

Cultures in Contact

Central Asia as Focus of Trade, Cultural Exchange
and Knowledge Transmission

Edited by
Christoph Baumer, Mirko Novák
and Susanne Rutishauser



CULTURES IN CONTACT

Central Asia as Focus of Trade, Cultural Exchange and Knowledge Transmission

SCHRIFTEN ZUR VORDERASIATISCHEN
ARCHÄOLOGIE

Herausgegeben von Winfried Orthmann,
Jan-Waalke Meyer und Mirko Novák

Band 19

2022

Harrassowitz Verlag · Wiesbaden

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The publication of this book was supported by a grant of the Society for the Exploration of EurAsia, Hergiswil, Switzerland.

Editing: Sabine Ecklin

Typesetting and layout: Sabine Ecklin

Proof reading: Pippa Brown

Russian language editing and harmonisation of the bibliographies: Anna Kharitonova, Anastasia Belozeroва and Zumrad Ilyasova

Cover illustration: Inscribed gem intaglio with a Middle-Persian inscription from Kesken-Kuyuk-Kala, Kazakhstan, fourth-fifth (or first-second) century CE (drawing: Gabriele Elsen-Novák)

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The editors thank the following institutions for their generous support of the conference: The Society for the Exploration of EurAsia; The Swiss Academy of Humanities and Social Sciences (SAGW); The University of Bern and The Swiss Society for Ancient Near Eastern Studies (SGOA).



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Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the internet at <https://www.dnb.de/>.

For further information about our publishing program consult our website <https://www.harrassowitz-verlag.de/>

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Published by Otto Harrassowitz GmbH & Co. KG, Wiesbaden 2022

ISSN 2196-7199
eISSN 2701-2514
DOI: 10.13173/2196-7199



ISBN 978-3-447-11880-4
eISBN 978-3-447-39296-9
DOI: 10.13173/9783447118804



Contents

General Overview and Topographical Maps	viii
Christoph Baumer, Mirko Novák and Susanne Rutishauser Introduction	1
Turkmenistan	
Michael Mäder Bronze Age Sceptres and Staffs from Elam and Margiana, and their Possible Names in Cuneiform and Linear Elamite	15
Luca Forni Sharing Spiritual Life and Belief in the Murghab Region (Southern Turkmenistan) New Evidence from Bronze Age Seals	35
Gian Luca Bonora Lock-shaped Stone Handbags (<i>Pierres Ansées</i>) from Central Asia Typology, Distribution, and New Findings	51
Barbara Cerasetti, Roberto Arciero, Traci N. Billings, Maurizio Cattani, Luana D’Ippolito, Luca Forni, Elise Luneau, Kyle G. Olson, Alberto C. Potenza, Lynne M. Rouse, Robert N. Spengler III The Rise and Decline of the Desert Cities The Last Stages of the BMAC at Togolok 1 (Southern Turkmenistan)	89
Aydogdy Kurbanov Between Two Cultures The Archaeological Record of Akdepe	117
Uzbekistan/Tajikistan/Afghanistan/Pakistan	
Johanna Lhuillier Intercultural Interactions of the Sine Sepulchro Cultural Community (Handmade Painted Ware Cultures) of the Early Iron Age with the Neighbouring Cultures of Asia and the Near East	135
Sonja Kroll, Mike Teufer, Natalia Vinogradova, Yuri Kutimov, Giovanna Lombardo, Delphine Bosch, Marjan Mashkour Isotopic Studies and Archaeological Evidence in Bronze Age Tajikistan The “Lady from Gelot”	153
Andrei V. Omel’chenko Nomadic Influence in Sogdian Domains New Discoveries of Ancient Weapons in the Bukhara Oasis (Uzbekistan)	167
Alisher Begmatov Cross-cultural Exchange across Eurasia as Reflected in the Sealings from Kafir-kala in Samarkand	193



Sara Peterson A Study of the Gold Folding Crown from Tillâ-Tepe as an Indicator of Cultural Exchange	205
Shakirdjan R. Pidaev Monumental Narrative Paintings of Karatepa in Old Termez, South Uzbekistan	225
Claude Rapin, Mutalib Khasanov, and Shokhimardan Rakhmanov The Iron Gates Wall near Derbent (Uzbekistan) From Alexander the Great to the 19th Century	233
Silvia Pozzi and Sirojiddin Mirzaahmedov Bactrian Influences in the Early Medieval Re-foundation of Vardāna	261
Jacopo Bruno and Gabriele Puschnigg Reflections on Ceramics in the Bukhara Oasis New Data from the MAFOUB Project	277
Ilaria Vincenzi Uch Kulakh: Cultural Contacts in the Early Medieval Period	289
Ehsan Shavarebi Gesticulationes Sogdianorum A Preliminary Study of Hand Gestures in Sogdian Iconography: their Origins and Significance	305
Michael Shenkar, Sharof Kurbanov, Abdurahmon Pulotov, and Firuz Aminov The Eastern Zeravshan Valley in the Early Islamic Period (8th to 9th Century CE) New Evidence from the Sanjar-Shah Excavations (2016–2019)	327
Pavel B. Lurje The Three Brothers' Houses? An Elusive Modular Block in Ancient Panjikent	351
Djangar Ilyasov End of a Long Way <i>Tamga</i> Signs on Ceramics from Qarshovul Tapa	377
Djamaliddin K. Mirzaahmedov, Munira N. Sultanova and Shuxrat T. Adylov Early Karakhanid Glazed Ceramics of Bukhara Based on a Corpus of Material from the Citadel of Vardanzeh	393
Azim Malikov The Cultural Traditions of Urban Planning in Samarkand during the Epoch of Timur	407
Julio Bendezu-Sarmiento Archaeological Survey and First Preliminary Results of the Site of Shahr-i Gholghola (Afghanistan) The Bamiyan Valley as a Centre of Trade and Cultural Exchange	421

Azerbaijan

Farda Asadov

Archaeological Evidence of the Presence of the Khazars
in the Territory of Azerbaijan in the 7th to 10th Century CE 445

Shahin Mustafayev

Archaeological Representations of Caspian Trade Routes
in North-eastern Azerbaijan 453

Kazakhstan and Kyrgyzstan

Bakyt E. Amanbaeva

New Information on the Ak-Beshim Site (Chui Valley, Northern Kyrgyzstan) 467

Valerii A. Kolchenko

Hearth Pedestals of the Medieval Chuy Valley as Ethno-cultural and Chronological
Indicators (of the Genesis of the Medieval Cities of the Chuy Valley) 473

Charles A. Stewart and Steven T. Gilbert

Ili Valley Settlement
Trade along the Northern Silk Route 483

Dmitriy Voyakin

The Hidden Oghuz
Some Remarks on the Archaeological Investigation of the Kesken-Kuyuk-Kala Site 503

Xinjiang and Tuva

Alexey A. Kovalev

The Chemurchek (Qie'muerqieke) Cultural Phenomenon
As a Result of Western European Migration to Dzungaria and the Mongolian Altai
(on Archaeological Data) 531

Tomas Larsen Høisæter

The Kingdom of Kroraina
At the Crossroads of the Ancient World 555

Marina E. Kilunovskaya and Pavel M. Leus

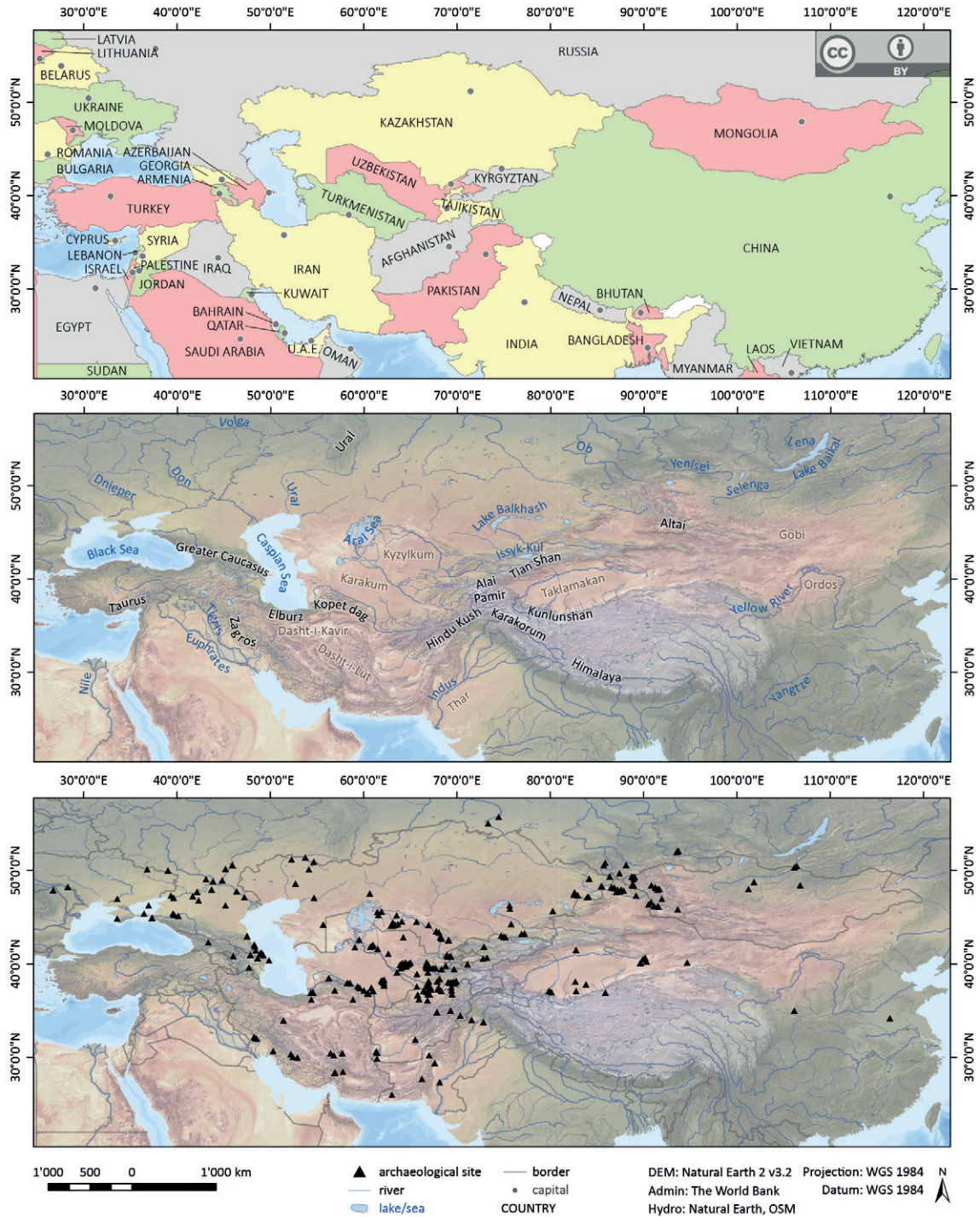
Burials with Openwork Belt Plaques of the Xiongnu Period from Tuva 567

Gino Caspari

The Earliest "Scythians" in Tuva and the World Beyond
Architectural Ideas and Interaction 587

Comprehensive Index of Toponyms 601

List of Authors 613



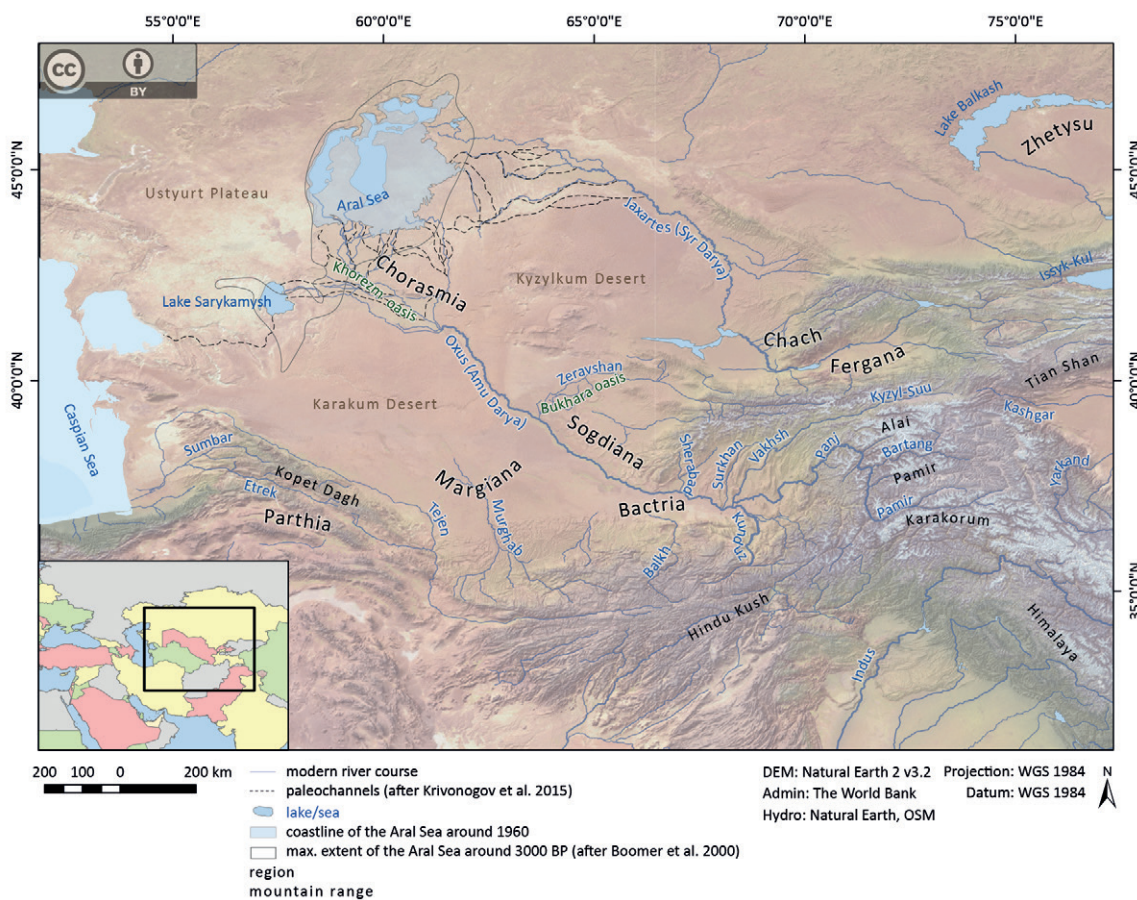
General overview map of Central Asia with neighbouring regions, consisting of a political map, a topographical map with relevant geographical toponyms, and a map with the locations of archaeological sites mentioned in this volume (RUTISHAUSER 2022b).

For the dataset with a list of the archaeological sites in different file formats (geoJSON, kml, csv, shp), see RUTISHAUSER 2022a. This map is published on the repository zenodo under a Creative Commons License CC BY 4.0. This license requires that reusers give credit to the creator. However, it allows reusers to distribute, remix, adapt, and build upon the material in any medium or format, even for commercial purposes.

Rutishauser, Susanne (2022a): Dataset-CA2. Zenodo: <<https://doi.org/10.5281/zenodo.6862012>>.

Rutishauser, Susanne (2022b): General Overview Map of Central Asia with Neighbouring Regions. Zenodo: <<https://doi.org/10.5281/zenodo.6873663>>.



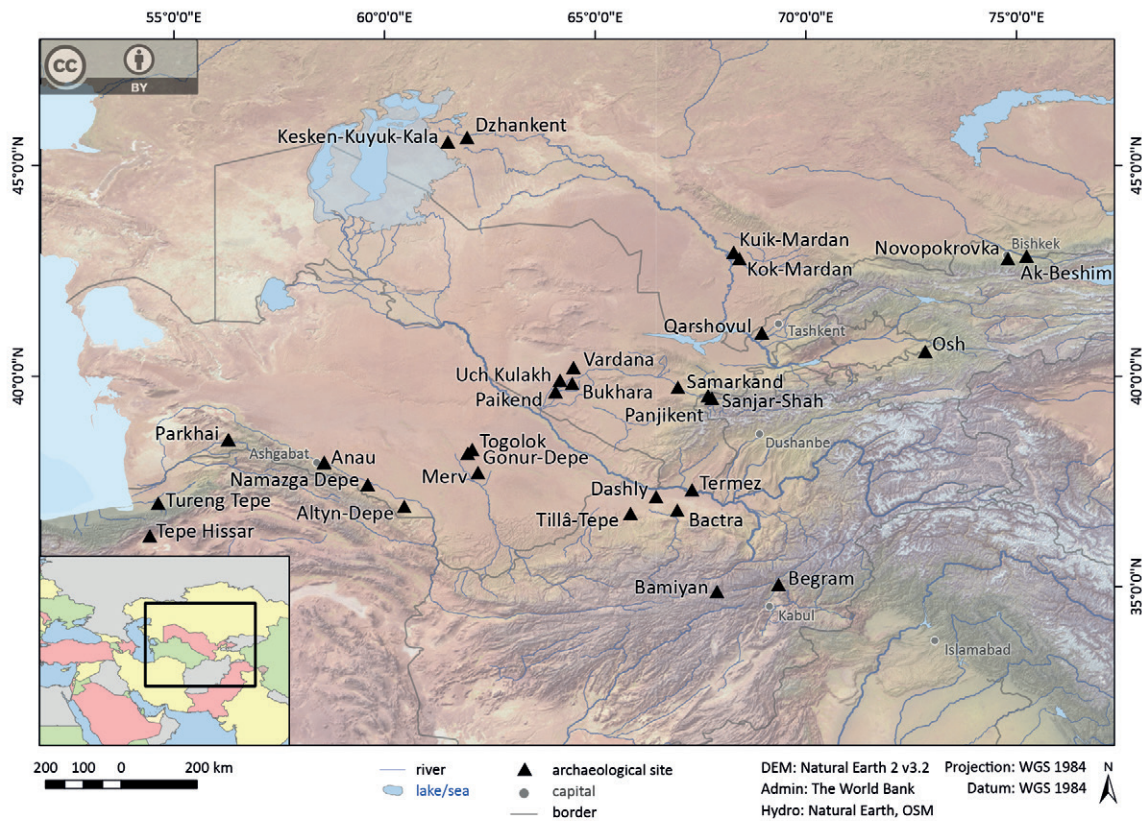


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Topographical map of Central Asia with historical regions (RUTISHAUSER 2022c).

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Rutishauser, Susanne (2022c): Topographical Map of Central Asia with Historical Regions. Zenodo: <<https://doi.org/10.5281/zenodo.6874832>>.



Topographical map of Central Asia with important archaeological sites (RUTISHAUSER 2022d).

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Rutishauser, Susanne (2022d): Topographical Map of Central Asia with Important Archaeological Sites. Zenodo: <<https://doi.org/10.5281/zenodo.6875155>>.

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2022c: Topographical Map of Central Asia with Historical Regions. Zenodo: <<https://doi.org/10.5281/zenodo.6874832>> (last access: July 2022).

2022d: Topographical Map of Central Asia with Important Archaeological Sites. Zenodo: <<https://doi.org/10.5281/zenodo.6875155>> (last access: July 2022).

Introduction

Christoph Baumer, Mirko Novák and Susanne Rutishauser

The Second International Conference on Central Asian Archaeology, organised by the Society for the Exploration of EurAsia (<http://www.exploration-eurasia.com>) and the Institute for Archaeological Sciences of the University of Bern (<https://www.iaw.unibe.ch>), took place at the University of Bern, Switzerland, from 13th to 15th February 2020 – only shortly before the outbreak of the Covid-19 pandemic would have prevented attendance at such an event. In total, 71 participants from 26 countries came together and 41 papers were read on these three days. The conference also provided the framework for a meeting of representatives of the UNESCO-affiliated International Institute for Central Asian Studies (IICAS). The programme is listed at the back.

The event was supported financially by the Swiss Academy of Humanities and Social Sciences (www.sagw.ch) and by various foundations and private sponsors, to whom the organisers express their deep gratitude. Abhinay Agarwal (Viva Management GmbH) and Theresé Weber (Society for the Exploration of EurAsia) were in charge of logistical organisation. During the conference, Julien Rösset and Sven Dvorak took care of technical support. Further assistance was provided by Kasia Langenegger, Selin Gür, and Setareh Ebrahimiabareghi (all from the IAW, University of Bern). We also thank Pippa Browne for the English language editing, Anna Kharitonova, Anastasia Belozeroва, and Zumrad Ilyasova for the Russian language editing and the harmonisation of the bibliographies, Susan Vaughan for the indexing, and most of all Sabine Ecklin (IAW, University of Bern) for the volume's editing and typesetting. They have helped to realise this publication through their commitment.

The conference was dedicated to the topic of *Cultural Contacts in Central Asia*. For a long time, the only vaguely defined area of Central Asia¹ occupied

1 We here equate the term *Central Asia* with the modern states of Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan (see also the map presented by ARWA: <https://arwa-international.org/archaeology/geographical-range/>). However, we are fully aware that this definition is largely ahistorical and that, depending on the period, some of the territories of these states belonged to large-scale historical units such as the Sasanian Empire, early Islamic Khorasan, or the Western Provinces of the Han and Tang Empires, and were thus closely linked to Iran or China. Also, the boundaries are always to be seen as fluid: thus, for example, the area on both sides of the ridge of the Kopet Dag has always been

a peripheral position in archaeological research and was overshadowed by the ancient and early Medieval cultures of the Mediterranean, Western Asia,² India, and China. Its role was often limited to being the home of nomadic tribes that occasionally infiltrated the neighbouring regions, or to a connecting and transit area through which important traffic routes such as the Silk Roads ran, thus linking the high cultures of their time; and on the rare occasions when Western archaeologists such as Sir Aurel Stein, Alfred Foucher, or Albert Grünwedel conducted research in Central Asia, their interest was less in past local cultures than in searching for traces of a putative legacy of Hellenistic expansion or in identifying early Buddhist relics. It was only through the research of mostly Soviet archaeologists since the late 1940s that the view slowly began to change. The areas of Central Asia were rediscovered as the home of high-level cultures that were granted an independent status and cultural achievements. Here, both urban and non-urban societies emerged.

The First International Conference on Central Asian Archaeology in Bern was held in 2016 and was dedicated to the topic of *Urban Cultures from the Bronze Age to the Karakhanids*; its proceedings were published in 2019.³ During the second conference, the question of Central Asia's role as the setting for cultural contacts was to be explored. However, while formulating the topic, the questions of what is meant by *cultures* and how one can define and recognise *cultural contacts* and *contact cultures* as such were raised first.

Culture is a man-made complex of collective constructions of meaning, forms of thought, and values, which manifests itself – in a semiotic sense – as a

close to the mountains, although today a political and linguistic boundary runs between them, and the mountains now define the border between *Western* and *Central Asia*. The same applies to other areas, especially in the region of the ancient kingdoms of Sogdiana, Bactria, and Margiana, some of which extended into areas that we now consider as belonging to the *Near* or *Middle East* and thus to *Western Asia*.

2 Levant, Anatolia, Mesopotamia, and Iran/Afghanistan, also labelled as *Near East*. In the US-American literature, the term *Middle East* is applied instead for Western Asia, leaving it open to the readers' interpretation as to where the "Near" East must then be according to that perspective.

3 BAUMER/NOVÁK (ED.) 2019.



communication system.⁴ Consequently, semiotics conceives culture as a coherent system of signs that is indicated by social practices and forms of expressions, including religion, language, architecture and dwelling practices, art production, marriage customs, dress styles, food rules, and many more. On this basis it is possible, on the one hand, to recognise that individuals or groups of people can be at the same time part of several communication systems (and thus cultures) and, on the other hand, to understand the transitions between different cultures not as sharp boundaries but as fluid zones, leaving space for hybrid or creole cultures in between.

A major problem in historical sciences like archaeology is that *culture* is often misinterpreted as an expression of *ethnicity*.⁵ It is true that cultural identities define themselves by contrasting with the “other”, based on single categories such as language – as it is also the case with ethnic groups. Ethnicity describes a socially structured community of individuals, who share elements and values of a common culture. It defines itself very often artificially through the postulation of common ancestry. However, sometimes people who share a common culture and speak the same language may belong to different identity groups that maintain distinction from one other, thus defining separate ethnicities.⁶ Conversely, people can form an identity group or even an ethnicity despite speaking different languages and having different cultural characteristics.⁷ Languages nevertheless have an important role to play in the formation of either cultural or “ethnic” identities because they can, in interaction with other cultural factors, define groups whose members maintain very heterogeneous lifestyles, e.g. sedentary and nomadic members of the same ethnicity or tribe.⁸

Culture is not a static entity and an unchanging constant, but a dynamic and unstable process and a construct that is subject to permanent change. Inherited traditional elements and values are permanently questioned and transformed, sometimes redefined and reweighted according to the changing circumstances; from time to time, new elements are

adapted and incorporated into the native cultural system. Cultural phenomena and elements that were essential to the (self-)definition of a culture for a certain period can suddenly be seen as irrelevant and insignificant and be replaced by new defining elements. This can be motivated either by internal social or technological developments, or by impulses from outside caused by external contacts.

Such contacts between different groups and cultures can have several reasons, motivations, and modes such as trade, technology and knowledge transfer, intermarriages, migration, etc. They can be driven by institutions, individuals, or media (artefacts, tools, texts, etc.), be based on various factors (economic exchange, political domination, group migration, mobile craftsmen and preachers, etc.), and happen with varying intensity (from punctual encounters with selective adaptations of singular elements to violent clashes with enforced exchange or enduring relationships). Important factors in this process are the geographical and topographical conditions as well as the existing or non-existing infrastructure (traffic routes, permanent settlements, etc.) The contacts can happen directly by representatives of the two involved cultures or indirectly by transmitters as a third party, and either in a border region that then served as an exchange zone or in a multicultural urban centre in which representatives of various cultures may meet and exchange ideas, goods, or technologies. Historical examples of such hubs were Babylon, Constantinople, Baghdad, and Samarkand, where people from far-distant countries came together temporarily or constantly, bringing in their own cultural elements.

The pure exchange of goods does not yet, and not necessarily, lead to a cultural transfer. Individual exotica can be traded as mere status symbols without any content. Yet when they are either adopted with the original values associated with them, or provided with their own, new content, the process of appropriation begins – this is called *interference*.⁹ Such an interference occurs when the production of the adapted element is no longer dependent on its origin, but is imitated and integrated in its new environment and repertoire.

A postulated contact between cultures based on the comparison of material or immaterial elements must be verifiable and comprehensible, since the use of formal or structural criteria only remains insufficient to draw conclusions about cultural contacts. The interpretation of similar signs identified in different cultures, without taking into account the associated environments, leads to false hypotheses about cultural contacts. For example, in southern Arabia, the petroglyph of a cross can mean either a Christian symbol, or a local tribal sign and mark-

4 ECO 1994: 33–36. For the concepts of *culture* and *cultural contacts*, see GILAN 2004 with further literature, whose explanations and definitions we follow in essence here.

5 GILAN 2004: 13, following Hall 1997: 23–24.

6 See for example Germans, Austrians, and German-speaking Swiss, or French and French-speaking Belgians and Swiss.

7 See for example the Swiss, Belgians, or Canadians, who are all divided into two or more linguistic groups and nevertheless stress their national and political identities.

8 See for example Arab people, who share the same language and (for most of them) also their belief, and thus define themselves as one ethnicity but live in very different conditions within the broad range from nomadic, semi-nomadic, rural farming, or urban lifestyles. This is even true for individual tribes such as the Šammar.

9 GILAN 2004: 19, following the works of Itamar EVEN-ZOHAR 2010: 52–69.

er (*wasm*), or the Thamudic letter *ta*. The same is true for comparisons of pottery styles or shapes of weapons. An analysis that is limited to establishing formal similarities between elements of different cultures without exploring their causes – that is, without proving an actual derivation – remains insufficient; it cannot prove the historical reality of the transmission.

There is a broad range of reactions to cultural contacts and interferences, from defence and resistance to the acceptance and complete adaptation of new elements. In most cases a selective and pragmatic adaptation of individual elements, not infrequently combined with a new definition of their content and adaptation to their own value system, is the outcome of culture contacts. Some cultures are *per se* more open to foreign influences than others, which are deliberately isolating themselves. Historically, however, the latter were usually less capable of innovation due to their unwillingness to absorb impulses and were therefore less well prepared for changing circumstances.

However, it is also important to understand the circumstances in which cultural contacts occur: are they voluntary on both sides and based on equality and reciprocity, or are they forced upon the other by one side? Is the relationship symmetrical, or asymmetrical with one party adapting more elements of the other than vice versa? Was there even a complete domination by one party with the widespread erasure of the culture of the other party? Depending on these modes and the outcomes, the result may be either a *transculturation*, the creation of a new system through the mixture of different elements, or an *acculturation*, the asymmetric situation with one side adapting components of the other, which in the extreme may lead to a complete *assimilation*.¹⁰ In history, however, the cases of transculturation dominate by far.

Through constant and permanent contact between two or many neighbouring cultures, a special *contact culture* can emerge in the interface zone, the characteristic of which is the creation of a new system from the adapted and transformed elements in an extreme transculturation process.¹¹ It is sometimes considered a pure hybridisation or creolisation of cultures, thus ignoring the own dynamics of its development. Strictly speaking, every culture is a contact culture – but to a different degree. However, the term should be limited to cultures whose primary characteristics consist in the adaptation and reconfiguration of elements borrowed from immediately neighbouring cultures.

Due to its special geopolitical location, the geographical and climatic conditions, as well as the cultural-historical developments, Central Asia has

been considered in more recent research to be a typical example of such a *contact culture*, which in the course of history was influenced to varying degrees by the neighbouring cultures of West Asia, India, or China and thus produced many facets of cultural hybridisation. Only further research can show whether this picture is accurate or needs to be modified or even abandoned. With this volume, which makes the contributions of the conference accessible, we would like to provide a small piece of evidence for the elaboration of a synthesis on this topic, being fully aware that it will not be able to offer even a provisional answer. Perhaps such an answer will never be gained in view of the large space of Central Asia and its very complex history.

Предисловие

Вторая международная конференция по центрально-азиатской археологии, организованная Обществом по изучению Евразии (<http://www.exploration-eurasia.com>) и Институтом археологических исследований (IAW) Бернского Университета (<https://www.iaw.unibe.ch>), проходила в Бернском Университете, в Швейцарии, с 13-15 февраля 2020 года – совсем незадолго до того, как вспышка пандемии Covid-19 сделала бы участие в подобном мероприятии невозможным. 71 участников из 26 стран собрались и прочитали 41 доклад за 3 дня. В рамках конференции также состоялась встреча представителей Международного института центрально-азиатских исследований при ЮНЕСКО (МИЦАИ). Ее программа представлена на обороте.

Мероприятие прошло при финансовой поддержке Швейцарской академии гуманитарных и социальных наук (www.sagw.ch), а также различных фондов и частных спонсоров, которым организаторы выражают глубокую благодарность. Абиной Агарваль (Viva Management GmbH) и Тереза Вебер (Общество по изучению Евразии) отвечали за логистическую организацию. Техническую поддержку во время конференции оказывали Жюльен Рёсселет и Свен Дворак. Дополнительную помощь нам оказали Касья Лангенгер, Селин Гюр и Сетарэ Эбрахимиабареги (все из Института археологии Бернского университета). Мы также благодарим Пиппу Браун за редактуру английских текстов, Анну Харитонову, Анастасию Белозерову, и Зумрад Ильясову за редактуру русских текстов и гармонизацию библиографий, Сузан Воган за индексацию, и, в особенности, Сабине Эклин (IAW, Бернский университет) за набор текста и редактуру издания. Своей усердной работой они помогли подготовить данную публикацию.

10 GILAN 2004: 20.

11 GILAN 2004: 23.

Конференция была посвящена теме Культурных контактов в Центральной Азии. Длительное время не вполне четко очерченный регион Центральной Азии¹² занимал периферийное положение в археологических исследованиях и находился в тени древних и раннесредневековых культур Средиземноморья, Западной Азии,¹³ Индии, и Китая. Его роль часто сводилась к месту обитания кочевых племен, которые периодически проникали в соседние регионы, или же к контактной и транзитной зоне, через которую проходили важные транспортные пути, такие как Шелковый путь, соединяя, таким образом, высокие культуры того времени; в редких случаях, когда такие западные археологи, как сэр Аурэл Стейн, Альфред Фуше или Альберт Грюнведель изучали Центральную Азию, они больше были заинтересованы в поиске следов предполагаемого наследия эллинистической экспансии или в выявлении ранних буддистских реликвий, чем в предшествующих локальных культурах. Только благодаря исследованиям, в основном, советских археологов начиная с 1940-х годов перспектива постепенно стала меняться. Территории Центральной Азии были признаны родиной высоких культур, им был присвоен независимый статус и культурные достижения. Здесь развивались как урбанистические, так и не урбанистические общества.

Первая Международная конференция по центрально-азиатской археологии в Берне проводилась в 2016 году и была посвящена теме

городских культур от Бронзового века до Караканидов; ее труды были опубликованы в 2019 году.¹⁴ В ходе второй конференции планировалось изучить вопрос о роли Центральной Азии в установлении культурных связей. При формулировании темы, однако, в первую очередь возникли вопросы о том, что именно подразумевается под *культурами* и как определять и опознать *культурные контакты* и *контактные культуры* как таковые.

Культура – это созданный человеком комплекс коллективных смысловых конструкций, форм мышления и ценностей, которые манифестируются – в семиотическом смысле – как система коммуникации.¹⁵

Таким образом, семиотика понимает культуру как связную систему знаков, которая обозначается социальными практиками и формами выражения, включая религию, язык, архитектуру и формы жилищ, искусство, брачные обряды, виды костюма, пищевые привычки, и многое другое. На основании этого можно определить, с одной стороны, что индивидуумы или группы людей могут быть одновременно частью нескольких систем коммуникации (а значит культур) и, с другой стороны, рассматривать переходы между различными культурами не как четкие границы, а как подвижные зоны, которые оставляют промежуточное пространство для гибридных или креольских культур.

Значительной проблемой таких исторических наук, как археология, зачастую является неверная интерпретация культуры как формы выражения этнической принадлежности.¹⁶ Действительно, культурные единицы определяют себя на контрасте с «другим», основываясь на таких отдельных категориях, как язык, также как в случае с этническими группами. Этническая принадлежность описывает социально структурированное общество людей, которые разделяют элементы и ценности общей культуры. Очень часто она определяет себя искусственным путем, через постулирование общего происхождения. Однако, в некоторых случаях, лица, разделяющие общую культуру и говорящие на одном языке, могут относиться к разным группам идентичности, сохраняющим между собой различия, таким образом обозначая различную этническую принадлежность.¹⁷ И наоборот, люди могут объединиться в одну

12 Мы сопоставляем термин Центральная Азия с современными республиками Казахстана, Киргизстана, Монголии, Таджикистана, Туркменистана и Узбекистана (см. также карту, представленную ARWA: <https://arwa-international.org/archaeology/geographical-range/>). Однако мы отдаем себе полный отчет в том, что это определение антиисторическое и что, в зависимости от периода, некоторые из территорий этих стран принадлежали к масштабным историческим единицам, таким как Сасанидская империя, ранне-исламский Хорасан, или Западные провинции империй Хань и Тан, и, следовательно, были тесно связаны с Ираном и Китаем. Также, всегда стоит учитывать непостоянство границ, так, например, местности по обоим сторонам хребта Копетдаг всегда находились в тесном контакте, несмотря на то что сегодня политическая и языковая черта разделяет их, а горы теперь очерчивают границу между Западной и Центральной Азией. То же самое относится и к другим регионам, особенно на территориях древних царств Согдианы, Бактрии и Маргианы, некоторые из них простирались на земли, которые сейчас относят к Ближнему и Среднему Востоку, а значит к Западной Азии.

13 Левант, Анатолия, Месопотамия, и Иран/Афганистан, также известные как Ближний Восток. В американской литературе термин Средний Восток употребляется вместо Западной Азии, оставляя читателю открытой интерпретацию, где «Ближний» Восток должен находиться с этой точки зрения.

14 BAUMER/NOVÁK (ED.) 2019.

15 ESO 1994: 33–36. О концептах культуры и культурных контактов, см. GILAN 2004 с дополнительной литературой, чьи разъяснения и определения мы в основном следуем в данном введении.

16 GILAN 2004: 13, следуя HALL 1997: 23–24.

17 Например, немцы, австрийцы, немецкоговорящие швейцарцы, или французы и франкоговорящие бельгийцы, и швейцарцы.

группу идентичности или даже иметь одну этническую принадлежность, несмотря на то что они говорят на разных языках и обладают разными культурными характеристиками.¹⁸ Тем не менее, языки играют важную роль в формировании либо культурных, либо «этнических» идентичностей, поскольку при взаимодействии с другими культурными факторами они могут определять группы, члены которых ведут однородный образ жизни, например оседлые и кочевые члены одной и той же этнической общности или племени.¹⁹

Культура не является статичной единицей и неизменной константой, она динамичный и нестабильный процесс, а также конструкт подверженный постоянному изменению. Унаследованные традиционные элементы и ценности постоянно подвергаются сомнениям и трансформации, порой переопределяются и переосмысливаются в зависимости от меняющихся условий; время от времени, новые элементы адаптируются и внедряются в родную культурную систему. Культурные феномены и элементы, которые являлись существенными для (само-)идентификации культуры в определенный период могут внезапно стать нерелевантными и незначительными и заменятся новыми определяющими элементами. Это может быть вызвано либо внутренним социальным или технологическим развитием, либо импульсами извне, вызванными внешними контактами.

Подобные контакты между различными группами и культурами могут иметь разные причины, мотивы и формы, такие как торговля, обмен технологиями и знанием, смешанные браки, миграция и т.д. Они могут быть сподвигнуты институциями, отдельными личностями, или другими носителями (артефакты, инструменты, тексты, и т.д.), могут основываться на различных факторах (экономический обмен, политическое доминирование, групповая миграция, подвижные ремесленники и проповедники), и могут происходить с варьирующей интенсивностью (от точечных взаимодействий с селективными адаптациями отдельных элементов до насильственных столкновений с навязанным обменом и установлением длительных

связей). Важными факторами в этом процессе являются географические и топографические условия, а также имеющаяся или не имеющаяся инфраструктура (транспортные пути, постоянные населенные пункты, и т.д.). Контакты могут происходить напрямую между представителями двух задействованных культур или косвенно, через носителей в лице третьей стороны, и либо в пограничном регионе, который служит зоной обмена, либо в мультикультурном урбанистическом центре, в котором представители различных культур встречались и обменивались идеями, товарами, или технологиями. Историческими примерами подобных центров являлись Вавилон, Константинополь, Багдад и Самарканд, в которых люди из отдаленных стран собирались временно или навсегда, принося свои собственные культурные элементы.

Сам по себе обмен товарами между культурами не всегда, или не обязательно, приводит к культурному обмену. Экзотическими предметами личного пользования могли торговать как символами статуса, без какого-либо содержания. Однако, в случае, когда эти предметы либо присваиваются вместе с приписываемыми им изначально ценностями или обретают новое содержание, начинается процесс апроприации, называемый *интерференцией*.²⁰ Подобная интерференция происходит, когда производство адаптированного элемента больше не зависит от своего оригинала, а имитируется и интегрируется в новую среду и репертуар.

Постулированный контакт между культурами, основанный на сравнении материальных и нематериальных элементов, должен проследиваться и быть понятным, так как использование формальных и структурных критериев недостаточно для того, чтобы делать выводы о культурных связях. Интерпретация похожих знаков, выявленных в разных культурах, без учета привязанного к ним окружения, приводит к ложным гипотезам о культурных контактах. Например, в Южной Аравии, петроглифы в форме креста могут обозначать либо христианский символ, либо локальный племенной знак и метку (*васм*), либо тамудскую букву *та*. То же самое происходит и при сравнении керамических стилей и форм оружия. Анализ, ограниченный выведением формальных аналогий между элементами разных культур без установления их причин – то есть без отслеживания их истинного происхождения – недостаточен; он не способен доказать историческую реальность перехода.

Существует широкий спектр реакций на культурные контакты и интерференции, от обороны и сопротивления до принятия и полной адапта-

18 Например, швейцарцы, бельгийцы или канадцы, которые все разделены на две и более языковые группы и, тем не менее, подчеркивают свою национальную и политическую идентичность.

19 Например, Арабский народ, который объединяет общий язык и (в большинстве) вера, и который соответственно относит себя к одной этнической общности, но живет в очень разных условиях внутри широкого спектра кочевых, полукочевых, земледельческих и урбанистических укладов жизни. Подобные случаи встречаются даже внутри одного племени, такого как Шаммар.

20 Gilan 2004: 19, следуя работам Itamar Even-Zohar 2010: 52–69.

ции новых элементов. В большинстве случаев селективная и прагматичная адаптация отдельных элементов, нередко в сочетании с новым определением их содержания и адаптации их к собственной системе ценностей, и является результатом культурных контактов. Некоторые культуры, как таковые, более открыты к внешним влияниям, чем другие, намеренно себя изолирующие. Однако исторически, последние, как правило были в меньшей степени способны к инновациям из-за отсутствующего желания впитывать импульсы и, как следствие, хуже приспособлялись к меняющимся условиям.

Важно также понимать обстоятельства, в которых происходят культурные контакты: добровольны ли они с обеих сторон, основаны ли на равенстве и взаимности или же навязаны одной стороной, приводя к уничтожению культуры другой стороны, как это широко распространено? В зависимости от применяемых форм и их последствий, результатом может оказаться либо транскультурация, создание новой системы посредством смешения различных элементов, либо аккультурация, то есть ассиметричная ситуация, в которой одна сторона перенимает компоненты другой, что в экстремальном случае может привести к полной *ассимиляции*.²¹ На данный момент в истории, однако, преобладают случаи транскультурации.

Постоянный и долгосрочный контакт между двумя или несколькими соседствующими культурами в зоне взаимодействия может произвести особую контактную культуру, характеризующуюся тем, что создаётся новая система из

перенятых и трансформированных элементов в экстремальном процессе транскультурации.²² Зачастую этот феномен считают чистой гибридизацией или креолизацией культур, игнорируя при этом внутреннюю динамику его развития. Каждая культура, собственно, является контактной культурой – но в разной степени. Тем не менее, этот термин должен ограничиваться культурами, чья первоначальная характеристика состоит в адаптации и реконфигурации элементов, перенятых от непосредственно соседствующих культур.

Благодаря особому геополитическому положению, географическим и климатическим условиям, а также культурно-историческому развитию, в научных публикациях последних лет Центральную Азию стало принято считать типичным примером подобной контактной культуры, которая на протяжении своей истории в различной степени подвергалась влиянию соседних культур Западной Азии, Индии, или Китая и в последствии произвела множество граней культурной гибридизации. Только дальнейшие исследования могут показать, насколько точна эта картина и нуждается ли она в доработке или нам стоит отказаться от нее совсем. Этим изданием, которое предоставляет труды конференции в общий доступ, мы бы хотели представить небольшое свидетельство разработок по этой теме, полностью осознавая, что оно не способно предложить даже частичное решение. Возможно, такое решение никогда не будет достигнуто ввиду огромной территории Центральной Азии и ее сложной истории.

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21 GILAN 2004: 20.

22 GILAN 2004: 23.

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**UNIVERSITÄT
BERN**

Second International Conference
on Central Asian Archaeology
13th–15th February 2020

Cultures in Contact
Central Asia as Focus of Trade, Cultural Exchange and
Knowledge Transmission



Excavations in Sanjar-Shah, Tajikistan

Wednesday, 12th February 2020

- 13.30 **IICAS Meeting** (IICAS members only)
Venue: University of Bern, Mittelstrasse 43, 3012 Bern, Building Uni Mittelstrasse,
Room 116
- 18:00–19:00 Pre-Registration at the Hotel Kreuz, Zeughausgasse 41, 3011 Bern
- 19.00 Dinner (invited speakers)

Thursday, 13th February 2020

- 08.00 Registration (Unitobler, Lerchenweg 36, F012)
- 08:30 **Elena Mango** (Dean, Faculty of Humanities): Welcome address
- 08:45–09:10 **Mirko Novák** (Institute of Archaeological Sciences, Bern): Opening remarks
- 09.10–09.30 **Christoph Baumer (Society for the Exploration of EurAsia)**: The Society for the Exploration of EurAsia in Contact with the Past and Present

Session 1: Elam and Bactria

- 09.35–10:00 **Mirko Novák** (University of Bern): Cultures in Contact – Cultural Transformation – Transculturation. An Archaeological Perspective
- 10.00–10.25 **Michael Mäder** (University of Bern): The fist-sized „command batons“ from Elam and Bactria-Margiana
- 10.25–10.45 Discussion
- 10.45–11.10 *Coffee break*

Session 2: Turkmenistan

- 11.10–11.35 **Luca Forni** (University of Trieste): Sharing Spiritual Life and Beliefs in the Murghab Region: New Evidence from Bronze Age Terracotta Figurines and Seals
- 11.35–12:00 **Gian Luca Bonora** (ISMEO Ferrara): Lock-shaped Stone Handbags (Pierre Ansées) from Central and Middle Asia: Typology, Distribution and new Findings
- 12:00–12:25 **Barbara Cerasetti** (University of Bologna): Redefine the idea of BMAC through the last innovative data of the Late Bronze Age Margiana
- 12:25–12:50 Discussion
- 12:50–14:00 *Lunch*
- 14:00–14:25 **Katarzyna Langenegger** (University of Basel/Bern): Swiss Research at Gonur Depe in 2014 and 2015
- 14:25–14:50 **Aydogdy Kurbanov** (Lyon): Between two cultures - the archaeological record of Akdepe
- 14:50–15:15 **Johanna Lhuillier** (CNRS Lyon): Sine Sepulchro cultures of the Early Iron Age: an interconnected Central Asian community of cultures
- 15:15–15:40 **Sonja Kroll** (CNRS, Paris): Isotopic Studies of Bronze Age Societies in Central Asia and Iran
- 15:40–16:05 Discussion
- 16:05–16:30 *Coffee break*

Session 3: Central Asia I

- 16:30–16:55 **Gunvor Lindström** (DAI, Berlin): Hellenistic Bactria. A view from Torbulok, Tajikistan
- 16:55–17:20 **Aleksandr Naymark** (Hofstra University, New York): Early History of Sogdiana and its international trade: silk, fur, amber, and slaves
- 17:20–17:45 **Andrey Omelchenko** (The State Hermitage Museum, St. Petersburg): New discoveries in Paikend: on nomadic influence in Sogdian domains
- 17:45–18:10 **Alisher Begmatov** (Berlin-Brandenburg Academy of Sciences): Cultural Exchange along the Silk Road as Reflected in the Sealings Unearthed from Kafir-kala
- 18:10–18:30 Discussion
- 19:00 Dinner (invited speakers, others upon registration, Haus der Universität)

Friday, 14th February 2020

Session 4: Central Asia II

- 08.30–08.55 **Sara Peterson** (London University): A study of the gold folding crown from Tillyatepe as an indicator of cultural exchange and status
- 08.55–09.20 **Shakirdjan Pidaev** (Academy of Sciences of the Republic of Uzbekistan): Monumental plot polychrome painting of Karatepa in Old Termez
- 09.20–09.45 **Claude Rapin** (CNRS, Paris): Fortifications, fortresses, and border walls in ancient Bactria-Sogdiana (sedentary and nomads between Samarkand and Ai Khanum)
- 09.45–10.10 Discussion
- 10.10–10.35 **Coffee break**
- 10.35–11.00 **Silvia Pozzi** (Udine): Bactrian influence in the re-foundation of Vardana in the Early Medieval period
- 11.00–11.25 **Bruno Jacopo** (Università degli Studi di Torino): Crossroads between Iran and Central Asia. New data on the ceramic assemblage of the Bukhara Oasis.
- 11.25–11.50 **Jegor Blochin** (IHMC RAS, St. Petersburg): Idols of Clay? Early Chalcolithic production area of clay figurines in Southern Turkmenistan
- 11.50–12.15 **Iliaria Vincenzia** (Universitat autònoma de Barcelona): Uch Kulakh Tepe: cultural contacts in the early medieval times
- 12.15–12.40 Discussion
- 12.40–14.00 **Lunch**
- 14.00–14.25 **Ehsan Shavarebi** (University of Vienna): Hand gestures in Sogdian iconography, their origins, and their significance
- 14.25–14.40 **Michael Shenkar** (The Hebrew University): Eastern Zeravshan valley in Transition from the Sogdian to the Arab Rule: New evidence from the Sanjar-Shah Excavations
- 14.50–15.15 **Pavel Lurje** (State Hermitage Museum, St. Petersburg): Modular residence block in Panjakent in comparative context
- 15.15–15.40 **Djangar Ilyasov** (Academy of Sciences of Republic of Uzbekistan): End of the Long Way. Tamgha-signs from Qarshovul-tepa as a marker of Nomad's sedentarisation process
- 15.40–16.05 Discussion
- 16.05–16.30 **Coffee break**
- 16.30–16.55 **Djamaliddin Mirzaachmedov** (Academy of Science Y. Gulomov, Samarkand): Early Karakhanid glazed ceramics from Bukhara (based on materials from the complex of the Vardanzeh citadel)
- 16.55–17.20 **Azim Malikov** (Palacký University, Olomouc): The cultural traditions of urban planning in Samarkand during the epoch of Timur
- 17.20–17.45 **Julio Bendezu-Sarmiento** (CNRS, Paris): The Bamiyan Valley as a center of trade and cultural exchange: the latest excavations on the site of Shahr-e Gholghola
- 17.45–18.10 **Imran Shabir** (Quaid-i-Azam University, Islamabad): An archaeological survey of sites of Kech-Makran, Balochistan, Pakistan
- 18.10–18.30 Discussion
- 19.00 Dinner (invited speakers)

Saturday, 15th February 2020

Session 5: Azerbaijan

08.30–08.55 **Farda Asadov** (Institute of Oriental Studies, Baku): Archaeological evidence of the presence of the Khazars in the territory of Azerbaijan in the VII-X centuries

08.55–09.20 **Shahin Mustafayev** (Azerbaijan National Academy of Sciences): Archaeological Representation of Caspian Trade Route on the Territory of Azerbaijan

Session 6: Kazakhstan and Kyrgyzstan

09.20–09.45 **Bauyrzhan Baitanayev** (A.Kh. Margulan Institute of Archeology, Almaty): Gold disks of Shymkent

09.45–10.10 **Bakyt Amanbaeva** (National Academy of Sciences of Kyrgyz Republic): New data on the ancient settlement of Ak-Beshim (Chu River Valley, Northern Kyrgyzstan)

10.10–10.35 Discussion

10.35–11:00 **Coffee break**

11:00–11:25 **Saltanat Eder** (University of Bern): The medieval town of Talkhir. Origination and development of urban culture in the northeast Zhetisu.

11:25–11:50 **Valerii Kolchenko** (National Academy of Sciences of Kyrgyz Republic): To the genesis of the cities of Chui Valley (according to data from the site Novopokrovskoe-2)

11:50–12:15 **Charles Stewart** (University of St. Thomas, Houston), **Steven Gilbert** (Archaeological Expertise LLC, Almaty): Ili Valley Settlement: Urban Development along the Northern Silk Route

12:15–12:40 **Dmitriy Voyakin** (International Institute for Central Asian Studies, Almaty): Archaeological Investigations of the Medieval town Ilibalyk: Achievements and Perspectives

12:40–13:05 Discussion

13:05–14:20 **Lunch**

Session 7: Xinjiang and Tuva

14:20–14:45 **Alexey Kovalev** (Russian Academy of Sciences): Chemurchek (Qiemuerqieke) phenomenon as result of western migration and its impact on cultures of South Siberia and Kazakhstan

14:45–15:10 **Tomas Larsen Høisæter** (University of Bergen): At the Crossroad of the Ancient World – On the Kingdom of Kroraina and its implications for the Silk Route model

15:10–15:35 **Pavel Leus** (Berlin): Ulug-Khem archaeological culture of the Xiongnu period in Tuva

15:35–16:00 **Gino Caspari** (University of Bern): The Steppe and the Sown - New evidence for culture contacts and migration between South Siberia and Central Asia

16:00–16:25 Discussion

16:25–16:50 **Coffee break**

16:50–18:00 Conclusion discussion **Mirko Novák / Susanne Rutishauser**

18:00–18:15 Closure of conference **Mirko Novák / Christoph Baumer**

19:00 Dinner (invited speakers)



Group photo of the conference participants (photo by Susanne Rutishauser).

Turkmenistan

Bronze Age Sceptres and Staffs from Elam and Margiana, and their Possible Names in Cuneiform and Linear Elamite

Michael Mäder

Abstract: Archaeologically, two wooden sceptres from western Iran, three bronze sceptres from south-eastern Iran, and more than 50 stone sceptres or staffs from the BMAC and its sphere of influence are documented. For the long stone staffs, three different functions can be proposed based on find contexts: those with slanted ends may have served as ritual mortars, the ones with finger-nail-shaped ends as ritual spoons, and those with a pommel must be power symbols. Iconographically, long sceptres (el. *hat*[?]) are only documented in Elam. They serve as a symbolic legitimization of political power. This stands in contrast to the short, fist-sized sceptres (el. *hušame*[?]) that are owned by goddesses alone. It is suggested that the concave fist-sized objects in the hands of Narunde may have an archaeological counterpart in the miniature columns of the latest phase (M. Vidale's type C) which, at the end of the 3rd millennium BCE, have become smaller and have lost their original function. Based on their shape, weight, and archaeological context, it is suggested that the original miniature columns (type A), as well as the stone staffs and stone plates with handle, may have been used for trance-like bodybuilding practices as they are still performed today in modern Zourkhaneh rituals. Finally, two observations presented in this paper may add to the steadily growing suspicion that the Gonur area, i.e. Margiana, is to be identified with the geographical name Šimaški: one of them is the depiction of a spindle-shaped, long, stone staff on a seal from Susa, and the second is the ring and rod ensemble that is attested several times in Elamite glyptic and has now been excavated in the Gonur necropolis.

Keywords: Margiana, Elam, sceptres, miniature columns, Narunde, Šimaški.

Резюме: В археологическом плане задокументированы два деревянных скипетра из западного Ирана, три бронзовых скипетра из юго-восточного Ирана и более 50 каменных скипетров из Бактрийско-Маргианского археологического комплекса ВМАС и зоны его влияния. Для каменных выделены несколько подтипа с плавным переходом между ними. Кажется, они играли не только символическую, но и функциональную роль, связанную с погребальными церемониями, возможно использовались как ритуальные ступы.

В иконографическом плане, изображения скипетров (эл. *hat*[?]) встречаются только в Эламе, где они служили символом законности политической власти, полученной от эламских богов (длинные скипетры). Скипетры размером с кулак (эл. *hušame*[?]) напротив, являются принадлежностью только богинь. Предполагается, что вогнутые предметы размером с кулак в руках Нарунде могут иметь археологический аналог в миниатюрных колоннах типа С, которые в конце третьего тысячелетия стали меньше и утратили свою первоначальную функцию. Миниатюрные колонны типа А, как и другие каменные артефакты, возможно, использовались в трансподобных ритуалах, сравнимых с современными иранскими действиями "Зурхане". Два определения, представленные в данной статье, могут усилить неуклонно растущее подозрение, что район Гонура, то есть Маргиана, в древности, был фактически тождествен месту Симашки. Один из них – изображение веретенообразного Длинного каменного скипетра на печати Сузы, а второй – ансамбль, состоящий из скипетра и кольца, который несколько раз был засвидетельствован в эламской глиптике и теперь раскопан в некрополе Гонура. Тем не менее, все предположения и сравнения в этом документе следует воспринимать с осторожностью и проверять или опровергать их в последующих исследованиях.

