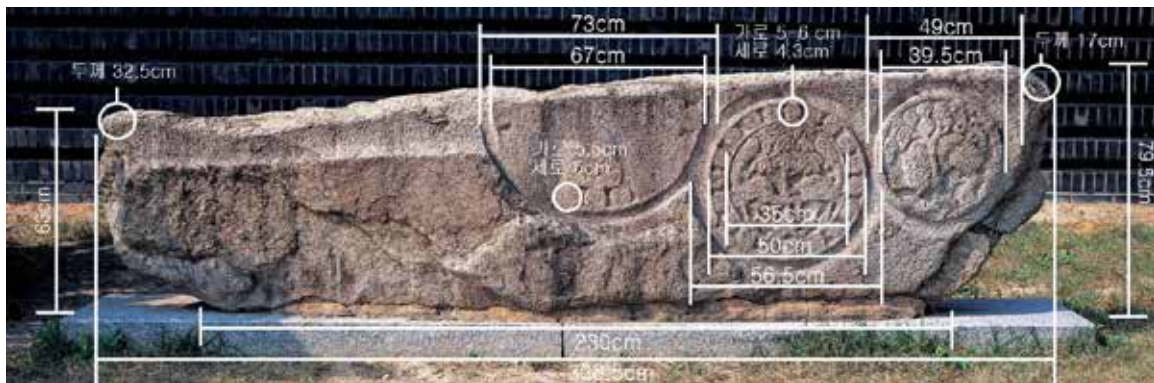




Photo sources: a) by author; b)-f) courtesy of Daniel C. Waugh; g) Wikipedia.

Fig. 5. Iranian examples showing pearl roundels and borders: a) Bronze ornament, first millennium BCE, National Museum of Iran; b) Lotus panel framed by a pearl-decorated border, excavated at Persepolis, Persepolis Museum; c) Stucco wall panel with a set of farr symbols ("farr afzum" prayer-sign, a pair of falcon wings called "Wings of Ahura Mazda," and pearl roundel) and a Pahlavi inscription, from House of Umm az-Za'atir, area of Ctesiphon (the last Sasanian Palace), Iraq, end of 6th–beginning of 7th century CE. Collection of Museum of Islamic Art, Berlin, Inv. Nr. KtO 1084; d) Stucco wall panel with a ram, Iran (or Iraq?), 6th–7th c. CE, Collection of the Museum of Islamic Art, Berlin, Inv. Nr. I.2212; e) Investiture of Sasanian King Khosro II (r. 590–628), detail of relief depicting Ahura Mazda on the right in the Large Grotto at Taq-e Bostan, Kermanshah, Iran; f) Detail of left angel holding a diadem, on spandrel of arch of the Large Grotto, Taq-e Bostan; g) Detail of robe, mural painting depicting a Sogdian royal procession, Afrasiab (outskirts of Samarkand), Uzbekistan, mid-7th century.

ited, based on a number of Sogdian-looking guard-ian statues of royal tombs and excavated burial goods of Near Eastern origin (Gyeongju National Museum 2008; Yim 2013b, 2016).

In East Asia it seems first to have appeared on archi-tectural roof tiles: in China by the 5th century as found in the Northern Wei (386–534) capital at Pingcheng 平城 (Datong 大同) and the nearby Yungang 雲岡石窟 Buddhist site (460–494); in Korea by the last quarter of the 7th century at the site of the Moon Pond 月池 (pop-ularly called Anap-ji) in the complex of the eastern de-tached palace (completed in ca. 674); and in Japan by the end of the 7th century at the site of Fujiwara palace 藤原宮 (built ca. 682–694), the first known Chinese-style palace in Japan (Wang 2007, p. 26; Kim 1981; Kawagoe n.d.-a; Avant d'oublier 2009) [Fig. 6].

Though their place of production is often uncertain, there are textiles decorated with pearl roundels from the 7th–9th centuries in the region west of China, China proper, Korea and Japan (Watt and Wardwell 1997; Chang 2007). The one Korean example is an embroi-dered Buddhist banner produced at the Silla court, now kept at the Eifuku-ji 叡福寺 Buddhist Temple, Osaka, Japan [Fig. 7, next page].⁴ A demon-face (also called dragon-face) featured in this pearl roundel was highly unusual on textile, but common on the exor-cistic ridge-end roof-tiles probably related to the *Tao-tie* tradition dating back to the Bronze Age of China. The insertion of a square pendant amongst the pearls is a feature closely associated with textiles. This Silla banner seems to imply that the pearl-roundel textile was known in Gyeongju society by the late 7th century. It also presents a unique specimen of textile in which



Fig. 6. Roof end tiles with pearl roundel: (Left): Lotus tile, excavated at the Northern Wei capital Shengle site, Inner Mongolia, ca.368–398; (Middle): Tile with a pair of birds, excavated at the Moon pond (Anap-ji), Gyeongju, ca. 670s–680s, Unified Silla, Collection of the Gyeongju National Museum; (Right): Lotus tile, excavated at the site of the Fujiwara palace (built 682–694), Yama-to Province (present-day Kashihara in Nara Prefecture), Japan.

Photo sources: <https://i1.kknews.cc/SIG=7mpke0/167s0003511nr8698042.jpg>; cour-tesy of Daniel C. Waugh; http://2.bp.blogspot.com/_71OM9lkGuVg/SyFkPAyeE7I/AAAAAAAUuo/2YIU4q29r6Q/s400/IMG_6232.jpg.

Fig. 7. (Left and Center [detail]) Embroidered Buddhist banner with a pearl roundel, late 7th–early 8th century, Unified Silla period, Collection of Eifuku-ji Buddhist Temple, Osaka, Japan. (Right) Roof tile with demon face, excavated from Hwangnyongsa Temple site, 7th–8th century, Unified Silla period.

Photo sources: http://1.bp.blogspot.com/_71OM9lkGuVg/SssCCM7TGF/AAAAAAAAAT_A/0a4c9b-CJZ5o/s1600/P10-115.jpg; <http://p8.storage.canalblog.com/87/57/119589/91020354.jpg>



the pearl roundel of Persian origin meets the East Asian motif of demon-face. The closest analogy to this demon-face in all its details is on the ridge-end tiles excavated from the above-mentioned Moon Pond.⁵ All this material and circumstantial evidence points to the 670s as the upper limit for the appearance of the pearl-roundel in Korea and thus for the production date of this rock relief.

In Japan the specimens of pearl-roundel textile datable to the 7th–8th centuries are kept in the Horyu-ji temple 法隆寺 and the Shoso-in Treasury 正倉院 of Todai-ji temple 東大寺, examples presumed to be of Chinese origin but in Persian style [Fig. 8] (Matsumoto 1984; Nara Museum 1996; Hayashi 1975, pp. 128-29). Given the deep connection with Korea of the two temples as well as the history of early Japanese textile and craft art which is entwined with Korea, they can be taken as indirect evidences for the shared popularity of pearl-roundel textile in Japan and Korea.⁶ However, by the mid-8th century there had already appeared signs indicating the pearl roundel design was going out of fashion, particularly in Chinese ex-

Fig. 8. (Left): Pearl roundel of Persian lion-hunting scene with the axial sacred tree (here identified as a mango tree), 7th–8th century Horyu-ji Temple. (Right): Textile fragment with pearl roundels framing a Persian lion-hunting scene, 8th century. Shoso-in Treasury, Todai-ji, Nara, Japan.



Image sources: (Above): https://ipfs.io/ipfs/QmXoypizjW3WknFjnKLwHcnL72vedx-jQkDDP1mXWo6uco/1/m/lossless-page1-220px-Horyu-ji_silk.tiff.png; <https://theheritagetrust.files.wordpress.com/2013/11/silk-21.jpg>. (Below): <https://i.pinimg.com/736x/0d/70/08/0d7008b19355d8efbe033519b87354fb--ancient-symbols-ancient-artifacts.jpg>; <https://i.pinimg.com/736x/d9/03/d6/d903d6a47dccc8d3524243788861b9b6--ancient-art-tree-of-life.jpg>; (images 3, 4) courtesy of Daniel C. Waugh; <https://i.pinimg.com/736x/79/4e/c2/794ec27e096193e33d7575234ad65226--istanbul-byzantine-art.jpg>

port textile (Kageyama 2003/2006).⁷ This development would have followed soon in Korea and Japan, whose culture was sensitive to trends in contemporary fashion in China.

The Tree of Life

The tree, which bifurcates the space, is the common denominator and the most important constituent in two roundels of the Gyeongju relief. In the middle roundel, a pair of peacocks face each other across the axial tree. A tree accompanied by humans, animals, anthropomorphic, and zoomorphic figures has been identified world-wide as a sacred tree under various names: Tree of Life, Cosmic Tree, Tree of Fertility, Tree of Resurrection and Eternity, Tree of Knowledge, etc. In Christianity the Tree of Life is identified with the Cross and Jesus Christ. The configuration in the Gyeongju roundel is undoubtedly linked to the time-honored sacred-tree imagery with confronted animals found in all religious symbolism, including Mesopotamian and Egyptian “paganism,” Hinduism, Buddhism, and Christianity. Here are examples selected for their relevance to the Gyeongju relief [Fig. 9].

Fig. 9. Tree of Life and confronting animal images. (Left to right): Earthen stamp seal with Tree of Life and confronting ibex, ca. 3,000 BCE, Sumer, Oriental Institute Museum, Chicago; Painted terracotta plaque with Tree of Life and wild goats, Phrygia, 6th century BCE, Museum of Anatolian Civilization, Ankara; Golden cup with Tree of Life and confronting bulls, ca. 7th–6th century BCE, found in Gilan, Iran, National Museum of Iran, Tehran; Stucco panel with Tree of Life (here, a grapevine) and confronting ibexes, ca. 6th–7th century, Sasanian, Museum of Islamic Art, Berlin, Inv. Nr. I.6197; Marble closure slab with relief Tree of Life between lions, Byzantine & Christian Museum, Athens.



Fig. 10. The Tree of Life and confronted animals in pearl roundels. (Left): Silk brocade with confronted ibexes, Sasanian or Sogdian, excavated in Dulan, Tibet (now Qinghai province, China), ca. 700. (Top middle): Tracing of image with confronted lions flanking a Mango tree, from a textile excavated in Dulan ca. 7th century; (Bottom middle): Decorative border with stylized "tree" and confronted horses, Mogao Cave No. 277, Sui dynasty (581–618), Dunhuang, Gansu province, China. (Right): Riding coat with large roundels of confronted deer and a reduced and stylized tree, Sasanian or Sogdian, ca. 7th century.



Image sources: <https://i.pinimg.com/736x/e5/a1/49/e5a149ded52116c42686b329f2873a1a--opening-day-art-fair.jpg>; Compareti 2003/2006, Fig. 9; *Dunhuang Mogaoku 2* (1984), Fig. 120; <https://i.pinimg.com/736x/f2/dc/f2dcf2e7a87b1987bb39a52dd1e806bf--silk-road-metropolitan-museum.jpg>

It is uncertain when and where the Tree of Life with confronted animals entered the repertory of motifs for pearl-roundels. But there are a number of specimens dating from the 7th–8th centuries found along the Silk Road. They can be divided into three types: those which follow the original Near Eastern configuration with the axial tree flanked by animals; those which show the extreme stylization of all motifs and the reduction of the tree, making it a mere accessory for the animals; those which show near disappearance of details leaving the shadow of forms [Fig. 10]. The Gyeongju roundels belong to the first category, the tree and animals having a significant presence.

The type of tree in the Gyeongju roundel is noteworthy. On its branches are sets of three or four cascading leaves, each crowned by a round fruit, immediately identifiable as a stylized depiction of the "Indian mango" (*Mangifera indica*), a tropical tree native to South Asia where it became the national fruit (of India, Pakistan, and the Philippines) or the national tree (of Bangladesh). Endowed with the pre-Buddhist symbolism of fertility, the mango tree acquired an important status in the Indian Buddhist iconography along with the Bodhi tree identified with the Buddha's enlightenment. Examples are the famous scene of the fertility goddess *Yakshi* with a mango tree at the east gate of the Great Stupa of Sanchi and the popular depiction of Buddha in the Mango Grove in Gandharan art. It appears that all regions along the Silk Road under the spell of Buddhism adopted the sacredness of the mango tree and even embraced it in non-Buddhist contexts.⁸

In fact, outside of the Buddhist context, this type of mango tree appears with the pearl roundels of the 7th–8th century textiles found in the far eastern limit of Central Asia all the way to Japan. Two examples are the Dulan 都蘭 piece [Fig.10, middle-top] (Compareti 2003/2006, Fig. 9; Xu and Zhao 1996) and the Horyuji textile [Fig. 8, left]. The composition of these roundels has a strong affinity to the typical Near Eastern tradition of the sacred tree with confronting animals set within the Iranian-origin pearl roundel. However, the Near Eastern type of sacred tree (date palm, pome-

granate, grape, etc.) has been replaced by the Far Eastern mango tree. In this regard the Gyeongju roundel, the only known example featuring a mango tree in a non-Buddhist context in Korea, seems to show such regional adaptation.

The Peacocks

The birds here are identifiable as peacocks owing to the crest atop the head and elongated upper tail coverts. Confronting one another, they are closely connected with the tree in the center. The right peacock's neck encircles the tree from behind, thrusting the head downward, while the left one's neck extends to the right across the front of the tree with the head down and forward. Thus they appear to be embracing the tree in veneration while their coupling necks balance each other in a peculiar symmetry. This unusual departure from the mirror-image composition common in depiction of confronting animals animates the scene with a certain degree of narrative naturalism.

The peacock is a jungle bird of South Asia and Africa which was revered as a symbol of paradise and immortality from ancient times. One famous example is a pair of peacocks in the first century Indian relief at the Great Stupa of Sanchi, though not depicted with a sacred tree. However, the peacock is not native to East Asia where its image is uncommon in the pantheon of birds. It appeared briefly in Chinese Bronze-Age art, most likely introduced via China's extreme southern frontier such as Yunnan, but by the time of the Han dynasty was overshadowed by the phoenix, the mythical bird which was the symbol of the Eastern realm in Chinese *Yin-Yang*-Five Elements cosmology and an auspicious sign of the ruler's heavenly mandate. The Chinese phoenix symbolism was duly followed by other East Asian neighbors. In esoteric Buddhism the peacock is regarded as a purifier of body and soul and a symbol of wisdom. *Mahamayuri*, one of the Wisdom Kings in the Buddhist Pantheon, is seated on a peacock throne, an image which seems to have gained currency in Buddhist art of Northern Song 北宋 (960–

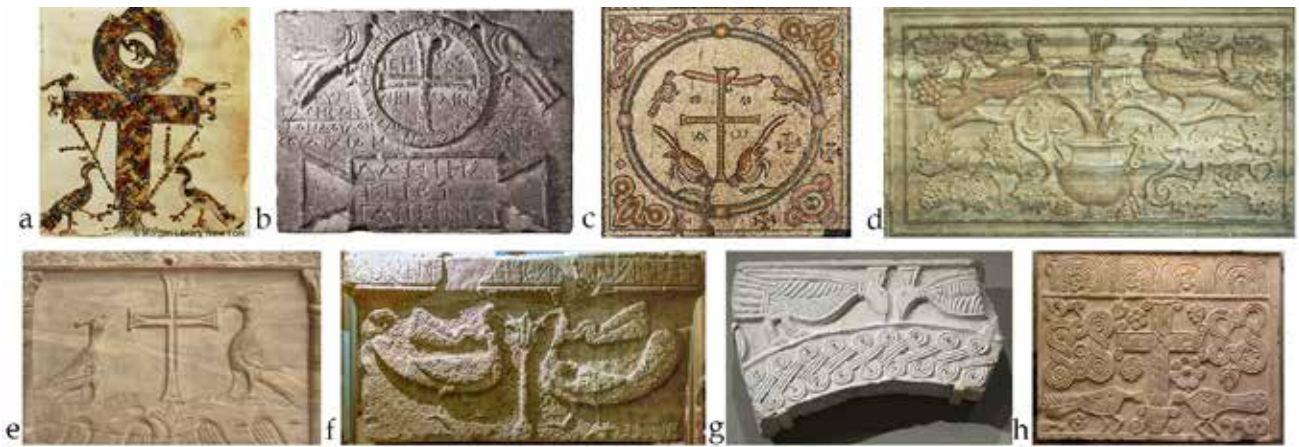


Fig. 11. Confronted peacocks in Christian contexts. a) A page from a Coptic manuscript of the Acts of the Apostles (Codex Glazier), ca. 5th century, Morgan Library, New York (MS G.0067); b) A stone relief chi-rho with Greek inscription, 5th century, Mother See of Holy Etchmiadzin Cathedral, Vagharshapat, Armavir Marz, Armenia; c) Floor mosaic, 6th century, excavated at Aluma, Israel; d) Marble relief, 6th century, Sant' Apollinaire Nuovo, Ravenna, Italy; e) Early Christian sarcophagus, 6th century, Sant' Apollinare in Classe, Ravenna, Italy; f) Fragment of a capital, a simplified tree in the center flanked by two peacock-like birds with kusti ribbons on the neck, Church of the Forty Martyrs, 5th–7th century, excavated at Mingachevir, Azerbaijan State Museum of History; g) Fragment of a ciborium, 8th–9th century, from an unknown Langobard church, Italy, Walters Art Museum, Baltimore, Accession no. 27.563; h) Detail of a pluteo, 8th century, Villanova di S. Bonifacio, Verona, Italy.

1127) China, Goryo 高麗 (935–1392) Korea and Heian 平安 (794–1185) Japan. Since there are no examples of a paired peacock with the Tree of Life in Buddhist art, it is most unusual to find such an image in this Gyeongju pearl-roundel.

On the other hand, in the Near East the peacock must have been imported early on and was so valued in ancient Persia that it was even called the “Persian Bird” in Greece from about the time of Alexander the Great’s conquest of Persia (Gamm 2014). Analogous to the case with the phoenix in China, at some point it merged with the *simurgh* (*senmurv*), the mythical composite creature with the head of a dog, the claws of a lion, and peacock tail-coverts or falcon-wings, which became the foremost emblem of the Sasanid monarchy.⁹

Interestingly, a pair of peacocks is most frequently found in Christian art from the third century on through the medieval period, the birds flanking the Tree of Life, the Cross, the Christogram (like *tau-rho*, *chi-rho*), the Ankh Cross, or the Holy Water basin [Fig. 11].¹⁰ These confronting pairs often show a head-down posture similar to the peacocks in the Gyeongju pearl roundel. This iconographic and morphological affinity poses the question of whether the carver of

Image sources: a) <http://corsair.morganlibrary.org/icaimages/6/g67.214v-215r.jpg>; b) http://upload.wikimedia.org/wikipedia/commons/1/12/Etchmiadzin_Cathedral_cross_relief_with_Greek_inscriptions.png; c) <https://img.purch.com/w/660/aHR0cDovL3d3dy5saXZlc2NpZW5jZS5jb20vaW1hZ2VzL2kvMDAwLzA2MS83MDAvb3JpZ2luYWwvY2hpc3RvZ3JhbS1hbHVtYS5KUe=>, Courtesy of Davida Eisenberg Degen; d) <https://zoticon.files.wordpress.com/2012/10/rav.png>; e) <https://i.pinimg.com/736x/93/82/83/938283e21d2485626e897b6888bbd01e--early-christian-christian-faith.jpg>; f) https://upload.wikimedia.org/wikipedia/commons/6/6e/Base_of_a_column_with_Albanian_inscription.JPG; g) http://art.thewalters.org/images/art/large/L_ps1_27563_fnt_dd_t07.jpg; h) http://worldwidemuseum.files.wordpress.com/2015/09/pluteo_viii-secolo_villanova-di-s-bonifacio_vr.jpg.

the Gyeongju relief was familiar with such Christian iconography.

Another interesting stylistic feature is the portrayal of the peacock’s train with the highly elongated upper tail-coverts. Presented most symmetrically among all components of the Gyeongju roundel, each follows the contour of the rim on left and right climbing nearly all the way to the tree top. The exaggerated verticality, the droplet-like bulkiness, and the presence of hook-like protrusions taken together are found only in the Sasanid-style depiction of the tails of *simurgh* and other birds in Persia proper and Sogdia (this design probably the original inspiration for the later creation of the emblematic droplet-shaped paisley motif) [Fig. 12, next page].

The Stepped Base for the Tree [Fig.13]

Curiously the tree stands on a three-step square pyramidal base which has an opening in the middle of the bottom tier. This motif is totally unknown in Korea before and after this stone relief. But outside of Korea there are a few textile specimens with pearl roundels featuring this type of tree-base, for example, a fragment datable to ca. early eighth century found in Astana (present-day Xinjiang, China) and another textile fragment from a tenth-century Viking ship-grave excavated in Mammen, Denmark [Fig. 14].¹¹ Such examples, though their purpose is unclear, point to the circulation of this type of pearl roundel with the Tree of Life enthroned on such a pedestal.

Possibly pertinent to the question on the origin and symbolism of this motif is its resemblance to the



Fig. 12. Images depicting a simurgh or cock in a roundel: a) Detail of a robe in mid-7th-century Sogdian mural at Afrasiab; b) Detail of robe of Khosro II, r. 590-628, Large Grotto, Taq-e Bostan; c) Stucco wall panel, Chal Tarkan, Northern Iran, 7th-8th century, British Museum, London, ME 1973.7-25.3 [135913]; d) Sasanian gilded silver ewer depicting simurgh and (not visible in this view) the Tree of Life, 6th - beginning of 7th century, Hermitage Museum, St. Petersburg, Inv. No. S-61; e) Sasanian gilded silver bottle depicting a cock, Museum of Fine Arts, Boston, Acc. No. 58.94.



Image source: National Museum of Korea, Dry Plate Collection No. 030693.

Fig. 13. Detail of the middle roundel on the Gyeongju stone, showing the stepped base for the tree.

Image sources: Compareti 2003/2006, Fig. 7; watercolor by Magnus Petersen, <http://samlinger.natmus.dk/DO/asset/877/thumbnail/1280>; <http://samlinger.natmus.dk/DO/asset/2282/thumbnail/1280>.



Fig. 14. (Left): Reconstruction drawing of a textile pattern (with the Tree of Life on a pyramidal base and confronted stags in a pearl roundel), ca. 8th century, excavated at Astana, Turpan oasis, Xinjiang, China. (Center and right): Drawing and reconstruction of an embroidered brocade fragment (with the Tree of Life on a pyramidal pedestal and confronted animals), 7th-8th century, of possible Sogdian or Chinese manufacture, excavated from a 10th-century Viking ship-grave, Mammen, National Museum of Denmark.

Image sources: a) <http://www.orientarch.uni-halle.de/ca/afraas/img/ww/w4z.jpg>; b) <http://www.orientarch.uni-halle.de/ca/afraas/img/supp/taqsenm2.jpg>; c) and d) courtesy of Daniel C. Waugh; e) <http://mfas3.s3.amazonaws.com/objects/5C275781.jpg>.

stepped pedestal appearing with at least four types of Christian crosses which seem to have taken shape sometime before 700 CE: 1) the *Golgotha* (Calvary) Cross of the Byzantine church which clearly referred by name to the hill where Jesus was crucified; 2) the *Khachkars* (Stele of Stone-Cross) of the Armenian Apostolic Church; 3) the Thomas Cross (also called Persian Cross) for the Saint Thomas Syriac Christian community (part of the Church of the East centered in Fars, Persia) in southern India; 4) the Cross (a variation of *Khachkar* or St Thomas Cross) at a Nestorian(?) church, Anuradhapura, Sri Lanka [Fig. 15, next page].¹²

These Crosses suggest a hypothesis that the Tree of Life enthroned on the same type of pedestal in the Gyeongju roundel is likely a metaphor of the Cross. There are two unusual examples in this connection: the Cross at the Kottayam Cheriya palli Church (a Saint Thomas church) which shows a combination of the Cross (instead of a tree), pyramidal pedestal, and a pair of peacocks; and a relief of the Tree of Life on a pyramidal pedestal with confronted animals at the Armenian Church of the Holy Cross, on Akhtamar Island, Lake Van (eastern Turkey) [Fig. 16].



Fig. 15. The Cross on a stepped pedestal: a) Gold solidus of Emperor Tiberios I (r. 578–582), reverse. Minted in Constantinople. Dumbarton Oaks Byzantine coin collection. b) Khachkar, 5th–7th century, Dsegh, Lori, Armenia; c) Khachkar, ca. early 11th century, Haghbat Monastery, Armenia; d) Saint Thomas Cross, Kottayam Valiyapalli Church, Kerala, India; e) A rock-relief “Nestorian” Cross at Anuradhapura, Sri Lanka.

Image sources: a) <http://www.doaks.org/resources/online-exhibits/byzantine-emperors-on-coins/sixth-seventh-centuries-emperors-491-717/solidus-of-tiberios-i-578-582/@images/image/preview>; b) courtesy of Masis Panos; c) Photo by Dickran Kouymjian, <https://i.pinimg.com/736x/b4/a8/00/b4a8003c6d9c4bef61e232e4152763a--forever-living-foi.jpg>; d) Antony 2017: <https://www.nasrani.net/wp-content/gallery/saint-thomas-cross/kottayam-valiyapalli-cross-1.jpg>; e) Ninan 2017: <http://www.talentshare.org/~mm9n/articles/sliva/wps825A.tmp.png>.

configuration of the Crucifix on top of the Tree of Life [Fig. 17].¹³ Thus the tree in the Gyeongju roundel may in fact symbolize both the Tree of Life and the Cross simultaneously. This probability is further strengthened by the presence of the peacocks, the attendant holy birds in veneration of the Cross in Christian iconography.

On the other hand, the pedestal closely resembles the square step-pyramidal motif which is nearly omnipresent in the decoration of palatial and mausoleum architecture from ancient times in West Asia through the Sasanid period. It is particularly prominent on the Sasanian royal crowns. The form is unquestionably rooted in the West Asian sanctuary of the *ziggurat* with its symbolism of divine mandate for the ruling house. It is thus justifiable to name it a “ziggurat symbol” [Fig. 18, next page].

These two contexts look seemingly unrelated but may have had some inner relationship. Furthermore, in their origins, the crosses themselves can be connected. All of these crosses came into being by the end of the seventh century under the far-reaching influence of the Persian Empire. This was especially the case in Armenia, which most of the time was under the direct control of Persia. As the forerunners of officially approved Christian churches during the 4th century, Armenian churches seem to have sought inspiration from Persia in the making of their foremost icon, the khachkar. Supporting this conjecture is the close

Image sources: <https://zoticone.files.wordpress.com/2012/10/rav.png>; <http://3.bp.blogspot.com/-zGmniV64jjQ/VPyCm28LfnI/AAAAAADxQ/zAtxrX6C-yE/s1600/Saint%2BGayane%2BEtchmiadzin.jpg>; https://upload.wikimedia.org/wikipedia/commons/thumb/d/d1/Rom%2CBasilika_San_Clemente%2C_Apsis_1.jpg/1280px-Rom%2CBasilika_San_Clemente%2C_Apsis_1.jpg



Image sources: Antony 2017: <https://www.nasrani.net/wp-content/gallery/saint-thomas-cross/kottayam-cheriapalli.jpg>; Photos by Ben Bender, Wikimedia commons.

Fig. 16. (Top): Thomas Cross with two peacocks, Kottayam Cheriapalli Church. (Bottom): Armenian Church of the Holy Cross, east wall, Akhtamar Island, Lake Van, Turkey.

Such an assumption becomes the more plausible from consideration of the Christian tradition in which the Tree of Life and the Cross are interchangeable. This Tree–Cross identity is often corporeally manifest through the organic metamorphosis of the Cross with lianoid endings of four arms or the network of vegetation surmounting the Cross, and even through a

Fig. 17. The Cross as Tree of Life. (Left): Marble relief, 6th century, Sant’ Apollinaire Nuovo, Ravenna, Italy; (Center): Khachkar, ca. 700, found near the Church of Saint Gayane (founded 630), Armenia; (Right): Crucifix growing out of the Tree of Life, apse mosaic, 12th-century Basilica of San Clemente, Rome.



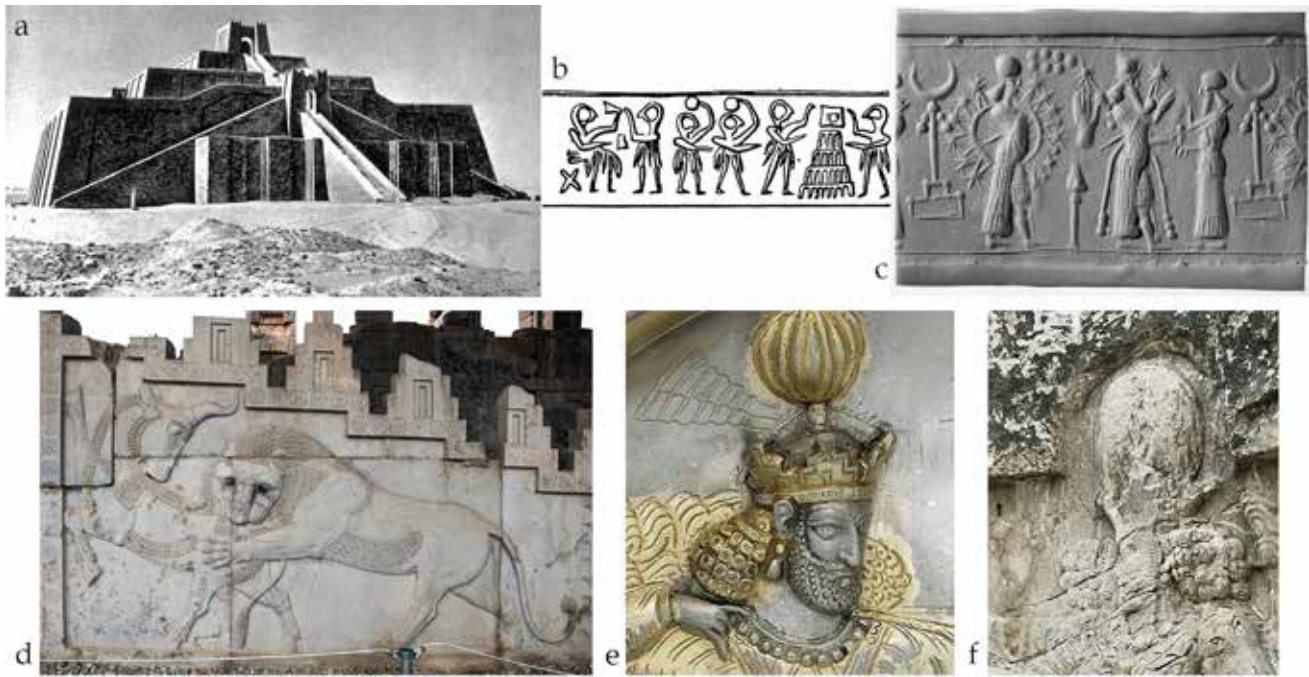


Fig. 18. Ziggurat images and their evocation: a) Reconstruction of a Sumerian ziggurat; b) Image from an Assyrian cylinder seal (first millennium BCE) showing construction of a ziggurat; c) modern impression from a neo-Assyrian cylinder seal (9th-8th century BCE) showing cult objects on ziggurat bases (stepped pyramids), Metropolitan Museum of Art, New York, Accession No. 1985.192.15; d) Detail of staircase on the Apadana, Persepolis, 5th-4th century BCE; e) Detail of head and crown of Sasanian King Shapur II (r. 309-379), on a gilded silver plate with a hunting scene, Freer-Sackler Gallery of Art, Smithsonian Institution, Accession Number F1934.23; f) Detail of head and crown of Sasanian King Shapur I (r. 240-270), in relief sculpture depicting the submission of Roman Emperor Valerian and Philip the Arab, Naqsh-e Rostam, near Persepolis.

Image sources: a) http://images.slideplayer.com/14/4409140/slides/slide_5.jpg; b) <http://www.native-science.net/Images/Gundestrup.Resemblance.jpg>; c) <https://images.metmuseum.org/CRDImages/an/original/239912.jpg>; d) and f) courtesy of Daniel C. Waugh; e) <blob:null/a0d88a29-6924-4c7f-a6b7-37f346ba7fbe>

iconographical affinity between an early type of *khachkar* and the Sasanian royal crowns exemplified by the crown of Ardashir III (r. 621-629), where the common elements are a “ziggurat symbol” and a pair of falcon wings. One difference is the replacement of the *Omphalos* with the Cross [Fig. 19] [Panos 2015]. Also called the “Wings of Ahura Mazda,” the falcon-wings are the foremost *farr* symbols (along with *simurgh*) of

divine mandate for Persian monarchy, rooted in the Zoroastrian (Mazdian) Holy book, the *Avesta*. The falcon-wings of *khachkar* later on change into plant-like forms more attuned to the symbolism of Cross as Tree of Life, which nevertheless retains the “ziggurat” pedestal for some time. The Thomas Cross (also called Persian Cross) of South India and the “Nestorian” Cross of Sri Lanka are akin to this later type of *khachkar*.

Thrones of the Cross come in various forms for which there are varied interpretations. However, the Armenian borrowing of Sasanian royal emblems in the making of *khachkars* seems quite obvious. As Thomas Antony, a scholar of the Christian crosses, has put it (2017), “It is essentially a throne for the placement of the kingly cross as used in all countries of the world. They are fashioned in accordance with the culture of the country and presents the symbols of the king.” In other words, the Cross of Jesus Christ,

Image sources: a) https://upload.wikimedia.org/wikipedia/commons/1/17/ArdashirIII_Coin_History_of_Iran.jpg; b) and c) courtesy of Masis Panos; d) photo by author *in situ*, 17 August 2016.



Fig. 19. Early Armenian *khachkars* and the Sasanian royal crown: a) Sasanian silver drachm of Ardashir III (r. 621-629), depicting him with pearl necklace and earrings and a diadem featuring a ziggurat base for a pole supporting a pair of falcon wings, a crescent and an omphalos; b) Armenian *khachkar*, from St. George Church of Mughni, Aragatsotn, Armenia; c) A tracing of that cross; d) *Khachkar*, 11th-12th century, Haghpart Monastery (founded ca. 976), Armenia.

the king and savior, is given the throne of the Persian ruler, "*Shahanshah*" (The King of Kings). Furthermore, it is possible to interpret the dual symbolism of the pedestal as both Golgotha and the ziggurat, so chosen to reinforce the idea of divine kingship and to encourage co-existence with the dominant Persian culture of Zoroastrianism at the time these crosses were shaped. This is an interesting topic for in-depth studies on its own.¹⁴

In sum, the above discussion points to a potential association of the Near Eastern ziggurat with the pyramidal throne of such Christian crosses and their possible Sasanian connection. That connection can be extended to the Gyeongju relief, which already has as well other morphological and stylistic affinities to the symbolic art of Sasanian royalty.



Image source: National Museum of Korea, Dry Plate Collection No. 030693

Fig. 20. Detail of the right roundel on the Gyeongju stone, highlighting the cub in the lower right.

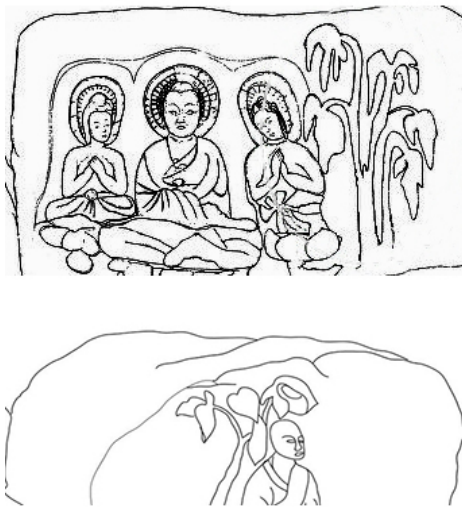


Fig. 21. Buddhist relief images on the rocks of the Pagoda Valley (Tap-gol), Mt. Nam-san, Gyeongju.

Image sources: *In situ* photographs by Author; tracings from Han 2007, 2014.

2. Roundel with a Tree, a Male Lion, a Cub, and a Tree-stand [Fig. 20]

This roundel on the right, the smallest of the three, measures about 40 cm in diameter. The rim is undecorated and now partly weathered. At first glance the roundel seems to contain only a leafy tree and a male lion. But close scrutiny reveals a somewhat vague image of a cub and a three-tiered pyramidal base under the tree. Since the tree-stand has already been discussed, here the focus will be on the tree, the cub and the male lion.

The Tree (Tree of Life)

The tree is slightly off-center, and its drooping spade-shaped leaves resemble those of the Bodhi tree. The most sacred tree in Indian and Sri Lankan Buddhism associated with the enlightenment of Śakyamuni, the Bodhi tree gained popularity throughout East Asian Buddhist art. But unlike the mango tree, it only infrequently is part of a roundel composition. The central placement of the tree, the appearance of attendant animal figures, and the use of the stepped base all collectively bespeak its sacred nature.