Ключевые слова: Маргиана, Элам, скипетры, миниатюрные колонны, Нарунде, Симашки.



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DOI: 10.13173/9783447118804.015

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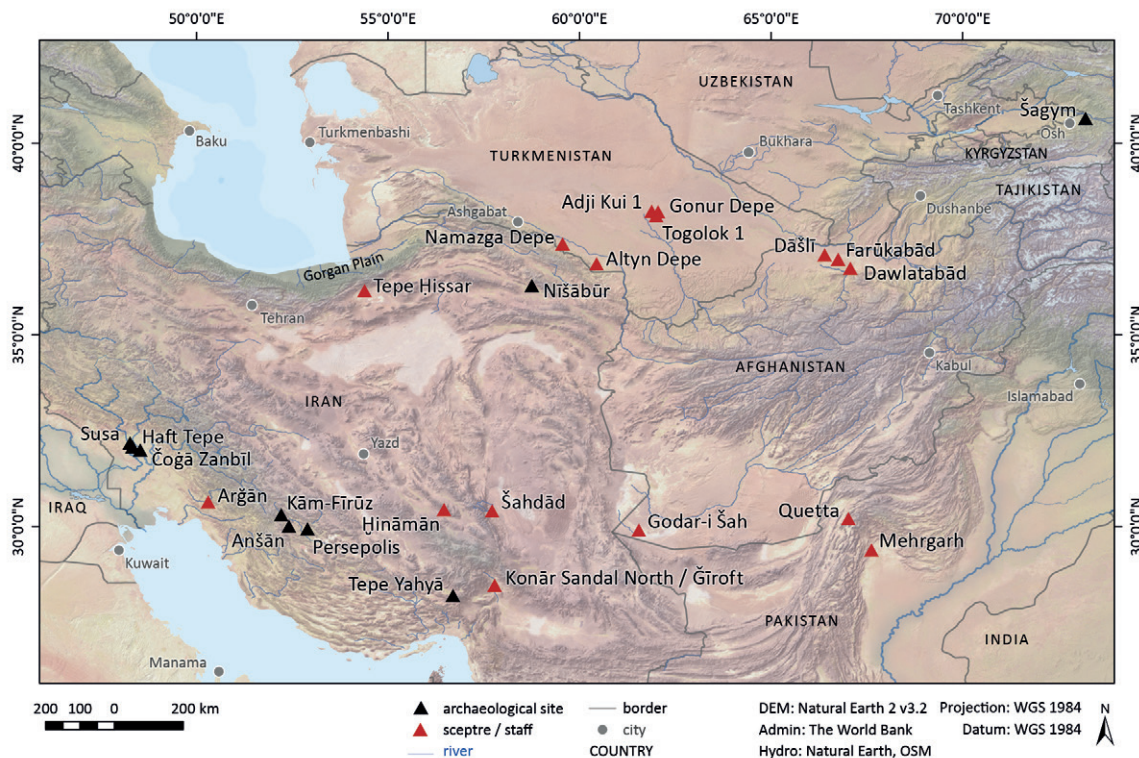


Fig. 1: Attested Bronze Age sceptres and stone staffs in Elam, Margiana, and the Pakistani Brahui area (RUTISHAUSER/MÄDER 2022).

Introduction¹

If we understand sceptres to be staff-shaped symbols of political and/or religious power, several artefact categories from Elam and Margiana must be referred to by this name. Other objects with potentially similar functions, but different shapes, such as cigar-shaped stone objects,² metal rods/harpoons,³ metal tridents,⁴ and decorated bronze axes, will not be discussed here. A general account of Elamo-Margianan sceptres and staffs will be elaborated, with the aim of identifying both the differences and the

similarities in the use of these objects. Bearing in mind that Linear Elamite writing was not completely foreign to the administrative courts of eastern Elam and Bactria-Margiana,⁵ proposals for possible Elamite words for long and short sceptres will round off the discussion.

1 Metal sceptres from south-east Elam

The object category which most clearly symbolised political power is that of metal sceptres. Only three have so far been found, none of them in controlled excavations. One is a preciously decorated bronze sceptre from Ğiroft (Jiroft) (**Fig. 1**). It has a bulb at the top and was cast in a complex process, in order to embed shell inlays.⁶ The other two sceptres are identical, hooked bronze poles from Hīnāmān (Khinaman) (**Fig. 1**). They were found together in

1 It is almost certain that the sceptre collection presented in this paper is deficient, representing more of a starting point than the completion of the typology of sceptres. I am thankful to the organisers and the engaged participants of the Second International Conference on Central Asian Archaeology, which took place in my hometown. They admitted a quantitative linguist – whose interest in sceptres was sparked solely by the discovery of the word *husa* (“pole”) on the Persepolis vessel – to the domain of BMAC archaeology and made many important contributions to this study. I owe special thanks to G.-L. Bonora for providing me with unpublished material and to N. Dubova for lending me a preprint of the Russian version of her 2021 book, as well as for her indispensable help in interpreting the artefacts discussed.

2 BOROFFKA/SAVA 1998; BONORA (2020: 36–37, Table 1).

3 DUBOVA (2019: 34, Fig. 4.II); JARRIGE (1989: 118, Fig. 128).

4 DUBOVA (2019: 34, Fig. 4.III).

5 The three easternmost Linear Elamite inscriptions – a fragmentary inscription on a Namazga V potsherd from Gonur Depe (**Fig. 1**), an inscribed gold seal with a Bactrian “bird man”, and an “Elamo-Harappan” (ASCALONE 2011: 420) steatite stamp seal probably manufactured in Šahdād (**Fig. 1**) or Tepe Yahyā (**Fig. 1**) – are discussed in MÄDER 2021.

6 See the meticulous description by ESKANDARI ET AL. 2020.

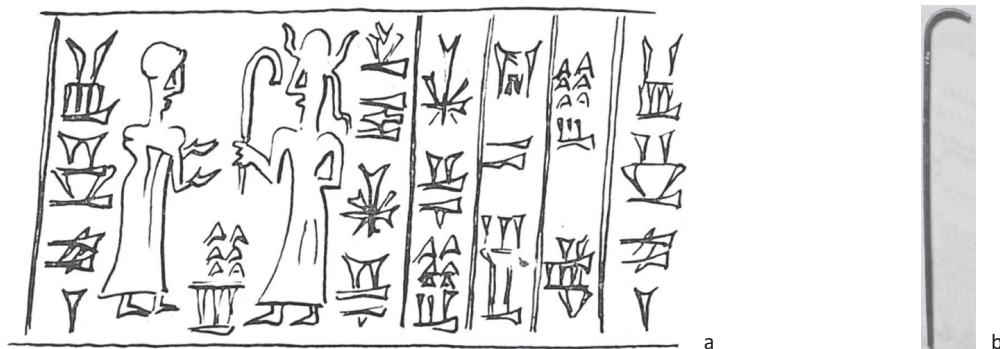


Fig. 2: **a** – Goddess handing over a crooked sceptre to legitimate the power of a highland Elamite *sukkalmah* (AMIET 1973: Pl. 11); **b** – A bronze sceptre from Hināmān (GREENWELL 1907: Pl. XXI, Fig. 2).

Upper end	Lower end	General shape	Length (cm)	Material	Find spot	Date	Publication
Crooked	Blunt	Crooked	49	Bronze	Hināmān (Kermān)	Bronze Age	GREENWELL 1907: Pl. XXI, Fig. 2
Crooked	Blunt	Crooked	47	Bronze	Hināmān (Kermān)	Bronze Age	GREENWELL 1907: Pl. XXI, Fig. 2
Bulb	Rectangular	Cylindrical	98	Bronze with shell inlays	Ĝiroft (Kermān)	Bronze Age	ESKANDARI ET AL. 2019

Tab. 1: Metal sceptres from south-east Elam.

the grave of a high official, and are not decorated, although they had probably been wrapped in some kind of band when in use. No further Bronze Age metal sceptres, and hence no exemplars from outside the Kermān province, are known to me.

Since the “Elamo-Harappan” seal type does not generally depict human beings, no local iconographic representation could be found in that seal corpus. However, an Elamite seal impression from Susa (Fig. 1) depicts a goddess handing over a crooked sceptre to a *sukkalmah* in order to legitimate his rule (Fig. 2a).

2 Wooden(?) sceptres from western Elam

There are two known instances of sceptres made from perishable material that have been found in Elamite ground. One of them can be inferred by the presence of a golden sceptre ring found in a grave in Arġān (Fig. 1). When it was found, it was still resting in the hands of a skeleton of a Neo-Elamite king, probably Kidin-Hutran II.⁷ The other relic of a presumably wooden sceptre is a mace-head made of white limestone from Čogā Zanbīl (Fig. 1) with an

⁷ For the discussion, see VALLAT 1984 and POTTS 1999: 303–306.

early Middle Elamite inscription on it.⁸ The lack of stone sceptres found in Elamite territory suggests that Elamite sceptres were generally made of perishable material, most likely wood. In the iconographical sphere, a sceptre/mace with a round mace-head or bulb and a sceptre ring is attested on a cylinder seal dating to the early *Sukkalmah* period, being held by a male individual (a *sukkalmah*?) sitting on a throne (Fig. 3a), while a sceptre with no recognisable bulb is being handed over by a god to king Tempti-Agun II (Fig. 3b),⁹ and a shorter sceptre is being handed over, probably by the Šimaškian king, Kindattu, to his son, Imazu (Fig. 3c).¹⁰ There are two further sceptre handover scenes involving

⁸ STEVE 1967: No. 58. For the inscription, see EIW: 703 and the linguistic discussion below.

⁹ PORADA 1946: 258, Fig. 3. “Die Szene ist identisch mit [...] einer Amtsverleihungsszene, wobei hier der Siegelinhaber nicht vor dem König, sondern vor einer Gottheit steht. Im Gegensatz zu den Amtsverleihungsszenen hält hier die Gottheit einen Stab in der Hand und nicht, wie oben erklärt, der Siegelinhaber” (MOFIDI-NASRABADI 2009: 64f.).

¹⁰ MOFIDI-NASRABADI 2009: Nr. 30. “Die Darstellung von zwei stehenden menschlichen Figuren soll vermutlich den Imazu vor seinem Vater Kindattu zeigen, der einen Stab als Zeichen eines offiziellen Amtes von dem König, seinem Vater, entgegennimmt” (MOFIDI-NASRABADI 2009: 61).

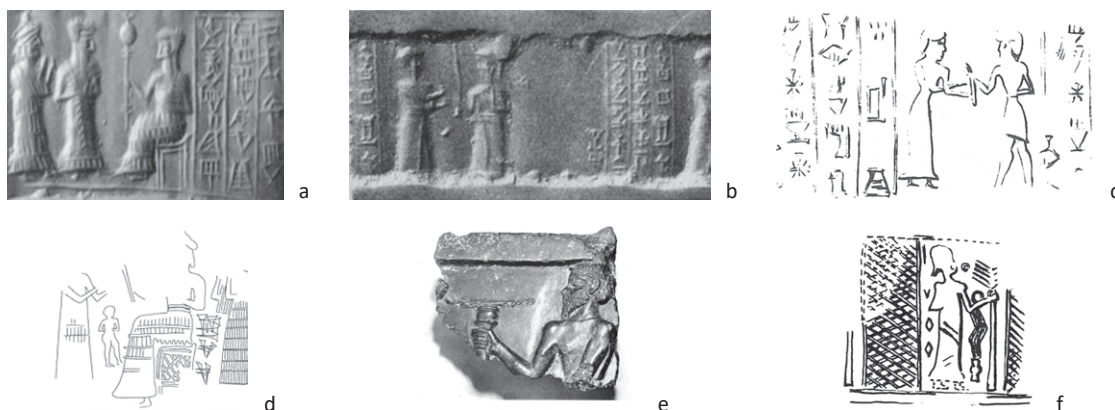


Fig. 3: Sceptres on seals from the Šimaški and Sukkalmah periods.

a – A *sukkalmah* holding a sceptre with a bulb (Mofidi-Nasrabadi 2009: Nr. 12); **b** – An Elamite god handing over a sceptre to the *sukkalmah*, Temti-Agun (Porada 1946: 258, Fig. 3); **c** – A sceptre handed over, probably by the Šimaškian king, Kindattu, to his son, Imaru (MOFIDI-NASRABADI 2009: Taf. 12, Nr. 30); **d** – King Temti-Ahar receiving a sceptre from a goddess (MOFIDI-NASRABADI 2009: 83; Taf. 17, Nr. 43); **e** – An Elamite king holding a sceptre with mace-head (AMIET 1965: 239); **f** – Seal impression from Susa with ritual(?) use of a sceptre with bulb (AMIET 1972: Nr. 2079).

sukkalmahs and their respective gods.¹¹ Finally, on a stela from Susa, an Elamite god is holding a sceptre with a clearly visible handle or mace-head (**Fig. 3e**).

3 Long stone staffs

Long stone staffs are the most widespread in Bactria-Margiana, with not a single archaeological find on Elamite ground. They differ in their general shape and length, and have different types of ends. In what is by far the most extensive collection of long stone staffs, DUBOVA/FRIBUS 2021, the authors have discerned three main types: *s navershiem* “with mace head/pommel”; *veteroobraznyj* “spindle-shaped”; and *s okončaniem v vide 'kopyta'* “with hoof-shaped end”.¹² A fourth “general type” category must be introduced, considering the categorical distinction between slanted and fingernail-shaped ends. In addition to this “general type” parameter, **Tab. 2** distinguishes the artefacts according to the nature of their functional ends because it is difficult to detect any straight logic between the “general type” and “functional end” parameters. Instead, we observe a fluent transition between the different sub-types.

All long stone staffs that have been properly excavated relate to graves or cenotaphs of high-ranking

officials. For staffs with pommels, there is no indication of a purpose other than symbolising power. The purpose of staffs with slanted and fingernail-shaped ends may be somewhat more specific. Their lower end is “as a rule” used (VIDALE 2017: 75), a fact which makes us think that slanted ends must be top ends, in contrast to fingernail-shaped ends which, with their spoon-like and often abraded appearance, are considered as being the functional tips. In one case, a stone object with a hole has been found adjacent to a staff with a slanted upper end, whose lower end fits into this hole. Without epigraphic information, it is impossible to determine the function of this perforated stone object (**Fig. 6a**). One possible profane purpose would be that it served as a sceptre stand, maybe combined with a metal fork found several times in Margiana (**Fig. 6b; c**) which may have served as a holder.¹³ It is also possible that it is a ritual mortar, with the slanted end making it easy to spin, such that its heavy weight would efficiently grind the seeds inside the fitted hole. They could be related to the haoma or cannabis ritual – as is suggested for the “miniature-column shaped” clay vessels or “vessels with pocket” (“*sosud s karmaškom*”), which may have been used as a smoking bong for the inhalation of psychoactive materials.¹⁴ Viewing the slanted poles as a ritual mortar would explain the fact that these objects were put into the grave

¹¹ AMIET 1972: Pl. 34, No. 1727; and *ibid.*: Pl. 35, No. 1741.

¹² Russian-speaking archaeologists traditionally make an analogy with a hoof (*kopito*), while in English this type of end is called “slanted” or “fingernail-shaped”. It is worth mentioning that we can observe a categorical distinction between slanted and fingernail-shaped ends. Even though I will argue below that the latter may have been used as a ritual spoon for scooping hallucinogenic pulp out of large bronze cauldrons, I will not introduce new terms here.

¹³ Although in the context of the “sceptre/stand ensemble” from Šahdād, no such metal fork has been excavated.

¹⁴ BOROFFKA 2016: 125. However, seeds of these plants have been found in a different kind of vessel (SARIANIDI 2003). The haoma cult was also celebrated in Elam, at least in the highlands: NEUMANN (2013: 89) views this plant, which he interprets as being the Syrian rue (*Peganum harmala*), as “characteristic of the Anšan glyptic iconography” in the Šimaškian period.

General type	Functional end	Remaining end	Length (cm)	Material	Find spot	Publication
With mace-head	Decorated bronze pommel	Blunt	105	Schist	Gonur, Tomb of the Lambs	SARIANIDI 1998: 75, Fig. 35
With mace-head	Decorated bronze pommel	Blunt	115	Stone	Northern Afghanistan	POTTIER 1984: Pl. V, No. 32
With mace-head	Ribbed lead pommel	Blunt	110	Greenish steatite	Gonur necropolis	ROSSI-OSMIDA 2002: 90–91
With mace-head	Pommel-shaped	Blunt, concave	92	Stone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.001 (see Fig. 4b)
With mace-head	Ribbed lead pommel	Blunt	126	Stone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.003
With mace-head	Carcass of a pommel	(Missing)	(Fragment)	Grey-green calcareous chlorite	Adji Kui	DUBOVA/FRIBUS 2021: No. 3.038
With mace-head	Pommel-shaped	(Missing)	(Fragment)	Grey mica slate	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.039
Finger-nail-shaped	Finger-nail-shaped	Blunt	134	Stone	Northern Afghanistan	POTTIER 1984: Pl. V, No. 35
Finger-nail-shaped	Finger-nail-shaped	(Missing)	(Fragment)	Stone	Quetta	JARRIGE/HASSAN 1989: Fig. 4
Finger-nail-shaped	Finger-nail-shaped	Slanted	133	Greenish steatite	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.006
Finger-nail-shaped	Finger-nail-shaped	Slanted	145	Stone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.007
Finger-nail-shaped	Finger-nail-shaped	(Missing)	(Fragment)	Cherry-red limestone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.011
Finger-nail-shaped	Finger-nail-shaped	Blunt	196	Grey mica slate	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.021
Finger-nail-shaped	Finger-nail-shaped	Slanted	154	Grey mica slate	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.023 (see Fig. 4c)
Finger-nail-shaped	Finger-nail-shaped	Blunt	166	Dark grey mica slate	Gonur, Tomb 3210	DUBOVA/FRIBUS 2021: No. 3.042
Finger-nail-shaped	Finger-nail-shaped	(Missing)	121	Dark grey mica slate	Gonur, Tomb 3235	DUBOVA/FRIBUS 2021: No. 3.043
Slanted	Slanted	Blunt	134	Stone	Northern Afghanistan	POTTIER 1984: Pl. V, No. 34
Slanted	Slanted	Conically pointed	132	Stone	Altyn-Depe	ALEKŠIN 1979: 81; Fig. 27
Slanted	Slanted	Blunt, with fitting stone stand		Stone	Šahdād	HAKEMI 1997: 198; 626
Slanted	Slanted	Conically pointed	110	Stone	Tepe Hissar	SCHMIDT 1937: 222, Pl. LXIV
Slanted	Slanted	Blunt, concave	58	Stone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.008
Slanted	Slanted	(Missing)	94	Black chlorite	Unknown	DUBOVA/FRIBUS 2021: No. 3.041
Spindle-shaped	Blunt	Conically pointed	110	Stone	Afghanistan	VIDALE 2017: 75, Fig. 61
Spindle-shaped	Blunt	Blunt, concave	110	Stone	Northern Afghanistan	POTTIER 1984: Pl. V, No. 31

General type	Functional end	Remaining end	Length (cm)	Material	Find spot	Publication
Spindle-shaped	Blunt, concave	(Missing)	(Fragment)		Quetta	JARRIGE/HASSAN 1989: Fig. 4
Spindle-shaped	(Missing)	(Missing)	(Fragment)	Stone	Afghanistan	VIDALE 2017: 75, Fig. 61
Spindle-shaped	Blunt, concave	Blunt, concave	165	Stone	Northern Afghanistan	POTTIER 1984: Pl. V, No. 33
Spindle-shaped	Blunt	Blunt	124	Stone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.004
Spindle-shaped	Blunt, concave	Blunt, concave	124	Stone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.005
Spindle-shaped	(Missing)	(Missing)	(Fragment)	Stone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.010
Spindle-shaped	(Missing)	(Missing)	(Fragment)	Grey mica slate	Togolok 1	DUBOVA/FRIBUS 2021: No. 3.020
Spindle-shaped	Blunt, concave	Blunt, concave	149	Cherry-red limestone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.022 (see Fig. 5a)
Spindle-shaped	(Missing)	(Missing)	(Fragment)	White limestone	Gonur, Tomb 3250	DUBOVA/FRIBUS 2021: No. 3.026
Spindle-shaped	Blunt, concave	Blunt, concave	125	Grey schist	Mehrgarh, Cénotaphe 1	JARRIGE 1989: 118, Fig. 129
(Indistinct)	(Missing)	Blunt	(Fragment)	Stone	Quetta	JARRIGE/HASSAN 1989: Fig. 4
(Indistinct)	(Missing)	Blunt, concave	(Fragment)	Stone	Namazga Depe	Unpublished (see Fig. 4a)
(Indistinct)	(Missing)	Blunt, concave	(Fragment)	Reddish steatite	Gonur necropolis	ROSSI-OSMIDA 2002: 119, No. 24
(Indistinct)	(Missing)	Blunt	(Fragment)	Greenish steatite	Gonur necropolis	ROSSI-OSMIDA 1991: 86–87
(Indistinct)	(Missing)	Blunt	(Fragment)	Grey schist	Mehrgarh, Cénotaphe 1	JARRIGE 1989: 111
(Indistinct)	Blunt, concave	(Missing)	(Fragment)	Stone	Gonur, courtyard	DUBOVA/FRIBUS 2021: No. 3.009
(Indistinct)	(Missing)	Blunt	(Fragment)	Grey mica slate	Gonur, Tomb 3231	DUBOVA/FRIBUS 2021: No. 3.012
(Indistinct)	(Missing)	(Missing)	(Fragment)	Dark grey siltstone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.013
(Indistinct)	(Missing)	Blunt	(Fragment)	Cherry-red limestone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.014
(Indistinct)	(Missing)	Blunt, concave	(Fragment)	Cherry-red limestone	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.015
(Indistinct)	(Missing)	(Missing)	(Fragment)	Grey-green calcareous chlorite	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.016
(Indistinct)	(Missing)	Blunt, concave	(Fragment)	Dark grey siltstone	Gonur	DUBOVA/FRIBUS 2021: No. 3.017
(Indistinct)	(Missing)	Blunt, concave	(Fragment)	Dark grey siltstone	Gonur, close to Tomb 1231	DUBOVA/FRIBUS 2021: No. 3.018
(Indistinct)	(Missing)	Blunt, concave	(Fragment)	Grey-green calcareous chlorite	Gonur necropolis	DUBOVA/FRIBUS 2021: No. 3.019

General type	Functional end	Remaining end	Length (cm)	Material	Find spot	Publication
(Indistinct)	(Missing)	(Missing)	(Fragment)	Stone	Gonur, Tomb 4310	DUBOVA/FRIBUS 2021: No. 3.024
(Indistinct)	(Missing)	(Missing)	(Fragment)	Stone	Gonur, Tomb 3210	DUBOVA/FRIBUS 2021: No. 3.025
(Indistinct)	(Missing)	(Missing)	(Fragment)	Grey mica slate	Gonur, Room 108	DUBOVA/FRIBUS 2021: No. 3.027
(Indistinct)	(Missing)	(Missing)	(Fragment)	Grey-green calcareous chlorite	Gonur, Room 108	DUBOVA/FRIBUS 2021: No. 3.031
(Indistinct)	(Missing)	(Missing)	(Fragment)	Grey mica slate	Adji Kui	DUBOVA/FRIBUS 2021: No. 3.032
(Indistinct)	Blunt	Slanted	(Fragment)	Dark grey siltstone	Altyn-Depe	DUBOVA/FRIBUS 2021: No. 3.033
(Indistinct)	(Missing)	(Missing)	(Fragment)	Greenish chlorite	Altyn-Depe	DUBOVA/FRIBUS 2021: No. 3.034
(Indistinct)	(Missing)	(Missing)	(Fragment)	Greenish chlorite	Altyn-Depe	DUBOVA/FRIBUS 2021: No. 3.035
(Indistinct)	(Missing)	(Missing)	(Fragment)	Stone	Godar-i Šah	DALES 1972: 33, Fig. 17

Tab. 2: Long stone staffs from Bactria-Margiana.
Smaller fragments (see DUBOVA/FRIBUS 2021, No. 3.029–3.060) are not included.

after the funeral (VIDALE 2017: 75): they would have been used one last time in an incense-burning and mortar ritual. In this funerary celebration, the miniature columns (see below) must also have played a role – most of the long stone staffs that have been properly excavated have been found together with miniature columns, including those from Mehrgarh (Fig. 1) and from Quetta. In Gonur Depe (Fig. 1), most of the stone staffs have been found in tombs of young males of 20–25 years of age (DUBOVA/FRIBUS 2021: 49). This makes it likely that they are symbols of initiation into adult life in the elite society. In the undisturbed Tombs 3880 and 3900 in Gonur Depe, different types of long stone staffs have been excavated in direct contact with a bronze cauldron (1 m diameter), inside a storage room filled with further ritual items such as miniature columns and goblets (DUBOVA/FRIBUS 2021: 49; see Fig. 13). It is thus imaginable that the stone staffs were used for grinding seeds and, with the fingernail-shaped end used as a spoon, scraping the hallucinogenic pulp out of the cauldron and using it to fill it into goblets, which have been excavated several times in context with stone staffs (e.g. in Tomb 3235, see DUBOVA/FRIBUS 2021: 48; for the remains of narcotic plants – namely hemp seeds [*Cannabis sativa*], poppy seeds [*Papaver somniferum*], and ephedra [*ephedra aurantiaca*] – in a preparation room to the south of the temple close to the “Ashes Hill” in Gonur, see SARIANIDI 1996: 293). Moreover, if the hypothesis is correct that the miniature columns, along with the “hand-

bags” and the stone plates with handles, are swing weights in a Zourkhaneh-style, trance-seeking spin dance (Fig. 15), then the preparation of stimulating drugs would come as no surprise.

4 The ring and rod ensemble

One of the staffs with lead pommel was found in a Gonur necropolis grave of a 30–35 year-old male, together with a 26 cm diameter ring made of lead (ROSSI-OSMIDA 2002: 91, see Fig. 8a). Over two dozen more of these lead rings with diameters of up to 21 cm have appeared on the Afghan antiquities market.¹⁵ We are probably confronted here with an archaeological counterpart to the “ring and rod” symbol known from Mesopotamian and Elamite iconography.¹⁶ In both areas, it emerges in about

15 POTTIER 1984: 26; Pl. XVII; with a localisation of the find spots on p. 5. See Fig. 8c. The smaller exemplars might also be pieces of jewellery, as is the case with two 10 cm diameter arm rings found in the grave of a female (ROSSI-OSMIDA 2002: 103).

16 For an overview of the ring and rod topic, see BOSSHARD-NEPUSTIL 2003, and Reallexikon der Assyriologie und Vorderasiatischen Archäologie 11, s.v. “Ring und Stab”. For further examples, see DUBOVA 2019: 34, Fig. 4. II.b; and BRAUN-HOLZINGER 2007: Taf. 55; Taf. 63; Taf. 68. Since in Mesopotamia the ring and rod ensemble is sometimes accompanied by a rope (= measuring tape), it has been proposed to see the ensemble as a set of engineering tools empowering kings to build temples (SUTER 2000: 181f.). For this, see the example of Nanna holding a

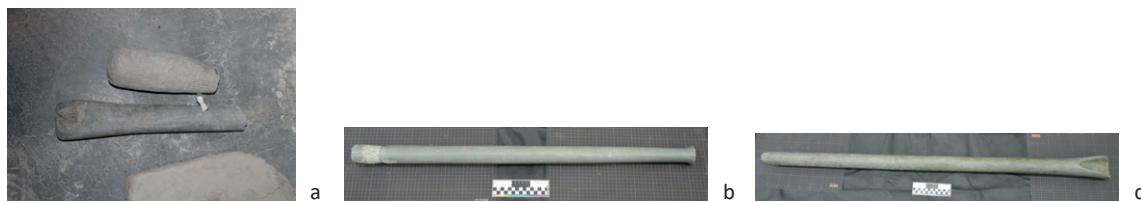


Fig. 4: **a** – Fragment of a long stone sceptre with blunt/concave end, together with another stone artefact, from Namazga-Depe (photograph by G.-L. Bonora; the objects are now in the small museum inside the school of Kaakha, ca. 5 km from Namazga-Depe); **b** – Long stone staff with knob-shaped upper end and concave blunt lower end (DUBOVA/FRIBUS 2021, No. 3.001); **c** – Long stone staff with fingernail-shaped (spoon-shaped) lower end from Gonur Depe (DUBOVA/FRIBUS 2021, No. 3.023).

the same period as the ring and rod ensemble from the Gonur necropolis is dated to, i.e. Ur III in Mesopotamia and the Šimaškian period in Elam. While in Mesopotamia, the ring and rod are held by deities alone and are never handed over to a living person,¹⁷ this seems to apply only partially to Elam: Middle Elamite kings receiving the ring and rod from goddesses are Untaš-Napiriša,¹⁸ Tan-Uli,¹⁹ an unidentified Šutrukid king,²⁰ and Tempti-Ahar II.²¹ On another seal, we see the ring and rod ensemble held by a goddess seated on an Elamite snake throne, although it does not show the king who may have received the power symbols.²² While all these instances are from the second half of the 2nd millennium, the tradition seems to date back to the Šimaškian period, with one ring and rod scene from the late 3rd millennium²³ and another one from the time of Idaddu II.²⁴ It is thus possible that the sceptre and ring from the Gonur necropolis (and the looted exemplars of lead rings and sceptres from Afghanistan) served as a prototype for the Šimaškian and, secondarily, for the Ur III period ring and rod ensemble. If this direction of influence is true, and if Šimaškian iconography indeed depicts the ensemble found at Gonur, the latter probably belonged to a king who was referred to as “Šimaškian”. Taken together with other arguments, this advocates for the

identification of the Margiana area with Šimaški.²⁵ It also leads me to favour one of the two proposed readings for the mostly identical Linear Elamite inscriptions on two stamp seals, one (^{Chris}G') with Bactrian and the other (^{Liga}V) with south-east Iranian iconography, which is as follows:²⁶ with regard to the already secured sound values 𐎧 *ši* and 𐎧/𐎧 *ki*, I stated that ^{Chris}G' 𐎧𐎧 𐎧 *x-ši-x* and ^{Liga}V 𐎧𐎧 𐎧 *x-ši-x-ki* could represent either some currently unknown political title or the geographical name 𐎧𐎧 𐎧 ^{HAL}Ši-*maš* “the land Šimaš” and accordingly 𐎧𐎧 𐎧 𐎧 ^{HAL}Ši-*maš-ki* “the land Šimaški”. On the palaeographical level, this latter proposal would imply that a) the already secured determinative/syllabic sign 𐎧 ^{HAL}/hal would go along with a graphically similar allograph 𐎧 HAL/hal, and b) the so-far undeciphered low-frequency sign 𐎧 would represent the low-frequency syllable *maš*. On the linguistic level, this would call into question Kupper’s well-argued, but not comprehensively proven, conclusion that *-ki* is part of the stem of

“Messband mit langem Stab” (“measuring tape with long bar”; transl. ed.) in front of Ur-Nammu (BRAUN-HOLZINGER 2007: Taf. 63).

- 17 Reallexikon der Assyriologie und Vorderasiatischen Archäologie 11, s.v. “Ring und Stab”, p. 417.
- 18 On a stela from Susa; HARPER/ARUZ/TALLON 1992: 128. See Fig. 9a.
- 19 On a cylinder seal from Susa; BRAUN-HOLZINGER 2007: Taf. 76, Nr. 2330. See Fig. 9b.
- 20 On a stela from Susa; CALMEYER 1995: Fig. 6. See Fig. 9c.
- 21 On a cylinder seal from Haft Tappeh (Fig. 1); MOFIDI-NASRABADI 2009: 83; Taf. 17, Nr. 44. See Fig. 5b.
- 22 On a seal impression from Susa; DE MIROSCHEDJI 1981: Pl. I, Nr. 3. See Fig. 9d.
- 23 On a stela from Susa; HARPER/ARUZ/TALLON 1992: 170. See below Fig. 8b.
- 24 On a seal impression from Susa; MOFIDI-NASRABADI 2009: Taf. 11, Nr. 25; for the dating, see ibid.: 10. See Fig. 9e.

25 In an article about a potsherd from Gonur with Linear Elamite signs, Kločkov (Kločkov 1995: 57f.) has pointed to the details of the iconographic presentation of the female figure on the silver vessel from Persepolis (kaunakes, collar, position of the hands, etc.) and to its working technique. These features are not only similar, but identical to those of the embossed silver artefacts from Bactria-Margiana. This led Potts (2008) to suggest that the Persepolis silver vessel must have been manufactured in Bactria-Margiana and sent as a gift to Šimaški, which he located in Elam. Later on, however, a large amount of same-type silver vessels, 12 of them bearing Linear Elamite inscriptions, appeared on the antiquities market, reportedly having been looted in the Kam-Firouz area not far from Persepolis, more precisely 43 km north-west of Tall-e Malyān/Anšan (Fig. 1) (DESSET 2018: 109). These circumstances – together with the discovery of Linear Elamite writing and maybe even the word ^{hal}Ši-*maš-ki* on two seals from Bactria-Margiana and eastern Elam (see below) – suggest the hypothesis that the cultural area called Šimaški must have covered the vast area stretching from the Persepolis/Anšan plain through the Šahdād area all the way up to Gonur and northern Iran. The ring and rod ensemble found at Gonur supports this maximalist thesis.

26 For a detailed linguistic and iconographical argument, see MÄDER 2021. For the sigla and photographs of all Linear Elamite inscriptions, see OCLEI.

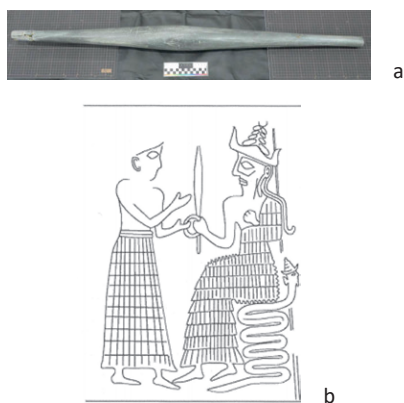


Fig. 5: **a** – Spindle-shaped long stone staff from Gonur Depe (DUBOVA/FRIBUS 2021: No. 3.022); **b** – The Elamite king, Temti-Ahar, receiving a spindle-shaped sceptre with ring (for the sceptre and ring ensemble, see Fig. 8 and Fig. 9) on a seal from Haft Tappeh (MOFIDI-NASRABADI 2009: 83; Taf. 17, Nr. 44).

the toponym Šimaški instead of being a suffix or a geographical determinative. And on the archaeological level, it would imply that Vallat (VALLAT 1985b: 50–52) was right in his localisation of Šimaški in the Iranian-Afghan borderlands.²⁷

5 Bactrian thin poles made from bone and stone

Thin bone poles with pointed tips (and often with linear ornaments) are generally interpreted as oracle bones. However, one exemplar of the same shape, but made of stone, from southern Tajikistan, is referred to as a sceptre (*zhesl*), and some similar if not identical objects likewise as *skipetr* by the excavators. A limestone pole from northern Afghanistan could belong to this category as well. As a consequence, thin poles made from stone must be mentioned here as representing a further category of Bactrian sceptres (see Fig. 7 for references).

27 But see STEINKELLER 2007, STEINKELLER 2014, and GUICHARD 2021: 75–77, arguing for a localisation of Šimaški in central northern Iran. The possibility that the BMAC “must have extended as far as Tepe Hissar and Gorgan plain (Fig. 1) to the west” (STEINKELLER 2014: 702f.) – a point of view that is corroborated by the presence of long stone staffs in Tepe Hissar and Namazga Depe (see above, Tab. 2) – again leads to the *perceptio maxima* of Šimaški presented in fn. 25 above. Just as it is the case in other semantic fields, the subcategorisation of toponyms often defies our expectation of neatly distinct categories: an “American political leader” mentioned in a modern text, for instance, may designate the president of the US, but also the mayor of a town in Wisconsin as well as any statesperson from Uruguay. Future archaeologists will be completely incapable to deliver a clear answer as to what the term “America” actually comprised.

6 Fist-sized sceptres and miniature columns

On a late 3rd millennium BCE sitting statue, the Elamite goddess Narunde holds two concave fist-sized objects in her hands (Fig. 10a; b), whose proportions correspond to those of the famous miniature columns.²⁸ The comparison is tenuous, because only a few miniature columns are fist-sized,²⁹ while the majority of them range between 25 and 35 cm in height. This would seem to make them too heavy for use in a religious ritual – unless we dare to suggest a link to the Pahlavani and Zourkhaneh rituals, which unite the toughening of the body and trance-like rites. Enlivened by the sound of drums and a chanting crowd, the believer lifts up and swings heavy weights (*mīl*) or bows with iron chains (*kabbādeh*) in order to reach a trance state and come closer to the gods. The tradition goes back to Zoroastrianism and is still performed in present-day Iran, Tajikistan, and Afghanistan.³⁰ This hypothesis has the advantage of explaining the different weights of the miniature columns.³¹ It would also go hand in hand with Vidale’s (VIDALE 2017: 47) observation that the grooves, which in his oldest miniature column type A were not only incised into the flat base and the top of the columns but also along the sides (see Fig. 10d), “bear evident wear marks suggesting that perhaps some kind of fibre or leather cord used to run in their tracks”. The columns would have been attached to leather cords and swung around horizontally (Fig. 15). Vidale estimates the leather laces to be 4–5 mm wide. In the last phase of their development, type C, the miniature columns became smaller, were heavily polished, and the grooves

28 Scheil (SCHEIL 1913: 17–19; cit. in HINZ 1969: 17) views the objects in Narunde’s hands as *aryballoi*. However, another depiction of the goddess Narunde (see Fig. 11) shows her holding two poles in her lowered hands, which are certainly not *aryballoi*.

29 The smallest example known to me is 15.9 cm high, with a base diameter of 9.7 cm; see Fig. 10c. Other small miniature columns have been found in Altyn-Depe (MASSON 1981: Pl. XXXV, 2.), Quetta (JARRIGE/HASSAN 1989: 153; Fig. 5; H = 18 cm), and in a grave in Godar-i Šah, not far from Ğīroft (DALES 1972: 33, Fig. 16). For the latter, no height is indicated by the excavator, but it is surrounded by other miniature columns, which are all significantly larger.

30 Personal communication, Abbās Mehrtāš Andīš, Šīrāz.

31 The famous south-eastern Elamite/Ğīroftian “handbags” (e.g. KOCH 2007: 68–69) with their differing weights also come into consideration for being *mīlhā*, as well as the “cigar-shaped” artefacts (see BONORA 2020) and, ultimately, all the ponderous objects that are operable as a ritual bodybuilding item. Moreover, I suggest that the mysterious circular stone plates with one handle (Fig. 14a) may be an early version of the *sang* shields used in modern Zourkhaneh ritual weightlifting. These suggestions are permuted into Fig. 15.

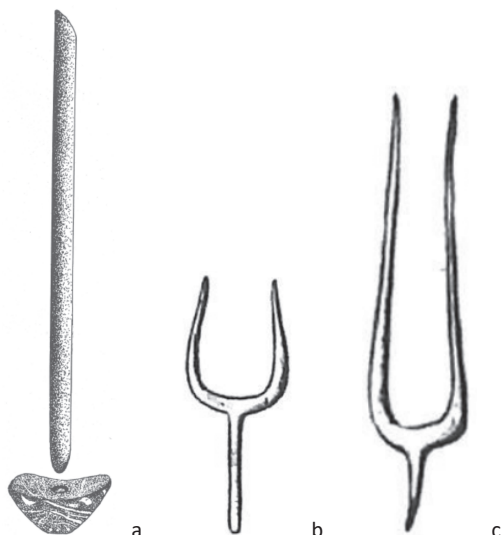


Fig. 6: **a** – A staff (mortar) with a slanted top from Šahdād, found together with a stand (or ritual mortar) (HAKEMI 1997: 198); **b** – Metal fork (sceptre holder?) from Tepe Hissar (SARIANIDI 1990: 81); **c** – Metal fork (sceptre holder?) from Gonor Depe (SARIANIDI 1990: 81).

shrank to shallow incisions, which in some cases were no longer aligned – that is, the axis of the two grooves diverged by several degrees. In other words, the miniature columns lost their original function and acquired a purely symbolic value towards the last two centuries of the 3rd millennium – the period to which the Narunde statue is dated.³²

On one of the so-called Gunagi vessels with a Šimaško-Margianan embossing style,³³ the famous Persepolis silver vessel, the standing figure – probably also Narunde³⁴ – holds two poles in her hands. However, in their proportions they differ significantly from the two fist-sized cylindrical objects on the sitting statue. The only object known to me to be identical in size and shape to those on the Persepolis vessel is a stone pole from a grave in Godar-i Šah (Fig. 1), although a stain on the photograph occludes its upper end, making it impossible to determine its length (Fig. 11c).³⁵ A comparison with the 40 cm long stone artefacts sometimes found in

BMAC graves together with miniature columns and other polished stone objects³⁶ is thinkable, but unlikely. The latter have blunt tips instead of rectangular ones, as on the Persepolis vessel. Additionally, they have a specific central thickening that is clearly absent from Narunde’s cylindrical poles. The second person on the back side of the Persepolis vessel, who is kneeling, is holding no such poles, which makes them seem like fist-sized sceptres symbolising a religious or divine power. But for the items in Narunde’s hands, to see them as a smoking device as suggested for the “vessels with pocket” (BOROFFKA 2016:125; Fig. 1) is the most plausible interpretation.

7 Possible names for the sceptres and staffs

Elamite is the least known language of the Elamo-Dravidian linguistic phylum.³⁷ In general, about one-third of the Elamite vocabulary can be considered established; for another third there are reasonable proposals; while the last third remains completely in the dark. The *Elamisches Wörterbuch* authored by Walther Hinz and Heidemarie Koch (HINZ/KOCH 1987; hereafter EIW) is thus only partially a dictionary in the ordinary sense. For the most part, it is a collection of reading proposals by Hinz and the scholars he references. All knowledge of the Elamite lexicon goes back to cuneiform texts. Therefore, all of the sound value attributions for the Linear Elamite writing system are secondary guesses. Within the framework of the slow advancement of Linear Elamite decipherment, 15 sound values can be firmly considered as accepted; a further 19 sound values can be considered as having reasonable reading proposals; this leaves the remaining 65 sign types as completely unacquainted.³⁸ This must be kept in mind whenever we deal with this language.

Cuneiform *ha-at*, “sceptre(?)”, “curse(?)”

It is not easy to determine whether *ha-at* is a physical object or not. In a first category of instances, *ha-at* is doubtlessly a physical object: in a text from Oruru,³⁹ *ha-at* is preceded by the logogram GIŠ, which is broadly accepted to be a translinguistic determinative for wooden objects. Here, its interpretation as a physical object is certain. On an administrative

32 The statue is dated based on the mention of 𐎠𐎠𐎠𐎠𐎠𐎠𐎠𐎠𐎠𐎠 Puzur-(In)šušinak (2150 BCE (short chronology)) in a Linear Elamite inscription (OCLEI^{Susa}] incised on the front right corner of the throne. The latter has, in line III, the unconfirmed reading 𐎠+𐎠 *na-ru-ti (original proposal 𐎠+𐎠 *na-ru-un-de by HINZ 1969: 39).

33 For a thorough examination of the 61 exemplars belonging to this type of silver vessel, see DESSET 2018: 119–120.

34 HINZ 1969: 17f.

35 DALES 1972: 33, Fig. 17. (On the same synoptic photograph, more than one dozen miniature columns of different sizes can be seen). There is one more stone pole identical in size and shape, from Šagym (Fig. 1) (Uzgenskij Rajon, south-western Kyrgyzstan, cf. BAJPAKOV ET

AL. 2016: 99). However, it seems to be a local product and is thus far too distant to be taken into account.

36 Fig. 14a–b. See also the stone pole from Tepe Hissar IIIB (SCHMIDT 1937: 222; Pl. LXIV), one from Altyn-Depe (MASSON 1981: Pl. XXXV, 5), and another one from northern Afghanistan (POTTIER 1984: Pl. V, No. 30).

37 MÄDER forthcoming.

38 MÄDER 2022: Tab. 2 and 3.

39 SCHMIDT 1957: Taf. 28; EIW: 582.

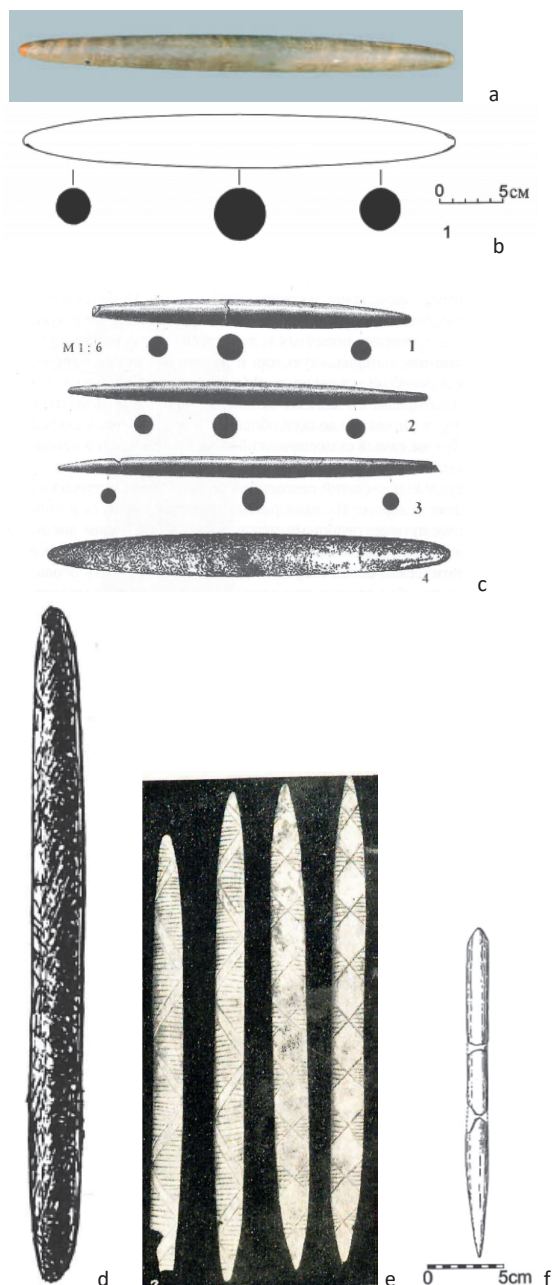


Fig. 7: **a** and **b** – Thin undecorated stone pole, described as a sceptre (*zhesl*) from southern Tajikistan (both by VINOGRADOVA/KUTYMOV 2018: 110, No. 2; idem: 111, No. 1); **c** – Undecorated stone poles, described as sceptres (*skipetry*) from various excavations in Kyrgyzstan (BAJPAKOV ET AL. 2016: 192, Fig. 25); **d** – A 75 cm limestone pole from northern Afghanistan (POTTIER 1984: Fig. 7); **e** – Decorated bone poles of similar size from Altyn-Depe (MASSON 1974: Fig. 6); **f** – An undecorated exemplar also from Altyn-Depe (KIRCHO 2019: Fig. 4, No. 19).

tablet from late Middle Elamite Anšan, a transaction of seven *ha-at* is registered.⁴⁰ Probably the same lexeme, although much later (Neo-Elamite), is the

40 STOLPER 1984: No. 77, obv. 4.

ha-at found on an administrative tablet from Susa: *1 ha-at^{hw} qa-am-na-ib-be^d za-na be-ir-ti-ra du-iš*, “the one (= the servant) of the divine lady Berti has received 1 sceptre”.⁴¹ Another administrative tablet from the same archive may even indicate the weight of a *ha-at*: *11 MA.NA 14 IM 1 ha-at*, “one *ha-at* of 11 pounds and 14 shekels”.⁴² Since this delivery of a *ha-at* “sceptre” took place within the framework of the Susian temple administration, *ha-at* is obviously a countable physical object with a value high enough to be delivered in single pieces. In contrast, in a second category of instances, the (suffixed) word *ha-at-ti* seems to be some sort of non-physical force that can be employed by kings as well as by gods: one part of an inscription of Huteluduš-Inšušinak reads *ha-at-ti [...]* *uk-ku-ri-ir ta-ak-na*, “the malediction⁷ [of the kings Huteluduš-Inšušinak and Šilhaha] shall descend upon him”.⁴³ In three attestations in a text of Šutruk-Nahhunte II,⁴⁴ *ha-at-ti* is employed by gods, e.g. *ha-at-ti^d Pi-ni-gir-mi uk-ku-ri-ir da-ak-ni*, “shall the curse⁷ (grudge) of goddess Pinengir descend upon him”, and in a text of Untaš-Napiriša,⁴⁵ the curse⁷ called *ha-at-ti* is even executed by three gods simultaneously; Napiriša, Inšušinak, and Kiririša. Moreover, another sentence warns of *ha-at*, in the sense that the enemy shall not spread a *ha-at*.⁴⁶ For this second semantic category, *ha-at(-ti)* is thus doubtlessly non-physical. Interestingly, there is a third category of instances, which themselves bear a bisemy, i.e. have a physical and non-physical meaning simultaneously: in an inscription of Hanne we find *ha-at DINGIR.GAL.na* “the curse⁷ Of god Napiriša [and of other gods]”.⁴⁷ In an inscription of Untaš-Napiriša,⁴⁸ *ha-at* has the same context (*ha-at DINGIR.GAL.na*), but this inscription has a parallel text (quasi-bilingual) in Akkadian,⁴⁹ mentioning a *ḥaṭṭu*, “pole”. Therefore, in this third category, *ha-at* must be a physical object in the shape of a pole, which bears, at the same time, a non-physical power within.⁵⁰ “Sceptre” is thus a plausible translation of *ha-at*.

41 SCHEIL 1907: No. 150, rev. 5.

42 SCHEIL 1907: No. 102, obv. 7.

43 EKI 61 C, VI; for “malediction”, see VALLAT 1978: 98; for semantically similar interpretations, see BORK 1933, REINER 1969, and GRILLOT 1973, all cited in EIW: 583.

44 EKI 71, V; EKI 73B, VI; EKI 74, §18.

45 STEVE 1967: No. 2:8.

46 EKI 9 IIIb, VII.

47 EKI 76, § 36; EIW: 581.

48 EIW: 581.

49 STEVE 1967: No. 32.9.

50 In order to harmonise these two senses, Hinz (EIW: 581) opts for – actually, invents – a bisemic noun, *Strafzepter*, “punishing sceptre”.

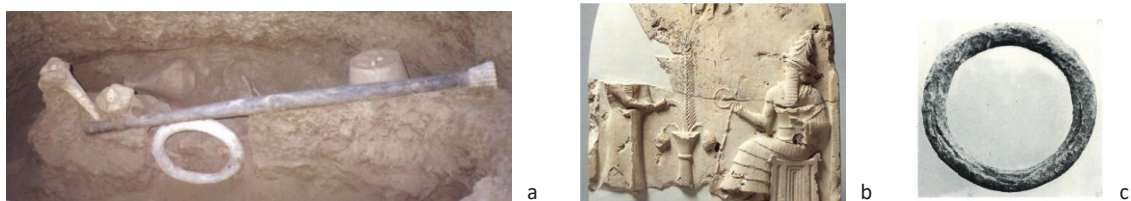


Fig. 8: **a** – Ring and rod ensemble, in situ, from the Gonur necropolis (ROSSI-OSMIDA 2002: 91); **b** – Ring and rod on a Šimaški period stela found at Susa (HARPER/ARUZ/TALLON 1992: 170); **c** – Lead ring with a diameter of 21 cm, from northern Afghanistan (POTTIER 1984: Pl. 199, No. 113).



Fig. 9: Further attestations of the ring and rod ensemble on Šimaškian and Šutrukid seals (for the references, see fn.18–24).

Cuneiform *hu-ut-ha-li-ik*, “emblem, sceptre(?)”

Even though it is only attested twice in a single text of king Šilhak-Inšušinak,⁵¹ König’s interpretation should be mentioned because the context provides some insight into the role played by the *hu-ut-ha-li-ik-ip* (which are only attested in the plural form ending in *-ip*) in the transition of power: “and the emblems (sceptres?) of Šutruk-Nahhunte, my beloved father, and the ones of my oldest⁷ Brother, and my own, and the one of Nahhunte-utu, the one of Šimut-nikataš, the one of Huteluduš-Inšušinak, ... [more members of the royal family are listed, then the inscription is fractured]”. If *hu-ut-ha-li-ik-ip* were indeed sceptres, this would mean that every significant member of the royal family, even those who never ruled as kings, would possess a sceptre. However, the iconography does not support this: neither Šilhak-Inšušinak on his relief on a half-column from

Susa,⁵² nor his relatives, are depicted with sceptres. On a linguistic level, the interpretation also raises doubts: *hu-ut-ha-li-ik* might well represent a contraction of the two-verb composite (past participle), *hu-ut-tak ha-li-ik*, with its well-established meaning of “made and produced (things), artwork”,⁵³ such that *hu-ut-ha-li-ik* could actually mean “achievements”.⁵⁴ This would also fit into the context of the Šilhak-Inšušinak text passage displayed above. Another doubt arises from the fact that the plural suffix *-ip* is not usually applied to inanimate objects. With this said, *hu-ut-ha-li-ik* is not a plausible candidate for the lexeme in question.

⁵² Photograph in VON DER OSTEN 1956: Taf. 42.

⁵³ EIW: 729.

⁵⁴ Vallat (VALLAT 2011: 265) demonstrates that two-verb composites exist and can affect the semantics in such a “modern” sense.



Fig. 10: a – The sitting statue of Narunde from 2150 BCE (KOCH 2007: 92, Abb. 50); b – Detail (ibid.); c – Type C (= recent; purely symbolic; concave) miniature column (H: 15.9 cm) from ca. 2000 BCE (VIDALE 2017: 50, Fig. 46); d – Type A (= ancient; functional; cylindrical) miniature column (H: 29 cm) from ca. 2500 BCE (VIDALE 2017: 48, Fig. 44).



Fig. 11: a – The Persepolis vessel with Šimaško-Margianan embossing technique, probably showing the goddess Narunde (HINZ 1969: frontispiece); b – Detail of the goddess with two fist-sized religious power symbols in her hands (ibid.); c – Stone pole from Godar-i Šah (DALES 1972: 33, Fig. 17).

Cuneiform Elamite *hu-sa-me* ~ Linear Elamite **hu-uš-ša-me*, “pole(?)”

For the cases in which it is preceded by the determinative for wooden objects, GIŠ, the translation of *hu-sa* as “tree” is generally accepted.⁵⁵ However, there are attestations of *hu-sa-me* (with the suffix *-me* for inanimate objects) that are more difficult to interpret. In more than 20 occurrences, it seems to spec-

ify a sanctuary, reading *si-ya-an hu-sa-me*, “temple of husame”, which former kings had built.⁵⁶ These observations have led scholars to understand *hu-sa-me* to mean “grove” (with an underlying meaning of “trunk, log, stick”, according to Hinz⁵⁷), supposing that there were holy wooded areas around the temples. Yet in one case,⁵⁸ this word appears in a com-

55 HALLOCK (HALLOCK 1969: s.v.): “In PFa 33 quantities of various kinds of fruit trees are summed up as GIŠ.*hu-sa* in the totals; so the word *husa* must mean ‘tree’”.