The 7th-8th century Buddhist rock reliefs on Mt. Nam-san 南山 in Gyeongju display the Bodhi tree next to the Buddha triad or meditating monks, evidence attesting to the currency of such motif in Silla Gyeongju at the time [Fig. 21] (Kim 2010). As in the first case, the appearance of this sacred tree in a roundel in non-Buddhist context may reflect the transnational and transcultural adaptation in East Asia of a prevailing Buddhist tree imagery.

A lion with a cub

The figure of a male lion dominates the composition, crossing behind the tree from right to left. His tail

Fig. 22. (Left): Detail of a Sasanian-style gilded silver dish depicting a feasting or ritual scene, with the main figures robe displaying a lion in a pearl roundel, ca. 8th century. Hermitage Museum, Inv. No. S-47. (Right): Sasanian gilded silver dish depicting a female tiger or leopard with a tree, 1st half of 7th century. Hermitage Museum, Inv. No. S-41.



Photos courtesy of Daniel C. Waugh

stretches up along the right edge of the rim and the paw of a foreleg rests against the left edge of the roundel. His crouching upper body, in close proximity to the tree, has a forward thrust, the head lowered and nearly touching the pedestal. The lower body seems to pulsate with rippling, sinewy muscle and tendon. The mass of the curly mane is articulated in detail. This is an image evoking feline movement with the ferocity and strength expected of a lion. At the same time there is a sense of oneness between the beast and the tree.

From ancient times, the image of a lion was enormously popular as a symbol of strength and ferocity and of kingship in the religious and secular art outside of East Asia. But since lions are not indigenous to China, the lion metaphor did not circulate there before approximately the Han dynasty. By the late sixth century, lion imagery had gained wider popularity along the transmission route of Buddhism and silk trade. Statues of lions in pairs were prominently featured as guardians in Chinese public architecture, royal mausolea, and Buddhist monuments in Tang 唐 (618–907) China (Luo 1993). Similarly, in Gyeongju, the capital city of the Silla dynasty, the lion image is common in various media and forms from the seventh century on, some of which have been regarded as masterpieces of stone sculpture of the Silla period (Gyeongju Museum 2006).

Nevertheless, the composition depicting a single lion with a central tree in a roundel is an isolated case in Korea and throughout East Asia. It also departs from the customary pairing of confronting animals with a sacred tree. The most comparable imagery is on some silver plates of Sasanian courtly tradition dating from the 7th–8th centuries, where a single female feline (if not a lion, a tiger or panther) is a metaphor for the mandate of royalty, and its power is manifest [Fig. 22].¹⁵ The similarity is, however, a distant one, especially due to the unique presence of a cub in this Gyeongju roundel where the main image is a male lion.

A cub stands upright on the right bottom corner of the roundel. The damaged upper part of the body hinders a clear identification of its species. But the legs are visible and offer two possibilities of its being either

a lion cub or a lamb. It makes little sense to regard it as a simple expression of a member of the lion family in a natural habitat, given the extraordinary combination of the Tree of Life on a ziggurat-shaped stand, a male lion, and the smaller animal. The interchangeability of the Tree of Life and the Cross, as discussed above, would suggest instead that the “cub” is a lamb in the biblical lion–lamb metaphor for Jesus Christ. In fact the lion–lamb pair appears with or without the Cross in Christian paintings often bearing the words, “Lion and The Lamb, our Savior, Jesus Christ.”¹⁶ The Syriac Church of the East had reached China by the seventh century or even earlier (Gillman and Klimkeit 2013, pp. 287–314; Jiang 2004). There is also ample evidence, direct and indirect, for the inflow of Eastern Christians into Korea and Japan, despite disapproval from the hard-core conservative scholars and staunch Buddhist clergy (Kim 2002; Lee 2001; Pulleyblank 1991/2011).

Of note is the unusual decorative stylization of the lion’s tail which resembles the *rinseau* ornamental plant pattern of world-wide popularity, commonly called the “Tang–arabesque pattern” in East Asia (Gyeongju National Museum 2010). In stark contrast with the rest of body, its decorative intensity is analogous to the manipulation of the tail ends of the peacocks in the first roundel. This stylization seems to have been utilized to complement the circular form of the roundel and shows a designer par excellence with a sense of design and control of a given space. But the overall naturalistic, sculptural quality of the relief in this roundel is comparable in sophistication with some of the lion sculptures in Gyeongju datable to the early and mid-eighth century. Examples include the granite lions guarding the main bridge leading to the Silla palace compound, which displays a very similar treatment of the curls of mane, and another high-relief granite tomb guardian–lion in a heraldic pose paired with a distinctively Central-Asian-looking figure of comparable vitality [Fig. 23, next page] (Lee 2015, Figs. 17, 34; Chin 1995).



Photos by author

Fig. 23. (Left): One of the two lion guardian statues for Woljeong-gyo Bridge, Gyeongju, early 8th century, Unified Silla, Gyeongju National Museum. (Upper center): A close-up view of the head of one lion. (Lower center): Detail of Fig. 20 – close-up view of the lion in the Gyeongju roundel. (Right): A corner stone for a rectangular tomb, Gujeong-dong village, Gyeongju, late 7th–8th century, Unified Silla, Gyeongju National Museum.

Summarizing the Study Results

- Although individual motifs in these two roundels appear in various cultural contexts, as found together here they have no parallels in and outside of East Asia.
- The combination of the central Tree of Life on a zigurat-like pedestal, the sacred animals, and the Persian-style pearl roundel shows the designer/carver's first-hand understanding of the iconography of the ancient Persia for his own creative application. Significant in this regard is the revelation of the artist's particular attachment to the readily identifiable Sasanian "droplet" design in the depiction of the peacocks' tails. The exaggerated extension of the lion's tail is again in the same stylistic vein.
- The three-tiered pyramidal base under the Tree of Life evokes Christian crosses with the same type of pedestal. The inter-changeability of the Cross and the Tree of Life in Christian tradition supports the possibility that the tree in these two roundels is meant to be a metaphor of the Cross, that is to say the Cross in disguise, hidden but recognizable to the believers who, assuming they existed, must have been an extreme minority in the Buddhist kingdom of Silla. The presence of sacred animals also strengthens this possibility (Kim 2002; Art History Association 2001; Korean Studies 2000).
- Even if what we have here is a simple auspicious symbolism with no religious intent, it should be viewed as historically significant, indicating that these extraordinary motifs of foreign origin and the overall compositional scheme were in the visual repertory of the designer/carver.
- Although the two types of tree depicted are popular in the Buddhist context, the roundels lack a Buddhist overtone and thus can be viewed as a popular adoption of these tree motifs reflecting a transnational style developed along the eastern Silk Road.

- The delineation of details in the relief demonstrates an experience of working hard granite stone at a level of skill comparable with that of the best stone sculptures from 7th–8th century Silla.
- The time of production likely falls in the period between the 670s when pearl roundels are assumed to have first appeared in Korea and sometime in the mid-eighth century when the Silla art of stone sculpture was at peak (epitomized by the Sokgulam Cave Temple in Gyeongju).
- The varying sizes and haphazard placement of the roundels on the Gyeongju slab eliminate a possibility of its being a single monument in its own right. Instead one can conjecture that they were carved as sample designs for garments or rugs (possibly religious) in consideration of the worldwide popular usage of roundels on textiles and the existence of pearl-roundel textile from seventh-century Silla.

Conclusion

Analysis of the Gyeongju stone relief offers clues as to the identity of its designer/carver and the time of production. It appears that he was someone who was in possession of an authentic understanding of iconography and symbolism practiced in the Persian cultural sphere, which was unachievable among natives of Korea; a person who was familiar with the Christian adaptation of such Persian religious and royal iconography; someone who was engaged in textile craft and/or stone carving residing in Gyeongju between the end of seventh century and mid-eighth century. The stone relief needs to be regarded as tangible, convincing evidence for the transmission of pan-Iranian art and culture with a possible Christian undertone into the Korean peninsula. It offers evidence for a settlement of people of Persian-Sogdian descent in Gyeongju who contributed to the rich multi-cultural milieu of Unified Silla culture (Kang 1991; Kwon 2015).

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References

- Akbarzadeh 2014
Daryoush Akbarzadeh. *Kuswiname: peleusia wangjawa sinla gongjuui cheon nyeon salang* 쿠쉬나메: 페르시아 왕자와 신라 공주의 천 년 사랑 [Kush nama: The Prince of Persia and the Silla Princess], Lee Hee-soo, tr. Seoul: Cheongae, 2014.
- Alpago-Novello 1986
Adriano Alpago-Novello. “Armenian Architecture from East to West.” Ch. 6 in Idem, ed. *The Armenians*. New York: Rizzoli, 1986.
- Alram 2015
Michael Alram. “The Cultural Impact of Sasanian Persia along the Silk Road – Aspects of Continuity 1.” *e-Sasanika* 14 (2015). <<https://www.sasanika.org/wp-content/uploads/Alram-esasanika14.pdf>>, last accessed 21 December 2017.
- Antony 2017
M. Thomas Antony. “Saint Thomas Cross – A Religio-Cultural Symbol Of Saint Thomas Christians.” (March 12, 2017) <<https://www.nasrani.net/2010/10/09/saint-thomas-cross-a-religio-cultural-logo-of-saint-thomas-Christians/#more-849>>, last accessed 21 December 2017.
- Art History Association 2001
Chon’guk Misul Sahak Taehoe 한국 미술사 학회 [The 7th National Convention of the Art History Association]. *T’ongil Silla misul ui taeye kyosop* 통일 신라 미술의 대외 교섭 [The External Contacts of Unified Silla Art]. Seoul: Yegyong, 2001.
- Avant d’oublier 2009
Wasurehen uchi ni 忘れへんうちに / Avant d’oublier blogspot. “Nihon ni aru renju enmon 日本にある連珠円文” [Pearl-roundels in Japan] (December 22, 2009) <http://avantdoublier.blogspot.kr/2009_12_01_archive.html>, last accessed 21 December 2017.
- Avant d’oublier 2015
_____. “Kimen bun onigawara 1 Hakuhō jida 鬼面文鬼瓦 1 白鳳時代” [Demon-face roof-tiles 1-Hakuo Period] (March 24, 2015) <http://avantdoublier.blogspot.kr/2015/03/blog-post_24.html>, last accessed 21 December 2017.
- Bashiri 1998
Iraj Bashiri. “The Art of Sassanian Iran.” (1998) <<http://www.angelfire.com/rnb/bashiri/Sassanian/Sassan.html>>, last accessed 21 December 2017.
- Capurro 2015
Carlotta Capurro. “Early Christian Decorations.” Posted to web blog “World Wide Museum – Museums on the net,” September 10, 2015 <<https://worldwidemuseum.wordpress.com/2015/09/10/early-christian-decorations/>>, last accessed 23 December 2017.
- Chang 1987
Chang Chong-sik 장충식. Seokjang-sa chulto yumul gwa seok-Yangji ui jogak yupung 錫杖寺 出土遺物과 釋良志의 彫刻遺風 [Relics Unearthed at the Sukjang-sa Temple and the Sculptural Style of Priest Yangji]. *Silla Munhwa* 신라문화 [Silla Culture] 3/4 (1987): 87-118.
- Chang 2007
Chang Kyeong-hee 장경희. “Su-Dang dae Yeonjumun-geum ui dongseo-gyosup 隋唐代 聯珠環文錦의 東西交涉” [Cultural Relations of East-West in the Pearl Studded Circlet Brocade of the Sui and Tang Periods]. *Johyeong dijain yeongu* 조형디자인 연구 [Research on Art and Design] [The Korean Association of Art and Design] 10/2 (2007): 291–313.
- Chin 1995
Chin Hong-sop 진홍섭. *Han’guk ui sokcho misul* 한국의 석조미술 [Stone Art of Korea]. Seoul: Munye, 1995.
- Chung 1992
Chung Su-il 정수일. *Munmyong kyoryusa yon’gu* 문명교류사 연구 [History of Exchanges between the Silla Dynasty and the West (of China)]. Seoul: Tongguk Taehakkyo, 1992.
- Comneno 1996
Maria A. L. Comneno. “Architectural Sculpture in Medieval Armenia – Decorations with Animal Motifs.” In: *In Armenien: Tagebuch einer Reise in das Land des Ararat*, Moreno Piccolotto et al., eds. Zürich: Institut für Hochbautechnik, Abteilung für Architektur, ETH, 1996: 191-98. Posted to website of Switzerland-Armenia Association <<http://www.armenian.ch/armenia/Pages/ETHZ/Vortrag/Comneno.htm>>, last accessed 23 December 2017.
- Compareti 2003/2006
Matteo Compareti. “The Role of the Sogdian Colonies in the Diffusion of the Pearl Roundels Pattern.” In: *Ērān ud Anērān: Studies Presented to Boris Il’ič Maršak on the Occasion of His 70th Birthday*, Matteo Compareti, Paola Raffetta and Gianroberto Scarcia, eds. Venezia: Cafoscarina, 2006: 149-74 (first pub-

lished as a Webfestschrift in *Transoxania*, 2003: <<http://www.transoxiana.org/Eran/Articles/compareti.html>>, last accessed 21 December 2017.

Compareti 2006

_____. "The So-Called Senmurv in Iranian Art: A Reconsideration of an Old Theory." In: *Loquentes linguis. Studi linguistica e orientali in onore di Fabrizio A. Pennacchietti*, Pier Giorgio Borbone et al., eds. Wiesbaden: Harrasowitz, 2006: 185-200.

Compareti 2009

_____. "Sassanian Textiles: An Iconographic Approach," *Encyclopaedia Iranica*, online edition 2009 <<http://www.iranicaonline.org/articles/sasanian-textiles>>, last accessed 21 December 2017.

Compareti 2015

_____. "Ancient Iranian Decorative Textiles: New Evidence from Archaeological Investigations and Private Collections." *The Silk Road* 13 (2015): 36-45.

Domyo 1987

Domyo Mihoko 道明三保子. "Sasan no renju En ayanishiki no seiritsu to imi ササンの連珠圖文錦の成立と意味" [Establishment and Meanings of Sasanian Textile with the Pearl-Roundel Pattern]. In: *Shiruku Rōdo bijutsu ronshū : Fukai Shinji Hakushi tsuitō* シルクロード美術論集: 深井晋司博士追悼 [Collection of Essays on Silk Road Art: Dr. Shinji Fukai Memorial], Katsumi Tanabe 田辺勝美 and Akira Hori 堀暁, eds.. Tokyo: Yoshikawa Kōbunkan, 1987: 153-76.

England 1996

John C. England. *The Hidden History of Christianity in Asia: The Churches of the East Before the Year 1500*. Delhi: The Indian Society for Promoting Christian Knowledge, 1996.

Feltham 2010

Heleanor Feltham. *Lions, Silks and Silver: The Influence of Sasanian Persia*. Sino-Platonic Papers, No. 206. Philadelphia: Univ. of Pennsylvania, 2010.

Gamm 2014

Niki Gamm. "The peacock: A symbol of royalty." *Hurriyet / Daily News*, April 19, 2014. <<http://www.hurriyetaidailynews.com/the-peacock-a-symbol-of-royalty-65241>>, last accessed 21 December 2017.

Gillman and Klimkeit 2013

Ian Gillman and Hans-Joachim Klimkeit. *Christians in Asia before 1500*. London: Routledge, 2013.

Gyeongju National Museum 2006

Kungnip Kyōngju Pangmulgwan 국립경주박물관 [Gyeongju National Museum]. *Silla ui saja* 신라의 사자 [Lion of Silla (special exhibition catalog, April 18-May 28, 2006)]. Seoul: City Partner Publishing, 2006.

Gyeongju National Museum 2008

_____. *Silla, Seo-Asia reul man-nada* 신라, 서아시아를 만나다 [Silla Meets West Asia]. [Exhibition Catalogue.] Gyeongju: Gyeongju National Museum, 2008.

Gyeongju National Museum 2010

_____. *Abjigwan teugjibjin-yeol 'neongkul munui'* 안압지관 특집 전열 '넝쿨무늬' ["Vine Design," a special exhibition at the Hall

of Anap-ji (November 2-December 5, 2010)].

Gyeongju National Museum 2013

_____. *Choson sidae ui Kyongju* 조선시대 의 경주 [Gyeongju in the Jeosun Period], (Special Exhibition Catalogue). Gyeongju: Gyeongju National Museum, 2013.

Gyeongju National Museum 2017

_____. "Silla wa Persia gondong ui gieok 신라와 페르시아, 공동의 기억" [Silla-Persia: A Common Memory], a special exhibition (November 4-December 15, 2017). co-organized by National Museum of Iran.

Han 2007

Han Kyung yong 한경용 (Sol-moe). "Tapgol sabangbul ui yetmoseup gwa domyeon 사방불의 옛모습과 도면 [Old pictures and drawings of the Four-directional Buddhas at the Pagoda Valley]. Posted 31 May 2007 to <<http://blog.daum.net/kinhj4801/11819295>>, last accessed 26 December 2017.

Han 2014

_____. "Gyeongju namsan-ui cheonnyeon mug-eun namu 경주 남산의 천년 목은 나무 [Millennium old tree of Gyeongju Namsan]. Posted 13 June 2014 to <<http://blog.daum.net/kinhj4801/15961922>>, last accessed 26 December 2017.

Hayashi 1975

Hayashi Ryochi. *The Silk Road and the Shosoin*. New York; Tokyo: Weatherhill-Heibonsha, 1975.

Jensen 2017

Jensen, Robin M. *The Cross: History, Art and Controversy*. Cambridge, MA: Harvard Univ. Pr., 2017.

Jiang 2004

Jiang Boqin 姜伯勤. *Zhongguo sianjiao yishu shi yanjin* 中国祇教艺术史研究 [A History of Chinese Zoroastrian Art], Beijing: Sandian shudian, 2004.

Jones 2002/2005

Heather Rose Jones. "Embroidery from the Tenth Century Viking Grave at Mammen Denmark." <<http://heatherrosejones.com/mammen/index.html>>, last accessed 23 December 2017.

Joseph 2005

Ken K. P. Joseph. *Ushinawareta aidentiti* 失われたアイデンティティ [Lost Identity]. Tokyo: Kōbunsha, 2005.

Juliano 2003/2006

Annette L. Juliano. "Chinese Pictorial Space at the Cultural Crossroads." In: *Ērān ud Anēran: Studies Presented to Boris Il'ich Maršak on the Occasion of His 70th Birthday*, Matteo Compareti, Paola Raffetta and Gianroberto Scarcia, eds. Venezia: Cafoscarina, 2006: 293-316 (first published as a Webfestschrift in *Transoxania*, 2003: <<http://www.transoxiana.org/Eran/Articles/juliano.html>>, last accessed 22 December 2017.

Kageyama 2003/2006

Kageyama Etsuko, "Use and Production of Silks in Sogdiana." In: *Ērān ud Anēran: Studies Presented to Boris Il'ich Maršak on the Occasion of His 70th Birthday*, Matteo Compareti, Paola Raffetta and Gianroberto Scarcia, eds. Venezia: Cafoscarina, 2006: 317-32 (first published as a Webfestschrift in *Transoxania*, 2003: <<http://www.transoxiana.org/Eran/Articles/kageyama.html>>, last accessed 22 December 2017.

Kang 1991

Kang Woo-bang 강우방. "Sin Yangji ron-Yangji ui hwaldonggi wa jakpum segye 新良志論 -良志의 活動期와 作品世界 [A new interpretation of the Silla's great master sculptor, Priest Yangji]. *Misul charyo* 美術資料 [National Museum of Korea art magazine] 47 (1991): 1-26.

Kawagoe n.d.-a

Aileen Kawagoe. "Reviewing the ruins of the Asuka-kyo and Fujiwara-kyo, the first imperial capitals of Japan." In web blog "Heritage of Japan: Discovering the Historical Context and Culture of the People of Japan" <<https://heritageofjapan.wordpress.com/inception-of-the-imperial-system-asuka-era/the-ruins-of-asuka-yamato/>>, last accessed 21 December 2017.

Kawagoe n.d.-b

_____. "Archaeological finds from 8th century Kudara-ji indicate Paekche craftsmanship and influence." In web blog "Heritage of Japan: Discovering the Historical Context and Culture of the People of Japan" <<https://heritageofjapan.wordpress.com/inception-of-the-imperial-system-asuka-era/the-cultural-heritage-the-art-of-asuka/the-cultural-heritage-of-asuka-manyoshu-poems-and-other-legacies-of-asuka/continental-connections/archaeological-finds-from-8th-century-kudara-ji-indicate-paekche-craftsmanship-and-influence/>>, last accessed 25 December 2017.

Kim 1981

Kim Seung-ku 金誠龜, "Anap-ji chulto gosik-wadang ui yeongsikjeok gochal 雁鴨池出土古式瓦堂의 形式的 考察 [Stylistic Studies of Roof-end Tiles Excavated from the Anap-ji Pond." *Misul-jaryo* 美術資料 [Art Documents] [National Museum of Korea] 29 (1981): 12-34.

Kim 1986

Kim Pu-sik 金富軾. *Samguk sagi* 三國史記 [Historical Records of the Three Kingdoms]. Lee Pyong-do, tr. Seoul: Uryu Munhwasa, 1986.

Kim 1992

Kim Sung-koo 김성규. *Yet-giwa* 옛기와 [Old tiles]. Seoul: Daewonsa, 1992.

Kim 2002

Kim Ho-dong 김호동. *Tongbang Kidokkyo wa tongso munmyong* 동방기독교와 동서문명 Eastern Christianity and East and West Civilization. Seoul: Kkachi, 2002.

Kim 2010

Kim Hwan-dae 김환대. *Gyeongju Namsan* 경주남산. Gyeongju: Han'guk Haksul Chongbo, 2010.

Kim 2013

Kim Young Ran 김영란. "Hanguk jasu ui yuhyeong gwa byeoncheon-sa 한국자수의 유형과 변천사" [Historical Survey on the Types of Korean Embroidery and Their Evolution]. In: Kungnip Kogung Pangmulgwan (Korea) 국립고궁박물관 [National Palace Museum of Korea]. *Areumdaun gungjung-jasu teukbyeol gangyeon-jip* 아름다운 궁중자수 특별강연집 [Proceedings of 'Beautiful Palatial Embroidery' Special Lectures], 2013: 16-21.

Kim 2015

Kim Hongnam 김홍남, ed. *Munyang ui gil* 문양의 길 [The Pattern Road]. National Asia Culture Center, Research Project, Final Report 2015. (Essays contributed by: Kwon Young-pil, Kim Hongnam, Suh Hyunsuk, Oh Youngchan and Kim Juyoun).

Klug 2015

Michael Klug. "Sacred Symbols: The Peacock." Posted to web blog "Mandorlas in Our Midst," 17 September 2015. <<https://mikejklug.wordpress.com/2015/09/>>, last accessed 22 December 2017.

Ko and Han 1989

Ko Kyung Hee 고경희 and Han Seok Hong 한석홍. *Anap-ji* 雁鴨池. Seoul: Daewonsa, 1989.

Koizumi 1986

Koizumi, Akio 小泉顯夫. *Chōsen kodai iseki no henrei : hakkutsu chōsa sanjūnen no kaisō* 朝鮮古代遺跡の遍歴 : 発掘調査三十年の回想 [Travel to the Ancient Sites of Jeoson: Recollection of 30 Years of Excavation Survey]. Tokyo: Rokkō, 1986.

Korean Studies 2000

Kukche Han'guk Hakhoe 국제한국학회 [International Society of Korean Studies]. *Silk'u rodu wa Han'guk munhwa* 실크로드와 한국문화 [The Silk Road and Korean Culture]. Seoul: Sonamu, 2000.

Kwon 2015

Kwon Young-pil 권영필. "Beom Iran misul ui hanbando jeomyip 범이란 미술의 한반도 漸入" [The Inflow of Pan-Iranian Art into Ancient Korea]. Unpublished paper presented at the 2015 winter workshop organized by Jungang Asia hakhoe 중앙아시아학회 (The Association of Central Asian Studies) held at 국립나주박물관國立羅州博物館 (Naju National Museum).

Lee 2001

Lee Do-hak 이도학. *Han'guk kodaesa, ku uimun kwa chinsil* 한국 고대사, 그 의문 과 진실 [Ancient Korean history, Doubts and Truths]. Seoul: Kimyong-sa, 2001.

Lee 2010

Samuel Lee. *Rediscovering Japan, Reintroducing Christendom: Two Thousand Years of Christian History in Japan*. Lanham MD etc.: Hamilton Books, 2010.

Lee 2015

Lee Chan-young 이찬영. "Woljeong-gyo chulto saja-seokju bokwon yeongu 월정교 출토 사자석주 복원연구" [A Study for the Restoration of the Excavated Stone Lion Statue of Woljeong-bridge]. M.A. thesis, Konkuk University, 2015.

Lendering n.d.

Jona Lendering. "Ctesiphon (Parthian: Tyspwn); The capital of the Parthian and the Sassanid empires." On-line at "Iran Chamber Society" <<http://www.iranchamber.com/history/ctesiphon/ctesiphon.php>>, last accessed 21 December 2017.

Lerner 2005

Judith A. Lerner. *Aspects of Assimilation: The Funerary Practices and Furnishings of Central Asians*. Sino-Platonic Papers,

- No.168. Philadelphia: Univ. of Pennsylvania, 2005. <http://www.sino-platonic.org/complete/spp168_sogdian_funerary_practices.pdf>, last accessed 21 December 2017.
- Lingley 2014
Kate A. Lingley. "Silk Road Dress in a Chinese Tomb: Xu Xianxiu and Sixth-Century Cosmopolitanism." *The Silk Road* 12 (2014): 1-12 + Color Plate I.
- Luo 1993
Luo Zhewen 罗哲文. *China's Imperial Tombs and Mausoleums*. Beijing: Foreign Languages Press, 1993 (translation of *Zhongguo lidai diwang lingqin* 中国历代帝王陵寝 [1984]).
- Marucchi 1908
Orazio Marucchi. "Archæology of the Cross and Crucifix." *The Catholic Encyclopedia*. New York: Appleton, 1908. Retrieved December 19, 2017 from New Advent: <http://www.newadvent.org/cathen/04517a.htm>.
- Matsumoto 1984
Matsumoto Kaneo 松本包夫. *Shōsōin-gire to Asuka Tenpyō no senshoku* 正倉院裂と飛鳥天平の染織 [7th and 8th Century Textiles in Japan from the Shoso-in and Horyu-ji]. Kyoto: Shikoshia, 1984.
- Meister 1970
Michael W. Meister. "The Pearl Roundel in Chinese Textile Design." *Ars Orientalis* 8 (1970): 255-67 + 14 plates. <https://www.academia.edu/783949/The_Pearl_Roundel_in_Chinese_Textile_Design>, last accessed 23 December 2017.
- Mirak-Weissbach 2011
Muriel Mirak-Weissbach. "'The Stones Will Cry Out.'" *Global Research* (Centre for Research on Globalization), July 11, 2011 <www.globalresearch.ca/the-stones-will-cry-out/25579>, last accessed 25 December 2017.
- Mode 2002
Markus Mode. "Court art of Sogdian Samarqand in the 7th century AD: Some remarks to an old problem." <<http://www.orientarch.uni-halle.de/ca/afras/index.htm>>, last accessed 21 December 2017.
- Nara National Museum 1996
Nara Kokuritsu Hakubutsukan 奈良国立博物館 [Nara National Museum]. *Hōryūji Nihon bukkyō bijutsu no reimei-ten zuroku* 法隆寺 日本仏教美術の黎明展図録 [Horyuji — Dawn of Japanese Buddhist Art — A Special Exhibition Catalogue]. Kyoto: Shikoshia, 1996.
- Ninan 2017
M. M. Ninan, "Marthoma Crosses." [2017] In: "M. M. Ninan's Biblical & Apologetic Studies" <<http://www.talentshare.org/~mm9n/articles/sliva/index.htm>>, last accessed 23 December 2017.
- Nishijin ori n.d.
"Nishijin'ori no lishi 西陣織の歴史" [History of Nishijinori]. In: *Some to o chiiki betsu jiten* 「染と織」地域別辞典 ["Dyeing and Weaving" Regional Dictionary], publ. on-line by The Cultural Foundation for Promoting the National Costume of Japan 財団法人民族衣裳文化普及協会. <www.kimono.or.jp/dictionary/area/nishijinori.html>; <<http://www.kimono.or.jp/dictionary/eng/nishijinori.html>>, last accessed 22 December 2017.
- Panos 2015
Masis R. Panos. "The 'Wings of Ahura Mazda' perpetuated in the design of the Armenian Khatchkar and other East Christian Crosses." Posted to web blog "Understanding Our Past, 8 March 2015 <<http://understanding-our-past.blogspot.kr/2015/03/>>, last accessed 23 December 2017.
- Porada 1993
Edith Porada. "Why Cylinder Seals? Engraved Cylindrical Seal Stones of the Ancient Near East, Fourth to First Millennium B.C." *The Art Bulletin* 75/4 (1993): 563-82.
- Pulleyblank 1991/2011
Edwin G. Pulleyblank. "Chinese-Iranian Relations 1. In Pre-Islamic Times," *Encyclopaedia Iranica*, online edition last updated 14 October 2011 (print ed., Vol. V, Fasc. 4 (Costa Mesa, 1991): 424-31. <<http://www.iranicaonline.org/articles/chinese-iranian-i>>, last accessed 23 December 2017.
- Rong 2014
Rong Xinjiang 榮新江. *Zhongguo zhongguo yu su te wenming* 中古中國與粟特文明 [Medieval China and Sogdian Culture]. Beijing: Sanlian shudian, 2014.
- Schmidt 2002
Hanns-Peter Schmidt. "Simorǧ." *Encyclopaedia Iranica*, online edition, 2002 <<http://www.iranicaonline.org/articles/simorg>>, last accessed 22 December 2017.
- Simurgh n. d.
"Simurgh." In: "Wikipedia" <<https://en.wikipedia.org/wiki/Simurgh>>, last accessed 22 December 2017.
- Soudavar 2010
Abolala Soudavar. "Farr(ah) II. Iconography of Farr(ah)/xʾarənah," (August 24, 2010). *Encyclopaedia Iranica*, online edition, 2016 <<http://www.iranicaonline.org/articles/farr-ii-iconography>>, last accessed 25 December 2017.
- Sui shu 1973
Sui shu di 6 ce juan 67 zhi juan 85 (chuan) 隋書第6册卷67至卷85 (傳) [Sui Shu No. 6 Volume 67 to Volume 85 (Biography)]. Beijing: Zhonghua shuju, 1973.
- Tokyo National Museum 2006
Tōkyō Kokuritsu Hakubutsukan 東京国立博物館 [Tokyo National Museum]. *Kokuhō Tenjukoku shūchō* 国宝一天壽國繡帳 [A National Treasure — the Tenjukoku Shucho Mandala] Tokyo: Tōkyō Kokuritsu Hakubutsukan, 2006.
- Trever and Lukonin 1987.
Kamilla V. Trever and Vladimir G. Lukonin. *Sasanidskoe serebro: Khudozhestvennaia kul'tura Irana III-VIII vekov. Sbornie Gosudarstvennogo Ermitazha* [Sasanian Silver: The Artistic Culture of Iran in the 3rd-8th Centuries. The Collection of the State Hermitage]. Moskva: "Iskusstvo", 1987.
- Vedeler 2014
Marianne Vedeler. *Silk for the Vikings*. Oxford: Oxbow Books, 2014.

Vogt 2013

Yngve Vogt. "Norwegian Vikings purchased silk from Persia." *Appolon Research Magazine*, posted 1 November 2013 <<http://www.apollon.uio.no/english/vikings.html>>, last accessed 23 December 2017.

Wang 2007

Wang Qing 王箐. "Wei jin zhi suitang shiqi zhongyuan ji nanfang diqu lianhua wen wadang yanjiu 魏晋至隋唐时期中原及南方地区莲花纹瓦当研究" [Research on the Lotus Pattern Tile in Central Plains and Southern China from Wei and Jin Dynasties to Sui and Tang Dynasties]. M.A. thesis, Jilin University, 2007.

Watt and Wardwell 1997

James C. Y. Watt and Anne E. Wardwell. *When Silk was Gold: Central Asian and Chinese Textiles*. New York: The Metropolitan Museum of Art, 1997.

Xiang 2002

Xiang Da 向达. *Tangdai Chang'an yu xiyu wenming 唐代长安与西域文明* [Tang Chang'an and Western Civilization], Shijiazhuang: Hebei Jiaoyu chubanshe, 2002.

Xiang 2017

Xiang Han 韩香. "Tangchao jingneide Bosi ren ji qi huodong 唐朝境内的波斯人及其活动" [Persian People in the Tang Dynasty and Their Activities]. *Zhongguo bianjiang xue 中国边疆学*, Series V (2016). Published on-line 29 June 2017 in *Meiri toutiao 每日头条* <<https://kknews.cc/history/lpbr59.html>>, last accessed 26 December 2017.

Xinjiang Museum 2000

Xinjiang weiwuer zizhiq u bowuguan 新疆维吾尔自治区博物馆 [Xinjiang Autonomous Region Museum]. *Tulufan diyu yu chutu juan zhiwu 吐鲁番地域与出土绢织物* [Turfan and Excavated Silk Textile]. Urumqi: Xinjiang weiwuer zizhiq u bowuguan, 2000.

Xu and Zhao 1996/1991

Xu Xinguo, and Zhao Feng. "A Preliminary Study of the Silk Textiles Excavated at Dulan," *China Archaeology and Art Digest* 1/4 (1996): 13–34 (Chinese original published in 1991).

Yamamoto 1998

Yamamoto Tadanao 山本忠尚. *Nihon no bijutsu 391 - onigawara 日本の美術 391 - 鬼瓦* [Japanese Art 391- Oniki Tiles]. Tokyo: Shibundo, 1998.

Yim 2001

Yim Young Ae 林玲愛 임영애. "Beopryung=sa Beon ui youngu 법흥사 변(幡)의 원류 [The Origin of the Buddhist Banner in Horyuji Temple]. *Gangjwa misul-sa 강좌 미술사* [Lectures – Art History], Vol. 16-0 (2001): 193–211.

Yim 2013a

_____. "Insik gwa jaehyeon: misulsa-jeok gwanjeom eseo bon 'Silla wa Seoyeok' 인식과 재현 : 미술사적 관점에서 본 '신라와 서역'" [Silla People's Recognition of Western Region People and Their Re-Creation as Art Works]. *Silla-sa hakbo 신라사학보* [Journal of Silla History Studies] 28 (2013): 423–56.

Yim 2013b

_____. "Silla wangneung jogak ui misulsa jeok jomang gwa

tuksuseong 신라왕릉조각의 미술사적 조망과 특수성" [The Art History and Sculpture of the Silla Royal Tombs]. *Silla munhwa 신라문화* [Silla Culture] 41 (2013): 135–62.

Yim 2016

_____. "Silla ui daewoe gwangye wa gukje gyoryu 신라의 대외관계와 국제교류" [International Relations and Exchanges of Silla]. *Silla sa daeggye 新羅史大系 신라사대계* [Silla Dynasty History] 12 (2016) (Publ. by Silla cheon-nyeon ui yeoksa wa munhwa pyeonchan wiwonhoe 신라천년의 역사와 문화편찬위원회 [Compilation Committee for A Millennium of Silla History and Culture]).

Yun 1994

Yun Kyongnyol 윤경렬. *Namsan: Discovering the Ancient Wonder of Kyongju's Mt. Namsan*. Seoul: Buddha Land, 1994.

Zhao 1992

Zhao Feng 赵丰. *Tang dai sichou yu sichou zhi lu 唐代丝绸与丝绸之路* [Silk and the Silk Route in the Tang Dynasty]. In series: *Suitang lishi wenhua congshu 隋唐历史文化丛书* [Collection of Studies on Sui-Tang History and Culture]. Xi'an: Sanqin chubanshe, 1992.

Notes

1. The city wall was first built in 1012, destroyed during the Japanese invasion (1592-1598), and rebuilt in 1746. It was demolished in the Japanese occupation period so that little remains (Gyeongju National Museum 2013). The temple still stands but is used for cultural activities.

2. Gukrip Jung-ang Bakmulgwan 國立中央博物館 National Museum of Korea, Dry-plate photo collection Nos. 022822, 030417, 030420, 030421, 030693 (*List of Dry-plates* III [1999], p. 292; *List of Dry-plates* V [2001], pp. 36, 51).

3. The pearl-roundel carries the pearl symbolism of Persian royalty represented by the Cydaris (the pearl ring of divine power), one of the Farr/Farrah (Persia's royal symbols of divine mandate), which grew out the Zoroastrian praise for its sublimity in the Avesta.

4. Eifuku-ji is a Buddhist temple attached to the mausoleum of the Crown Prince Shotoku Taishi 聖德太子 (574–622) and his mother and wife. This banner bears a seven-character inscription, reading "A Buddhist banner presented by the Silla Kingdom 新羅國獻上之幡," written in black-ink in Chinese. According to the Eifuku-ji this Silla banner was originally kept in the Horyu-ji 法隆寺 (first built ca. 607, rebuilt in 711) (Kim 2013; Yim 2001). Yim's article offers a convincing argument for the Korean origin of the Horyu-ji Buddhist banners. Also see Avant d'oublier 2015 (which does not mention the inscription).