56 EIW: 703.

57 In his words, “Hain, Grundbedeutung wohl ‘Stamm’, ‘Stange’ als Kollektivbegriff” (EIW: 703).

58 STEVE 1967: 102.



Fig. 12: The Linear Elamite inscription ^{PERS}Q on the Persepolis silver vessel, with $\diamond \ast \parallel \dagger$ **hu-uš-ša-me* “pole” at the end of the second to last phrase (drawing extracted from OCLEI).

pletely different context and seems to name the object it is written on, namely a mace-head: *hu-sa-me* ^{har}.SAG *la-an-si-ti-h*, “I gilded the pole (belonging) to the stony mace-head”.⁵⁹ Having established this, it seems worth considering the possibility that *hu-sa-me* means “pole”. Let us now turn to one famous iconographic representation of poles in a religious context: the Persepolis silver vessel with a (divine?) female standing and holding two poles in her hands (Fig. 11a; b). The Linear Elamite inscription on the top of the vessel contains the sequence $\diamond \ast \parallel \dagger$ (Fig. 12), which must be a noun for two reasons: a) it appears at the end of the second to last phrase,⁶⁰ which usually contains the grammatical object, as Elamite is an SOV language; and b) its final sign is \dagger , a grapheme statistically established as a nominal suffix.⁶¹

Two of these signs, \ast *uš* and \dagger *me*, have broadly accepted sound values, and for another one, \parallel *ša*, Desset (DESSET 2018: 133) has made a reasonable proposal based on the divine name *Napiriša*, attested six times as $\dagger \parallel \parallel \parallel$ *Na-pi-ri-ša*⁶² and three times as $\dagger \parallel \parallel \parallel$ *Na-pi-ir-ri-ša*.⁶³ As is expected for divine names, the sequence is positioned at the beginning of inscriptions or phrases, sometimes preceded by the introductory exclamation \ast *e*, “oh!”. Furthermore, a frequency comparison of the sign in question and the respective cuneiform syllable corroborates the sound value proposal: \parallel is the only sign that is a) placed in the highest frequency class,⁶⁴ but b) not in a suffix position.⁶⁵ The respective cuneiform syllable *ša/sa*⁶⁶ shows the same specific behaviour, i.e. it is a) one of the most frequent cu-

neiform syllables,⁶⁷ but b) not a suffix. With this in mind, it is appropriate to list Desset’s \parallel *ša* among the signs with reasonable sound value proposals. With $\ast \parallel \dagger$ *uš-ša-me* established, we have to account for the preceding sign \diamond *hu*, which is an inscribed sign, i.e. $\diamond + \ast = \diamond$. It has long been assumed that inscripta determine the vocal value of the matrix sign. With the rhomboid containing the consonant /h/,⁶⁸ and \ast probably including a vowel /u/,⁶⁹ we can assume \diamond *hu*, and thus, as a hypothesis yet to be confirmed externally, $\diamond \ast \parallel \dagger$ **hu-uš-ša-me* “pole” naming the two poles in Narunde’s hands.⁷⁰

Conclusion

The nature of sceptres or staffs depends on the area in which they were used: in Bronze Age Elam, sceptres were made from a perishable material; while in the Ĝiroft area, they were cast from metal. Yet another type of workmanship was applied in Margiana and its sphere of influence (Tepe Hissar, Altyn-Depe, Namazga Depe, the Gonur area, northern Afghanistan, Šahdād, Godar-i Šah, Mehrgarh, and Quetta; Fig. 1), where more than 50 stone staffs are documented. For the latter, four sub-types exist, with fluent transitions between them. Two of the sub-types – the slanted and the fingernail-shaped ones – seem to have not only a symbolic, but also a functional role in connection with funeral or initiation ceremonies, perhaps as a ritual mortar (the slanted ones) and a spoon for scooping hallucinogenic pulp out of large bronze cauldrons (the fingernail-shaped ones). On the iconographical level, sceptres and staffs (Elamite *hat*² or *hatalik*²) are only documented in Elam (Šimaški and Sukkalmah periods). These Šimaškian and Sukkalmah sceptres serve as a symbolic legitimization of political power handed over by the Elamite gods. In contrast to these long sceptres,

59 Already understood in that way by Steve (STEVE 1967: 102); “le bois, la tête de pierre², j’ai recouvert d’or”; and accepted by Hinz (ELW: 703); “ich vergoldete das Gestänge² für einen Steinkopf²”. For a confirmation of “stone head” for ^{har}.SAG, see TAVERNIER 2007: 265.

60 The long stroke | is a phrase divider in Linear Elamite, i.e. it separates two parts of a sentence.

61 MÄDER ET AL. 2018: 83–87.

62 OCLEI ^{Mah}X II 11–14; ^{Mah}Z IV 7–10; ^{Schep}F’ II 7–10; ^{Mah}H’a I 2–5; ^{Mah}N’ V 6–9; and ^{Mah}O’ I 73–76.

63 OCLEI ^{Mah}I’b II 7–11; ^{Mah}O’ I 2–6; and ^{Mah}O’ I 30–34.

64 MÄDER ET AL. 2018: 83, Tab. 8.

65 MÄDER ET AL. 2018: Tab. 8. Only in 7% of the occurrences, \parallel is found in a word-final position. This indicates that it is not a verbal or nominal suffix.

66 For the s/š alternation, see VALLAT 1985a: 43.

67 According to a frequency count executed in a digitalised corpus of Cuneiform Elamite inscriptions, the syllable *sa/ša* has 1204 occurrences, which is 1204 / 31’197 = 3.86% of all syllables.

68 This is assumed based on the accepted sound value \ast *hal*, cf. DESSET 2012: 110, Fig. 37.

69 HINZ 1969: 44.

70 For inanimate nouns, no morphological plural exists in Elamite.



Fig. 13: **a** – Bronze cauldron with fingernail-shaped stone staff from the hypogeum (= Tomb 3880) at the necropolis of Gonur Depe (photograph by Margiana archaeological expedition; for a description, cf. DUBOVA/FRIBUS 2021:49); **b** – Bronze cauldron with two stone staffs from Tomb 3900 (photograph by Margiana archaeological expedition).

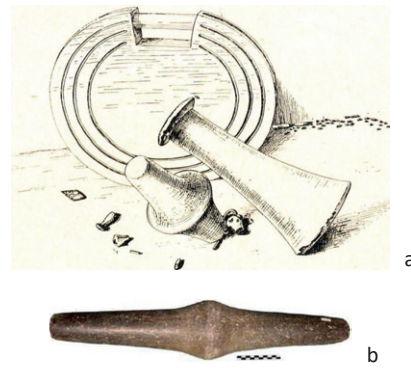


Fig. 14: **a** – Cultic objects from Altyn-Depe (MASSON 1974: 8, Fig. 5) which may have been used in ritual weightlifting activities, similar to the modern Iranian sang and mīl; **b** – Spindle-shaped chlorite object from Altyn-Depe (length 52 cm, weight 5.16 kg) (DUBOVA/FRIBUS 2021, No. 3.061).



Fig. 15: Hypothetic scenic interpretation of a pre-Zoroastrian initiation ritual in the style of the modern Iranian and Tajik/Afghan Zourkhaneh trance-like spinning and bodybuilding activities. Through a lead ring, a noble young man is given hallucinogenic ephedra/cannabis/poppy pulp scooped out of a large bronze cauldron with a fingernail-shaped stone staff. Before boiling, the seeds were ritually mortared using a convex stone staff with slanted end. Supported by ritual drummers, trained actors are swinging heavy type A miniature columns attached to leather cords and are lifting different types of stone poles or plates. In this inspirational scenery, a visitor from Ğiroft with his “handbags” has joined the group. The event may have taken place in the rectangular open-air construction close to the “Ashes hill” at Gonur Depe (SARIANIDI 1996: 291, Fig. 2) (drawing by Y. Mäder Mürner).

the fist-sized sceptres (*hušameʾ*) are owned by goddesses alone. It is suggested that the concave fist-sized objects in the hands of Narunde may have an archaeological counterpart in the type C miniature columns, which, at the end of the 3rd millennium, became smaller and lost their original function as pre-Zoroastrian, Zourkhaneh-style ritual items. Finally, two observations presented in this paper may add to the steadily growing suspicion that the Gonur area, i.e. Margiana, is to be identified with the geographical name Šimaški: the first is the depiction of a Margiana-style spindle-shaped staff on a seal

from Susa (**Fig. 5**); the second is the ring and rod ensemble, which on the one hand is attested several times in Šimaškian and Sukkalmah glyptics and on the other has now been excavated in the Gonur necropolis (**Fig. 8**). However, all proposals and comparisons put forward in this paper should be treated with caution and stand in need of verification or falsification by future studies. In the words of Massimo Vidale (VIDALE 2017: 51): “Further evidence [...] might fully dismiss the idea – but a preliminary hypothesis is always better than no hypothesis at all”.

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Abbreviations

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EIW = HINZ, W./KOCH, H. (1987), *Elamisches Wörterbuch* (= *Archäologische Mitteilungen aus Iran*, Ergänzungsband 17), Berlin.

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Sharing Spiritual Life and Belief in the Murghab Region (Southern Turkmenistan)

New Evidence from Bronze Age Seals

Luca Forni

Abstract: In recent years, much research has been carried out in the Murghab alluvial fan in southern Turkmenistan, mainly in order to understand how mobile people integrated into the broad social arena of the vast pasturelands and the sedentary contexts. This region was a strategic location for interactions between sedentary farmers and mobile pastoralists between the Middle and Final Bronze Age (2400–1300 BCE). The investigation of sedentary and mobile sites has allowed a better understanding of which customs and traditions mobile pastoralists may have borrowed from their sedentary contemporaries. Artefacts such as seals found during the investigations of the Namazga V (Middle Bronze Age) sites have demonstrated how sedentary populations had their own complex belief system. If this interaction happened, how did mobile pastoralists “reinterpret” sedentary customs in their own spiritual life? Recent discoveries carried out between 2014 and 2018 at the Bronze Age sedentary site of Togolok 1 can offer new and intriguing answers.

Keywords: Central Asia, Bronze Age, Murghab, BMAC seals, agropastoralism.

Резюме: В последние годы в дельте реки Мургаб на юге Туркменистана был проведен ряд исследований, главная цель которых состояла в том, чтобы понять, как происходила интеграция кочевников в разностороннюю социальную среду населения обширных пастбищ и оседлых зон. Этот регион был стратегически значим с точки зрения взаимодействий между оседлыми земледельцами и скотоводами-кочевниками в период среднего и позднего бронзового века (2400–1300 гг. до н. э.). Исследование территорий, на которых проживали оседлые и кочевые народы, позволило лучше понять, какие обычаи и традиции кочевники могли заимствовать у своих оседлых современников. Древние печати и прочие артефакты, обнаруженные в процессе исследований остатков поселения Намазга-Депе V, стали свидетельством наличия собственной сложной системы верований у оседлых народов. Если взаимодействия между земледельцами и кочевниками имели место, каким образом кочевники «приспосабливали» обычаи оседлых народов к своему религиозному мировоззрению? Новые ответы на эти вопросы могут дать недавние открытия, сделанные с 2014 по 2018 год при раскопках поселения Тоголок 1.

Ключевые слова: Центральная Азия, бронзовый век, Мургаб, печати Бактрийско-Маргианского археологического комплекса, земледелие и скотоводство.



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DOI: 10.13173/9783447118804.035

Inv. N.	Year	Site	Material	Typology	Profile	Decoration	Dating	Publication
200	1992	Site 90	Copper alloy	Compartmented seal fragment	-	-	Late Bronze Age	MASIMOV ET AL. 1998: Fig. 6:1
201	1992	Site 90	Copper alloy	Compartmented seal fragment	-	-	Late Bronze Age	MASIMOV ET AL. 1998: Fig. 6:2
263	1992	Site 64	Copper alloy	Closed-back compartmented seal	Quadrangular	Floreal motif	Late Bronze Age	MASIMOV ET AL. 1998: Fig. 6:6
264	1992	Site 64	Copper alloy	Closed-back compartmented seal	Wavy	Geometric motif	Late Bronze Age	MASIMOV ET AL. 1998: Fig. 6:5
554	1994	Site 236	Copper alloy	Pin-head	Five pointed-star	-	Late III-early II mill. BCE	MASIMOV ET AL. 1998: Fig. 5:16
582	1994	Site 377	Copper alloy	Compartmented seal fragment	-	-	Late Bronze Age	MASIMOV ET AL. 1998: Fig. 4:2
633	1994	Gonur North	Chlorite	Amulet-stamp seal	Stepped lozenge	Plant/bird of prey	Late Bronze Age	FORNI 2017–2018: 110
634	1994	Gonur North	Chlorite	Stamp seal	Circular and notched	Five pointed-star	Late III-early II mill. BCE	FORNI 2017–2018: 111
635	1994	Gonur North	Chlorite	Stamp seal	Circular	Five pointed-star	Late III-early II mill. BCE	FORNI 2017–2018: 112
641	1997	Adji Kui 1	Copper alloy	Closed-back compartmented seal	Circular	Cross	Middle Bronze Age	SALVATORI 2000: Fig. 5
663	1997	Adji Kui 1	Chlorite	Amulet-stamp seal	Quadrangular	Coiled snake / geometric figure	Late Bronze Age	SALVATORI 2002: Fig. 7
680	1997	Adji Kui 1	Copper alloy	Closed-back compartmented seal	Cross	-	Middle Bronze Age	SALVATORI 2000: Fig. 6
692	1997	Togolok 6	Chlorite	Stamp seal	Circular	Cross	Late Bronze Age	FORNI 2017–2018: 116
706	1997	Site 964	Copper alloy	Closed-back compartmented seal	Maltese cross	-	Middle Bronze Age	SALVATORI 2000: Fig. 7
783	2000	Site 1220	Chlorite	Stamp seal	Circular	Geometric motif	Late Bronze Age	SALVATORI 2008b: Fig. 8:5
787	2000	Site 1220	White stone	Cylinder seal	Cylinder	Hero protecting bulls from winged lions	Middle Bronze Age	SALVATORI 2008b: 111–118
911	1996	Site 712	Jasper	Stamp seal	Quadrangular	Snake within a <i>guilloche</i>	Middle Bronze Age	FORNI 2017–2018: 121
912	1996	Site 822	Copper alloy	Figurative seal	Zoomorphic	Two squatting monkeys	Middle Bronze Age	FORNI 2017–2018: 122
1208	2008	Site 1528	Chlorite	Amulet-stamp seal	Quadrangular and notched	Kneeling ungulate/ cross motif	Late Bronze Age	FORNI 2017–2018: 123
1395	2013	Adji Kui 1	Red-stone	Stamp seal	Circular and notched	Four-pointed-star	Late Bronze Age	FORNI 2017–2018: 124

Inv. N.	Year	Site	Material	Typology	Profile	Decoration	Dating	Publication
1411	2014	Togolok 1	Copper alloy	Closed-back compartmented seal	Circular and notched	Bird within a geometric motif	Middle Bronze Age	CERASETTI ET AL. in press; FORNI 2017–2018: 125
1420	2014	Togolok 1	Chlorite	Stamp seal	Circular	Floreal motif	Late Bronze Age	FORNI 2017–2018: 126
1441	2014	Togolok 1	Chlorite	Amulet-stamp seal	Squared	Bird of prey/rosette-cross element	Late Bronze Age	FORNI 2017–2018:127
1444	2015	Togolok 1	Chlorite	Amulet-stamp seal	Quadrangular	“Snake man”/winged woman	Late Bronze Age	ARCIERO/FORNI forthcoming; CERASETTI ET AL. in press; FORNI 2017–2018: 128; LYNNE/CERASETTI 2018: Fig. 5
1454	2015	Togolok 1	Chlorite	Stamp seal	Circular and notched	-	Late Bronze Age	FORNI 2017–2018: 130; LYNNE/CERASETTI 2018: Fig. 5

Fig. 1: List of the seals detected by the AMMD and TAP between 1990 and 2018.

1 Introduction

Since 1990, the Italian Institute for the Middle and Far East (ISMEO) and the University of Bologna have been involved in numerous archaeological projects in southern Turkmenistan, including stratigraphic excavations and surface surveys, mainly concerning the study of the urban phenomenon in the alluvial fan of the Murghab River between the Bronze and Iron Age (2400–550 BCE). The archaeological research proceeded to the analysis and exploration of an area of over 20,000 km², leading to the registration of about 2,000 sites dating from the Bronze Age to the Islamic period (MASIMOV/SALVATORI/UDEUMURADOV 1998; SALVATORI/TOSI/CERASETTI 2008). Among the materials collected during the surveys and excavations, seals are certainly worthy of note. If in the Ancient Near East seals represent a key artefact for understanding the socio-economic mechanisms that regulated the production relationships of the first protohistoric cities, in the Murghab region they also constitute an important tool for understanding the protohistory of Margiana. Additionally, the iconography related to these seals pertains to a cultural and religious *koine* between late 3rd and early 2nd millennium BCE, which stretches from the Iranian plateau to the Indus Valley in the east, and Afghanistan, southern Uzbekistan, and southern Turkmenistan in the north (WINKELMANN 2014: 199). This phenomenon can be considered the result of a complex “international long-distance trading” system (AMIET 1986).

The present contribution focuses on 25 seals collected by the Archaeological Map of the Murghab Delta Project (AMMD) and the Togolok Archaeological Project (TAP) between 1990 and 2018 (CERASETTI ET AL. in press; CERASETTI ET AL. 2019; FORNI 2017–2018; GUBAEV/KOSHELENKO/TOSI 1998; SALVATORI/TOSI/CERASETTI 2008) (Fig. 1).

2 Old and new evidence from the Murghab seals: context of discovery

The surface survey carried out as part of the AMMD confirmed the widespread presence of this class of material throughout the north-eastern sector of the Murghab alluvial fan (Fig. 2). The seals were found predominantly in the areas related to some of the main archaeological sites of the Murghab region, where these artefacts had already been documented: Gonur North (SARIANIDI 1981a: 221–255; 1998; 2007: 99–108), Adji Kui 1 (SALVATORI 2000: 97–138; 2002: 107–133; MASIMOV/SALVATORI 2008: 99–109), and the Togolok area (SARIANIDI 1981b: 226–232; SALVATORI 2000: 97–138). In other cases, the seals have instead been found on the surface of sites where this class of material is poorly documented at the current time: Dashly-tepe, Jakiper-tepe, and Takhirbai (MASIMOV/SALVATORI/UDEUMURADOV 1998: 39, 45–46). Among the aforementioned 25 seals, four were identified during the stratigraphic excavation carried out by the TAP at Togolok 1 be-

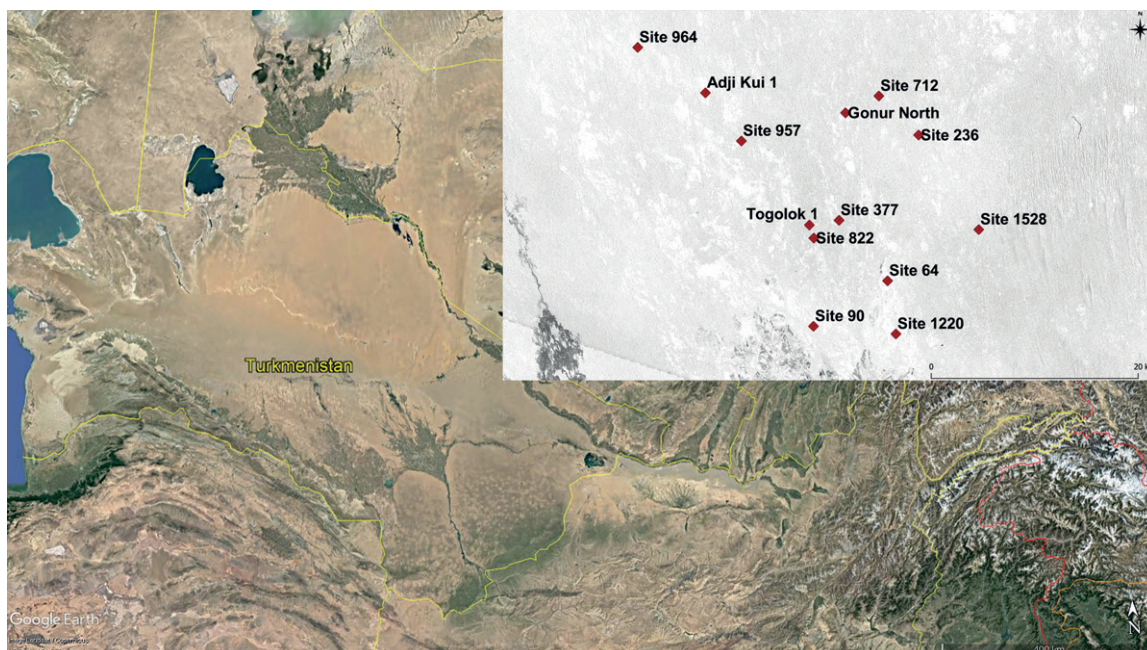


Fig. 2: Map of Central Asia with the context of discovery of the seals under consideration (elaboration by the author; base-maps: Google Earth 2020 and CORONA 1972).

tween 2014 and 2015. The results of this research led to the discovery of a semi-mobile camp dated from the very final phase of the Middle Bronze Age to the Late Bronze Age (3581 ± 27 BP \rightarrow 1986–1879 cal BCE (80.3%)), (3554 ± 21 BP \rightarrow 1961–1873 cal BCE (82.8%)), (3420 ± 45 BP \rightarrow 1880–1620 cal BCE (95.4%)) (see CERASETTI ET AL. in this volume). Archaeobotanical and archaeozoological remains, and the presence of typical mobile pastoralist materials together with Bactrian-Margian Archaeological Complex (BMAC) items, highlight a complex arrangement that presents evidence of the occupation of this area by agropastoralists (see CERASETTI ET AL. in this volume; CERASETTI ET AL. in press; CERASETTI ET AL. 2019; ROUSE/CERASETTI 2014; 2018). The excavation of the latest occupation phases of Togolok 1 provided crucial data for understanding the complex cultural and economic variability across the semi-mobile communities inhabiting the Murghab region during the Bronze Age.¹

3 Typology

The seals identified by the AMMD and TAP are characterised by a significant variety of typologies. More specifically, the closed-back compartment type is the most common one with nine specimens. The definition “compartmented seal” derives from the decoration of the reverse. Despite the appearance,

this decoration is the result of the combination of several elements. Compartmented seals are mostly cast in metal with the lost-wax method and can be classified according to their appearance, the technique used to produce them, and their back. In the latter case, the motif of the closed-back compartmented seals is directly soldered on a thin plate or a plain back. Compartmented seals are widespread across the entire area of the BMAC (LYONNET/DUBOVA 2020). The finding of compartmented seals during the excavations carried out at Altyn-Depe (KIRCHO 2001: Figs. 12–13), from Margiana (MASIMOV/SALVATORI/UDEUMURADOV 1998: 35–46; SALVATORI 2008a: 79–80; SARIANIDI 1998: 285–291; 2007: 99–108), and southern Bactria (BAGHESTANI 1997; PITTMAN 1984) dates this type to the Middle Bronze Age (2400–1950 BCE). However, the dating could be extended to the early Late Bronze Age (early 2nd millennium BCE), as documented by the findings at Gonur South (SALVATORI 2000: 116). Among the specimens detected by the TAP, there is a direct comparison between a seal found on the top of the archaeological deposit of the excavation carried out at the Togolok 1 site in 2014 and specimens found at Gonur North (CERASETTI ET AL. in press; ARCIERO/FORNI forthcoming). The artefact is marked by a wavy profile and strictly geometric composition, and the shape of a bird dominates the centre (**Fig. 3:1**). A fragment of a compartmented seal that was similar in style and decoration was found during the excavation of Room 512 in the Fire Temple of Gonur North (**Fig. 3:2**). Better preserved examples were identified during the excavations of the Gonur North palace and the south-eastern tower

¹ See CERASETTI ET AL. in this volume for an in-depth analysis of the Togolok 1 excavations between 2014 and 2018.



Fig. 3: **1** – Copper alloy closed-back compartment seal fragment from Togolok 1 (photograph by the author); **2** – Copper alloy closed-back compartment seal fragment from Gonur South (after SARIANIDI 1998: Fig. 1566).



Fig. 4: **1** – Red stone stamp seal from Togolok 1; **2** – Chlorite stamp seal from the Late Bronze Age semi-mobile camp at Togolok 1 (photographs by the author); **3** – Copper pin-head stamp seal from Jakiper-tepe (after MASIMOV ET AL. 1998: Fig. 5:16).

of the urban centre (SALVATORI 2000: 101–118; SARIANIDI 1998: Fig. 1564).

Another interesting closed-back compartmented seal was detected during the surface survey of an area not far from the settlement of Togolok 1 (Fig. 9:2). Unlike the other artefacts, this copper alloy seal is characterised by a zoomorphic profile difficult to recognise due to the advanced oxidation state. However, the back of the object seems to feature the profile of a camel, while the stamp surface can be interpreted as the profile of two seated monkeys facing each other. The discovery of zoomorphic figurative seals in Middle Bronze Age settlements such as Gonur North (SARIANIDI 1994: Fig. 57:1b), Kelleli (MASIMOV 1981: Fig. 2:13), Altyn-Depe (MASSON 1988: Figs. 11, 14), and Shahr-i Sokhta (TOSI 1969: Figs. 288–290) allows this seal to be dated to the same period.

Stone stamp seals are the second most represented type with eight specimens. In general terms, all the stone seals that present engraved, drilled, chiselled, or scratched motifs fall into this category. These artefacts can then be divided into sub-types

according to their material, number of faces, style, and shape. Stone stamp seals have been well documented in southern Turkmenistan since the mid-4th millennium BCE in the Kopet Dagh foothills (KIRCHO/KOROBKOVA/MASSON 2008; BONORA ET AL. 2014: 55–71). Meanwhile, in the Murghab region during the Middle Bronze Age, several types of stone seals were widespread, including those appearing to be imitations of metal compartmented seals (SALVATORI 2000: 126–127). Regarding the eight specimens under consideration, the seals are mainly made of chlorite, and two objects were obtained by drilling and chiselling jasper and red stone. The profiles of these artefacts are circular, rarely notched (Fig. 4:1). The decorations are almost exclusively geometric motifs: crosses, in two cases delimited by four arches; four or five-pointed stars; or irregular concentric circles. Among these artefacts, a chlorite stamp seal from the excavation of Togolok 1 is certainly noteworthy (Fig. 4:2). This artefact is circular with a notched profile, with traces of a suspension loop on the back of the seal. The surface of the stamp seal is perfectly smooth, while a circular hole drilled



Fig. 5: Black chlorite amulet-seal from the Late Bronze Age semi-mobile camp at Togolok 1 (photographs by the author).



Fig. 6: White stone cylinder seal with Akkadian motifs from site 1220 (after SALVATORI 2008b).



Fig. 7: **1–2** – Seal impressions on pottery fragments detected during the surface survey of Togolok 1 (photographs by the author); **3** – Seal impression on pottery fragment from the the latest occupation phase of Togolok 1 (photograph by the author); **4** – Seal impression on cretula from the surface of site 1529 (photograph by B. Cerasetti).

in the centre of the artefact is the only decoration. Perhaps the extreme simplicity of the figurative motif suggests that the seal is an unfinished product.

A typological variation of the stamp seal is represented by the copper pin head found near the Sasanid and Islamic site of Jakiper-tepe (**Fig. 4:3**). The artefact is composed of a pin, ca. 8 cm long, and a head consisting of a six-pointed star stamp seal. Although only one other specimen has been documented in the alluvial fan of Murghab, specifically in Gonur North (SARIANIDI 1990: Fig. 260), this type represents one of the most typical artefacts

of the BMAC material culture. Indeed, pin heads were detected in Bactrian burials looted during the 1970s, located north-east of the modern city of Balkh (LIGABUE/SALVATORI 1979: 5–11); during the excavations of the Bactrian sites of Dashly-tepe (SARIANIDI 1977: Fig. 44) and Sapalli (ASKAROV 1973: Figs. 26:22–26:23, 32:7–32:8); and, finally, in the Kopet Dagh foothills (MASSON/SARIANIDI 1972: Fig. 31). The seal(s) found at Sapalli allows us to date the production of the pin-head stamp seals between the late 3rd and early 2nd millennium BCE (SALVATORI 2000: 125).

Five seals found during the AMMD and TAP research are attributable to the so-called class of “amulet-seals” (Figs. 5, 8:3, 8:4). These double-sided artefacts, in black or green chlorite, present different shapes: quadrangular, rectangular, or stepped lozenge. In most cases, the decorations appear on the convex faces of the seal in the form of deep carvings or engravings in the stone. A string hole was drilled through the longitudinal axis of the objects. All of these features are typical of the “Murghab Style” (SARIANIDI 1981b: 221–255). In fact, this seal typology has been identified almost exclusively in the Murghab region, in particular at the Gonur South and Togolok 21 sites (SALVATORI 2000: 132). The proposed chronological attribution of this typology is the beginning of the Late Bronze Age (1950–1500 BCE) (SALVATORI 2000: 132), which is consistent with the depositional context of an amulet-seal found during the excavation of Togolok 1 in 2014 (ARCIERO/FORNI forthcoming; CERASETTI ET AL. in press; CERASETTI ET AL. 2019).

The last typology is represented by a cylindrical seal in white stone with rust-coloured streaks, documented on the surface of an area located about seven kilometres south of Togolok 1 (Fig. 6). Published by Salvatori (SALVATORI 2008b: 111–118), the artefact is characterised by its fine workmanship and figurative repertoire, as well as the exceptional nature of the discovery. In fact, at the present state of research cylinder seals dating to the second half of the 3rd millennium BCE were rarely detected east of Mesopotamia and in Iran, outside the Elamite area. The few examples known in Central Asia and datable to this period were found in southern Bactria (WINKELMANN 1997: Figs. 1a–c) and Margiana (SARIANIDI 1998; SARIANIDI 2007: 107). The Togolok seal has a motif that is frequently reproduced in the repertoire of Mesopotamian glyptic, with which the carver was probably acquainted: a human figure surrounded by two bull-men whose heads are turned back towards two opposed lions. The depicted scene is directly inspired by and consciously borrowed from the typical production of Mesopotamian glyptic during the post-Sargonid Akkadian dynasty (SALVATORI 2008b: 111).

The style and typology of Murghab seals is closely linked to their use. There is poor evidence that seals were used in administrative processes in protohistoric Margiana, in contrast to the Ancient Near East where this usage is widely documented. Indeed, seal impressions on pottery, cretulae, and bullae have been found exclusively at Gonur North (SARIANIDI 1998: 23) and Taip 1 (MASIMOV/SALVATORI 2008: 106–107). Regarding the AMMD and TAP findings, the objects characterised by seal impressions are limited: three wheel-made pottery fragments with seal impressions were detected during the surface surveys carried out at the Togolok 1 site between 2009 and 2014 (Fig. 7). Moreover, a handmade pot-

tery fragment with a seal impression was found in 2015 during the excavation of the latest phases of occupation of Togolok 1 (Fig. 7:3). An interesting sealing on a cretula was also collected on the surface of site 1529 (Fig. 7:4) (CERASETTI 2012: 21–22). The impression on this artefact features a geometric or flower motif marked by four circular lobes. Despite their limited number, these findings represent evidence of an emerging hierarchy and control system in the Murghab region between the Middle and Late Bronze Age (HIEBERT 1994: 152).

However, an element allows the hypothesis of a further use of seals. The presence of a perforated handle or a hole drilled through the longitudinal axis of the artefact is detected in all of the studied specimens. The hypothesis that a string could be passed through these holes, allowing the seal to be suspended as a pendant, suggests the importance of these objects for the owner. Our opinion is that these objects had symbolic or spiritual value for their owners, particularly in the case of the seals depicting complex iconographies (FORNI 2017–2018: 100). In this case, seals can be considered as strictly personal objects, as is evidenced by the presence of 112 seals (total) from inside 109 burials of the necropolis of Gonur Depe (SARIANIDI 2007: 99–108). Most of the findings were identified in female shaft graves (60.6%) and more than one third of the total number of seals were found at the waist of the dead, while one fifth were detected at the neck, wrist, and head (SARIANIDI 2007: 99). Nonetheless, the presence of seals within rich grave goods from two male sepulchres of the Gonur Depe necropolis does not exclude the possibility that these artefacts were also considered symbols of high rank, such as ceremonial axes, sceptres, knives, metal swords, and terracotta standing or sitting male figurines (SARIANIDI 2007: 99; FORNI 2017: 9–19).

4 Iconography

BMAC seals are characterised not only by their shape, but also by their variety of iconographies. Unanimously, numerous scholars argue that the cultural *koiné* that developed between the Iranian Plateau and the Indus Valley towards the second half of the 3rd millennium BCE strongly influenced the figurative repertoires of the BMAC seals (AMIET 1986). This macro-region can be considered a single cultural area, independent of the Mesopotamian culture. Indeed, all the proto-urban civilisations that were part of this vast cultural region were characterised by highly intertwined material cultures and artistic productions, as well as their iconographies. For example, the figurative repertoires of BMAC seals can be compared with those of the Luristan seals of the 4th millennium BCE, the iconographies of the Susiana seals of the Uruk period, themes of



Fig. 8: **1** – Black chlorite amulet-seal from Togolok 1 depicting a bird of prey (photograph and drawing by the author); **2** – Jasper stamp seal representing a snake in the centre of a guilloche (photograph by B. Cerasetti and drawing by the author); **3** – Black chlorite amulet-seal from Adji Kui 1 depicting the figure of a snake, whose body forms two voluminous coils (after SALVATORI 2002: Fig. 7; drawing by the author).

proto-Elamite art, and those belonging to the Kerman culture (WINKELMANN 2000; 2013).

In the BMAC figurative repertoire, birds of prey are one of the most represented subjects, and the seals found by the AMMD and TAP are no exception. These birds, probably short-toed eagles (*Circaetus gallicus*, FORNI 2017–2018: 64–65), comprise the main decoration of numerous compartmented seals and amulets-seals. Short-toed eagles were especially represented in the so-called “heraldic” position: spread wings with the body placed in front and the head in profile. This image is depicted on a double-sided black chlorite amulet-seal, documented in 2014 during the preliminary survey before the excavation in Togolok 1 (Fig. 8:1). A stylised bird of prey is engraved on one side of the seal and is rendered through geometric shapes: the body and tail are represented together as an hourglass; the wings, which are spread upwards, are depicted through a simple horizontal and two perpendicular lines; a rosette element descends from each of the wings, perhaps a Margian elaboration of the curls that characterise the representations of birds of prey in Bactrian seals (SARIANIDI 1998: 44; e.g. Figs. 125, 152–154, 186); the head has a particular hook profile, which recalls a single arm of a Maltese cross seal detected during a surface survey carried out in the area of Adan Basan 20 (SALVATORI 2000: Fig. 7).

Birds of prey were often associated with snakes – the other typical animal characteristic of the BMAC glyptic and the figurative repertoire of the Kerman culture. Depictions of reptiles in the beaks, or between the claws or the wings, of birds of prey suggest a conflict between these two animals, perhaps linked to the contrast between the celestial and ch-

thonic spheres. Indeed, the relatively constant presence of ornithomorphic deities in the BMAC glyptic suggests a positive consideration of the bird of prey, relegating the snake to its malevolent antagonist. The presence of this clash on the seals indicates an apotropaic meaning, associated with the removal of evil. Snakes are the main figurative theme of the decoration of two of the examined seals. The first one is a particular stone stamp seal found during the surface survey of the Sasanid-Islamic site of Jakiper-tepe. The shape of this artefact is marked by a quadrangular profile and a prism-shaped handle, which is almost totally deteriorated (Fig. 8:2). This seal was obtained through the processing of jasper, a semi-precious stone rarely used for BMAC seals (SARIANIDI 1998: Fig. 1452). The figurative theme, created by engraving and carving, portrays a stylised snake in the centre of a *guilloche*, which is a ring motif consisting of the intertwining of two stylised coils of snakes. This element often appears in the iconographies of BMAC seals, especially as a frame for the main figurative theme of the artefact. As a single element of the figurative scheme, the meaning of the snake can be related to an apotropaic value. In fact, hiding in its den during the cold season and reappearing in the spring, the snake has been linked to chthonic beliefs and the idea of fertility, while its annual moult links it to the concepts of eternal youth and rebirth (SARIANIDI 1998: 35; CAUET 2020: 208). In Mesopotamia the coils of the snake are indistinguishable from the coils of the spiral, which is a frequent motif used to represent running or still water (CAUET 2020: 208–209). In this case, the snake is closely linked to the humid underground. This association between snakes–



Fig. 9: 1 – Green chlorite amulet-seal representing a kneeling ungulate from site 1528 (photograph by B. Cerasetti); 2 – Copper alloy figurative seal from site 822 depicting two squatting monkeys (photograph by B. Cerasetti and drawing by the author).

water-fertility can also be found in the Elamite iconographies. Many Elamite potteries of the 3rd and 4th millennium BCE are decorated with intricate snake designs, while a coiled snake represents a seat for the god Inshushinak as an iconographic motif of longue durée and large distribution (MIROSCHEDEJI 1981: 25; SHAKIBA 2018: 8).

The second specimen is a double-sided chlorite amulet-seal identified during the surface survey of Adji Kui 1 carried out in 1997 by the AMMD (Fig. 8:3; SALVATORI 2002: Figs. 4:8, 7). On one side, the engraved and drilled decoration represents the figure of a snake, whose body forms two voluminous coils that comprise the centre of the figurative motif. The head is depicted in a secluded position, distinguished by its wide-open jaws and protruding tongue. In addition to the iconography of the clash with the bird of prey, the snake wrapped in its own coils represents a typical iconography of the BMAC glyptic. This figurative motif is usually depicted when this animal is the only subject of the decoration.

Ungulates are another frequent representation in BMAC seals. Among the examined seals, a green chlorite amulet-seal found during a surface survey carried out in 2008 by the AMMD at site 1528 depicts an ungulate in a crouching position, presumably a bezoar goat (*Capra aegagrus aegagrus*) based on the arched horns (Fig. 9:1). The crouching goat represents a theme reproduced in almost all types of seals documented in the BMAC glyptic. On this amulet-seal there is also a small plant above the back of the animal, the stem and leaves of which have been rendered through simple linear incisions, with no traces of flowers or buds. Although the two figures do not appear to be related to each other, the juxtaposition of goats and plants in the same composition recalls the iconography of the so-called “sacred tree”, a symbol generally interpreted as the

link between heaven and earth (SARIANIDI 1998: 40). This is a particularly widespread motif in the Ancient Near East, starting with the first attestations on the seals of the Uruk period (4000–3100 BCE) (FRANKFORT 1939: Tab. IV). The symmetrical scheme of two goats in a rampant position, standing or crouching in front of a tree located on a mountain, finds its first examples in the proto-Elamite glyptic at the beginning of the 3rd millennium BCE. Afterwards, this iconography reached its maximum diffusion in the Ancient Near East during the Late Bronze Age (BUSHNELL 2008: 99–108). A different interpretation suggests that the tree or the mountain represents the aniconic manifestation of a female divinity accompanied by her own animals (WINKELMANN 2013: 49). In any case, the presence of this iconography on some ceremonial vases found in the Gonur Depe necropolis, probably used for libations (SARIANIDI 2007: 63; WINKELMANN 2013: 42), suggests that this iconography had a particular cultic or ritual meaning.

Among the animals depicted on the BMAC seals, monkeys certainly represent an interesting case study. This species has been documented exclusively in compartmented seals attributed to Bactrian culture, often as the main theme of the decoration. Curiously, Bactria, as well as Margiana, were never the natural habitat of this animal. Monkeys are depicted alone in a characteristic squatting position on their rolled tail, or on the throne or stool on which deities are also seated. If two specimens are depicted, they are represented in inverted positions with respect to each other. These motifs are probably of Indian origin, indicating the presence of “merchants” from the Indus Valley in Central Asia (SALVATORI 2008a: 79). Considering the squatting position of the two figures, the stamp surface of the only figurative seal found by the AMMD was interpreted as two seated

monkeys unusually positioned opposite each other, perhaps holding each other's hands (Fig. 9:2).

5 Sharing spiritual life and belief in the Murghab region: new evidence from Togolok 1

A particular black chlorite amulet-seal was identified during the excavation carried out by the TAP at the Togolok 1 site in 2015 (Fig. 5). Specifically, the research team found the artefact in a filling layer of a fireplace attributable to the second occupation phase of the semi-mobile camp dating from the very final phase of the Middle Bronze Age to the Late Bronze Age (ARCIERO/FORNI forthcoming; CERASETTI ET AL. in press; CERASETTI ET AL. 2019). The occupation phases of Togolok 1 by a semi-mobile community took place after the abandonment by sedentary inhabitants, or at least in a final stage of the site, perhaps due to reduced water resources that were unable to support intensive agriculture (see CERASETTI ET AL. in this volume; ARCIERO/FORNI forthcoming; CERASETTI ET AL. in press; CERASETTI ET AL. 2019; ROUSE/CERASETTI 2014; 2018). This double-sided artefact is marked by its quadrangular shape, an engraved decoration on both sides, and a string hole drilled through its longitudinal axis.

The two images on both faces are of remarkable importance for the iconography of the seals from Margiana. Engraved on the seal are a human face with a snake-shaped body on one side and a winged woman surrounded by snakes on the other. Regarding the latter, the presence of an ornithomorphic aspect is inferred by outspread wings and a tail that evokes those of birds of prey (Figs. 10:1–10:2). The female human figure is defined only by breasts that are small in size and circular in shape, like those found on numerous terracotta flat violin-shaped female figurines from the Murghab region during the Middle Bronze Age (FORNI 2017; LUNEAU/SHIRAZI 2020: 159–160; MASSON/SARIANIDI 1973; SARIANIDI 2007: 68–70). Similarly, the face resembles those of the terracotta figurines, as it is placed in frontal view, in relief, and has a pronounced ornithomorphic nose (Fig. 10:4). The link between this iconography and the female terracotta figurines represents a unique case. Regarding the interpretation of the latter, the ornithomorphic appearance of the faces of the statuettes (the noses pronounced like beaks, the arms wide and spread like wings) has always influenced the analysis of these artefacts. These characters have been identified as protective spirits, minor deities (SARIANIDI/MASSON 1973: 111–212), or manifestations of the “Great Goddess” in the form of the “Bird Goddess” (WINKELMANN 2007: 325). Many scholars, however, are in agreement about the

association between these figures and the figures frequently characterised by wings or other ornithomorphic attributes portrayed in the BMAC glyptic (Fig. 10:3). Nevertheless, the iconography depicted in the two classes of material is significantly different. Excluding noses and arms, no details – such as an engraved motif to represent plumage – have been found on any statuette to support this kind of identification. The importance of the examined amulet-seal relies on the fact that its figurative scheme includes the features of the flat terracotta female figurines and the iconography of the bird of prey fighting with snakes in the same figurative repertoire. Although the connection between the characters of the seals and those of the statuettes is still distant, the examined amulet-seal confirms that the characters depicted in the statuettes were beings related to the symbolic meaning of birds of prey. The fact that both this amulet-seal and the flat female terracotta figurines have holes to allow their suspension possibly as pendants is a clue. Indeed, in general, seal amulets have a hole drilled through one of their axes, while figurines present this feature in the trapezoidal element interpreted as a “tiara”. Terracotta flat figurines, which were used as pendants, were probably linked to an apotropaic meaning and the protection of the individual, as is evident by their discovery inside the burials of the necropolis of Gonur Depe. These artefacts were placed in particular positions, such as in front of the face of the deceased (SARIANIDI 2007: 68) or vertically in the sand at the feet (SALVATORI 1995: 5–37).

Returning to the considered amulet-seal, its other side shows an underrepresented iconography of Murghab seals with a human face above three coiled snakes (Fig. 11:1). At the present state of research, the only possible parallels to this specific iconography in the prehistoric BMAC area are the decorations on two stone stamp seals and one amulet-seal from private collections (Figs. 11:2–11:3; WINKELMANN 2016: Fig. 3). The particularly human features of goggled eyes, flared nostrils, swollen cheeks, wild hair, and a beard might be related to characters from Bactrian compartmented seals that were dated between the Middle and Late Bronze Age (AZARPAY 1992: 1–10; SARIANIDI 1998: 171, Figs. 904:1–907:2; WINKELMANN 2016: 295–304). Moreover, the figure is usually portrayed constricted by snakes or as a fusion between man and animal with snake-like arms (Fig. 11:4). This “snake-man” has been interpreted as a Bactrian monster (SARIANIDI 1998: 31) or a prototype of the demonic figure of *Aži Dahāka* (AZARPAY 1992: 6–7), whose full name is explained as “snake-man” or “hominoid serpent”. The latter is described as the creator of evil and thus the antagonist of the Mazdayasnian religion (SKJÆRVØ ET AL. 2000: 191–205). Other scholars interpreted this figure as a combination of man and feline (WINKELMANN 2016: 302–303). However, this iconography



Fig. 10: **1** – Winged woman surrounded by snakes depicted on one side of the black chlorite amulet-seal from the Togolok 2015 excavation (photograph and drawing by the author); **2** – Modern impression of a black chlorite amulet/stamp seal from Gonur South (after SARIANIDI 1998: Fig. 1646:2); **3** – Copper alloy open-work compartmented seal from private collection (after SARIANIDI 1998: Figs. 34:1–34:2); **4** – Terracotta female flat violin-shaped figurine from Gonur Depe (after LUNEAU/SHIRAZI 2020: Fig. 3:b).

may originate in south-eastern Iran, dating back to the mid-3rd millennium BCE, as seen in the chlorite vessels from the Kerman region (WINKELMANN 2016). Among the iconographic repertoire, there is a standing male figure, sometimes horned, in an apparent struggle with two snakes that are on either side of him. The character is distinguished by accentuated muscles, a profiled head with long hair, a pronounced nose, large eyes, and profiled legs covered by a skirt. This iconography was found on a vessel from Tutub (modern Tell Khafajah in Iraq) and on several artefacts from the contemporary looting of the Jiroft necropolises in Iran (ARUZ 2003: 330–332). After the spread into the BMAC area, this iconography was re-elaborated perhaps through the integration of a character from local culture, as is evident from the distinctive facial features. Nevertheless, considering the lower level of detail compared to that of the Bactrian compartmented seals, the amulet-stamp seals from prehistoric Margiana might be a local re-elaboration of iconography. This iconography would have resulted from progressive schematisation that began with the Kerman chlorite vessels and ended with the Margiana glyptic; the phenomenon was documented across different figurative themes, such as birds of prey fighting with snakes. Specifically, this process began with the snake-fighting character on the Middle Bronze Age chlorite seals from Kerman, continued with the figure with snake-shaped arms on the Late Bronze Age stamp seals from Bactria, and eventually reached maximum schematisation on the Bronze Age amulet-stamp seals from Margiana.

Considering the style and iconography of this amulet-seal, it is necessary to explain the presence of an artefact related to the sedentary culture and linked to a symbolic or spiritual dimension in a semi-mobile pastoral camp like the one identified in Togolok 1. The discovery of materials related to sedentary material culture, as well as archaeobotanical and archaeozoological data, supports the idea of a mutual sphere of cultural contact that diverges from the classic dichotomous approach to farmers and pastoralists. In addition to pottery, terracotta flat violin-shaped figurines, and semi-precious stone vessels, the considered amulet seal represents a clear indicator of the BMAC social sphere's crucial influence on, if not integration with, the semi-mobile context in Togolok 1 (ARCIERO/FORNI forthcoming; CERASETTI ET AL. 2019; CERASETTI ET AL. forthcoming). Specifically, all the evidence provided further data on the presence of agropastoralists in the Togolok 1 area following the abandonment of the sedentary site. In this context, the presence of the considered amulet-seal can be explained through simple hoarding. BMAC materials, such as terracotta figurines or seals, would have been hoarded by agropastoralists for a possible aesthetic value. However, we cannot exclude that the agropastoralists would have identified a possible value or meaning in these objects belonging to a different culture. In this case, the attribution of a symbolic value to these artefacts would be made possible only through the interaction between agropastoralists and sedentary people. A result of this interaction could have been represented first by the association of a certain iconography with an apotropaic value, even before a



Fig. 11: 1 – “Snake-man” depicted on one side of the black chlorite amulet-seal from the Togolok 2015 excavation (photograph and drawing by the author); 2 – Modern impression of a stone stamp seal from private collection (after SARIANIDI 1998: Fig. 1235); 3 – Modern impression of a stone stamp seal from private collection (after SARIANIDI 1998: Fig. 1236); 4 – Copper alloy amulet/stamp seal from formerly Kovacs Collection (after WINKELMANN 2016: 296, Fig. 4, photo by Renée Kovacs).

possible recognition of the depicted figures. Considering these premises, we cannot exclude the possibility that these artefacts were obtained through exchanges with BMAC sedentary communities, which were also documented by the archaeobotanical and archaeozoological remains. In any case, it is reasonable to suggest that the interaction between these two cultures led to a possible cultural integration process in Togolok 1. This phenomenon probably led to a possible sharing of a complex system of symbols, iconographies, meanings, and values between agropastoralists and sedentary people. However, this site might represent a specific case and caution must be used due to the limited data available from other semi-mobile excavated sites in the Murghab region.

6 Conclusions

The analysis of the seals found by the joint projects between 1990 and 2018 provided valuable information relating to one of the most important classes of materials, facilitating a better historical-archaeological understanding of the Murghab region. First, surface survey and excavation research confirmed the ubiquitous spread of the seals in the north-eastern sector of the Murghab alluvial fan. Moreover, the specimens identified by the joint projects in the Murghab area facilitated the documentation of typologies that were only documented in prehistoric Bactria, or exclusively attributed to this region, or not yet identified at all. These are important elements that highlight the large variety that characterises this class of materials and clarify which types of seals were the most widespread in protohistoric Margiana.

Few conclusions can be made regarding the effective use of seals in the Margian context. Seal impressions and cretulae detected by the joint projects present further evidence of an emerging hierarchy and control system in the Murghab region between the Middle and Late Bronze Age. However, the number of findings is still too limited to demonstrate their exclusive use in administrative processes. At the same time, the recurring presence of drilled holes or perforated handles for the suspension of these objects as pendants reveals their importance to their owners. This class of material constitutes important evidence of a complex “international long-distance trade” system, which led to highly interconnected material and artistic productions between the Iranian Plateau and the Indus Valley towards the second half of the third millennium BCE. Nevertheless, this trade led to a transfer of divinities, acting heroes, mixed beings, and animals from Iran – specifically the Kerman region – to protohistoric Bactria and Margiana. The recurring presence of specific animals and characters within this figurative repertoire, such as the birds of prey and “snake-man” detected on the joint projects seal, leads to the hypothesis that these figures held a high symbolic meaning for their owners.

Finally, the discovery of seals in semi-nomadic contexts allows us to form new hypotheses about the interactions and exchanges between these two different worlds; a reconsidering of the classic narrative of distinction between semi-mobile pastoralists and BMAC farmers (e.g., HIEBERT 1994; KOHL 2007; CERASETTI 2012; FRACHETTI 2012; ROUSE/CERASETTI 2014). The amulet-seal found at Togolok 1 represents one of the numerous pieces of archaeological evidence that allow the identification of a possible sharing of values between BMAC sedentary

people and agropastoralists. In a semi-mobile context, like the one identified in Togolok 1, we do not apparently perceive a break with that complex system of symbols, iconographies, meanings, and values found in some materials, such as amulet-seals and terracotta figurines, documented in BMAC sedentary settlements between the Middle and Late Bronze Age. We therefore observe a discontinuity in the subsistence practices due to seasonal mobility, but not in some habits and customs such as wearing amulets for the value that they hold for the individual. New archaeological excavations planned at Togolok 1 will better clarify the last stages of life of one of the largest settlements of protohistoric Margiana.

Acknowledgments: TAP is funded by the Italian Ministry for Foreign Affairs (MAECI), the ISMEO,

the University of Bologna (UNIBO), and the University of Naples “L’Orientale” (UNIOR). The author would like to thank the scientific directors of the project, Dr. B. Cerasetti from UNIBO-ISMEO and Dr. M.A. Mamedov from the Ministry of Culture of Turkmenistan, for their strong support of this research. I wish to thank the vice-director of the project, Prof. M. Cattani from UNIBO, for his precious help and support of the TAP research activities. Additional assistance in the research activities was provided by Dr. L.M. Rouse, scientific director of the Project for the Ancient Murghab (PAM). Lastly, the author would like to thank Dr. R. Jepbarov, director of the Ancient Merv National Historical Park, for his kind support in the organization of the fieldwork.

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Lock-shaped Stone Handbags (*Pierres Ansées*) from Central Asia

Typology, Distribution, and New Findings

Gian Luca Bonora

Abstract: This paper is dedicated to the study of the stone handbags of a lock shape and other similar forms discovered across Copper and Bronze Age Eurasia. Information, data, and measurements are collected and presented for the first time in a comprehensive paper. A preliminary typology of the artefacts divided into six large super-types, with types and sub-types, is then advanced. Unfortunately, most of the handbags have been found by chance and lack useful information to understand and reconstruct their original function – whether ritual, social or economic – which remains enigmatic. The earliest artefacts were found at Late Neolithic and Chalcolithic sites of south Turkmenistan. However, the period of their greatest diffusion comprises between the mid-3rd and the mid-2nd millennium BCE, as confirmed by the discovery of some handbags in stratigraphic contexts of farmers' settlements located in northern and south-eastern Iran, southern Turkmenistan, and Tajikistan. Recently, other handbags have been identified in the storerooms of different museums in southern Kazakhstan and Kyrgyzstan, extending their area of diffusion northward toward the cultural world of the Eurasian steppes. With awareness that the geographical definition of the Oxus civilisation is a matter of broad scientific debate, the study of this class of objects allows some new light to be shed on the socio-economic and cultural contacts between the settled farming communities of southern Central Asia and the mobile groups of cattle breeders widespread across the Eurasian steppes.

Keywords: Central Asia, Copper and Bronze Age, Oxus civilisation or BMAC, typological classification, stone handbags, handled weights, cultural interactions across Eurasia.

Резюме: Статья посвящена изучению каменных гирь «замковой» формы и подобных изделий, засвидетельствованных на территории Евразии эпохи энеолита и бронзового века. Впервые в одной работе собрана и систематизирована вся доступная информация о данной категории инвентаря. Разработана типология артефактов, выделены шесть больших «супер-типов», объединяющие ряд типов и подтипов. К сожалению, большинство из рассматриваемых предметов представляют собой случайные находки, что не позволяет достоверно определить их функцию. Возможно только на уровне гипотезы допустить их ритуальное, социальное или экономическое назначение. Самые древние из рассматриваемых изделий происходят из памятников позднего неолита и энеолита юга Туркменистана. Период их широкого распространения приходится на середину III – середину II тыс. до н.э., что подтверждается находками каменных гирь в слоях стратифицированных земледельческих поселений на севере и юго-востоке Ирана, на юге Туркменистана и Таджикистана. Выявление подобных артефактов в археологических коллекциях музеев Южного Казахстана и Кыргызстана позволяет заключить, что зона их распространения простиралась далеко на север. Учитывая, что географическое положение цивилизации Окса (БМАК) является предметом научных дискуссий, изучение рассматриваемых орудий позволяет по-новому взглянуть на социально-экономические и культурные контакты между оседлыми земледельцами южной Центральной Азии и животноводами евразийских степей.

Ключевые слова: Центральная Азия, энеолит и бронзовый век, цивилизация Окса или БМАК, типология и классификация, каменные гири; гири с ручками, культурные взаимодействия в Евразии.



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DOI: 10.13173/9783447118804.051

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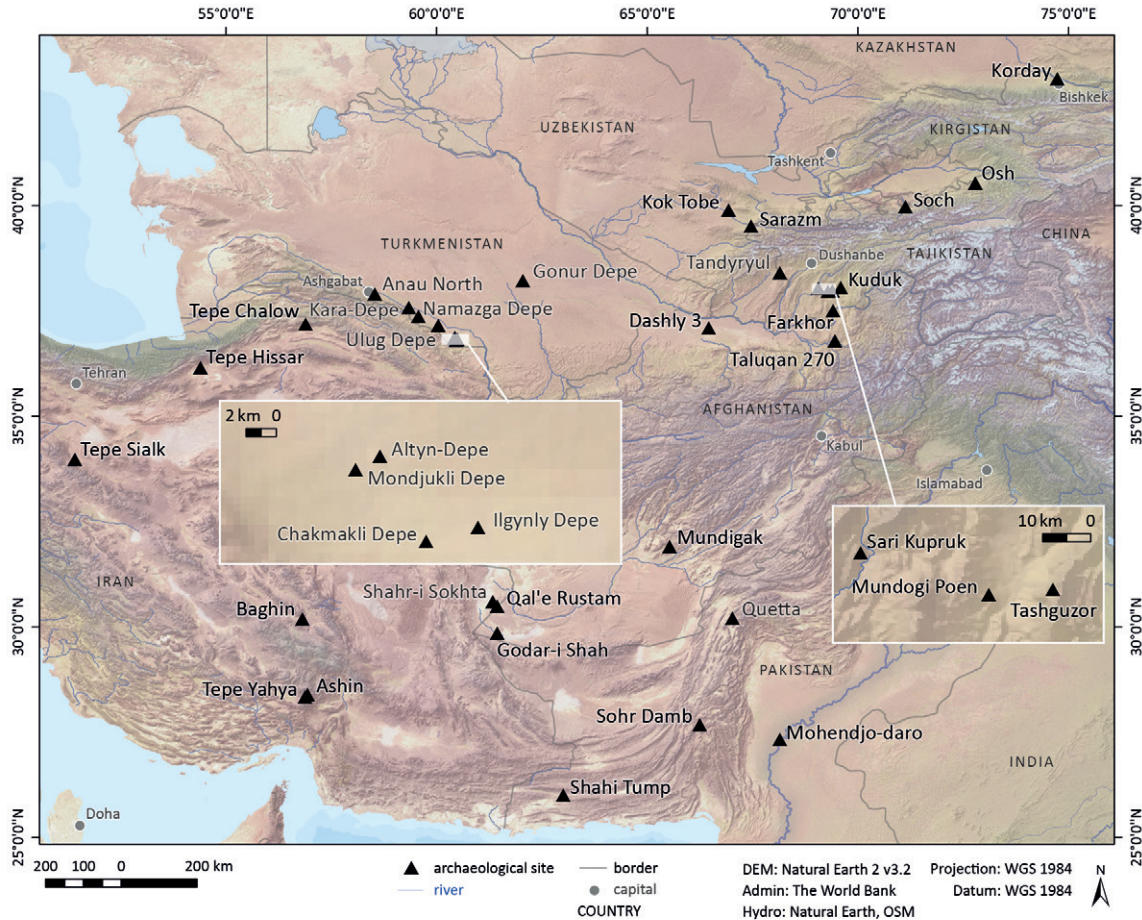


Fig. 1: Map of Central Asia and surrounding regions featuring the archaeological sites where lock-shaped stone handbags were discovered (RUTISHAUSER/BONORA 2022).

A lock-shaped handbag is a bag- and/or padlock-like artefact made of stone (less commonly of metal), of various geometric shapes and sizes, carved out of a single piece and equipped with a handle or grip. On account of their form and heaviness, in some cases weighing more than 3–4 kg, they are also known as *sac à main*, *pietre ansées* and, frequently, “weights”. All these heterogeneous labels and denominations clearly denote that their function and purpose has not been determined as of yet; in fact, scholars have not come to a general consensus on their use and purpose. Designative adjectives are frequently found in their presentations and descriptions: “enigmatic” or “mysterious”.

The question of their denomination and function is extremely biased and complicated by the fact that several handbags have been found by chance, either on the surface of multilayered sites during surface surveys, or in secondary contexts such as building layers pertaining to Iron Age or Medieval sites, modern burials of holy personages, and the courtyards of a local farmer. In most cases, useful information that would aid in understanding and reconstructing their primary context and original function is

lacking. Moreover, other handbags originate from ruinous and illegal plundering of countless ancient cemeteries in northern Afghanistan (southern Bactria) and the valley of the Halil Rud in the Jiroft region of southern Iran. Lastly, since some handbags appear to be – or really are – fake, modern forgeries must not be overlooked.

Aside from the ambiguity of their origin and function, these objects are extensively dispersed across large areas of Central Asia (Fig. 1). It has been speculated that the wide distribution of these objects would appear to suggest a “cult” practice that linked northern and southern Iran to south Central Asia and the Indo-Iranian borderland. Specifically, some authors believe that they served an extremely specific function in rituals (GODARD 1938; DURRANI 1964; POTTIER 1984) or funerary ceremonies (VIDALE/MICHELI 2012) of the socio-political élites across Central Asia in protohistory: in other words these objects, along with other peculiar stone objects such as chlorite-schist staffs and miniature grooved columns, played a still unknown, but evidently important and permeating, ideological purpose.

Other authors considered them as weights, or weight-measuring units, utilised to weigh specific types of goods (KOHL 1979; MUSCARELLA 1993; KIRCHO 2007). Although the dimensions and weight of each artefact differs from that of other objects and, consequently, it is impossible to hypothesise a sort of regional standardisation of measurement unit, this economic purpose appears to be suggested by an item, catalogued as HSS2 in **Table 1**,¹ from Tepe Hissar. The handbag HSS2 was found in Room 4 of the Hissar IIIB Burnt Building. As stated by the excavator, H. Schmidt, it may well be that grain was kept, ground, weighed, and traded in the building. Small piles of charred wheat(?) were found in the north-east corner as well as at the centre of the base of the western wall in Room 4. Fragments of mullers (flat, heavy stone tools used to grind) and hand grinders were also discovered in the floor deposit. HSS2, a large, well-wrought polished weight in red-brown stone, lay near the southern end of the room. This end of the room had burst into flames, and the room walls were blackened and reddened on account of the heat of the conflagration. The differences in shape, material, and weight of the numerous handbags catalogued and codified here could be interpreted as variants of each local system of measurement according to the product or goods that had to be weighed. It may well be that during a certain period, specific weights or instruments were utilised to weigh specific resources (wool, wheat, barley, bread, milk, etc.).

Another hypothesis, namely that handbags served as counterweights to use in big doors or gate openings, cannot be ruled out. As a matter of fact, some of them bore distinctive wear patterns on their handle (for example, HSS6), other handbags had a shiny handle from lengthy use (ALT1, ALT2, ALT9, SRZM2), and in several cases the handle had been broken long ago (THRN1, SRZM4) and the two faces of the body plaque were evidently marked by traces of wear. All this evidence appears to suggest that the objects were hung for a long time by means of cloth ties or cords, probably in the fashion of a flat weight.

Two lead handbags or weights from the Bactria region, here codified as BCT1 and BCT2, are believed to be ingots, i.e. a mass of metal that was cast in a standard shape for convenient storage or shipment. May this idea be extended to all stone handbags? Considering that the stone handbag MND8 from Mundigak, although fragmentary, has exactly the same shape as the lead ingot weighing 10 kg found at Sarazm (BESEVAL 1987: 455), and is comparable to the lead ingots both from illegal digging in Bactria

(SARIANIDI 1988c: 116, Fig. 7:6) and those found in grave 7.01 of Adji Kui, Margiana (BONORA ET AL., in press), this idea cannot be dismissed.

As outlined in the previous paragraphs, it is extremely difficult to ascertain their primary or original function – whether ritual, socio-political or economic – yet a later process of re-use or re-interpretation with a completely different function cannot be excluded. In this regard, the artefact from Semirechye, here codified as SMR, which were gathered in the early 20th century in a Kazakh village east of Almaty, are clear examples of the aforementioned: they were repurposed as tethering stones for keeping animals close to the village. The same concept is documented by the artefacts from Godar-i Shah in the Registan Desert of south-west Afghanistan, codified as GDRS, and the Ashin Grave in the Kerman region, catalogued as ASH. In Central Asia, people frequently gather ancient stone artefacts or fossils and dedicate them to the graves of holy personages. The stone handbag NMZG1 was recently found lying on a modern burial on the surface of the Namazga Depe settlement.² Interestingly, part of the artefact, in contrast to the well-preserved grip handle, is now missing – presumably because the object was repurposed to fulfill a completely different function from the original one.

This paper presents for the first time data and measurements relating to over 150 stone handbags, which have been collected and presented in a comprehensive paper as well as assigned to an initial and, indeed, preliminary typology of the artefacts. The descriptive and typological attempt has been written to arouse curiosity and interest, or raise doubts and criticisms, in colleagues and scholars. It is the author's hope that, in the near future, typological classification will be improved, descriptions and information corrected and updated, and that a general consensus on their function will be reached among scholars.

This work of data collection was by no means a simple and easy task, due to a number of reasons. Firstly, there is no clear standard that may be used to ascertain which artefacts are true handbags and which are not. This uncertainty is the logical and direct consequence of the absence of a clear and established function for these artefacts. Thus, we preferred to include several artefacts that at first sight do not fully correspond to the definition of a handbag. However, due to the degree of similarity, be it small or great, with typical handbags, as well as the fact that they shared the same archaeological contexts, we were able to include them and thus extend the number of the objects. Secondly, it bears mentioning that a lot of information is published in

1 See the appendix at the end of the paper. The main bibliographical references for each catalogued object are written in **Table 1** – but not in the text, in order to avoid overloading it with repeated information.

2 As explained by its toponym, “*namaz*” means prayer; most of the modern surface of the Namazga Depe settlement is today used as a burial ground.

hard-to-find journals and books with limited circulation. Moreover, drawings and photos of some handbags have been published in several works, facilitating their descriptive and typological reconstruction, while other artefacts are not illustrated at all³ or only feature a single photo or drawing, which can be easily interpreted incorrectly. Furthermore, some artefacts are currently housed in museum warehouses where permission is not granted to study the objects.

The handbags have been catalogued and labelled with three or four capital letters and progressive numbers: for example, the artefacts from Altyn-Depe⁴ are presented here with the code ALT and a progressive number, while those recovered from the Afghanistan antiquities market and believed to have originated from the Bactria region are presented with the code BCT and a progressive number. In cases where the regional origin or precise location of the find is completely unknown, the code of the artefact is composed of the capital letters UNKN followed by a progressive number. The comprehensive table in the appendix (**Table 1**) displays the code of each artefact, its typological classification, a brief description of the archaeological context of finding, if ascertained, and a chronological note derived from the architectural layer of the discovery locus or the accepted and common periodisation of the site. The table also contains data regarding the manufacturing material and the size and weight of the object, while the last column highlights the main bibliographical references. Above all, we preferred to quote only papers and books in which the artefact is described and shown in drawings and/or photos.

All the finds have been divided into six large classes or super-types according to their pre-eminent geometric form: from letter A, identifying artefacts of circular shape, to letter F, used for artefacts of irregular and very singular shape. Each super-type is further divided in types and sub-types, identified according to the specific shape and peculiar features of the artefacts. No typological distinctions have been made in relation to the manufacturing material.

1 Typological classification (Figs. 2, 3, and 4)

The total number of artefacts taken into account in this work is 157.

1. Super-type A: Circular⁵ (total number of artefacts taken into account: 35).

- Type A1: Flat, disk-shaped with profiled handle (five items: HSS1, HSS6, HSS11, SRK1, KKT1).
- Sub-type A1a: Flat, disk-shaped with profiled handle and body decorated by three perimetric concentric grooves on both sides (one item: ALT1).
- Sub-type A1b: Flat, disk-shaped with handle and figurative (zoomorphic) decoration on both sides (one item: CHLW3).
- Sub-type A1c: Flat, disk-shaped with profiled handle and body decorated by cross-shaped windows (five items: ULG1, BCT1, BCT2, FRK1, ALT3).

The group of artefacts forming sub-type A1c is heterogeneous: three in stone and two in lead. Moreover, one is highly fragmentary (ALT3), its handle is not preserved, and thus its typological classification in this sub-type may be wrong. However, all five handbags or weights, in addition to having flat faces and a circular shape, are characterised by simple or crenelated cross-shaped decorations on their bodies, which are typical and peculiar motifs pertaining to the Namazga and Oxus civilisation of the late 4th and the 3rd millennium BCE (BONORA 2021: 755).

- Type A2: Flat, disk-shaped, with two diametrically opposed notches. No grooves are present on the large flat faces (four items: HSS3, HSS9, HSS12, GDRS3).
- Sub-type A2a: Flat, disk-shaped, with two diametrically opposed notches and grooves on both large flat sides connecting the notches (16 items: GNN1, GNN2, GNN3, GNN4, GNN5, GNN6, GNN7, GNN8,⁶ HSS7, HSS8, HSS13, BCT7, BCT8, QTT1, QTT2; DSL1).

3 An unillustrated stone weight with a handle has been found in the Early Chalcolithic layer of Dashly-tepe, in south Turkmenistan (HLOPIN 1963: 9). It is dated to the early 4th millennium BCE.

4 I am deeply grateful to V.A. Alekshin and L.B. Kircho of the Institute of History of the Material Culture of the Russian Academy of Science in Saint Petersburg, who both very kindly communicated and provided unpublished information, data, and drawings of the stone handbags from Altyn-Depe. Without their precious help, this work would have been incorrect, incomplete, and partial.

5 Some of the handbags of type A are not perfectly circular in shape. In this first super-type, I considered all the artefacts for which the measurement of the two perpendicular diameters – roughly speaking, the vertical diameter and the horizontal one – have less than 15% difference between them.

6 N. Dubova very kindly communicated to me that all the stone disks from the Gonur royal necropolis, here catalogued from GNN2 to GNN8, share the same shape (circular) and the same features (grooves connecting the diametrically opposed notches). I wish to thank N. Dubova for her distinctive and invaluable kindness.

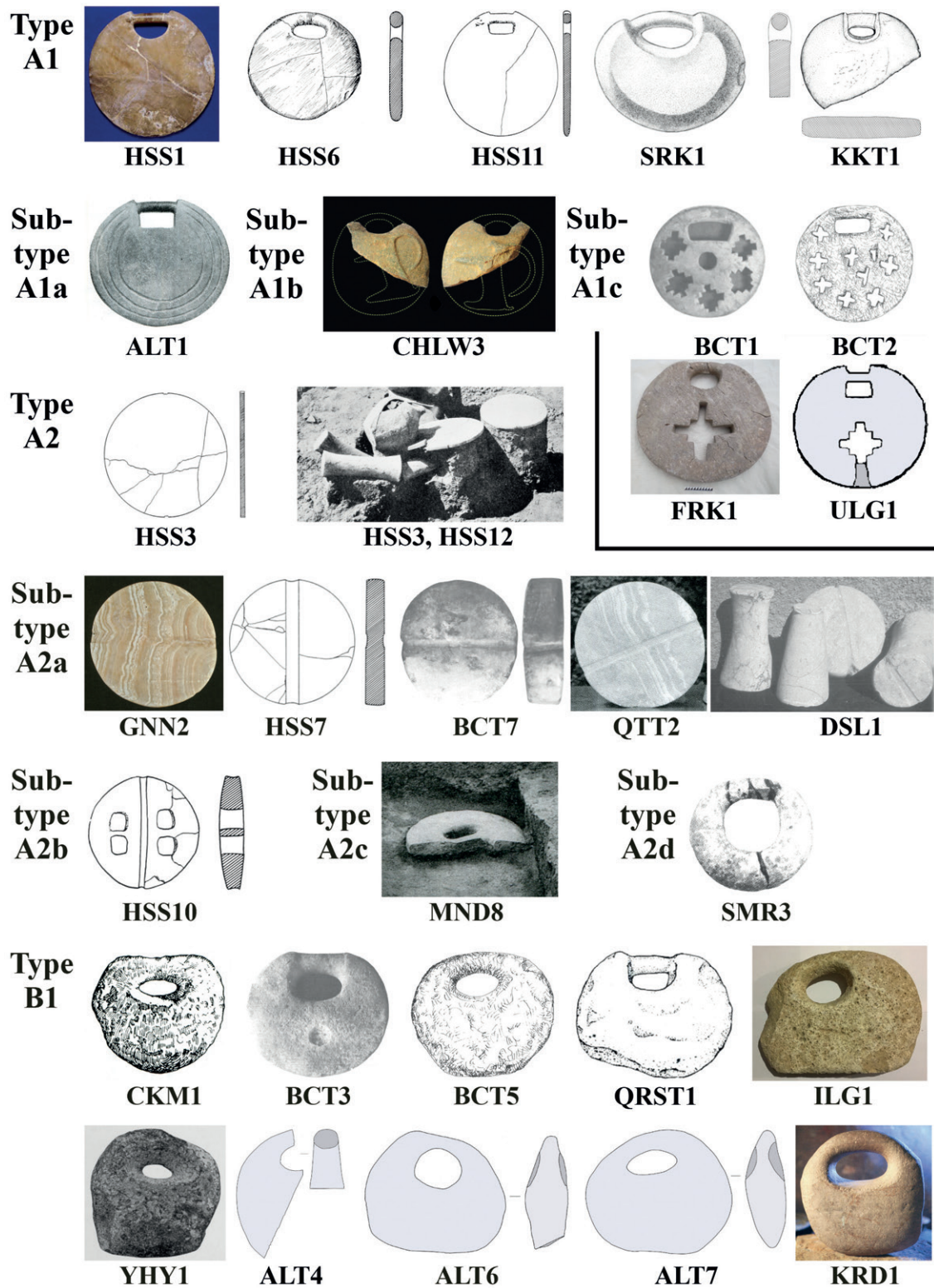


Fig. 2: Typological classification of stone and metal handbags or weights: from Type A1 to Type B1.

- Sub-type A2b: Flat, disk-shaped, with diametrical grooves on both large sides as well as four square windows (one item: HSS10).
- Sub-type A2c: Flat, disk-shaped, with two central quadrangular windows (1 item: MND8).
- Sub-type A2d: Ring-shaped (one item: SMR3).

The main difference between type A1 and A2 is represented by the handle, which is well profiled in all findings of type A1 and, on the contrary, is absent in all type A2 finds. However, the diametrically opposed notches in the sub-type A2a artefacts and the grooves on both large faces of sub-type A2b may have served for threading a rope or string used as a carrying handle or for suspension. The artefacts of sub-types A2b and A2c have an open-worked body featuring quadrangular windows or perforations which, similarly, may have served as grips to move the item from one place to another.

2. Super-type B: Pseudo-circular and oval (total number of artefacts taken into account: 60).

- Type B1: Flat, pseudo-circular, with inner handle⁷ (16 items: CKM1, BCT3, BCT5, ILG1, ILG4, ULG3,⁸ YHY1, KR1, SRZM9, ALT4, ALT6, ALT7, QRST1, TSH1, SIEV1, MDP1⁹).
- Type B2: Oval-shaped, elongated along its horizontal axis, with inner handle (15 items: ALT2, ALT8, ALT9, NMZG1, TLQ1, BCT4, ANAU4, ILG2, ILG3, ILG6, ULG2, SRZM2, SRZM4, SRZM5, QRST2).
- Type B2b: Oval-shaped, asymmetrical, elongated along its horizontal axis, with inner handle (one item: FRK4).
- Type B3: Oval-shaped, elongated along its vertical axis, with inner handle (three items: MNJ1, HSS2, SMR2).
- Type B4: Egg-shaped, with flat base and two perforations drilled diagonally from two sides at the top (23 items: CBLC1, CBLC2, CBLC3, CBLC4, CBLC5, CBLC6, CBLC7, CBLC8, CBLC9,

CBLC10, CBLC11, CBLC12, SHRD1, SHRD2, SHRD3, SHRD4,¹⁰ SHRD5, SHRD6, SHRD7, MHDD1, MHDD2, MHDD3, ANTM1).

- Sub-type B4a: Egg-shaped (in metal) with handle and flat base (one item: SHHT1).
- Type B5: Spherical, with small flat base (one item: TSKT1).

The objects of type B4 have no handle, in contrast to most of the handbags classified here. Traces of wear at most of their perforations, drilled diagonally from two sides at the top, imply that the objects were hung on a rope or were moved from one place to another using a rope or cord. Notwithstanding their different shape, it seems that their function and use could be similar to the typical handbags bearing distinctive wear patterns on their profiled handle such as item HSS2. Sub-type B4a is represented by a single artefact: the so-called "Leopard Weight" from grave 402, dated to Period IIIa (late 4th to early 3rd millennium BCE), of Shahi Tump, in southern Baluchistan or Pakistani Makran. Catalogued as SHHT1, it is manufactured in a lead and copper alloy and decorated with shell inlays portraying two hunting scenes, and a leopard attacking an ibex, separated by four small stylised flies; it is a unique masterpiece of the prehistoric Indo-Iranian borderlands. This ovoid ball weighs over 15 kg and is equipped with a handle at its top. This extraordinary artefact was included in this work due to the fact that its shape is comparable to type B4 weights as well as its weight and the presence of a well-manufactured handle. Last, but not least, without exception all the weights of type B4 and sub-type B4a originate from Baluchistan and the adjacent Indus Valley region, thus providing an explicit and unambiguous regional distribution. Weight ANTM1, which was purchased in the antiquities market some years ago by an Italian manager, shares the same characteristics and sizes of the type B4 items, and is here conditionally attributed to the Central Baluchistan region and dated to the late 4th millennium BCE. The essential condition is its authenticity, which unfortunately cannot be verified.

3. Super-type C: Pseudo-triangular (total number of artefacts taken into account: 38).

- Type C1: Pseudo-triangular with trapezoidal body (plaque), flat base and high, hemispherical handle (31 items: JRFT1, JRFT2, JRFT3, JRFT4 (forgery?), JRFT5, JRFT6,

7 In this first type of the second super-type, I considered all the artefacts of oval or pseudo-circular shape for which the difference between the measurement of the vertical height and that of the horizontal length is less than 20%.

8 Five stone handbags from Ulug-depe are presented here. Four of them have been found by the Franco-Turkmen Archaeological Expedition. Unpublished data, information, and photos about these latter have been kindly provided by J. Lhuillier and J. Benduzu-Sarmiento. To them, I extend my heartfelt thanks.

9 This handbag from Mundogi Poen, in south-west Tajikistan, comes from a grave without human remains (cenotaph) recently opened by a local farmer. The grave goods consisted of two vessels and the stone artefact, here codified as MND1, which appears to be partially rough and without flat and even sides because it is probably unfinished.

10 Seven stone egg-shaped weights from Sohr Damb are described here. Six of them were found between 2002 and 2006 by the German-Pakistan Archaeological Mission to Kalat (Eurasia Department, German Archaeological Institute in Berlin). Unpublished data, information, and photos about these latter have been generously provided by U. Franke, to whom I extend my deepest thanks.

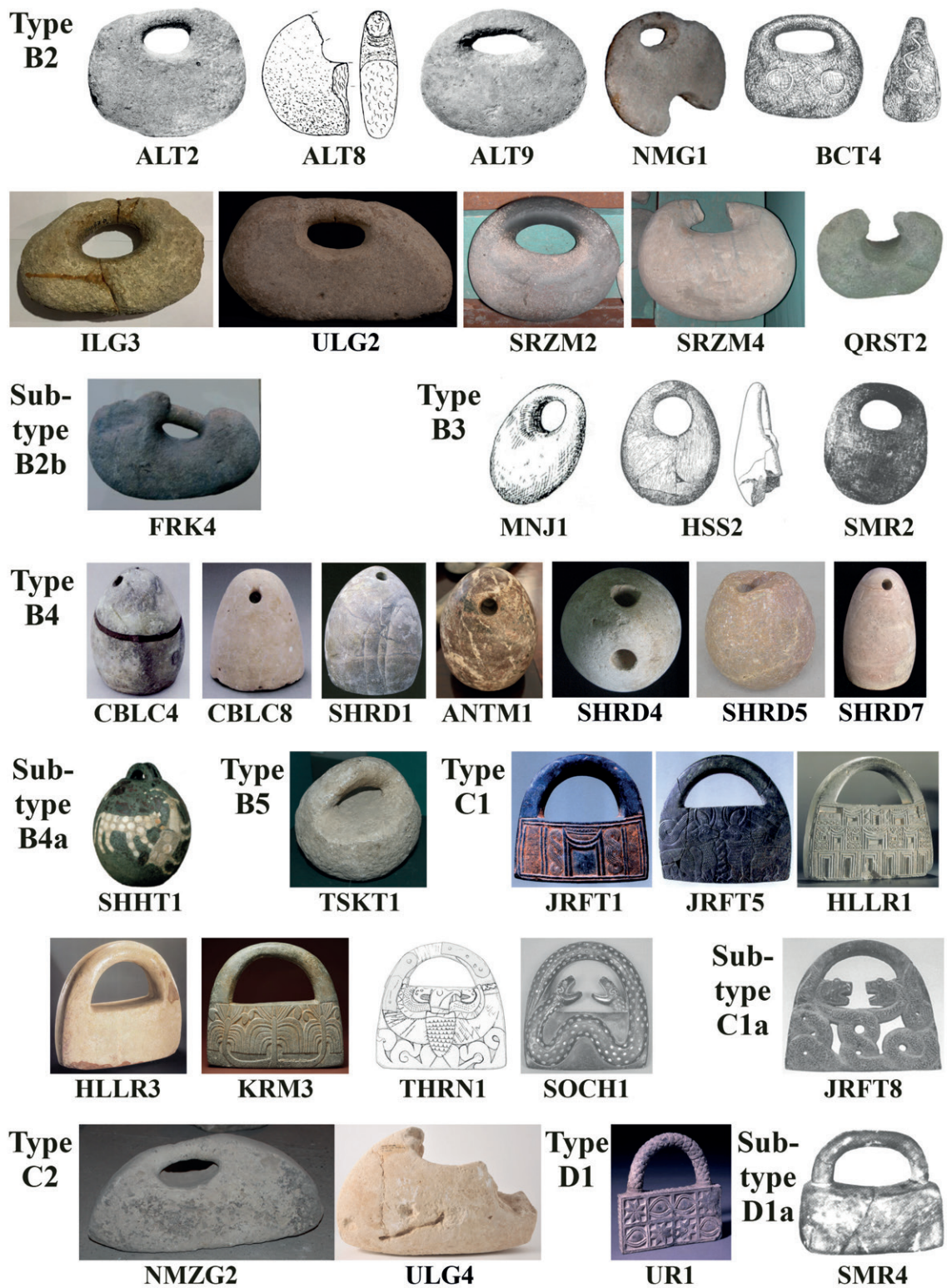


Fig. 3: Typological classification of stone and metal handbags or weights: from Type B2 to Type D2.

JRFT7,¹¹ HLLR1, HLLR2, HLLR3, KRM 2, KRM3, KRM4, KRM5, KRM6 (forgery?), UNKN3, UNKN5 (forgery?), UNKN6, UNKN7 (forgery?), UNKN8, UNKN10, SUSA1, ASH1, BGH1, SIS1, PLM1, NPP1, THRN1,¹² SCH1, SMR1, YHY2).

- Sub-type C1a: Pseudo-triangular with open-worked body, or plaque, and flat base (four items: JRFT8; UNKN2; UNKN9; UNKN11 (forgery?)).

- Type C2: Pseudo-triangular with long and flat base (three items: NMZG2, ANAU1, ULG4).

The large group of handbags catalogued here as type C1 and sub-type C1a, most of them made of chlorite or soft stone, is truly interesting because of the sculpted, carved, and incised decoration with figurative representations that they bore. The topic of the iconographical subjects and their meaning (PERROT/MADJIDZADEH 2005) is beyond the scope of this paper.¹³ However, the fine and

mysterious figurative decorations, as well as the captivating and enigmatic anthropomorphic and zoomorphic representations, have brought about such curiosity and interest that in recent times numerous handbags have been manufactured in chlorite to satisfy the demands of private customers and international museums, and to fill the antiquities market with fake, recently forged pieces (PITTMAN 1984; LIGABUE/SALVATORI 1989; ARUZ/WALLENFELS 2003; VIDALE 2017). Moreover, the great demand from the antiquities market has led consequently to the search for exceptional pieces through illegal excavations (MADJIDZADEH 2003; FRANKE/CORTESI 2015). Although, of course, we vigorously condemn the pillaging of archaeological heritage and the definitive loss of the context of the origin of these artefacts, we must admit that these publications give access to material that would otherwise mostly be hidden away. Furthermore, some authors have made a real scientific work out of these market pieces and their studies have been used in this research as well (AMIET 1977; 1978; 1986; 1988a; 1988b; POTTIER 1984; MUSCARELLA 1993; 2005; SARIANIDI 1998b; WINKELMANN 2004). Therefore, we do not forbid the use of some of them in this paper as, for example, most of the handbags codified here as UNKN and the artefacts SUSA1, NPP1, PLM1, and UR1. Some of them would appear to be actual modern forgeries, while others require additional scrutiny and careful analysis.

- 11 In his office, M. Vidale showed me two chlorite handbags with finely decorated bodies discovered in the Jiroft region (JRFT6 and JRFT7). The first bore on one face the figurative representation of two affronted bulls, while on the other face where two affronted human-headed figures with unmistakable scorpion bodies. The second handbag is decorated with three crosshatched palm trees bearing dates; the two tree trunks at the sides touch a ground line, while the centre one passes below it to the inferior edge of the handbag. The other face of this second artefact is unknown. Both are still unpublished. I wish to thank M. Vidale for his distinctive and invaluable kindness.
- 12 The geographical misattribution of the handbags here codified here as PLM1 and THRN1 does not allow them to be incorporated in the provenience map. The precise location of both objects is completely unknown.
- 13 A brief summary of the iconographic motifs highlights that the variety and differentiation of the subjects is very high. About 35% of the handbags bear decorations on their faces, while most of them are unadorned (about 65%). Some figurative patterns were geometrical: concentric thin grooves (ALT1); cross-shaped carvings (ALT3, HSS5, FRK1, ULG1, BCT1, BCT2); square windows (HSS10, MND8, MND9); checkerboard (JRFT2, KRM2); guilloche (UNKN1); circles (BCT4); twists (NPP1, PLM1, KRM2); rows of geometric figures (JRFT9). Others were inspired by the natural environment: three palms connected by their roots (JRFT2, JRFT3, JRFT7, KRM3, NPP1, PLM1, KRM5, YHY2); entwined snakes treated in the round (SOCH1, JRFT8, UNKN9, UNKN11); a big eagle between two snakes and/or accompanied by other small animals (THRN1, JRFT4, KRM5, UNKN7); fishes (JRFT3); rosette and eye motifs arranged in squares (UR1); facing animals (JRFT 5, JRFT6, HLLR2, KRM4, KRM6, YHY2); a single animal (CHLW3); feline and herbivore (SHHT1). Yet others were inspired by architectural structures where doors play the major role in the depiction (THRN1, JRFT1, HLLR1, KRM4, UNKN6, UNKN7, UNKN8), and/or by anthropomorphic figures (with or without zoomorphic attributes) accompanied by animals (JRFT4, UNKN2, UNKN3, JRFT6). Considering that stone vases of different shapes and sizes, as well as stone game boards, were also adorned by these same categories of

4. Super-type D: Quadrangular (total number of artefacts taken into account: 17).

- Type D1: Flat, rectangular, with high, external handle (two items: UR1, JRFT9).
- Sub-type D1b: Parallelepiped-shaped, with high, external handle (one item: SMR4).
- Type D2: Flat, rectangular, with inner handle (nine items: GDRS1, SRZM1, ANAU2, KARA1, MND1, MND2, FRK2, FRK3, CHLW1).
- Type D3: Rectangular, elongated along its horizontal axis, with inner handle (one item: SRZM3).
- Type D4: Parallelepiped-shaped, elongated along its horizontal axis, with flat base and inner handle (two items: OSH1, OSH2).
- Type D5: Flat, rectangular, with handle and a perforation in its body (one item: SRZM7).
- Type D6: Trapeze-shaped with profiled handle (one item: KDK1).

5. Super-type E: Pentagonal (total number of artefacts taken into account: five).

- Type E1: Flat, pentagonal (three items: KARA2, CHLW2, ULG5).

figurative motifs, it seems likely that the iconography was not related to the function of the handbags.

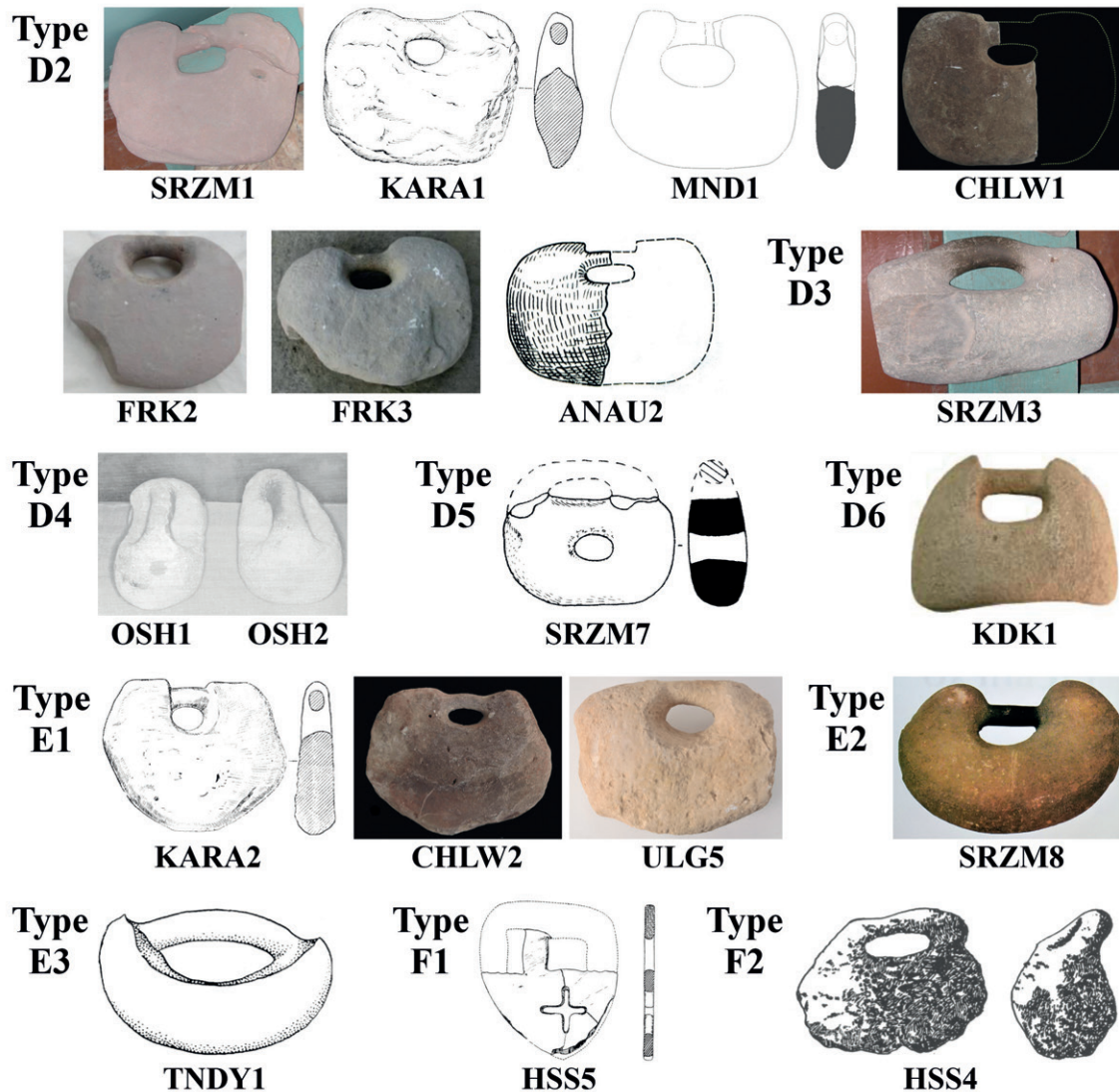


Fig. 4: Typological classification of stone and metal handbags or weights: from Type D2 to Type F2.

- Type E2: Heart-shaped (one item: SRZM8).
- Type E3: Boat-shaped (one item: TNDY1).

6. Super-type F: Unique and singular artefacts (total number of artefacts taken into account: two).

- Type F1: Flat, heart-shaped with open-worked body (one item: HSS5).
- Tipo F2: Rough, oval-shaped, with inner handle. Possibly unfinished (one item: HSS4).

2 Morphological evolution

The morphological evolution of the stone handled weights in the protohistory of Central Asia has nev-

er been studied in detail. The following suggestions represent the author's humble attempt.

The earliest artefacts come from sites located along the piedmont plain north of the Kopet Dagh mountain chain, in southern Turkmenistan: Mondjukli Depe and Chakmakli Depe. Both are oval or pseudo-circular in shape and have an inner handle. The stone handbag from the former site, MNJ1 of type B3, appears to be the earliest and might date back to the 6th or, more likely, 5th millennium BCE, according to the latest chronological determinations (POLLOCK ET AL. 2019). The stone handbag from the second site, CKM of type B1, comes from the Anau IA layer, which was transitional between the late Neolithic and the Meana Horizon and the early Chal-

colithic period. It can be dated to the late 5th millennium BCE.

Other southern Turkmenistan sites document further steps in the evolution and diffusion of these artefacts during the first half of the 4th millennium BCE. Two stone handbags originate from Anau North. While ANAU4, found within a domestic context – Locus ANM 6, Layer 14 – is oval in shape, elongated along its horizontal axis, type B2, and continues the formerly attested morphological tradition, artefact ANAU2 documents a new shape: rectangular, with inner handle, type D2. Considering that handbag ANAU1, discovered in a residential context dating back to the mid and second half of the 4th millennium BCE, stands out on account of its peculiar shape – pseudo-triangular with a long and flat base – the idea may be put forth that marked forms of differentiation in the manufacturing of this specific class of artefacts may have begun to emerge during the Chalcolithic period. Other handbags pertaining to the same millennium clearly confirm an increasing level of socio-cultural complexity which, in this crucial period, is attested in every aspect of everyday life: domestic, military and religious architecture, pottery production, long-distance trade and procurement of raw materials, artificial irrigation, and the appearance of a ranked and hierarchical society.

A fragment of a stone weight from the same site of Anau North, ANAU5, would appear to suggest that the discovery locus of most objects of this class was represented by household contexts, thus implying that they were used for economic purposes in a domestic environment. ANAU5 was discovered during the excavation of a room characterised by a thin NW-SE wall and an exterior courtyard area. This context is part of the third architectural building phase of the site, dating back to the late 3rd millennium BCE.

Six handbags were found at the site of Ilgynly Depe and four of them are taken into account in this work.¹⁴ The relevant site of Ilgynly, also in southern Turkmenistan, is located near Mondjukli and Chakmakli. Generally speaking, the stone objects can be dated to the mid and second half of the 4th millennium BCE: two of them are pseudo-circular, ILG1 and ILG4, while the other two, ILG2 and ILG3, are oval-shaped, elongated along their horizontal axis. In the 4th millennium BCE, the map of distribution is extended by findings from several sites located in geographical regions culturally connected to south Turkmenistan during prehistory. The fragment of a handle, SYLK1,¹⁵ from Tepe Sialk (Ghirshman

1938/1939: 142, plate LXXXV, S223) and the rectangular handbag with inner handle SRZM1,¹⁶ from Sarazm in Tajikistan, found on the floor of Courtyard 1 in Excavation II, near a hearth for kitchen purposes, both date back to the early 4th millennium BCE. The rough and asymmetrical handbag from Tepe Hissar, HSS4, can be attributed to the first third of the same millennium BCE (around 3700 BCE). It was found in a garbage dump and this fact would appear to confirm that it was discarded prior to being finished. The vast Indo-Iranian borderland region enters into the distribution map with two finds from Mundigak, respectively codified as MND1 and MND 2.¹⁷ Both are rectangular, with inner handle, and come from residential contexts composed of one or two-roomed houses and fireplaces in the courtyards, and can be dated to the mid-4th millennium BCE. The finds from Kara-Depe also come from domestic and/or residential contexts. KARA1, of type D2, was discovered in Excavation 4, Room 22, in stratigraphic association with a copper perforator (borer), while KARA2, of pentagonal shape, type E1, comes from the same excavation, Courtyard V, near Room IV, 13. Both are dated to the middle phase of the Late Chalcolithic period, in other words to the late 4th to early 3rd millennium BCE.

A significant pattern of regionalisation is made apparent by the egg-shaped weights in stone, grouped in type B4, and the ovoidal “Leopard Weight” in metal with shell inlays which, on account of its uniqueness and individuality, is the only object of type B4a. Documented from the second half of the 4th millennium BCE onwards, they are particularly prevalent in Central Baluchistan, in Makran, as well as in the Indus Valley. Some egg-shaped weights have also been discovered recently in south-eastern Iran (M. Vidale, personal communication). Thus far, none have been found across the central and northern Iranian plateau, or in Afghanistan, southern Turkmenistan, Margiana, Bactria, or across the Eurasian steppes.

Neither circular handbags of super-type A, nor pseudo-triangular ones with trapezoidal body (plaque), flat base, and high, hemispherical handle, of type C1, are documented until the first half of the 3rd millennium BCE. In regard to the finds, the earliest artefacts of circular shape appeared in the first

14 Two were not included because they are fragmentary and typologically difficult to identify. I would like to thank N. Solov'eva sincerely for sharing with me data and photos of her findings, which are still largely unpublished.

15 This find is not present in Table I, in the appendix, due to its highly fragmentary state, which did not allow it to be classified typologically.

16 SRZM1 is the only handbag from Sarazm found in a fixed archaeological context. All of the other eight items have been found on the surface of the settlement in the middle Zeravshan Valley.

17 J.-M. Casal passed on the information that five other finds, fragments of handbags (from MND3 to MND7), have been found in Mundigak. Their sizes and drawings are not available. From a chronological point of view, the first four fragments are dated to the second half of the 4th millennium BCE, while the last one, MND7, is dated to the second or third century of the 3rd millennium BCE. All come from residential or household-related contexts. Not one is from a burial.

half of the 3rd millennium BCE, while the beautiful handbags made of chlorite or other stones featuring finely executed figurative decorations appeared in the second half of the 3rd millennium BCE and are to be considered typical objects of the so-called Oxus civilisation or BMAC (Bactro-Margiana Archaeological Complex).

The fragmented find MND8 from Mundigak in the Kandahar region of central Afghanistan, of sub-type A2c, is one of the first circular artefacts. It comes from Mound C, Room CCXXVII, Level IV, 1, which dates back to approximately the first two centuries of the 3rd millennium BCE. It bears mentioning that the place of discovery has been interpreted by its excavator, J.-M. Casal, as a residential structure: the artefact MND8 was found in a dwelling, made of mudbricks, built without foundations, next to a small corner fireplace. The circular handbag FRK1, of sub-type A1c, was discovered on the surface of the Farkhor site in southern Tajikistan, lacking its original archaeological context; this find may be considered the earliest example of a round-shaped handbag with decoration: the body bears an open-worked crenelated cross motif. Concurrently with the appearance of the earliest circular objects, the tradition of the stone handbags that are pseudo-circular and oval in shape continued as documented by the finds from the site 152 near Qal'e Rustam, in south-eastern Iran, published here for the first time thanks to the courtesy of Reza Merhfarin. Unfortunately, both come from the surface of the site; however, the painted pottery found on the site surface in association with both handbags is that typical of Period II of the prominent Bronze Age site of Shahr-i Sokhta, in Iranian Sistan. According to the recent revision of the chronology and periodisation of the prehistoric eastern Iran region by M. Vidale and other colleagues (KAVOUSH ET AL. 2019), which is based on the excavation of Tepe Graziani, Period II of Shahr-i Sokhta has to be dated to the early 3rd millennium BCE.

As already stated in the previous paragraphs, considering all the finished and unfinished stone handbags coming from controlled excavations, it is evident that half¹⁸ of the earliest finds – those dated to the period from the 5th, 4th, and mid-3rd millennium BCE – come from household contexts, suggesting then that their function was much more closely related to an economic or socio-economic purpose than a ritual or funerary one. The only exceptions prior to the second half of the late 3rd millennium BCE are represented by the so-called “Leopard Weight”, found in grave 402 of Shahi Tump, and three egg-shaped weights from grave 739/40 of Sohr Damb. However, it bears stating that other two

egg-shaped weights, SHRD5 and SHRD6, from Sohr Damb were not found in burials: the first in a Period II domestic context in Trench VIIc, Complex 7A, but most likely in a secondary use; and the second in Room A 12, Group G, respectively.

Three finds from Altyn-Depe, all of the same type, B2, appear to confirm and support the assumption regarding the predominance of residential and domestic discovery contexts rather than funerary and ritual loci. The oval-shaped fragmentary limestone handbag ALT8 was found in a courtyard of Excavation 5, Horizon 11. It is dated to the first century of the 3rd millennium BCE. Handbag ALT9, also manufactured out of limestone, was discovered on the floor of Room 4 in Excavation 5, Horizon 7. It belongs to the early phase of the Early Bronze Age (ca. 2700–2625 BCE), while the artefact ALT2 comes from Rooms 5 and 6 of Excavation 7, Horizon 2. It is dated to the late 3rd millennium BCE. The find from Tepe Yahya, YHY1, dated to the second half of the 3rd millennium BCE, also supports the household theory: it was found when dismantling the wall of a narrow room, built in a north-south orientation, measuring 3.06 × 0.92 m across the interior. However, regarding this hypothesis, the most important artefact is HSS2, which is large and well-wrought and polished. As was previously stated, it was found in Room 4 of the Hissar IIIB Burnt Building, dated to third quarter of the 3rd millennium BCE. It may well be that in this room grain was kept, ground, weighed, and traded. Small piles of charred wheat(?) were found in the north-east corner as well as at the centre of the base of the western wall. Fragments of mullers and hand grinders were also discovered in the floor deposit.

3 Late 3rd millennium BCE

It bears mentioning that in the last centuries of the 3rd millennium BCE, some important changes took place in the morphological evolution of the stone handbags, in their patterns of distribution as well as in their function.

The tradition of the disk-shaped handbags with handle, type A1 and relative sub-types, continues and their number is consistent in this period. Illustrative examples are the items HSS1, HSS6, and HSS11, from Tepe Hissar, ALT1 from Altyn-Depe, as well as the unique handbag CHLW3 from Tepe Chalow. The handbag is decorated on both faces with the relief image of an ibex.

An important novel element is represented by the first appearance of very elegant marble disks with diametrically opposed notches and grooves connecting them (type A2 and sub-type A2a). The examples are numerous, closely clustered in two geographical regions – north-eastern Iran and Bactria-Margiana – and all chronologically and culturally attributed

18 Twelve out of 24 handbags: ANAU1, ANAU4, HSS2, HSS4, HSS6, MND1, MND2, MND8, ALT3, KARA1, KARA2, SRZM1.

to the Oxus civilisation. Outside the core area of the BMAC, marble disks have been found in the Quetta hoard, perhaps a votive funerary deposit, which dates to the very peak of the Oxus civilisation, and in the shrine of Godar-i Shah. They were located in one or more unidentified graves in the vicinity and were brought as offerings to the modern tomb of a local holy man; evidently, they were much more ancient. These disks, found in association with stone miniature columns and staffs, rods, or sceptres, are clearly among the archaeological indicators of the process of expansion of the Oxus civilisation communities from the core area, represented by Bactria and Margiana, toward the surrounding regions and areas in search of natural resources as well as new land.

Moreover, as implied by the Quetta finds, several of these marble disks come from funerary or votive contexts, thus attesting that a substantial change in their meaning and purpose occurred at the end of the 3rd millennium BCE. Of the eight stone A2a disks from Gonur North, seven were found in large and well-furnished graves. Concerning Tepe Hissar, one A2 disk (HSS9), three A2a (HSS7, HSS8, and HSS13), and one A2b (HSS10) were finds of Hoard I of Treasure Hill, an Oxus civilisation cenotaph that contained a culturally and chronologically significant and exquisitely executed assemblage: alabaster objects, weapons, tools, and vessels of copper, ornaments sewn on fabric of gold (five modeled mouflon heads made of gold foil of admirable workmanship, also decorated with the repoussé technique), decorations in silver and other materials, as well as pottery vessels in grey burnished ware (bottles, pitchers with long horizontal spouts or long beak spouts, and canteens with a bottle neck and perforated lugs). A handled A1 disk, HSS1, was part of the so-called "Grave of the Warrior", Grave DF 19, x-2, of Tepe Hissar, where a miniature stone column was discovered among the other finds. A handbag of the same type, HSS11, was an important find of another Oxus civilisation cenotaph discovered at the same site of Tepe Hissar: the so-called "Hoard II", which consisted of an alabaster hourglass-shaped figurine, two alabaster cosmetic bottles – one bearing a lid, light brown, pea-shaped beads, a miniature column and a cup made of stone, two bottle-pitchers and a bowl in grey ware, a bottle in lead containing a wand in copper, a hemispherical cup, and a jar in alabaster.

Another find from a funerary or ritual archaeological context is the handled handbag ALT1, which comes from Excavation 7, Room 7 of the so-called "priestly sepulchre" or "funerary complex" opened in the third or earliest horizon of the Middle Bronze Age, near the cult centre. The "priestly sepulchre" at Altyn-Depe consisted of a suite of rooms, where a corridor and a vestibule-like chamber led into the "sanctuary", or Room 7, characterised by a raised hearth in its centre and a rectangular altar built against its northern wall. This room was filled with

human and animal bones and a wealth of objects, including three large objects of polished stone, a miniature stone column, a biconical "sceptre" and a flat, disk-shaped handbag, the gold heads of a bull and a wolf, numerous beads of lapis lazuli, turquoise, elephant ivory, carnelian, agate and also gold, bone game sticks, and a composite plaque of white and grey with a cross and half-moon depicted on either side of two vertically set white stones. The contents of Room 7 resemble those of a typical collective burial with a pile of bones representing 11 individuals, some of whom had no skulls, and a final burial, still articulated. Separate skulls with humeri and ribs were set into niches in the walls of the room.

The late 3rd millennium BCE was the period of greatest diffusion of the most famous and well-known type of handbags: here codified as type C1, they are represented by a pseudo-triangular handbag with high, semi-circular handle and a finely executed and decorated rectangular plaque. Most were carved in the Halil Rud figurative style. Their plaques display a great variety of designs, often different on the front and back, and feature animals, birds, plants, reptiles, and geometric patterns in relief. Undecorated plaques have also been found, usually associated with hard stones such as limestone and sandstone, i.e. not soft stone such as chlorite. This specific type of handbag is not attested in the earlier collections of southern Turkmenistan (Anau, Altyn, Kara, Mondjukli, and Chakmakli), of Mündigak, Sarazm, and Tepe Hissar, nor in Baluchistan and along the valley of the Indus River. It was certainly manufactured in specialised manufacturing areas that flourished in south-eastern Iranian settlements, such as the one excavated at Tepe Yahya, in context A.75.9.8 attributed to Period IVB. Tepe Yahya must have been only one of a large constellation of manufacturing sites that in the late 3rd millennium BCE provided the main urban centres of the Halil Rud civilisation, in south-eastern Iran, with these famous objects. Most of the C1 handbags have no precise and concrete archaeological context, but they appear to have come from the numerous graves looted in the Halil Rud Valley (Jiroft).

The looting of many of these objects in the Halil Rud graveyards strongly suggests that these objects circulated in the local early urban settlements to be finally displayed and used in important socio-political and crucial funerary events, and were no more produced for economic and trade purposes, as suggested here for the earliest objects found in southern Turkmenistan, at Tepe Hissar, Mündigak, and Sarazm. In the Halil Rud Valley, in the late 3rd millennium BCE, the handbag undoubtedly took on a local (not-Central Asian) form and possibly also another meaning – a meaning that might have been exclusively funerary in order to highlight the social status of the inhumated, their socio-cultural affiliation, or ethnic origin. The former idea was translat-

ed into a local medium, functioning in a local setting with its specific and local significance.

However, the funerary interpretation was not common among all the Bronze Age communities. Considering one of the most important burial grounds of the 3rd and 2nd millennia BCE such as the graveyard of Shahdad, in south-eastern Iran, located near the most important manufacturing area for chlorite vessels, handbags, and other artefacts, it may be stated that no handbags were found in the 383 graves of the Bronze Age necropolis excavated by A. Hakemi. The same may be said of the large burial ground of Shahr-i Sokhta, in Iranian Sistan. Approximately 510 graves have been excavated already by the Italian-Iranian archaeological expedition and none contained handbags. It is very surprising that in Margiana and north-east Iran, where some sites such as Gonur, Adji Kui, and Tepe Hissar have been excavated extensively and very numerous burials have been opened, no typical handbags in chlorite decorated with finely carved figurative representations have been found so far. This would appear to signify that other artefacts played the socio-political or symbolic role of the chlorite handbags, or that this role was not a necessity in the community, it was not important, and it did not deserve to be made explicit and materialised in such an object.

4 Across Eurasia

The handbag with high, external handle circulated all the way to the northern or north-eastern border of the civilisation of the Iranian Plateau when, precisely in the late 3rd millennium BCE, other artefacts, innovative ideas, religious, cult beliefs, and technologies found their way to the world of the large cattle breeders inhabiting the Eurasian steppe, and vice-versa. The large corpus of the objects made of stone, metal, ivory, and other material created by the Oxus civilisation settled communities was so attractive, precious, and appealing to the neighbouring mobile groups of the Eurasian steppe that their desire for possession or emulation led them to purchase or create the same types of objects utilising local materials.

The handbag from Korday (KRD1), as well as those found by chance in Semirechye, and today housed in the State Museum of Kazakhstan in Almaty (from SMR1 to SMR4), the finds from the Ferghana Valley in Uzbekistan and Kirghizistan (the masterpiece SOKH1, and the chance finds OSH1 and OSH 2), and the spherical artefact exhibited in the State Museum of History of Uzbekistan, in Tashkent, of unknown provenience (TSKT1), highlight the early development process of the socio-economic and cultural contacts between the settled farming communities of southern Central Asia and the mobile groups of cattle breeders widespread across the

Eurasian steppes. They may testify to the earliest attempts made by Oxus civilisation surveyors to explore the southern and central Kazakhstan steppes as well as the fertile plains of the Ferghana Valley in search of metal and other resources.

The diffusion of the stone handbags across northern and southern Eurasia throughout several millennia demonstrates that objects, and the idea behind them, propagated between and through cultures due to various mechanisms of transmission – and for various reasons, and that the idea was often subjected to transformation. Perhaps this is why the shape of these handbag “weights”, and their variations, are so geographically and culturally scattered. Yet, once it reached the Halil Rud Valley, as well as in the grave of the First Warrior of Tepe Hissar and in the high valleys of Bronze Age Tajikistan,¹⁹ the handbag undoubtedly took on a local, decidedly non-Central Asian form and possibly another meaning as well. The foreign idea was translated into a local medium, functioning in a local setting with its specific and local significance. Characteristic material culture forms and materials are transportable, but their meanings may be reshaped and repurposed to fit diverse socio-political settings and a different array of participants (APPADURAI 1986; URBAN 2001). The mobile groups of specialised pastoralists and herders, the merchants and traders, pilgrims and travelers, moving from region to region and leaving tokens and traces behind as they moved onward, are the key factors to in this interaction and a plausible mechanism for the dispersal of artefacts from east to west, and vice-versa, and from the southern farming communities of the Iranian plateau and Indo-Iranian borderland towards the northern steppe inhabited by mobile cattle breeders, and vice-versa.

19 In 2020 summer, while excavating the foundations for a house, a stone handbag was discovered in the small village of Siev, in the Roshtqal'a district of the Gorno-Badakhshan region, Tajikistan. This is the north-easternmost find discovered and it comes from a very high valley where, so far, archaeological evidence has very rarely been brought to light.