5. Roof-tiles with a demon face were produced in China, Korea, and Japan before the pearl-roundel was introduced. For China, see "Shou mian wa 兽面瓦" [Animal face tile] <<https://baike.baidu.com/item/兽面瓦/5240274>>, last accessed 26 December 2017. For Japan, see Yamamoto 1998; also see Avant d'oublier 2015. For Korea see Ko and Han 1989; Kim 1992.

6. *The Dyeing and Weaving Regional Dictionary* (Nishijin ori n.d.) writes that Kyoto's famous Nishijinori 西陣織 began with about one-thousand Korean silk textile craftsmen who migrated to Kyoto in the fifth century. The Horyuji temple

preserves fragments of a large embroidery of a mandala-paradise scene whose production involved some Korean weavers residing in Japan. Commissioned by the family of Crown Prince Shotoku Taishi upon his death (d. 622), it was meant to be a prayer for his rebirth in paradise (Tokyo National Museum 2006).

7. Most of the Shoso-in textiles likely predate the mid-8th century, and some show a sign of sinicization in design devoid of pearl-roundel. The production of pearl-roundel textile was probably not so much meant for domestic consumption in China, since it is curiously absent on the garments of Chinese court ladies in Tang metropolitan figure paintings, the one exception being the depiction of a Tibetan envoy in a work attributed to the leading court painter Yan Liben 閻立本 (d. 673). Pearl roundels are also found on the clothes of Sui-early Tang Bodhisattvas and Sogdian donors at the remote Dunhuang cave temples 敦煌石窟 (such as Caves 277, 394, 401, 402, 420 of the Sui period 581–618; Cave 57 of the early Tang, ca. 618–712) and on the female clothes in the tomb murals of the northwestern region such as the Xu Xi-anxiu 徐顯秀 (d. 571) tomb at Taiyuan, Shanxi (Lingley 2014; Juliano 2003/2006).

8. The mango tree is found on the murals of the Mogao caves at Dunhuang – No. 320 of early Tang, No. 172 of the middle Tang, etc. – and on the steles of the Buddhist triad as illustrated by a seventh-century plaque at the Metropolitan Museum of Art (Accession No. 30.137). It is also found on the secular mortuary furnishings of the Sogdian tombs of the late seventh century excavated in northern China (Lerner 2005).

9. The figure can be found in all periods of Iranian art and literature and is also evident in the iconography of Georgia, medieval Armenia, the Byzantine Empire, and other regions that were within the realm of Persian cultural influence. The simurgh is also depicted in Iranian art as a winged creature in the shape of a bird, gigantic enough to carry off an elephant or a whale. It appears as a peacock with the head of a dog and the claws of a lion – sometimes, however, also with a human face. See Simurgh n.d.; Schmidt 2002; cf. Compareti 2006, who argues that it is a “pseudo-Simurgh”, not the actual beast as originally designated.

10. The earliest Christian images of peacocks are said to be the ones found at the Catacombs of Priscilla, as a part of ceiling fresco, though not a confronted pair (Klug 2015).

11. For the Astana piece, see Compareti 2003/2006, Fig. 7. The Astana piece is extraordinary in design because, in addition to the pyramidal pedestal, the imposing stags of regal posture have a pearl-studded neck-band with the Persian royal symbol of flying ribbon attached and even a Chinese title “Flowering Tree with Confronted Deer” on the square cartouche on the tree. For the Mammen piece, see Vedeler 2014, pp. 29–30, 40–41; Vogt 2013; Jones 2002/2005. Most consider the textile fragments from the Viking graves to be datable much earlier than the tenth century.

12. The Golgotha Cross began to appear on the gold solidus of Emperor Tiberios I (578–582) in Byzantine Constantinople and received official recognition during the time of Pope Innoncent III (r.1198–1216) (Marucci 1908). For a discussion on the Sri Lanka cross, see Chapter XV “ANURADHAPURA CROSSES, SRI LANKA,” Ninan 2017.

13. “The Cross of Christ, the Tree of Life” (Corinthians 1:18–31). The Eastern Orthodox Church has traditionally understood the Tree of Life in Genesis as a prefiguration of the Cross. Christ himself is identified as the Tree of Life. Perhaps the finest and best known example is the mosaic in the apse of the church of San Clemente, illustrated here, portraying the Crucifix as the Tree of Life, from which the tendrils of a vine grow out to encompass all walks of human life.

14. Nevertheless it is worthwhile to note that the botanical transformation of the Persian falcon wings occurred at the later stage of evolution of khachkars and that it may signify a shift in the Armenian attitude away from the symbol of Zoroastrian origin to more recognition of true nature of the Cross as the Tree of Life, the Living Cross. The so-called “lotus-flower” motif enthroning the Thomas Cross, very similar to that of the late khachkars, can be understood in this context. It is certainly not totally groundless to interpret the motif as an Indian transformation. Such regional adaptations were practiced for popular propagation and sometimes as a secret sign of the faith. In China, “Nestorian” crosses come with such auspicious symbols as lotus or clouds in Chinese culture; the Virgin Mary appears as a Bodhisattva holding Jesus probably in awareness of the Chinese Buddhist community. Early Buddhist images in Central Asia and the Western Region of China often display the royal attire of Persia during the time of its influence.

15. These plates have been dated to the late or post-Sasanian period, produced in the regions still under Persian influence (Alram 2015, Fig. 18; Bashiri 1998; cf. Trever and Lukonin 1987, p. 114, who date to the early 7th century the plate with the feline, which they, probably correctly, given its stripes, designate as a tiger [Hermitage No. S-41]). There is a small four-footed mammal below the feline, alongside of similarly small images two birds. There is an analogous plate with a female feline suckling two cubs (Hermitage No. S-22). The most popular themes on the Sasanian plates are the scenes of royal hunting and banquet. Others include simurgh, griffin, a singular peacock, birds amongst grapevines, royal portraits or the goddess Anahita.

16. A set of lion-and-lamb with a Cross or a Crucifix appears in contemporary iconic paintings with the quotations from John 1:36 (“And looking upon Jesus as he walked, he saith, Behold the Lamb of God!”) and Revelation 5:5 (“And one of the elders saith unto me, Weep not: behold the Lion of the tribe of Juda, the root of David...”). See <<https://www.pinterest.co.kr/pin/164099980149779241/>>; <<https://www.pinterest.co.kr/pin/164099980147583629/>>.

A RELIC FROM SAMARKAND IN THE URALS

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The accidental discovery in Ekaterinburg of a piece of carved marble fence that had originally been in the Timurid Gur-e Amir mausoleum in Samarkand initiated a fascinating exploration of the piece's significance and the history of how it arrived in the foothills of the Urals, far from its original home. The article which follows here presents the results of this research on a remarkable fragment of 15th-century Central Asian architecture.

In 2014 research fellows of the Sverdlovsk Oblast' Museum of Regional Studies (*Sverdlovskii oblastnoi kraevedcheskii muzei*), Ekaterinburg, came across an intriguing entry in the catalogue of the Urals Society of the Lovers of Scientific Knowledge (*Ural'skoe obshchestvo liubitelei estestvozananiia*, USNSF) for the year 1917. The record included a description of a rare exhibit that had been presented to the museum by General Aleksandr Evstaf'evich Baranov in 1887 and then would be on display until 1920. The description characterized the exhibit as "a piece of stone slab with bas-reliefs,

that had been originally enclosing Tamerlane's tomb at the oldest mosque in Samarkand" (*Katalog* 1887, p. 372). An examination of the museum holdings located the object, a piece of marble slab weighing 20 kg, measuring 96 x 15 x 5 cm [Fig. 1].

In order to identify the exhibit correctly and proceed with historical analysis, the museum addressed the Ural Federal University (UrFU) Central Asian Research Center (CARC). CARC is an UrFU department that has been carrying out fieldwork and research on the Central Asian region since 2010, with the Samarkand Expedition as one of its key projects. In the course of the expedition, research groups from UrFU visited Uzbekistan, examined the archaeological site of ancient Afrasiab, carried out excavations and studied the cultural heritage of Samarkand, especially its architectural monuments, including the Gur-e Amir mausoleum. Thus there was an opportunity to combine the efforts of scholars from Ekaterinburg and Samarkand to study the artefact in order to trace how it came to the Urals.

Fig. 1. The marble fence fragment from the Gur-e Amir mausoleum, obverse bottom, reverse top.

Photos courtesy of Sverdlovskii oblastnoi kraevedcheskii muzei.



The historical background begins with Russian territorial expansion into Central Asia in the 1860s. In 1865 Russian troops under the command of General Mikhail G. Cherniaev conquered Tashkent; in 1866 Khujand was occupied too, as well as, a bit later, Ura-Tiube. In 1867 these territories were included in the newly-formed Turkestan governorate (Abashin 2008, pp. 73–77). In 1868 Samarkand was also included in the same administrative unit, but not without a struggle, as Russian forces had to take refuge in the citadel and defend it against a concerted counter-attack.

Vasilii V. Vereshchagin, who became a famous Russian artist noted for his battle scenes and depictions of Central Asia, was among the citadel defenders and wrote in his memoirs:

Soldiers are scurrying to and fro in the smoke-covered ground above the Bukhara gate and exchanging lively fire with the enemy. I rushed in, saw how few were our defenders, grabbed the gun of a dead soldier lying closest to me, filled my pockets with ammunition rounds of the dead and for 8 days defended the fortress together with my comrades. This was not any kind of heroism, but simply because our garrison was already few in numbers to the extent that those released from the hospital, even if still weak, were impressed into service to increase the number of bayonets. For a healthy individual to remain idle in the circumstances was sinful and unthinkable. [Vereshchagin 1888/2011].

At the time of its conquest in 1868, the city of Samarkand was subjected to sanctions of the newly formed Turkestan governorate. The governor-general Konstantin P. von Kaufman ordered the local bazaar to be burned and, as was typical for almost any conquering force, allowed his soldiers to plunder the city. It was only later, as he established stable colonial administration in Central Asia, that von Kaufman initiated projects to study and record local culture, one of which led to the publication of the invaluable *Turkestan Album* of photographs that would include a major section on the architectural monuments, among them the Gur-e Amir.

Colonel (later General) Aleksandr Baranov was among the army officers at the taking of Samarkand [Fig. 2]. Information about his personal life is thin, but we know he was the son of an 1812 Napoleonic War veteran and general, Evstafii Baranov, was trained in the Corps of Pages, and then enrolled in the prestigious Preo-

brazhenskii Life Guard regiment. He was reassigned to the Caucasus, where he received honors for bravery in battles against the indigenous mountain people, served briefly in Poland during the 1863 uprising, and then was sent in 1865 to the Turkestan governorate. In Turkestan Baranov took part in all major military expeditions against the still independent Bukhara Khanate. In 1866 after the siege of Khojend he was promoted to major. His service in 1868 commanding the 3rd Orenburg Line battalion in a battle near Samarkand resulted in promotion to colonel. After the fall of Samarkand, Baranov proceeded together with von Kaufmann's main corps to the city of Bukhara which was also forced to capitulate. Over the course of his career, Baranov was awarded multiple orders and other military decorations of the Russian Empire, e. g. Order of St. Stanislav (First Class), Order of St. Anna (First Class), Order of St. Vladimir (Second Class, 1890), Order of White Eagle (1896), Order of St. Alexander Nevsky (1905), Golden Sword for Bravery, and Order of St. George. His promotion to the rank of Major-General came during his service on the Caucasus front in the Russo-Turkish war of 1877–1878. With his appointment to command the army's Perm' brigade in 1881, he made his home there for the last 24 years of his life. The obituary published in the local Perm' newspaper after his death on 27 December 1905 described him as "a fine man, modest and honest in the highest degree" (Baranov necrology 1906). One ought to take this into account while analyzing his stay in Turkestan.

Presumably Baranov acquired the piece of the marble fence from Tamerlane's tomb during his stay in Samarkand in summer or autumn of 1868. How he actually obtained the piece is unknown, although it is hard to imagine he simply ripped the slab away from its position in Timur's mausoleum. Nevertheless, in those days seizing this kind of "oriental souvenir" of the Islamic world was routine. Baranov might have either purchased the fence piece or found it lying in a pile of rubble and picked it up while visiting Gur-e Amir, which apparently was in a truly deplorable condition (see below). Situated not far from Timur's citadel (later destroyed), the mausoleum would have been easy for the Russian occupiers of the fortress to visit. Thus, Aleksandr Baranov, a military professional and fancier of historical artifacts, took the Gur-e Amir fence piece from Samarkand as a memento of the expedition, and until 1887 kept it in his private possession.

In 1887, while still in military service



Fig. 4. General Aleksandr Evstafievich Baranov.

Image source: https://upload.wikimedia.org/wikipedia/commons/7/7d/Baranov_Aleksandr_Evstafievich.jpg

as head of the 21st Perm Brigade, General Baranov applied to participate in the Siberian-Urals Exhibition of Science and Industry, which took place in Ekaterinburg from June to September of the same year. Organized on the initiative of USNSF members (Korepanova 2005, pp. 34–65) the exhibition included eleven sections: anthropology, geography, ethnography, education, mining industry, factories, cottage crafts, agriculture, imported items (the so-called *vvoznoi* section), a Siberian section, and the section of arts. With almost 4000 exhibitors from 32 Russian provinces, the exhibition was a significant milestone in the cultural and industrial life of the Urals region and for Russia as a whole. Moreover, it was the first large-scale exhibition in Russia that successfully combined scientific and industrial exhibits (Istoriia 2015).

Baranov was not the only participant displaying Turkestan artifacts at the exhibition. Central Asian participants included representatives from Samarkand, Verniy (Almaty), Tashkent and Pishpek (Bishkek). Even the governor-general of the Turkestan district contributed to the exhibition and presented his essays on the local natural environment. Documents relating to the exhibition now in the State Archive of the Sverdlovsk (Ekaterinburg) Region (GASO) point to intensive cooperation between the Ural region and Central Asia. It is worth noting that such interaction had a long history, going back to the Muscovite period when “Bukharan” merchants were regular visitors to the Urals and Siberia. The exhibition in 1887 was visited by a number of Samarkand merchants: Dmitrii L. Filatov, famous for his wine and cognac; Mirza Bukharin and Mirza Abdulin, purveyors of silk; and tobacconist I. M. Bolonin. Among those from Tashkent were the merchant A. G. Donskoi and Ieronim I. Krauze (Karl Hironim Krause). Krauze was a noted specialist on medicinal plants, had established a string of pharmacies in Tashkent, and would receive many

honors for his study of the natural resources of Turkestan. The ethnographic section of the exposition featured the Kirghiz people in their traditional clothing and yurts.

General Baranov was awarded the “Great Silver Medal” at the exhibition for displaying “an archaeological rarity,” the artefact which he then, on 15 September 1887, presented to USNFS (*Katalog*, p. 372). One might assume he did so with the encouragement of his wife, Ekaterina I. Lenarttsen, the daughter of Ivan I. Lenarttsen, the deputy head of the Urals mining factories association and a founding member of the Society.

According to USNFS records, the fence piece was put in a separate showcase, where it remained on display in the History Department of the Society’s museum until 1920. Then, with the whole country in the throes of Civil War, the museum was closed, its holdings abandoned, and, like a homeless orphan, relocated from one cellar to another — e. g., in the Voznesenskaia Church, which for a time in the inter-war years was home to a museum, and the Aleksandr Nevsky Cathedral, which for several decades beginning in 1961 was a repository for holdings of the regional museum. Thus the unique Central Asian bas-relief lay concealed for almost a hundred years in storage, until its re-discovery in 2014.

The first questions about the piece which demanded attention concerned its significance and authenticity. To answer them involved searching for similar carved designs which might have been preserved in the Gur-e Amir mausoleum itself or in other Samarkand museums.

The Gur-e Amir, Tamerlane’s mausoleum, is one of the outstanding monuments of Central Asian medieval architecture, listed as a UNESCO World Heritage site, and one of Uzbekistan’s most popular museums, visited by millions of tourists annually [Fig. 3]. Begun in 1403 as the burial place for Timur’s grandson,

Fig. 3. *The Gur-e Amir. (Left): Photo from the 1890s; (Right): Photo from 1999, after rebuilding of minarets.*



Image credits: (Left): Photo archive of the Institute of the History of Material Culture, Russian Academy of Sciences (St. Petersburg): Vvedenskii Collection; (Right): Courtesy of Daniel C. Waugh



Fig. 4. The grave of Tamerlane in the basement crypt of the Gur-e Amir, photographed in 1979.

Photo courtesy of Daniel C. Waugh

who had pre-deceased him, the mausoleum was not yet finished in 1405, the year of Timur's death, after which it became the family tomb. The main floor of the mausoleum contains the magnificent cenotaphs, sumptuously decorated according to local tradition, while the actual graves, as is typical for such mausolea, are below on the plainly decorated basement level [Fig. 4]. Construction continued in the 1420s when the mausoleum was widened and buildings were added adjacent to it to house pilgrims (Pugachenkova and Rempel' 1958, pp. 119–22). Ulugh Beg, Timur's grandson who ruled in Samarkand, installed as the cenotaph over Timur's grave the large block of dark green jade one sees there today and in 1447 had a carved marble fence added around the cenotaphs on the main floor. On his assassination two years later, Ulugh Beg would be buried at the feet of Timur.

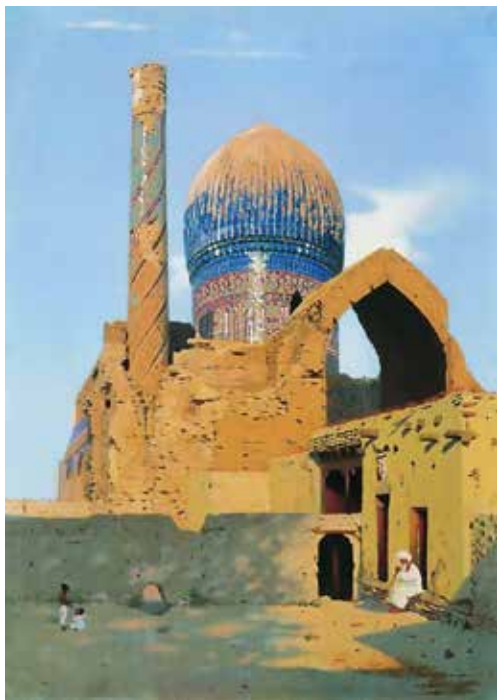


Image source: <http://veresh.ru/img/turkestan/gur-emir-mavzoley.jpg>

Between the reign of Ulugh Beg and the Russian conquest of Samarkand, control over the city passed through the hands of a succession of sovereigns, who, hypothetically, could each alter its architecture at will. The last Timurids were dethroned by Shaybani Khan in 1507, the Bukhara Khanate was established, and in 1612 Yalangtush Bahadur (1576–1656) was appointed governor in Samarkand, where he was responsible for transforming the Registan with the construction of the Shir-Dor and Tilia-Kari medreses. There is no indication he altered the Gur-e Amir. Finally, in 1740, Transoxiana was conquered by Nader Shah (1688–1747).

While the latter was famous for taking as booty the treasures of the places he conquered — and in fact, unsuccessfully, tried to abscond with the jade cenotaph over Timur's grave — there is no evidence that otherwise he changed the mausoleum. For in fact it was not only a tomb, but a sacred Islamic site as well: Timur was buried at the feet of his Sufi mentor, Mir Sayyid Baraka, and another prominent Sufi *pir*, Sayyid Umar, was buried in the mausoleum.

As attested by early photographs, the fabric of the mausoleum complex had decayed with the declining fortunes of Samarkand, but it is almost impossible to document to what extent the interior decoration had changed prior to 1868. For the state of the interior at the time of the Russian conquest (and soon thereafter), we have two key pieces of evidence.

Even though Vasilii Vereshchagin's account of his time in the city in 1868 focuses on military affairs, he also recorded interesting conversations with von Kaufman regarding antiquities. On a second trip to Central Asia in 1870, the artist apparently visited Samarkand again and sent a letter to the newspaper *Sankt-Peterburgskie vedomosti*, in which he painted an alarming picture of the sad state of the antiquities of Samarkand. He specifically mentioned Tamerlane's mausoleum and the damage to the cenotaphs, where locals could easily bribe the watchman to allow them to take away pieces of tile and rubble. It appears the artist prodded von Kaufman to salvage what remained of the original decoration, preserve it in a museum and hire local craftsmen to do some restoration based on the remains (Demin 1991, Ch. 4). Using his sketches drawn while in Central Asia but after he had re-located elsewhere, Vereshchagin painted his famous Turkestan series. A painting of his from 1890 shows the exterior of the Gur-e Amir [Fig. 5]. A drawing done for the series when he was in Munich in the

Fig. 5. Vasilii Vereshchagin's 1890 painting of the Gur-e Amir, viewed from the west.

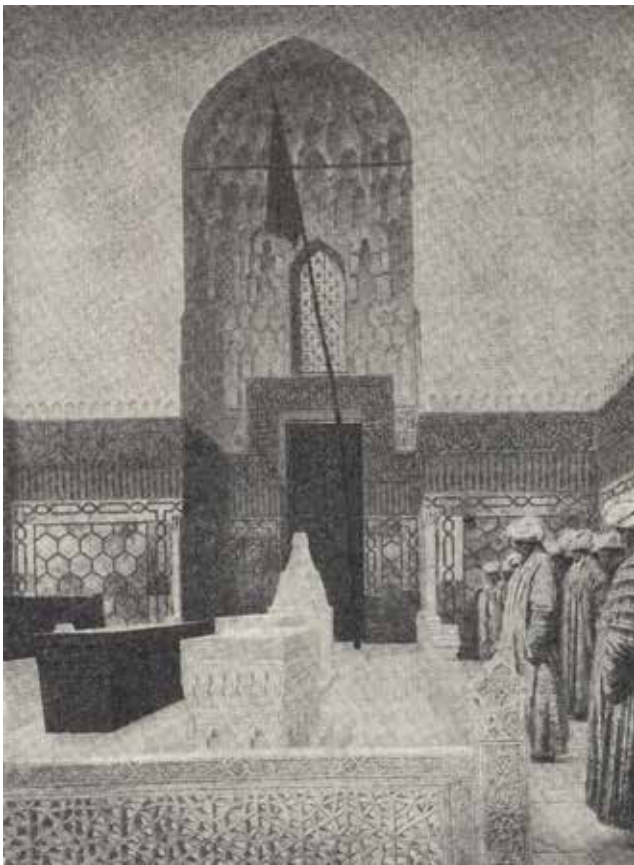


Fig. 6. Vereshchagin's 1873 drawing of the Bukhara Emir's praying in the Gur-e Amir.

early 1870s shows the interior, captioned "They pray to the Almighty at the grave of the saint" (1873) [Fig. 6]. It is an imagined scene of the Emir of Bukhara and his entourage inside the building, where they stand next to the cenotaphs on the main floor. However, the details in the picture clearly indicate it is based on the artist's first-hand observation, though perhaps with some "restoration" of detail—in it the fence around the cenotaphs seems to be intact.

Fig. 7. The photograph of a part of the fence around the cenotaphs in the Gur-e Amir in the *Turkestan Album*, Pt. 1, Vol. 2, Pl. 120.

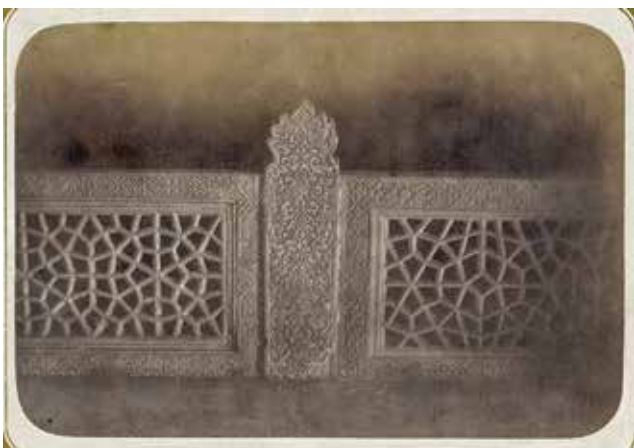


Image source: <https://memory.loc.gov/master/pnp/ppmsca/09900/09947/00297u.tif>

Image credit: Photo archive of the Institute for the History of Material Culture, Russian Academy of Sciences (St. Petersburg); Vvedenskii Collection

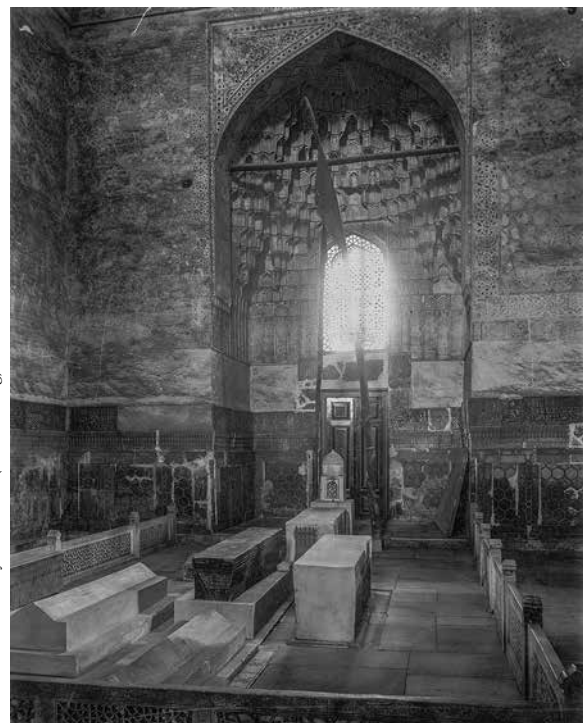


Photo from the 1890s showing the interior of the Gur-e Amir, the cenotaphs, and the fence.

Vereshchagin's observations about the state of the mausoleum are confirmed in another report from 1870. Nikolai A. Maev, who later became a leading expert on the antiquities of Turkestan, published an article in the newspaper he edited, the *Turkestanskie vedomosti*, where he noted (1870, p. 11):

At one time the grave stone of Timur was surrounded by an elegant carved marble lattice fence, though now only a small piece of it has been preserved. By the order of the Governor-General [von Kaufman] the lattice fence was restored and, following the model of what had been providentially preserved, another, alabaster fence was ordered made.

A well-preserved section of the fence, presumably the one referred to by Maev, was photographed *in situ* for the famous *Turkestan Album* published in 1871-72 [Fig. 7], where the caption indicates that it is a "part of the marble lattice fence around the cenotaphs." What Maev's account does not make explicit is when the restoration commissioned by von Kaufman may have been completed. Since Vereshchagin saw the interior only in its ruined state, possibly he referred to the photograph at the time he painted his picture in 1873 showing the fence as intact. In any event, we know that by 1890, when Countess Praskov'ia Uvarova visited Samarkand, she could describe how "the tomb stones were fenced with a low carved alabaster railing" (1891, No. 12, p. 5). Interior photographs from the 1890s, one by G. A. Pankrat'ev, and another usually attributed to I. Vvedenskii [Fig. 8], show the intact

Fig. 9. A. Minenko's drawings of the Gur-e Amir lattice fence, published in 1905.



fence. An album of plates published in St. Petersburg in 1905 (edited by Nikolai I. Veselovskii) includes reproductions of the precisely drafted watercolors made *in situ* by A. Minenko showing details of the fence as it existed around the end of the 19th century [Fig. 9].

Our analysis of the piece suggests that its original position had been in the lower part of the fence. The carved floral and geometric decoration on it has analogues both in marble garden fences, numerous pieces of which have been excavated in the Chil Sutun palace garden in Samarkand, and in the carving on the Timurid cenotaphs in Gur-e Amir (Pugachenkova and Rempel' 1965, p. 73). However, the various reconstructions of the mausoleum (1890, 1916, the 1950s, extensively in 1967, and in 1996) have resulted in a major part of the original interior design having been lost. It is unclear to what degree the fence around the cenotaphs one sees there today may be a modern creation even if patterned on the presumed original [Fig. 10].

It is reasonable to conclude then, given the identity of the ornamental elements with those on other

carved pieces from the 15th century, the evidence from Vereshchagin's painting and the photograph in the *Turkestan Album*, and the fact that the primary reconstruction of Gur-e Amir occurred only some time after 1870, that the fence piece located in the Ekaterinburg museum must be an original fragment of the fence which had been in Gur-e Amir prior to the Russian conquest of Samarkand in 1868. There seems to be a very low probability that any significant reconstruction of the tomb had occurred between the middle of the 15th and middle of the 19th century, at which time Russian artists and photographers documented the deplorable condition of the building. So the age of the piece is some 570 years, and it merits being considered an example from Central Asia's architectural heritage in the age of the Timurid "Renaissance."

The news released in late October 2015 concerning the rediscovery of the piece and the conclusions based on its scholarly analysis created quite a sensation, as reflected in the publication of various popular-science articles. In November 2015 the *Sverdlovsk Oblast'*

Fig. 10. Two views of the cenotaphs and fence in the Gur-e Amir, photographed in 1979.



Photos courtesy of Daniel C. Waugh



Photo by Rustam Ganiev

Fig. 11. The Samarkand relic displayed today in the Museum of History and Archaeology, Ekaterinburg.

museum in Ekaterinburg opened a special exhibition dedicated to the relic. That exhibit then sparked a great deal of interest here and in the wider Urals region in studying the era of Tamerlane, the Turkestan expeditions and the history of the centuries-long ties between the Urals region and Central Asia. Today, the remarkable marble slab from Samarkand is on permanent display in the Museum of History and Archaeology, a branch of the *Oblast'* museum (Istoriia 2015) [Fig. 11].

Acknowledgements

This article elaborates on material previously published in Nazar'ian and Ganiev 2015, where, however, one can find additional detail about the history of the Urals Society of the Lovers of Scientific Knowledge. The editor notes the kind assistance of Dr. Elena Paskaleva (Leiden), who provided the images of the Minenko drawings.

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References

- Abashin et al. 2008
Sergei N. Abashin, Dmitrii Iu. Arapov, and Nailia E. Bekmakhanova, eds. *Tsentrāl'naiia Aziia v sostave Rossiiskoi imperii* [Central Asia as a Part of Russian Empire]. Moscow, Novoe literaturnoe obozrenie, 2008.
- Baranov necrology 1906
S. I. [?=Sergei Andreevich Il'in]. "General-leitnant A. E. Baranov (Nekrolog)" [Lieutenant-General A. E. Baranov [Necrology]]. *Permskii gubernskii vedomosti* [Perm Province News], 1906, No. 6 (8 January). [Reprinted on-line at <<http://www.bergenschild.com/Necropolis/Necrolog.htm>>, last accessed 4 January 2018.]
- Demin 1991
Lev M. Demin. *S mol'bertom po zemnomu sharu. Mir glazami V. V. Vereshchagina*. Moskva: Mys', 1991. On-line at: <<https://www.booksite.ru/fulltext/vere/scha/gin/3/index.htm>>.
- GASO
Gosudarstvennyi arkhiv Sverdlovskoi oblasti [State Archive of Sverdlovsk Region]. *Fond 101. Opis' 1. Dela Nos. 27, 37*.
- Istoriia 2015
"Istoriia U[ral'skogo] O[bshchestva] L[liubitelei] E[stestvoznaniia]" [History of the Urals Society of the Lovers of Scientific Knowledge]. On-line at: <<http://uole-museum.ru/events/page/48/?id=54ff0a427517a3fc7228abea>> and <<http://uole-museum.ru/events/istoriya-uole/>>, last accessed 4 January 2018.
- Katalog 1887
Katalog Sibirsko-Ural'skoi nauchno-promyshlennoi vystavki 1887 g. [Catalogue of the Siberian-Ural Science and Industry Exhibition of 1887]. Ekaterinburg: Tip. "Ekaterinburgskaia nedelia", 1887.
- Korepanova 2005
Svetlana A. Korepanova. "Vystavochnaia deiatel'nost' v Rossii v XIX veke: Promyshlennye i nauchno-promyshlennye vystavki" [Exhibition Activity in Russia in the 19th Century: Industrial and Science-and-Industry Exhibitions]. Unpublished *kandidat* [Ph.D.] dissertation. Ekaterinburg: Ural'skii gos. universitet, 2005. [Table of contents and introduction to the author's summary [*avtoreferat*] on-line at <<http://www.dissercat.com/content/vystavochnaya-deyatelnost-v-rossii-v-xix-veke-promyshlennye-i-nauchno-promyshlennye-vystavki>>, last accessed 4 January 2018.]
- Krauze
"Krauze, Ieronim Ivanovich." Wikipedia <https://ru.wikipedia.org/wiki/Краузе_Иероним_Иванович>, last accessed 6 January 2018.
- Maev 1870
Nikolai A. Maiev. "Dzhizak i Samarkand" [Jizzakh and Samarkand]. *Turkestanskiie vedomosti* 1870, No. 23 (also in idem, ed. *Materialy dlia statistiki Turkestanskogo kraia*, Vol. 2. S.-Peterburg, 1873: 269–87).

Mecheti 1905

Imperatorskaia arkheologicheskaia komissiia. *Mecheti Samarkanda*. Vyp. 1. *Gur-Emir*. S.-Peterburg, Ekspeditsiia zagotovleniia gosudarstvennykh bumag, 1905.

Nazar'ian and Ganiev 2015

Ruben Nazar'ian and Rustam Ganiev. "'Permskii sled' nadgrobii Amira Timura [The "Perm' Remnant" of Amir Timur's Grave]. *Vostok Svyshe: Dukhovnyi, literaturno-istoricheskii zhurnal*, yp. XXXVI, No. 1 (ianvar' - mart 2015) (Tashkent): 68–73.

Pugachenkova and Rempel' 1958

Galina A. Pugachenkova and Lazar I. Rempel'. *Vydaishchiesia pamiatniki arkhitektury Uzbekistana* [The Outstanding Monuments of Architecture in Uzbekistan]. Tashkent, Gos. izd-vo. khudozhestvennoi literatury UzSSR, 1958.

Pugachenkova and Rempel' 1965

_____. *Istoriia iskusstvo Uzbekistana* [The History of the Arts of Uzbekistan]. Moskva: Iskusstvo, 1965.

Turkestanskii al'bom 1871-72

Turkestanskii al'bom. 4 parts in 6 volumes. Tashkent and St. Petersburg, 1871–1872. For a descriptive overview and links to a complete photographic reproduction: "Turkestan

Album", at the Prints and Photographs Division of the U.S. Library of Congress <https://www.loc.gov/rr/print/coll/287_turkestan.html>, last accessed 6 January 2018. The first, "archaeological" part in two volumes contains the photographs of historic architecture.

Uvarova 1891

Praskov'ia S. Uvarova. "Poezdka v Tashkent i Samarkand" [Journey to Tashkent and Samarkand]. *Russkaia mysl'* XII (1891), No. 11, Otd. 2: 1–19; No. 12, Otd. 2: 1–25.

Vereshchagin 1888/2011

Vasilii V. Vereshchagin. "'Zvezda Vostoka'. Samarkand v 1868 godu. Iz vospominanii khudozhnika V. V. Vereshchagina" ["The Star of the Orient". Samarkand in 1868. From the Memoirs of the Artist V. V. Vereshchagin]. *Pis'ma o Tashkente: khudozhestvennyi istoricheskii almanakh*, 10 April 2011. On-line in three parts, at: <<http://mytashkent.uz/2011/04/10/zvezda-vostoka-samarkand-v-1868-godu-iz-vospominanij-xudozhnika-v-v-vereshhagina-nachalo/>>; [continuation: ...vereshhagina-prodoljenienie/, and conclusion: ... vereshhagina-okonchanie/], last accessed 4 January 2018. [Originally published in *Russkaia starina* 59/9 (1888): 617–46].

THE TUMU INCIDENT AND THE CHINGGISID LEGACY IN INNER ASIA

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Southern Methodist University

One of the most pivotal military defeats in Chinese history was the Tumu Incident of 1449, during which the Oirad ruler Esen Khan not only decimated the Ming 明 army at Tumu 土木 (50 miles northwest of Beijing 北京), but also captured the Zhengtong 正統 emperor. Indeed, many scholars have claimed that this debacle changed forever the course and nature of the Ming dynasty (1368–1644).

To begin, the loss of life, was staggering: in the hundreds of thousands. So much so that the court felt it imperative to hold a massive Buddhist “hungry ghost” ritual to appease the dead.¹ Whether such rituals helped is unknown. However, as was to be the case with the Civil War in America and the Taiping Rebellion in China, such wartime demographic disasters had profound social consequences (Gilpin Faust 2008; Meyer-Fong 2013). Chu Hung-lam (1989, p. 9), for example, has argued that the psychological and cultural impact of this defeat changed forever the Ming intellectual world. Timothy Brook (2014, p. 274), moreover, has recently pointed out that the Tumu Incident also played a fundamental role in the subsequent Ming turn inwards. Thus, rather than continuing with their global adventures – as well evidenced in the voyages of Zheng He 鄭和 – the Ming dynasty instead famously put an end to such exploits at precisely the same time as the Europeans were venturing forth. So in pondering the age-old question about the “rise of the West,” we need to recognize that the Tumu Incident played no small part.