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Appendix: Table 1

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
HSS1 – Tepe Hissar, north-east Iran (inv. nr. H 174)	A1	Grave DF 19, x-2, which contained: a silver pitcher, grey pottery vessels, an alabaster jar, copper wand with birds or animal heads, bident, dagger, mattock, hollow chisel, helmet(?) of copper, chalcedony, lapis lazuli and other beads, and two gold-sheathed, copper earrings. A miniature column of alabaster and handbag HSS1 were in front of the knees of the deceased. Hissar IIIC period – late 3rd millennium BCE	Alabaster	H: 38.5 cm; L: 39.4 cm; T: 2.5 cm.	SCHMIDT 1933: 423 and 431, 442 and 444, Pl. CXXXVI, A; Pl. CLII; SCHMIDT 1937: 396; GÜRSAN-SALZMANN 2016: 244, Fig. 5.19; 290, Fig. 6.18.
HSS6 – Tepe Hissar, north-east Iran (inv. nr. H 2895)	A1	Found in Plot CG 11, in a room of the Hissar IIIB level, probably buried by Hissar IIIC settlers. Hissar IIIC period – late 3rd millennium BCE	Stone	H: 33 cm; L: 33 cm; T: 3.6 cm; Ø h: 4.5 cm.	SCHMIDT 1937: 219, Pl. LXII.
HSS11 – Tepe Hissar, north-east Iran (inv. nr. H 3492)	A1	In Hoard II of Treasure Hill, found on the floor of the uppermost level in Plot DH 07. Hoard II consisted of: an alabaster hourglass-shaped figurine, two alabaster cosmetic bottles (one with lid), light brown, pea-shaped beads, a miniature column and a cup in stone, two bottle-pitchers and a bowl in greyware, a bottle in lead containing a wand in copper, a hemispherical cup, and a jar in alabaster. Hissar IIIC period – late 3rd millennium BCE	Alabaster with tan and brown shades	H: 47.2 cm; L: 44.3 cm; T: 2.5–3 cm.	SCHMIDT 1937: 219, Figs. 98, 99, Pl. LXII.
SRK1 – Sari Kupruk, south Tajikistan	A1	The handbag was found on the surface of a river terrace where a Bronze Age burial ground was later identified. Today the terrace is covered by a modern graveyard. Late Bronze Age – early 2nd millennium BCE	Silicified limestone	H: 36 cm; L: 41 cm; Ø h: 4.5 cm.	FILIMONOVA/AHMETZANOV 2008: 79–80, Fig. 5.3.
KK11 – Kok Tobe, Uzbekistan	A1	The handbag was found in a pit excavated after the foundation of the Achaemenid platform and filled with objects from rituals. The handbag has an anachronistic character. Possibly, it was picked up from an unknown Bronze Age site located near Kok Tobe. Kok III phase – Achaemenid period – second half of the 1st millennium BCE	Sandstone	H preserved: 26.5 cm; L: 37 cm; T: 6.7 cm; Ø h: 5.5 cm.	RAPIN 2017: 424, note 7, Fig. 3b; RAPIN/ISAMIDDINOV 2013: 124.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
HSS3 – Tepe Hissar, north-east Iran (inv. nr. H 1845)	A2	Plot CF 37, Level 1, building remains of the North Flat. In the house remains of Section 1, three alabaster “miniature columns” (H 1841, H 1842, and H 1843) and two disks (H 1845 and H 1846) were found. Hissar IIIC period – late 3rd millennium BCE	Light tan, trans-lucent alabaster	Ø: ca. 46.2 cm; T: ca. 2 cm.	SCHMIDT 1937: 177, 218–219, Fig. 132, Pl. LXII.
HSS9 – Tepe Hissar, north-east Iran (inv. nr. H 3263)	A2	Treasure Hill, Hoard I: it consisted of alabaster objects, weapons, tools, and vessels of copper, ornaments of gold, silver, and other materials, as well as pottery vessels. Hissar IIIC period – late 3rd millennium BCE	Alabaster	Ø: ca. 33.1 cm; T: ca. 3 cm.	SCHMIDT 1937: Fig. 97.
HSS12 – Tepe Hissar, north-east Iran (inv. nr. H 1846)	A2	Plot CF 37, Level 1, building remains of the North Flat. In the house remains of Section 1, three alabaster “miniature columns” (H 1841, H 1842, and H 1843) and two discs (H 1845 and H 1846) were found. Hissar IIIC period – late 3rd millennium BCE	Light tan, trans-lucent alabaster	Ø: ca. 46.2 cm; T: ca. 2 cm.	SCHMIDT 1937: 177, 218–219, Fig. 132, Pl. LXII.
GDRS3 – Godar-i Shah, Sistan region, east Afghanistan	A2	Found in the modern shrine of Godar-i Shah, where a grave is completely covered by stone objects, which are out of context, and many empty rifle cartridges.	Stone		DALES 1972: Figs. 16, 18 and 19; BESENVAL/FRANCFORT 1994: Fig. 1.9; BISCIONE/VAHDATI 2021: 537, Fig. 19, 9.
GNN1 – Gonur Depe, Margiana	A2a	Palace of Gonur North. Late phase of the Middle Bronze Age, 2150–2000 BCE	Stone		SARIANIDI 1998a: 51, Fig. 19, 10.
GNN2 and GNN3 – Gonur Depe, Margiana	A2a	Grave 3220: containing a man and two women, as well as 11 male and eight female sacrificed individuals. Inventory: two stone sceptres, two miniature columns, two vessels and other artefacts in gold, 17 vessels and other artefacts in silver, five bronze vessels, and mosaic tesserae. Late phase of the Middle Bronze Age, 2100–2000 BCE	Stone	GNN2: Ø: 49.5 cm; T: 5 cm. GNN3: no data.	GASS/MASANZ 2018: 207–208, cat. 157; DUBOVA 2021: 344, 352.
GNN4 and GNN5 – Gonur Depe, Margiana	A2a	Grave 3210: containing four men and three women, as well as four sacrificed male individuals. Inventory: a stone sceptre, two miniature columns, a camel, a dog, a calf and two sheep, gold and silver artefacts, and mosaic tesserae. Late phase of the Middle Bronze Age, 2100–2000 BCE	Stone		DUBOVA 2021: 352.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
GNN6 – Gonur Depe, Margiana	A2a	Grave 3230: containing two men and a woman, as well as 10 female and six male (a dwarf among them) sacrificed individuals. Inventory: a stone sceptre, a miniature column, gold artefacts, and mosaic tesserae. Late phase of the Middle Bronze Age, 2100–2000 BCE	Stone		DUBOVA 2021: 352.
GNN7 – Gonur Depe, Margiana	A2a	Grave 3235: containing four men and five women, as well as four male and five female sacrificed individuals. Inventory: two stone sceptres, two vessels and other artefacts in gold, three vessels and other artefacts in silver, three bronze vessels, and mosaic tesserae. Late phase of the Middle Bronze Age, 2100–2000 BCE	Stone		DUBOVA 2021: 352.
GNN8 – Gonur Depe, Margiana	A2a	Grave 3880: containing three(?) sub-adult individuals. Inventory: three stone sceptres, four miniature columns, a camel, a dog, gold and silver artefacts, and mosaic tesserae. Late phase of the Middle Bronze Age, 2100–2000 BCE	Stone		DUBOVA 2021: 353.
HSS7 – Tepe Hissar, north-east Iran (inv. nr. H 3261)	A2a	Treasure Hill, Hoard I: it consisted of alabaster objects, weapons, tools, and vessels of copper, ornaments of gold, silver, and other materials, as well as pottery vessels. Hissar IIIC period – late 3rd millennium BCE	Tan limestone	Ø: 35.5 cm; T: 5.2 cm.	SCHMIDT 1937: 219, Fig. 97, Pl. LXII.
HSS8 – Tepe Hissar, north-east Iran (inv. nr. H 3262)	A2a	Treasure Hill, Hoard I: it consisted of alabaster objects, weapons, tools, and vessels of copper, ornaments of gold, silver, and other materials, as well as pottery vessels. Hissar IIIC period – late 3rd millennium BCE	Alabaster	Ø: 28 cm; T: 6.5 cm.	SCHMIDT 1937: 219, Fig. 97.
HSS13 – Tepe Hissar, north-east Iran (inv. nr. H 3263)	A2a	Treasure Hill, Hoard I: it consisted of alabaster objects, weapons, tools, and vessels of copper, ornaments of gold, silver, and other materials, as well as pottery vessels. Hissar IIIC period – late 3rd millennium BCE	Alabaster	Ø: 33.1 cm; T: 3 cm.	SCHMIDT 1937: 219, Fig. 97.
BCT7 and BCT8 – Bactria region, north Afghanistan	A2a	Unknown location and context. Late phase of the Middle Bronze Age – late 3rd millennium BCE	Alabaster	BCT7: H: 29 cm; L: 31 cm; T: 8 cm. BCT8: no data.	POTTIER 1984: 42, Pl. XXXV, 289.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
QTT1 and QTT2 – Quetta, Baluchistan, central Pakistan	A2a	Deposit found by chance consisting of: three sceptres, four miniature columns, several alabaster vessels as well as copper/bronze objects, a pedestaled goblet, hundreds of tiny beads and two bull-shaped pendants in gold, the lower part of a female sculpture in steatite, a piece of lead, a cylindrical brazier in copper, and several inlaid parts of a lost object. Mehrgarh VIII period – late 3rd millennium BCE, 2100–2000 BCE	Marble	QTT1: Ø: 44 cm; QTT2: Ø: 38 cm.	JARRIGE/USMAN HASSAN 1989: 153, Figs. 4 and 5.
DSL1 – Dashly 3, Bactria, north Afghanistan	A2a	Unknown context. Late 3rd/early 2nd millennium BCE	Stone		SARIANIDI 1986: Abb. 53.
HSS10 – Tepe Hissar, north-east Iran (inv. nr. H 3264)	A2b Decor.	Treasure Hill, Hoard I: it consisted of alabaster objects, weapons, tools, and vessels of copper, ornaments of gold, silver, and other materials, as well as pottery vessels. Hissar IIIC period – late 3rd millennium BC	Alabaster	Ø: 23.4 cm; T: 5.2 cm.	SCHMIDT 1937: 219, Fig. 97, Pl. LXII.
MND8 – Mundigak, central Afghanistan	A2c Decor.	From Mound C, Room CXVII. Level IV, 1 – 2900–2800 BCE	Stone		CASAL 1961: 235, Pl. XX, A.
SMR3 – Semirechye region, south-east Kazakhstan	A2d	Unknown location and context.	Stone		BESENVAL/ISAKOV 1989: 18, Fig. 30; BONORA 2021: 760.
ALT1 – Altyn-Depe, south Turkmenistan	A1a Decor.	Excavation 7, Horizon 3, Room 7. A large number of objects and disturbed human bones and bones of small horned animals, covered with heaps of bricks, were lying on the floor of the room. Among the others: vessels, cross-like stone artefacts, numerous beads of lapis lazuli, turquoise, elephant ivory, carnelian, agate, and also gold. Moreover, the gold heads of a bull and a wolf, bone gaming sticks, a composite plaque of white and grey stone with a cross and half-moon depicted on either side of two vertically set white stones, and three large objects of polished stone – a miniature stone column, a biconical “sceptre”, and the flat, disk-shaped handbag. Note: The handle of the handbag was shiny from lengthy use.	Dark grey steatite	H: 41 cm; L: 43 cm; T: 3 cm; Ø h: 3.8 cm.	MASSON 1974: 6, Fig. 3–5; 1976; 1988: 65–68, Fig. 19–22, Pl. XXXV, 4; KOROBKOVA 2001: 196, Fig. 28, 3; MAS- SON/BEREZKIN 2005: 31, 99, Pl. 42; 44, 3; 47, 2.
CHLW3 – Tepe Challow, north-east Iran	A1b Decor. fragm.	From the surface of the site. The handbag is decorated with the relief image of an ibex on both sides. Late 3rd millennium BCE	Stone	Ø: ca. 24 cm.	VAHDATI ET AL. 2020: 183, Fig. 5, b.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
ULG1 – Ulug-depe, south Turkmenistan	A1c Decor.	From the surface of the site. The handbag is decorated with an open-worked crenellated cross motif.	Stone	H: 56 cm; L: 60 cm; Ø h: 4.4 cm.	SARIANIDI 2001: 69, Fig. 36.
BCT1 – Bactria, north Afghanistan	A1c Decor.	Unknown location and context. The handbag is decorated with five regularly spaced eight-pointed cruciform openings and a central circular opening.	Lead	Ø: 26 cm; T: 2.5 cm; Ø h: ca. 3.8 cm.	POTTIER 1984: 43, nr. 290, Pl. XXXV, 290.
BCT2 – Bactria, north Afghanistan	A1c Decor.	Late phase of the Middle Bronze Age – late 3rd millennium BCE Unknown location and context. The handbag is decorated with 10 four-pointed cruciform openings, two of which are incomplete possibly due to a manufacturing defect.	Lead	Ø: 26 cm; T: 2.5 cm.	POTTIER 1984: 43, nr. 291, Fig. 41, 291.
FRK1 – Farkhor, south Tajikistan	A1c Decor.	Late phase of the Middle Bronze Age – late 3rd millennium BCE From the surface of the site. The handbag is decorated with an open-worked crenellated cross motif.	Marble slate	H: 46 cm; L: 50 cm; T: 3 cm.	BOBOMULLOEV ET AL. 2015: 48, Fig. 1, 2; 2017: 14, 18–19, 138, Fig. 2, 1, Fig. 138; VINOGRADOVA/BOBOMULLOEV 2017: 74, Fig. 1, 2.
ALT3 – Altyn-Depe, south Turkmenistan	A1c Decor. fragm.	Excavation 5, Horizon 1. The handbag is decorated with cruciform openings.	Stone	Ø: ca. 40 cm; T: 4.4 cm (edge); T: 6.7 cm (centre).	MASSON 1988: Pl. XLIII, 10; KOROBKOVA 2001: 184, Fig. 22, 1.
CKM1 – Chakmakli-depe, south Turkmenistan	B1	Unknown context. Anau IA period – late 5th millennium BCE	Stone	H: 18.7 cm; L: 20.7 cm; Ø h: 3.7 cm.	BERDYEV 1968: Fig. 4, 1; KOHL 1984: 69–70.
BCT3 – Bactria, north Afghanistan	B1	Unknown context. The body is decorated with a small, grooved circle. Late phase of the Middle Bronze Age – late 3rd millennium BCE	White Limestone	H: 27 cm; L: 30 cm; T: 8 cm; Ø h: 4.2 cm.	POTTIER 1984: 43, nr. 292, Pl. XXXV, 292.
BCT5 – Bactria, north Afghanistan	B1	Unknown context. Late phase of the Middle Bronze Age – late 3rd millennium BCE	Limestone	H: 22 cm; L: 25 cm; Ø h: 3.7 cm.	POTTIER 1984: 43, nr. 294, Fig. 41, 294.
ILG4 – Ilgynly-depe, south Turkmenistan	B1	From the surface of the site. Chalcolithic period – 4th millennium BCE(?)	Stone	H: 21.5 cm. L: 25.7 cm; Ø h: 3.6 cm.	Unpublished. Data kindly provided by N. Solov'eva.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
ILG1 – Ilgynly-depe, south Turkmenistan	B1 Fragm.	Unknown context of Horizon III. Middle and second half of the 4th millennium BCE	Stone	H: 23 cm; L: 31 cm; Ø h: 3.7 cm.	KIRČO 2007: Fig. 3, 6. Photo kindly provided by N. Solov'eva.
ULG3 – Ulug-depe, south Turkmenistan	B1 Fragm.	Found in 2010 in US26. Code n° 4080.	Stone	H preserved: 24 cm; L preserved: 15 cm; T: 6 cm.	Unpublished. Data and photo kindly provided by J. Ben-Lhuillier and J. Ben-dezu-Sarmiento.
YHY1 – Tepe Yahya, south-west Iran	B1 Unfinished(?)	Trench A. The artefact was found in 1975 when dismantling wall A.9.8. Phase IVB1 – second half of the 3rd millennium BCE	Chlorite	H: 18 cm; L: 17.4 cm; Ø h: 4.6–4.8 cm.	LAMBERG-KARLOVSKY 1988: 92, Pl. II; MUSCARELLA 1993: note 2; POTTS 2001: 115, Fig. 4.40.
KRD1 – Kordai district, south Kazakhstan	B1	Unknown location and context.	Greyish granite	H: 25 cm; L: 24 cm; T: 6 cm.	BONORA 2021: 760–761, Fig. 26.8.
SRZM9 – Sarazm, west Tajikistan	B1	Unknown context. 3rd millennium BCE	Stone		RAZAKOV 2008: Fig. 9. 2.
ALT4, Altyn-Depe, south Turkmenistan	B1 Fragm.	From the surface of the site. Second half of the 3rd millennium BCE	Sandstone	Ø: ca. 32 cm; T: ca. 7.8 cm; Ø h: 4.1–5.5 cm; W: 3.9 kg.	ALĚKŠIN 1973: 240, Fig. 1, 4. Drawing kindly provided by V.A. Alekshin and L. Kircho.
ALT6, Altyn-Depe, south Turkmenistan	B1	From the surface of the site. Second half of the 3rd millennium BCE	Stone	H: 20.6 cm; L: 24 cm; T: ca. 7.1 cm; Ø h: 2.1–3.5 cm; W: 5.475 kg.	ALĚKŠIN 1973: 240, Fig. 1, 6. Drawing kindly provided by V.A. Alekshin and L. Kircho.
ALT7 – Altyn-Depe, south Turkmenistan	B1	From the surface of the site. Second half of the 3rd millennium BCE	Limestone	H: 24.3 cm; L: 28.8 cm; T: ca. 7.6 cm; Ø h: 2.6–3.6 cm; W: 6.975 kg.	ALĚKŠIN 1973: 240, Fig. 1, 7. Drawing kindly provided by V.A. Alekshin and L. Kircho.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
QRST1 – Site 152 Qal'e Rustam, south-east Iran	B1	From the surface of the site. Early 3rd millennium BCE	Stone	H: 28,4 cm; L: 33,5 cm; T: 10,5 cm; Ø h: 4 cm.	Unpublished. Data and photo kindly provided by R. Merhfarin.
TSH1 – Tashguzor, south-west Tajikistan	B1	Chance find from the courtyard of a modern house (Vinogradova 2001). Pit-house 2 of Area 6 (Teufer 2021). 3rd millennium BCE	Stone	H: 24.4 cm; L: 21.9 cm; T: 6.9 cm; Ø h: 1.8 cm.	VINOGRADOVA 1999: Fig. 5, 11; 2001: 142, Fig. 10, 12. TEUFER 2021: 723.
SIEV1 – Roshtqal'a, Gorno-Badakhshan region, Tajikistan	B1	Chance find from the courtyard of a modern house. Found in June 2020 at a depth of 1.8 m from the contemporary surface of the ground.	Stone	H: 30 cm; L: 33 cm; T: 0.9 cm; W: 1.75 kg.	Unpublished.
MDP1 – Mundogi Poen, south-west Tajikistan	B1 Un-fini-shed?	From a grave without human remains opened by a local farmer. The grave goods consisted of two vessels and this stone artefact, which appears to be unfinished. Late 3rd millennium BCE	Stone	H: 28.8 cm; L: 26.7 cm; T: 20.5 cm; Ø h: 6 cm.	FILIMONOVA/AHMETZ'ANOV 2012: 62–63, Fig. 10, 1.
ALT2 – Al'tyn-Depe, south Turkmenistan	B2	Excavation 7, Horizon 2, Rooms 5 and 6. Note: the handle of the handbag was shiny from lengthy use. Layer Altyn 2, middle phase of the Middle Bronze Age, 2200–2125 BCE	Limestone	H: 19 cm; L: 22.7 cm; T: 6.2 cm; Ø h: 2.8–2.3 cm; W: 4.050 kg.	MASSON 1988: Pl. XXXV, 6; ALĖKŠIN 1973: 240, Fig. 1, 5. Photo kindly provided by V.A. Alekshin and L. Kircho.
ALT8 – Al'tyn-Depe, south Turkmenistan	B2 Fragm.	Excavation 5, Horizon 11, Courtyard A. Layer 11, middle phase of the Late Chalcolithic period, ca. 3000–2925 BCE	Limestone	H: ca. 23 cm; L: ca. 30 cm; T: 7 cm; Ø h: 4.5 cm.	KOROBKOVA 2001: Fig. 12, 5; KIRČO 2007: Fig. 3, 11. KIRČO ET AL. 2008: Tab. 100, 1.
ALT9 – Al'tyn-Depe, south Turkmenistan	B2	Excavation 5, Horizon 7, Room 4, on the floor. Note: the handle of the handbag was shiny from lengthy use. Layer 7, early phase of Early Bronze Age, 2700–2625 BCE	Limestone	H: 12 cm; L: 15.2 cm; T: 4.8 cm; Ø h: 2.3/2.2 cm.	KIRČO 1983: Fig. 1, 13; KIRČO 2007: Fig. 3, 12.
NMG1 – Namazga Depe, south Turkmenistan	B2 Fragm.	From the surface of the site. 3rd millennium BCE(?)	Stone		Unpublished. Photo by the author.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
TLQ1 – Taluqan 270, north Afghanistan	B2 Fragm.	This object was found in the Rud-i Shahrawan Valley, which links the plain of Taluqan with the plain of Khwaja-i Ghar, on the left bank of the Kokcha River, on the surface of a modern graveyard, close to a burial.	Stone	H: 30 cm; L: 12 cm; T: 5.2 cm; Ø h: 2.3 cm	LYONNET 1997: 48–49, Fig. 12, 1a and 1b.
BC74 – Bactria, north Afghanistan	B2 Decor.	Unknown location and context. The body is decorated with two circles on both frontal faces and a circle on both lateral sides. Moreover, the lateral sides bear the depiction of a vertical and wavy line that ends near the small circle. Late phase of the Middle Bronze Age(?)	Green chlorite	H: 18 cm.	POTTIER 1984: 43, nr. 293, Fig. 41, 293.
ANAU4 - Anau North, south Turkmenistan	B2 Fragm.	Excavation area ANIM, Context 6, 14th architectural layer. Early Chalcolithic period – early 4th millennium BCE, 4000–3800 BCE	Stone	H: ca. 21.7 cm; L: ca. 33.4 cm; Ø h: ca. 6 cm.	HIEBERT 2003: 93, Fig. 7.15, 1.
ILG3 – Ilgynly-depe, south Turkmenistan	B2 Fragm.	Horizon III, Excavation 4. Mid and second half of the 4th millennium BCE	Stone	H: ca. 13.5 cm; L: ca. 21.9 cm; Ø h: ca. 3 cm.	KIRČO 2007: Fig. 3, 5. Photo kindly provided by N. Solov'eva.
ULG2 – Ullug-depe, south Turkmenistan	B2 Fragm.	Found in 2002. Unknown context. Code n° 1143. This artefact is stored in a museum in Ashgabat, from 2004.	Stone		MAFTUR 2012: 24, Fig. 55; MAFTUR 2014: 32, Fig. 55.
ILG2 – Ilgynly-depe, south Turkmenistan	B2 Fragm.	Excavation 5, Courtyard A. Mid and second half of the 4th millennium BCE	Stone	H: 22.2 cm; L: 35 cm; Ø h: 3.5 cm.	Unpublished. Data kindly provided by N. Solov'eva.
SRZM2 – Sarazm, west Tajikistan	B2 Fragm.	Unknown context.	Stone	H: 29.5 cm; L: 42.1 cm; T: 28.4 cm; Ø h: 8.4 cm.	ISAKOV 1991: 63; Fig. 31, 2; RAZZAKOV 2002: 73. Photo by the author.
SRZM4 – Sarazm, west Tajikistan	B2 Fragm.	Unknown context.	Stone		Unpublished. Photo by the author.
SRZM5 – Sarazm, west Tajikistan	B2 Fragm.	Unknown context.	Stone	H: 20.8 cm; L: 24.8 cm; T: 22 cm; Ø h: 6.4 cm.	ISAKOV 1991: 63, Fig. 31, 1; RAZZAKOV 2008: Fig. 9, 2. Photo by the author.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
QRST2 – Site 152 Qal'e Rustam, south-east Iran	B2 Fragm.	From the surface of the site. Early 3rd millennium BCE(?)	Stone		Unpublished. Data and photo kindly provided by R. Merhfarin.
ILG6 – Ilgynly-depe, south Turkmenistan	B2 Fragm.	From the surface of the site. Still unexcavated. Late Chalcolithic period – late 4th/early 3rd millennium BCE, 3200–2900 BCE	Stone	T: 8.2 cm; Ø h: 4.2 cm.	Unpublished. Data kindly provided by N. Solov'eva.
FRK4 – Farkhor, south Tajikistan	B2b Fragm.	From the surface of the site. Early and beginning of the Middle Bronze Age – first half of the 3rd millennium BCE	Sandstone	H: 26 cm; L: 34 cm; Ø h: 4 cm.	BOBOMULLOEV ET AL. 2017: 138, Fig. 139.
MNJ1 – Monjukli-depe, south Turkmenistan	B3	Unknown context. 6th or, more probably, 5th millennium BCE	Stone	H: 17.5 cm; L: 11.5 cm; Ø h: 2 cm.	BERDYEV 1972: Fig. 7, 15; KOHL 1984: 69–70.
HSS2 – Tepe Hissar, north-east Iran (inv. nr. H 2772)	B3 large, well-wrought, polished	Room 4 of the Hissar IIIB Burnt Building. It is possible that grain was kept, ground, weighed, and traded here. Small piles of charred wheat(?) in the north-east corner as well as at the centre of the western wall base were found. Fragments of millers and hand grinders were in the floor deposit. Hissar IIIB, 2400–2200 BCE	Red-brown stone	H: ca. 39 cm; L: ca. 32.2 cm; T: ca. 16.8 cm; Ø h: ca. 5.2 cm.	SCHMIDT 1937: 167, 221, Fig. 90, Pl. LXIII.
SMR2 – Semirechye region, south-east Kazakhstan	B3	Unknown location and context.	Stone		BESEVAL/ISAKOV 1989: 18, Fig. 30; BONORA 2021: 760.
ANTM1 – antiquities market	B4	Unknown location and context.	Stone	H: 23.1 cm; Ø b: 14.6 cm; W: 10.5 kg.	Unpublished. Photo by the author.
CBLC1 – Central Baluchistan, Pakistan	B4	Unknown location and context. Ca. 3300–3100 BCE	Grey stone	H: 26.2 cm; Ø b: 16–16.8 cm; W: 13.82 kg.	FRANKE/CORTESI 2015: 282, 284, cat. no. 631.
CBLC2 – Central Baluchistan, Pakistan	B4	Unknown location and context. Ca. 3300–3100 BCE	Dark grey diorite(?)	H: 22.9 cm; Ø b: 14.5 cm; W: 10.36 kg.	FRANKE AND CORTESI 2015: 283–284, cat. no. 632.
CBLC3 – Central Baluchistan, Pakistan	B4	Unknown location and context. Ca. 3300–3100 BCE	Grey stone	H: 23.1 cm; Ø b: 15.3 cm; W: 11.47 kg.	FRANKE/CORTESI 2015: 284, cat. no. 633.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
CBLC4 – Central Baluchistan, Pakistan	B4	Unknown location and context. Ca. 3300–3100 BCE	Grey stone	H: 23 cm; \emptyset b: 13–13.6 cm; W: 9.64 kg.	FRANKE/CORTESI 2015: 284, cat. no. 634.
CBLC5 – Central Baluchistan, Pakistan	B4	Unknown location and context. Ca. 3300–3100 BCE	Light grey stone	H: 23.5 cm; \emptyset b: 18 cm; W: 13.65 kg.	FRANKE/CORTESI 2015: 284, cat. no. 635.
CBLC6 – Central Baluchistan, Pakistan	B4	Unknown location and context. Ca. 3300–3100 BCE	Beige stone	H: 21.7 cm; \emptyset b: 13 cm; W: 8.15 kg.	FRANKE/CORTESI 2015: 285, cat. no. 636.
CBLC7 – Central Baluchistan, Pakistan	B4	Unknown precise location and context. Ca. 3300–3100 BCE	Beige stone	H: 27.3 cm; \emptyset b: 11–14.5 cm; W: 11.97 kg.	FRANKE/CORTESI 2015: 285, cat. no. 637.
CBLC8 – Central Baluchistan, Pakistan	B4	Unknown precise location and context. Ca. 3300–3100 BCE	Beige stone	H: 21 cm; \emptyset b: 18.5–18.7 cm; W: 8.91 kg.	FRANKE/CORTESI 2015: 285, cat. No. 638.
CBLC9 – Central Baluchistan, Pakistan	B4	Unknown precise location and context. Ca. 3300–3100 BCE	Light grey stone	H: 22.1 cm; \emptyset b: 13.2 cm; W: 9.6 kg.	FRANKE/CORTESI 2015: 285, cat. no. 639.
CBLC10 – Central Baluchistan, Pakistan	B4	Unknown precise location and context. Ca. 3300–3100 BCE	Beige stone	H: 21.1 cm; \emptyset b: 13.5 cm; W: 7.39 kg.	FRANKE/CORTESI 2015: 285–286, cat. no. 640.
CBLC11 – Central Baluchistan, Pakistan	B4	Unknown precise location and context. Ca. 3300–3100 BCE	Light brown stone	H: 19.5 cm; \emptyset b: 16 cm; W: 8.15 kg.	FRANKE/CORTESI 2015: 285–286, cat. no. 641.
CBLC12 – Central Baluchistan, Pakistan	B4	Unknown precise location and context. Unfinished(?) Ca. 3300-3100 BCE	Grey stone	H: 28.9 cm; \emptyset b: 16.1–16.5 cm; W: 16.48 kg.	FRANKE/CORTESI 2015: 286, cat. no. 642.
SHRD1 – Sohr Damb/Nal, Central Baluchistan	B4	Tomb 739/740, Trench IIIb, Period I. Third quarter of the 4th millennium BCE, 3500–3200 BCE	Stone	H: ca. 25 cm; W: ca. 10 kg.	FRANKE-VOGT 2003–2004: 108–109, Abb. 34; 2005: 67; FRANKE/CORTESI 2015: 79–80, Fig. B7.14.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
SHRD2 – Sohr Damb/ Nal, Central Baluchistan	B4	Tomb 739/740, Trench IIIb, Period I. Third quarter of the 4th millennium BCE, 3500–3200 BCE	Black stone	H: ca. 25 cm; W: ca. 10 kg.	FRANKE-VOGT 2003–04: 108–109; 2005: 67; FRANKE/CORTESI 2015: 79.
SHRD3 – Sohr Damb/ Nal, Central Baluchistan	B4	Tomb 739/740, Trench IIIb, Period I. Third quarter of the 4th millennium BCE, 3500–3200 BCE	Greyish buff stone	H: ca. 25 cm; W: ca. 10 kg.	FRANKE-VOGT 2003–04: 108–109; 2005: 67; FRANKE/CORTESI 2015: 79.
SHRD4 – Sohr Damb/ Nal, Central Baluchistan	B4	Unknown context. Found in 2006 in the extension of Trench I. Attributed to the transition between Period II and III. Supplementary data and photo were kindly provided by U. Franke. Early 3rd millennium BCE.	Light grey stone		FRANKE-VOGT 2003–04: 108–109; 2005: 67; FRANKE/CORTESI 2015: 79.
SHRD5 – Sohr Damb/ Nal, Central Baluchistan	B4 Fragm.	Unknown context. Found by labourers in 2005, in a Period II domestic context (but most likely in secondary use) in Trench VIIc, Complex 7A, above Period I layers. Supplementary data and photo were kindly provided by U. Franke. Late 4th millennium BCE.	Light brown stone		FRANKE-VOGT 2003–04: 108–109; 2005: 67; FRANKE/CORTESI 2015: 79.
SHRD6 – Sohr Damb/ Nal, Central Baluchistan	B4	Room A 12, Group G. Late 4th to early 3rd millennium BCE.	Stone		HARGREAVES 1929: 25, Pl. XVb.
SHRD7 – Sohr Damb/ Nal, Central Baluchistan	B4	Found by labourers in 2002 in the fields north of the mound. Now in a private collection. Supplementary data and photo were kindly provided by U. Franke.	Pinkish-beige stone		FRANKE-VOGT 2003–04: 108–109; 2005: 67; FRANKE/CORTESI 2015: 79.
MHDD1 – Mohend- jo-daro, Indus Valley	B4	Room 11, Structure I, Block 7, HR Area. Level, 4 feet 5 inches below surface. Mid and second half of the 3rd millennium BCE	Green slate	H: 20.3 cm; Ø b: 14.7 cm; Ø g: 2.4 cm.	MARSHALL 1931: 463, Pl. CXXX, 25.
MHDD2 – Mohend- jo-daro, Indus Valley	B4	Room 2, House 1, Block 1, Section B, DK Area. Level, 1 foot 9 inches below surface. Mid and second half of the 3rd millennium BCE	Grey lime-stone	H: 25.15 cm; Ø b: 14 cm; W: 10.26 kg.	MARSHALL 1931: 463, Pl. CXXX, 26.
MHDD3 – Mohend- jo-daro, Indus Valley	B4	Room 15, House VIII, VS Area. Level, 6 feet below surface. Mid and second half of the 3rd millennium BCE	Light green slate	H: 15 cm; Ø b: 18 cm; Ø g: 2.16 cm; W: 6.9 kg.	MARSHALL 1931: 463, Pl. CXXX, 34.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
SHHT1 – Shahi-Tump, south Baluchistan	B4a Decor.	The “Leopard Weight” was decorated with shell inlays. From grave 402. Period IIIa – late 4th/early 3rd millennium BCE	Lead and copper alloy	H: 16.7 cm; Ø max: 13.5 cm; Ø b: 6 cm; W: more than 15 kg.	BESENVAL 2005; MILLE ET AL. 2005.
TSKT1 – Uzbekistan	B5	Unknown location and context. Today it is on display in the State Museum of Uzbekistan History, Tashkent.	Stone		Unpublished.
JRFT1 – Jiroft, south Iran	C1 Decor.	Unknown context.	Chlorite	H: 19.4 cm; L: 19.5 cm; T: 4 cm.	MADJIDZADEH 2003: 129; PERROT, MADJIDZADEH 2005: 128, Fig. II, h.
JRFT2 – Jiroft, south Iran	C1 Decor.	Unknown context.	Chlorite	H: 25 cm; L: 23.8 cm.	MADJIDZADEH 2003: 125; PERROT, MADJIDZADEH 2005: 152.
JRFT3 – Jiroft, south Iran	C1 Decor.	Unknown context.	Chlorite	H: 18.3 cm; L: 18.5 cm; T: 3.2 cm.	MADJIDZADEH 2003: 127; PERROT, MADJIDZADEH 2005: 128, Fig. II, k.
JRFT4 – Jiroft, south Iran	C1 Decor.	Unknown context. According to Muscarella: “Probable forgeries”.	Chlorite	H: 20.3 cm; L: 24 cm; T: 4.8 cm.	MADJIDZADEH 2003: 126; PERROT, MADJIDZADEH 2005: 128, Fig. II, f–g.
JRFT5 – Jiroft, south Iran	C1 Decor.	Unknown context.	Chlorite		MADJIDZADEH 2003: 128.
JRFT6 – Jiroft, south Iran	C1 Decor.	Unknown context.	Chlorite		Unpublished. Thanks to the courtesy of M. Vidale.
JRFT7 – Jiroft, south Iran	C1 Decor.	Unknown context.	Chlorite		Unpublished. Thanks to the courtesy of M. Vidale.
HLLR1 – Halli Rud River Valley or Jiroft area, south Iran	C1 Decor.	Unknown context.	Chlorite	H: 23 cm; L: 13 cm; T: 4 cm.	PIRAN/HESARI 2005: nr. 22.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
HLLR2 – Halil Rud River Valley or Jiroft area, south Iran	C1 Decor. fragm.	Unknown context.	Chlorite	H: 23 cm; L: 13 cm.	PIRAN/HESARI 2005: nr. 23.
HLLR3 – Halil Rud River Valley or Jiroft area, South Iran	C1	Unknown context.	Stone	H: 24.2 cm; L: 26 cm.	PIRAN/HESARI 2005: nr. 68.
UNKN3 – antiquities market	C1 Decor. fragm.	Unknown location and context.	Chlorite		Perrot/MADJIDZADEH 2005: Fig. 12, g.
UNKN5 – White-Levi Collection	C1 Decor.	Unknown location and context. According to Muscarella: "It is very probably a modern work". Forgery(?)	Chlorite	H: 22 cm; L: 24.5 cm; T: 3.5 cm.	PITTMAN 1990: 42, no. 28; MUSCARELLA 1993: 146, Fig. 7.
UNKN6 – antiquities market	C1 Decor. fragm.	Unknown location and context. Today it is stored in the Museum of Fine Arts, Boston.	Chlorite		KOHL 1979: Fig. 9; MUSCARELLA 1993: 146–149, Fig. 9.
UNKN7 – antiquities market	C1 Decor.	Unknown location (Tel-i Iblis, Kerman?) and context. Today it is in the Gluck Collection of Tokyo. According to Muscarella: "None of the motifs is consistent in execution, form, and style with those known from the corpus". Forgery(?)	Chlorite	H: 25.5 cm; L: 26.7 cm; W: 3.15 kg.	MUSCARELLA 1993: 149, Fig. 11.
UNKN8 – antiquities market	C1 Decor. fragm.	Unknown location and context. According to A. Hakemi, it comes from the western Kerman province. Today it belongs to a private collection. According to Muscarella: "It is unique but has a good parallel on an excavated piece... nothing specifically condemns it".	Chlorite	H preserved: 20.9 cm; L preserved: 25.6 cm.	MUSCARELLA 1993: 149, Fig. 12; HAKEMI 1997: 34, Figs. 46–47.
SUSA1 – Susa, Mesopotamia	C1 Fragm.	Today it is stored in the Louvre Museum (Sb 17818). Uruk period	Stone	H preserved: 26 cm; L: ca. 60 cm; T: 1.3/4.3 cm.	AMIET 1986: 102, Fig. 3.
UNKN10 – south-east Iran	C1	Unknown location and context. Today it is stored in the Louvre Museum (AO 29138).	Dark green chlorite	H: 13.5 cm; L: 13.9 cm.	AMIET 1986: 103, Fig. 5.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
ASH1 – Ashin (Soghun Valley), south Iran	C1	Near the modern tomb of a holy individual. First half of the 3rd millennium BCE	Stone	H: ca. 30 cm.	LAMBERG-KARLOVSKY/KOHL 1971: 16; POTTS 2001: 115, Fig. 4.41, Fig. 4.42.
BGH1 – Baghin, south Iran	C1	Unknown context.	Stone		POTTS 2001: 115, Fig. 4.43.
SIS1 – Shahr-i Sokhta, Sistan, Iran	C1 Fragm.	Unknown context. Code: Dp.CS 14512.	Stone	H preserved: 15.5 cm; L: 28.8 cm; T: 9.2 cm.	Unpublished. Data kindly provided by A. Lazzari.
PLM1 – Palmyra (Tadmor), Syria	C1 Decor.	Unknown precise location and context. Found in the modern bazaar of Palmyra.	Chlorite	H: 15 cm; L: 17 cm.	GODARD 1938: Figs. 212–213; DURRANI 1964: Pl. XI; KOHL 1975: Fig. 2; 1979: Fig. 1; WINKELMANN 1997: Fig. 2b.
NPP1 – Nippur, Iraq	C1 Decor. Fragm.	Unknown context. Found in the 19th century, now in Istanbul.	Chlorite	H preserved: 13 cm; L: 26 cm; T: 4.2 cm.	DE MIROSCHEDEJI 1972: 159–161, Fig. 7, Pl. V; MUSCARELLA 1993: 144, Fig. 3.
KRM2 – Kerman region, south Iran	C1 Decor.	Unknown precise location and context. Attributed by A. Hakemi to the western Kerman province. Today in a private collection.	Grey chlorite	H: 20 cm; L: 20 cm.	HAKEMI 1997: 33, Figs. 42–43.
KRM3 – Kerman region, south Iran	C1 Decor.	Unknown location and context. According to A. Hakemi, it comes from the western Kerman province. Today it is stored in the Metropolitan Museum of Art (1989:281.40). According to Muscarella: “It is consistent with the forms, execution, and style of the known motifs and designs”.	Chlorite schist	H: 22.9 cm; L: 25.1 cm; T: 4.6 cm; W: 4 kg.	PITTMAN 1984: 22, Fig. 3; MUSCARELLA 1993: 148–149, no. 6, Fig. 10; HAKEMI 1997: 33–34, Figs. 44–45; MUSCARELLA 2003a: 328–329, no. 225b.
KRM4 – Kerman region, south Iran	C1 Decor. fragm.	Unknown location and context. According to A. Hakemi, it comes from the western Kerman province. Today it belongs to a private collection.	Black chlorite	H preserved: 15 cm; L preserved 10 cm.	HAKEMI 1997: 36, Figs. 48–49.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
KRM5 – Kerman region, south Iran	C1 Decor. fragm.	Unknown location and context. According to A. Hakemi, it comes from the western Kerman province. Today it belongs to a private collection.	Chlorite	H preserved: 12.4 cm; L: 20.5 cm.	HAKEMI 1997: 36, Figs. 52–53.
KRM6 – Kerman region, south Iran	C1 Decor.	Unknown location and context. According to Hakemi, it comes from the western Kerman province. Today it belongs to the White-Levi Collection. According to Muscarella “...its age, ancient or modern, is difficult to determine, and I hesitate to recommend it”. Forgery(?)	Chlorite	H: 22 cm; L: 24.5 cm; T: 3.5 cm (in HAKEMI: H: 25.2 cm; L: 30 cm).	PITTMAN 1990: 41, no. 27; MUSCARELLA 1993: 146, Fig. 8; HAKEMI 1997: 39, Figs. 56–57.
THRN1 – From Azerbaijan(?)	C1 Decor. fragm.	Unknown precise location and context. Falsely attributed to “Azerbaijan”. Today it is stored in the Tehran Museum.	Chlorite	H: 26 cm; L: 27 cm; T: 2.3 cm.	GODARD 1938: Figs. 210–211; DURRANI 1964: 62, Pl. X; KOHL 1975: 24, Fig. 1; 1979: 74, Fig. 2; LAMBERG-KARLOVSKY 1988: 55; WINKELMANN 1997: Fig. 2a; VIDALE/MICHEL 2012.
SCH1 – Soch, Uzbekistan	C1 Decor.	Unknown location and context Found in the late 19th century. Today it is on display in the State Museum of Uzbekistan History, Tashkent.	Dark green chlorite		PUGAČENKOVA/REMPEL’ 1965: 24, Fig. 5; BRENTJES 1971: 155, Pl. I, B; KOHL 1984: 188–189; SARIANIDI 1986: 151, Fig. 43; MUSCARELLA 1993: 144–145, no. 5, Fig. 5; MUSCARELLA 2003b: 339, num. 239; BAUMER 2012.
SMR1 – Semirechye region, south-east Kazakhstan	C1	Unknown location and context. Today it is stored in the State Museum of Kazakhstan, Almaty.	Stone		BESENVAL/ISAKOV 1989: 18, Fig. 30; BONORA 2021: 760.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
YHY2 – Tepe Yahya, south-west Iran	C1(?) Decor. fragm.	Unknown context. Period IVB – second half of the 3rd millennium BCE	Chlorite		KOHL 1975: 26, Fig. 3, 27, Fig. 7; 1979: Fig. 8; LAMBERG-KARLOVSKY 1988: 66, 94, Pl. VII, no. 475; HAKEMI 1972: 54–55; 1997: 37, Figs. 54–55.
JRFT8 – Jiroft, south Iran	C1a. Decor.	Unknown context.	Chlorite	H: 25 cm; L: 28 cm; T: 3 cm.	MADJIDZADEH 2003: 123–124; PERROT/MADJIDZADEH 2005: Pl. II, J; MUSCARELLA 2005: 197, Fig. 20.
UNKN2 – antiquities market	C1a Decor.	Unknown location and context. From Bactria(?)	Chlorite		PERROT/MADJIDZADEH 2005: Fig. 12, b.
UNKN9 – south-east Iran	C1a(?) Decor. fragm.	Unknown location and context. According to P. Amiet, it comes from south-eastern Iran. Today it is stored in the Louvre Museum (AO 29142).	Light green chlorite	H preserved: 13.2 cm; L preserved: 16.6 cm.	AMIET 1986: 102–103, Fig. 4.
UNKN11 – antiquities market of Tehran	C1a Decor. fragm.	Unknown location and context. According to Muscarella, it was purchased in Tehran in the early 1960s; while according to Hakemi, it comes from western Kerman province. Today it is stored at the Art and History Trust of Houston, Texas. According to Muscarella: "...the execution is very crisp and mechanical".	Dark chlorite	H: 21 cm; L: 24.5 cm; T: 3.3 cm. (in Hakemi 1997: H: 23 cm; L: 25 cm).	MUSCARELLA 1993: 149, Fig. 13; HAKEMI 1997: 36, Fig. 51.
NMZG2 – Namazga Depe, south Turkmenistan	C2	Unknown context. Today it is stored in the local school of Kaakha city.	Stone		Unpublished. Photo by the author.
ANAU1 – Anau North, south Turkmenistan	C2	Table A.3, Context 3 of 1904 excavations. Middle Chalcolithic period – middle and 2nd half of the 4th millennium BCE	Stone	H: ca. 19 cm; L: ca. 32.2 cm; T: ca. 4.4 cm; Ø h: ca. 2 cm.	MASSON 1962: Tab. XI, 12; 1982: 81, Tab. XV, 19; HIEBERT 2003: 93, Fig. 7.15, 2; KIRČO 2007: Fig. 3, 4.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
ULG4 – Ulug-depe, south Turkmenistan	C2 Fragm.	Found in 2014 in US41. Code n° 4611.	Stone	H preserved: 25 cm; L: 40 cm; T: 15 cm.	Unpublished. Data and photo kindly provided by J. Ben-Lhuillier and J. Ben-dezu-Sarmiento.
UR1 – Ur (Tell Mukkayyar), Mesopotamia	D1 Decor.	Obtained by the British Vice-Consul in Basra, J.E. Taylor, in 1854 from a burial of Tell Mukkayyar. However, the precise location of the finding was not handed down.	Schist		GADD 1951: 43–44, Pl. XII; DURRANI 1964: 89, Pl. IX; WINKELMANN 1997: 187, Abb. 1.
JRFT9 – Jiroft, south Iran	D1 Decor.	Unknown context.	Chlorite		Unpublished. Thanks to the courtesy of M. Vidale.
SMR4 – Semirechye region, south-east Kazakhstan	D1b	Unknown context. Today it is stored in the State Museum of Kazakhstan, Almaty.	Stone		BESEVAL/ISAKOV 1989: 18, Fig. 30; BONORA 2021: 760.
GDPS1 – Godar-i Shah, south-west Afghanistan	D2	Found in the modern shrine of Godar-i Shah, where a grave was completely covered by stone objects out of context and many empty rifle cartridges.	Stone		DALES 1972: Fig. 18; BESEVALFRANCFORT 1994: Fig. 1.9; BISCIONE/VAHDATI 2021: 537; MUTIN/LAMBERG-KARLOVSKY 2021: 563.
SRZM1 – Sarazm, west Tajikistan	D2	Excavation II, Horizon 2 (Sarazm 2). It was found on the floor of Courtyard 1, near a hearth for kitchen purposes. Early Chalcolithic period – early 4th millennium BCE	Stone	H: 23.6 cm; L: 30 cm; T: 3.6 cm; Ø h: 3.2 cm; W: 12.2 kg.	ISAKOV 1984: 271, Fig. 4, 1; 1986: 156, Fig. 8, 1; 1991: 26, Fig. 31, 7; RAZZAKOV 2002: 78–79; 2008: Fig. 9, 2; KIRČO 2007: Fig. 3, 8.
ANAU2 – Anau North, south Turkmenistan	D2	Unknown context of the 1904 excavation. First half of the 4th millennium BCE	Stone	H: ca. 14 cm; L: ca. 23.5 cm.	MASSON 1962: Tab. XI, 10; 1982: 75, Tab. IX, 30, and 81, Tab. XV, 19; HIEBERT 2003: 93, Fig. 7.15, 3; KIRČO 2007: Fig. 3, 3.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
KARA1 – Kara-Depe, south Turkmenistan	D2	Excavation 4. Layer Kara 1A, Residential Room 22, found in association with a copper perforator (borer). Middle phase of the Late Chalcolithic period – late 4th/early 3rd millennium BCE, ca. 3100–2900 BCE	Grey sandstone	H: 34 cm; L: 43 cm; T: 10,75 cm; Ø h: 3.9/4.8 cm; W: 26.43 kg.	MASSON 1960: 354, Tabl. XXXII, 1; ALĚKŠIN 1973: 240; Fig. 1, 2; KOHL 1984: 100; KIRČO 2007: Fig. 3, 9.
MND1 – Mundigak, central Afghanistan	D2	MG. A., Level I, 5. Middle of the 4th millennium BCE	White limestone	H: 30.6 cm; L: 36 cm; T: 7.2 cm; Ø h: 4.2 cm.	CASAL 1961: 235, Fig. 135, 4; ALĚKŠIN 1973: Fig. 1, 9; KIRČO 2007: Fig. 3, 7.
MND2 – Mundigak, central Afghanistan	D2	MG. A., Level I, 5, room CCCXVIII. Middle of the 4th millennium BCE	Stone		CASAL 1961: 235.
FRK2 – Farkhor, south Tajikistan	D2 Fragm.	From the surface of the site. Early and beginning of the Middle Bronze Age – first half of the 3rd millennium BCE	Sandstone	H: 33 cm; L: 33 cm; T: 5 cm.	BOBOMULLOEV ET AL. 2017: 138; Fig. 138.
FRK3 – Farkhor, south Tajikistan	D2 Fragm.	From the surface of the site. Early and beginning of the Middle Bronze Age – first half of the 3rd millennium BCE	Limestone	H: 45 cm; L: 34 cm.	BOBOMULLOEV ET AL. 2017: 138; Fig. 138.
CHLW1 – Tepe Challow, north-east Iran	D2	From the surface of the site. Late 3rd to early 2nd millennium BCE	Stone	H: 32 cm; L preserved: 27.8 cm; Ø h: 5 cm.	VAHDATI ET AL. 2019: 183–184, Fig. 5, d.
SRZM3 – Sarazm, west Tajikistan	D3	Unknown context. 3rd millennium BCE	Stone	H: 19.5 cm; L: 33.7 cm; T: 7.5 cm; Ø h: 3.1 cm.	ISAKOV 1991: Fig. 31, 4; RAZZAKOV 2008: Fig. 9, 2.
OSH1 and OSH2 – Osh Valley, Kyrgyzstan	D4	Unknown context.	Stone		BESENVAL 1987: 455–456, Fig. 11.
SRZM7 – Sarazm, west Tajikistan	D5	Unknown context. 3rd millennium BCE	Stone	H: ca. 30.6 cm; L: 35 cm; T: 11.8 cm; Ø h: 5 cm.	ISAKOV 1991: Fig. 31, 5.
KDK1 – Kuduk, south Tajikistan	D6	Unknown context.	Stone		TEUFER 2010: 382, Abb. 46; TEUFER/FILIMONOVA 2012: 195.

Code – site, region, and country	Type/ sub-type	Archaeological context Chronological notes	Material	Sizes	Main bibliographical references
KARA2 – Kara-Depe, south Turkmenistan	E1	Excavation 4, Layer Kara 1A, Courtyard V near Room IV, 13. Middle phase of the Late Chalcolithic period – late 4th/early 3rd millennium BCE, 3100–2900 BCE	Grey sandstone	H: 40 cm; L: 49 cm; T: 10,75 cm; Ø h: 3,9/5,4 cm; W: 19 kg.	MASSON 1960: 354, Tabl. XXXII, 4; ALÉKŠIN 1973: 240, Fig. 1, 3; KOHL 1984: 100; KIRČO 2007: Fig. 3, 10.
CHLW2 – Tepe Challow, north-east Iran	E1	From the surface of the site. Late 3rd to early 2nd millennium BCE	Stone	H: 36 cm; L: 45,7 cm; Ø h: 4 cm.	VAHDATI ET AL. 2019: 183–184, Fig. 5, c.
ULG5 – Ulug-depe, south Turkmenistan	E1	Found in 2014 in US42. Code n° 4613.	Stone	H: 28 cm; L: 37 cm; T: 12 cm.	Unpublished. Thanks to the courtesy of J. Lhuillier and J. Bende-zu-Sarmiento.
SRZM8 – Sarazm, west Tajikistan	E2	Unknown context. 3rd millennium BCE	Stone	H: 35,5 cm; L: 45,3 cm; T: 9,7 cm; Ø h: 4,4 cm.	ISAKOV 1984: 271, Fig. 4, 2; ISAKOV 1991: Fig. 31, 6; RAZZAKOV 2002: 73.
TNDY1 – Tandryyul, central Tajikistan	E3	Discovered in the house of a local farmer, who stated that he found it near a miniature column in the deep ravine called Tandryyul. Final Bronze Age – mid-2nd millennium BCE	Stone	H: 20,5 cm; L: 31 cm; T: 17,3 cm; Ø h: 4,2 cm.	ANTONOVA/VINOGRADOVA 1979: 93–94, 108; VINOGRADOVA/KUZ'MINA 1996: 41, Fig. 4, 16; VINOGRADOVA 1991: Abb. 8, 7–8; VINOGRADOVA 2004: 74, Fig. 4, 25; TEUFER 2015: Abb. 112.
HSS5 – Tepe Hissar, north-east Iran (inv. nr. H 2798)	F1 decor. Fragm.	Isolated find in plot CF 47. Hissar IIIC 2200–2000 BCE	Grey stone	H: ca. 40 cm; L: ca. 36 cm; T: ca. 2,4 cm; Ø h: ca. 6,4/2,4 cm.	SCHMIDT 1937: 218, Pla. LXII.
HSS4 – Tepe Hissar, north-east Iran (inv. nr. H 2095)	F2	In a garbage dump of Layer Hissar IC. First half of the 4th millennium BCE, ca. 3700 BCE	Stone		SCHMIDT 1937: 58, Pl. XVIII, A, H2095; KIRČO 2007: Fig. 3, 2.

The Rise and Decline of the Desert Cities

The Last Stages of the BMAC at Togolok 1 (Southern Turkmenistan)

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Abstract: Archaeological research has traditionally focused on the centres of urban development in the ancient world, across the Loess plains, along the Indus, and throughout the Fertile Crescent and adjacent foothills. Urban development in southern Central Asia, along the northern rim of the Iranian Plateau and into the oases of the Karakum, has received far less attention. Collaborative multiproxy research has clarified many previously unexplored aspects of the urban flourishing and paleoeconomy. Here, we showcase new data from the ongoing excavations of the occupation layers at Togolok 1 in the Murghab alluvial fan, from the late third to the mid-second millennium BCE. Archaeobotanical, zooarchaeological, and paleoclimatic data can better clarify the long developmental trajectories of economic and environmental change across this key area of urban development.

Keywords: Central Asia, Murghab, BMAC, urbanisation, agropastoralism, paleoeconomy.

Резюме: Археологические исследования традиционно были сосредоточены на древних центрах городского развития, расположенных на лёссовых равнинах, вдоль течения Инда и по всему ареалу Плодородного полумесяца с прилегающими к нему предгорьями. Гораздо меньше внимание было уделено развитию городов в южной части Центральной Азии, вдоль северного края Иранского плато и в оазисах Каракумов. Совместные многопрофильные исследования выявили многие ранее неисследованные аспекты расцвета городской культуры и палеоэкономики. В статье приводятся новые данные из продолжающихся в настоящее время раскопок, полученные из культурных слоев памятника Тоголок 1 в Мургабском конусе выноса и относящиеся ко времени с конца третьего до середины второго тысячелетия до н.э. Археоботанические, зооархеологические и палеоклиматические данные позволяют лучше выявить долговременные траектории экономических и экологических изменений в этой ключевой области городского развития.

Ключевые слова: Центральная Азия, Мургаб, БМАК, урбанизация, скотоводство, палеоэкономика.

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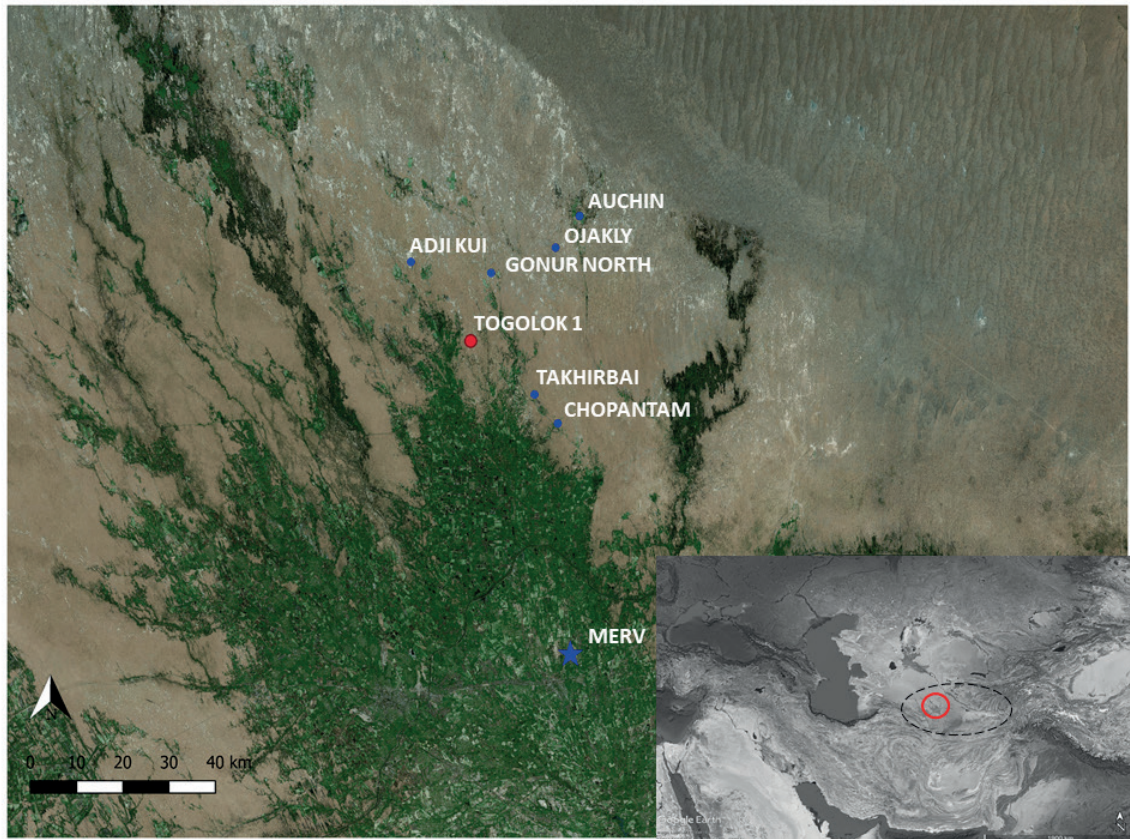


Fig. 1: Overview of the Murghab alluvial fan with the distribution of some of the main Bronze Age archaeological sites (basemap: LANDSAT 8-2019). In the small image (bottom, to the right), the modern Murghab alluvial fan (red circle) and the extension of the BMAC core area (dashed black circle), according to V.I. Sarianidi (basemap: Google Earth 2016; GIS elaboration by R. Arciero).

1 Introduction

In the past, as in the present, Central Asia presents a vast mosaic of cultures, which shaped a socially complex landscape that falls far from being understood. Over the millennia, profound geological changes, environmental alterations, demographic shifts, and political upheavals have outlined a unique territorial structure, consisting of a cultural palimpsest at the centre of the ancient world (BABAEV 1999; LAMBERG-KARLOVSKY 2003; KOHL 2007; KUZ'MINA 2007). From the mid-third to the early second millennium BCE, the populations of Central Asia and the neighbouring regions from the Iranian Plateau to the Indus Valley, as well as from the more distant Mesopotamia and the Arabian Peninsula, were affected by major political, economic, and social changes connected to a cultural phenomenon called the “Bactria-Margiana Archaeological Complex” (BMAC)¹ (HIEBERT 1994; LAMBERG-KARLOVSKY 2013; FRANCFORT 2009; LUNEAU 2014; SALVATORI 2016; VIDALE 2017), or “Greater Khorasan

Civilization” (GKC) as recently and wittily attested by Biscione and Vahdati (BISCIONE/VAHDATI 2021: 527) (Fig. 1).

The BMAC term was coined by V.I. Sarianidi (SARIANIDI 1974: 70; 1977: 97), following numerous discoveries made in Bactria and Margiana, in order to highlight the place of origin of this archaeological complex (LYONNET/DUBOVA 2021: 11). The wide geographic spread of this phenomenon characterised the numerous later definitions (POSSEHL 2002; BISCIONE/VAHDATI 2021), of which the most commonly used is “Oxus Civilisation/Oxus Culture” (FRANCFORT 1984: 174; 2016) or the already mentioned and more correct “Greater Khorasan Civilization” (BISCIONE/VAHDATI 2021: 527). During the first centuries of the second millennium BCE, the BMAC phenomenon was strongly influenced by the progressive decline of the MAIS (Middle Asian Interaction Sphere) (POSSEHL 2002; 2007), a broad inter-regional trade network which deeply characterised the entire geographic area including the Bronze Age Margiana, located along the current alluvial fan of the Murghab River in southern Turkmenistan. Since much has already been written by numerous spe-

¹ See DUBOVA ET AL. (2018: 8) for a recent modification in the use of Bactria-Margiana Archaeological Culture.

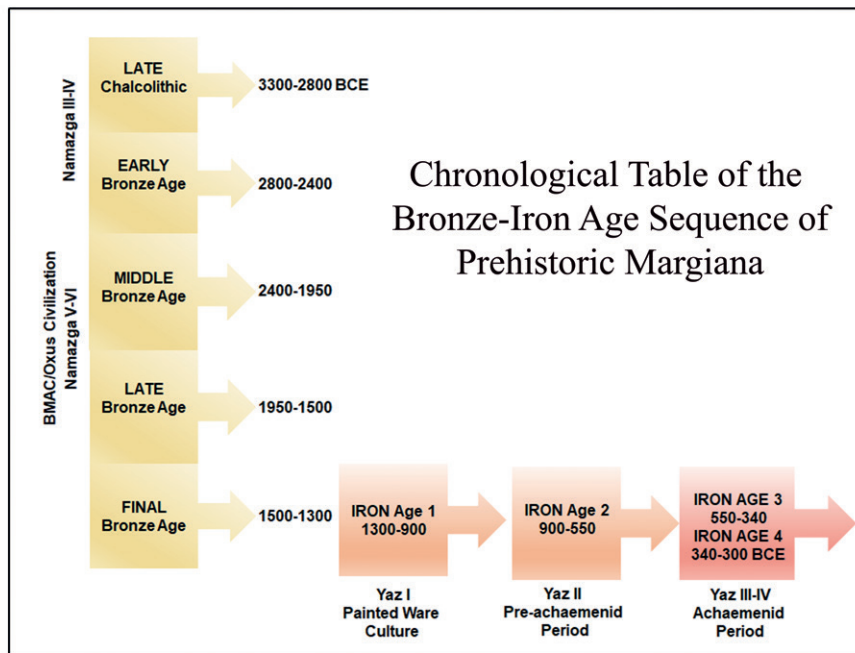


Fig. 2: Chronological table of the Bronze–Iron Age sequence of prehistoric Margiana (imagery by B. Cerasetti).

cialists;² we do not discuss this further here. Rather, we opt to deal with the evanescence of the BMAC in relation to the urban formation and dissolution and to the resulting economic transformations in prehistoric Margiana, as well as throughout southern Central Asia.

Despite the numerous and in-depth investigations carried out over the years in the alluvial fan of the Murghab River (GUBAEV/KOSHELENKO/TOSI 1998; ROSSI OSMIDA 2007; 2011; SALVATORI/TOSI/CERASETTI 2008; DUBOVA ET AL. 2018), we are fully aware that much remains to be done and that the studies carried out so far are insufficient to define the BMAC phenomenon from its flourishing to its dissolution between the third and second millennia BCE (Fig. 2).

There are three key issues that could shed light on this phenomenon and redirect research. The first is to identify a common and regionally specific chronological sequence through radiocarbon dating from the cohesive BMAC sites, along with a solid and universally accepted ceramic sequence (SALVATORI 2016; SATAEV/DUBOVA/MAMEDOV 2019; LUNEAU 2014: 35–46). Despite the brilliant results achieved so far, research still suffers from insufficient co-ordination between specialists working in different geographic areas. The second issue is to clarify the position of Bronze Age Margiana within the trade network that has connected the region with its eco-

² Recently, an interesting and all-encompassing volume on this cultural phenomenon was edited by LYONNET/DUBOVA (2021), with a comprehensive collection of works by specialists in the different geographic areas affected by the BMAC phenomenon.

nomics partners from the Indus Valley to the Iranian Plateau, from the Persian Gulf to Mesopotamia (TOSI/LAMBERG-KARLOVSKY 2003; POSSEHL 2002; KOHL 2007; FRACHETTI/ROUSE 2012; LYONNET/DUBOVA (ED.) 2021). This was not only a network of economic exchange, but of ideas and ideologies, architectural and agricultural techniques, etc., which only a careful analysis of religious and residential architecture and extensive material culture can outline. Finally, the interaction between BMAC sedentary farmers and non-BMAC agropastoralists, linked to the Andronovo Cultural Complex of the mountainous and steppe regions of Bronze Age Central Eurasia (CATTANI 2008; ROUSE/CERASETTI 2018; ROUSE ET AL. 2019; BONORA 2021), needs further attention. We are quite sure that the assimilation of the pastoral element with the local one took place already in the Middle Bronze Age, if not even during the final phase of the Early Bronze Age, and that we are actually studying this resulting phenomenon in prehistoric Margiana. Despite the importance, this relationship has been greatly neglected in the Murghab region in the past and is only lately receiving due attention (ROUSE 2020; CERASETTI 2021). This phenomenon is crucial for clarifying the major transformations that characterised the definitive decline of BMAC at the end of the Bronze Age. Defined as a “crisis” by some specialists (BISCIONE 1977; KOHL 1984; SALVATORI 2016; LYONNET/DUBOVA 2021), we believe it is rather an expected transition phase to the subsequent Iron Age – the result of a combination of profound climatic upheavals, vast movements of peoples, and intense cultural interactions. The introduction of new methods in the ar-

chaecological sciences to Central Asian archaeology, as well as aDNA and stable isotope analysis of human, faunal, and botanical remains (NARASIMHAN ET AL. 2018; HANKS ET AL. 2018; ANANYEVSKAYA ET AL. 2020), is helping us to redefine the ancient societies and related paleoeconomy.

The stratigraphic study of a single long-lived BMAC site, such as Togolok 1, can potentially shed light on all three of the issues mentioned above and clarify how BMAC populations related to earlier and later occupation in ancient Margiana. The results obtained from the three excavation campaigns of TAP – Togolok Archaeological Project (directed by B. Cerasetti), in 2014, 2015, and 2018, paint an interesting scenario concerning the strategic phases from the Middle to the Late Bronze Age, and the transition to the Iron Age (CERASETTI ET AL. 2019; forthcoming; ARCIERO/FORNI forthcoming). This is a period of intensive political, economic, and socio-cultural changes throughout Central Asia and its neighbouring regions, which only a careful analysis of archaeological evidence can bring out from the shadows of the past. (BC/MC)

2 Preliminary analysis of the Togolok hydrological system

Although Holocene paleoclimatic change in Central Asia is not well documented, FOUACHE ET AL. (2021) recently argue that local climatic fluctuations have certainly affected river dynamics and regional ecosystems during the Bronze Age. This is the case of the Murghab alluvial fan, one of the largest endorheic drainage systems in Central Asia. The Murghab River originates in west-central Afghanistan and enters modern-day Turkmenistan between the plateaus of Badkhyz and Karabil (BABAEV 1994: 14). Once in Turkmenistan, it gradually slopes downward, creating an alluvial fan of 25–30,000 km², with generally flat river branches in its lower course (MARCOLONGO/MOZZI 1998). The north-eastern area of the Murghab alluvial fan represents the more ancient hydrologic system, which has been regarded by many scholars as crucial for the development of BMAC civilisation (SARIANIDI 1990a; CERASETTI 2008; CERASETTI/TOSI 2010; LAMBERG-KARLOVSKY 2013; ROUSE/CERASETTI 2017).

In recent years, the paleochannel network of the Murghab alluvial fan has been reconstructed and analysed on a macro scale (CERASETTI 2008: 31; CERASETTI/TOSI 2010; ROUSE/CERASETTI 2017). Despite the good results obtained so far, only a micro-scale approach can address questions relating to local water resources. During 2017–2018, joint research between the TAP and PAM (Project for the Ancient Murghab, directed by L.M. Rouse) conducted preliminary surveys by satellite and aerial images on part of the area of Togolok. Most of the identified pa-

leochannels in the area, later ground-truthed during field campaigns, were characterised on the surface by a flat *takyr*,³ almost completely lacking elevated levees. Although *takyr* surfaces can occur naturally in drainage areas, in association with elongated or meandering forms, they represent old hydrological systems (VITKOVSKAÁ 1990).

In the Togolok complex, 14 paleochannel traces have been identified with different lengths and distances from Togolok 1 (ROUSE/OLSON, see **Sec. 3**) (**Fig. 3**). When close to one another, the paleochannel traces might refer to different trends in channel transformations or avulsion processes (RĂDOANE ET AL. 2013). In some cases, traces may refer to the same paleochannel at different chronological stages (JOTHERI 2018: 111–125). Similarly, in the Togolok area avulsions, cut-off processes or paleomeanders may refer to different evolutionary stages across the floodplain (BROWN 1997: 17–44). Although several factors can bias the interpretation and identification of the paleochannel evidence (e.g. sand dune accumulation), the ancient floodplain system identified can likely be interpreted as a natural intermediate sinuosity anastomosing floodplain (cf. BROWN 1997: 22). The pinpointed paleochannels present meander-like or possible braided forms (MAKASKE 2001), similar to the modern Murghab alluvial fan channels. Very straight channels – often associated with artificial watercourses (WILKINSON/JOTHERI 2021) – have not yet been identified in the Togolok area. In the Murghab alluvial fan, a small ancient artificial canal has been identified at Gonur North, although it was probably not used for irrigation, but exclusively as a source of water supply to the settlement (SATAEV 2008: 65–66).

As for the agricultural fields, interestingly, no crevasse splays or herringbone structures, typical of irrigation systems such as in ancient south-west Asia (WIDELL ET AL. 2013: 56–80), were identified in the Togolok area. As observed by Cattani and Salvatori (CATTANI/SALVATORI 2008: 9–10) around Takhirbai 3, cultivated fields seem to be located along the secondary channels limited by small rural settlements on both of the riverbanks (**Fig. 4**).

We can suppose that, in the Togolok area too, cultivated fields were located along the secondary channels. Irrigation was likely achieved using rudimentary dams and gates to divert and regulate water from natural channels in the nearby fields. However, we cannot exclude the possible existence of artificial ditches, such as at Gonur, able to transport water to more distant fields.⁴

3 The *takyr* soil is a polygonally cracked surface with a clay-loam texture, typical of Central Asian deserts (FLESKENS ET AL. 2007).

4 In the near future, we are planning an extended geophysical prospection by using magnetometry to detect the main features both in relation to the main tepe of Togolok 1 and the area surrounding the site, as successfully

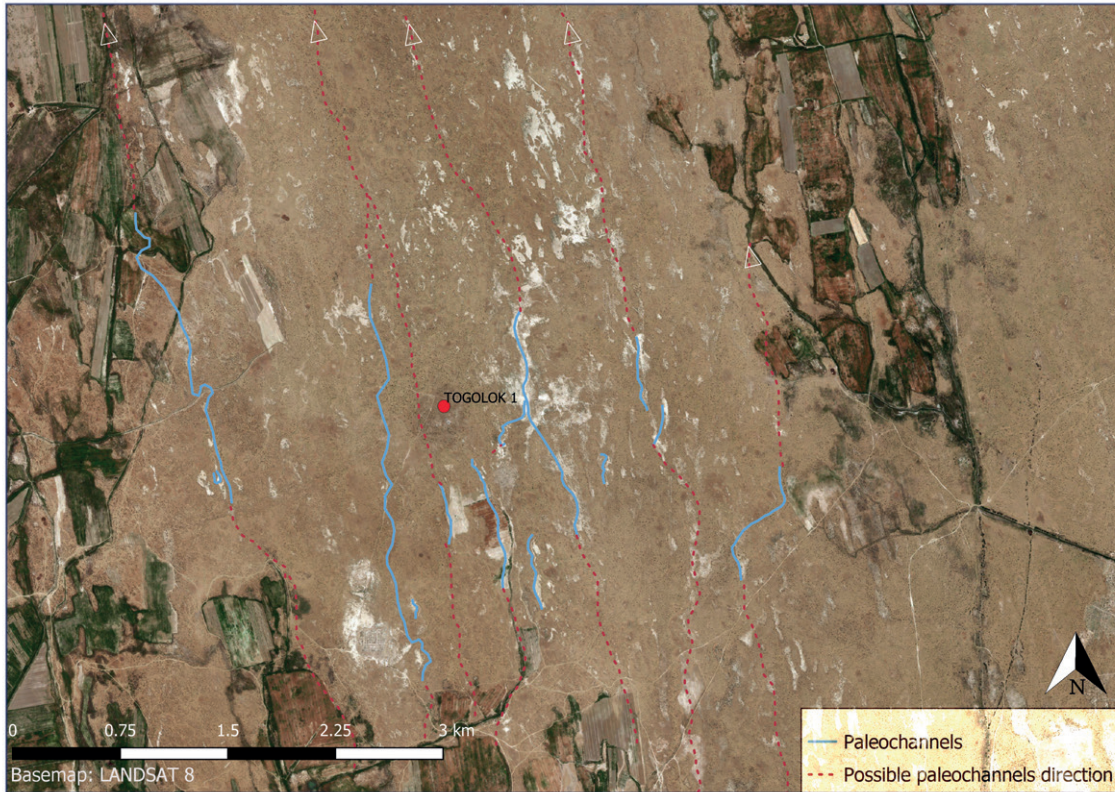


Fig. 3: Distribution of the paleochannels traces (light blue lines) identified in the Togolok area, with possible paleochannel direction (dashed red lines/white triangles) (basemap Landsat 8-2019; GIS elaboration by R. Arciero).

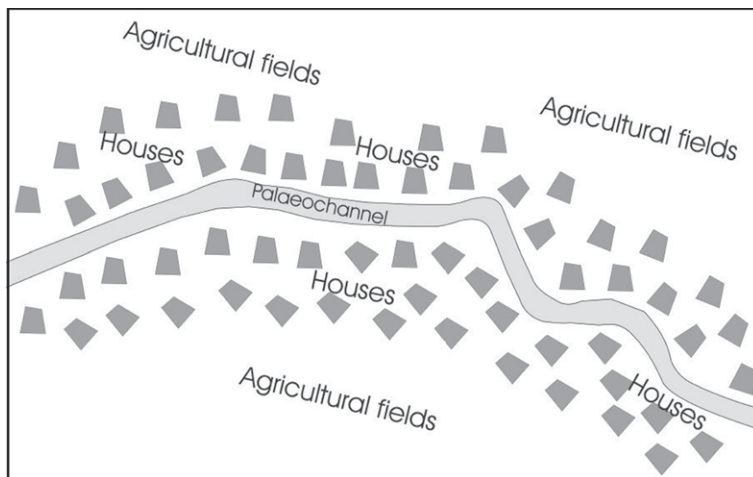


Fig. 4. Proposed model of the farm houses and agricultural fields pattern along a paleochannel in the Takhirbai area (SALVATORI/CATTANI 2008: 11 Fig. 1:7).

The archaeobotanical analysis from Togolok 1 (BILLINGS/SPENGLER, see **Sec. 7**) suggests a complex system of crop cultivation that would require a significant amount of water. This crop production was likely managed by the satellite settlements in the proximity of the main mound of Togolok 1, which had control over the rural watercourses and cultivated fields. They also likely played an important

role in the management of the channel system of Togolok's archaeological complex (ROUSE/OLSON, see **Sec. 3**). (RA)

made in Gonur's archaeological area (HÜBNER/NOVÁK/WINKELMANN 2019).

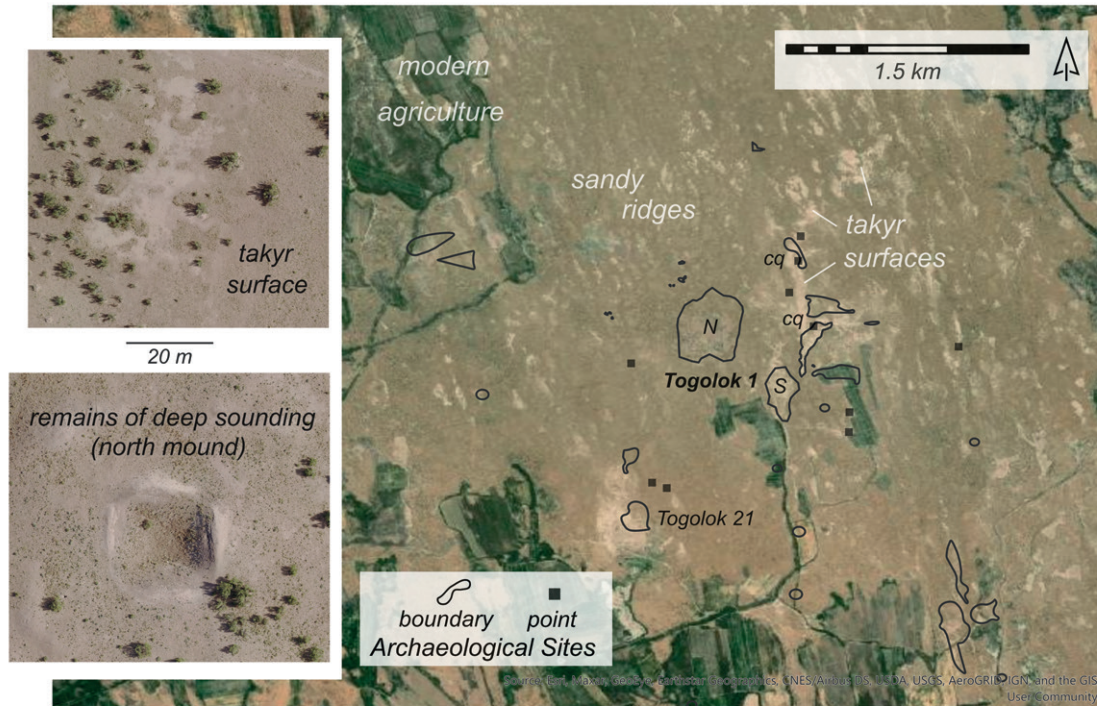


Fig. 5: Overview of the landscape centred on Togolok 1, showing a mix of natural and archaeological features. Components of Togolok 1 site complex labelled as N (north mound/tepe 1), S (south mound/tepe 2), cq (ceramic quarter). Insets show details (UAV images) of features discussed in text (imagery by K.G. Olson and L.M. Rouse).

3 Togolok in landscape context

The physical landscape surrounding the Togolok site complex is composed of a mixture of natural and anthropogenic components: *takyr* surfaces, sandy ridges, and modern agricultural fields and canals (Fig. 5).

Traditionally, the flat, non-vegetated *takyr* are preferred locales for cultivation because of their loamy soils and capacity for water retention, while sandy ridges provide relatively good vegetation for pasturing small stock in the desert steppe environment of the Murghab (KALUCKOV/GLUHOV 2014; MARKOFSKY 2010: 32). Since the major Bronze–Iron Age occupation of the Togolok area, aeolian and fluvial processes have affected the precise position of different features (e.g. CREMASCHI 1998), but the localised mix of microenvironments has remained a constant factor, as has the region’s overall aridity. The Murghab’s mixed arid landscape composition thus demands an integrated economy consisting of careful water management, multiple subsistence practices, variable levels of production intensity and residential mobility, and an accompanying patchwork of resource exploitation zones. Intercultural exchanges between BMAC communities and mobile pastoral groups during the mid-second millennium BCE may have formed a strategic part of this integrated economy (ROUSE/CERASETTI 2018; ROUSE 2020).

Although many more details of the ancient landscape around Togolok 1 remain to be documented – the subject of joint research currently underway by the TAP and PAM projects – some preliminary observations on the hydrological network can already be made. The remains of a large north-south oriented palaeochannel are visible in the east/north-east of the Togolok 1 complex, as numerous large, elongated *takyr* surfaces (Fig. 5). An investigative trench opened in 2018 (ROUSE 2018) revealed not only that the palaeochannel’s present-day midpoint has likely shifted dozens of metres from its ancient course, but that Bronze–Iron Age surfaces of the palaeochannel are minimally 4–5 m below the modern surface. Similar and even deeper prehistoric palaeochannel deposits are known around Gonur Depe (R. Kurbanov, personal communication), ca. 11 km to the northeast of Togolok 1. At Gonur, several large basins constructed around the main settlement may have diverted, stored, and filtered water from natural and artificial channels (HÜBNER/NOVÁK/WINKELMANN 2019). The precise structures used for managing water around Togolok 1 remain undocumented at present (ARCIERO, see Sec. 2), but as a similarly complex, multi-part site, we might anticipate their future discovery.

Our understanding of Togolok 1 as a site complex can benefit from comparisons and inferences drawn from other investigated BMAC contexts. As the closest geographic and temporal parallel, Gonur is com-

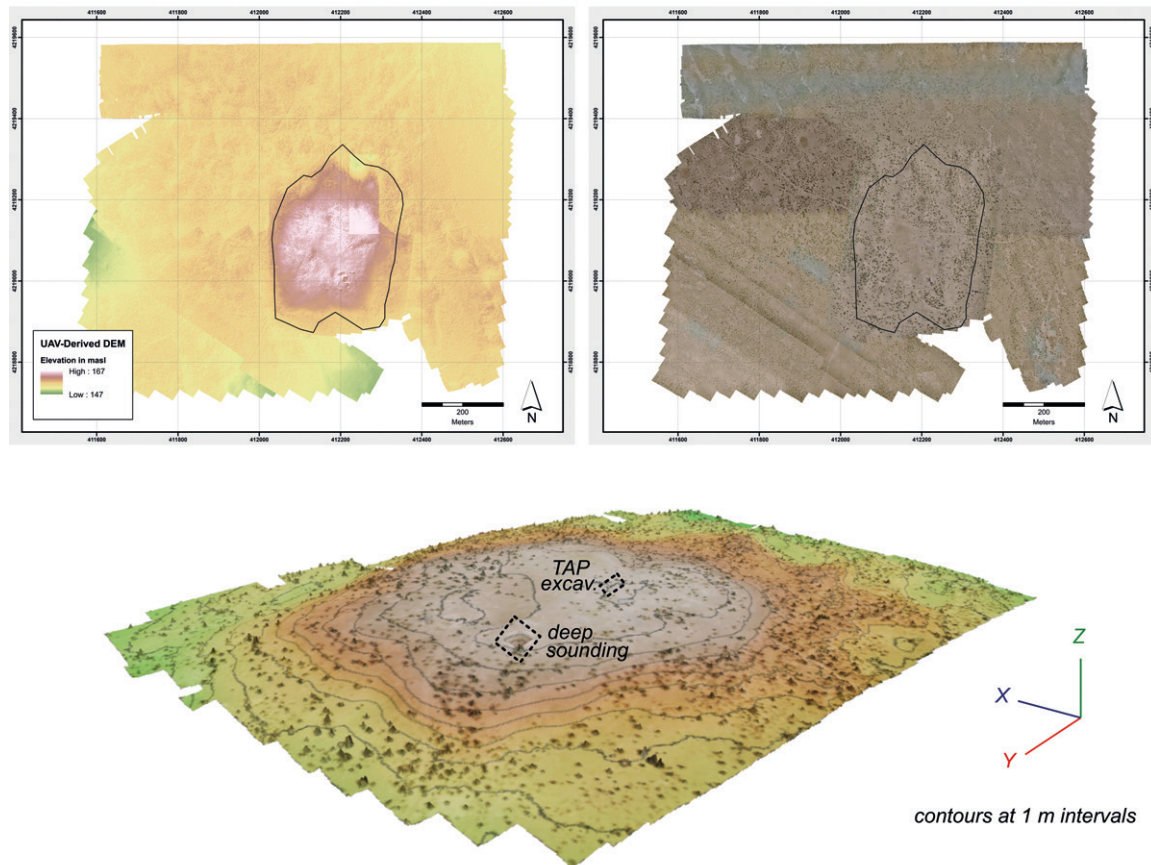


Fig. 6: Composite image of UAV-derived models, centred on Togolok 1 north mound.

Top left – digital elevation model; **top right** – orthophoto mosaic; **bottom** – 3D perspective of elevated mound, based on digital elevation overlays, and draped with 1 m contour lines (data processing and imagery by K.G. Olson and L.M. Rouse).

prised of various sectors of administrative and ritual activity, domestic occupation, and craft workshops, all distinctly laid out in a carefully planned context (e.g. DUBOVA 2019; HÜBNER/NOVÁK/WINKELMANN 2019). Similar multi-part layouts have been noted in BMAC site complexes in south-eastern Uzbekistan (i.e. Dzharkutan; BENDEZU-SARMIENTO/MUSTAFOKULOV 2013). At Togolok 1, the apparent separation of concentrated settlement (tepe 1), a substantial “temple” structure (tepe 2), and ceramic production quarters suggests a similar planned community (e.g. SARIANIDI 1986; 1990b) (Figs. 5–6). The multi-part composition of Togolok 1 was first reported by V.I. Sarianidi, where he identified two mounds roughly 500 m apart, and two ceramic quarters to the east and north-east (SARIANIDI 1986; 1990b).

At larger scales in the region, the maintenance of different resource-exploitation zones has been suggested around Samarkand in the post-Hellenistic period (MANTELLINI 2019) and in Antique-period Khorezm (BRITE 2013; NEGUS CLEARY 2015). What each of these archaeological examples have in parallel with one another and with Togolok 1 is a major (proto-)urban occupation in a semi-arid context, made possible through careful water management

and full exploitation of the diversity of localised microenvironments. Importantly, many of these examples also highlight the inseparability of agricultural, pastoral, sedentary, and mobile communities in social configurations across Central Asia – an issue already raised by the authors for Togolok 1 (CERASETTI ET AL. 2019).

During 1987–1988, the southern mound (Togolok 1, tepe 2) was fully excavated to reveal a fortified building, interpreted as a “rural” or smaller version of the monumental “temple” uncovered 1 km to the south-west at Togolok 21 (SARIANIDI 1986; 1990b). The northern mound of Togolok 1 (tepe 1), in contrast, has never been subject to broad excavation, but its large size (350 × 300 m) and height (roughly 4 m) are generally interpreted as the remains of a significant settlement. A deep sounding atop the mound uncovered 3.5 m of cultural deposits stretching back to, possibly, the beginning of the Late Bronze Age (SARIANIDI 1986; P’YANKOVA 1993). In addition to the mounds, two major ceramic quarters were originally identified 500 m east and 630 m north-east of the north mound (SARIANIDI 1990b: Fig. 1). Located in a *taky*, these two areas of concentrated surface ceramics and kiln fragments are visi-



Fig. 7: **A** – Overview of Togolok 1 trench (2014–2015) with the largest of the fireplaces (circled in red); **B** – Detail of the fireplace, belonging to the first phase of occupation; **C** – Detail of the post holes that were part of the artificial platform (third phase of occupation) (CERASETTI ET AL. forthcoming: Fig. 5; photo by TAP).

ble on modern satellite imagery and remain largely intact, as observed by the authors during field visits. Further survey carried out by the AMMD (The Archaeological Map of the Murghab Delta), TAP, and PAM archaeological projects have recorded the high density of sites and surface materials in the immediate vicinity of Togolok 1 (CERASETTI/CODINI/ROUSE 2014). In fact, there are more than 30 documented archaeological sites ascribed to the Togolok “oasis” (a problematic term often used in Murghab literature to refer to a group of geographically-related sites). The Togolok sites as a group exhibit a relatively high frequency of surface ceramics spanning the local Bronze–Iron Age transition (SARIANIDI 1990a; GUBAEV/KOSHELENKO/TOSI 1998) – making the further investigation of the Togolok 1 settlement and the spatial layout of its immediate archaeological landscape of primary importance.

Ongoing research at Togolok 1 has highlighted the complexity of potential cultural interactions and material cultural overlaps related to the Bronze–Iron Age transition. Of critical importance in upcoming research will be a richer documentation of the different sectors of the site complex, for example by using magnetometry techniques to identify on- and off-mound structures and potential workshop zones. A clearer picture of the ancient geo-hydrological system must also be drawn in terms of both identifying canals and related features of water

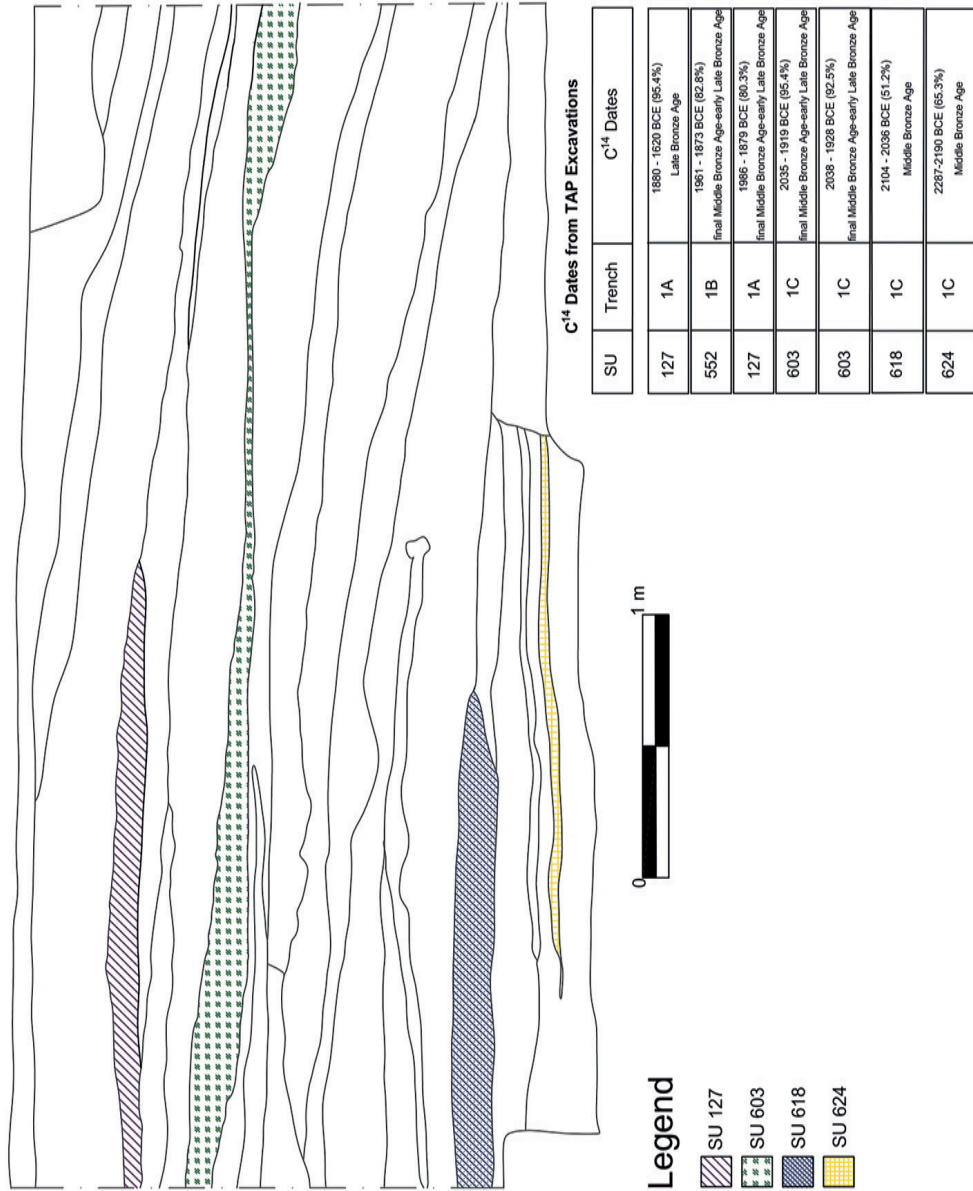
management by way of further pedestrian and UAV survey (see **Fig. 6**), and, where possible, scientifically dating hydrological features by way of OSL, organic remains, or the refined ceramic chrono-typology from stratigraphic excavations at the Togolok 1 mound settlement itself. (LMR/KGO)

4 Togolok 1: the 2018 excavation

The Bronze Age site of Togolok 1 covers ca. 11 hectares (9 ha for tepe 1 and 2.3 ha for tepe 2, respectively) (SARIANIDI 1986: 8–9; 1990a; 1994; SALVATORI 2005; SALVATORI 2008b: 60). In 2014 and 2015, the TAP team opened a test trench in the upper part of the largest tepe and brought to light the latest phases of occupation of Togolok 1 by groups of semi-permanent inhabitants (**Fig. 7**). The C14 analysis dated the latest phase of occupation of the area from the very final phase of the Middle Bronze Age to the Late Bronze Age (3581±27 BP → 1986–1879 cal BCE (80.3%)), (3554±21 BP → 1961–1873 cal BCE (82.8%)), (3420±45 BP → 1880–1620 cal BCE (95.4%))⁵ (CERASETTI ET AL. 2019: 70) (**Fig. 8**).

5 The more recent radiocarbon date was converted into calendar years by using the software OxCal Ver. 3.5, based on the 2013 atmospheric dataset (REIMER ET AL.

Western Section of Togolok 1 (2014-2015; 2018)



Harris Matrix

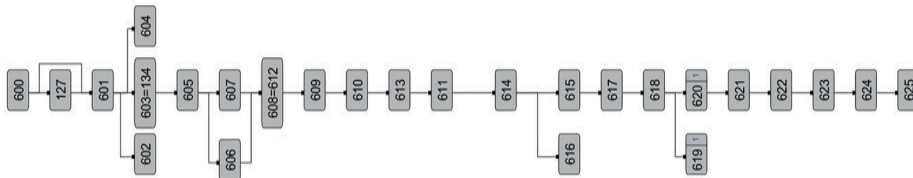


Fig. 8: Western section of Trench 1C (2014–2015 and 2018 excavations), with Harris Matrix (2018 excavation, and SU 127 from 2015 field campaign) and table of the radiocarbon dates (2014–2015 and 2018 excavations) (CAD elaboration by L. Forni).

The excavation revealed three different occupation phases of two areas, characterised by the presence of artificial platforms with drilled post holes, likely used to support non-permanent structures such as tents or light shelters. The southern area was identified as a “living area”, which was inhabited for temporary or seasonal periods; meanwhile, a large organic deposit intersected the northern part of the trench (CERASETTI ET AL. 2019: 68–69). The latter likely represents a large animal enclosure or pen for herds, as demonstrated by the organic layers rich in sheep dung, burnt wood, and a large quantity of carbonised seeds (CERASETTI ET AL. forthcoming; see also BILLINGS/SPENGLER **Sec. 7**). This area also presented artificial platforms on the south and north-western sectors of the trench with the presence of post holes. Semi-mobile structures with a living area next to animal enclosures can still be observed in the modern-day Murghab desert area (ARCIERO/FORNI 2018).

Among the archaeological items, typical BMAC objects were discovered (CERASETTI ET AL. forthcoming). The stylistic analysis of an amulet/stamp seal, collected in a fireplace attributable to the second occupation phase of the animal enclosure (CERASETTI ET AL. forthcoming; Fig. 5), confirms the chronological attribution of the archaeological context to the Late Bronze Age. In addition, the finding of a burnt head of a flat violin-shape female figurine in a layer related to the second occupation phase of the living area promotes the dating to the final stage of the Middle Bronze Age according to the radiocarbon dates (Fig. 8). This class of material is emblematic of the Murghab region and the Kopet Dagh foothills during this period (ANTONOVA/SARIANIDI 1990; FORNI 2017: 6–8; MASSON/SARIANIDI 1973) and came to an abrupt halt at the end of Middle Bronze Age. (RA)

2013: 1869–1887). The analyses were made by CEDAD – CEntro di DATazione e Diagnostica, Dipartimento di Ingegneria dell’Innovazione, Università del Salento (Italy) and were funded by the Volkswagen and Mellon Foundations, Fellowship for Research in the Humanities for Research in Germany, grant for 2015–2016, PI Spengler. The radiocarbon dating in the middle was converted into calendar years by using the software OxCal Ver. 4.3.2, based on the 2013 atmospheric dataset (REIMER ET AL. 2013: 1869–1887). The analyses were processed by the Research Laboratory for Archaeology and the History of Art of the University of Oxford and were funded through the ERC grant: Fruits of Eurasia: Domestication and Dispersal (FEDD), European Research Council Starting Grant (851102). The conventional radiocarbon ages of the last sample were converted into calendar years by using the software OxCal Ver. 4.4, based on the 2020 atmospheric dataset (REIMER ET AL. 2020: 725–757). The analyses were processed by Scottish Universities Environmental Research Centre (SUERC) of the University of Glasgow and were funded by the Max Planck Institute for the Science of Human History.

In 2018, the TAP team further investigated the north-western area of the previous trench, opening Trench 1C (2 × 6 m). A refuse deposit was excavated, composed of alternating organic layers, compact artificial platforms, and one fireplace in SU 609 (Figs. 9–10). The area is located in the proximity of the residential quarter to the south of the settlement (SALVATORI 2005) and was periodically burned and levelled, presumably for sanitisation purposes. Under the upper layer (SU 600), the stratigraphic sequence appeared to be a mix of thin silty and sandy sediments along the entire trench (SU 601–603). Radiocarbon dating of two carbonised seeds from SU 603 placed the layer between the end of the Middle and the beginning of the Late Bronze Age (3624 ± 20 BP → 2035–1919 cal BCE (95.4%)/3631 ± 20 BP → 2038–1928 cal BCE (92.5%))⁶ (Fig. 8). Interestingly, layers SU 600, 601, and 603 revealed a rich and significant concentration of items. In particular, we recovered a fragment of one chlorite spindle whorl (SQ F5) (Fig. 11:1), four pottery disks (SQs F1–F4–G2–G4), a fragmentary undetermined clay figurine (SQ F4), and a flint arrowhead (SQ F4) (Fig. 11:2) (FORNI, see **Sec. 5**) (Fig. 10), together with daub remains, unbaked mudbrick fragments, and hand-made and wheel-made pottery. In SU 604, located under SU 601, daub and pottery fragments were found in association with two fragmentary cretulae, animal bones, and white calcified remains.

The excavation of SU 606 and 607 led to the identification of an artificial platform (SU 608) along the entire trench, which was composed of grey-brown sandy sediment. The layer was rich in gypsum, especially in the northern sector of the trench, together with charcoal fragments spread throughout the entire layer, a considerable amount of handmade and wheel-made pottery fragments, and five pottery disks. Further evidence of anthropogenic activity was identified in SU 609, along the western section of the trench. The compact blackish layer was interpreted as an artificial platform with the presence of one fireplace delimited by gypsum (SQ F3), associated with hand and wheel-made pottery, one clay spindle whorl (SQ F2), and two pottery disks (SQs F4–F6). Below SU 609, a sandy, burnt brown layer (SU 610) contained a Late Bronze Age zoomorphic figurine (Fig. 11:4) (FORNI, see **Sec. 5**).

After the excavation of the underlying SU 611–614, the excavators interpreted a brown compact layer as another artificial platform, which extend-

6 These radiocarbon dates were converted into calendar years by using the software OxCal Ver. 4.3.2, based on the 2013 atmospheric dataset (REIMER ET AL. 2013: 1869–1887). The analyses were processed by the Research Laboratory for Archaeology and the History of Art of the University of Oxford and were funded through the ERC grant: Fruits of Eurasia: Domestication and Dispersal (FEDD), European Research Council Starting Grant (851102).



Fig. 9: Overview of Togolok 1 excavation trench from the south side (end of field season). In the right image, Togolok 1 trench with the squares' grid (photo by TAP and GIS elaboration by R. Arciero).

ed into the southern part of the trench (SU 617) (Fig. 12), with the presence of five pottery disks (SQs F1–F2–F4–F5) and wheel-made pottery in association with a headless violin-shaped flat female figurine (SQ F5) (FORNI, see Sec. 5) (Fig. 11:3). Under SU 617, a sandy layer (SU 618) was detected in the south-western corner of the trench, which was rich in medium to large-sized wheel-made pottery fragments. Radiocarbon dating from this layer dates the occupation level to the Middle Bronze Age (3722 ± 20 BP \rightarrow 2104–2036 cal BCE (51.2%))⁶ (Fig. 8). In addition, SU 617 covered both an artificial platform (SU 619), which extended in the central-southern area of the trench, and a sandy, light brown layer (SU 620), located along the northern section of the trench. The layer SU 620 presented worked astragali bones, one pottery disk (SQ F2), and notably a grinding stone (SQ F2) (Fig. 11:5), which likely testifies to the production of cereal flour or grit. The object is fragmentary, but the traces of use on both planes are very evident.

In the central-southern sector of the trench, the team identified another artificial platform (SU 622) with the presence of faunal remains, including one astragalus, and unbaked mudbrick fragments. Mudbrick fragments, together with wheel-made pottery and a stone vessel fragment (SQ F3), were all present in a compact, light brown clay sediment (SU 623), located under SU 622. The removal of SU 623 led to the identification of a significant amount of burnt animal bones, interpreted as the remains of meals (POTENZA, see Sec. 8). Underneath SU 623, a grey sandy layer with charcoal inclusions (SU 624) included one pottery disk (SQ F5) and a fragment of an undetermined terracotta figurine (SQ G5). As observed for many of the other stratigraphic units in the trench, these two layers were artificially lev-

elled in order to create horizontal plans of use. The C14 analysis from SU 624 dates the last occupation phase excavated in Trench 1C to the Middle Bronze Age (3784 ± 20 BP \rightarrow 2287–2190 cal BCE (65.3%)).⁶ (LDI/LF/RA)

5 Material culture from the 2018 excavation: preliminary description

The material culture documented during the 2018 excavation at Togolok 1 provided further data on the presence of a community of agropastoralists between the Middle and Late Bronze Age. More specifically, the finding of BMAC objects, which are rare or unknown in other pastoralist contexts, suggest a mixed society as already documented during the 2014–2015 campaigns (ARCIERO/FORNI forthcoming; CERASETTI ET AL. 2019; CERASETTI ET AL. forthcoming; ROUSE/CERASETTI 2018: 681). A fragment of a chlorite spindle whorl, decorated with an incised circle possessing a dotted centre, was found during the removal of SU 600 (Figs. 11:1; 10). This type of artefact is widespread in the Murghab region and often found in Late Bronze Age residential areas and graves, such as at Gonur South and the related necropolis (MASIMOV/SALVATORI/UDEUMURADOV 1998: 36, 45; SARIANIDI 1990a: Pl. 80: 4–5). Archaeologists have reported similar specimens from archaeological sites in Bactria, such as at Sapalli and Dashly-3 (SARIANIDI 1977: Figs. 54: 5–9, 64). Unlike the Late Bronze Age examples, Middle Bronze Age biconical spindle whorls have no decorations. Furthermore, other types of stone or clay, rather than chlorite, were apparently used as biconical spindle

Trench	SU	Squares	Depth min./max. from the ground level (metres)	SU description	Organic/inorganic material	Interpretation
1C	600	F5; F6; G6	-0.21; -0.87	Greyish sandy layer with small charcoal inclusions	Handmade (63%) and wheel-made (37%) pottery, 1 chlorite spindle whorl, charcoal	Refuse deposit
1C	601	all squares	-0.43; -0.91	Black/dark grey compact organic layer, with gypsum and small silt inclusions	Gypsum, unbaked mudbrick fragments, handmade (61%) and wheel-made (39%) pottery, 1 terracotta spindle whorl, 1 pottery disk, wattle and daub, carbonised seeds	Refuse deposit
1C	603	all squares	-0.62; -0.95	Black/dark grey sandy layer	Handmade (53%) and wheel-made (47%) pottery, 3 pottery disks, 1 undetermined terracotta figurine, 1 flint arrowhead, carbonised seeds	Refuse deposit
1C	604	all squares	-0.61; -0.87	Brown sandy layer, with white calcified inclusions	Handmade (53%) and wheel-made (47%) pottery, 2 cretulae, 1 pottery disk, wattle and daub, animal bones	Refuse deposit
1C	608 = 612	all squares	-0.99; -1.45	Grey/brown sandy layer, rich in gypsum; charcoal fragments spread through the entire layer	Handmade (24%) and wheel-made (76%) pottery, 5 pottery disks, charcoal, animal bones, gypsum	Artificial platform
1C	609	F2; F3; F4; F5; F6	-1.19; -1.72	Blackish compact layer, located in the western sector of the trench	Handmade (20%) and wheel-made (80%) pottery, 1 terracotta spindle whorl, 2 pottery disks, gypsum	Artificial platform, with a fireplace delimited by gypsum (SQ F3)
1C	610	F2; G1; G2; G3	-1.44; -1.60	Burnt brown sandy layer, located in the northern sector of the trench	Wheel-made pottery, 1 pottery disk, 1 zoomorphic terracotta figurine	SU under the artificial platform (SU 609)
1C	617	F1; F2; F3; F4; F5; F6; G2; G3; G4; G5; G6	-1.36; -2.08	Brownish compact layer	Wheel-made pottery, 1 anthropomorphic terracotta figurine, 5 pottery disks, charcoal, gypsum	Artificial platform with the evidence of human activities
1C	618	F5; F6	-1.81; -2.01	Brown sandy layer, with gypsum inclusions	Wheel-made pottery, 1 pottery disk, unbaked mudbrick fragments	SU covering the artificial platform (SU 619)
1C	619	F4; F5; F6; G4; G5	-1.93; -2.03	Brownish compact layer	-	Artificial platform, located in the central-southern area of the trench
1C	620	F1; F2; G1; G2	-2.01; -2.22	Light brown sandy layer, located in the northern sector of the trench	1 fragmentary grinding stone, 1 pottery disk, worked astragali bones, animal bones	Anthropic level
1C	622	F3; F4; F5; F6; G4; G5	-2.21; -2.60	Grey compact layer	1 astragalus, animal bones, unbaked mudbrick fragments	Artificial platform, located in the central-southern sector of the trench

Trench	SU	Squares	Depth min./max. from the ground level (metres)	SU description	Organic/inorganic material	Interpretation
1C	623	F3; F4; F5; F6; G4; G5	-2.13; -2.23	Light brown compact clay layer	Wheel-made pottery, unbaked mudbrick fragments, 1 stone vessel fragment, animal bones	Light-brown clay sediment, located under an anthropic platform (SU 622)
1C	624	F3; F4; F5; F6; G5	-2.23; -2.34	Grey sandy layer, located in the south-western sector of the trench	1 pottery disk, 1 undetermined terracotta figurine, charcoal	Anthropic level
1C	625	F3; F4	-2.34; -2.55	Light brown silty layer, located in the south-western sector of the trench	-	Anthropic level

Fig. 10: Table of the stratigraphic units of Trench 1C, with the inclusion of the most significant layers (elaboration by L. Forni, L. D'Ippolito, and R. Arciero).



Fig. 11: Special items from the 2018 excavation at Togolok 1: **1** – Chlorite spindle whorl fragment with dotted decoration; **2** – Bifacial leaf-shaped flint arrowhead; **3** – Flat violin-shaped headless female terracotta figurine; **4** – Zoomorphic terracotta figurine; **5** – Fragmentary grinding stone with traces of use (photo by TAP and imagery by L. Forni).



Fig. 12: Artificial platform located in the southern sector of Trench 1C (photo by TAP.)

whorls during this period (MASIMOV/SALVATORI/ UDEUMURADOV 1998: 38; SARIANIDI 2007: 332).

A bifacial leaf-shaped flint arrowhead was recovered, characterised by denticulated sides and a short tang (SU 603, **Fig. 11:2**). Interestingly, arrowheads represent the only flint artefacts from Bronze Age Central Asia and were unusual items from BMAC sites of southern Turkmenistan (SKAKUN 2003: 146–147). They appeared in this region during the Chalcolithic, when the overall number of flint tools decreased. Bifacial leaf-shaped flint arrowheads were found in the Murghab region during the excavation of the Gonur necropolis and the site of Adjı Kui 9 (ROSSI OSMIDA 2011: Fig. 144; SARIANIDI 2007: Figs. 202–203). In particular, flint arrowheads from the Gonur necropolis were detected in male human and lamb burials, where they seem to play a symbolic role (SARIANIDI 2007: 113). The excavation of Adjı Kui 9 led to the identification of flint arrowheads in domestic and ritual contexts (ROSSI OSMIDA 2011: 116–135, 144–145). The objects from these sites are dated between the second half of the third and the beginning of the second millennia BCE (ROSSI OSMIDA 2011: 116–135; SARIANIDI 2007: 27). Further findings were detected during the surface survey carried out by the AMMD Project between 1997 and 2000. In 1997, three leaf-shaped biface flint arrowheads were detected at Adjı Kui 1 (SALVATORI 2002: 109) and two biface foliate and three bifacial arrowheads were discovered at Adjı Kui 9 (SALVATORI 2002: Figs. 45:3–45:7). In 2000, a flint arrowhead with bifacial retouch on the dorsal and ventral surfaces and denticulated sides was identified on the surface of Togolok 1 (SALVATORI 2000).

A zoomorphic terracotta figurine representing a quadruped was retrieved from SU 610 and dates to the Late Bronze Age (**Fig. 11:4**). This artefact can be interpreted as one of the decorative elements that usually adorn the rim and the body of ceremonial or ritual vessels, as documented in Late Bronze Age contexts by V.I. SARIANIDI (2005: 261–283). This typology of figurines can be recognised by their lower profile, usually curved or flat, due to the pressure exerted on the figurine to place it on the vessel, when the clay was still unfired (HIEBERT 1994: 142–143). The absence of legs is an implicit confirmation of this function, because the breakages are due to the detachment of the artefact from the original location.