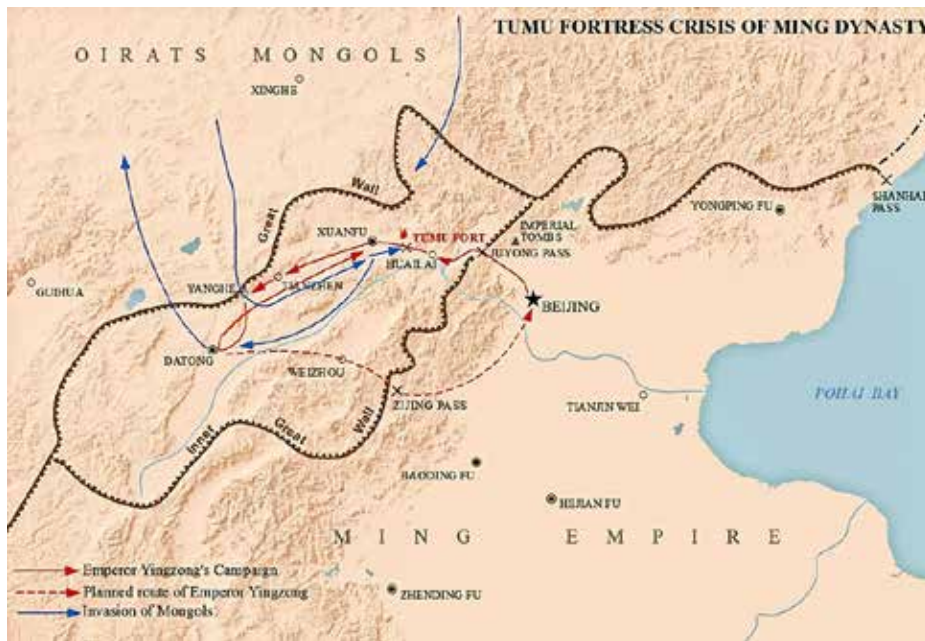
The point of this article, however, is not to explore the global dimensions of the Tumu Incident. Its aim is far more limited in scope. Rather, since the bulk of scholarship on the Tumu Incident is based on Chinese sources, this article seeks to explore how the other major players in this event – the Oirads and the Mongols – came to understand this particular episode in their own historical traditions. By so doing it therefore hopes to address one of the long lingering questions about the Tumu Incident, namely, why did the Oirads not take more advantage of this stunning victory (Mote 1974, pp. 265–72)? Or, in other words, why did Esen Khan not immediately invade Beijing, crush the Ming, and thereby recreate the Mongol empire?

The Incident

When the Xuande 宣德 emperor died suddenly after an illness at the young age of thirty-six in 1435 his eldest son Zhu Qizhen 朱祁鎮 was put on the imperial throne. Yet, his being only eight years old, there quickly developed a regency consisting of the empress dowager, three grand secretaries, and three eunuchs to help him rule. In short order, however, this regency was largely in the hands of the emperor’s tutor and leading court eunuch Wang Zhen 王振 (?–1449). Wang, building on his close relationship with the young emperor and deft political maneuvering, quickly came to be the most powerful person in the imperial court. As such he came to be the leading voice advocating for the emperor to go into the field against the northern threat, which, of course, culminated in the debacle at Tumu.

Why he did so is unclear. Some have suggested it was simply to further enhance his own power. Others have suggested that Wang Zhen actually thought that the Ming army could defeat the Oirads, since they had recently had victories in the southwest and suppressed a rebellion in Fujian 福建. Moreover, there was the historical precedent of the Yongle 永樂 emperor (r. 1402–1424), who had famously led five campaigns into the steppe against the Mongols. Whatever his assumptions may have been, the fact is that his decision was based on the reality of an Oirad incursion on the northern border in the summer of 1449. The reason for that incursion is slightly unclear. Chinese sources claim it was on account of the Oirad ruler’s being denied both trade relations with the Ming, and an imperial daughter for his son in marriage. In any event, Esen launched a three-pronged invasion: one group attacked Liaodong 遼東 in the east, another attacked the military garrison of Xuanfu (a hundred miles northwest of Beijing), and Esen himself attacked Datong 大同 a little further to the west.

On account of there not being a “Great Wall” at this time – only garrisons along the frontier – this invasion was a direct assault on the front and largely last line of defense of the Ming’s northern border (Waldron 1990). The court quickly recognized the existential threat that this invasion posed. Thus in short order they amassed an army of half a million men, which,



Map source: https://upload.wikimedia.org/wikipedia/commons/f/f1/Tumu_Crisis.jpg

Fig. 1. Map of the Tumu campaign.

on the insistence of Wang Zhen, was led by the twenty-two year old Zhengtong emperor. The idea was to march northwest, first to Xuanfu, then Datong, whereupon, ideally having defeated Esen and his forces, the emperor and his army would triumphantly return by a southern route through Shanxi 山西 province.

It did not go as planned [Fig. 1]. Leaving the capital on 4 August, the army was immediately bogged down by heavy rain, which resulted in the generals recommending the army to halt at Juyong Pass 居庸關, and then later at Xuanfu. Wang Zhen, however, dismissed both of these suggestions and the army moved north in the worsening conditions. Thus by the 12th the situation was so tense that some courtiers recommended assassinating Wang, bringing the emperor back to Beijing, and letting the army go to Datong under the command of Chinese generals. Of course, this did not happen either. Rather, as the army marched northwest they passed numerous battlefields that revealed the true extent of the horrific loss of life that Esen had caused. Thus upon reaching Datong, they realized that going into the steppe after Esen was a lost cause and decided instead to return the way they had come.

By 27 August the totally disordered army reached Hsüan-fu. On 30 August the Mongols attacked the rear guard east of Hsüan-fu and wiped it out. A powerful new rear guard of cavalry was sent to guard the imperial entourage. Its commander, an elderly and incompetent general, Chu Yung, led it straight into a Mongol ambush at Yao-erh-ling: this force too was annihilated. The Mongols were now only 15 miles behind the main army. On 31 August the army camped at T'u-mu post station. The walled county town of Huai-lai was only eight miles farther

on, within easy reach, and the officials urged the emperor to take refuge in the city. But Wang Chen again refused, since this would have meant abandoning his own huge baggage train, and overruled the ministers. [Twitchett and Grimm 1988: p. 324]

Instead he ordered the army to camp at Tumu, where there was no water for either the troops or the horses. Esen therefore sent a battalion to block their access to a river in the south and thereby gradually surrounded the bedraggled Chinese army.

On the morning of 1 September the Oirads prevented the army from breaking camp and offered to negotiate. Wang Zhen dismissed these overtures and ordered the army to move towards the river, whereupon the Oirads attacked, killing half of the original force, as well as all the leading generals. Wang Zhen was apparently killed by his own officers, and, of course, the emperor was captured. And on 3 September he was sent to Esen's headquarters near Xuanfu.

Thus ended Wang Chen's, and the emperor's, dream of glory. The whole expedition had been unnecessary, ill-conceived, and ill-prepared, and Wang Chen's irresponsible decisions had led it into total disaster. Esen for his part was quite unprepared either for the scale of his victory (according to some sources the battle of T'u-mu was won by an advance guard of only 20,000 Mongol cavalry) or for the quite fortuitous capture of the emperor. Peking now lay before him, open and undefended. What he might have done had he pressed home his advantage is incalculable. As it was, he decided to keep the emperor hostage as a bargaining counter and to turn back with all the booty his men could carry to regroup his own forces. [Twitchett and Grimm 1988, p. 325].

Esen Khan, the Oirads, and the Mongols

To begin to understand Esen Khan's decision to hold the emperor, and to delay attacking Beijing, it is necessary to put these events into the broader historical context of fifteenth-century eastern Eurasia. To that end we can start with the fall of the Mongol Yuan 元 dynasty, which was brought about by the leadership

of Zhu Yuanzhang 朱元璋 (1328–1398). He led a collection of rebels on a northward march to expel the Mongols from China and, victorious, on 10 September 1368 was declared emperor of the new Ming dynasty.

For their part, the Mongols, led by the last Yuan emperor Toghhan Temür, fled north. Much to their surprise, however, the old Mongol capital of Qaraqorum was already occupied. Indeed, the entire Mongolian plateau, their ancestral “homeland,” had been taken over by the Oirad. Believing it was not possible for his recently defeated army to wrest control away from the Oirad, Toghhan Temür and the Mongols found themselves in limbo. Eventually they went south and established themselves in the no-man’s land between China’s northern border and the Gobi Desert, which nowadays is the Inner Mongolian province of the People’s Republic of China (Elverskog 2006). Two years after arriving as a refugee in this environmentally and politically marginal buffer zone Toghhan Temür died of dysentery.

While his ignominious death symbolizes well the waning fortunes of the Mongols in the post-Yuan period, such was not the view from China.² Instead the Ming court continued to see the Mongols as a mortal threat to their very existence and they launched several campaigns against them. Much to the anger and consternation of the Ming court, the Mongols continued to elude defeat.³ Nevertheless, one unintended consequence of the continuing Mongol-Ming struggle was that it enabled the Oirad to become stronger. As noted above, the Oirad had taken over the Mongolian plateau during the later Yuan dynasty, though how this happened – as well as who the Oirad were, and where they came from – is somewhat obscure. Nevertheless, by the fourteenth century the term Oirad was an overarching designation for four groups – the Oirad, Naiman, Kereid, and Barghud – that had taken control over the plateau as the Mongols had become more and more embroiled in the affairs of China during the Yuan dynasty (Okada 1987; Miyawaki 1997).

Yet even though the Oirad controlled the “heartland” they were not a major power in the immediate post-Yuan period [Fig. 2]. In the west there was the powerful Moghul ruler Tughluq Temür Khan and in the south were the Mongols, weakened but still a powerful force. The power of both the Mongols and the Moghuls rested not only on their military might, but also in their economic position. In particular, they controlled the east-west trade,

and most importantly, they controlled the trade in Central Asian horses, which were essential for both the Ming military and its larger economy. Without them the Ming would quite literally grind to a halt, since Chinese soil lacks selenium, a vital mineral for the raising of strong horses (Becker 2008, p. 18), and the immensity of this trade is reflected in the fact that annually the Ming bought nearly two million horses from the Mongols (Serruys 1975). Thus, even though the post-Yuan Mongols may have been battered and defeated, they still had the Ming over a barrel.

For the Ming court this situation was clearly intolerable, since in their view China’s national security was in the fickle hands of their barbarian enemies. This vital issue therefore had to be dealt with, and the initial option was invasion and conquest. But every campaign of both Zhu Yuanzhang and the Yongle emperor were largely failures. The Mongols simply retreated into the steppe, and, once the supply lines were overextended, the stranded Ming army was decimated. In response to these failures the Ming court adopted a two-pronged strategy. The first was to find another source of horses, which they did by re-establishing the tea-for-horse trading network with Tibet (Sperling 1988). And although this trade was to expand enormously – one single transaction in 1435, for example, involved 1,097,000 pounds of tea for 13,000 horses (Elverskog 2003, pp. 148–49) – the Ming court still wanted to keep alive their trade with the Mongols and Moghuls. To this end, they therefore decided to normalize trade relations, but on their own terms. Their plan was thus to funnel all trade with the west through the small independent city-state of Hami 哈密, which in 1406 had been brought into the Ming system of frontier garrisons (Rossabi 1997).

The Mongol khan Gülich (1402–1408), however, did not agree with these terms and he poisoned Engke Temür, the prince of Hami, who had initially made



Fig. 2. Post-Mongol Eurasia.

the deal with the Chinese. At this turn of events the Ming court was bewildered, but they still hoped to salvage the trade negotiations. Yet when their envoys were executed at the command of the new Mongol ruler Punyashri, the Ming court finally decided to circumvent the Mongols entirely. They therefore made contact with the Mongols' archrival, the Oirad. The Ming then not only bestowed titles and privileges upon the Oirad ruler, but they also opened up direct trade relations. To repay the favor, the Oirad ruler Mahmud (d. 1416) launched an assault on the Mongols in 1412. After killing Punyashri, Mahmud put his own son Delbeg (r. 1412–1414) on the Mongol throne.

But these events were not solely an internal Oirad-Mongol affair. Rather, the central player in these unfolding events was the Ming court, which had approached the Oirad in order to undermine the recalcitrant Mongols for what were, in Chinese eyes, unfair trading practices. Their hope was that the Oirad would be more willing to do business, as indeed they were. The Ming therefore cut their relations with the Mongols and established direct economic ties with the Oirad. The immediate consequence of this was that any power the Mongols had over the Ming simply evaporated, both their wealth and power rapidly collapsed, and in their place arose the Oirad.

The growing power of the Oirad, however, impacted not only the fortunes of the Mongols. It also came to impinge upon the Moghuls. For example, Uways Khan fought the Oirad twenty-one times and lost every battle but one. He was even taken hostage three times, and to insure his release he had to give the Oirad ruler his sister as a wife (Dughlat 1996, pp. 35–36, 48). And the situation among the Moghuls only grew worse after the death of Uways Khan in 1429. Part of the difficulties that ensued certainly had to do with the succession struggle that erupted between his two sons, Yunus and Esen Buqa, but at the root of the crisis was the collapsing Moghul economy.

In 1424 the Ming emperor had abolished the horse trade with Central Asia (Fletcher 1968, pp. 216–18). Yet even so, such trade continued surreptitiously through the city of Hami (Watanabe 1975). This lifeline of the Moghul economy was cut when the Oirad ruler Toghan (d. 1440) married into the Hami ruling family and took control over this last entrepôt of Moghul trade with China. The final blow to Moghul trade, however, came when Toghan's son and successor Esen moved the horse trade away from Hami completely and established it at Datong near Beijing. It was precisely this new trade arrangement that the Ming, citing cost overruns, had stopped, a move that played a role in Esen's campaign of 1449 and the subsequent Tumu Incident (Farquhar 1957).

Two things should be clear from the above historical synopsis. The first is that the most important event in Inner Asia during the early Ming period was the on-going "civil war" between the Mongols and Oirad. In particular, the essential question was which one of these groups would be the dominant power. Intimately tied into this feud was not only the issue of who was the legitimate heir to the Chinggisid legacy, but also – more mundanely – who would control the trade with China. For both the Mongols and Oirad, this generally meant the normalization of trade relations. In particular, they wanted markets to be opened along the Sino-Mongol border where goods could routinely be bought and sold.

However, such a free market system was not only potentially beyond the ever hyper-vigilant control of the Chinese state, but it was also antithetical to the traditional Chinese tribute system, whereby trade with foreign countries was never simply an economic transaction but instead an elaborate piece of the imperial ideology keeping alive the illusion of China as the center of the universe. All trade was therefore imagined as being tribute presented to the Chinese emperor by subjects from afar, and the Chinese goods sold in return were simply the magnanimous gift of the Chinese sovereign. Since the Chinese market was so valuable, most foreign traders through history had been willing to put up with this charade. When the European imperial powers arrived, however, they were not willing to play the game and problems invariably ensued (Hevia 1995). In many ways it was the same with the Mongols. They wanted open markets, but more often than not the Chinese refused. They wanted to control the trade and thereby limited Mongol "tribute" missions to the imperial capital to one every few years. As a result, at certain times both the Mongols and Oirads launched raids into Ming territory in order to secure what they could not obtain through trade. It was in this context, whereby the Ming had once again refused to trade with Esen, that the 1449 campaign was launched.

The Chinggisid Legacy in Post-Mongol Eurasia

The full reasons why Esen launched this particular campaign, much less why he acted as he did once he won it so decisively, are hard to know based on the available evidence. Indeed, we have no Oirad sources about this event. Moreover, the sources we do have about it were only written down two hundred years after the event from the Mongol perspective. In other words, all we have to make sense of this pivotal moment in Eurasian history – aside from Chinese sources – are the late "legendary" recollections of the Oirads' main enemies, the Mongols. What we have are the texts conventionally known as the "Mongol chron-

icles": works written around the middle of the seventeenth century in the wake of the Manchu conquest and the founding of the Qing 清 dynasty (1644–1912).⁴

To many, the historical value of these sources, especially in reconstructing the "Oirad view" of the Tumu Incident, may therefore seem quite dubious.⁵ Indeed, I readily concede that working with these sources to such an end presents many problems. At the same time, however, I also believe that the material as it has come down to us does still offer us some insights into the realities on the ground. To that end, it is important first to recognize that the "Tumu story" as found in the chronicles is embedded in a much larger narrative frame explaining the history of the Mongol-Oirad wars which were eventually won by the Mongols. In fact, shortly after the Tumu Incident and the death of Esen in 1455, the Mongols gained the upper hand.

How the Mongols were actually able to rally themselves at this particular moment is little understood. One factor in their favor was the environment. Chinese sources record that on account of poor climatic conditions, north China suffered severe famine during the 1450s and '60s (Robinson 1999, p. 95). The same conditions must clearly have affected both the Mongols and the Oirad. Yet since the Oirad were on the Mongolian plateau, which has far greater weather extremes than "Inner Mongolia," it is very likely that they were far worse off during these decades than were the Mongols. Moreover, being closer to China, the Mongols not only could trade with the Chinese, but if need be could also raid over the border.

A further factor that facilitated the rise of the Mongols, or least the weakening of the Oirad, was the changing situation among the Moghuls. During the Oirads' rise to prominence the Moghuls had been in disarray as a result of the succession struggle between the sons of Uways Khan and the weakening economy. However, when his son Yunus eventually became khan in 1468, many of these problems evaporated. One factor that facilitated this turnaround was Yunus Khan's alliance with the charismatic Sufi leader Khoja Ahrar (d. 1490), since it not only put an end to earlier religious squabbles (Paul 1991a), but on account of Khoja Ahrar's status, the expansion of Naqshbandiyya Sufism among the Moghuls helped bridge alliances with other Central Asian Muslim leaders (Alam 2009). In fact, because Khoja Ahrar was so respected, most Central Asian rulers came to have one of his religious representatives at their courts, and through this Sufi network there actually developed a dialogue among all of these fractious groups (Paul 1991b). Even the long alienated Timurid and Moghul rulers came into contact once again on account of Khoja Ahrar's dealings. The two even subsequently developed political and trade relations. Yet while this was good for

the position of the Naqshbandiyya in Central Asia and also improved the economic situation among the Moghuls, it was disastrous for the Oirad, since it left them isolated between the Muslims in the west and the Ming in the east. The final blow was still to come.

In 1500 the Timurid dynasty was conquered and its territories divided into two. The Uzbeks, who traced their origins back to the Mongol Golden Horde, took over Central Asia; and the Safavids, a local Persian dynasty, took over Persia and Iraq. One consequence of this event was the disruption of the political, economic, and religious alliances between the Timurids and Moghuls that had recently developed on account of the Naqshbandiyya. As a result, all of these relations had to be renegotiated with the Safavids and Uzbeks. However, such a possibility was made difficult when the Safavids declared Twelver Shi'ism as their state religion. Their decision to make a radical break with Turko-Mongol Sunni rule and mark their independence by becoming Shi'a did not endear them to either the Uzbeks or the Moghuls, much less the Naqshbandiyya. Nor was the situation ameliorated by the Safavids' invasion of Central Asia. Moreover, as these political tensions mounted, whatever earlier economic networks had tied these regions together started to fray as well. This set in motion a downward spiral, since, as east-west trade diminished in the sixteenth century, the deteriorating financial crisis only added fuel to a worsening religiopolitical situation (Rossabi 1990).

Even more fuel was added to the fire by the Naqshbandiyya. They had cut their teeth and risen to power in Central Asian politics within the rhetoric of shari'aism, namely, "a pre-eminent emphasis on the strict observance of Islamic law" (Fletcher 1995, p. 5). The Safavid conversion to Shi'a Islam thus not only infuriated them, but also caused them to redouble their efforts as agents of both religious and political reform. Yet since the Safavids now acted as a buffer to the west, the Naqshbandiyya were forced to push further into the east. One of Khoja Ahrar's disciples, Khoja Taj ad-Din (d. ca. 1533), for example, carried the Naqshbandiyya message all the way to China's Gansu province (Fletcher 1995, pp. 6-7). The Naqshbandiyya were not the only ones who were forced to move their operations to the east. With their political and economic options stymied in the west on account of the Safavids and Uzbeks, the Moghul khans also began pushing east. Mansur Khan (1485–1545), who was ruling the eastern half of the Moghul Ulus, attacked China's northwestern frontier in the hope of accessing the riches of the Ming dynasty.

Therefore, the final collapse of the Oirad needs to be situated within this context of Sufi revivalism, economic contraction, and the attendant Moghul push

eastward. The rise of the Mongols also must be understood in relation to these events, even though, as noted above, how that happened in the mid-fifteenth century is clouded in mystery (Elverskog 2003, pp. 48–53). It is commonly held that after Molon Khan’s death in 1466, the Mongol throne was empty for a decade until Mandagul became khan and reigned briefly in the late 1470s. Upon his death, Bayan Möngke became khan, and upon his death in 1484 his seven-year old son was married to Mandagul Khan’s widow, which enabled him (of rather suspect Chinggisid lineage) to be recognized as the rightful ruler of the Mongols. Yet once the fortunes of the Mongols began to turn under this young ruler’s direction — soon to be entitled as Dayan Khan — he came to be seen as truly upholding the Chinggisid legacy (Elverskog 2004).

Dayan Khan’s meteoric rise to power began with his consolidation of the Mongols living in the eastern area of “Inner Mongolia” and his re-organization of them into the Three Eastern Tümen (Chakhar, Khalkha, and Uriyangkhan). Next came his greatest military achievement, the conquest of the Mongols of Ordos, who had taken advantage of the Tumu Incident to occupy the area within the great bend of the Yellow River (Hambis 1970). Having thus only recently moved into and taken over this territory, the Ordos Mongols did not initially want to ally themselves with Dayan Khan. Instead they violently resisted Dayan Khan’s project of unification (Okada 1989). Ultimately, however, Dayan was victorious, and the Ordos Mongols were then organized into the Three Western Tümen (Ordos, Tümed, and Yüngshiyebü). On account of this organizational reformulation of the Mongols into the Six Tümen under the authority of the Chinggisid ruler Dayan Khan, they were able to reassert their power against the Oirad. While military prowess, marriage alliances, and shrewd politics certainly held this new sociopolitical structure together, it was also ideologically reinforced through the concept of a return to proper Chinggisid rule and a reaffirmation of the Mongol legacy in opposition to the Oirad “usurpation.”

Indeed, if we are to understand the “Tumu story” as found in the Mongol chronicles — and what it may tell us about Esen’s actions — we need to put the Chinggisid legacy front and center. For the Chinggisid model was the defining feature of political legitimacy in post-Mongol Eurasia from Anatolia to China. While the importance of the Chinggisid legacy in the Muslim world is now well known, as the work of David Robinson (2013) is now making clear, it was also crucial for the legitimacy of the Ming dynasty. Moreover, as Jonathan Brack reveals in his study of the correspondence between the Yongle emperor and the Timurid ruler Shahrukh (r. 1405–1447), it is precisely on account of

this shared Chinggisid legacy that these post-Mongol states understood themselves as being equal:

The Ming Emperor’s letter and Shāhrukh’s response letters represent two distinct, albeit similar trajectories for the engagement with the Chinggisid sacral authority after the dissolution of the Mongol states in Iran and China. Under the Ming, the Chinggisid claim to divine designation was subsumed into the parallel Chinese ideological structure of the Heavenly Mandate, allowing the Ming to claim their inheritance of Chinggisid universal rule in Chinese terms. In the Islamic world, the Mongols’ theology of auspicious kingship was translated into Iranian and Islamic concepts, subsequently giving rise to a new imperial discourse of universal and sacral Muslim kingship. Shāhrukh’s Persian letter, indeed, ends with his rejection of the Ming emperor’s claim to Timur’s earlier submission to the Yuan. Instead, it positions Shāhrukh on an equal footing with the Ming emperor stating that the relationship between Yunglo’s father and Timur was that of “love and friendship,” and that, Shāhrukh and Yunglo should both strive to emulate their example. Shāhrukh, in other words, argues that the Timurids and the Ming, two universal empires at the opposing ends of post-Mongol Eurasia, have each an equal standing in their political succession to the Chinggisids. [Brack forthcoming]

What we need to recognize is that it was the same with Esen and the Zhengtong emperor. They were equals. They were two rulers legitimately ruling over their respective realms in accord with Chinggisid mandates. Thus for Esen, in the wake of the Tumu Incident, the problem or aim was not to conquer the Ming — much less kill a fellow legitimate ruler — but rather to secure his own power against his arch-rival: the Mongols.

Remembering Tumu

The story of Tumu is found in the three main chronicles of the seventeenth century: Sagang Sechen’s *Precious Summary*, Lubsangdanjin’s *Golden Summary*, and the anonymous *Golden Summary*. The longest and most elaborate version of the story is found in the work of Sagang Sechen,⁶ and it differs slightly in the details from the parallel versions found in both the *Golden Summary*.⁷ Regardless, all three follow a basic structure:

1. It is revealed in a dream that Esen will capture the Ming emperor. In Sagang Sechen’s version, it is Esen himself who has the dream, while in the other two, Esen Samai has it.⁸
2. Esen then crushes the Chinese and captures the Ming emperor. In the *Golden Summary* version, the

emperor is identified because he cannot be killed by a sword, or drowning, or in any other way.⁹

3. Esen tells his followers not to tell anyone about the capture of the emperor until he returns home. Yet, upon returning home Esen greets his mother, who already knows that he has captured the emperor. Outraged Esen asks how she knows, and when she reveals the name of the “squealer,” he is executed.¹⁰

4. Esen then sends off the Ming emperor to someone else who is to take care of him.¹¹

5. This individual puts him to work, and gives him a Mongol wife. And during this “captivity” the Mongols see that the emperor is no ordinary man, most notably his body emits light rays.¹²

6. Recognizing his sanctity, the Mongols return the emperor to the Chinese.¹³

7. The descendants of the child the emperor had with his Mongol wife are identified as the nobility of the Asud Mongols.¹⁴

8. On account of this fiasco of mishandling a Chinggisid, Esen’s power is thereby weakened, and while retreating he is then killed by the son of the man who had made public the fact that he had captured the Ming emperor.¹⁵

Whether any of this actually happened is certainly open to question. However, the story as it is told does nevertheless give some insight into why Esen acted as he did.

In particular, it is crucial to recognize that both the Oirad and Mongols saw the Ming emperor as being special. Thus not only could he not be killed, but his body also emitted light, an image that clearly resonates with the famous story of the Borjigins’ progenitor being divinely born through an immaculate beam of light conception. Yet, in fact the Mongols did not need such a literary allusion to connect the Ming ruler with the Chinggisid legacy. For them, the Yongle emperor was a Mongol of royal blood, and thus by extension so too was his grandson the Zhengtong emperor (Serruys 1972; Chan 1992). It is therefore perhaps not surprising that his capture was not something to promote and use as leverage, but rather something that was to be kept secret. Moreover, as the Tumu story makes clear, this capture was not the highpoint of Esen’s career, but ultimately his undoing.

Magical Realism vs. Realpolitik

In the wake of the Tumu disaster the Ming court regrouped in Beijing. Some have called it Beijing’s “finest hour” (Twitchett and Grimm 1988, p. 328). For example, in order to weaken Esen’s possibility of demanding a ransom for the Zhengtong emperor, they

had him deposed and put his brother on the throne, who reigned as the Jingtai emperor (景泰, r. 1449–1457). Moreover, under the leadership of Yu Qian 于謙 the Ming armies were quickly reorganized and the defense of Beijing made priority number one. So much so that when Esen did eventually march towards Beijing a month later he was quickly repelled and thereby returned to the steppe without ever really leveraging the monumental advantage he had gained at Tumu. Indeed, it is precisely this question that has vexed numerous scholars: why did he not take advantage of it?

On a certain level I think the answer can be found in the Tumu story, in particular, in the way it represents the Zhengtong emperor, namely, who he was, and what he represented: a legitimate Chinggisid ruler of a neighboring state. Significantly, when Esen did actually “attack” Beijing in late October 1449, what he demanded was not the submission of the Ming to Oirad power, but that Zhengtong be restored to the throne. The Chinese, of course, rebuffed him (apparently on the recommendation of Zhengtong himself). However, this fact reveals the core narrative truth of the Tumu story: Zhengtong was “magical,” or sacred, on account of his being a Chinggisid by blood.

Of course, in our contemporary demythologized world – and especially in post-nobility America – the power of blood is often under-estimated. Rather, within the framework of modern realpolitik such a notion seems patently absurd. For the Oirad and the Mongols the legacy of Chinggis Khan mattered profoundly, since, as we have seen, for them the most pressing issue was precisely who among them rightfully held the Chinggisid mantle. That was the very point of the civil war: who were the rightful heirs of Chinggis? The Oirad or the Mongols?

In China, on the other hand, the situation was already settled: the rightful rulers in the Chinggisid legacy were the Zhu family. Thus for Esen the only proper course of action was to return Zhu Qizhen, the Zhengtong emperor, to the throne. It was not – as so many modern scholars assume – to leverage his capture in order to reconquer China. Rather, Esen’s task was to reclaim the same authority as the Zhus held in China within his own designated territory – or in Mongol terms, their *ulus* – which was the area north of the “Great Wall.”¹⁶ Indeed, as seen in the correspondence between Shahrukh and the Yongle emperor, these rulers all saw themselves as legitimate heirs of Chinggis Khan ruling their own respective states. Thus the aim was less conquering each other, than maintaining the “Westphalian” status quo between these distinct and legitimately recognized territorial states (Lhamsuren 2010).¹⁷

In the case of the Oirads, however, both their Ching-

gisid legitimacy and their territorial space – the ulus – was questioned by the Mongols. During Esen’s reign this questioning became muted on account of both his undeniable power and Mongol weakness. Nothing confirmed this turn of events more than Esen’s remarkable military victory at Tumu. Moreover, his legitimacy was further bolstered by his unanimous treatment of his fellow Chinggisid ruler, the Zhengtong emperor. Thus, for Esen, his ultimate goal was not to conquer the Ming, for doing so would have been a gross violation of the accepted political order of post-Mongol Eurasia. Rather, his task was to confirm his Chinggisid bona fides and thereby rule the Mongol-Oirad ulus, which he did precisely by trying to return the Zhengtong emperor to his rightful ulus and throne.

Of course, the Ming did not go along with Esen’s plan, which was geared not towards the Chinese but towards the Mongols and Oirads. Having returned the Zhengtong emperor and thereby further secured his power, Esen eventually proclaimed himself Khan in 1453, only to pass away two years later. So too would the fortunes of the Oirad pass, when within the shifting economic and political winds of fifteenth-century Inner Asia, the Mongols ultimately came out on top. In fact, it was with Ming support that Mongols came again to not only uphold the Chinggisid legacy, but also to rule the Mongol-Oirad ulus.

Thus to ask why Esen did not exploit his victory at Tumu is in fact to pose entirely the wrong question. It completely misses the balance of power forged across post-Mongol Eurasia on account of the Chinggisid legacy and the ulus model of rule. Only when we understand that reality do the Tumu story and so too the actions of Esen himself make sense. He was being a good ruler by returning a fellow Chinggisid to his rightful throne.

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References

- Alam 2009
Muzaffar Alam. “The Mughals, the Sufi Shaikhs and the Formation of Akbari Dispensation.” *Modern Asian Studies* 43/1 (2009): 143–54.
- Bawden 1955
Charles R. Bawden. *The Mongol Chronicle Altan Tobci: Text, Translation and Critical Notes*. Weisbaden: Harrassowitz, 1955.
- Becker 2008
Jasper Becker. *City of Heavenly Tranquility: Beijing in the History of China*. New York: Oxford Univ. Pr., 2008.
- Brack forthcoming
Jonathan Brack. “Theologies of Auspicious Kingship: The Islamization of Chinggisid Sacral Kingship in Medieval Iran.” *Comparative Studies in Society and History*, forthcoming.
- Brook 2014
Timothy Brook. “Commerce: The Ming in the World.” In: *Ming: 50 Years that Changed China*, Craig Clunas and Jessica Harrison-Hall, eds. Seattle: Univ. of Washington Pr., 2014: 254–95
- Brook 2016
----. “Great States.” *The Journal of Asian Studies* 75/4 (2016): 957–72.
- Chan 1992
Chan, Hok-lam. “The Demise of Yüan Rule in Mongolian and Chinese Legends.” In: *Altaic Religious Beliefs and Practices*, Géza Bethlenfalvy and Alice Sárközi et al., eds. Budapest: Akademiai Kiado, 1992: 65–82.
- Chu 1989
Chu Hung-lam. “Intellectual Trends in the Fifteenth Century.” *Ming Studies* 27 (1989): 1–33.
- Dughlat 1996
Mirza Haydar Dughlat. *Tarikh-i-Rashidi: A History of the Khans of Moghulistan*, tr. by Wheeler M. Thackston. Cambridge: Harvard Univ., Department of Near Eastern Studies, 1996.
- Elverskog 2003
Johan Elverskog. *The Jewel Translucent Sutra: Altan Khan and the Mongols in the Sixteenth Century*. Leiden: Brill, 2003.
- Elverskog 2004
----. “The Story of Zhu and the Mongols of the 17th Century.” *Ming Studies* 50 (2004): 39–76.
- Elverskog 2006
----. “The Legend of Muna Mountain.” *Inner Asia* 8/1 (2006): 99–122.
- Elverskog 2017
----. “Sagang Sechen on the Tumu Incident.” In *How Mongolia Matters: War, Law, and Society*, Morris Rossabi, ed. Leiden: Brill, 2017: 6–18.

- Farquhar 1957
- David M. Farquhar. "Oirat-Chinese Tribute Relations, 1408-1446." In: *Studia Altaica: Festschrift für Nikolaus Poppe zum 60. Geburtstag am 8. August 1957*, Walther Heissig, ed. Wiesbaden: Harrassowitz, 1957: 60-68.
- Fletcher 1968
- Joseph F. Fletcher. "China and Central Asia, 1368-1884." In: *The Chinese World Order*, John K. Fairbank, ed. Cambridge: Harvard Univ. Pr., 1968: 205-19.
- Fletcher 1995
- . "The Naqshabandiyya in Northwest China." In: *Idem. Studies on China and Islamic Central Asia*, Beatrice Manz, ed. Aldershot: Variorum, 1995: 1-46
- Geiss 1988
- James Geiss. "The Chia-ching reign, 1522-1566." In *The Cambridge History of China, Vol. 8: 1*, Frederick W. Mote and Denis C. Twitchett, eds. Cambridge: Cambridge Univ. Pr., 1988: 440-510
- Gilpin Faust 2008
- Drew Gilpin Faust. *The Republic of Suffering: Death and the American Civil War*. New York: Knopf, 2008.
- Hambis 1970
- Louis Hambis. "Note sur l'installation des Mongols dans la Boucle du Fleuve Jaune." In: *Mongolian Studies*, Louis Ligeti, ed. Amsterdam: Grüner, 1970: 167-79.
- Haufler 2014
- Marsha Haufler. "Beliefs: Miracles and Salvation." In: *Ming: 50 Years that Changed China*, Craig Clunas and Jessica Harrison-Hall, eds. Seattle: University of Washington Press, 2014: 204-53.
- Hevia 1995
- James L. Hevia. *Cherishing Men from Afar: Qing Guest Ritual and the Macartney Embassy of 1933*. Durham: Duke University Press, 1995.
- Jagchid and Symons 1989
- Sechin Jagchid and Van Jay Symons. *Peace, War, and Trade Along the Great Wall: Nomadic-Chinese Interaction through Two Millennia*. Bloomington: Indiana Univ. Pr., 1989.
- Johnston 1995
- Alastair Johnston. *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History*. Princeton: Princeton University Press, 1995.
- Lhamsuren 2010
- Lhamsuren Munkh-Erdene. "The 1640 Great Code: An Inner Asian Parallel to the Treaty of Westphalia." *Central Asian Survey* 29 (2010): 269-88.
- Liu Rogers 2009
- Leland Liu Rogers. *The Golden Summary of Činggis Qayan: Činggis Qayan-u Altan Tobči*. Wiesbaden: Harrassowitz, 2009.
- Meyer-Fong 2013
- Tobie S. Meyer-Fong. *What Remains: Coming to Terms with Civil War in 19th Century China*. Stanford: Stanford Univ. Pr., 2013
- Miyawaki 1997
- Miyawaki Junko. "The Birth of Oyirad Khanship." *Central Asiatic Journal* 41 (1997): 38-75.
- Mote 1974
- Frederick W. Mote. "The T'u-mu Incident of 1449." In: *Chinese Ways in Warfare*, Frank Kierman Jr. and John K. Fairbank, eds. Cambridge: Harvard Univ. Pr., 1974: 243-72.
- Okada 1987
- Okada Hidehiro. "Origins of the Dörben Oyirad." *Ural-Altaische Jahrbücher* 7 (1987): 181-211.
- Okada 1989
- . "Dayan Khan in the Battle of Dalan Terigün." In: *Gedanke und Wirkung: Festschrift zum 90. Geburtstag von Nikolaus Poppe*, Walther Heissig and Klaus Sagaster, eds.. Wiesbaden: Harrassowitz, 1989: 262-70.
- Paul 1991a
- Jürgen Paul. *Die politische und soziale Bedeutung der Naqšbandiyya in Mittelasien im 15. Jahrhundert*. Berlin; New York: de Gruyter, 1991.
- Paul 1991b
- . "Forming a Faction: The *Ĥimāyat* System of Khwaja Ahrar." *International Journal of Middle East Studies* 23/4 (1991): 533-48.
- Robinson 1999
- David Robinson. "Politics, Force and Ethnicity in Ming China: Mongols and the Abortive Coup of 1461." *Harvard Journal of Asiatic Studies* 59 (1999): 79-124.
- Robinson 2013
- . *Martial Spectacles of the Ming Court*. Cambridge: Harvard Univ. Asia Center, 2013.
- Rossabi 1990
- Morris Rossabi. "The Decline of the Central Asian Caravan Trade." In: *The Rise of Merchant Empires: Long Distance Trade in the Early Modern World, 1350-1750*, James D. Tracy, ed. New York: Cambridge Univ. Pr., 1990, 351-70.
- Rossabi 1997
- . "Ming Foreign Policy: The Case of Hami." In: *China and Her Neighbours: Borders, Visions of the Other, Foreign Policy 10th to 19th Century*, Sabine Dabringhaus and Roderich Ptak, eds. Wiesbaden: Harrassowitz, 1997: 79-97.
- Serruys 1959
- Henry Serruys.. *Sino-Mongol Relations during the Ming, I: The Mongols in China during the Hung-wu Period (1368-1398)*. Brussels: Institut Belge des Hautes Études Chinoises, 1959.
- Serruys 1972
- . "A Mongolian Version of the Legend of the Mongol Ancestry of the Yung-lo Emperor." In: *Analecta Mongolica: Dedicated to the Seventieth Birthday of Professor Owen Lattimore*, John G. Hangin and Urgunge Onon, eds. Bloomington: Indiana Univ., 1972: 19-61.