Finally, the excavation of SU 617 revealed a headless, flat, violin-shaped, female terracotta figurine (**Fig. 11:3**). The latter is recognisable by one of the breasts, rendered through the use of an appliqué, and by the pubic triangle, which forms the lower part of the figure. The pubic triangle is decorated with thick engraved hatches. Flat, violin-shaped, female terracotta figurines are characteristic of the second half of the Middle Bronze Age (2200–1950 BCE) in the Kopet Dagh foothills and Murghab region (ANTONOVA/SARIANIDI 1990; FORNI 2017: 6–8; MASSON/SARIANIDI 1973), with an abrupt end in production during the Late Bronze Age. (LF)

6 Preliminary study of the pottery excavated in 2018

The pottery material from Togolok 1 is highly fragmented, and mainly divided into two groups: fine



Fig. 13: Preliminary distribution of the fine and coarse wares in the various layers at Togolok 1: **a** – Diagrams of the fine and coarse wares, by layers and by counting, and **b** – By layers and by weight (elaboration by E. Luneau and L. D’Ippolito).

wheel-made wares and coarse handmade wares. The first group of pottery is made of fine to very fine ware, of light beige, light brownish to orange or grey colour. It includes various categories of vessels, such as jars, pots, bowls, basins, footed cups, spouted vessels, moulds, etc. The second ware group is made with grog or mineral temper and exhibit various colours from beige, orange to brown, grey, and black. The vessels correspond mostly to various shapes of pots and bowls. These wares are consistent with the pottery found during the previous excavations at Togolok 1 by V.I. Sarianidi (SARIANIDI 1986) and by the TAP Project (2014–2015) (CERASETTI ET AL. 2019; CERASETTI ET AL. forthcoming), as well as with the Bronze Age pottery identified by other teams in the Murghab region (HIEBERT 1994; P’YANKOVA 1993; SARIANIDI 1990a).

The nature of the area excavated, identified as a refuse deposit, explains the strong fragmentation of the pottery. We can also observe a significant dif-

ference in proportion of the fine and coarse wares between the various layers of the studied area (Fig. 13). The uppermost layers dated to the second millennium BCE show a higher proportion of coarse handmade pottery (up to ca. 75%) in comparison to the lower layers, dated to the end of the third millennium BCE (Fig. 8). In these lower, earlier layers, the number of fragments of fine wheel-made ware exceeds the number of coarse handmade potsherds, increasing up to 80%. This observation⁷ needs to be further studied in secure contexts in different areas of the site. The nature of the layers is not amenable to addressing the changes in pottery production and

⁷ We can also note that the way the pottery is documented (between the counting of potsherds and the weight) influences the results (Fig. 13). The coarse ware is usually affected by a higher fragmentation than the fine wheel-made ware. The distribution of the wares by weight thus provides a good control of the “traditional” counting of potsherds.

use in this area, though we might raise questions about whether and how this phenomenon relates to materials having been thrown away at different periods and/or from specific areas.

Such cultural development would be particularly significant for the characterisation of the ceramic traditions at Togolok 1 and for understanding larger socio-cultural changes in the Murghab inner delta during the Late Bronze Age. Indeed, the interaction with the so-called “mobile pastoralists”, who occupied the Murghab region in the first half of the second millennium BCE and produced handmade coarse wares, is a crucial issue in the investigation of the transformations of the Bronze Age society in southern Central Asia and the disappearance of the Oxus Civilisation (CERASETTI/CODINI/ROUSE 2018; LUNEAU 2014; 2021a; ROUSE 2020; CERASETTI 2021). Moreover, in the subsequent Early Iron Age, pottery is mostly handmade. Yet the results of the pottery study from the previous seasons of excavation at Togolok 1 (CERASETTI ET AL. forthcoming) showed the existence of analogies of the coarse handmade pottery from Togolok 1 with pottery found both at “steppe” campsites (Ojakly) and at Early Iron Age sites (Yaz-depe, Site no. 999). The ceramic material thus shows an overlap of the material traditions related to several cultural groups. Although the (current) scarcity of clear material connections in the Murghab alluvial fan complicates our understanding of the contacts and integration of “steppe” populations within or on the margins of the Oxus civilisation (DOUMANI DUPUY ET AL. 2021), the flexibility of material and cultural boundaries between the various communities at the end of the Bronze Age, as we can see it at Togolok 1, indicates the important role played by intercultural relations in the changes of the Oxus civilisation (LUNEAU 2021b). Further fieldwork and ceramic studies at Togolok 1 should thus continue to bring essential information regarding the deep socio-cultural changes, still poorly understood, which occurred in the second millennium BCE in the Murghab area. (EL/LDI)

7 Economic plant use at Togolok 1

As archaeobotanical studies become more prominent in southern Central Asia, scholars are developing a better understanding of the role of plants in the paleoeconomy and past environments. To assess the dietary economy at Togolok 1, soil samples were collected from each stratigraphic unit, focusing on the large midden or possible herd animal pen in Trench 1A from tepe 1 from the 2014 campaign (ARCIERO, see **Sec. 2**). A barley grain from Trench 1A was radiocarbon dated to 3581±27 BP → 1986–1879 cal BCE (80.3% probability), fitting the stratigraphic sequence as noted above (**Fig. 8**) (see D’IPPOLITO/

FORNI/ARCIERO **Sec. 4**). Excavators processed these samples using a simple bucket flotation method, as described in PEARSALL (2015). In some cases, they also hand collected carbonised macrobotanical remains, which were abundant enough to see without magnification during excavation. All of the samples are currently being sorted using light microscopy at the Max Planck Institute for the Science of Human History.

The assemblage is rich in carbonised botanical remains, and we have identified both wild and domesticated species. These remains are dominated by cereal grains (**Fig. 14**), as is typical for prehistoric and historic bread-baking cultures across West Asia. The prominence of free-threshing hexaploid bread wheat (*Triticum aestivum*) likely suggests that the grinding and baking of wheat into bread was an important daily part of the dietary economy. Both naked and hulled barley (*Hordeum vulgare* var. *nudum* and *H. vulgare* var. *vulgare*) are also prominent in the assemblage and may have been ground into flour or consumed fermented or as porridge; barley, historically, has also been used as animal fodder. The barley rachises at Togolok 1 likely indicate that people were cultivating six-rowed varieties of the crop locally and processing grains at the site. A few specimens of highly compact wheat were also present, either indicating a specific variety of the crop or a larger range of diversity within the variety grown.

Legumes are also prominent in the assemblage at Togolok 1, with common peas (*Pisum sativum*), lentils (*Lens culinaris*), and grass peas (*Lathyrus sativus*) being ubiquitous and appearing in high abundance (**Fig. 14**). A few other legumes are present, but appear in low numbers; these include chickpeas (*Cicer arietinum*), fava beans (*Vicia faba*), and bitter vetch (*Vicia ervilia*). The diverse range of legumes found in the Togolok 1 assemblage forces us to think more critically about their role in the dietary economy of Central Asia. Legumes tend to be more water-demanding than cereal crops and have long growing seasons (MURPHY-BOKERN/STODDARD/WATSON 2017). Traditionally in South-west Asia these legumes were cultivated as irrigated field crops, and could have either been summer-sown in a heavily irrigated system or planted alongside winter-sown wheats (ZOHARY 1969). It would have been feasible to transfer cultivation practices and traditions from the Mediterranean climate of South-west Asia to southern Central Asia in prehistory. Legumes also fix soil nitrogen and complement grains in agropastoral cultivation systems (MURPHY-BOKERN/STODDARD/WATSON 2017).

Beyond the field crops, a few species of fruit trees and lianas were identified, although the only one appearing at a relatively high ubiquity is grapes (*Vitis vinifera*) (**Fig. 14**). Traditionally, grape vines have been cultivated around the urban centre as a garden



Fig. 14: A selection of macro-botanical remains recovered from Togolok 1: **1** – Hulled barley (*Hordeum vulgare* var. *vulgare*); **2** – Naked barley (*Hordeum vulgare* var. *nudum*); **3** – Common pea (*Pisum sativum*); **4** – Free-threshing wheat (*Triticum aestivum*); **5** – Lentil (*Lens culinaris*); **6** – Grape pip (*Vitis vinifera*); **7** – Grass pea (*Lathyrus sativus*) (photos by T. Billings and R. Spengler).

crop or on trellises, unlike the field crops discussed above. Grapes and apples have also been reported at Gonur Depe (MOORE ET AL. 1994). Other economically significant plants in the assemblage include a few possible apple seeds (*Pyrus/Malus* sp.) and the pits of a fruit in the *Prunus* genus, likely a plum. It is possible that these specimens represent a wild plum similar to greengages (*Prunus domestica* sp. *italica*), but this theory needs to be checked with modern comparative collections from the region. As a final possibly cultivated crop, garlic bulbs (*Allium* sp.) were found in one sample and may represent a small-scale garden crop.

This preliminary assessment of the ongoing archaeobotanical analyses of the 2014 assemblage from Togolok 1 has provided key insights into the

use of plants by its past inhabitants.⁸ The recovery of several domesticated species and dung fragments confirms that the population probably had a mixed agropastoral economy. Given the abundance of rachis finds, crops were likely being processed locally and, therefore, presumably grown close to the site. The known growing requirements of the wheat and legume crops, combined with the arid environment, suggest that irrigation was probably necessary. In addition to cereal and legume crops, the occupants were also making use of some arboreal resources. These fruits may have been procured in the nearby

⁸ The current global health situation has prevented us from returning to Turkmenistan. For this reason, the 2018 flotation samples are still there and will be processed as soon as they can be transported to the lab in Jena. Meanwhile, the flotation samples of 2015 are being analysed.

Kopet Dagh foothills, traded, or possibly cultivated locally. The presence of six-rowed barley, free threshing wheat, peas, and lentils is similar to other sites in the Murghab region, including Gonur Depe, Adji Kui 1, and Chopantam (MILLER 1993; 1999; MOORE ET AL. 1994; SATAEV/SATAEVA 2014; SPENGLER ET AL. 2014a; 2018). The combination of these species, sometimes referred to as the “Founder Crops” or the “South-west Asian Agricultural Complex”, appears to be part of a broader pattern of agricultural dispersal (e.g. ZOHARY/HOPF/WEISS 2012; SPENGLER 2019b). The broad similarities of plant resources may suggest similar subsistence strategies across South-west Asia through southern Central Asia.

Over the last few years, the TAP has made significant contributions to the study of archaeobotany in southern Central Asia (ROUSE/CERASETTI 2014; SPENGLER ET AL. 2014a; b; 2018; SPENGLER 2019a; CERASETTI ET AL. forthcoming). Integrated archaeobotanical and zooarchaeological research at the sites of Adji Kui 1 (SPENGLER ET AL. 2018), Ojakly, and Chopantam (SPENGLER ET AL. 2014a) has illustrated that the herding of sheep and goats remained a prominent part of the broader agropastoral economy (ROUSE/CERASETTI 2018). The integration of an agropastoral system impacts labour inputs, diet, and cultural practices; herd animals can complement grains and legumes through the production of meat and dairy products. Additionally, dung can be an important commodity in a wood-poor landscape. In addition to being a fuel source, herd animal dung can serve as a nitrogen-rich fertiliser, and agricultural stubble for post-harvested fields can serve as winter fodder; hence, there are many complementary aspects to a pastoral and agricultural economy (CHANG 2018). Archaeobotanical research at Adji Kui 1 illustrated that peas (*Pisum sativum*), lentils (*Lens culinaris*), grass peas (*Lathyrus sativus*), bitter vetch (*Vicia ervila*), and fava beans (*Vicia faba*) were present, but did not provide measurable quantities or meaningful ubiquities. Likewise, a study at Gonur Depe identified lentils, and one each of a probable grass pea, pea, and chickpea (*Cicer* sp.) (MILLER 1999). The data from Togolok 1 shows how important this diversity of legumes was in the economy by the early second millennium BCE and adds possible common vetches (*Vicia sativa*) to the list. Collectively, grains, legumes, and sheep and goats may have formed the basis of life at these growing urban sites. (TNB/RNS)

8 New data on animal exploitation at Togolok 1

The herding of sheep and goats appears to have been tightly integrated into a larger dietary economy in southern Central Asia and all indications from Togolok 1 suggest that secondary pastoral products

were important (ROUSE/CERASETTI 2018; CERASETTI ET AL. 2019; forthcoming). The analysis of the zooarchaeological material from the 2018 campaign complements the preliminary data obtained from the 2014–2015 field campaigns and confirms a mixed economy at the Bronze Age settlement (CERASETTI ET AL. forthcoming). Although relatively limited, the osteological sampling provides an interesting picture of the economy and eating habits of the last inhabitants of this BMAC urban centre. The analysed sample consists mainly of highly fragmented and burnt bones. Out of the 967 bone fragments recovered, only 119 (12.3%) were identified, while 796 fragments (82.3%) were splinters and small unidentified portions, ranging from 1 cm to 7 cm. Only a few astragali and some teeth were found intact. We also identified 18 fragments of medium-sized vertebrae (1.9%) and 34 rib fragments (3.5%), all from medium to large mammals (Fig. 15A). The majority of the zooarchaeological sample comes from the upper layers in the northern area of Trench 1C (SQs F–G 1–4) (Figs. 9–10). The high percentage of burnt bones suggests that they were remains of meals, in accordance with the interpretation of the archaeological context as a refuse deposit.

Taking into account both identified and unidentified fragments, 40% (391) of the entire sample present traces of combustion, which modified the colour from black to white depending on the degree of burning. Furthermore, some bone elements have evident traces of slaughter. Combustion, fragmentation, and slaughter are indicative of animal use mainly for food consumption – possibly for boiling and extracting the marrow, as is common across Central Asia today. Among the identified bone fragments (Fig. 15B), most of them (71.4%, i.e. 85 fragments) refer to sheep and goats (*Ovis* vel. *Capra*), followed by cattle (*Bos taurus*) (16 fragments, 13.4%). The domesticated fauna is completed by four pig, four dog, and two equid bones. Wild species are scarcely represented, including only one astragalus, probably belonging to a gazelle, and two tarsal metatarsals and a skull of bird. Four rodent bones likely represent commensals or scavengers on the midden.

Due to the high fragmentation of the bones, in general we followed the convention of not distinguishing between sheep and goat, instead using the category “ovicaprid” (BOESSNECK/MULLER/TEICHERT 1964; 1969; KRATOCHVIL 1969; PAYNE 1985; HALSTEAD/COLLINS/ISAAKIDOU 2002; PRUMMEL/FRISCH 1986; ZEDER/LAPHAM 2010). Two astragali bones and a fragment of a mandible appear to be from *Ovis aries*, and an astragalus and a proximal radius belong to *Capra hircus* (Fig. 15C). The Minimum Number of Individuals (MNI) for the 85 recognisable ovicaprid bone fragments was six, of which two were sub-adults identified through the unfused right proximal femur epiphyses. Unfortunately, the long-term taphonomic processes have resulted in a

TOGOLOK 1-Faunal remains		
	Nr.	%
Identified	119	12.3
Unidentified	796	82.3
Vertebrae	18	1.9
Ribs	34	3.5
Total	967	100

A

TOGOLOK 1			
Taxon	NISP	%	MNI
Cattle- <i>Bos indicus</i> L.	16	13.4	2
Sheep or Goat- <i>Ovis</i> vel. <i>Capra</i>	80		
Sheep- <i>Ovis aries</i> L.	3	71.4	6
Goat- <i>Capra hircus</i> L.	2		
Pig- <i>Sus domesticus</i> L.	4	3.4	1
<i>Equus</i> sp.	2	1.7	1
Dog- <i>Canis familiaris</i> L.	4	3.4	1
Gazelle- <i>Gazella</i> sp.	1	0.8	1
Rodents- <i>Rodentia</i> ind.	4	3.4	2
Birds- <i>Aves</i> ind.	3	2.5	1
Total	119	100	15

B

TOGOLOK 1					
Body parts of domestic animals by number of identified specimens (NISP)					
Elements	Cattle	O/C	Pig	Equid	Dog
cranium		2			
upper M1/2	2	8		1	
upper M3		2			
incisors		1			
lower deciduous/permanent premolars		3		1	
lower M1/2		3			1
unidentified teeth	1	5			1
emimandible		6 (1 O.)			
scapula		2			
humerus	1	3			
radius	1	4 (1 C.)			
ulna		2			
carpal		3			
metacarpal		3			1
pelvis	3	5			
femur		6			
tibia		3			
astragalus	1	7 (2 O.; 1 C.)			
metatarsal	1	3			1
phalanx 1st	2	6	1		
phalanx 2nd	2	4	3		
phalanx 3rd	2	4			
Total	16	85	4	2	4

C

Fig. 15: **A** – Determination of the faunal remains at Togolok 1; **B** – Number of identified animal remains (NISP) and Minimum Number of Individuals (MNI); **C** – Body parts of domestic species by number of identified specimens (NISP) (data elaboration by A.C. Potenza).

scarcity of measurable elements. Following the TEICHERT (1969; 1975) coefficients, it was possible to obtain an average height of 61.6 cm from four astragali. Mortality of caprines calculated on dental eruptions (PAYNE 1973; 1987) provides a partial figure, since the few measurable elements, consisting of two hemimandibles with P4/M1 (premolar/molar) and two lower molars, are attributable to individuals between three and six years (according to PAYNE 1973).

Cattle are the second most represented species in the assemblage, with 16 bone fragments (Fig. 15C), equating to a MNI estimate of two adults, represented by the presence of two right coxal fragments (ischium and ilium). The absence of lower teeth does not allow for a calculation of the age at death, and the fragmentation of the bones prevents metric estimations. The presence of pig is attested by the discovery of four phalanges, while an upper molar and a lower premolar, attributable to an adult individual, certify the presence of an equid. Among the meal remains, the absence of equid postcranial elements could be indicative of the unlikely use of this animal for food.

Overall, sheep and goats are the most exploited animals, though not just as food. The presence of adults and sub-adults could be indicative of the maintenance of animals for milk and wool as secondary resource. The presence of pig, which is an exclusively sedentary animal, along with cattle, which tend to remain restricted to areas with available water, confirms a mixed economy, as does the equid, which might represent a labour animal for farming. The almost total absence of wild species is indicative of their marginality in the subsistence economy. However, the presence of a gazelle astragalus and bird bones could be indicative of a landscape with low vegetation, perhaps richer in water – slightly different from the current environment.

The conclusive data are perfectly in line with the preliminary analysis of the 2014–2015 faunal remains (CERASETTI ET AL. forthcoming). Of the 48 identified fragments from the two previous campaigns, sheep and goats were the most represented species (66.7%), followed in smaller percentages by pig, cow, and dog (12.5%; 10.4%; 2.1%, respectively). According to the 2018 results, the presence of one bone each of only four species – gazelle, fox,

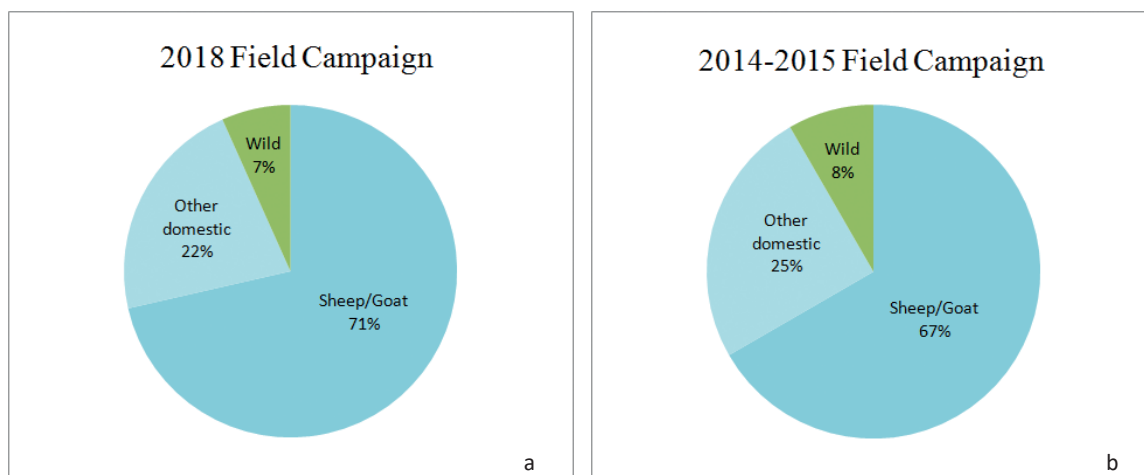


Fig. 16: Difference between domestic and wild species in a) 2018 and b) 2014–2015 field campaigns (data elaboration by A.C. Potenza).

hare (*Lepus cf. tolai*), and tortoise (*Testudo horsfieldii*) – confirms until now the extreme marginality of the wild animals in the economy of Togolok 1 (Fig. 16).

The Late Bronze Age site of Ojakly was also inhabited by agropastoralists, with an exclusive exploitation of domestic species and a predominance of ovicaprids in the meat diet (ROUSE/CERASETTI 2014: 38–39; ROUSE/WOLDEKIROU/CERASETTI 2022). At Adji Kui 1, the co-presence of mobile shepherds and sedentary farmers influenced the respective eating habits. The majority of sheep and goat remains was complemented by some cattle and small freshwater fish bones (ROUSE/CERASETTI 2018: 678–680; SPENGLER ET AL. 2018: 376). At Chopantam, the presence of a group of agropastoralists is evidenced by the living structures, the material culture, and the archaeobotanical remains. Unfortunately, the study of faunal remains has not yet been carried out (ROUSE 2020: 406). The predominance of domesticated fauna (98% of the entire sample) is even more evident in Gonur Depe, where ovicaprids are the most represented. The other less represented domestic species are cattle, pigs, Bactrian camels, donkeys, and dogs (SATAEV 2021: 438–455).

The continuation of the excavations at Togolok 1 will allow us to clarify many aspects related to animal husbandry, such as quantitative analysis of the remains, study of the age of death, and sex assessments. New analyses could better define the peculiarities of the food subsistence economy, the breeding techniques, and animal exploitation that characterised the complex society of Togolok 1. (ACP)

9 Conclusions

Since 1990, when the project “The Archaeological Map of the Murghab Delta” (AMMD) (GUBAEV/KOSHELENKO/TOSI 1998; SALVATORI/TOSI/CERASETTI 2008) began to explore the vast alluvial conoid of the Murghab River in southern Turkmenistan, archaeologists – who at that time shared the burdens and honours of a pioneering project – quickly realised that they were facing a very complex archaeological landscape that would probably involve endless research. Like the inner delta of the Murghab, river deltas or alluvial conoids characterised by physical stability and minimal hydrogeomorphological changes have always guaranteed the survival of the human species and constituted the cradle of ancient civilisations (TOLSTOV 1960; ANDRIANOV 1969; LISITSINA 1969). Humans have always worked to exploit the resources of the environment that housed them and to shape the surrounding territory according to their needs. The peculiarities of the endorheic deltas in arid and semi-arid environments have forced human beings to make enormous efforts to exploit water, especially before hydraulic works facilitated fluvial control. The current ecology of the alluvial fan of the Murghab River is the result of the synchronous connection between the environment and humanity, even at the price of upheavals in ecosystems and serious human consequences (FET/ATAMURADOV 1994; BABAIEV 1994).

Since the Middle Bronze Age, the settlement pattern of the Murghab region has depended heavily on the human adaptation to the natural course of the river (ARCIERO, see Sec. 2). Although targeted excavations have not yet been carried out, the site of Togolok 1 might have seen an exploitation of the river system very similar to that of Gonur Depe where the water, transported by secondary canals, was stored in large basins located outside the urban centre (ROUSE/OLSON, see Sec. 3) or redirected to the culti-

vated fields (ARCIERO, see **Sec. 2**). In addition to Gonor Depe, an interesting example of comparison is the site of Chopantam (CATTANI 2008), related to the Andronovo culture, where archaeologists together with geo-archaeologists identified a secondary canal which redirected water from the adjacent paleochannel towards the settlement (NINFO/PEREGO 2006; AZZARÀ 2007).

During the Middle to Late Bronze Age, the surrounding environment was probably different from the present (see also BILLINGS/SPENGLER **Sec. 7** and POTENZA **Sec. 8**). A deep climate change and drying up already affected the distal branches of the Murghab, with a gradual withdrawal of the river waters to the south and an abandonment of the northernmost area of the fan. Despite the efforts, the water system exploited during the Bronze and Iron Ages was abandoned in favour of the southernmost one, which served the so-called “oasis of Merv”, and BMAC urban centres such as Togolok 1 underwent a progressive and inexorable abandonment (CERASETTI 2008; TOSI/CERASETTI 2010).

In the Middle-Late Bronze Ages, Togolok 1 was a flourishing town with a typical BMAC fortified urban plan, likely part of a complex system consisting of administrative, residential, cultural, craft, and rural neighbourhoods (ROUSE/OLSON, see **Sec. 3**). The Bronze Age settlement probably controlled a large territory closely connected with other cohesive settlements. It was part of a highly hierarchical structure in the Middle Bronze Age that gradually transformed, with the collapse of the BMAC at the end of the Bronze Age, into a homogeneous system with urban centres similar in size and relevance (SALVATORI 2004; 2008a–b; LUNEAU 2021a).

Despite the limited excavation carried out on the top of the northern tepe (D’IPPOLITO/FORNI/ARCIERO, see **Sec. 4**), the TAP team highlighted the enormous potential of Togolok 1 to address the abovementioned three main questions that would allow a more precise characterisation of the BMAC phenomenon (CERASETTI/CATTANI, see **Sec. 1**). The micro-stratigraphic excavation identified in a few metres a stratigraphic sequence dated from the Middle to the Late Bronze Age (**Fig. 8**), and careful studies of ceramic remains (LUNEAU/D’IPPOLITO, see **Sec. 6**) and material culture (FORNI, see **Sec. 5**) have

already begun to address many important chronological issues and have highlighted the crucial role of Togolok 1 in an inter- and intra-regional network. In addition, the analysis of the considerable amount of carbonised seeds and various organic material (BILLINGS/SPENGLER, see **Sec. 7**), together with faunal remains, is providing interesting information concerning the paleoeconomy and the eating and daily habits of the last inhabitants of Togolok 1 (D’IPPOLITO/FORNI/ARCIERO, see **Sec. 4**; POTENZA, see **Sec. 8**).

Overall, the most remarkable issue is the agricultural and pastoral interconnection, which is referred to as agropastoralism, but which has to be evaluated in the broadest sense. For many years we have been studying the phenomenon of the vast shifts of peoples throughout Central Asia, and in particular towards Bronze Age Margiana (ROUSE ET AL. 2019; CERASETTI/ROUSE/DE NIGRIS 2018; CERASETTI ET AL. 2019; forthcoming; ROUSE 2020; CERASETTI 2021). Complex cultural negotiations must have regulated the process of transition of mobile pastoralists to a more stationary economy, which we are trying to piece together like a gigantic puzzle. We believe that this process of interaction/integration is the turning point in our understanding of the crucial transition from the decline of BMAC in the Bronze Age to the establishing of a centralised system in the following Iron Age. (BC/MC)

Acknowledgements: Actually, the TAP is a joint collaboration between ISMEO – The International Association for Mediterranean and Oriental Studies and the Ministry of Culture of Turkmenistan. The project is funded by the Italian Ministry for Foreign Affairs, the ISMEO, the University of Bologna, and the University of Naples “L’Orientale”. The authors wish to thank Dr. M.A. Mamedov of the Ministry of Culture of Turkmenistan, who is co-partner of the project, Dr. R. Jepbarov, director of the “Ancient Merv National Historical Park”, and all of our Turkmen colleagues from the Museum of History and Cultures of Mary and the Ministry of Culture of Turkmenistan for their crucial support in the project. Likewise, the authors also wish to thank Dr. A. Kurbanov for his kind support in translating the Russian version of the abstract.

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Between Two Cultures

The Archaeological Record of Akdepe

Aydogdy Kurbanov

Abstract: Akdepe is located south-west of Ashgabat, the capital of modern-day Turkmenistan, near an old riverbed. Administratively part of the city, Akdepe is an unusual archaeological site in Turkmenistan owing to its long history of occupation. Several archaeological soundings have shown occupation ranging from the 5th millennium BCE to the Late Medieval period. The Chalcolithic and Bronze Age periods are of particular interest at Akdepe and deserve close examination. Akdepe is the only known site in southern Turkmenistan where painted and grey ware ceramics are equally represented; they are generally associated with the 4th to 3rd millennia BCE. Painted ware is understood to belong to the ancient inhabitants of the “Namazga culture” of the Kopet Dagh piedmont and well-documented at sites such as Kara-Depe and Namazga Depe. Grey and black pottery, by contrast, belongs to the sites of south-western Turkmenistan and north-eastern Iran. The documented association of painted and grey ware types at Akdepe suggests the close contact of ethnic groups and cultures from the south and west of the region, and possibly the presence of immigrants or their influences.

Keywords: Chalcolithic, Bronze Age, grey ware, painted ware, Middle Ages, Turkmenistan.

Резюме: Поселение Акдепе расположено на юго-западе Ашхабада, столицы современного Туркменистана, близ старого речного русла. Акдепе входит в состав города и в то же время является необычным для Туркменистана археологическим памятником, поскольку поселение на городище имеет длительную историю. Исследования показали, что поселение существовало с V тысячелетия до н. э. вплоть до позднего средневековья. Акдепе эпохи энеолита и бронзы представляет особый интерес и заслуживает тщательного изучения. Акдепе — единственный из известных памятников на юге Туркменистана, где в равной степени представлена как расписная, так и сероглиняная керамика; большинство ученых датируют ее IV–III тысячелетиями до н. э. Расписная керамика предположительно была оставлена носителями культуры Намазга, жившими в предгорьях Копетдага. Она хорошо засвидетельствована на таких памятниках, как Кара-депе и Намазга-депе. В то же время серая и черная керамика ассоциирована с городищами на юго-западе Туркменистана и северо-востоке Ирана. Наличие как расписной, так и серой керамики на Акдепе свидетельствует о тесных контактах этнических групп и культур юга и запада региона, а также, возможно, о присутствии переселенцев или их влиянии.

Ключевые слова: энеолит, бронзовый век, сероглиняная керамика, расписная керамика, Средние века, Туркменистан



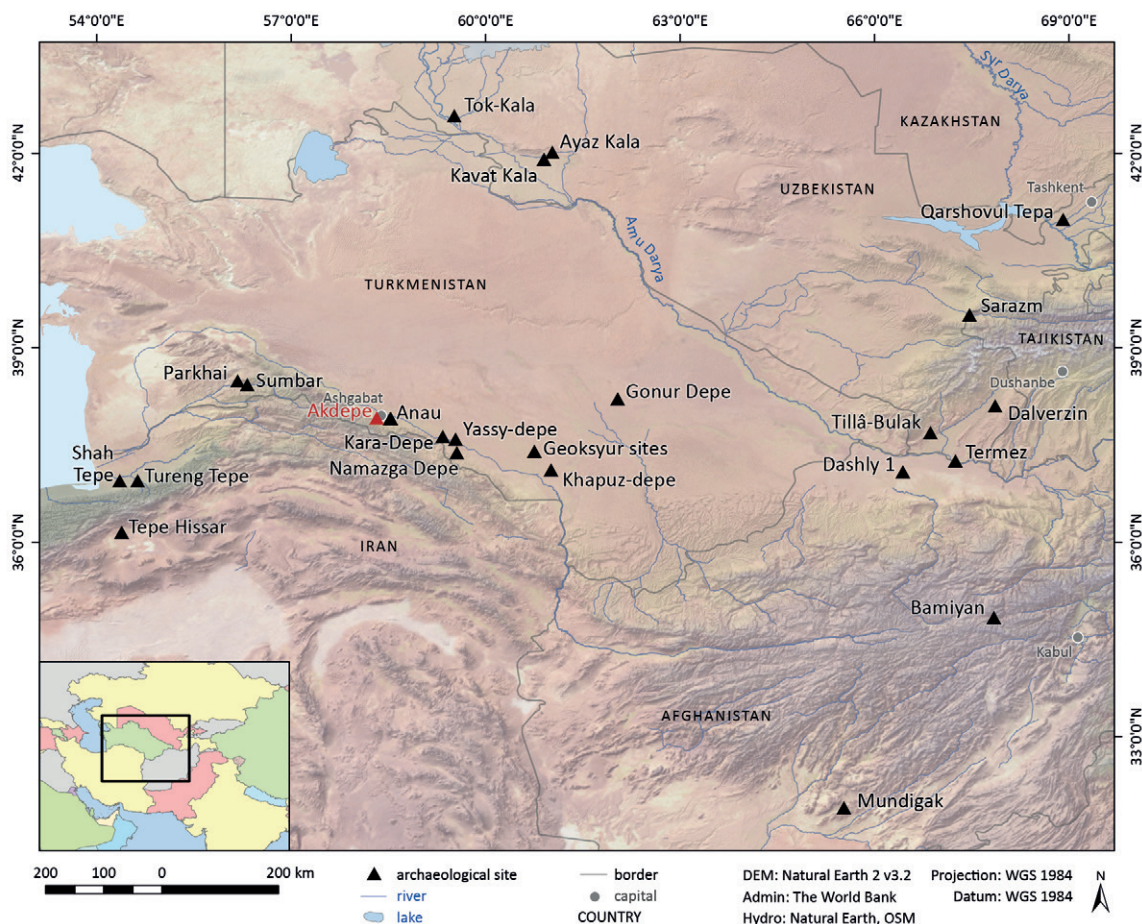


Fig. 1: Map with sites mentioned in the text (RUTISHAUSER/KURBANOV 2022a).

1 Introduction

Akdepe¹ (37°54'41.3"N 58°19'02.2"E) is located in the Bagtyyarlyk district of Turkmenistan's capital, Ashgabat, near the old riverbed, Ashgabadka (Fig. 1). The remains of the site are a mound with an area of ca. 1.5 ha, constituting a flat platform surrounding the inner mound (the latter with an area of less than 0.5 ha; Fig. 2).

The site has been severely damaged by modern construction and soil robbing, making publication of the excavated materials even more important. Several archaeological soundings have shown an occupation ranging from the end of the 5th millennium BCE almost to the 19th century CE. At the same time, this is one of the key sites of the Chalcolithic and Bronze Age periods of southern Turkmenistan, containing up to 20 m of archaeological deposits from these periods. Akdepe is also the only multilayer site in southern Turkmenistan where the two major cul-

tural horizons of the 4th to 3rd millennium BCE – represented by grey ware and painted ceramics, respectively – are found in nearly equal amounts. Thus, this one site can provide an unparalleled diachronic perspective on the evolution of complex societies in this region, while also contributing insight into the synchronic “frontier” zone between two extant material cultures in the late Chalcolithic and Early Bronze Age periods.

2 Research history

The site of Akdepe has been excavated multiple times since its discovery by Soviet archaeologists (Arbekov, Nikiforov, and Rundau). In 1926, V.D. Gorodetskij (1878–1943) from the Ashgabat Museum organised the first excavations (two soundings) in the north-west corner of the mound. He supposed that Akdepe could fill the hiatus between Anau North and Anau South. The results of V. Gorodetskij (Fig. 3:2) attracted other colleagues. In 1927–1929, several leading researchers visited Akdepe: D. Bukinič, A. Semenov, A. Šmidt from Tashkent; M. Voevodskij and M. Grāznov from Moscow and Leningrad; and

1 From Turkmen, the name *Akdepe* can be translated in two ways: 1. *Ak* – white, and *depe* – mound; 2. Since many remains of wheat seeds were found here, another possible interpretation is *Ak* – seeds, and *depe* – mound (BASAKOV/KARRYEV/HAMZAEV (ED.) 1968: 36).



Fig. 2: Akdepe seen from the north in 2007 (photo by the author).

the Swedish archaeologist, Ture Arne, investigated sites around Ashgabat and visited Akdepe (FIELD/PROSTOV 1938: 234; ERŠOV 1944: 28–29).

M.V. Voevodskij (Moscow State University's Anthropological Museum) assembled a large collection of surface materials: 947 ceramic samples and 1 flint bar/slab (KUFTIN 1954: 23). In 1930–1931, A.A. Marušenko (1904–1976) from the Institute of Turkmen Culture (Turkmenkul't) started his excavations in Akdepe (ERŠOV 1944: 31) (**Fig. 3:3**). He uncovered a building on the top of the mound (LÂPIN 2006: 268) and made five soundings (KIRČO 2014: 132). The uncovered building was an assemblage of 12 rooms and, based on materials uncovered within, these served different functions, including dwelling rooms, rooms for storing supplies and, apparently, a small shrine. The floors and walls in a number of the rooms were found to have been faced with alabaster (MASSON/SARIANIDI 1972: 102; KIRCHO 1981: 98).

During the Akdepe excavations, signs of an earthquake that occurred around the 2nd millennium BCE were discovered. Calculation of the earthquake strength indicates a magnitude of nine points (KAR-RYEV 1995: 59).

Some of the Akdepe artefacts were shown for the first time at the Third International Congress of Iranian Art and Archaeology, which took place in the USSR in September 1935, inciting great interest among researchers (presented in the catalogue: a female figurine with a broken top and bottom; parts of statues of red clay with a light engobe; and several

articles of plaster – all from hall № 215) (KATALOG 1935: 89–98; REMPEL' 1953: 172–173, 190, fn. 11).

In 1950 and 1952, S. Eršov and later B. Kuftin visited the site and collected surface materials. According to B. Kuftin, who examined the 947 sample ceramics from the collection of M. Voevodskij, Akdepe fills the chrono-cultural gap between the northern and southern mounds of the nearby site of Anau (Anau II and Anau III periods) (KUFTIN 1954: 23). That is, the Akdepe sequence helps to bridge the gap between the second half of the 4th millennium BCE and the beginning of the 2nd century BCE. Kuftin believed that the striking similarities in details of the ornamentation, forms, and techniques of ceramic products from the sites of the Ahal and Etek regions (e.g. the north Anau mound, Yassy (Jassy)-depe in the Kaahka region, Akdepe, and Namazga Depe) were the result of cultural and tribal unity throughout the piedmont zone of the central and the eastern Kopet Dagh (KUFTIN 1956: 284).

During 1955–1957, A. Marušenko conducted new excavations at Akdepe to examine the stratigraphy of the mound (LÂPIN 2006: 267–292; KIRČO 2014: 132) (**Fig. 3:1**). However, a number of serious contradictions emerged over the sequence of the site. A. Marušenko (1956: 8) dated Akdepe to the Anau II/beginning of the Anau III period, contrasting with B. Kuftin's (KUFTIN 1956: 263) dating of Akdepe to Anau III. It was found that at the end of the Namazga II period, Akdepe was destroyed by a big fire. Traces of the fire can be observed in all areas of the settle-

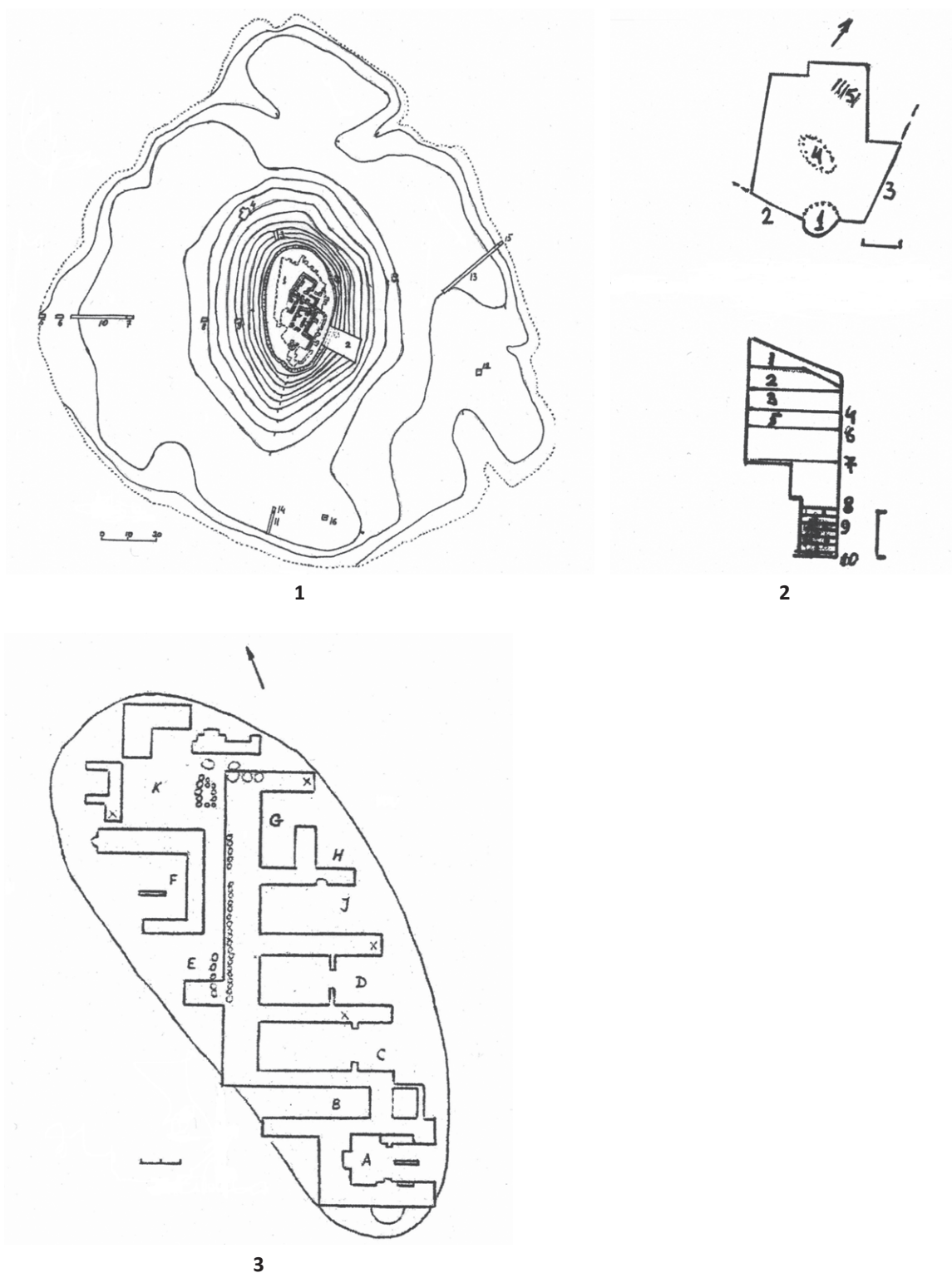


Fig. 3: Excavations of Gorodetskij and Marušenko in Akdepe (adapted from LĀPIN 2006). **1** – Plan of G. Golubčenko (1957) after A. Marušenko's excavations (1955–1957); **2** – V. Gorodetsky's test pit (1927); **3** – Plan of uncovered building on the top of Akdepe. A. Marušenko's excavations (1930–1931).

ment opened by excavations (KIRČO 1999: 53; KIRČO 2017: 386).

Based on the materials excavated by A. Marušenko (MARUŠENKO 1955–1957), D. Durdyev (DURDYEV 1959: 8–10) divided the stratigraphy of Akdepe into four periods:

Akdepe I = Anau IB (4th millennium BCE);

Akdepe II = Anau II (end of the 4th millennium BCE);

Akdepe III = Anau III (first half of the 2nd millennium BCE);

Akdepe IV = Anau IV (1st millennium BCE).

Later, L. Kirčo (KIRČO 1999: 53–54; KIRČO 2014: 133–136, 145–146) updated this chronology by correlating them to the Namazga sequence (Namazga I–IV):

Akdepe I = Anau IB = Namazga I (first third of the 4th millennium BCE);

Akdepe II = Anau II = Namazga II (ca. 3650–3200 BCE);

Akdepe III = Anau III = Namazga III (first centuries of the 3rd millennium BCE);

Akdepe IV = Anau IV = Namazga IV (ca. 2800/2700–2350 BCE).²

Among Lâpin's collection were ceramics and spindle-whorls of the Namazga V type (the Middle Bronze Age period), although there is no evidence for this period or the later Namazga VI period in the Akdepe excavated levels (KIRČO 1999: 112). Durdyev (DURDYEV 1959: 8–10) made assumptions about the date of the platform surrounding the mound, suggesting that it may date back to the Late Antique period or the beginning of the Early Middle Ages.

Several times, the site of Akdepe drew the attention of such well-known archaeologists as V.M. Masson and V.I. Sarianidi, who published in part some Akdepe artefacts (pottery, terracotta figurines, etc.) in their works; however, the exact layer(s) and present locations of the finds were not identified (MASSON 1966: Fig. 36; MASSON/SARIANIDI 1973: 178; SARIANIDI 1976: Fig. 2–15).

The site became known to Western scholars only in the 1980s with the early publications of Ph. Kohl (KOHL 1984a; 1984b), who followed V. Masson and

V. Sarianidi in noting the close ties between the ceramics from Akdepe and those from the Gorgan and the Sumbar Valleys of the south-eastern Caspian littoral (THORNTON 2011: 128). From the end of 1960s until the end of the 1980s, Akdepe was investigated by hydraulic engineer A.A. Lâpin, who noted 12 construction levels in the thicker layers of the mound above the burnt horizon, of which the first (upper) and the second were completely excavated by A. Marušenko (LÂPIN 2006: 267–292). A large collection of materials was transferred by A. Lâpin to L.B. Kirčo, which formed the basis of her work (KIRČO 1999).

G.E. Markov (MARKOV 1959: 218–226) uncovered a cemetery to the north-west of Akdepe, which according to finds within burials was dated to the 14th–18th century CE. The burials covered the Early Medieval settlement, which suggests that there was a cemetery after its abandonment. During 1986–1988, K. Kurbansahatov conducted excavations in the northern part of Akdepe; later, in 1994, a French-Turkmen team under the direction of S. Cleuziou and I. Masimov worked on the top of the mound. The results of these works remain unpublished.

Unfortunately, despite the many years of excavations at Akdepe and the copious literature that refers to the site, relatively little is known about the settlement itself or the people who lived there. Therefore, during 2006–2010 a team from the Turkmen Institute of Archaeology and Ethnography carried out excavations at Akdepe to gain a better understanding of the history of the Ashgabat area (GUNDOGDYEV/HODŽANIÂZOV/KURBANOV 2006: 116–118; GUNDOGDYEV/HODŽANIÂZOV 2007: 122–131; GUNDOGDYEV/HODŽANIÂZOV/KURBANOV 2010).

3 Historic Akdepe as a contact zone: painted and grey wares

Akdepe is one of the most important sites, and acted as a critical “frontier” settlement between the grey ware sites of the Caspian littoral and the painted ware sites of the eastern Kopet Dagh. In southern Turkmenistan, Akdepe is the only multilayer site where grey and painted ceramics of the Namazga II–IV periods, dating back to the 4th–3rd millennia BCE, are almost equally represented proportionally, suggesting close contacts of the cultures from the south and west of the country (KOHL ET AL. 1982: 15–16; CLEUZIOU 1991: 297–300; KIRČO 2014: 146; KIRČO 2017: 391; **Fig. 4**).

In the territory of southern Turkmenistan, as a result of economic and cultural development and active settlement processes of the Early Chalcolithic communities in the second third of the 4th

² There is another slightly different calculation of the Namazga chronology. For example, Bonora and Vidale (BONORA/VIDALE 2013: 143) suggest for Namazga I ca. 4000–3500, Namazga II ca. 3500–3200, and Namazga III ca. 3200–2800 BCE.

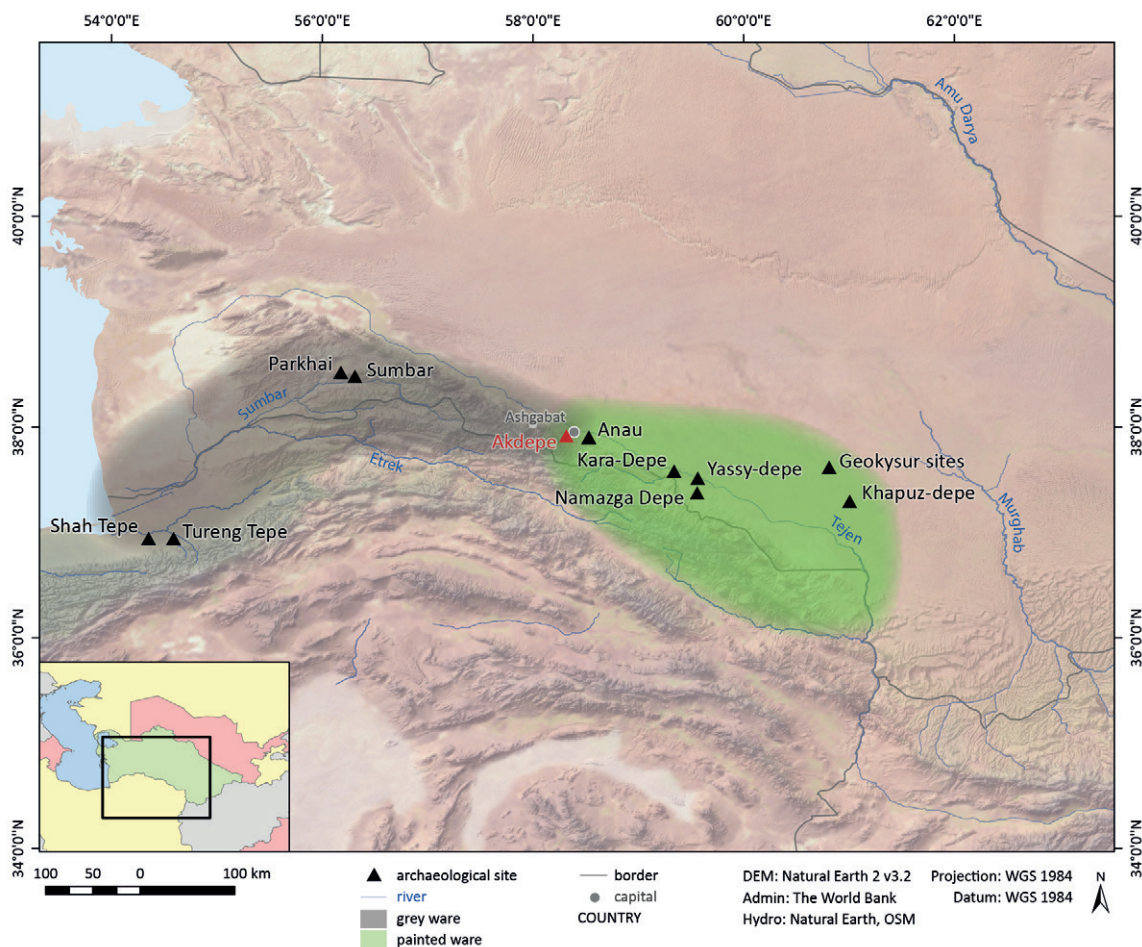


Fig. 4: The protohistoric sites in Khorasan with indication of painted and grey wares (RUTISHAUSER/KURBANOV 2022b).

millennium BCE, two local variants of the Anau culture of the Middle Chalcolithic (Namazga II) period formed (KIRČO 2009: 376; KIRČO 2017: 384). They were represented in south-eastern Turkmenistan by complexes of the Namazga II type (a bichrome or polychrome black and maroon colour on a rose-yellowish background) in the central zone of the Kopet Dagh piedmont (MASSON 1956: 298) and of the Yalangach type (a monochrome black on red ware) in the Geokysur oasis of the ancient Tejen River deltaic area (MASSON 1962; MASSON 1982: 26–34; HLOPIN 1963: 74–79; HLOPIN 1969). The painting, largely in the form of a frieze on the upper part of a vessel (MASSON 1956: 298). There were also large vessels painted with triangular or cruciform elements, such as those from Geokysur (SARIANIDI 1960: 244–245).

In south-western Turkmenistan, in the Sumbar River Valley, a local complex with original grey ware formed; this became a characteristic feature of this region for three millennia and had connections with the sites of the Gorgan plain in the south-eastern Caspian region (KHLOPIN 1994: 363–364; HLOPIN 1997: 67). On the basis of the excavations of the

Sumbar I and Parkhai II necropolises, the protohistoric period of south-western Turkmenistan was divided by I. Hlopin (KHLOPIN 1994: 363) into seven periods: SWT VII–V, corresponding to the Chalcolithic period (the end of the 5th millennium to the first half of the 3rd millennium BCE), and SWT IV–I to the Bronze Age (the first half of the 3rd millennium to the second half of the 2nd millennium BCE).

Later, at the end of the 4th millennium BCE (Namazga III period) in the central zone of the Kopet Dagh piedmont, a zoomorphic ornamentation on painted ceramics of the Kara-Depe style appeared, such as images of goats similar to those from Ismailabad in northern Iran (KIRČO 2009: 379; KIRČO 2017: 386), and the figures of spotted animals (“leopards”) in the ornaments of ceramics of the Kara 1A type that were similar to zoomorphic images on vessels of the well-known Sialk III type and Hissar IC/IIA³ (MASSON 1956: 301–302; HLOPIN 1959: 45–46; Masson 1960: 356–357, 376). Also, from the beginning of the Late Chalcolithic period in

³ The separation between IC and IIA is unclear. According to radiocarbon dating, IC/IIA is approximately 3980–3865 cal BCE (VOIGT/DYSON 1992: 173–174).



Fig. 5: Vessel with goats from Akdepe. Namazga IV. State Museum of Turkmenistan. A. Marušenko's excavations, 1930–1931 (photo courtesy of Ruslan Muradov).

Kara-Depe and at Geoksyur 1, grey ware was already present not only in the cultural layer, but also in the inventory from burials (MASSON 1960: 331; SARIANIDI 1965: Fig. 11). All this testifies to the increasing influence of the cultures of central and northern Iran at the end of the 4th millennium BCE and possibly the movement of population groups from the south-eastern Caspian region in a north-eastern direction (MASSON 1982: 51; HLOPIN 1997: 119–120) up to the Ashgabat region (KIRČO 2009: 380; KIRČO 2017: 386).

In general, painted vessels of the Namazga III period in southern Turkmenistan were made of clay paste with mineral inclusions, decorated with monochrome and bichrome geometric ornaments of Geoksyur and post-Geoksyur styles (KIRČO 2000: 192). In the central zone of the Kopet Dagh piedmont, a monochrome ware of the Kara-Depe style was made mainly of clay paste with organic inclusions, showing influence of the Geoksyur geometric ornamentation system (KIRČO 1999: 43–45) and zoomorphic motifs of painted ceramics of the Sialk-Hissar type (Masson 1960: 376). Grey ware from the south-eastern Caspian region was found in almost all protohistoric sites of southern Turkmenistan (KIRČO 2017: 389). At the beginning of this period (Namazga III), the Geoksyur sites were abandoned and the population is thought to have moved to the south, settling in Khapuz-depe (HLOPIN 1964: 61).

The painted pottery of the Namazga IV period is mostly monochrome, decorated with small patterns forming friezes; these were mostly geometric patterns, the previous zoomorphic motifs having practically disappeared. On isolated vessels schematic bird motifs occur, or more realistically portrayed goat figures often standing between two trees (see Fig. 5) and, significantly, represented in a style entirely different from that of the previous Late Chalcolithic period of southern Turkmenistan (MASSON/SARIANIDI 1972: 102).

Kohl (KOHL ET AL. 1982: 15–17; KOHL 1984b: 326) noted that the material culture of Tepe Hissar II–III is closely related to the Gorgan sites (Tureng Tepe and Shah Tepe) and that a regional cultural area probably extended from the north-central Iranian plateau through the Gorgan plain and into south Turkmenistan. Various ornamentation on grey pottery as well as anthropomorphic figurines from Akdepe (composed of grey terracotta) reveal a uniform style over the entirety of southern Turkmenistan (SARIANIDI 1976: 95; KIRČO 1999: 57). However, some female figurines from Akdepe are distinguishable because they resemble the figurines from Tureng Tepe in their standing position (MASSON/SARIANIDI 1972: 109).

The grey wares from Akdepe are close to those from the cemetery Parkhai II in the Sumbar Valley (KHLOPIN 1981: 23–27; KOHL 1984a: 101). Bonora and Vidale (BONORA/VIDALE 2013: 143) describe the grey wares of north-eastern Iran and south-western Central Asia during the Chalcolithic and Bronze Age periods thus: “handmade ceramics of dark grey to black fabric, with a high proportion of sand, gypsum, and grog tempers, and more rarely grass or chaff inclusions, fired at high temperatures in strongly reducing atmospheres. The surface is slipped reddish grey to black and often highly burnished. It is either plain or decorated with incised motifs of parallel lines and diagonally or horizontally hatched, alternating upright and inverted triangles with shared borders”.