Serruys 1975

----. *Sino-Mongol Relations during the Ming, III: Trade Relations: The Horse Fairs*. Brussels: Institut Belge des Hautes Études Chinoises, 1975.

Sperling 1988

Elliot Sperling. "The Szechwan-Tibet Frontier in the Fifteenth Century." *Ming Studies* 26 (1988): 37–55.

Twitchett and Grimm 1988

Denis C. Twitchett and Tilleman Grimm. "The Cheng-t'ung, Ching-t'ai, and T'ien-shun reigns, 1436-1464." In: *The Cambridge History of China: Volume 7, The Ming Dynasty, 1368-1644, Part I*, Frederick W. Mote and Denis C. Twitchett, eds., New York: Cambridge Univ. Pr., 1988: 305–42.

Vietze and Lubsang 1992

Hans-Peter Vietze and Gendeng Lubsang. *Altan Tobči: Eine mongolische Chronik des XVII. Jahrhunderts von Blo bzan bstan 'jin*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa, 1992.

Waldron 1990

Arthur Waldron. *The Great Wall of China: From History to Myth*. New York: Cambridge Univ. Pr., 1990.

Watanabe 1975

Watanabe Hiroshi. "An Index of Embassies and Tribute Missions from Islamic Countries to Ming China (1368-1644) as recorded in the *Ming Shih-lu* Classified According to Geographic Area." *Memoirs of the Research Department of the Toyo Bunko* 33 (1975): 285–348.

Notes

1. This ritual also entailed commissioning a monumental set of 139 mural paintings at Baoning Monastery in Shanxi to appease the troubled souls lost in the battle (Haufler 2014, p. 248).

2. For the court debates and different Ming views on the Mongols see Serruys 1959, Jagchid and Symons 1989, and Johnston 1995.

3. The Ming hatred of the Mongols would reach its most pathological extreme during the later reign of the Jiajing emperor (嘉靖, r. 1522–1566), who mandated that the Chinese characters for "barbarians" (i.e. Mongols) should be written in the smallest possible characters in all official records (Geiss 1988, p. 441).

4. The earliest Mongol sources, the undated *Golden Summary of Chinggis Khan* (Liu Rogers 2009) and the 1607 *Jewel Translucent Sutra*, both completely ignore the Tumu Incident. In fact, the *Jewel Translucent Sutra* summarizes the two hundred year history from the fall of the Yuan to the rise of Dayan Khan – and thus the entire Oirat-Mongol civil war – in one four-line verse:

From that time on there were several generations of Khans.

There was suffering [because] the state of this world and the Buddha's religion were not stable.

They did not resolutely distinguish between Khans and commoners nor good and evil.

At that the Borjigen Golden Clan deteriorated. [Elverskog 2003, p. 70]

5. See, for example, the comments of Charles R. Bawden in his translation of one of these chronicles, the anonymous *Golden Summary* (*Altan tobči*, or AT): "The actual historical reliability of AT is small... It is in my opinion difficult to treat the accounts of such events as these two as anything more than legends having a certain historical basis, and I do not propose to discuss the historical implications" (1955, p. 172, n. 1).

6. For a full translation see Elverskog 2017.

7. The parallel passages in Lubsangdanjin's version can be found in Vietze and Lubsang 1992, pp. 105–06.

8. While he was making his expedition to the Jürclid, Esen Samai of the Yüngsiyebü dreamed that he had taken prisoner the Qagan of the Great Ming. He reported this to Esen Tayisi. Esen Tayisi said: 'I should like you to take him. If you take him, I will give him to you.' [Bawden 1955, p. 172]

9. While he was returning from taking over the rule of the Jürclid, Jingtai Qagan was campaigning with his troops against the Mongols. On the way they met each other. The Chinese dug an enclosing trench, but did not let themselves be attacked. Esen Tayisi pretended to go back, and sent spies in the rear. The Chinese came out from their ditch. Esen Tayisi came and defeated the army of the Chinese. Three hundred men did not move. He cut them to pieces, but took alive one man, and asked him: 'Why did you not move?' That man said: 'We are the officers of the Qagan of the Great Ming. How should we move, abandoning our Qagan?' He asked: 'Where is your Qagan?' That man pointed out to him that the Qagan was on the ground. They took the Qagan out of the hole, and went to cut him down. His body was not wounded, and sword broke in pieces and fell. When they bound him and threw him into the water, he did not sink, but floated. They could not kill him. [Bawden 1955, p. 172]

10. When Esen Tayisi was on his way back, he gave orders saying: 'Do not say that I have taken this prisoner, Jingtai Qagan of the Great Ming. I will kill whoever tells it.' After Esen Tayisi had come back to his house, his Mother asked, 'What of your booty?' He said: 'I have no great booty. We are in good health.' She said: 'Why do you make a mystery? I have heard that you have seized great booty, and taken Jingtai Qagan of the Great Ming.' He said: 'Who said those words?' His mother said to her son Esen: 'Sorson of the Yüngsiyebü of the Mongols said them.' Saying: 'I said, "Do not tell this;" why did you tell it?' he killed Sorson and separating his chest from his behind, he left him hanging on a crooked tree. [Bawden 1955, p. 173]

11. According to the signs of his dream, he gave Jingtai Qagan to Esen Samai. [Bawden 1955, p. 173]

12. He [Buqun] gave the woman called Mulu Yagatu to that Jingtai Qagan; giving him the name Muqur Sigüse

he gave him to Esen Samai of the Yüngsiyebü, He took him in his service. Although amongst that people there was no cattle-plague, starvation, sickness or pestilence, the man who employed Jingtai Qagan was not content. After he had fallen asleep a light used to come out from his body. [Bawden 1955, p.173-74]

13. He [Jingtai] wrote a note, saying: 'I am here,' and hiding the note in the hairs of a sheepskin which was for sale, he sent it off. The Chinese saw this note and took it. They said: 'It is said that you are employing the Qagan. This is not fitting for you. Give him to us.' The Six Thousand Üciyed of the south side of the mountains, brought back (the Chinese emperor) and gave him back and received Taitu. [Bawden 1955, p. 174]
14. It is said that the Mongols took and kept behind the son of Jingtai Qagan, born of the woman called Mulu Yagatu whom he had married in the land of the Mongols. His descendants are the Talbi Tabunang of the Asud. [Bawden 1955, 174]

15. After that, Esen Tayisi, going alone and exhausted, came to the house of the wife of Sorson. He drank some koumiss, and when he was about to go out, the wife of Sorson saw him and said: 'The gait of this man is like the walking of the evil Esen. He is going clip-clop.' At his Mother's words, her son said: 'What is that man acting like that for?' His Mother said: 'It is said that the peace of Esen Tayisi has been destroyed by himself. This is really he. You should have taken a good look at him.' After that Buqun, the son of Sorson came again, and recognized Esen and took him and killed him. [Bawden 1955, p. 173]

16. On the Mongol theory of *ulus* and how it shaped post-Mongol Eurasian political history see Elverskog 2003, pp. 7-43, and 2006, pp. 40-62.

17. See also Timothy Brook's discussion (2016) on how the *ulus* model can expand scholarly approaches to the study of empire.

EXPLORING THE ORIGINS OF HORSE HERDING AND RIDING IN THE MONGOLIAN STEPPE

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Jamsranjav Bayarsaikhan

National Museum of Mongolia

Around the globe, the introduction of domestic horses transformed human societies — changing the way we subsist, communicate, and interact. In the steppes of Mongolia and eastern Eurasia, horses are the key to traditional nomadic herding life, and are both an important livestock animal and the primary form of transportation. First domesticated nearly 6000 years ago in the steppes of Kazakhstan and western Central Asia, as archaeological data suggest, horses were used for meat, dairy products, and pulling chariots. However, the questions of when and why people first began mounted horseback riding, and its role in major social developments in subsequent centuries are much less clearly understood. Over the last 16 years, Arctic Studies Center (Smithsonian Institution) (ASC) researchers (in cooperation with the National Museum of Mongolia and Eastern Tennessee State University) collected detailed archaeological data from one of the earliest nomadic cultures in eastern Eurasia: the late Bronze Age Deer Stone–Khirigsuur (DSK) Complex. Although sites from this culture are not linked with historical records, and produce few artifacts illustrating how the animals were used, they have yielded a rich record of equine skeletal remains — including the head, hooves, and neck bones of sacrificed horses. These horse bones are among the oldest evidence for domestic horses in eastern Eurasia.

Combining the large sample of bones previously excavated by the ASC and National Museum with new specimens collected from targeted excavations in northern and central Mongolia, we have sought to use these skeletal remains to understand how horses were used in eastern Eurasia during the late Bronze Age. By studying the skulls of contemporary domestic and wild horses, along with archaeological horse bones from the great nomadic empires of Mongo-

lian history, we developed criteria for animals that had been bridled and heavily exerted on the basis of cranial features. Using a 3D scanner and digital measurement, we identified diagnostic changes to the nasal bones and premaxilla of Deer Stone–Khirigsuur horses caused by horseback riding or pulling chariots and carts. Demographic (age and sex) patterns among these Bronze Age archaeological specimens indicate that they were part of a managed livestock herd, and modifications to the teeth and maxilla show that herders practiced veterinary care and began experimenting with equine dentistry. A precision radiocarbon model suggests that a rapid expansion of horse ritual across Mongolia and adjoining regions took place around 1200 BCE.

Together, these results indicate that Deer Stone–Khirigsuur people managed horses and used them for transport, and that a major change in domestic horse use took place towards the end of the second millennium BCE. Based on unique cranial features linked with riding and the rapid increase in the visibility of horses in archaeological sites at this time, it appears likely that the Deer Stone–Khirigsuur period (ca. 1200–700 BCE) saw the first mounted horseback riding in eastern Eurasia — and perhaps the world. This period was a time of wetter, ameliorated climate, casting doubt on hypothesized links between drought and the development of horsemanship or nomadic life. Instead, horse riding and improved grasslands may have prompted steppe peoples to expand into further regions of the arid steppes, bringing DSK herders (and their horses) into contact with the settled peoples of China.

During the fieldwork, we also documented several new rock art sites in central Bayankhongor using drone photography and 3D photogrammetry under

the leadership of Dr. Julia Clark at the American Center for Mongolian Studies. Using the 3D models collected during this project, as well as those of nearly 100 Bronze and Iron Age horse specimens which were obtained, we hope to produce a publicly accessible on-line database of ancient horse remains useful for education and research.

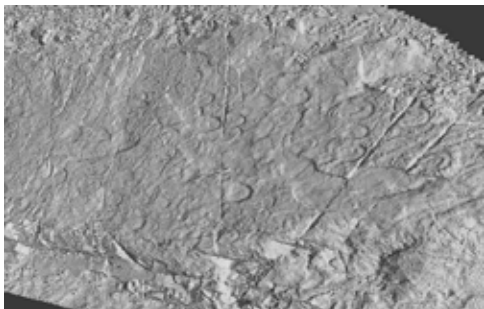
Fig. 1. (Above right): Excavation of a horse-head burial mound at a deer stone site in Bayankhongor, central Mongolia.



Fig. 2. (Below left): 3D scan of rock art panel showing dozens of horse hoof imprints from Morin Mort, northern Bayankhongor province, Mongolia, produced using 3D photogrammetry.

Fig. 3. (Below middle): 3D model of equine skull from an archaeological horse burial in Bayan-Ulgii province, western Mongolia, excavated by the Smithsonian-National Museum of Mongolia team in 2011.

Fig. 4. (Below right): A modern horse skull next to a Bronze Age deer stone in Bayankhongor, central Mongolia.



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References

Bayarsaikhan et al. 2017

J[amsranjav] Bayarsaikhan, W[illiam] Taylor, and T[umurbaatar] Tuvshinjargal. "Morin Mörtijn durstal" [Archaeological Investigations at Morin Mort]. *Nuudelchdijn öv sudlal* [Nomadic Heritage Studies] XVIII-II (Fasc. 1-27) (2017) (National Museum of Mongolia): 7-14.

Taylor 2016

William Taylor. "Horse Demography and Use in Bronze Age Mongolia." *Quaternary International* 436 (2016): 270–82.

Taylor et al. 2015

William Taylor, Tumuurbaatar Tuvshinjargal, and Jamsranjav Bayarsaikhan. "Equine Cranial Morphology and the Identification of Riding and Chariotry in late Bronze Age Mongolia." *Antiquity* 89(346) (2015): 854–71.

Taylor et al. 2016

William Taylor, Tumuurbaatar Tuvshinjargal, and Jamsranjav Bayarsaikhan. "Reconstructing Equine Bridles in the Mongolian Bronze Age." *Journal of Ethnobiology* 36/3 (2016): 554–70.

Taylor et al. 2017

William Taylor, Jargalan Burentogtokh, K. Bryce Lowry, Julia Clark, Tumorbaatar Tuvshinjargal, and Jamsranjav Bayarsaikhan. "A Bayesian Chronology for Early Domestic Horse Use in the Eastern Steppe." *Journal of Archaeological Science* 81 (2017): 49–58.

Taylor and Tuvshinjargal 2018

William Taylor and Tumorbaatar Tuvshinjargal. "Horseback Riding, Asymmetry, and Anthropogenic Changes to the Equine Skull: Evidence for Mounted Riding in Mongolia's Late Bronze Age." In: László Bartosiewicz and Erika Gál, eds., *Care or Neglect? Evidence of Animal Disease in Archaeology*. Oxford: Oxbow Books, 2018: 134–54.

SHORT REPORT ON THE SYMPOSIUM "FROM KHOTAN TO DUNHUANG – CASE STUDIES OF HISTORY AND ART ALONG THE SILK ROAD" HELD 13 JUNE – 14 JUNE 2017 AT THE EÖTVÖS LORÁND UNIVERSITY (ELTE), BUDAPEST, HUNGARY

Supported by Hanban (Confucius Institute Headquarters), the symposium entitled "From Khotan to Dunhuang: Case Studies of History and Art along the Silk Road" was organised by ELTE's newly established "One Belt, One Road" Research Center and the Silk Road Research Group of MTA-ELTE-SZTE. The latter research group is funded by the Hungarian Academy of Sciences (MTA), and consists of ten scholars from ELTE and the University of Szeged (SZTE), who will research various aspects of the Silk Road between 2017 and 2022.

After the opening ceremony, keynote speeches by Rong Xinjiang and Imre Galambos followed. Rong Xinjiang (Beijing University) gave an introductory background lecture entitled "Dunhuang and the Mogao Caves on the Silk Road," also highlighting results of his current Khotan and Dunhuang project, especially the research on Miraculous Images 瑞像 (*ruixiang*) and also on other special iconography, e.g., in Dunhuang Cave 98. The ceiling of this cave shows eight guardian deities who seem to have a direct connection to Khotanese iconography. Imre Galambos (Cambridge University) spoke about "Manuscripts and donors: Notes on the production of religious manuscripts in Dunhuang." Galambos concentrated on specific and hitherto little researched phenomena and introduced Dunhuang manuscripts where the direction of the script is in vertical lines left to right (as opposed to right to left). In an earlier paper Galambos already investigated the reasons for this, but now he conducted a more systematic study examining all manuscripts and concluded that none of them date before 867 CE. Therefore his earlier assumption that this may reflect the growing influence of Uygurs has now been extended to include Turkic and Sogdian influence; this seems to be reinforced by the appearance of Sogdian style names in these manuscripts. The only exception to this seems to be in art, for example in Dunhuang caves dated to the Middle Tang period – why this is so needs to still be investigated.

This was followed by a session on Khotanese texts. Duan Qing (Beijing University), in her paper "What the complete Khotanese Raśmivimalaviśuddha-prabhā-nāma-dhāraṇī (in short: Kalpasūtra) reveals," spoke about a five-meter long scroll with a dharani text,

including aspects of ritual: how spells needed to be copied and then stored in a hollow pillar. The MS. cannot be earlier than the 6th century, as it was written in Brahmi script. Fan Jingjing (Beijing University) re-examined two texts (Khot 154/4 and Khot 19/4 from the BL) in her paper "Reanalysis of several unidentified Khotanese fragments from Xinjiang in the British Library." She compared them to Pali and Chinese versions and studied all versions from a buddhological point of view (often not done by linguists), for example how the *bhikṣu* is replaced by a bodhisattva, showing the increased influence of Mahayana.

The afternoon session was about manuscripts. Constantino Moretti (École Pratique des Hautes Études, Sorbonne, Paris), in "Buddhist Scriptures 'Ad Usum Populi': Notes on Early Medieval Apocrypha found in Dunhuang..." spoke about versions of the 十王经 (Sutra of the Ten Kings of Hell) with their complex bureaucratic system of 30 hells. Gábor Kósa (ELTE), in "Comparing Descriptions of Mānī's Life in the Dunhuang and Xiapu Manuscripts..." explained how 唐玄宗 (the Tang Emperor Xuanzong, r. 713–756 CE) asked for the teachings of Manichaeism to be summarized in order to decide whether to promote it – and then decided against supporting this foreign religion. The text is very interesting, as in six parts it presents Mānī's life. Details such as his mother's name or where he was born and miraculous events were compared to other manuscripts in detail. In his paper "Revisiting the Sutra of the Wise and the Foolish," Saerji (Beijing University) compared Korean and Khitan versions of this text.

Ágnes Birtalan (ELTE), in her paper "The East Turkistan Mongolica: Terminology of Life and Death," talked about Mongolian sources from the 13th–14th centuries including descriptions of Hell and compared these to much later Shamanistic material. The ideas of "punishing afterlife" and "hell" were unknown to the Mongolians earlier and were transmitted by the Uygurs from Sogdia. The Pre-Buddhist ideas survived up to the present day in shamanistic rituals.

The last session on this day was devoted to Manjuśrī and Huayan studies: Chen Juxia (Dunhuang Academy) spoke "About the New-styled Images of Manjuśrī on the East Wall of Cave 2 at the Yulin Grot-

toes,” drawing attention to little known wall paintings from the Xi Xia period. The 24 disasters from the Lotus Sutra are here unusually combined with the depiction of Manjuśri (rather than Avalokiteśvara), who sits in the centre.

Imre Hamar (ELTE), the main organiser of the conference, in his paper “Buddhavatamsaka sutra and Khotan,” stressed that in his opinion this sutra may originate from Khotan. Some Buddhist texts were compiled in Sanskrit in Central Asia; so the language alone is no evidence for the origin of the sutra. In the “Book of Zambasta” it was even stressed that in Khotan they do not translate, but preserve Sanskrit texts.

On 14th June the papers about the art were presented. Lilla Russell-Smith (Museum für Asiatische Kunst, Staatliche Museen zu Berlin) spoke about “Regional Styles in Kucha, Turfan and Dunhuang in the 8th-13th Centuries: New Observations,” reporting on the results of a research trip in April 2017. In addition to drawing attention to some new discoveries, for example in Toyuq, the paper also emphasised the importance of conservation to preserve the wall paintings for further research. In the Berlin museum, about 10 conservators are now preparing wall paintings for the move to the centre, to the Humboldt Forum, and it is hoped that joint conservation projects with China can be organised. Beatrix Mecsi (ELTE) spoke about “Khotan, Dunhuang and Goryeo Buddhist Paintings,” drawing attention to similarities and differences in the iconography, e.g. Amitabha welcoming the diseased. In Korea such paintings are called 西域 (“from the

Western Regions”) and have been little researched, except for a publication by Kim Haewon in 2012. In Korea Mahasthamaprapta is interestingly soon replaced by Ksitigarbha in the triad originally consisting of Amitabha and his two accompanying Bodhisattvas.

Meng Sihui (Palace Museum, Beijing) in her paper compared the “Buddha Statues Parade” in the Western Regions and the paintings of “the Tejaprabha Buddha Leads the Planet Deities Parade” – and cited texts about Buddhist processions comparing the depiction of ritual carriages “decorated like a great hall,” and also examined the importance of 北斗 (the Big Dipper) “carrying the Emperor” and a similar role of the Buddha Tejaprabha. Judit Bagi (Oriental Collection, Library of the Hungarian Academy of Sciences, Budapest) spoke about “Faces of Dizang (Ksitigarbha) along the Silk Road,” investigating how the Ten Kings ritual survives into modern-day China. She described the results of her fieldwork to Yunnan where the Mulian Festival lasts three days, with many comparisons that can be drawn to rituals known from Dunhuang texts and wall paintings.

A lively discussion closed the conference: new topics for future conferences and ideas for various collaborations were mentioned. The guests from China were then taken to see the famous reading room at the Hungarian Academy of Sciences (MTA), where, for example, Aurel Stein’s archive, books and photographic collections are kept.

– Lilla Russell-Smith
Berlin

ART AND ARCHAEOLOGY OF THE SILK ROAD, A SYMPOSIUM ON OCTOBER 11-13, 2017, AT PORTLAND STATE UNIVERSITY, PORTLAND, OR, USA

This very stimulating symposium was organized by Prof. Junghee Lee of the School of Art and Design at Portland State University, with support from a number of other departments and organizations. While the original plan had been that the program be even broader in its scope, due to visa and other travel problems, some potential participants had to cancel. Nonetheless, the range of topics was considerable, and there were interesting exchanges in each session, spearheaded by invited discussants from regional universities who were not otherwise presenting papers. The decision to have “keynote” talks at the beginning, in the middle, and at the end provided very useful contextualization for the more narrowly focused papers,

listed here with the titles as indicated in the printed program (there were some changes as actually presented). Video of the keynotes by Waugh and Canepa may be viewed at: <<https://vimeo.com/243199828>>. It is possible that a conference volume with a selection of the papers will be published.

Keynote 1: Searching for the ‘Silk Road’: How will we know that we have found it?

Daniel C. Waugh, University of Washington, Seattle

Traces of Shamanic Rituals and Beliefs found in Pre-Historic Sites in Xinjiang

Xijuan Zhou, Willamette University

- Study of Antenna-Style Daggers in Northeast Asia from the Perspective of Interregional Interaction
Sunmi Park, Northeast Asian History Foundation
- Understanding Cross-Cultural Interaction: the Silk Route and Kushan Material Culture in Kashmir, India
Mohamad Ajmal Shah, University of Kashmir
- The Border Pattern Dividing the Earthly World and the Heavenly World in Koguryo Tomb Paintings: Merlon Pattern and Lattice Patterns of Gandhara and Dunhuang
Young-pil Kwon, The Korean National University of Arts
- Buried Towers: The Screen Wall and Artistic Innovation on China's Frontier
Heather Clydesdale, Santa Clara University
- The Underground Silk Road - Pictorial Affinities in 5th-century Cave Temples and Tombs
Bonnie Cheng, Oberlin College
- Life Like the Buddha: Narrative Illustrations on the Shi Jun Sarcophagus (580 CE)
Jin Xu, Vassar College
- Images of the Crowned Buddha along the Silk Road: Iconography and Ideology
Rebecca Twist, Pacific University
- Archaeology of Uddiyana with Reference to Guru Padmasambhava
Abdul Rauf Kakepoto, Shah Abdul Latif University, Khairpur-Sindh, Pakistan
- Data Report and Identification of The So-called Nestorian Crosses
Andrea Jian Chen, University of Hong Kong
- The Prehistoric Petroglyphs of the Silk Route: Shatial to Khunjerab Pass
Naela Aamir, College of Art & Design, University of the Punjab, Lahore
- Revisiting Early Chinese Silks along the Silk Road and Revealing Nomadic Contribution, 200 BCE-600 CE.
Angela Sheng, McMaster University, Canada
- Along the Silk Road's Thread: Textile as a Universal Medium of Eurasian Kinship
Mariachiara Gasparini, independent scholar
- Paintings in the Red Hall of Varakhsha and Tiraz of Buhtegin (Shroud of St. Josse)
Aleksandr Naymark, Hofstra University
- Keynote II: The 'Iconic' Silk Road: Asset or Liability?*
Annette Juliano, Rutgers University, Newark, NJ
- Slide show: The Turkey You May Not Have Seen*
Daniel C. Waugh
- Medieval Riverine Landscapes of Passage and Journey: Border, Riparian and Steppe in the Oxus Borderland
Manu P. Sobti, The University of Queensland, Australia
- Revealing the Baekje's Contribution on the Eastern Silk Road Story
Insook Lee, Seoul Baekje Museum
- An Archaeological Observation on the Seaports for Porcelain Shipping in the Jin Dynasty: Internal and External
Jing Wu, Research Centre for Chinese Frontier Archaeology, Jilin University, China
- Keynote III: The Lord of the Seven Climes: Iran at the Center of Eurasian Exchange*
Matthew P. Canepa, University of Minnesota

– Daniel C. Waugh
Seattle

TWO AT OXFORD

While the candidates for any review of Internet resources these days are legion, with so many of them deserving, these two which came across my screen recently merit readers' attention and may not yet be in your bookmark list.

I. The Historic Environment Image Resource (HEIR)

In its own words, this new resource

contains digitised historic photographic images from all over the world dating from the late nineteenth century onwards. HEIR's core images come from lantern slide and glass plate negatives held in college, library, museum and departmental collections within the University of Oxford. New resources are being added all the time, including collections from outside the University.

HEIR's mission is to keyword the images and re-photograph them in their modern settings so they can be used by researchers from a wide variety of disciplines to track changes to sites, monuments, landscapes and societies over time.

This archive at the Institute of Archaeology, University of Oxford <<http://heir.arch.ox.ac.uk>>

currently contains more than 18,000 images taken from glass plate negatives, lantern slides, photographs, film negatives or 35mm slides and span the years from the 1870s to the early 21st century. Although the majority of the images are black and white, more than 2,000 are in colour. Contributors to the HEIR archive include the University of Oxford, the Ashmolean Museum, Historic England, the British Museum and Fellows of the Society of Antiquaries.

... The database contains hundreds of images of archaeological sites and monuments in Britain, Europe, the Near East and North Africa, including excavations of sites such as Knossos, Kish, Vinca and Verulamium; sites prior to excavation, restoration or destruction such as Carthage, Ephesus or Palmyra; and topics such as hillforts, standing stones, stone circles, churches, castles and cathedrals are all well represented in the collection. Many of these images have been unseen for 70 years or more.

A distinctive aspect of this project is its invitation to users to contribute information that will help to identify images that are in need of further documentation. One goal is eventually to be able to compare more recent photos taken from the same camera angles with

the earlier ones in order to document change over time.

I have done a simple location search here, bringing up many interesting images for Istanbul (also searchable under Constantinople), Pergamon (which comes up also under Bergama), a few from Ephesus (but not registering under Efes). The successful search by location will bring up a clickable page of thumbnails, where each one then leads to a separate page for the image and all the data. The options for free downloading include e-mail-sized images and larger ones suitable for use in a Powerpoint. Higher resolution images require login and payment. It is clear that the digitization of the originals is creating huge archival quality tiffs, though there is no effort here to clean digitally the originals, which, understandably, may be quite spotted and dirty, and, of course, where any process of cleaning could destroy essential data.

The project is working on obtaining contributions from around the world of other major collections of historic photos. It is already a valuable resource, but it has huge potential for future study and research as more material is added. The private funders who have supported its creation and the staff deserve plaudits for their vision.

II. Yousef Jameel Centre for Islamic and Asian Art, Ashmolean Museum, University of Oxford

The Ashmolean Museum at Oxford is one of the most important university-based museums anywhere in the world, having benefited from centuries of academic excellence and exploration and donations by many of those who served the British Empire around the globe. The museum now has announced a major initiative to make all its collections available on-line, following the example of other far-sighted museums who understand their obligation to make their resources freely available to the public. While there is much yet to be done for other parts of the collection, the Yousef Jameel Centre, named for one of the museum's fellows and honorary LHDs, a man of vision and extraordinary generosity, is well along in its mission to make the Ashmolean's Asian collections available on-line.

The Jameel Centre website <<http://jameelcentre.ashmolean.org/>> already makes available 35 highlights, 27 exhibitions, 15 galleries, 14 collection trails to follow, 20 publications to explore, and over 10,500 objects to browse or search. Each object is available

in high-quality, large, downloadable images, where views from different angles (side and back for ceramics, for example) can be had, and there is a zoom function to be able to see minute detail. The search functions are impressive, where a timeline with a slider lets one move through any thematic collection. For special exhibitions of the past, it is possible to see in one place all the objects that were drawn from the Ashmolean's own collection. The timeline feature

here is at least analogous to the one developed at the Metropolitan Museum in New York but already a bit more advanced technically. Overall, my impression is that what the Jameel Centre has accomplished makes much better use of the potential of the internet to facilitate easy searching and connecting of objects one with another than what one finds at least to date on most other museum websites.

GARY LEE TODD'S WORLD HISTORY PHOTOS

<<https://worldhistorypics.weebly.com/>>

A Professor of History at Sias International University in Xinzheng, Henan, China, since 2005, Gary Lee Todd has done a huge service in posting nearly 150,000 photos in freely-available, un-retouched full size files. As he explains, "They are a resource for scholars, writers, and teachers, but also meant to preserve a record of as much history as possible due to the fact that history is constantly being lost to natural disasters, neglect, and idiots with hammers or dynamite." It is an eclectic collection, reflecting the breadth of his interests and travels, including a lot from the U.S. and Mesoamerica, groups pertaining to railroad history, major European cities and their museum collections (London, Paris, Berlin...), Egypt.... The core of the collection though, which is of particular interest to those writing or teaching about the Silk Roads is from his travel and study in East and South Asia, with, understandably, a huge amount from China.

The index page is an easily scrollable listing by location, with sub-links for individual collections from museums or under other rubrics. Clicking on any of these links brings up pages of large thumbnails that can be scrolled. A mouse-over of any image gives a very brief caption as to what it is. Clicking on the image brings it up in a slide-show arrangement (this all via Flickr), where, if one wants to download the picture, the download arrow on lower right opens options as to what size to choose. If one downloads the picture and opens it via the default TWINUI option, it is then possible from that window to copy the picture off to one's computer by right-clicking and choosing "copy". The Flickr slide show display includes the date on which the photos were taken. Note, if you scroll the slide show, every few frames will bring up a Flickr advertising image.

To evaluate the site and quality of pictures, I took a few random samples, choosing places where I have been and thus know something about what one might see and photograph and the challenges in doing the photography. Here are a few observations.

Todd was at Angkor in Cambodia in 2012; so it is interesting to see the state of some of the temples then compared with what I saw there just at the end of 2017. In some cases, things were a lot more overgrown, not yet cleaned off. For the most famous of the temples, Angkor Wat, he has nearly 1500 photos (far more than I took in a very brief couple of hours at the site), including, he indicates, images of essentially all of the reliefs. For the lower gallery around the entire building, the low relief images can be particularly difficult to photograph well, as many of his images make clear, but he provides lots and lots of closeup details.

Todd was in Ulaanbaatar in 2017, where he took more than 800 photos in the National Museum of Mongolia. Given the pace at which new discoveries are being made by archaeologists in Mongolia, it was particularly interesting for me to see how the exhibits have changed since I was last there years earlier. I even spotted objects that I had been the first to uncover in an excavation back in 2007. It is clear he is captive to what the museum's own captioning may have told him about what he was seeing – so, for example, the reproductions from the Ilkhanid manuscripts of Rashid al-Din's world history (photo enlargements, framed on the walls), may not tell us about the lifetime of Chinggis Khan or *Mongol* painting (take, for example, the famous image of the siege of Baghdad in 1258...). The most important thing here is the photographs of artefacts: one can always correct any limitation of the captioning before using them in a lecture.

Among the museums in China note the extensive collection from the Inner Mongolia Museum in Hohhot, another very extensive group from the Gansu Provincial Museum in Lanzhou, and, of course, much more from other locations. We are talking here about systematic photography as he walks through the galleries, some of the images including caption plaques, but most just the objects. The quality varies, since such museum photography is subject to vagaries of lighting, the angle from which one shoots, possible reflection on glass. But my impression is that Todd has done as well as one can in such conditions. For the most part images are sharp and bright, and where there may be problems, it is possible in some cases to manipulate the photos digitally to bring up detail in shadows, make a color correction or sharpen them. This does not mean, of course, that for something like early steppe belt plaques, laid out at a low angle within a case, one is necessarily going to get a usable result, but then, when so much else he offers is more than just “usable,” this is hardly reason to complain.

Even for places one may have visited, Todd’s collection can be extraordinarily valuable. At the National Museum in Seoul, I did not get to see the display of the artifacts from the important Sinan shipwreck. He has more than 130 photos of them.

Lastly, a comment or two on looking at his photos from Agra in India. He was at the Taj Mahal on a typ-

ically hazy day in November 2015. His photos of the Taj are a reminder that, unlike the professional photographer working on assignment from, say, *National Geographic*, a visitor such as Todd is more likely than not to have but one, brief chance to see and photograph in what may not be the ideal light. That said, many of the pictures are lovely (the haziness does have its artistic qualities), but they do benefit from some manipulation in Photoshop to cut through some of the haze if one wishes better to see detail. And, if one wishes to be technical, it is clear that some suffer from chromatic aberration at the edges (red or green fringes induced by the way the lens captured the light). In a program like Photoshop one can correct perspective, tinker with tone and contrast, and get rid of the chromatic aberration (if that is important for one’s purpose), giving a result that is fully as good as anything a commercial, stock photography site is likely to provide at a hefty price.

Todd does indicate it would be nice if those who take advantage of his generosity would send a bit of money via Paypal to help support his habit. As a retired academic of modest means trying to support my own expensive habit, I confess I have not done so, even though I continue to mine his rich array of images from places I have yet to see (and many I have visited) when working on this journal or preparing a presentation.

DICK OSSEMAN’S PICTURES OF TURKEY, SYRIA AND JORDAN

<<http://www.pbase.com/dosseman/root>>

The more than 70,000 images Dick Osseman provides here for Turkey constitute what is probably the best, freely available collection to be found anywhere outside of some institutional website. He visited Syria in 2009 and 2010, prior to the onset of the war, which makes his photos from there particularly valuable. And he has seen a lot in Jordan, where his details of, e.g., Christian mosaics and the murals in the Umayyad bathhouse at Qusayr Amra are laudable. He also has a number of galleries for sites in Italy, though that part of his material is less fully developed.

Access from the opening page is easy, either by a clickable alphabetic list or by clickable labeled thumbnails for each of the galleries of photos. He has some thematic groupings (e.g., carpets and kilims, Sinan mosques), with most of the collections specific to a

particular location. For Istanbul, there are dozens of sub-folders, each for a particular theme or building. There are substantial sets taken in museums, for example, the one at Selçuk that displays the artefacts from there and neighboring Ephesus. One of the virtues of what he has done is his explanatory captioning, where he has had time to provide it. Thus one can find compact information on the “Library of Celsus” at Ephesus, although others of the many Ephesus photos (taken in 2011) are not accompanied by any indication of what they show. He also provides links to others’ sites which may contain additional information. His explanatory guidance to what can be found on his site is both in English and in Turkish.

Clearly Osseman has a good eye for composition and detail. He uses good equipment; some of the most

valuable of the pictures taken with a very wide angle (14 mm) lens; others with a good zoom. Interior photographs, such as his extensive set covering the mosaics and frescoes in the Kariye Camii in Istanbul, are first rate. A lot of the photos show close attention to proper perspective; others could have had some perspective correction, adjustment for tone intensity, etc. On the whole though, one finds here really professional-quality images which document many sites very thoroughly. He has noticed and photographed many details of reliefs and other decoration at historic sites which I must have seen but never photographed myself while there, even though I am not shy about filling memory cards.... His photos are not just buildings, sculptures, etc., but also include landscapes and

lots of casual shots of people, many of which are lovely portraits.

He has a liberal policy about use and re-use, which one should read—basically for academic and education purposes, it is sufficient just to give him picture credit. The images are available in various sizes, the largest ones in most cases quite adequate for illustrating an article and certainly for projection in a presentation. The website includes many of the laudatory comments from those who have used it and benefited from his visual introduction to places they then visited or, after seeing the pictures, intended to see.

– *Daniel C. Waugh*

Kjeld von Folsach and Joachim Meyer. *The Human Figure in Islamic Art. Holy Men, Princes, and Commoners*. Copenhagen: The David Collection, 2017. 280 pp. ISBN 978-8792949-96-7.

There is still time to catch this exhibition at the David Collection Museum in Copenhagen, where it closes on 13 May 2018. And one should make a point of visiting, not only for this special, coordinated selection from the museum's treasures, but to see the rest of the collection, whose Islamic holdings are among the most important anywhere in the world. Don't, however, arrive with busloads of other tourists, as the museum spaces are intimate, which makes for a wonderful viewing experience but cannot accommodate huge crowds all at once. The website photos of the corridors and rooms where the exhibition is mounted emphasize how stunning it must be to see the material there, each painting or object highlighted like a gem against the dark background of the wall where it is displayed.

I have written before in this journal about the David Collection (see Vol. 12 [2014]: 132–36 + Pl. IX, and Vol. 14 [2016]: 241–42), but when a copy of the latest special exhibition catalog, under review here, arrived unsolicited in my mail, I had to write about it.

The virtues of this book and others the museum has published are many, starting with the careful text oriented toward non-specialist readers but including enough tantalizing detail and analogy to keep even specialists reading. With the exception of one essay, by Jakob Skovgaard-Petersen, on "Human Figures in the Modern Muslim World," the rest is the work of the museum's director, Kjeld von Folsach, and the senior curator, Joachim Meyer. One might suspect here that the motivation for the choice of subject was the controversy provoked by a Danish newspaper's having published cartoons denigrating the Prophet Muhammad, but that would be a simplistic view, especially given the fact that it was not the publication of human imagery as such which was at the core of the controversy, but the uses to which it was put. As the essays here make very clear, religious opinions in the Islamic world regarding what was permissible in the arts evolved over time and are by no means uniform, and, whatever might have become a canonical barrier to such representations in a religious context, there was really never a time when in other contexts it was impossible to depict living beings and in particular humans. In short, any considered assessment of

the achievements of the arts in the Islamic world (and those achievements are legion) must take into account how and why humans were depicted and try to understand how they were viewed. Not least in interest is the possibility that the visual material can shed light on aspects of daily life that otherwise might not be clear just from written texts. In conveying these understandings, von Folsach and Meyer have succeeded admirably.

As is the case both on the museum's website and in the books it publishes, the image quality is superb – there is no better museum photography than that by Pernille Klemp, who does all their work. Given the generous "coffee-table" format of the volume, one can view all the art in life or larger-than-life size, each object displayed on a full page with facing explanatory text. While there are a few comparative examples shown from other sources, the exhibition has been drawn from the David Collection itself, some of the items well known from having been on regular display there for many years, others less frequently seen (one cannot expose manuscript pages and textiles to very strong light over extended periods without their deteriorating), and some newly shown, among them recent acquisitions. Few museums can boast of being able to compose a coherent special exhibition relying on in-house resources, a fact which tells you something about the richness of this collection.

The material is grouped under various topical headings, which means that in each section there is geographical and chronological diversity. The chapters include: "Figurative Depictions and Opposition to Them," "Ornament, Decoration and Symbol," "Scientific Illustrations and Other Uses for Miniature Painting," "The Religious Sphere"..., "Love," and several others. Each section has a short introduction that highlights what the images selected for it demonstrate and how they fit together under the rubric that has been chosen.

Do I have some favorites here? My choices may not necessarily be for all the right reasons (that is, connected with the purpose and theme of the exhibition), but here they are. Among the miniatures, one of the earliest preserved Islamic world paintings dated 1219 (Cat. 34, on deposit from the Royal Library), a frontispiece



Image source: https://www.davidmus.dk/files/a/7/423/12.16-D1-1990-Kitab-al-Aghani-_miniature-gallery_.jpg

Fig. 1. Miniature from volume 20 of a copy of Abu'l-Faraj al-Isfahani's *Kitab al Aghani*. Iraq, Mosul; 616 AH=1219 CE. 28.5 x 21.5 cm. Permanent loan from the Royal Library; David Collection Inv. no. D 1/1990.

to a copy of al-Isfahani's *Book of Songs (Kitab al-aghani)*, is absolutely stunning, in part for the unusual textile designs [Fig. 1]. It is of interest in part for the way it incorporates some artistic motifs from non-Islamic traditions and for the fact that the patron (identified by his name on the *tiraz* band on the rider's sleeve) was an Armenian slave who eventually rose to become the *de facto* ruler of the Mosul region under the Zangid dynasty.

As my notes at the end of this volume of *The Silk Road* may suggest, I happen to like depictions of boats and the indications of who and what they carry. So there are three miniatures in the exhibit that leaped off the page at me. One is the ferry full of passengers crossing a river on a page of an early 13th-century Dioscorides manuscript (Cat. 22) [Fig. 2]. As the commentary mentions, there are analogous images in several other illuminated Islamic manuscripts [Fig. 3]. The second is a Timurid illustration of Noah's ark

Figs. 1, 2, 4 and 5 are all photographs by Pernille Klemp; copyright The David Collection, downloaded from the museum's website.



Image source: https://www.davidmus.dk/files/3/5/371/Coyright_5-1997_recto-The-David-Collection.-Copenhagen-Photo-Pernille-Klemp_web.jpg

Fig. 2 (below left). Miniature from a copy of *Kitab al-ha-shaish*, an Arabic translation of Dioscorides's *De Materia Medica*. "A Ferry Crossing the Gagos River." Iraq, Baghdad?; 1224. Leaf: 32.2 x 24 cm. David Collection Inv. no. 5/1997.

Fig. 3. Manuscript page from the *al-Maqāmāt al-ḥarīriyah (The assemblies of al-Hariri)*, copied and illustrated in 1237 by Yahya ibn Mahmud al-Wasiti. *Bibliothèque nationale de France*, MS Arabe 5847, fol. 119v.



Image source: <http://gallica.bnf.fr/ark:/12148/btv1b8422965p/1248.highres>



Image source: https://www.davidmus.dk/files/3/6/285/16_2_8-2005-Noahs-ark-Hafiz-Abru-2.jpg

Fig. 4. Miniature from Hafiz-i Abru's *Majma al-tawarikh*. "Noah's Ark." Iran (Afghanistan), Herat; c. 1425. Leaf: 42.3 × 32.6 cm. David Collection Inv. no. 8/2005.

(Cat. 25) [Fig. 4], where the animals populate the hold and the humans the upper deck. The image is a good reminder of the place Biblical texts and figures occupy in Islamic belief, and this particular image also is striking for its bank of Chinese-style clouds, which are among the most common borrowings from China that populate Islamic miniature painting. Lastly, again thinking about cross-cultural mixing, often of greatest interest where seen in paintings with specific Islamic religious associations, look at the miniature painted in Isfahan at the very beginning of the 17th century (Cat. 31) [Fig. 5], illustrating a copy of Sa'adi's *Bustan*. It is of interest for what it tells us about the meeting of the European and Middle Eastern worlds, the ship clearly a European one and out of place as simply a ferry at a river crossing, even as its passengers are characters in an autobiographical part of the text involving meeting with a dervish. The picture reminds us of the abundant other evidence about cultural intermixing in that period, so vividly to be seen in the works created for Shah Abbas I in his capital [Fig. 6]. The essay here tells us that the manuscript was one donated by the Shah to the family shrine at Ardabil, which also was the recipient of his monumental collection of Chinese porcelain. As a Russianist, interested in the cultural encounter between traditional Orthodox Russia and

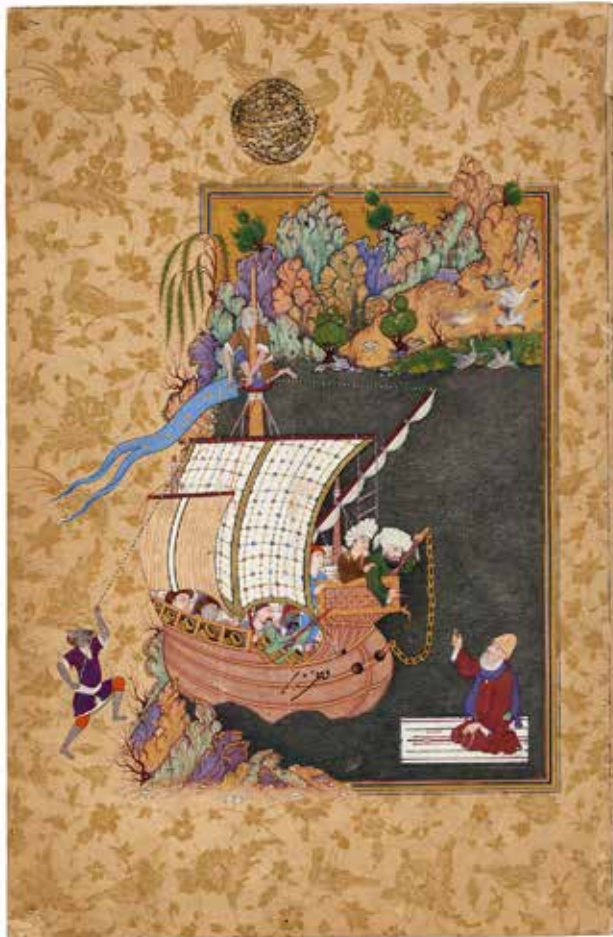


Image source: https://www.davidmus.dk/files/8/1/428/Copyright_David-Collection_Copenhagen_11-2016_recto_hvid_web.jpg

Fig. 5 (below left). Miniature from a copy of Sadi's *Bustan*. "The Dervish from Faryab Crosses the River on his Rug," attributed to Habiballah. Iran, Isfahan; c. 1600–1608. Leaf: 28.5 × 18.5 cm. David Collection Inv. no. 11/2016.

Fig. 6. Isfahan. *Qaysariyya Gate into the bazaar, detail of painting showing European musicians at a court entertainment. Safavid period, early 17th century.*

Photo by Daniel C. Waugh



Western Europe in the 17th century, I can see some possible parallels to pursue with what is happening at the same time (or somewhat earlier) in the Islamic world.

I could go on — each treasure tugs at the heartstrings and stimulates the imagination....

It is always of interest to see how a special exhibition, both while it is on and after it has closed, may be represented on a museum's website. In this regard, the David Collection has a unique opportunity, drawing as it does on its own holdings, to provide the exhibition with a long afterlife. Whether or not that will happen as it *could* remains to be seen though. The web pages for the current show are analogous to those created for the *Shahnama* exhibition they mounted two years ago: a decent introductory overview text, some photos of the gallery spaces, and a selection of a dozen or fifteen of the objects, where one can click to bring up the images and descriptive pages that are in place already in the chronologically arranged other sections of the museum's collections web pages. The pictures are superb — one can bring up huge, detailed images that allow seeing every detail (and can be downloaded). The text already on the museum web pages, to which one is given the link here, overlaps with that in the new exhibition book, but the latter contains more detailed analysis and clearly has been re-written so as to link each of the essays and its object with other parts of the exhibit as a whole. One does not get that same linkage from the texts created separately for the website and presumably some time ago. So, one could, in theory, find everything in the special exhibit on line with a decent individual description, but

lacking the connecting linkages that make the current exhibition so compelling. It should be easy enough to bridge more effectively the gap between the focused show and the rest of the collection.

My other suggestion here is something I have frequently noted in the past about museum exhibitions and websites. While it is common enough for the art historians and curators to tell us about analogous examples in various collections or *in situ* at historic sites, all too rarely do they illustrate them (even if all we might expect would be something less than a magnificent full-page image) so the reader could actually see the comparison. The David Collection website does contain pages with illustrations of coinage or architecture from the different dynasties or periods the collection encompasses, but both there and especially here in the volume under review, are many what I would term "missed opportunities." For example, the possibilities to have contextualized visually in this exhibit the abundant Safavid and Mughal material are numerous.

So I wonder then, when the current exhibit ends in May and enough copies of the book have been sold, whether there might not be an initiative to give this superb exhibition a much fuller and longer life than has been done for other special exhibitions. Perhaps the essays could all be posted and linked seamlessly using technologies that are already adequate to the task. The David Collection has the resources and the vision to do this, and those who cannot make it to Copenhagen right now would be in their debt.

— Daniel C. Waugh

Lilla Russell-Smith and Ines Konczak-Nagel. *The Ruins of Kocho. Traces of Wooden Architecture on the Ancient Silk Road*. Berlin: Museum für Asiatische Kunst Staatliche Museen zu Berlin; Gerda Henkel Stiftung, 2016. 160 pp. ISBN 978-3-88609-786-9.

This slim, but packed medium-format volume may have slipped under the radar screen of many who should read it, since has not been widely advertised. Importantly here, before reading on about its content, know that you can purchase it on-line at <<https://www.smb-webshop.de/en/museums-und-collections/places/museen-dahlem/3662/the-ruins-of-kocho?c=1100>>.

On the eve of the closure of the museum complex in Dahlem in preparation for the move of the Turfan collection to the new Humboldt Forum in the center of Berlin where it will re-open next year, Lilla Russell-Smith and Klaas Ruitenbeek (the Director of the Museum für Asiatische Kunst, who has a particular interest in Asian architecture) curated an exhibition (on from 7 September 2016–8 January 2017) which was the occasion for the publication of this book. This was the culmination of a project to study “Medieval pre-Islamic Architecture in Kocho on the Northern Silk Road” that had been supported by the Gerda Henkel Stiftung (whose visionary philanthropy has also supported many other important projects in Asian archaeology and the study of the Silk Roads).

Ever since they had been acquired by the German expeditions of the early 20th century, a great many wooden objects had remained in storage and been largely ignored, as research focused on paintings, statuary and manuscripts. As the new project determined, this material provided crucial

evidence regarding the architecture of the important site of Kocho (Gaochang), where *in situ* no wooden remains have been preserved, the site having deteriorated over the intervening century and been mined by the local population for wood that could be used as fuel [Figs. 1, 2]. What was learned in the conservation work carried out on the objects and in the complex efforts to contextualize them in the remains of Kocho sheds new light on the cross-cultural history of this major city on the “Northern Silk Road.” Even though in many ways what was accomplished in the project is but preliminary to what we can hope may eventually be a fuller study incorporating new archaeology, the forward-looking methodologies explained in this book are hugely important for even non-specialists to appreciate. The book both presents a great deal of new information at the same time that it reminds us how crucial it is to critique closely early excavation reports in order to maximize the value of what they can tell us. Here is a brief summary of the individual contributions to the book.

Lilla Russell-Smith’s introductory essay (pp. 7–14) on the project explains clearly how and why it was initiated even prior to the receipt of the Henkel grant and provides a concise introduction to the history of Kocho. A workshop in 2015 (from which some of the papers are published here) preceded an on-site visit in autumn 2015. Extensive work in the archives of the Turfan expeditions was part of the project, since original notes and sketch maps needed to be mined along with an invaluable set of very sharp photo-

Figs. 1, 2. Panoramas of Gaochang/Kocho, taken in July 2008.



graphs taken during the original expeditions. The project became a truly international one, involving collaboration with the Chinese archaeologists who have worked at the site, and, importantly, incorporating innovative imaging that had been underway through the auspices of the National Institute for Informatics in Japan. A goal in all this was to try to determine the specific context for the wooden objects with reference to documented (if no longer preserved) architectural remains *in situ* and in the process try to understand the role of the wooden pieces in an architecture that to a considerable degree eschewed wood as a construction material, due to its scarcity.

For the broader comparative context, Pavel B. Lurje's essay (pp. 17-26), his notes on wooden architecture in Sogdiana, is of interest in part simply as an effective summary of Sogdian construction and its decoration. The relevance here, of course, is that Sogdians were a significant presence in Kocho, and thus it is logical to assume that "western" elements evident in the architecture there might have been introduced by them or at least have close analogies with what one can document for the Sogdian homeland. Lurje is the current director of the excavations at Sogdian Panjikent.

Another likely influence on what is found at Gaochang is the architecture left by the Uighurs in their previous homeland in Mongolia. There has been important new archaeological study at their capital of Karabalgasun in the Orkhon River Valley, an overview of which is provided here by Christina Franken (pp. 27-34) and Burkart Dähne (pp. 35-41; see also his summary in this volume of *The Silk Road* [p. 173] of his detailed publication of that recent archaeology). In these essays, as throughout the book under review, the illustrations are of high quality and very effective. Here, for example, we get several of the dramatic digital terrain models that highlight what on the ground can be almost invisible to the casual visitor to the site. There are also good excavation photos and drawings. One conclusion from this recent work is that, even if there are elements of Chinese architectural norms to be found at Karabalgasun, there are also distinctive features. The same, as it turns out, can be said for what is found at Kocho.

Simone-Christiane Raschmann's essay on "Uyghur Scribbles on a Wooden Object" (pp. 42-48) and Michaël Peyrot's on the "Tocharian B inscriptions from Ruin Q" (pp. 127-34) are good reminders of how even fragmentary textual material from Kocho is so valuable. The Uighur texts include references to a standard Chinese primer, the *Qianziwen* ("The Outline of Thousand Characters"), which is known to have existed in Uighur translation and obviously was part of Uighur education. Peyrot's essay, like Raschmann's illustrated with good photos of the objects, is of interest for what it says about the distribution of Tocharian B and Tocharian A texts and for the suggestion that the so-called Ruin Q at Kocho likely has a particular association with Tocharian B speakers.

For those who cannot otherwise access the Chinese archaeological literature, Chen Aifeng's review (pp. 50-58) of what has been done starting with Huang Wenbi's survey at Gaochang in 1928 is very valuable. Chen summarizes concisely what conclusions were reached (not all sustained by subsequent work) and what was found in the trenches dug

in various areas of the huge site. The article includes a few good site photos and on p. 50 a plan on which the areas of the excavations from 2006-2013 are marked.

From the standpoint of methodology, perhaps the most interesting and forward-looking of the essays here is that by Yoko Nishimura, Erika Forte and Asanobu Kitamoto, "A New Method for Re-Identifying Ancient Excavated Structures on the Silk Road – the Case of Kocho" (pp. 59-68). The problem addressed by this work was to try to correlate the data on the first excavation maps (published and in manuscript, drawn by Albert Grünwedel) with other evidence from his descriptive texts, the photos taken by his photographer, analogous material produced by Aurel Stein in his brief visit to Kocho, and then the modern evidence from archaeological survey and photography. Grünwedel's maps were sketchy, not always very precise (since not based on formal surveying), and thus for any study now, being able to identify his locations with what may still exist and yield new information is a critical issue. This same kind of challenge is to be found at any number of other historic sites, where it is desirable to ensure that evidence from different periods can be correlated precisely. In part thanks to Google Earth satellite imagery and accompanying technology, it was possible to juxtapose the older maps with the present, precise images. Moreover, once the result of producing a new and accurate map had been obtained (p. 66), it was then also possible to identify the exact locations where the older photos were taken and thus to compare them with recent photos which show the extent to which the structures still visible over a century ago have been preserved, or, more commonly deteriorated significantly and even disappeared entirely from the surface.

Several of the following essays in the book focus on major buildings that had been studied by the original expedition. The choice here was in part dictated by there being sufficient remains to be able to analyze architectural techniques, though in part too, these were the locations of other important finds. One of these structures yielded many of the wooden objects now in Berlin.

Caren Dreyer (who has been mining the expeditions' archival records—see the review in *The Silk Road* 14 [2016]: 236) and Ines Konczak-Nagel provide a lavishly illustrated overview of the "Architecture of the Great Monastery, Ruin β " (69-80), where the use of wooden architectural elements has to be documented indirectly by analysis of such things as holes in the mud-brick walls that would have accommodated beams [Figs. 3, 4]. The juxtaposition here of the histor-

Fig. 3. Kocho/Gaochang, Ruin β , Temple A, Block E from the east.





Fig. 4. Kocho/Gaochang, Ruin β, outer wall of Cell A.

ic photos with modern ones taken from the same vantage points is instructive in part for what we can see about how recent “restoration” has been undertaken that in the process now makes it impossible to do further study of what lay underneath. The noteworthy example of this is the rebuilding of the Hall I, with its rounded upper elevation that culminated in a dome (the dome itself not re-created, at least not yet...) [Fig. 5].

From the standpoint of understanding the uses of wood in construction at the site, Giuseppe Vignato’s essay also on Ruin β (pp. 81–88) is one of the most important contributions to the book. He lays out clearly the arguments for what then is depicted here in digital images showing the placement of wooden elements, among which one of the more significant was a walkway that provided entry into second-story cells, thus explaining what had mystified Grünwedel as to how they could have been accessed. Even though timber was used, it was in a limited way, the preference being instead for “Iranian” construction techniques that did not require it. This is in contrast to traditional Chinese architecture, where timber, more abundantly available, was used in ways that simply are not in evidence in Kocho.

Caren Dreyer and Ines Konczak-Nagel’s essay on the architecture of the monastery Ruin K (pp. 89–102) is analogous

Fig. 5. Kocho/Gaochang, Ruin β, Hall I, as reconstructed, from the west.



to their contribution on Ruin β. The importance of Ruin K is related to the fact that it preserved some Manichaean wall paintings and was at least near the location of the “library” that included Manichaean manuscript and banner fragments brought back both by the German expeditions and (to a lesser degree) by Stein. Unfortunately, the deterioration of the site means that reconstructing details of the architecture is very problematic.

Ruin Q, the subject of Klaas Ruitenbeek’s stimulating essay (with contributions by Ines Konczak-Nagel and Gudrun Meltzer) (pp. 103–26), is a different matter. Not only did the site produce some of the most striking of the clay sculptures found at Kocho [Fig. 6, next page], but it also was the find spot for many of the more significant wooden architectural elements. This has enabled Ruitenbeek to piece a good many of them back together to give a sense of the framework that would have supported part of a ceiling. Carefully comparing the measurements with those of the preserved ruins, and invoking some comparative material from Jiaohe and paintings from Bezeklik, he then argues that the wooden remains here probably were part of a gatehouse. Of particular interest, since the construction can be dated to the 10th–11th century, is the way in which these remains correlate closely with norms laid out in a Song Dynasty building manual *Yingxao fashi*, which is approximately of the same date. The comparison with those norms extends as well to the techniques of painting preserved on the wood. A fragmentary Sanskrit inscription on the wood (presumably from a Buddhist sutra) is one indication that some of the wood was probably recycled from an earlier building.

Two of the essays (by Oliver Hahn and by Martina Runge) (pp. 135–48) deal with the techniques employed for technical analysis of pigments and with the conservation measures undertaken. Hahn’s brief overview of the non-invasive methods for chemical analysis is a good primer for those who would wish to know the current state of the art and what the graphs obtained reveal. Runge explains what was learned about painting technique, and her illustrations show nicely the before and after results of the conservation and cleaning.

Where so much of this project is looking to the future, it is appropriate that Lilla Russell-Smith concludes (149–50) with an outline of what the future may bring in the new Humboldt Forum, which will allow for public display of this ever-interesting material in ways that never were possible in the old museum. (For details, see her “Berlin’s ‘Turfan Collection’ Moves to the Center,” *The Silk Road* 13 [2015]: 153–57 + Pls. V–VI.)

There is a brief appendix by Ines Konczak-Nagel (pp. 152–53) on the history of the collections of the wooden objects, which had been in the booty carted off to Moscow by Soviet occupation troops at the end of World War II and were returned to Germany only in the late 1970s. There for a time they lay in storage, infested by pests, before they were finally transferred to Dahlem in the 1990s and the conservation process begun. That we have them at all (where

so many of the important Turfan paintings did not survive the war) is something of a miracle.

The book concludes (pp. 154–59) with the catalog of the wooden objects from Kocho, each illustrated with a color photo accompanied by appropriate captioning.

While portions of the book are rather technical, on the whole all of the essays have been carefully written and edited so as to be accessible for a general audience. Picture quality is excellent, and the illustrations abundant. The accomplishments of this project have advanced our understanding of the Silk Road sites such as Kocho. Anyone interested in their history is urged to obtain the book and be inspired its contents to learn more.

– Daniel C. Waugh

Photo © 2004 by Daniel C. Waugh



Fig. 6. Clay statue of the Buddha from Kocho Ruin Q. Collection of Museum für Asiatische Kunst, Staatliche Museen zu Berlin.

MUNSHI ABDUL RAHIM: FORGOTTEN HERO OF THE GREAT GAME

Hermann Kreutzmann. *Wakhan Quadrangle. Exploration and espionage during and after the Great Game*. Wiesbaden: Harrassowitz Verlag, 2017. 282 pp. ISBN 978-3-447-10812-6.

The appearance of the second of a planned three volumes epitomizing Hermann Kreutzmann's several decades of travel and study of the Pamir region is a cause for celebration. The approach here, the format and the production values all emulate those of the first one, *Pamirian Crossroads* (reviewed by me in this journal, Vol. 13 [2015]: 173-77), with which there is some overlap. We find the same felicitous combination of extensive archival research focusing on the history of exploration, some of the most intensive on-the-ground survey and travel by any modern scholar in the region, and the critical acumen of a specialist whose interest, when everything is said, is in the human geography of peoples whose lives were arbitrarily interrupted by the machinations of outside political actors. The large-format pages are filled with maps – historic ones largely drawn from Markus Hauser's Pamir Archive collection, others very clearly drawn by the author – historic photos and engravings, and the author's own photos (each carefully dated as to when it was taken). In fact the visual richness of the book places demands on the reader who would wish to integrate the imagery with the text, text that includes very informative captioning. The historic maps may require using a magnifying glass to decipher place names, but the quality of the reproductions rewards the effort.

What is new here? In a sense, the book is mis-titled, even if indeed it is about the "Wakhan Quadrangle," what the small sketch map on p. 8 suggests is to be understood as that northeast extension of modern Afghanistan separating Tajikistan from Pakistan and ending at the border with Xinjiang. In fact, the discussion here encompasses a lot of the neighboring regions, the narrower Wakhan defined by maps today being an artifact of Great Game rivalries which, as the final chapter in the book bringing the story down to the present makes clear, resulted in dispersal of the native Wakhi population and disruption of the traditional patterns of communication, political and economic life.

As the subtitle indicates, the book is really about the history of exploration and espionage, especially in the second half of the 19th and early 20th centuries. What is missing from the title is the name of the "hero" of the book, Munshi [=secretary] Abdul Rahim, an omission that is odd, to say the least, where Kreutzmann's account is by far and away the best we have in trying to ferret out information about the "indigenous intermediaries" such as the Munshi, who did so much of the work on the ground for the British and others but more often than not received little credit for it.

Roughly the first 100 pages here offer what surely is now the best, compact history of the pioneering reconnaissances into the region, not only the Wakhan in the narrow sense but

also Chitral, Hunza, Gorno-Badakhshan and some other territories. Part of this story is known reasonably well, but here every scrap of information that can be teased out regarding the role of the "indigenous intermediaries" (think "pandits" in some of the standard accounts) has been examined, often in excruciating detail and with some repetition. We learn about the purposes of missions (in the first instance, to gather political intelligence), the degree to which the work of the intermediaries actually made it into published or confidential reports and maps, the stages in which the recent political history of the area previously unknown to the British (in the first instance, though the Russians and others figure in here) came to be known.

Virtually nothing is known about Munshi Abdul Rahim's personal life. The relative neglect of his record of his travels in 1879-1880 in part seems to be explained by the particular history of his supervisor, Major John Biddulph, briefly appointed to be the first resident in Gilgit with a rather limited mandate for intelligence gathering, who had a personal interest in exploration further afield, including obtaining ethnographic and other "soft" evidence that might not have had a direct bearing on British political interests. Munshi Abdul Rahim's report embodies such an emphasis. Departmental rivalries within the Raj also may have figured in here.

The Munshi's book was in fact published in 1885 by the government press in Simla as *Journey to Badakhshan*, in a translation from the original Persian. However, the book, if drawn upon by others in the British establishment, was generally not acknowledged, and subsequently became a bibliographic rarity. Now, thanks to the fact that Kreutzmann includes a full facsimile of the book (pp. 151-87), we have it to read. The pages leading up to the facsimile (101-49) include Kreutzmann's detailed summary and analysis of what Munshi Abdul Rahim wrote (or at least what his translator conveyed to us from what he wrote), bringing to bear other information including modern observation in order to assess its accuracy and value. Kreutzmann emphasizes that he has followed on the ground essentially the entire route of his 19th-century predecessor and explored as well adjoining regions about which he commented even if he had not visited them. The many photographs then show us the terrain about which the Munshi wrote.

Following on the facsimile is a section providing a compressed overview of subsequent exploration in the region. Of particular interest here is the section on routes (pp. 205-12), whose importance varied over time. To what degree they may have been used in much earlier centuries is not the focus, but those interested in the "silk roads" certainly could use this framework for plunging back in history

(and hoping to find archaeological evidence) to document historic trade and contact. To some degree, of course (if we think about the evidence from petroglyphs which has been systematically catalogued and recent discovery of Buddhist remains), such work is well advanced.

Summarizing, Kreutzmann writes (pp. 101, 144)

Munshi Abdul Rahim's report is one of the last eyewitness accounts and investigations when Wakhan was still a semi-independent principality with territory on both sides of the Amu Darya River and control over Kirghiz pastures that extended as far as the Great and Little Pamirs and the Alchur Pamir...[A] significant contribution was made to a general understanding of Wakhan's position in particular and that of Badakhshan more generally.

In keeping with Major John Biddulph's "ethnographical and geographical approach that distinguishes his narratives from most other reports," Munshi Abdul Rahim provided a

focus on Wakhan and Badkhashan that was unmatched until the Gilgit Mission followed its footsteps with significantly increased authority, manpower and financial resources. Nevertheless, in certain aspects they did not manage to provide deeper insights into socio-economic affairs and regional power games than had already been achieved by Munshi Abdul Rahim.

All in all then, might not a more precise title for the volume under review have been something like: "*Journey to Badakhshan: Munshi Abdul Rahim's forgotten description of the Wakhan in the era of the Great Game*"?

The third installment of Kreutzmann's trilogy is well advanced and, judging from the first two, should be eagerly anticipated.

– Daniel C. Waugh

Burkart Dähne. *Karabalgasun – Stadt der Nomaden. Die archäologischen Ausgrabungen in der frühuigurischen Hauptstadt 2009-2011*. Forschungen zur Archäologie aussereuropaischer kulturen 14. Wiesbaden: Reichert Verlag, 2017. x + 235 pp. ISBN 10: 3954901269 / ISBN 13: 9783954901265.

[At the request of the editor, Dr. Dähne provided the following description of his important book:]

This monograph deals with the excavations of the Mongolian-German-Orkhon-Expedition (MONDOREX) in the Uighur capital Karabalgasun, carried out between 2009 and 2011.

The first part is dedicated solely to the Uighur capital and begins with a discussion of the historical sources and the recent research history, subjects which have not previously been critically analyzed in this fashion. The extensive analysis of the city layout, which has been compiled by Airborne Laserscanning, is particularly noteworthy for improving substantially our knowledge about the dimensions of the city and the layout of different city areas.

The book then turns to an analytic-discursive presentation of the excavated material and the relevant stratigraphies for the city's history, obtained from the researched areas HB1 (the Manichean sacral complex) and HB2 (the so-called temple or palace complex).

Of particular interest in the results is the emphasis on Sogdian influences, which have always been either pushed into the background by the ostensibly superior Chinese influences or simply ignored entirely. The Middle-Asian-Sogdian tradition of isolated building structures would point to the influence of Sogdian ideas, while their construction and building technique correspond to Chinese tradition.

The second part of the book sets the excavation results into the context of the early settlement and urban history of Central Asia, particularly in Mongolia, southern Siberia and Buriatia. The difficulties for interpreting late nomadic ramparts or settlement structures archaeologically are undeniable. However, the number of archaeologically researched settlements has risen along with the gradual expansion of research at Karabalgasun, particularly in recent years. To set the Uighur capital within the wider settlement context may be as yet only preliminary, but nevertheless yields some interesting results. In this way the city can be considered an essential part of nomad state building: the capital makes the state.

This monograph should become a standard reference on the capital of the first Uighur khaganate, whose history is barely known from the primary sources. The work at the site is still in its early stages, so much remains to be done. However, now we have a summary overview of recent, as well as past research on Karabalgasun, including importantly new, much more accurate maps. The recent archaeological excavations made possible for the first time

a scientific publication on the history of the Uighur capital and as such, it is a seminal contribution to the research on the city within the context of the late nomadic cultures of Central Asia.

[Copies of Dr. Dähne's earlier publications about Karabalgasun, may be found at: <<https://dainst.academia.edu/BurkartDähne>>].

Michelle C. Wang. *Maṇḍalas in the Making: The Visual Culture of Esoteric Buddhism at Dunhuang*. Sinica Leidensia, 139. Leiden and Boston: Brill, 2018. xviii + 318 pp. ISBN 978-9-004357-65-5; E-ISBN 9978-9-004360-40-2.

As described on the Publisher's website:

The first scholarly monograph on Buddhist maṇḍalas in China, this book examines the Maṇḍala of Eight Great Bodhisattvas. This iconographic template, in which a central Buddha is flanked by eight attendants, flourished during the Tibetan (786–848) and post-Tibetan Guiyijun (848–1036) periods at Dunhuang. A rare motif that appears in only four cave shrines at the Mogao and Yulin sites, the maṇḍala bore associations with political authority and received patronage from local rulers. Attending to the historical and cultural contexts surrounding this iconography, this book demonstrates that transcultural communication over the Silk Routes during this period, and the religious dialogue between the Chinese and Tibetan communities, were defining characteristics of the visual language of Buddhist maṇḍalas at Dunhuang. *Readership:* All those with an interest in cross-cultural interactions in Chinese and Tibetan visual culture and Buddhism, as well as specialists in esoteric Buddhism, Silk Road art, and Dunhuang studies.

Michelle C. Wang, Ph.D. (Harvard, 2008), is Assistant Professor in the Department of Art and Art History at Georgetown University. A specialist in medieval Chinese art, her publications have addressed Buddhist maṇḍalas, Dunhuang painting, and art of the Silk Road.

{The following have all been written/compiled by Daniel C. Waugh}

Valerie Hansen. *The Silk Road. A New History with Documents*. New York; Oxford: Oxford University Press, 2017. xxiv + 472 pp. + two end-paper maps. ISBN 978-0-19-020892-9 (pb edition).

Near a third longer than the first edition (which I reviewed in this journal, Vol. 10 [2012]: 164–67), Hansen's book offers much to stimulate discussion and has the potential to be very valuable for teaching. While I have but sampled Chapters 1–7 here, they appear to reproduce without change the ones in the original book (criticisms of it notwithstanding). The most valuable change in this edition is her addition of a

good many well-selected source texts, keyed to each chapter. Some are descriptive travel accounts, most are early documents written in Chinese, Sogdian, Prakrit or other languages, and translated here. They include some of the best known evidence that is cited in histories of the silk roads; it will be a boon to teachers and learners to have them. The other major addition to this edition is a new chapter which, as the cover promises, provides “coverage of the Mongols and Marco Polo.” It is mostly Marco, and begins rather inauspiciously with the misleading statement that the Mongols “made travel along the ‘grasslands’ route possible” (p. 391), as though prior to that it had not been. My impression is that this new chapter, rather detached from the rest of the book, was cobbled together rather quickly, the subject (a potentially worthy one) deserving a lot better than what we are given. There is little here to provide any understanding of the “grasslands” route in Marco’s time, and certainly not earlier. The chapter underscores the challenges in trying to produce a broadly conceived history of the silk roads, where the dominant interpretive paradigms have yet to be adequately re-thought even in a work such as this one which set out to overturn at least some of them.

Peter Frankopan. *The Silk Roads. A New History of the World*. New York: Alfred A. Knopf, 2016. (Originally published by Bloomsbury Publishing, 2015). xx + 649 pp. ISBN 978-1-101-94632-9. Also available as an e-book and in paperback.

This book seems to have generated some buzz, and more than once I have fielded inquiries from individuals wondering whether it would be one for those interested in the historic silk roads to prioritize reading. I’m afraid I had to respond with skepticism, though that judgment was based on something less than the careful analysis which should be undertaken to write a proper review of it. What you get here are some impressions, but with little claim to analysis in depth.

Frankopan is a historian at Oxford, apparently a Byzantine specialist who has an earlier book on the history of the First Crusade. (The crusades in fact get a lot of his attention.) His footnotes here would suggest he has done a huge amount of reading, with a good many citations being to recent literature that I confess has to date escaped me. He notes that he has the good fortune to have learned Russian, which helps explain some of the emphasis in the book.

His book though is one which invokes “Silk Road” only to turn the term into something meaningless. His chapters involve many roads, of Heaven, Hell, Gold, Silver, Empire, Black Gold, etc., etc. all of which brings him down to the present with some acid and not misplaced comments on geopolitics involving the Middle East by the time he finishes (“Road of Genocide,” “American Silk Road,” “Road of Superpower Rivalry,” ... “Road to Tragedy”). If we are in an era of “new Silk Roads,” I confess I don’t quite know how they possibly relate to the older ones except as slogans.

This is not to say that he just quickly glosses that earlier history, even if often his glib formulations might give pause.

He certainly has some sensible ideas – notably, for example, in his explicit attempt to balance an assessment of the Mongols. But in a sense, this is the anti-Silk Road book (if we think the traditional paradigms about what it was), deliberately avoiding much serious discussion of China and other parts of East Asia. His purported focus is a somewhat vague “what is in the center,” in particular what many would call the Middle East and Central Asia. Along the way, he does offer some laudable comments on the interest of the Mughals of India in promoting long-distance trade. Yet the actual history of Central Asia gets short shrift here, notwithstanding the decision by the publisher or author to put an image of the interior of the dome on the Tilla Kari Madrasa in Samarkand on the cover (a structure that was re-created from scratch in the late 20th century). In many ways the book is oddly Eurocentric, as it chronicles the rise of the West with reference to the “Age of Discovery” and its exploitation of the riches of the East and even the Americas. A lot of the story here is that of the Great Game great power rivalries, which did not end in 1907 with the Anglo-Russian treaty, but have continued in one form or another to the present.

This is the kind of ambitious, sweeping treatment which will invite specialists to nit-pick. There certainly are for this reader some red flags in small matters: placing the Caspian at the center of medieval Arabic maps, confusing Balasaghun with Kharbalgasun, suggesting Marco Polo made it to Qaraqorum, mis-identifying the location of one of the Sasanian rock reliefs in Iran... While it is laudatory that he devotes some attention to the Vikings in Eastern Europe and the Volga trade, when he gets down to modern Russia, wanting to say something about Russian fascination with the “East”, he distorts the essence of the Slavophile-Westernizer controversy. Does any of this matter in the larger picture? I’m not sure, if the goal here in the first instance to invite readers to try to place contemporary geopolitical concerns into a deeper historical context. The occasional mistake is not the same as weaving a tapestry of “alt-facts”, as so many of our politicians nowadays do. But just don’t think a lot of this has to do with the historic Silk Road exchange across Afro-Eurasia, however we might wish to define that concept in perhaps more meaningful terms.

Peter Jackson. *The Mongols and the Islamic World from Conquest and Conversion*. New Haven and London: Yale University Press, 2017. xxii + 614 pp. + 4 pp. plates. ISBN 978-0-300-12533-7.

My editorial obligations to my authors have so far robbed me of the time I might have spent reading Peter Jackson’s new book. From what is as yet a cursory examination of it, I would strongly advise readers to drop what they are doing and read it carefully. Jackson is one of the leading historians of the Mongol Empire and the medieval Islamic world. His previous publications include an authoritative history of the Delhi sultanate, a widely ranging treatment of *The Mongols and the West 1221-1410*, which is essential reading for anyone who would wish to study the Mongol Empire, and (with David O. Morgan) the now standard edition in English of

William of Rubruck's valuable 13th-century account of the Mongols.

Jackson's new book, buttressed by 128 pages of notes, another 32 pages of bibliography, a glossary, some good maps and genealogical tables, promises to be the most judicious and nuanced account of a subject that has not been addressed so fully in the vast outpouring of scholarly and not so scholarly writing about the Mongols. While there is a lot here on the political history of the establishment of Mongol rule in Islamic lands, the focus is on the ways in which the Mongols interacted with their Muslim subjects, ultimately in important cases themselves converting to Islam. There have always been serious questions about the impact of the Mongols, in this case specifically in what we might term the "Middle East", but too often discussions have revolved around a simplistic good-bad dichotomy. Close examination of the sources reveals a lot of change over time, differences according to region, and so on. The discussion here includes a careful examination of how Islamic norms may or may not have been affected by indigenous Mongolian traditions and legal perceptions. The larger issue of Mongol policies with regard to other religions is an important part of the discussion.

Those who have understandably mined Juvayni and Rashid al-Din for the history of the Mongols should find much new here to ponder, since Jackson is careful to delineate how their viewpoints differed. For all the fact we tend so to admire especially Rashid al-Din for his intellectual accomplishments, it is important as well to understand how his history deliberately distorts certain issues in Mongol history, however well informed he may have been thanks to insider information. Jackson also makes use of a previously untapped source, the *Akhbār-i muḡhūlān* attributed to Qutb al-Dīn Shirāzī, which sheds new light on the rise of Hülegü.

Jackson emphasizes that, while he is well aware of the tendency in much recent scholarship to want to focus on the positive aspects of Mongol rule, he is not one to downplay the very real destructiveness of their invasions and the in fact quite mixed fate of those who found themselves under Mongol rule. I feel duly chastised for having invoked the idea of a Pax Mongolica in the past, a term that Jackson deems inaccurate. Even if many areas the Mongols conquered then were the focus of attempts by the new rulers to revive the economy, the benefits were more likely to accrue to the cities, not the countryside, and internecine warfare meant that there all too rarely was any "pax" to be had.

There is much here which will provoke further discussion. Jackson readily admits that some of the subjects which surely are important cannot be fully addressed due to lack of sources. In any event, it seems unlikely that a book even as authoritative and judicious as this one is ever going to satisfy those who might wish to make of the Mongols something they were not. We are edging toward perhaps a sensible consensus about the history of the Mongols. If we ever can arrive there, surely Jackson's work will have been a great help along the way.

Roman Khautala. *Ot "Davida, tsaria Indii" do "ne-navistnogo plebsa satany". Antologiiia rannikh latinskikh svedenii o tataro-mongolakh*. Ser.: "Iazma Mias". Pis'mennoe Nasledie. Textual Heritage, Vyp. 2. Kazan': Institut istorii im. Sh. Mardzhani AN RT, 2015. 496 pp. ISBN 978-5-94981-196-2.

The M. A. Usmanov Center for the Study of the Golden Horde and Tatar Khanates, which is part of the Sh. Mardzhani Institute of History of the Academy of Sciences of the Republic of Tatarstan, has been publishing a range of important studies, source collections and periodicals. This collection of the Latin sources on the Mongols is the work of Roman Hautala, who received his doctorate from the University of Siena in Italy, his dissertation on the relations among the Mongols, Mamluks and Papacy in the 13th century. The collection includes all the (often obscure or little known) materials in Latin about the Mongols that antedate 1241, when the armies of Batu invaded Hungary. Hautala provides a critical edition of the Latin texts with translation and annotation to them in Russian. His long essay introducing the material contextualizes it nicely. The book is provided with appropriate indexes.

Of course much of the material reflects the mystification about the Mongols, who were originally thought to be connected somehow with an imagined Christian potentate in the east (hence the "David, Emperor of India" in the title here) until the reality of what their invasion brought transformed them into the "hated minions of Satan." Both for the study of the realities of western communications and diplomacy and for the light shed on the development of images of the Mongol other, however far removed they may have been from that reality, the book is of great value. Presumably there would be good cause to have a version of it made available with the Russian translations and notes rendered into English.

Ross Burns. *Aleppo: A History*. London and New York: Routledge, 2017. xvi + 340 pp. ISBN 978-0-415-7321-0; 978-1-315-544-7-6 (e-book).

One of the desiderata for expanding our knowledge of the silk roads is to have readable and up-to-date studies of individual cities. The Routledge series "Cities of the Ancient World," in which Burns' volume appears (his *Damascus* appeared in it earlier, and he is also the author of the best compact guide to the archaeological and architectural sites in Syria, *Monuments of Syria*), promises to fill such a need. In addition to his two volumes, to date one on Miletos (by Alan Greaves) has been published, and the list of those ahead includes Palmyra, Ebla, Antioch, and in one volume, Memphis, Babylon and Cairo (a curious combination).

Given the horrendous destruction in Aleppo in the ongoing civil war in Syria, in a sense Burns's book is an epitaph for the city that is one of the oldest and truly most important of all the urban sites in the Middle East. Despite the loss of important buildings and extensive damage to others, as Burns



Photo by Daniel C. Waugh, October 2010.

The minaret of Aleppo's Great Mosque as it was in 2010; destroyed in 2013. As Burns, who chose an image of it for his cover, writes (p. 191), "its collapse under shellfire can only be compared to the loss of a building of the unique artistic value of, for example, the baptistery of the Florence Cathedral. Without this building – the only Seljuk monument in Syria and dated to the 1190s – we wipe out memory of a whole era."

explains, "What I hope to convey...is some sense of Aleppo as it was in the hope that it helps inspire a new phase of regeneration in the future" (p. xvii). Apart from his research in the historical sources, he spent a lot of time there prior to the war and photographed everything of consequence. The book is generously illustrated with those photos, though unfortunately not all are done justice by Routledge (many of the images are pretty muddy, which certainly is not true of the originals). There are also some good maps, a glossary, a substantial bibliography, and an index.

His website <<http://monumentsofsyria.com/>> is one of the best resources for learning about Syria's historical buildings and sites, with generous selections of color photos for each. It also contains his continually updated information about the sites destroyed and still under threat as the warfare continues. For Aleppo, he has links to a number of other reports that provide the grim details, which are not part of the book under review here.

Beata Biedrońska-Słota and Aleksandra Görlich, eds. *Textiles of the Silk Road. Design and Decorative Techniques: From Far East to Europe*. Ser.: The Artistic Traditions of Non-European Cultures, Vol. 4. Warsaw; Torun: Polish Institute of World Art Studies and Tako Publishing House, 2016. 180 pp. ISSN 2450-5692; ISBN 978-83-65480-23-1.

My guess is that this volume, which should be of interest beyond the circle of textile specialists, may escape the attention it deserves. It contains a wide range of essays, the first section grouped under "East Asia" focusing on Japanese textiles and especially kimonos, with an eye to connecting contemporary fashion and design with earlier traditions. For me, the last of the essays in this section is of particular interest: Ewa Orlińska-Mianowska, "Reception of the Orient in the Eighteenth-Century European Silk Industry" (pp. 53-64).

The three essays under "Central Asia" are: Marta Żuchowska, "Transferring Patterns Along the Silk Road: Vine and Grape Motifs on Chinese Silks in the 1st Millennium AD (67-80)"; Paweł Janik, "The Faces from Noin Ula's Embroidery – Xiongnu or Kushans?" (81-90); Astrid Klein, "The Language of Kučean Clothing: A Comparative Study of Wall Paintings and Textiles" (91-102).

The Third Section, entitled "From Central Asia to Near East and Europe – Influences" includes: Kosuke Goto, "The Celestial Lotus: on the Sources of Ornamental Patterns Woven in Silk Samite" (105-18); Maria Ludovica Rosati, "Textiles Patterns on the Move: Looking at the Iconographical Exchanges along the Silk Route in the Pre-Modern Period as Cultural Processes" (119-31); Beata Biedrońska-Słota, "The Cross-Cultural Role of Textiles Exemplified by Textiles with Arabic Inscriptions and Some Other Motifs (133-43); Cemile Tuna, "Silk Trade from Bursa to Krakow on the Silk Road" (145-53).

The final section, "Technique and Tradition Throughout Asia," has two articles: Natalia Shabalina, "Colour is a Sign of National Traditional Ornamental Art" (157-67); Rəcəp Karadag and Yusuf Yildiz, "Characterisation of Dyes, Metal Threads and Silk Yarns from 16-18th-Centuries Ottoman Silk Brocades" (169-79).

Those who would wish to learn more about the work of the Polish Institute of World Art Studies should consult the separately published *Sprawozdanie i bibliografia / Report and bibliography 2000-2015* (Warszawa-Toruń, 2015; ISBN 978-83-62737-70-3), where the introductory essay is in both Polish and English, followed by a detailed bibliography of publications.

Eva Allinger, Frantz Grenet, Christian Jahoda, Maria-Katharina Lang, and Anne Vergati, eds. *Interaction in the Himalayas and Central Asia: Processes of Transfer, Translation and Transformation in Art, Archaeology, Religion and Polity. Proceedings of the Third International SEECHAC Colloquium, 25-27 Nov. 2013, Austrian Academy of Sciences, Vienna*. Vienna: Austrian Academy of Sciences Press, 2017. viii + 423 pp. ISBN 978-3-7001-8073-9.

For those who are not aware (I was one, until somewhat by accident I came across this book), SEECHAC is the acronym for the Society for the Study of the Cultures of the Himalayas and Central Asia, whose previous colloquia were convened by Prof. Gérard Fussman in 2009 and 2011; its current president is Prof. Frantz Grenet. As with most conference volumes, this one includes some papers that were not actually presented at the time and omits some that were. What we have here in this sinfully lavish, large-format volume is an array of fascinating essays, many of which surely will open new vistas for those of us who study "silk roads" in a still somewhat blinkered approach. As all are in English and thus accessible to my readers, I list here the contents and titles:

Christian Jahoda. "Introduction: Interaction in the Himalayas and Central Asia. Processes of Transfer, Translation and Transformation in Art, Archaeology, Religion and Polity" (pp. 1-9).

Élise Luneau. "Transfers and Interactions between North and South in Central Asia during the Bronze Age" (13-27).

Lhagvasuren Erdenebold. "Preliminary Excavation Findings from Shoroon Bumbagar, Ulaan Kherem, Mongolia" (29-54). [Note: While readers of *The Silk Road* will have seen some of the images from this important Turkic tomb in an article by Sergey Yatsenko, Vol. 12 [2014]: 13-24, the quality of the color plates here is far better than anything I have seen, even in the Mongolian book devoted to the discovery.]

Oscar Nalesini. "Two Enigmatic 'Megalithic' Sites in Tibet" (55-69).

Ciro Lo Muzio. "Skanda and the Mothers in Khotanese Buddhist Painting" (71-89).

Frantz Grenet. "The Deydier Vase and Its Tibetan Connections. A Preliminary Note" (91-103). [Note: In his n. 2, Grenet refers to the full version of a paper on the vase by Men'shikova and Nikitin, that was supposed to be published in *Journal of Silk Road Art and Archaeology*, Vol. 7, but was not, nor was it in the volume from the Marshak memorial conference held at the Hermitage in 2012 where it was first presented. I do not know whether it has yet appeared.]

David Thomas Pritzker. "Allegories of Kingship: A Preliminary Study of a Western Central Asian Gold Ewer in the Royal Court of Tibet" (105-25).

Tianshu Zhu. "The Influence from Khotan: The Standing Buddha Images in Kucha" (127-42).

Eva Allinger. "An Early West Tibetan Manuscript from Hanle Monastery, Ladakh" (147-71).

Amy Heller and Charlotte Eng. "Three Ancient Manuscripts from Tholing in the Tucci Collection, ISIAO, Roma, Part II: Manuscript 1329 O" (173-89).

Christiane Kalantari. "The Art of Khorchag and Khartse in the Fabric of Western Himalayan Buddhist Art (10th-14th Centuries): Questions of Style II" (191-225).

Finbar B. Flood. "A Turk in the Dukhang? Comparative Perspectives on Elite Dress in Medieval Ladakh and the Caucasus" (227-53).

Marialaura Di Mattia. "A Cultural Crossroads: Some 'Foreign' Elements in the Art and Architecture of mNga'ris" (255-74).

Hubert Feiglstorfer. "Reconstruction of the West Tibetan Temples of Khorchag: The Lakhang Chenmo" (275-306).

Lewis Doney. "Narrative Transformations: The Spiritual Friends of Khri Srong lde brtsan" (311-20).

Quentin Devers. "Charting Ancient Routes in Ladakh: An Archaeological Documentation" (321-38).

Marie Lecomte-Tilouine. "Is There a Network of Sacred Fires Across the Himalayas and Central Asia? From Baku to Nepal, and Back" (339-56).

Isabelle Charleux. "Circumambulating the Jowo in Mongolia: Why Erdeni Juu Should be Understood as 'Jowo Rinpoche'" (357-74).

Ágnes Birtalan. "Between the Himalayas and Inner Asia: The Mongolian Case" (375-84).

Maria-Katharina Lang. "Moving Artefacts: Mongolian Tsam Figures" (385-420).

Altai v krugu evraziiskikh drevnostei / Altai among the Eurasian Antiquities. A. P. Derevianko and V. I. Molodin, eds. Novosibirsk: Izd-vo. IAET SO RAN, 2016. 624 pp. ISBN 978-5-7803-0265-0.

This is a posthumous Festschrift honoring the prominent specialist on the antiquities of the Altai, Vladimir Dmitrievich Kubarev (1946-2011). More than the first hundred pages are devoted to tributes and reminiscences about him and a bibliography of his publications. The remainder of the book contains 27 substantial articles by a pleiad of prominent scholars who have worked on many of the topics that occupied Kubarev, often in collaboration with him. The topical headings for the sections are: "Archaeology of the Bronze Age"; "Archaeology of the Early Iron Age"; "Archaeology of the Medieval Period"; "Rock Art". An essay of Kubarev's entitled "The Altai—the Ancient Treasure-house of Asia" serves in place of a conclusion. Citations from the various articles have been consolidated for a single bibliography. The articles are illustrated with many high quality images, including excellent color plates. Most of the essays are in Russian, the exceptions (in English) being the contributions by Henri-Paul Francfort, Güneri Semic, Hayashi Toshio and Esther Jacobson-Tepfer. The long and interesting article by

Elena Stepanova describing her reconstruction of a Scythian saddle from Pazyryk Barrow No. 3 is presumably the same as what was published in English in *The Silk Road* 14 (2016): 1-18 + Plate I. And at least a portion of the article on petroglyphs by Aleksei Rogozhinskii also appeared in this journal (elaborated in greater detail) in an article he jointly authored with Sergey Yatsenko (Vol. 13 [2015]: 109-25). This volume certainly is a fitting tribute to Kubarev and, at first blush, promises a lot of new information and interpretation.

N[igora] D[avliatovna] Dvurechenskaia. *Terrakotovaia plastika drevneishikh gosudarstv Srednei Azii IV v. do n. e. – IV v. n. e. / Terracotta Plastics of the Earliest States of Middle Asia of the 4th century B.C. – 4th century AD (Archaeological Aspect)*. Sankt-Peterburg: Nestor-Istoriia, 2016. 610 pp. ISBN 978-5-4469-0425-9.

The author of this massive work of classification and analysis has considerable experience in excavation of early Central Asian sites and currently heads the Bactrian section of the Central Asian Archaeological Expedition of the Russian Academy of Sciences' Institute of Archaeology. The book opens with a long review of the historiography of the study of the material, then devotes separate chapters to each distinct region—Chorasmia, Bactria-Tocharistan, Sogd and Margiana—before pulling the material together to discuss the stages of the development of such terracotta sculptures. There are two appendices: on the typology of small statues of Chorasmia and separately, for Bactria, Sogd and Margiana. Analytical tables occupy more than 200 pages, and there are another 170 or so pages of illustrations. Whereas earlier studies of this material tended to focus on issues such as iconography, in her examination of more than 1200 examples, she focuses on what one can learn from the archaeological contexts and the possibilities for employing techniques of statistical analysis, as abundantly illustrated in the computer-generated graphs and pie charts.

P[etr] K[uz'mich] Kozlov. *Dnevnik Mongolo-Sychuan'skoi ekspeditsii 1907–1909* [Diaries of the Mongolia-Sichuan Expedition, 1907–1909]. Ed. T[at'iana]. I[vanovna]. Isupova et al. Sankt-Peterburg: Nestor-Istoriia, 2015. 424 pp. ISBN 978-5-4469-0661-1.

We can be grateful that the Russians are now publishing some of the important documents about the early Russian expeditions that contributed greatly to our knowledge of the silk roads. Petr Kuz'mich Kozlov (1863–1935) participated in half a dozen major expeditions to Inner Asia, heading three of them. We already have his diaries from the Mongolia-Tibet expeditions of 1923–26, during which the first major Russian finds at the Xiongnu cemeteries of Noyon uul in Mongolia were made. The editors here were also responsible for that earlier publication in 2003 (*Dnevnik Mongolo-Tibetskoi ekspeditsii 1923–1926*).

In this new volume we get the diaries from the expedition which really put his name up in lights, when he excavated at the Xi Xia city of Khara-Khoto and brought back to St. Petersburg what is still one of the most significant collections of Tangut artifacts. This volume reproduces the entire text from the original autograph copy (four notebooks with more than 1000 manuscript pages written on both sides) held in the archive of the Russian Geographical Society. Even though Kozlov would publish what became popular accounts about his discoveries at Khara-Khoto, for which he drew on the record in the diary, here we have all the notes taken on a pretty regular basis at the time. A quick sampling suggest that the text has a literary quality that makes for good reading and is not just a dry record of events.

The book is supplied with a generous selection of photos showing Kozlov and covering what he saw on the expedition. There are even a couple of plates with color reproductions of the hand-colored lantern slides made from the original photos. There are explanatory notes, a glossary of Mongolian, Tibetan and Chinese terms, indexes of biological terms, geographic and topographic names, and personal names, a bibliography of works pertaining to the expedition, and a map showing its route.

To place these diaries in the broader context of Kozlov's career, readers surely will want to consult Iusupova's biography of him: *Puteshestvie kak obraz zhizni: issledovatel' Tsentral'noi Azii P. K. Kozlov* [The Journey as a Way of Life: P. K. Kozlov, Explorer of Inner Asia] (Sankt-Peterburg: Nestor-Istoriia, 2016).

Petr Kuz'mich Kozlov



Image source: https://upload.wikimedia.org/wikipedia/commons/thumb/7/7a/Kozlov_P_K_88.jpg/800px-Kozlov_P_K_88.jpg

Kateřina Svobodov. *Iranian and Hellenistic Architectural Elements in Chinese Art*. Sino-Platonic Papers, No. 274. Philadelphia: University of Pennsylvania Department of East Asian Languages and Civilization, February 2018. 36 pp. Open-access at: <http://sino-platonic.org/complete/spp274_iranian_hellenistic_chinese_art.pdf>.

A stimulating collection of examples of certain artistic motifs from all across Asia over the millennia. As the author explains (p. 2),

In my previous paper, presented on September 27, 2014, at the conference of the European Association for Asian Art and Archaeology in Olomouc, I discussed atlantid figures, flying divinities, and garlands in Chinese Buddhist art, again using mainly examples from Yungang. Here I would like to focus on additional architectural decorative motifs, namely column capitals, and at the same time to show the mixture of these motifs with indigenous elements of Chinese origin.

The paper published here was first presented on April 9, 2015, at the conference “Symposia Iranica” held at Downing College, University of Cambridge. The work was part of a research project “Political and Cultural Relations between China and the Western Regions,” which took place in 2016 at the Faculty of Arts, Charles University, Prague.

She concludes (p. 19):

[I]n Yungang native Chinese patterns known since the Bronze Age taking on a more Western appearance, mixed with the Western design perhaps arriving in China through the examples of small metal objects and precious items made from other materials and, perhaps, in the case of Buddhist iconography, also through drawings and portable shrines and venerated objects brought by travelers and pilgrims. Yungang art, created by a non-Han nomadic tribe, reflects all these influences and thus belongs among the distinctive monuments of early Chinese Buddhist art, and provides as well unique evidence of historically significant intercultural contact.

Asian Archaeology. Published by the Research Center for Chinese Frontier Archaeology of Jilin University. Beijing, Science Press. Vol. 2 (2013); Vol. 3, (2015); Vol. 4 (2016). ISBN 978-7-03-042013-8; 978-7-03-044088-4; 978-7-03-047964-8.

These three volumes of this new journal came into my hands thanks to Prof. Wu Jing of Jinlin University. The journal is entirely in good English; it has an impressive list of international advisers, co-editors, etc. Its large format allows for excellent illustrations, including in each number some high-quality color plates. Two of the three volumes here contain articles surveying some of the most important results of Chinese archaeology for the given year. Submissions may be sent to <asianarch@jlu.edu.cn> or <tengmy@jlu.edu.cn>.

Here is a sampling of article titles that caught my eye, but which is not intended as any judgment on the interest and importance of the whole, which undoubtedly should be on the required reading list of anyone interested in the archaeology of East Asia.

Vol. 2

Li Feng, Elizabeth Berger, Liang Zhonghe, Jeremiah Trinidad-Christensen. “Intrasite Organization in the Late Bronze Age: The Application of Full-Coverage Survey Methods at Guicheng, Shandong Province, China” (pp.1-39 + Pls. I, II). [Interesting especially for the illustration of methodologies that obviously have a wide application.]

Julia Elikhina, Olga Novikova and Sergey Khavrin. “Chinese Lacquered Cups of the Han Dynasty from the Collection of Noyon-Uul, the State Hermitage Museum: Complex Research Using the Methods of Art History and Natural Science” (93-109 +Pls. VI-VIII). [While these cups have received considerable attention in the past (see, e.g., Pirazzolli-t’Serstevens in *The Silk Road* 7 [2009]: 31-41), the technical analysis here sheds new light on production processes and provenance.]

Pauline Sebillaud, Liu Xiaoxi, Wang Xinsheng, Xing Chunguang. “Revealing a Wall with RTK—A Non-destructive Investigation of a Chinese Medieval Walled Site” (125-32). [Another article interesting especially from the methodological standpoint, explaining how the application of a Real Time Kinematic (RTK) ge positioning technique enabled the precise mapping of a settlement site outside of Kujindui, located between Harbin and Shenyang, the site dating from the Liao or Jin period.]

Vol. 3

James T. Williams. “Demography and Conflict During the Warring States and Han Periods in Northern Liaoning” (1-10) [One of Williams’ first ventures in serious archaeological survey, with excellent results, was as part of the Silkroad Foundation-National Museum of Mongolia Tahilt excavation project in 2007 (see his report in *The Silk Road* 5/2 [2008]: 42-47). He has now moved on to much more ambitious and technically advanced work.]

Pan Ling. “The Transformation of Cultural Exchange Between North China and the Eurasian Steppe from the Late Warring States Period to the Middle Western Han” (95-106). [With a particular focus on the evidence of open-work belt plaques, concludes that “the Zhang Qian mission to the Western Regions would seem less of a trail blazing expedition and more of a renewed step toward ‘re-opening’ or re-summing previous connections between northern China and the Eurasian Steppe.”]

Mandy Jui-man Wu. “Contact and Exchange in Northern China: A Case Study on the Tomb of a Zoroastrian-Sogdian, Kang Ye (512-571 CE)” (107-28). [The author, who teaches at Hanover College, developed this project with the guidance and encouragement of a number of prominent specialists. Apart from her analysis of the imagery on Kang Ye’s deathbed, she provides in an appendix a translation of his epitaph.]

Vol. 4

Shao Huiqiu and Yang Jianhua. "The Northern Zone and Mongolian Plateau Metallurgical Province: The Cultural Foundations of the Xiongnu Confederation" (47–67). [Typological classification, not metallurgical analysis, of objects is the basis for this interesting essay. The article cites a broad range of research, including Russian reports on sites such as Dyrestui and Ivolga.]

Julia Elikhina, Olga Novikova and Sergey Khavrin. "Details and Fragments of Chinese Chariots of the Han Dynasty from Noyon-uul in the Collections of the State Hermitage Museum: Complex Research Using the Methods of Art History and the Natural Sciences" (69–85 + Pls. V–VII). [More on the technical analysis that previously had not been done on the Hermitage's important Xiongnu collection.]

Cai Dawei, Luan Yiting, Zhao Xin, Chen Yongzhi, Zhu Hong and Zhou Hui. "Ancient DNA Analysis of Uigher Human Skeletal Remains from Durvuljin No. 1 of the Khulhiin Am Site, Mongolia" (109–14). [An introduction to this very interesting Uighur cemetery was published by Ochir et al. in *The Silk Road* 8 (2010): 16–26. The new DNA analysis is an important step forward in determining the as yet uncertain origins of the Uighurs.]

Journal of Inner Asian Art and Archaeology 7/2012 [2016], Judith A. Lerner, Sören Stark and Annette L. Juliano, eds. Produced under the aegis of the Institute of the Ancient World, New York University, by Brepols Publishers (Turnhout, Belgium), 2016. 324 pp. ISBN 978-2-503-54348-2.

As the editors indicate, this is the last of this series that will appear as an annual journal volume. Subsequently, the same editorial team and publisher will transition to a series of edited volumes under the new title *Inner and Central Asian Art and Archaeology: New Research*, which will appear at less regular intervals but "with a stronger thematic, geographical, and/or chronological focus."

Contents

Luca M. Olivieri. "The Last Phases at Barikot: Urban Cults and Sacred Architecture. Data from the Spring 2013 Excavation Campaign in Swat" (pp. 7–30, 291–95 [Pls. 1–6]).

Shaymardankul A. Rakhmanov. "Wall Paintings from Tavka, Uzbekistan" (31–54, 296–98 [Pls. 1–10]).

Aleksandr Naymark. "The Coinage of Nakhshab during the First-Fourth Centuries C.E. Towards a New Systematization of Sogdian Coinages and the Political History of Sogd during Antiquity (55–77, 299 [Pl. 1]).

Andrey V. Omel'chenko. "On the Question of Sasanian Presence in Sogdiana. Recent Results of Excavations at Paykand" (79–107, 300–03 [Pls. 1–6]).

Sirodzh D. Mirzaakhmedov. "The *Ribāt*-Caravanserais from the Eastern Suburbs of Paykand. Archaeological and Historical Aspects (109–23, 304–06 [Pls. 1–3]).

Alison Betts, Vadim N. Yagodin, Frantz Grenet, Fiona Kidd, Michele Minardi, Meodie Bonnat, and Stanislav Khashimov. "The Akchakhan-kala Wall Paintings: New Perspectives on Kingship and Religion in Ancient Chorasmiā" (125–65, 307–12 [Pls. 1–7]).

Ken Parry. "Reflections on a Silk Fragment from Toyuq: Christian or Manichaean?" (167–92, 313–14 [Pls. 1–5]).

Tatjana Bayerova and Gerald Kozicz. "The Last Wall Standing. A Survey of the Architectural Remains and the Material Components of the Dilapidated Buddhist Temple of Chigtan in Lower Ladakh" (193–204, 315–17 [Pls. 1–6]).

Papers from the Roundtable "Shifting Frontiers: Current Issues in the History of Early Islamic Central Asia," held on December 17–18, 2010, at Leiden University.

Petra Sijpesteijn and Étienne de la Vaissière, "Introduction" (207).

Minur Inaba, "Between Zābulistān and Gūzgān: A Study on the Early Islamic History of Afghanistan" (209–25).

Simone Mantellini, Serena Di Cugno, Rita Dimartino, and Amreddin E. Berdimuradov. "Change and Continuity in the Samarkand Oasis: Evidence for the Islamic Conquest from the Citadel of Kafir Kala" (227–53, 318–22 [Pls. 1–7]).

Boris I. Marshak and Valentina I. Raspopova. "Panjikent and the Arab Conquest (255–75, 323–24 [Pls. 1–4]).

Asan I. Torgoev. "New Data on the Islamization of South-Western Semirech'e" (277–87)

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All of these volumes and the current Vol. 15 (2017) are available in pdf format, along with individual files for each article in them, on the new website for the journal at <<https://edspace.american.edu/silkroadjournal/issues/>>. For a time, the volumes will also continue to be available on-line at <<http://www.silkroadfoundation.org/toc/newsletter.html>>, though only the most recent numbers have links there to individual article files. In addition to being published on-line, these volumes were also printed in hard copy and distributed free of charge to academic libraries around the world. Starting with Vol. 16 for 2018 the journal will cease print publication and be available only on-line at <<https://edspace.american.edu/silkroadjournal/>>. The following listing of the contents for the first 15 volumes includes all the articles and significant book reviews, but does not provide detail for shorter announcements or book notices. Note that Vols.1–6 each appeared in two separate numbers; starting with Vol. 7, there was one annual volume. Pagination for each article is given in parentheses after each entry.

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- ROGER L. OLESEN. Welcome to the First Issue! (1–2).
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HORST REMUS. The Origin of Chess and the Silk Road (6–9).
JOHN MASSON SMITH, JR. The Mongols and the Silk Road (9–15).
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ALEKSANDR NAYMARK. Returning to Varakhsha (9–22).
ÉTIENNE DE LA VAISSIÈRE. Sogdians in China: A Short History and Some New Discoveries (23–27).
FRANTZ GRENET. The Pre-Islamic Civilization of the Sogdians (seventh century BCE to eighth century CE): A Bibliographic Essay (studies since 1986) (28–36).
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- RICHARD SALOMON. The British Library Symposium on ‘The Kingdom of Khotan to AD 1000: A Meeting of Cultures’ (38–39).

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BRYAN K. MILLER, JAMSRANJAV BAYARSAIKHAN, TSEVEENDORJ EGIIMAA and CHRISTINE LEE. Xiongnu Elite Tomb Complexes in the Mongolian Altai. Results of the Mongol-American Hovd Archaeology Project, 2007 (27-36).

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WATER

Individuals who invoke the term “Silk Road” may have wondered at one time or another what it really might mean. What Ferdinand von Richthofen meant when he coined the term is clear enough, but over time the concept he enunciated in a very specific sense has morphed into a kind of catch-all term that often has nothing to do with historic exchange across the Old World (whatever geography and chronology that term itself might imply). Readers of this journal may indeed wonder about its title, given how widely its content has ranged over the years. It is commonplace to invoke the past in the cause of contemporary concerns, but unfortunately too often the term “Silk Road” bears no relationship whatsoever to the historical realities it implies.

Not to be deterred here by such words of caution and stimulated by two recent news articles, I am going to risk putting down a few “notes for a future project” which may or may not (if it is ever completed) be graced with the words “Silk Road” in its title. Suppose we were to start a new history of the Silk Road with an emphasis on water. Might it in fact be the guiding thread that could tie together in some coherent way much of what we might like to say about culture and exchange in the Old World, if those really constitute our subject?

The first of the news items is not news for anyone who has been reading about climate change and its consequences. On 18 January 2018, *The New York Times* published an article by Somini Sengupta entitled “Warming, Water Crisis, Then Unrest: How Iran Fits an Alarming Pattern.” At the head of the piece was a dramatic picture of Lake Urmia, in northwestern Iran, which, as the caption indicated, has lost some 90% of its water since the 1970s. The picture very much reminds us of what we have been seeing in recent decades about the near disappearance of the Aral Sea. Both of these bodies of water, of course, lie along some of the historic routes of travel and settlement which we normally include in our thinking about the Silk Road. The point of Sengupta’s article was to emphasize how the looming water crisis, which can be documented for many other places as well, is already igniting political unrest and has the potential to tear apart even the fragile remains of stability in many heavily populated areas of the world. Moreover, the looming crisis is to be connected with ill-advised policies of political elites, investing in dam building and other mega-projects that may produce short-term fi-

nancial benefits but at the expense of future generations. Without water, the historic “silk routes” could not have existed, and now huge areas along them are threatened with becoming uninhabitable.

The second recent news item, brought to my attention by Victor Mair, was a short article in *Newsweek* (linked to the academic report) on 3 January 2018 summarizing new research by archaeologists at a site called Mohuchahoangoukou in the Yangqi Basin, a region nestled in the foothills of the Tian Shan mountains northwest of the Turfan Depression in the Xinjiang-Uighur Autonomous Region. The task the authors set was to try to locate evidence that would shed light on the early history of the development of irrigated agriculture in that arid region, evidence which might then address the disputed question of what possible influences were responsible for its emergence (Li et al. 2017). Strikingly, imaging from drones revealed a complex network of canals and other dry-land farming features. Ground survey confirmed the fact that at least in the one smallish region studied, there was a rather sophisticated infrastructure that supported intensive farming, the site datable to approximately the 3rd-4th century CE. In other words, it is evidence from a place and time that lie in the center of what we conventionally consider belongs to Silk Road history. Only at the end, and very cautiously, the authors suggest that possibly those who were responsible for the agriculture at this site may have been influenced by (or even came from) areas further to the west, where similar dry-land farming techniques were known to have been highly developed. At very least, the new study questions the claims that have often been made in Chinese scholarship that settled agriculture in Inner Asia must have come in the wake of Chinese expansion into the region.

A similar set of questions underlay a recent study done by Arnaud Bertrand (2012) concerning the tanks (open reservoirs) which have been documented at the famous Silk Road site of Niya. Bertrand hypothesizes that the possible inspiration and technical know-how for introducing such a system of water collection and storage, came from South Asia at the time when Niya was part of the Kushan Empire.

Capturing and directing water from stream or river flow is, of course, only part of the story here. In her article in the current volume on caravanserais in the Mongol Golden Horde, Emma Zilivinskaia notes their proximity to water sources, including the equivalent

of the tanks or cisterns known from other regions. When streams dry up, collecting runoff from seasonal rainfall may be essential. Wells and underground channels called *karez* or *qanat* are amongst the sources which have long been studied (and, one might add, are now under threat as reservoirs of groundwater are being drained to feed burgeoning populations and in the service of often wasteful agricultural projects). Some years ago in this journal, Bertrand (2009) summarized information about such systems as documented from the Turpan region and from comparative work in the Middle East (see also Trombert 2008).

Clearly if we are to learn more about water availability and management historically, the most modern scientific analytical tools must be brought to bear. Satellite imaging has been applied already in studying the situation in Niya, in the important Murghab delta region at Merv (Padwa and Stride et al. 2004), and in the area around the fortress of Resafa, in the eastern Syrian desert. Palaeoclimate data based on sampling of glacial ice cores has suggested a correlation between the demise of Niya and climate change which dried up its river (Yang et al. 2004).

For Resafa, the recent detailed analysis includes techniques for determining porosity of different soils, modeling to predict the amount of run-off from rain during different seasons of the year, extrapolations from modern climate data to arrive at reasonable estimates regarding climate in earlier centuries, and more (Beckers 2012; Beckers and Schütt 2013). Excavation data, even if very selective, has demonstrated the existence of dikes and dams from early times. Much more needs to be done to analyze organic remains and other kinds of evidence that may help confirm chronologies. The result so far confirms that the huge cisterns at Resafa, dating from the period when it was a late Roman/Byzantine fort and continuing to be used under Islamic occupation, would have supplied enough water from the collection of run-off during the rainy season to maintain a sizeable population during an entire year of little rainfall that might follow. There is interesting comparative analysis of the evidence from Resafa with that from Petra, another dry-climate site that was hugely important for early trade in Asia and could not have existed without sophisticated management of water resources. As Renato Sala reminds us though with reference in part to his studies of irrigation in Kazakhstan: "Most probably simple techniques of surface water use were invented independently in several places of the world: everywhere they started on alluvial plains as devices for the diversion of seasonal floods from cultivable areas back to the river; and then evolved by directing the drainage channels across dry areas that, water-fed by the sides, were reclaimed to cultivation" (Sala n.d., p. [2]).

To focus on management of water resources that are essential for basic survival and settled agriculture is only part of the story, of course. While it is common to think that nomad pastoralists "followed the grass" with their herds, of course they were also following the water. Seasonal movement thus might be quite localized, moving from winter camps in lowlands to summer pastures in the mountains, where water from snow melt might in fact be quite abundant and there would be sufficient rainfall for the mountain pastures. Camps naturally would be located near water sources, but even so some minimal "engineering" through the digging of ditches or the like might be undertaken. Many pastoral communities also practiced a certain amount of agriculture. None of this would have required borrowing, even if some interaction with the outside world might have been the norm, important exchange taking place along the "steppe roads" or, in Michael Frachetti's recent formulation (2012), the "Inner Asian Mountain Corridor."

Water management might also require high levels of engineering skill and the marshalling of resources that would be beyond the means of small, local communities and individual actors. Aqueducts, dams, dikes, tunnels or canals are important big ticket projects whose visibility has undoubtedly overshadowed the evidence which is harder to come by concerning local communities. Some technologies, such as the use of animals or water wheels to raise water from wells or from a river bed to higher surrounding banks, might easily have been conceived and employed without external inputs. In fact, if water is to be our guiding thread here, it is woven into a tapestry of considerable complexity. Projects on different scales may in fact serve different purposes specific to one society or polity but not to be observed in the same way in another (Kamash 2012). Water-powered mills to grind grain might be fairly simple, but devising the mechanisms and employing them in order to cut stone might demand a different level of knowledge and in any event be irrelevant in societies where mud brick, rather than stone was a basic construction material (itself requiring access to water). The public fountains and baths of Imperial Rome are an example not emulated everywhere. Techniques for carrying water in Hellenistic times left a considerable legacy, but were overlaid by grandiose Roman projects based on different approaches to engineering. Both left their imprint on the Sasanian and Islamic Middle East, but at some remove. Nabataean Petra, "at the hub of a vital region of the Near East" (Ruben 2003, p. xxi), illustrates well the complexity of inputs from adjoining areas.

Of course a great deal has been written about science and technology in various regions of the Silk Roads (a literature that is, I admit, still largely *terra incognita* to

me). It is clear though that without substantial new archaeologically documented evidence, and even when we have it, key questions remain to be answered regarding directions and processes of borrowing. The easy analogies in material culture from disparate locations are always tempting, but without careful chronologies and precise analysis of techniques and materials, they are hardly ever going to be conclusive.

The infrastructure supporting travel and communication is part of this history and not just what we almost take for granted about overland routes involving caravans (or in some analyses, just small parties with a few transport animals). Rivers were important highways, even (or especially) in winter when they may have been frozen. Most major cities were either on rivers or were seaports, and the location of key nodes in many cases was the point where two rivers joined or where they were most easily crossed. The engineering involved in building and maintaining ports certainly is part of this history, where some of the most famous entrepôts died as their harbors silted up. Every new discovery through underwater archaeology is fleshing out the still very sketchy but hugely important subjects of maritime trade and shipbuilding technology, which most students of the silk roads have come to recognize are part of the story. Some of the most interesting evidence about the importance of river networks in the Old World comes from northeastern Europe, a region which has often been ignored in conventional treatments of the silk roads. We know now a great deal about the boat-building technologies which enabled the Vikings to travel by river and portage all the way to the Middle East (Larsson 2007).

Water and its management also focus our attention on ritual and belief, since deities may have had a particular connection with water, and ritual observance often involves water. Images of water deities have been found at early urban centers in Syria, and temples assumed to have been dedicated to Anahita are scattered through ancient western Asia. In many parts of the world, traditional rituals connected with the agricultural cycle invoke the guiding spirits of nature which ensure that the rains will come. Down to the present in Buddhist temples, ritual offerings of pure water grace the altars and water may be used to “anoint” certain images. Ablutions prior to prayer are expected of Muslims. Holy springs and wells are widespread. The ostensibly secular imagery and built environments of gardens may be evocations of Paradise, out of which, at the east of the imagined world of medieval cartographers, flowed the great rivers of civilization.

So, in a sense, water is everywhere we might look along the silk roads even if roads as such and silk may be conspicuously missing much of the time. Is

there a book here? If so, surely a somewhat bizarre concoction that a wag might title “Walking on Water: an alt-History of the Silk Roads.” At very least though, in analyses of the Old World exchange, water surely deserves more than a few pages.

The thousands of words that it might take to make a persuasive case here remain to be researched and written. Short of that, I invite you to consider some rather eclectic visual evidence drawn from a considerable photographic archive I have accumulated while trying to follow the “silk routes” over a good many years. I often find that visual stimuli such as sites, landscapes and objects, even as seen through the distorting lens of the present, may point to new directions for deeper inquiry into the past. Think of the images as pieces in a jigsaw puzzle, which one is only beginning to fit together but without the aid of a picture showing what it is supposed to look like when done. Connecting the edge pieces may be relatively easy, but what is in the middle promises to take a lot more time. And it may be that the last person who worked on the puzzle dropped a few of the pieces on the rug where they were vacuumed up. Perhaps, of course, this kaleidoscope of possibilities will turn out to be no more coherent than a Renaissance Wunderkammer, emblematic of a kind of undisciplined curiosity from a time long ago and far away.

References

Beckers 2012

Brian Beckers. *Ancient food and water supply in drylands. Geoarchaeological perspectives on the water harvesting systems of the two ancient cities Resafa, Syria and Petra, Jordan*. Doctoral diss., Free University of Berlin, 2012.

Beckers and Schütt 2013

Brian Beckers and Brigitta Schütt. “The elaborate floodwater harvesting system of ancient Resafa in Syria – Construction and reliability.” *Journal of Arid Environments* 96 (2013): 31-47.

Bertrand 2009

Arnaud Bertrand. “The Hydraulic Systems in Turfan (Xinjiang).” *The Silk Road* 8 (2010): 27-41.

Bertrand 2012

_____. *Water Management in Jingjue 精絕 Kingdom. The Transfer of a Water Tank System from Gandhara to Southern Xinjiang in the Third and Fourth Centuries C.E.* Sino-Platonic Papers, No. 223 (April 2012). Philadelphia, PA: Univ. of Pennsylvania.

Clarke et al. 2005

Derek Clarke, Renato Sala, Jean-Marc Deum and Enrique Meseth. “Reconstructing Irrigation at Otrar Oasis, Kazakhstan 800-1700 AD.” In: *Integrated Land and Water Resources Management in History*, Schriften der DWhG, Sonderband 2. Siegburg, 2005: 251-64. (Accessible on-line via Academia.edu).

Clarke et al. 2010

Derek Clarke, et al. "Analysis of the hydraulics of the irrigation canals of Otrar, Kazakhstan." *Water Science & Technology: Water Supply – WSTWS* 10/3 (2010): 453-61 On-line at <https://www.researchgate.net/publication/250143240_Analysis_of_the_hydraulics_of_the_irrigation_canals_of_Otrar_Kazakhstan>, last accessed 23 January 2018.

Frachetti 2004

Michael D. Frachetti. "Archaeological Explorations of Bronze Age Pastoral Societies in The Mountains of Eastern Eurasia." *The Silk Road* 2/1 (2004): 3-8.

Frachetti 2008

_____. *Pastoralist Landscapes and Social Interaction in Bronze Age Eurasia*. Berkeley, etc.: Univ. of California Pr., 2008.

Frachetti 2012

_____. "Multiregional Emergence of Mobile Pastoralism and Nonuniform Institutional Complexity across Eurasia." *Current Anthropology* 53/1 (2012): 2-38. Includes responses and discussion.

Juchniewicz and Żuchowska 2012

Karol Juchniewicz and Marta Żuchowska. "Water Supply in Palmyra, A Chronological Approach." In: Marta Żuchowska, ed. *The Archaeology of Water Supply*. BAR International Series 2414. Oxford: Archaeopress, 2012: 61-73. (Available on-line via Academia.edu).

Kamash 2012

Zena Kamash. "Irrigation technology, society and environment in the Roman Near East." *Journal of Arid Environments* 86 (2012): 65-74.

Larsson 2007

Gunilla Larsson. *Ship and Society. Maritime Ideology in Late Iron Age Sweden*. Aun 57. Uppsala: Uppsala Uinversitet, Department of Archaeology and Ancient History, 2007.

Li et al. 2017

Yuqi Li, Michael J. Storzum, Xin Wang and Wu Guo. "Early irrigation and agropastoralism at Mohuchhangoukou (MGK), Xinjiang, China." *Archaeological Research in Asia* (in press) <<http://dx.doi.org/10.1016/j.ara.2017.09.005>>, accessed via Academia.edu.

Medrano 2018

Kastalia Medrano. "Ancient China: Satellite and Drone Imagery of Prehistoric Silk Road Corridor Reveals Long-Lost Irrigation Network." *Newsweek*, published on line 3 January 2018 <<http://www.newsweek.com/ancient-china-irrigation-system-traveled-silk-road-corridor-satellite-drone-769482>>, last accessed 11 January 2018.

Padwa and Stride, et al. 2004

Mariner Padwa and Sebastian Stride. "Archaeological GIS in Central Asia" *The Silk Road* 2/2 (2004): 25, introducing the following: Sebastian Stride, "An Archaeological GIS of the

Surkhan Darya Province (Southern Uzbekistan)" (30-35); Bernardo Rondelli and Simone Mantellini, "Methods and Perspectives for Ancient Settlement Studies in the Middle Zerafshan Valley" (35-39); Barbara Cerasetti, "Reasoning with GIS: Tracing the Silk Road and the Defensive Systems of the Murghab Delta (Turkmenistan)" (39-42); Mariner Padwa, "Evolving the Archaeological Mapping of Afghanistan" (43-46); Eric Kansa, "Storing and Sharing Central Asian GIS: The Alexandria Archive" (47-49).

Ruben 2003

Isabelle Ruben, ed. *The Petra Siq: Nabataean Hydrology Uncovered*. Amman: Petra National Trust, 2003.

Sala n.d.

Renato Sala. "Underground Water Galleries in Middle East and Central Asia: survey of historical documents and archaeological studies." On-line at <https://www.academia.edu/11935519/UNDERGROUND_WATER_GALLERIES_IN_MIDDLE_EAST_AND_CENTRAL_ASIA_survey_of_historical_documents_and_archaeological_studies>, last accessed 23 January 2018.

Sala and Deom n. d.

Renato Sala and Jean-Marc Deom. "Bronze Age Human Habitats of Semirechie." On-line at <<http://www.lgakz.org/Texts/LiveTexts/2-BronzeHabSemEn.pdf>>, last accessed 23 January 2018.

Sengupta 2018

Somini Sengupta. "Warming, Water Crisis, Then Unrest: How Iran Fits an Alarming Pattern." *The New York Times*, 18 January 2018. Accessed on-line at <<https://www.nytimes.com/2018/01/18/climate/water-iran.html?hp&rrref=world&action=click&pgtype=Homepage&module=well-region®ion=bottom-well&WT.nav=bottom-well>>.

Trombert 2008

Éric Trombert. "The Karez Concept in Ancient Chinese Sources: Myth or Reality?" *T'oung Pao* 94 (2008): 115-50.

van Geel et al. 2004

B. van Geel et al "Climate change and the expansion of the Scythian culture after 850 BC: a hypothesis." *Journal of Archaeological Science* 31 (2004): 1735-1742. Critique and authors' response are in 33 (2006): 143-144; 145-148.

Yang et al. 2004

Yang Bao et al. "Evidence for a late Holocene warm and humid climate period and environmental characteristics in the arid zones of northwest China during 2.2 ~ 1.8 kyr B.P.," *Journal of Geophysical Research*, 109 (2004): 2105-2115.

— Daniel C. Waugh
Shoreline, WA
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On the pages which follow, all photos were taken by me with the exception of the Google Earth image and the manuscript miniatures from the Harvard Art Museum, the Bibliothèque Nationale, and the David Collection.



MOUNTAINS AT THE CENTER OF THE SILK ROADS

We might start any survey of “Silk Road geography” in the mountain knot of Inner Asia, since it is the glaciers and snow which are the source of much of the water that makes life in the lowlands possible.



Top left: the peaks of the **TIEN SHAN**, looking east from the slopes of Khan Tengri.

Above left, the snout of the **BALTORO GLACIER**, Pakistan, where the Braldu River, a tributary of the Indus, begins.

Above: The **KIZIL SUU** valley in the Pamirs, probably part of the route to China famously recorded by Ptolemy.

Above and right: Two views of **BOGDO ULA** on the eastern end of the Tien Shan in Xinjiang, showing how elevation and vegetation zones are related, and the significance of the snow-melt rivers.





Above: The historic site of **SUBASHI** flanking the Kuqa River, nearly dry when this photo was taken in 2009.

HUMAN SETTLEMENT AND WATER



Above: The barley fields lining a valley in **TIBET**.



Above: A green oasis in the high desert -- the Upper Indus valley at **LEH** in Ladakh.



Above: Irrigated agriculture at **JIAYUGUAN** in the Hexi Corridor, the water from snowmelt out of the Qilian mountains.



Left: A little oasis of a farmstead where a stream enters the **KARATASH RIVER** in the mountains south of Kashgar. In this area, pickaxe and shovel are used to channel the water into the fields where there is a precious bit of flat land in the otherwise stark terrain.



Pastoralists (a.k.a. “nomads”) follow the grass but also, importantly, the water, and they may bring the water to where it is needed by digging channels or wells.

Above: A summer herder camp above the village of **MAGHREB** in the Yagnob region of Tajikistan. Nearby, channels had been dug to direct spring water to small fields where oats or barley had been planted. *Above right:* A herder camp in the **EAST KARAKOL VALLEY**, Kyrgyzstan. *Right:* Horses watering at a well in **WESTERN MONGOLIA**. *Below right:* A Kyrgyz work party creating a water channel in the **KARASU VALLEY, PAMIR-ALAI MOUNTAINS**. *Below:* An “aqueduct” leading to a camp in the mountains south of Kashgar, with modern hose used to bridge the gully.



THE GREEKS AND THE ROMANS

In important ways technologies employed in western Eurasia for obtaining and transporting water to where it was needed were developed by the Greeks and then further refined by Roman engineering.



DELOS, the sacred island of Apollo in the Aegean, was important not only as a center of religious worship but also at various times was a major trading entrepot, with a population of as much as 25,000. For its fresh water, it relied mainly on seasonal rains, which filled the many cisterns. Only at one low-lying area was there a lake, the soil moist enough today to support vegetation, where even in the dry season water could be obtained from wells.



Above: The large cistern, once roofed over, located near the theater.
Below: The site of the lake and a well located amidst the vegetation.





One of the most important cities on the Anatolian coast was EPHEsus (Efes today, whose population center is the adjoining Selçuk). It flourished as a port until its harbor silted up and for a time played an important role in the early Christian church. Today one may be challenged to disentangle the early Greek from the later Roman layers, but everywhere there is abundant evidence of sophisticated hydraulic engineering.



The aqueducts, whose water source was in the surrounding hills, led to a cistern in town (*above*) and to a water tower (*above right*) that fed the fountains and plumbing.





Remains of Roman aqueducts are everywhere, perhaps the most iconic being the **PONT DU GARD** in France, which carried water from a source 50 km away to supply Nimes. A visitor should walk along the route the water took, now overgrown, which provides a sense of how the angle of incline from the water source was almost impossibly shallow. Yet it worked, a testimony to Roman surveying accuracy and engineering skill.



Most visitors to **ISTANBUL** today will see the Aqueduct of Emperor Valens and go down into one of the cisterns now known as the Yerebetan Saray. What is perhaps less well known is the extent of the old Roman and Byzantine aqueduct network, which can be traced to distant suburban hills, and the fact there were a number of other large cisterns in the city.

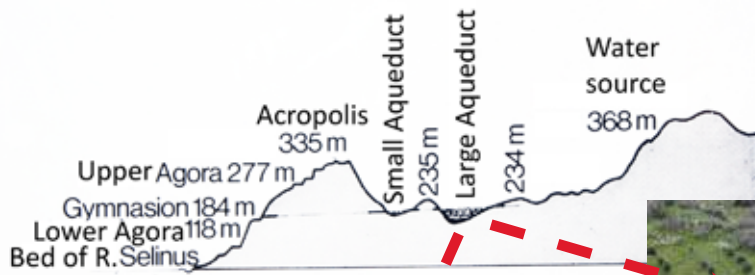
Above: The Yerebetan Saray.

Right: The location of what was once a huge cistern below the later Ottoman Mosque of Selim I and now occupied by a sports complex.





PERGAMON (Bergama today) is another of the Graeco-Roman sites of great importance where one can appreciate the hydraulic engineering. Its Acropolis, the site of various temples, a theater and other public structures, tops out at 335 m above the River Selinus and obtained its water not from the river far below but from a spring off in the mountains at a higher elevation. A long water channel led from the spring, crossing intervening gullies on aqueducts. Some of the water was directed to buildings lower down the hill; but the upper structures were supplied by pipes engineered to withstand the considerable pressure that raised the water to where it was needed.



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Byzantine engineers continued the high standard of their Roman predecessors and often showed considerable ingenuity in delivering water to places that were not easy to supply. Here, on the left, the aqueduct which supplied the monastery at SUMELA on a cliff face in a mountain valley south of Trabzon.



Above: The dated inscription at the end of the tunnel naming Valerian and Titus.

Ambitious engineering projects often were directed not at bringing the water to a place that needed it but rather keeping it away from a place that did not want it. A famous example is the nearly kilometer-long tunnel and adjoining dam built by Emperors Vespasian and Titus in the 1st century CE, at **SELEUCIA IN PIERIA**, the important harbor city serving inland Antioch that had been founded by the successors of Alexander the Great and continued to flourish under Roman rule. The hydraulic works were to divert seasonal flooding from the port and prevent its silting up, though today the area is covered with farm plots tended on the layers of sedimentary soil that eventually ended its days as a harbor town.



Though one should never exaggerate the influence of Hellenistic and Roman accomplishments east along the Silk Roads, certainly in the areas that came under their direct control, be it as far away as Greek Ai Khanum on the Oxus or much closer to home on Rome's eastern frontiers, a lot of their infrastructure remains.

On the right: Byzantine aqueducts at **ŞANLIURFA** (historic Edessa, now in Turkey)..



At Byzantine **DARA**, along the southern border of today's Turkey, it was crucial to collect the runoff during the winter rainy season. The house below rests on a remarkable foundation, a large cistern, and the remains of another cistern, now bereft of its vaulting, can be seen on the outskirts of town,



Even more impressive are the huge cisterns (*right*) at **RESAFA** in the Syrian desert south of Raqqa but not directly on the Euphrates. The site was important as a fortress and also for the location there of a much revered Christian shrine. Even under the Umayyads it retained its importance and for a time was the residence of the caliph. The early Islamic rulers maintained the previous hydraulic system which filled the huge cisterns (their tops barely visible in the partial panorama *below*) with the seasonal rainwater, directed into them through a complex system of levees and dams.





PETRA, the Nabataean capital and for a long time the arbiter of the spice trade through the Middle East, perhaps best embodies the way that indigenous and borrowed technologies were employed to enable the city to survive in a forbidding climate. Petra ran the danger of flash floods but also had to supply itself with water in an arid land where there were few springs. A diversion tunnel (analogous to the one built by the Romans at Selucia in Pieria) helped keep floodwaters out of the narrow canyon (*siq*) that provided the main access to the city. Dams were built to block flooding from intersecting wadis and also to collect water. Cisterns and channels were everywhere, and there was extensive use of ceramic pipes, sediment collection traps and connection boxes that could direct the water to more than one level where it was needed.

Right and below: a dam (upper right in picture) and cistern in front of a temple.

Lower right: cisterns at the High Place of Sacrifice.



KAREZ AND QANAT: TAPPING GROUNDWATER

Right: A satellite image showing the wellheads of the *karez* system supplying the **TURPAN** oasis.

Below: Model in the **YAZD**, Iran, water museum showing section of a *karez*.



In the dry regions along the Silk Roads (and they were ubiquitous), every possible technique for obtaining water would be used. One of the most widespread was to dig tunnels that might extend for dozens of kilometers to tap underground water flow from neighboring hills and bring it to the lowlands for drinking and irrigation. Such *karez* (also known as *qanats*) are still widely used today in Iran, Central Asia and Xinjiang.

Above: A cooling tower over the entrance to a *karez* well in Yazd, with a model showing a cutaway view of such a structure. *Right:* A cistern at ground level and stairs leading down into a *karez* in the Yazd bazaar.





There were extensive networks of caravanserais criss-crossing the dry lands of the Middle East and Central Asia. All of them had to be located at a source of water, be it cisterns, wells or the occasional spring. The overland trade routes continued to flourish down to the modern era thanks in part to the considerable efforts by the Mughals and Safavids to build the infrastructure which made it possible. Here is a caravanserai at **KHOJATABAD** in Iran (*top photo*), facing a fortress (the picture below it). They were supplied with water from a spring.



Well water can be raised by hand, as at a textile factory in **MANDALAY**, Myanmar (on the *left*), or by yoking animals to a geared system, as reconstructed *above* at the Umayyad bathhouse in the Jordanian desert at **QUSAYR AMRA**.



Over the centuries in much of the world, water wheels have been used to raise or direct water. One can still see a whole line of them along the Yellow River at LANZHOU, where once presumably they supplied much of the city's water supply via the wooden pipes that let off from the tops of the wheels. In Syria, the water wheels at HAMA on the Orontes are famous, with wheels of different sizes raising the water to different levels and releasing it into masonry aqueducts. Near the top of the rotation, the water in the boxes on the wheel pours out into a trough on the aqueduct.



WATER POWER



From the time water wheels and turbines were invented, the power generated by moving water could be applied to various tasks. I encountered this in an unexpected way when riding a mountain bike along the **EAST KARAKOL VALLEY IN KYRGYZSTAN** in 1995. Stopping and being invited in for traditional hospitality, I noticed a tiny electric bulb hanging from the rafters. The host then took me out to see the small electric generator he had installed in the stream next to his camp, where he could turn on the flow of the side channel into it simply by lifting a metal plate. This was a family still herding in the pastures by horseback in the summer, but then trucking the sheep and goats via the dirt road down to the winter village at the end of the season.



The stonecutters at **JERASH**, one of the flourishing Roman cities of the Decapolis in Jordan, did not have electricity at their disposal, but they did know how to use water power. Shown here is a reconstruction based on careful study of archaeological remains, of a water-powered saw that was used to cut the stone blocks for erecting what is still a very imposing array of buildings. The saw (and nearby a pottery kiln), were located right next to the Temple of Artemis.



Mills in the mountain knot of Central Asia show a combination of traditional and modern technology. At *top left* is the ruin of a traditional mill in GULMIT, Hunza Valley, Pakistan, photographed in 1995. The remaining pictures are from MUSTANG, Nepal, in 2013, the mill *top right* a functioning one fed by a mill race built down through the middle of the village. *Below* one can see a similarly man-made channel leading to a wooden trough into a now disused mill building off to the right, the settlement a more remote one. At *bottom*, a woman grinds grain in the first of these mills, the millstones powered by a metal horizontal water wheel, shown underneath where she is working.



Water Mills in Iran



At SHUSTAR (top four pictures), a Sasanian era dam diverted water from the river to a canal that led to town, where horizontal wheel mills (their workings shown in the diagram), lined each side of the waterway. At DEZFUL, vertical wheel mills were built out into a rapidly flowing section of the river, a reconstruction and one of the huge millstones shown on the right.

BEFORE THERE WERE
SOCIAL MEDIA...



In **EPHESUS** (*top pictures*) one might meet an acquaintance at the public latrine, where wastes were flushed away by running water. In **MILETOS** (*above right*), as in most other Roman cities of note, the great public baths were the meeting place of the elite. And in the Islamic world (*right*), public baths too were an essential part of the infrastructure, here a model of the one at **BULGAR** on the Volga and (*below right*), the warm room of the bath at Islamic **GRANADA** in Spain.



And there was always the town well or pump, here **BHAKTAPUR**, Nepal, before the earthquake of 2015.



WATER AND WORSHIP



In Islam, ablutions before prayer are *de riguer*. So every mosque provides an appropriate place to wash. *Top above* shows the pool (*khauz*) in front of the Bolo Khauz mosque in **BUKHARA**, a photo from 1969. *Above right*, a man at his ablutions in the courtyard of the Great Mosque in **ALEPPO** in 2010. The ablution fountain in the courtyard of the Ulu Camii in **DIYABAKIR**, Turkey, has well-worn faucets and a sign reminding users to keep it clean.



Many Muslims also regard as holy water sources they associate with one of the prophets. At **ŞANLIURFA** (*below*), a complex with a large pool next to a spring is connected with the belief that Abraham was miraculously saved from death by the appearance of the water. The man praying here invited me to drink of the holy water. Also at Şanlıurfa is a huge new complex built around an underground chamber said to be the cave of Job, and a well identified with an appropriate Quranic citation that also is connected with Job (Eyub).



Gods associated with water feature prominently in many cultures. For the Romans, public nymphaea, such as this grandiose one *on the right* at **JERASH** in Jordon, had fountains and images of water nymphs. On **RHODES** (*below*), the Roman nymphaeum was connected with a network of grottoes through which flowed a spring.



Villas of the wealthy, such as that of Giulia Felice in **POMPEII**, not only had pools in the gardens but also their private nymphaea, decorated in this case with paintings showing “nilotic” scenes with dwarves on boats, this one carrying a load of amphorae. The painting is now in the Archaeological Museum in Naples, though other parts of the house retain paintings on the walls and can be viewed *in situ*.

On the *right* here is a bathing pool in the palace compound at **व्हाक्तपुर**, Nepal, presided over by a gilded head of Vasuki, the snake god, and surrounded by the serpent’s body.





Above: Euphrates and the river gods, a mosaic from **ZEUGMA** on the Euphrates.



Left: The River goddess Yamuna. *Right:* The river goddess Ganga, from **RAJASTHAN**, ca. 800 CE. Coll. of the Los Angeles County Museum of Art.



Below: Remains of a vessel used to store the holy water of the River Ganges, at the Mughal palace site of **FATEHPUR SIKRI**.



Left: Statue of the water goddess from ancient **MARI** in Syria. Collection of Aleppo National Museum.

Below: The Anahita temple, at Sasanian **BISHAPUR**, Iran.





Sacred springs are found in many cultures, the one here in northern Xinjiang on the way to Lake Kanas. Whether or not they are identified by a highway sign, they are often festooned with prayer offerings.



Commercial promotion of almost anything that might attract tourists should not obscure the fact that LAKE NAMTSO occupies a special place in Tibetan Buddhism, the cliff overlooking it draped in prayer flags and the lake visited by pilgrims as well as the hordes of tourists.



Left: Water is important in Buddhist worship, here pure bowls of it on an altar in MAIWASI Temple, Aba Tibetan and Qiang Autonomous Prefecture, Sichuan.



Right: At the Shwedagon Pagoda in YANGON, Myanmar, "anointing" a Buddhist image at one of the stations marking the day in the week when one was born, the ritual invoking good fortune.

WATER FOR PLEASURE IN DOMESTIC SPACE



At the House of the Faun in **POMPEII**, a pool with a faun statue greeted visitors as they entered the garden. The original is now in the Naples Archaeological Museum along with the most famous of the objects that was in this garden, in the pavilion in the background, the mosaic depicting Alexander the Great fighting the Persian King Darius.



Domestic space in many cultures is shielded from the street, whereas the atria and porches within open onto gardens where the family can move about unobserved by outsiders. This certainly was true for the Romans, whose houses were designed to capture rainwater from the roofs into basins as shown *middle right* (a house in Pompeii) and where both painted garden scenes and real pools with dolphins (depicted swimming around the edges in the mosaics) might be seen. The house with the pool, the floor original, is a reconstructed Roman villa on the island of **Kos** in the Aegean.



Image source: Harvard Art Museums/ Arthur M. Sackler Museum. Gift of John Coelet; <<https://ids.cache.harvardartmuseums.org/ids/view/17810868?width=3000&height=3000>>

Pleasure gardens with water features were common in the Islamic world, little tastes of Paradise. *At left:* Two views of the renowned Fin Gardens in **KASHAN**, Iran. *Above:* A Mughal miniature, dated 1588, from the collection of Harvard's Art Museum. *Below right:* The Generalife at the Alhambra, **GRANADA**, Spain.



BOATS

Here I must rely heavily on artistic representations, museum models, and but minimally on actual archaeological evidence, which can be found in, for example, the excavation reports from underwater archaeology. It is certainly of interest to see how traditional methods for boat construction are being used still, the results providing an opportunity to test the handling characteristics of vessels from much earlier centuries.

A lot can be learned if we begin with the Vikings, my examples here from the Viking Ship Museum at ROSKILDE in Denmark.



Among the most important discoveries for our understanding of 11th-century shipping in the Baltic are the boats sunk at Skudelev to block an invading fleet. Their remains, brought up out of the water, are displayed in the Roskilde museum. Careful study has made it possible to reconstruct exact replicas, those on the left being a small warship and a cargo boat (the one at the right) 14 m long that could have carried about 5 tons.

The secret to Viking ship building was the radial splitting of the logs, making it possible to construct a hull of very light weight but strong and flexible. This helps explain how the Vikings could make it through the rivers of Eastern Europe over portages to get Arab silver from the Middle East and raid Byzantium..



This late 10th century runestone found at Pilgård on the Island of GOTLAND commemorates a Viking who died on the rapids of the Dnieper River. In the collection of the Gotlands Museum.





One of the most important discoveries on the seabed was off the Anatolian coast near **ULUBURUN**, a ship that sank ca. 1300 BCE with varied cargo that included tin ingots (presumably from Central Asia), hippopotamus tusks, ingots of blue glass and much more. It is vivid evidence of the scope of international trade well before the opening of the so-called Silk Roads.

Shown here is a reconstruction image with a view of its contents and a display of the artifacts as they had scattered on the seabed. In the museum at Bodrum.

Common images of **PALMYRA**, which flourished because of the international trade, normally focus our attention on camel caravans. This Palmyrene relief from early in the Common Era reminds us that shipping was a key to a lot of that prosperity. The city is on a main route leading east to the Euphrates, and the goods then would have traveled the river route to and from the Persian Gulf and beyond. Collection of the Palmyra Museum.



In the Indian Ocean, goods commonly would have been carried on lateen-rigged dhows like this one in the Greenwich Maritime Museum. A somewhat fanciful image of an Arab boat is in the 13th-century Paris manuscript of the *al-Maqāmāt al-ḥarīriyah*.

While we know that Muslim sailors and their boats were active on the routes all the way to China from the time of the Tang Dynasty, nautical archaeology is also revealing a great deal about the construction and cargoes of East Asian ships, some of them perhaps analogous to the ones shown in these models from the Naval Museum in Venice.



The model *on the left* shows an ocean-going junk, possibly similar to those which were on the famous voyages of the Muslim eunuch admiral Zheng He into the Indian Ocean in the early 15th century. at a time when Chinese nautical technology was still well in advance of that in Europe.



On the very large INLE LAKE in Myanmar boats are essential transportation, the larger ones all powered by out-board motors. However, the construction techniques are traditional, with hand-sawing of the thin planks, shaping of the ribs, sealing of the seams.



VENICE

In any history of the Silk Roads, VENICE looms large, and not merely because Marco Polo was a Venetian, even if he is emblematic of the far-flung commercial interests of the city on the lagoon at the head of the Adriatic. While Venetians did not always dominate the Mediterranean and Black Sea trade to the East, they were among the key players even as Venice began to decline in the 16th and 17th centuries.



Remains of a Venetian harbor fort on the island of PAROS in the Aegean



The courtyard where perhaps Marco Polo's house once stood.



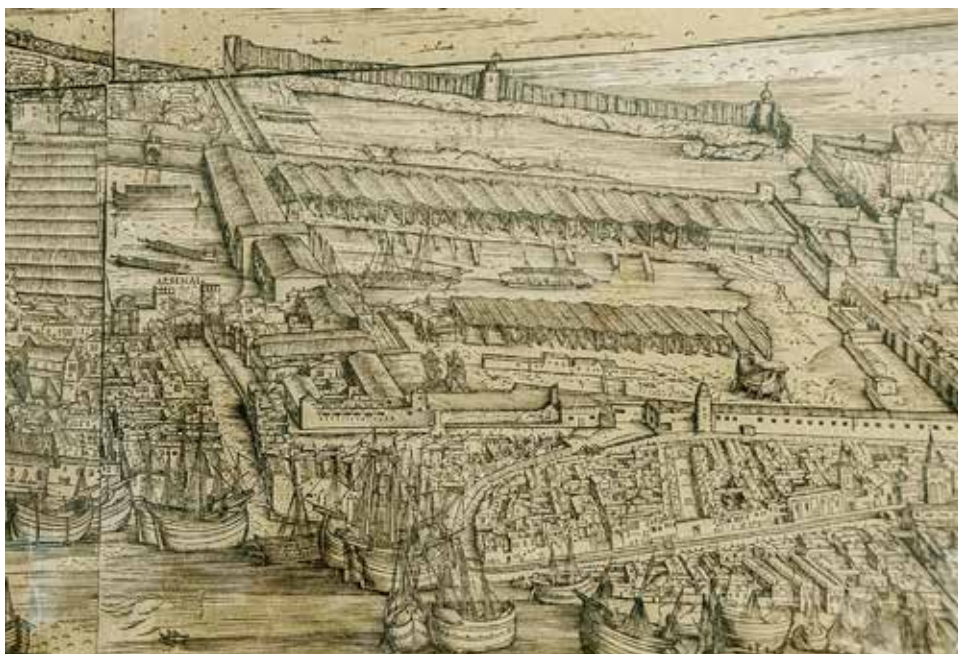
Venetian merchants decorated their houses with testaments to their involvement in the Asian trade, the relief sculpture here reminiscent of a depiction on a tomb brick excavated at Dunhuang, where the cameleer is identified as a Central Asian by his dress.



Venetian sea power made it all possible, and the Venetians exacted their price. In the case of the Fourth Crusade, this meant diverting the crusading army to Constantinople, which it took by storm in 1204. The famous gilt bronze quadriga that decorated San Marco (and is now safe from the elements in the cathedral museum, replaced by a replica over the façade) was part of the spoils.



While for tourists today Venice's maritime glory has shrunk to gondolas in the canals (a rare workshop still makes them), what was really important was the massive shipyard at the Arsenal, shown in an engraving below, which could turn out a full-sized warship in a day or two.



A Venetian galleon of the 16th century, shown in a model at the Naval Museum, probably was very similar to the Dutch and Portuguese ones of the same era in the Indian Ocean which may have inspired the Safavid artist's depiction in the miniature from the David Collection.

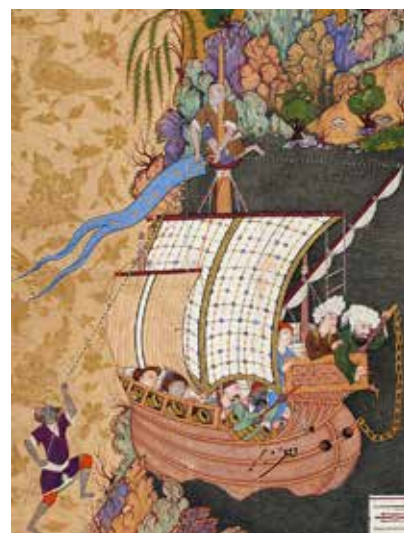


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