A characteristic feature of the Akdepe cultural complex in the Namazga II period is the absolute predominance of red ware and the almost complete absence of painted vessels, which suggests a local peculiarity of the Akdepe culture. In the Namazga III period of the Akdepe ceramic complex, grey clay vessels begin to predominate in ceramics. During this time at Akdepe, painted and unpainted light and red-embossed vessels were made mainly of clay paste with mineral inclusions. The firing of such vessels was carried out with an intensive access of oxygen, since the sherds at the fracture have a bright pink colour (KIRČO 2014: 138–140). According to Masson and Sarianidi (MASSON/SARIANIDI 1972: 105), at Akdepe, alongside the Namazga IV period's painted pottery, “there was a large amount of grey, partially burnished pottery with incised decoration.



Fig. 6: Akdepe. Excavations in 2006–2010: **1** – Muslim cemetery, 14th–18th century CE; **2** – Stratigraphic trench; **3** – Excavations in the west; **4** – Excavations in the south (source: modified Google Maps).

Besides these grey pots there were sharply ribbed goblets of bizarre shape standing on crimped, often hollow, pedestals. Worthy of note, too, is the incised decoration in patterns comprising groups of vertical stripes of horizontal wavy lines. A characteristic method of decoration used little coiled snakes applied to the wall of the vessel, resulting in an elegant design of great expressiveness". This depiction with snakes on grey pottery is not marked on the painted ware. The grey pottery with incised decoration was found at other sites in southern Turkmenistan, but in a smaller proportion compared with the painted pottery; this is an indication that the grey pottery was imported from the more western sites, including Akdepe (MASSON/SARIANIDI 1972: 106).

At Akdepe, in the materials of the late Namazga III–IV periods, the terracotta anthropomorphic scoops, double-sided materials like seals, and a special type of female figurine (SARIANIDI 1976: 95; KIRČO 1999: 113) were unknown at sites located east of the Ashgabat region (KIRČO 2017: 391).

S. Cleuziou (1991: 297–300) notes that in the Bronze Age, grey ware pottery appears farther east as well, at Dashly 1 and Gonur Depe and even at Sarazm. The grey wares found in small quantities in Namazga IV period sites are considered to be forerunners of the Namazga V period unpainted wares with similar shapes, reflecting a possible eastward migration of the "burnished grey-ware people". According to I. Hlopin (KHLOPIN 1994: 363–364),

grey pottery spread from the south-eastern Caspian region to the south of the Elburz (Tepe Hissar), to the east to the Swat region and Mundigak (Kandahar area), and in the second half of the 3rd millennium reached the delta of the Amu Darya River in a northern direction. During the excavations of a sector to the north of the surrounding wall in Gonur Depe, burials were discovered. One of these burials (4150) contained local and foreign materials, including from north-eastern Iran – in particular, a handmade vessel. The vessel is of fine grey clay with an ornamentation of vertical lines on the neck separated from the shoulder by a broad horizontal band, which is covered by a cross-hatched pattern. Such ornamentation is typical of the Hissar culture. The vessel can be correlated with the Hissar IIIC period (2170–1900 cal. BCE) and demonstrates that contact between these regions continued (SARIANIDI/BOROFFKA/DUBOVA 2012: 4–5; SARIANIDI/BOROFFKA/DUBOVA 2014: 130–131). The painted ware disappeared in southern Turkmenistan entirely by the beginning of the 2nd millennium BCE (MASSON/SARIANIDI 1972: 98).

4 Akdepe excavations during 2006–2010

During 2006–2010, a team from the Institute of Archaeology and Ethnography of the Academy of



Fig. 7: Akdepe. Excavations during 2006–2010. Stratigraphic trench. 1 (left) – View from the south; 2 (right) – View from the north (photos by the author).

Sciences of Turkmenistan, under the direction of Dr. O. Gundogdyev (GUNDOGDYEV 1966–2013), renewed excavations at Akdepe.⁴ During six seasons, excavations were made in the western and southern parts of the mound, plus a stratigraphic trench in the northern slope of Akdepe (Fig. 6). It should be noted that a survey of Akdepe's environs by team members identified 38 abandoned Medieval kariz/qanat (underground irrigation systems) to the south-southwest (ending ca. 3 km from the settlement) (GUNDOGDYEV/HODŽANIÂZOV/KURBANOV 2006: 116–118; GUNDOGDYEV/HODŽANIÂZOV 2007: 122–131).

4a Stratigraphic trench

A trench 2.5 × 5 m in size was started in the spring of 2006, and 18 *yarus* “artificial levels” (0.5 m each) in total were made in the section, which is 8.85 m, when mound's bedrock was reached.⁵

Based on the data from the trench (Fig. 7), we may suggest the following:

- 4 Team members: T. Hodžaniâzov, A. Kurbanov, G. Yagšimyradov, O. Bakieva, and N. Amanlyev.
- 5 Unfortunately, this article has no plans nor drawings due to several structural changes in the organisation which had conducted the Akdepe excavation.

1. Prior to the development of settled societies in this area, the surface was uneven. In the lowest areas, rainwater had collected forming fine sand layers. Given the slope of these lenses, probably under the present Akdepe, there was likely a natural elevation (mound), on which the first settlers settled.

2. The trench is located, apparently, at the foot of the mound; as the lowest part, it served as the waste dump as evidenced by the thick ash refuse deposits. Moreover, the upper part of the sequence of this early cultural complex was most likely destroyed in the Middle Ages(?) by natural erosion and the population mining the site for bricks. The total thickness of cultural layers from the natural ground to the reconstructed top of the mound is approximately 20 m.

3. The stratigraphically identified layers from the protohistoric time in the trench date to the Namazga I and IV periods, according to the findings of ceramics of these periods.

4. A platform of clay and mudbrick was found immediately after the first sand layer. It seems to have been built to level the uneven surface



Fig. 8: Akdepe. Excavations during 2006–2010. Excavations in the west (photo by the author).

around the mound. The height at its edge is 3 m, which decreases towards the centre of the mound. The date is still unclear because of the lack of material on which the dating could be based. The mudbricks are rectangular, varying in size from 22 to 29 cm at the short side and from 42 to 49 cm at the long side, with a thickness of around 11–12 cm.

5. There were no materials from the Namazga V period until the 10th century CE.

6. The eastern side of the trench clipped the edge of a robust mass of mud, built (presumably) to strengthen the unshaped edges of the platform. The ceramic materials from this belong to the 10th–13th century CE.

4b Excavations in the west of Akdepe

Excavations on the western slope of Akdepe were conducted during the seasons from 2006 to 2010. The excavations, which started in 2006 at a distance of almost 14 m to the west from the reference top point, had a horizontal exposure of 5.5×14 m. The lowering of the surface of the slope was 4 m from the reference top point at the beginning of the excavation border, and 8 m at the end of the excavation border (Fig. 8).

In the spring field season of 2007, the excavation was expanded to the north, south, and east. The final overall dimensions of the excavation were 15×20 m. An important result of the 2007–2008 season excavations on the western slope of Akdepe was the discovery of a layer of the 18th–19th century CE. The mound was a convenient place to protect the local population. A *pakhsa* wall of the 18th–19th century was erected on the heap, where there were fragments of adobe bricks, lime plaster, large *pakhsa* blocks, etc.

During the 2009–2010 seasons, excavations continued on the western slope of the mound and five more rooms were opened. The walls are made of mudbricks measuring $25 \times 25 \times 7$ cm, with the lower parts made of natural stone. It was probably made to stop salt percolating up into the mudbricks from the ground water and thereby destroying the bricks. Archaeological material consists mainly of ceramics of the Samanid and Seljuk periods (10th–11th century CE). There is a large number of fragments of glazed pottery with plant, geometric, and epigraphic character ornamentation. Epigraphic patterns include slip-painted *kufic* inscriptions on the inside of vessels. Among the glazed ceramics, there are two fragments of bowls covered with off-white glaze and inscriptions of general benedictions inside of the bowls.⁶ Judging by the forms of the letters and the

⁶ According to T. Hodžaniázov (personal communication), on one of the fragments with two words, the first word

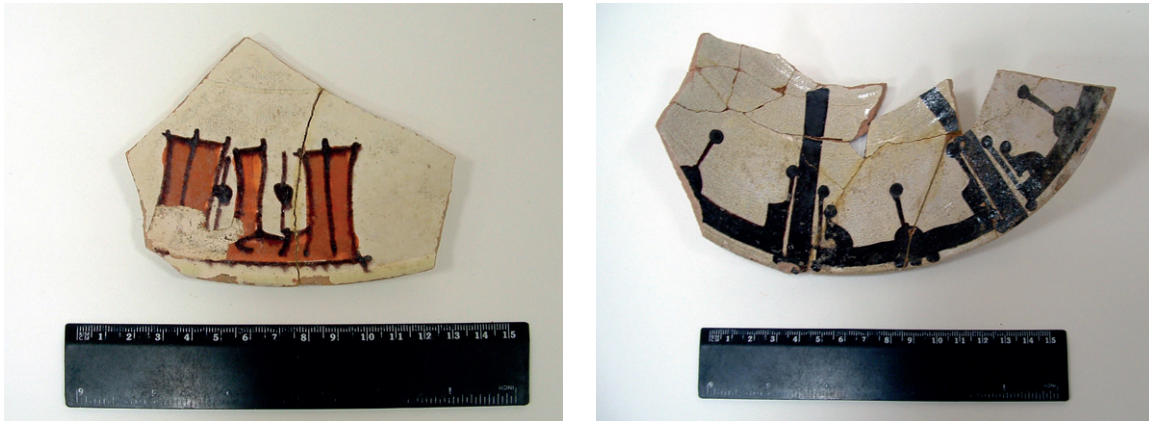


Fig. 9: Akdepe. Excavations during 2006–2010. Excavations in the west. Ceramics with inscriptions from 10th–11th century CE (photos by the author).



Fig. 10: Akdepe. Excavations during 2006–2010. Excavations in the south (photo by the author).

ornamentation, these date to the 10th or early 11th century CE. Ceramics with inscriptions of such auspicious content were typical for all regions of Central Asia in the Islamic period (Fig. 9).

There are also fragments of bowls with green, yellow, and brown glaze painted with floral, geometric, and epigraphic ornaments. Various pieces of

is read as *'al-yumn'* – i.e. “happiness” or “prosperity” and the second might be *'wa-l-iqbāl'* – i.e. “good fortune”. So “prosperity and good fortune” to the person who acquires this bowl.

thick plaster coating and stone round sling-stones were also found. The fragments of pottery, the size of the bricks, and the distinctive signature vessels allow us to date the cultural layers to the 10th–11th century CE. Material from earlier periods will probably be found in lower levels.

4c Excavations in the south of Akdepe

The excavation in the southern part of the mound was begun in the spring of 2009 (Fig. 10). The pur-



Fig. 11: Akdepe seen from the north in 2009 and 2019 (photos by the author).

pose was to determine the abundance of cultural layers above the mound, surrounding the central platform. This included a thorough cleaning of damaged layers. The works started at a depth of 5.65 m from the reference point and were brought to a depth of 10.35 m – i.e. almost to the level of the central platform. In this interval five construction horizons were recorded, marked with the levels of the floors.

The floor of the earliest building horizon, at a depth of 10.35 m, was found along with the base of two walls of yellowish adobe bricks. The preserved height of the walls (one brick thick) is 0.3–0.5 m.

The floor of the next building horizon was encountered 0.6 m above the earliest. On this floor a wall 1.3 m high (a thickness of one brick) was found, as well as a hearth with a rounded shape and a diameter of 0.6 m (0.3 m in depth). On the floor are marks of a substantial fire: ashes, embers, burnt plaster wall, and fragments of burnt pottery. These are traces of the big fire in the settlement at the end of the Namazga II period, which was mentioned earlier.

The floor of the third building horizon is at a depth of 8.65 m from the reference point (or 0.9 m higher than the second floor). At this level, in the northern part of the excavation, was the foundation of a new wall with a preserved height of 3 m. The walls of this building are similar to the previous

horizon. On the south side of the wall a *sufa* of four rows of mudbricks was attached. This period also ended with a fire.

The fourth building horizon is 1 m higher than the third. At this level, at a distance of 1.45 m to the south of the wall (connected to the third floor and parallel to it), a new wall of the same adobe bricks was erected, which has been preserved to a height of 1.7 m. The wall was erected on the ash layers of the third horizon; the 15 cm thickness of the section clearly shows how this layer of ash settled under the weight of the wall.

Finally, the floor of a fifth building horizon is 0.4 m higher than the fourth one (i.e. at a depth of 7.25 m from the datum point). Those walls originating in the third and fourth building horizons probably continued to be used. The walls of all building horizons were built of rectangular adobe bricks of a yellowish colour, sized $43 \times 21 \times 10$ –11 cm and $46 \times 23 \times 10$ cm. Unpainted ceramics, for the most part with red slip, as well as grey (almost black) wares with ornaments of the Namazga II and III periods, were found in all building horizons.

5 Conclusion

Akdepe is a unique archaeological site, since many other sites provide us with only shorter “slices of

time” such as the Early Bronze Age or the Samanid period. Pottery and other artefacts from Akdepe indicate that it was occupied from the 5th millennium BCE onwards (with intervals?) to Medieval times and beyond. Akdepe was a small settlement of domestic houses in protohistoric periods. Except for the above discussed protohistoric periods, the historical levels at Akdepe also deserve close examination. The written sources and archaeological evidence from other sites in Turkmenistan, as well as neighbouring lands, and the study of the historical periods at Akdepe may help us to better understand the role of the region of Ashgabat in local and broader narratives.

Another challenge is the rapid destruction of the mound by extensive construction works around the site. Comparing Google satellite imagery from 2009 and 2019 we see that the Medieval Muslim cemetery and the stratigraphic trench have already been eliminated (**Fig. 11**).

Currently, we do not have any evidence of the settlement’s life between the Namazga V period and the 10th century CE. It is hoped that some sort of clarity in the stratigraphic reconstruction of Akdepe, primarily through ceramics, will be made by a careful future study of the collections stored at the new Institute of History and Archaeology of the Academy of Sciences of Turkmenistan.

Note: The Institute of Archaeology and Ethnography (which conducted excavations in Akdepe) and the Institute of History (which kept all materials from the Soviet period excavations) were united in March 2019 and established as the Institute of History and Archaeology of the Academy of Sciences of Turkmenistan.

Acknowledgments: I am very grateful to my colleagues, N. Boroffka, P. Wordsworth, and L. Rouse, for their valuable suggestions and comments.

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Uzbekistan/Tajikistan/Afghanistan/Pakistan

Intercultural Interactions of the Sine Sepulchro Cultural Community (Handmade Painted Ware Cultures) of the Early Iron Age with the Neighbouring Cultures of Asia and the Near East

Johanna Lhuillier

Abstract: The Sine Sepulchro cultural complex, also known as “Handmade Painted Ware cultures”, developed over the larger part of the territory of southern Central Asia during the Iron Age (in the second half of the second millennium BCE), where it is generally perceived as isolated from cultures of the same period. The present article, which is based on the most recent archaeological discoveries, questions this viewpoint and, on the contrary, demonstrates the complexity of interactions with neighbouring cultures. Interactions with cultures of the Late Bronze Age (the Oxus civilisation and the Vakhsh culture), those of the steppe (the Andronovo cultural community, the Tazabag’jab and Amirabad cultures), and those of Xinjiang and of Archaic Dehistan are examined. Several interface zones are thus identified on the margins of the territory of the Sine Sepulchro cultural complex, as well as in the very heart of its territory in Bactria.

Keywords: Central Asia, Iron Age, Sine Sepulchro cultural complex, cultural interactions, buffer zones.

Резюме: Культурный комплекс Sine Sepulchro, также известный как “культуры лепной расписной керамики”, развивался на большей части территории юга Средней Азии в раннем железном веке (во второй половине второго тысячелетия до н.э.). Обычно он воспринимается как феномен, изолированный от других культур того же периода. Эта статья, основанная на последних археологических открытиях, ставит под сомнение данную точку зрения, и, напротив, демонстрирует его сложные взаимодействия с соседними культурами. Рассматривается взаимодействие с культурами позднего бронзового века (цивилизацией Окса и Вахшской культурой), степными образованиями (андроновской культурной общностью, тазабаг’ябской и амирабадской культурами), а также с культурами Синьцзяна и Архаического Дехистана. Таким образом, выявляется несколько зон сопряжения на окраинах территории культурного комплекса Sine Sepulchro, а также в самом центре его нахождения в Бактрии.

Ключевые слова: Средняя Азия, ранний железный век, культурный комплекс Sine Sepulchro, Сине Сепульхро, культурные взаимодействия, буферные зоны.



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DOI: 10.13173/9783447118804.135

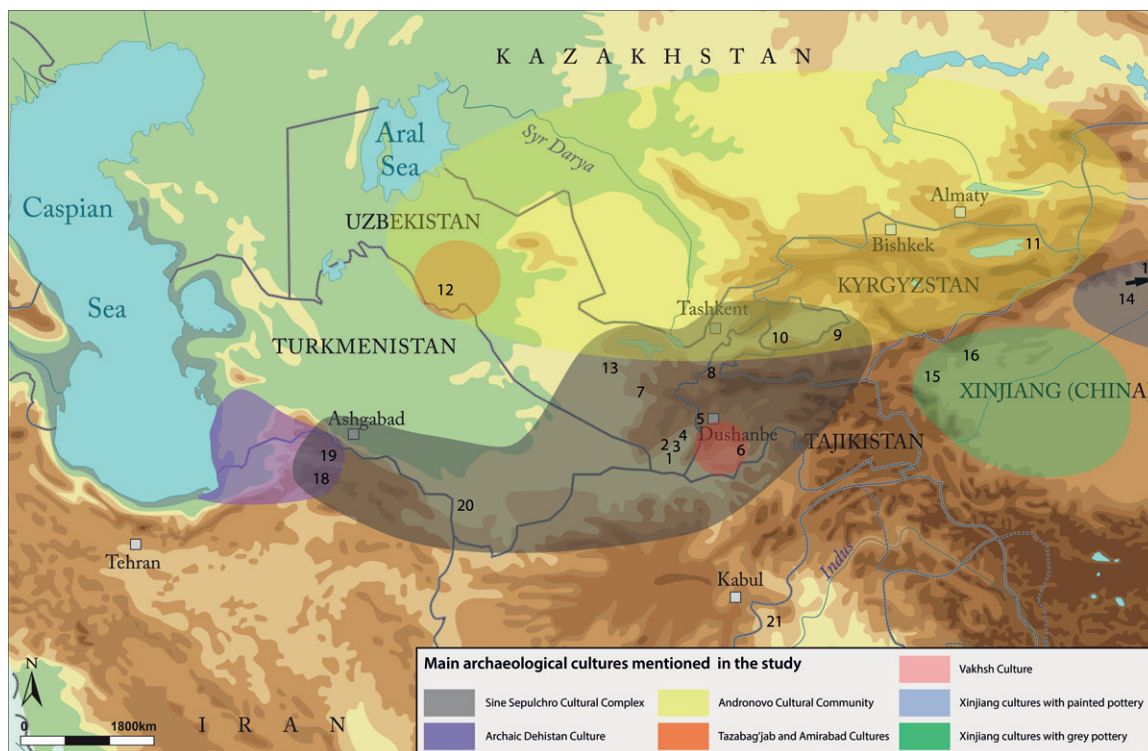


Fig. 1: Indicative location of the main archaeological cultures and key sites mentioned in this study (© J. Lhuillier).

1 – Dzharkutan; 2 – Kayrit Oasis; 3 – Maydatepa; 4 – Molalitepa; 5 – Tandyryul; 6 – Saridzhar/Karim-Berdy; 7 – Chirakchi; 8 – Ak-Tanga; 9 – Osh; 10 – Dashti-Asht/Tashkurgan; 11 – Sary-Bulun; 12 – Bajram-Kazgan 2; 13 – Karnab; 14 – Xintala; 15 – Aketala; 16 – Haladun; 17 – Yanbulake; 18 – Jayran-Tepe; 19 – Tepe Rivi; 20 – Topaz Gala depe; 21 – Akra/Ter Kala Dheri.

Introduction

Central Asian protohistoric cultures have always been tightly connected to contemporaneous neighbouring ones. As early as the Chalcolithic, in the mid-4th millennium BCE, artefacts from distant areas – including south Turkmenistan, Iran, Baluchistan, and Uzbekistan – are present in Sarazm in Tadjikistan (Lyonnet 1996). Later, during the Middle Bronze Age when the Oxus civilisation (BMAC) reached its apogee, long-distance interactions played a key role in its development and wealth, and it was thus part of the “Middle Asian Interaction Sphere” (POSSEHL 2007). Evidence of bilateral exchange is found at sites of the Harappan civilisation (RATNAGAR 2021), in the Persian Gulf (Lombard 2021), the Iranian Plateau, and Mesopotamia (MUTIN/LAMBERG-KARLOVSKY 2021), as well as on sites of the steppe cultures related to the Andronovo cultural community (BONORA 2021). During its final stage, around 1800/1700–1500 BCE, most of these long-distance contacts decreased substantially, with the exception of those with the northern steppe cultures which, on the contrary, intensified. Artefacts related to the Andronovo cultural community are then found at many sites in southern Central Asia (CERASETTI 2021) and, on some occasions, evidence from both communities is found at the same sites (as in Ojakli; ROUSE/CERASETTI 2014).

At a later stage, around 1500 BCE, Central Asia underwent major cultural, economic, and ideological shifts that led to the emergence of the Iron Age and the formation of a new cultural community, the Handmade Painted Ware cultures or cultural community (LHULLIER 2013a), also known as “Yaz I”¹ cultures in Central Asia’s traditional chronology (MASSON 1959) or, in a more suitable way given its characteristics, as the Sine Sepulchro cultural complex (BENDEZU-SARMIENTO/LHULLIER 2015) (Fig. 1). This transition may be defined by a total transformation of the material culture, a radical change in the settlement pattern, and a shift in mortuary practices as well as (most probably) in religious beliefs.² Reviews of archaeological evidence

- 1 The use of this term has been popularised after the discovery of the first sites of this period and the identification of their most striking feature: some handmade pottery with painted geometrical decoration. I prefer to replace the term “cultures” by “cultural community” since all the cultures grouped under this label share numerous cultural and socio-economic features. The reference site for this period is Yaz-depe in Turkmenistan, where this period has been first identified as corresponding to the Yaz I phase.
- 2 These transformations included the disappearance of wheel-made pottery, figurative art, luxury goods, and all other artefacts except for utilitarian tools, and the appearance of a new type of handmade pottery (LHULLIER

suggest that trade and long-distance interactions with the neighbouring cultures were severed, including those with steppe cultures. The overall impression in the scientific literature is that of an inward-looking community of small cultures, with a self-sustaining economy, that did not have contacts between one other – and even less so with other cultures of the same period. Interactions with the surrounding territories are supposed to have resumed only after the Achaemenid conquest of Central Asia, which was then integrated into a larger empire. A closer look, however, at the Sine Sepulchro cultural community and its material culture reveals a much more nuanced situation, in which intercultural interaction with contemporary cultures is very real, although more diffuse and difficult to grasp than during the Bronze Age. The present volume provides a good opportunity to gather material evidence available on this neglected issue, from both the core territory and its northern, eastern, and south-western margins.

1 Interactions with the sedentary cultures of the Late Bronze Age: the Oxus civilisation and the Vakhsh culture

Limited evidence of contact with the Oxus civilisation in its final phase was recorded at some sites occupied without interruption between this period and the beginning of the Iron Age. These sites are very rare, since the majority of those of the Early Iron Age are new settlements; among them, this occasional interaction is best seen at Dzharkutan in the Surkhan Darya Valley in Uzbekistan (**Fig. 1**). At this location, several examples of ceramic vases are imitations of vessels from the Oxus civilisation manufactured according to techniques typical of the Early Iron Age, which seems to testify to contacts between the two cultures (cf. LHUILLIER ET AL. 2018): wheel-made stemmed bowls and medium-sized pots with a moulded base (**Fig. 2:1–2**), some forms typical of Bronze Age material assemblages (for example in Dzharkutan, see LUNEAU/BENDEZU-SARMIENTO 2013), but absent from Early Iron Age ones, were reproduced according to techniques specific to the Handmade Painted Ware populations (handmade,

2013a; 2013b), which led to the common use of the name “Handmade Painted Ware cultures”. Large cities fragmented into small villages, which spread to new areas of the buffer zone between the steppe and groups of oases (LHUILLIER 2019). Burials disappeared, to be replaced by open-air exposure and excarnation (BENDEZU-SARMIENTO/LHUILLIER 2015), while religious buildings vanished altogether.

grog-tempered pottery, pinkish ware with firing spots). The latter form is sometimes combined in an original way with another form typical of the Oxus civilisation: pots with a gutter spout. The best illustration of the chrono-cultural attribution of these imitations to the Handmade Painted Ware cultures is the discovery of two of these vases, together with a wheel-made bowl, in a foundation deposit of an Early Iron Age pit-house.

Excavations conducted by M. Teufer in south-western Tajikistan revealed an identical process at two neighbouring sites, since handmade vessels from the Bronze Age site, Saridzhar, and the Early Iron Age site, Karim Berdy (**Fig. 1**), are almost identical (TEUFER/VINOGRADOVA/KUTIMOV 2014: Fig. 37). In addition, some of the vessels uncovered at Saridzhar-2, a Bronze Age settlement, have analogies with forms from the Chust culture, which belongs to the Sine Sepulchro cultural community in the Ferghana Valley (TEUFER/VINOGRADOVA/KUTIMOV 2014: Fig. 30). The fact that these imitations or transfers were observed only at some sites – or groups of sites – that were settled both by the Oxus civilisation and by the cultures of the Sine Sepulchro complex, to the exclusion of others, strongly suggests that they are due to contacts and not to observation in a process of imitation by Iron Age populations of Bronze Age vessels a few decades after the latter’s disappearance.

Other evidence suggests contacts between the cultures of the Sine Sepulchro complex and the Vakhsh culture. The latter, which developed in south-western Tajikistan (**Fig. 1**), is said to combine features of the Oxus civilisation and the Andronovo steppe culture, and is traditionally attributed to the Late Bronze Age (LUNEAU 2014: 55–56), although this chronological attribution has recently been questioned and dated much earlier, sometime between the end of the 3rd millennium and 1600 BCE (TEUFER 2021). Whatever the correct dating of this culture is, the existence of direct interactions around the middle of the 2nd millennium is well illustrated by a recent discovery made by Yuri Kutimov at the site of Tandyryul, in the Hissar Valley (**Fig. 1**). This find is a beaker, whose shape and ware are typical of the Vakhsh culture, and which also bears painted parallel friezes of hatched triangles, reddish in colour, typical of Handmade Painted Ware cultures (KUTIMOV 2017: Fig. 6:14) (**Fig. 2:3**). This discovery remains unique until now, but it is nonetheless a clear illustration of the existence of direct contacts, whether regular or occasional, between the Vakhsh culture and the Sine Sepulchro cultural complex. These interactions were bilateral: Vakhsh-type potsherds were discovered at Dzharkutan in stratigraphic levels attributed to the Early Iron Age (SHAYDULLAEV 2000: Fig. 20; LUNEAU ET AL. 2013) (**Fig. 2:4**), proving the presence of bearers of the Vakhsh culture at the site. Some of these vessels were

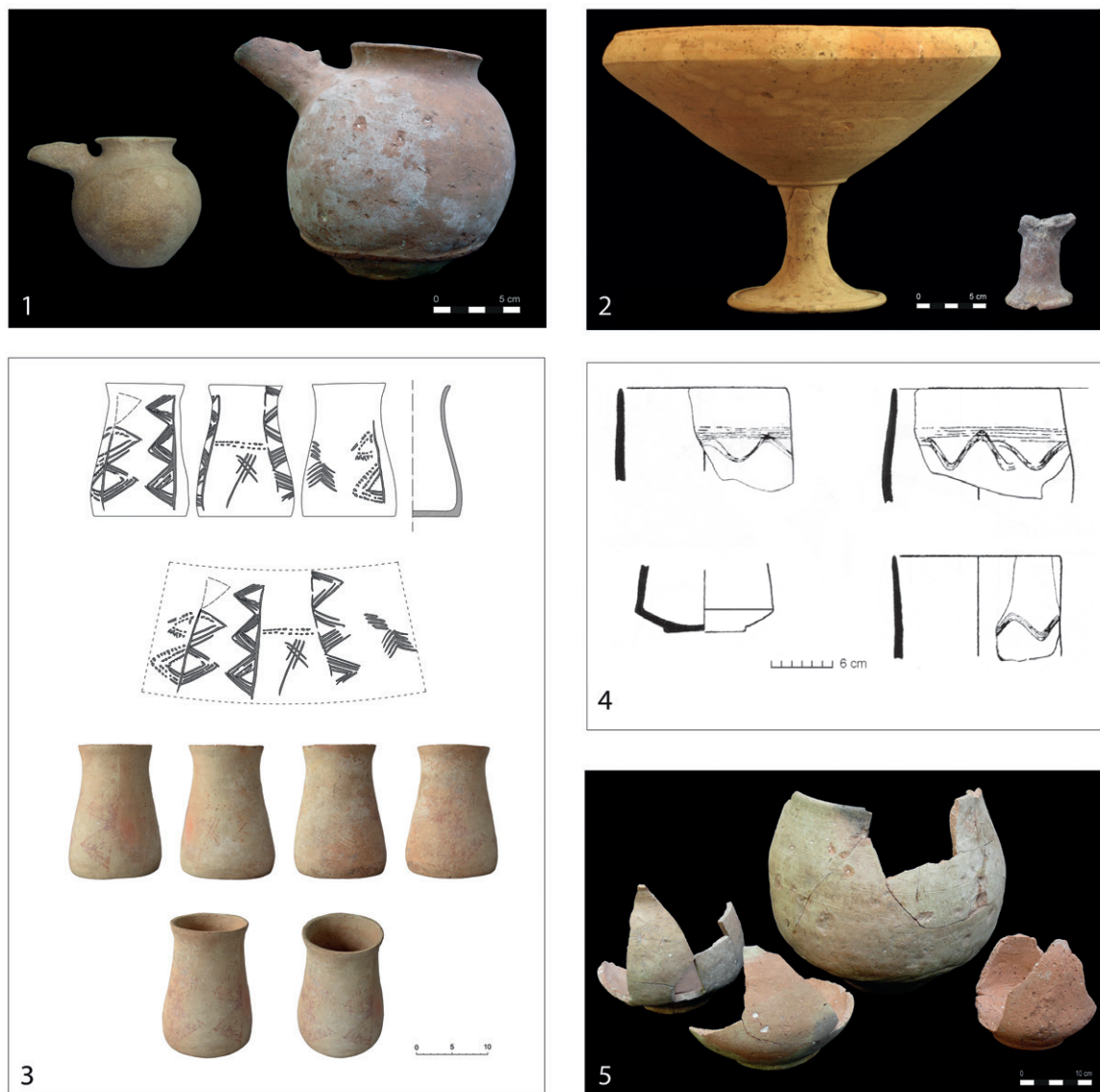


Fig. 2: Pottery evidencing the interactions with the Bronze Age cultures.

1–2 – Dzharkutan; on the left, Bronze Age pottery from the Oxus civilisation; on the right, imitation by the Sine Sepulchro cultural complex (© MAFOuz-P); 3 – Tandryul, Vakhsh beaker with a painted decoration (courtesy Ū. Kutimov); 4 – Dzharkutan, Vakhsh potsherds (after ŠAJDULLAEV 2002: Fig. 21:1–3, 7 and LUNEAU ET AL. 2013: Pl. 1); 5 – Dzharkutan, imitation of Vakhsh pottery by the Sine Sepulchro cultural complex (© MAFOuz-P).

also reproduced by the bearers of the Sine Sepulchro complex, according to their own techniques, leading to the making of small pots with a discoid base, a Vakhsh-type form (see e.g. LUNEAU ET AL. 2011: Fig. 2; TEUFER 2021: Figs. 25:4–25:5) whose ware, handmade technology, and firing techniques leave no doubt as to their cultural attribution to the Sine Sepulchro complex populations (Fig. 2:5). According to Elise Luneau, some potsherds with incised wavy-line decoration discovered at Maydatepa (Fig. 1), a site of the Early Iron Age also located in the Surkhan Darya Valley, could also be attributed to the Vakhsh culture (identification in LUNEAU 2010:

388 fn. 3 of the potsherds mentioned in SVERČKOV/BOROŤKA 2006: 195).

The very existence of these interactions between cultures traditionally attributed to successive chronological periods in the same regions – some to the Final Bronze Age and others to the Early Iron Age – shows that such chronological distinctions must be considered with caution; one must moreover consider as probable the existence of a more or less long chronological overlap, and the co-existence of these different cultures during a transitional phase at the end of the Bronze Age and the beginning of the Iron Age.

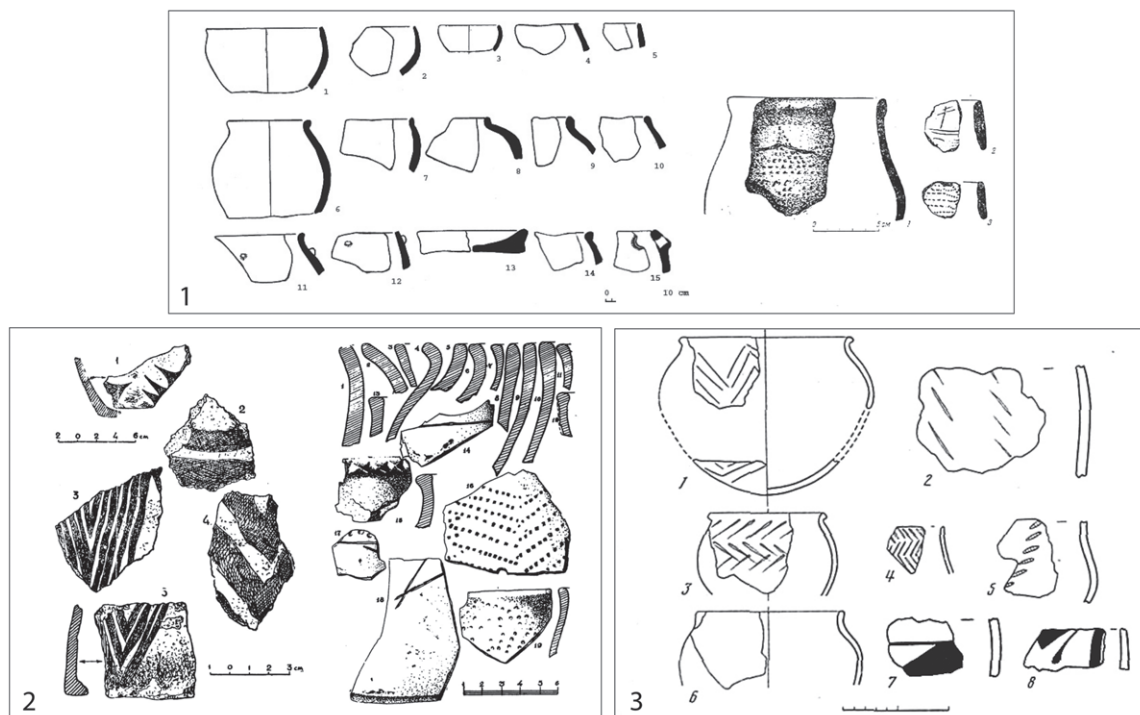


Fig. 3: Pottery evidencing the interactions with the steppe cultures.

1 – Chirakchi, on the left, potsherds of the Yaz I type; on the right, pottery related to the Andronovo cultural community (© DUKE 1982: Figs. 2–3); 2 – Ak-Tanga, on the left, potsherds of the Yaz I-type (Chust culture); on the right, pottery related to the Andronovo cultural community (© LITVINSKIJ/RANOV 1964: Fig. 8; 1961: Fig. 9); 3 – Bajram-Kazgan 2, pottery from the Tazabag'jab culture (nos. 1–6) and of the Yaz I type (nos. 7–8) (© ITINA 1977: Fig. 50).

2 Interactions with the steppes: the Andronovo cultural community and related cultures

Evidence of the Andronovo presence in southern Central Asia is abundant during the Bronze Age, even more so during its final stages, and may have played a significant role in the formation of Early Iron Age cultures (LHUILIER 2013a: 217–251). However, from the beginning of the Iron Age, there are very few potsherds that can be attributed to cultures of steppe origin in most of the territory occupied by the Sine Sepulchro cultural complex. Some exceptions are to be noted, for example in southern Turkmenistan at Namazga Depe, where a small proportion of Yaz I-type ceramics co-exists with coarse steppe-type pottery and a majority of Namazga VI-type ones in the Vyshka III.1–3 levels (ŠETENKO 2002: 56–57; ŠETENKO/KUTIMOV 1999: Figs. 5–6). In Sogdiana, at Chirakchi (Fig. 1, Fig. 3:1), a few rare steppe-type potsherds were discovered among the Yaz I-type pottery assemblage (DUKE 1982). On the contrary, a minority of ceramics from the Chust culture, belonging to the Sine Sepulchro cultural community, was discovered in a rock shelter in northern Tajikistan, at Ak-Tanga (Fig. 1, Fig. 3:2), where

pottery consists mainly of steppe-type ceramics (LITVINSKIJ/RANOV 1961; 1964). In the Fergana Valley, the finds of Chust-type pottery in kurgans related to the steppe culture of Kajrak-Kum at Dash-ti-Asht (SALTOVSKAÂ 1978; 1982) or Tashkurgan (GORBUNOVA 1979; 1995) are comparable (Fig. 1). These limited findings alternatively suggest the occasional presence of one or the other group within a site linked to the other culture, reflecting a process of cohabitation – at least temporary in nature, but perhaps of longer duration, linked to cultural or economic interaction.

Evidence outside the territory of the Sine Sepulchro cultural complex is very scarce and, to the best of our knowledge, is limited to two painted potsherds from a site of the second stage of the Tazabag'jab culture, Bajram-Kazgan 2 (Fig. 1, Fig. 3:3), located in the Akcha Darya delta (ITINA 1977: 92, Fig. 50:7–8). These potsherds are handmade, and include grog and mineral temper; they are painted in red-brown on a buff surface, each one with a triangle. They are very small and the lack of a rim does not allow one to determine their original shape, although the painted ornament in itself and the nature of the ware are sufficient to suggest strong analogies with painted pottery from the Sine Sepulchro cultural complex. Contacts with steppe-related cultures have in some cases been reciprocal, although

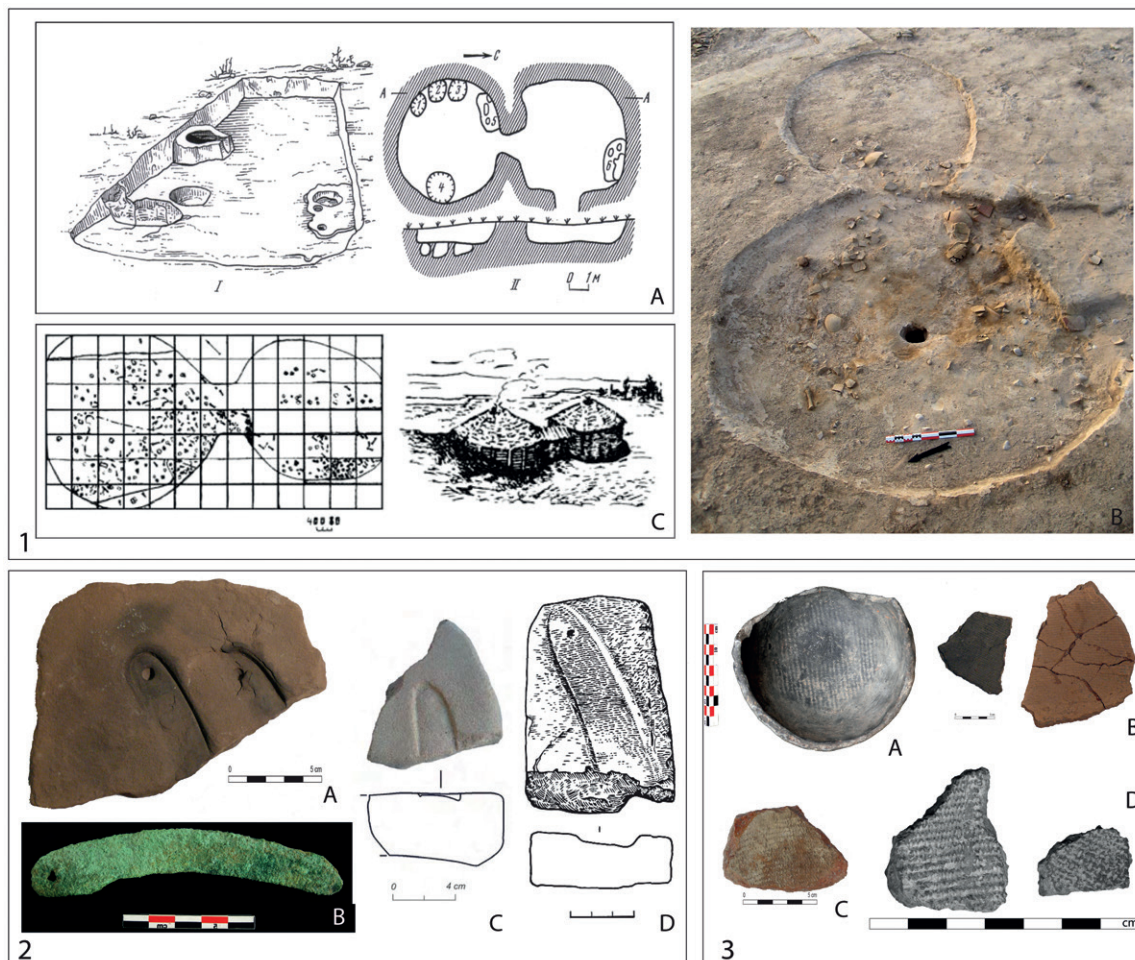


Fig. 4: Shared material elements between the steppes cultures and the Sine Sepulchro cultural complex.

1 – Some 8-shaped pit-houses: **A.** Tujabuguz (© KOSHELENKO 1985: Pl. LXXII.I–II), **B.** Dzsharkutan (© MAFOuz-P), **C.** Chaklinga, Andronovo culture (© KUZ'MINA 2007: Fig. 10); **2** – Moulds for sickles and copper-alloyed sickle: **A.** Chust culture (© J. Lhuillier/State Museum of History of Uzbekistan), **B.** Dzsharkutan (© MAFOuz-P), **C.** Maydatepa (BOROFFKA/SVERCHKOV 2019: Fig. 9:7), **D.** Jakke-Parzan 2, Amirabad culture (ITINA 1977: Fig. 79); **3** – Pottery with textile imprints: **A.** Koktepe (© MAFOuz Sogdiane), **B.** Chust culture (© J. Lhuillier/State Museum of History of Uzbekistan), **C.** Kayrit oasis (© MAFBAP), **D.** Begash, Andronovo Culture (DOUMANI/FRACHETTI 2012: Fig. 2).

evidence of mobility of the Sine Sepulchro cultural community abroad is very limited.

For the most part, the evidence of interaction is different in nature: it lies in the sharing of some aspects of material culture and architecture, which is more evident in the northernmost cultures of the Sine Sepulchro cultural complex in Uzbekistan and Kyrgyzstan. These northern cultures, mainly the Burguljuk (located around Tashkent) and the Chust cultures (in the Fergana Valley), but also some sites in the Surkhan Darya Valley, share characteristic elements with the steppe-like cultures of the Aral Sea region attributed successively to the Final Bronze and Early Iron Ages, the Tazabag'jab and Amirabad cultures, and with the Andronovo cultural community. These shared features include: pit-houses, whether rectangular, oval, or 8-shaped (Fig. 4:1); an elaborate metallurgy that produced comparable

tools locally, as evidenced by the existence of stone moulds (Fig. 4:2); and the ceramic technology consisting in moulding the lower part of the vases on a convex support covered with a fabric, which has left various textile imprints inside the vases (Fig. 4:3) (for a detailed synthesis of these parallels, see BENDEZU-SARMIENTO/LHUILLIER 2009).

Another indication of these interactions can be found by looking at figurative iconography, which is limited to very rare occurrences within the Sine Sepulchro cultural community, since it is generally limited to geometric representations on painted pottery. These very scarce examples of painted figurative iconography demonstrate clear links with that of the steppe world, as seen in the petroglyphs attributed to the Andronovo cultural community (Fig. 5). In the Kyrgyz sector of the Fergana Valley, four potsherds from Osh (a site of the Chust cul-

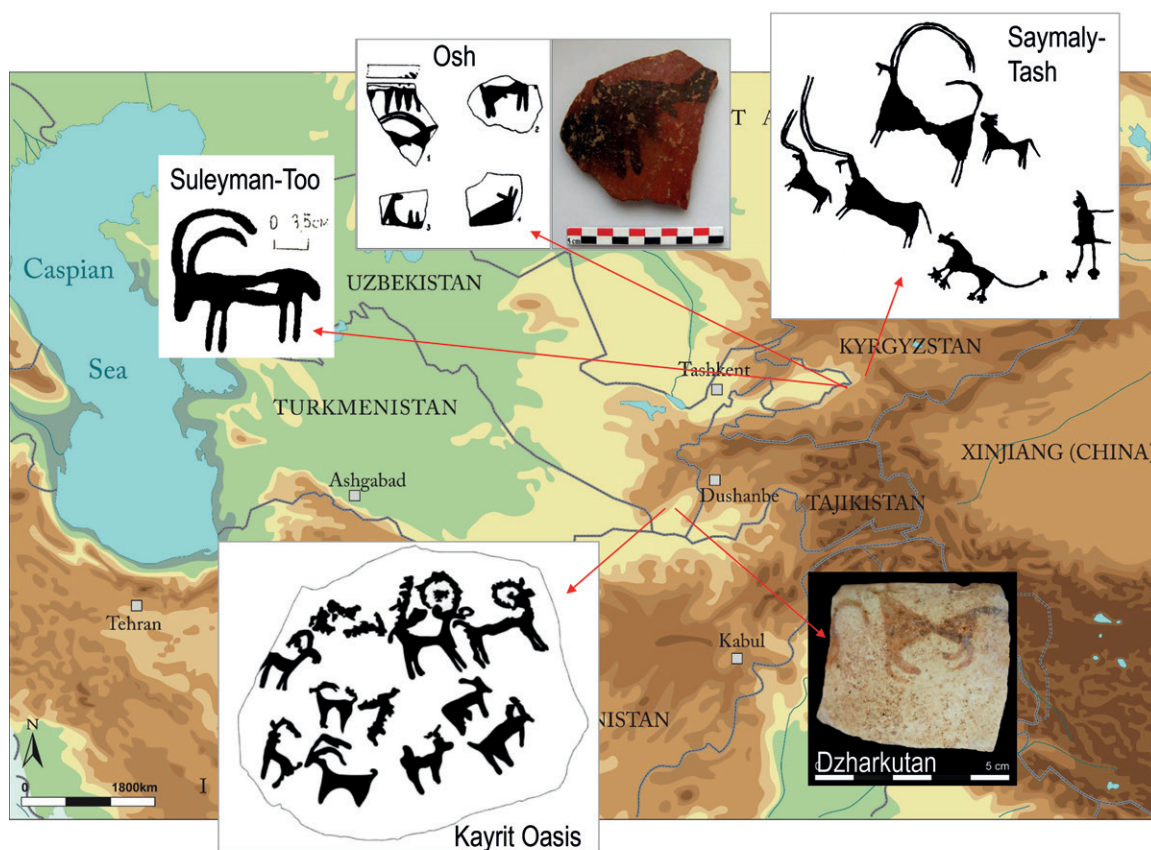


Fig. 5: Comparable zoomorphic representations on petroglyphs and on painted pottery: Sulayman-Too (© MALTAEV 2000: Fig. 27), Saymaly-Tash (© TASHBAYEVA 2001: Fig. 20), Osh (© ZADNEPROVSKIJ 1997: Fig. 52; LHUILLIER 2013a: Pl. 44:14), Kayrit Oasis (© AUGUSTINOVA/STANČO 2016: Fig. 1), Dzharkutan (© LHUILLIER ET AL. 2018: Fig. 28).

ture; **Fig. 1** display painted zoomorphic decoration, which can be identified on two of them: one is of an animal with a body consisting of two triangles joined at the top (a “bi-triangular” body) and very long horns, arched and projecting backwards; the other also shows an animal with a bi-triangular body – a male with grouped hind legs, but whose front legs and head have disappeared (ZADNEPROVSKIJ 1997: Fig. 52:1–4; see a colour photograph of one of the potsherds in LHUILLIER 2013a: Pl. 44:14).

The closest analogies for these zoomorphic representations are located at the nearby site of Saymaly-Tash, where some petroglyphs representing different kinds of animals were found, executed in bi-triangular style with straight legs; rock carvings include bulls and deer or ibex (TASHBAYEVA ET AL. 2001: Figs. 3–5; MARTYNOV/MARIASHEV/ABETEKOV 1992: Photos 17–18, Fig. 75). Mount Sulayman-Too, where the site of Osh lies, is also engraved with comparable petroglyphs, especially goat motifs with arched horns (AMANBAEVA/DËVLET 2000; MALTAEV 2000). Contrary to what has long been asserted,³

we agree with A. Rogozhinsky (ROGOZHINSKY 2008) when he writes that “the claim that there are no grounds for associating petroglyphs in the bi-triangular style with the Chust culture is unfounded”. Without attributing the authorship of these rock carvings to the bearers of the Chust culture – which would require further elements of proof – formal similarity suggests at least the existence of contacts.

Another example of this association was more recently discovered in the Surkhan Darya Valley in southern Uzbekistan (**Fig. 5**): a potsherd from Dzharkutan bears a zoomorphic decoration of a frieze of animals, probably caprine, with only one individual well preserved, and a second one represented by its tail only. The animal has a bi-triangu-

lar drawings of Saymaly-Tash belong to the same period and culture, one should then expect discovering similar motifs on Chust culture pottery, as of course supposed by A.N. Bernshtam; now, there is not even a single sherd with animal motifs [...] There are therefore no obvious reasons to attribute the drawings in “bi-triangular style” to the Chust culture or to older periods” (tr. by author). Since these lines were written, however, the discovery of the settlement of Osh, and more particularly of these potsherds with figurative decoration, seems to shed a new light on the cultural connection.

3 Before the discovery of the site of Osh, A. J. Martynov, A. N. Mariashev, and A. K. Abetekov (MARTYNOV/MARIASHEV/ABETEKOV 1992: 26) wrote: “Although bi-triangu-

lar body, a small head with a long muzzle with short horns or antlers, a long tail, and is depicted with the legs folded under the belly, suggesting movement (LHULLIER ET AL. 2018: Fig. 28). A comparable petroglyph, similar to those at Saymaly-Tash, was recently discovered (AUGUSTINOVA/STANČO 2016: Fig. 1) at a short distance from Dzharkutan, in the immediate vicinity of a group of Early Iron Age sites in the Kayrit oasis (LHULLIER/SHAJDULLAEV/STANČO 2018; Fig. 1). Re-appropriating the convention of the bi-triangular body, it belongs to a larger set of petroglyphs.

In both cases, at Dzharkutan and Osh, the most likely explanation is that the pots were painted by local potters who saw the petroglyphs, were inspired by them, and transferred their iconography to a different medium. The use of a style and an iconography usually associated with steppe cultures by the populations of the Sine Sepulchro cultural community suggests the existence, at different locations of its vast territory, of some areas where the two communities interacted, in addition to a large interface zone located on the northern fringe of its territory.

3 Interactions with the cultures of Xinjiang province

The issue of the existence or absence of contacts between the Sine Sepulchro cultures of Central Asia and the cultures of Xinjiang is very delicate.⁴ At first glance, similarities are striking. One can first and foremost mention the presence of painted ceramics in both regions.

Indeed, ceramics with painted geometric decoration are characteristic of eastern Xinjiang (Fig. 1), in parts of the southern Tian Shan and further north in the Ili Valley (MU 1992), where they are mostly found in the vast necropolises of the agro-pastoral communities occupying the region in the 2nd millennium BCE (notably the Yanbulake site). The sites with painted ceramics in Xinjiang cover a much longer time span than those in Central Asia, being founded in the 2nd millennium BCE and then settled throughout the Iron Age, ascribed to between about 1000 and 300 BCE. This is mainly due to a tradition of painted ceramics dating back to the Neolithic in north-west China, which continues in Xinjiang until around the Common Era, while it is interrupted at the end of the Neolithic in the other parts of China (DEBAINE-FRANCFORT 2001). Painted vases from Xinjiang often include black decoration on a slipped surface, which is red or sometimes buff. Some of these vessels can be compared to the

ceramics of the Chust culture, in the Uzbek and Kyrgyz Fergana Valley, because of their motifs (plain or hatched triangles, horizontal bands, etc.), and due to the composition of the decoration in vertical panels or the shapes of some vessels (especially carinated bowls with an everted lip), as pointed out by Ū. Zadneprovskij (ZADNEPROVSKIJ 1997) (Fig. 6:1–2). It must be said, however, that the majority of the decorations and forms differ from those of the Chust culture, but also above all from those of the other areas occupied by the Sine Sepulchro cultural complex.

In the western and southern parts of Xinjiang (Fig. 1), where the pottery is usually made in a grey ware, other types of artefact display similarities with Central Asian material, especially agricultural tools such as stone sickles (Fig. 6:3–4) (DEBAINE-FRANCFORT 1988a), which again come mainly from funerary contexts (especially the Ake-tala group). These tools are morphologically very similar to the knife-sickles discovered in the Fergana Valley, Sogdiana, and Bactria (see LHULLIER 2013a: 47).

Several hypotheses can explain the existence of these similarities. According to Zadneprovskij (ZADNEPROVSKIJ 1997), they might indicate that Xinjiang was an additional settlement area within the Hand-made Painted Ware cultural community, whose area of diffusion should therefore be extended. In our opinion, however, there are too many discrepancies to seriously consider this hypothesis.

In the opinions of N. Boroffka and L. Sverčkov, similarities are due to a filiation between the cultures of Xinjiang and those of Central Asia, the former being earlier. The population from the Xintala group (Fig. 1) in particular, whose sites were abandoned around the middle of the 2nd millennium BCE, probably as the result of an ecological crisis, is considered to be at the origin of the settlement of Maydatepa in Surkhan Darya in Uzbek Bactria a little later, around 1400 BCE. N. Boroffka and L. Sverčkov thus mention that similarities between painted ceramics, stone sickles, metal objects, and even the size of mudbricks appear to support this hypothesis. The presence of grey ceramics at four Chust culture sites (Fig. 6:3; ZADNEPROVSKIJ 1962: 24–29; 1997: 51) and comparable lithic items are material evidence of this filiation. The same can be surmised from similarities between finds in Xinjiang and Burguljuk culture items around Tashkent (SVERČKOV/BOROFFKA 2009; BOROFFKA/SVERČKOV 2019). Other scholars also support this hypothesis, based on similarities between the material complexes of the sites around Haladun (Fig. 1) in Xinjiang and those of the Chust Culture, and on the slightly earlier date of the former (CHEN/HIEBERT 1995: 287).

The opposite hypothesis has also been formulated (SHUI 1998), according to which Xinjiang was an intermediate stage in the displacement of Central

⁴ For a more detailed discussion of the parallels between the two regions and the several plausible hypotheses, see LHULLIER 2007 and LHULLIER 2013a: 189–196.

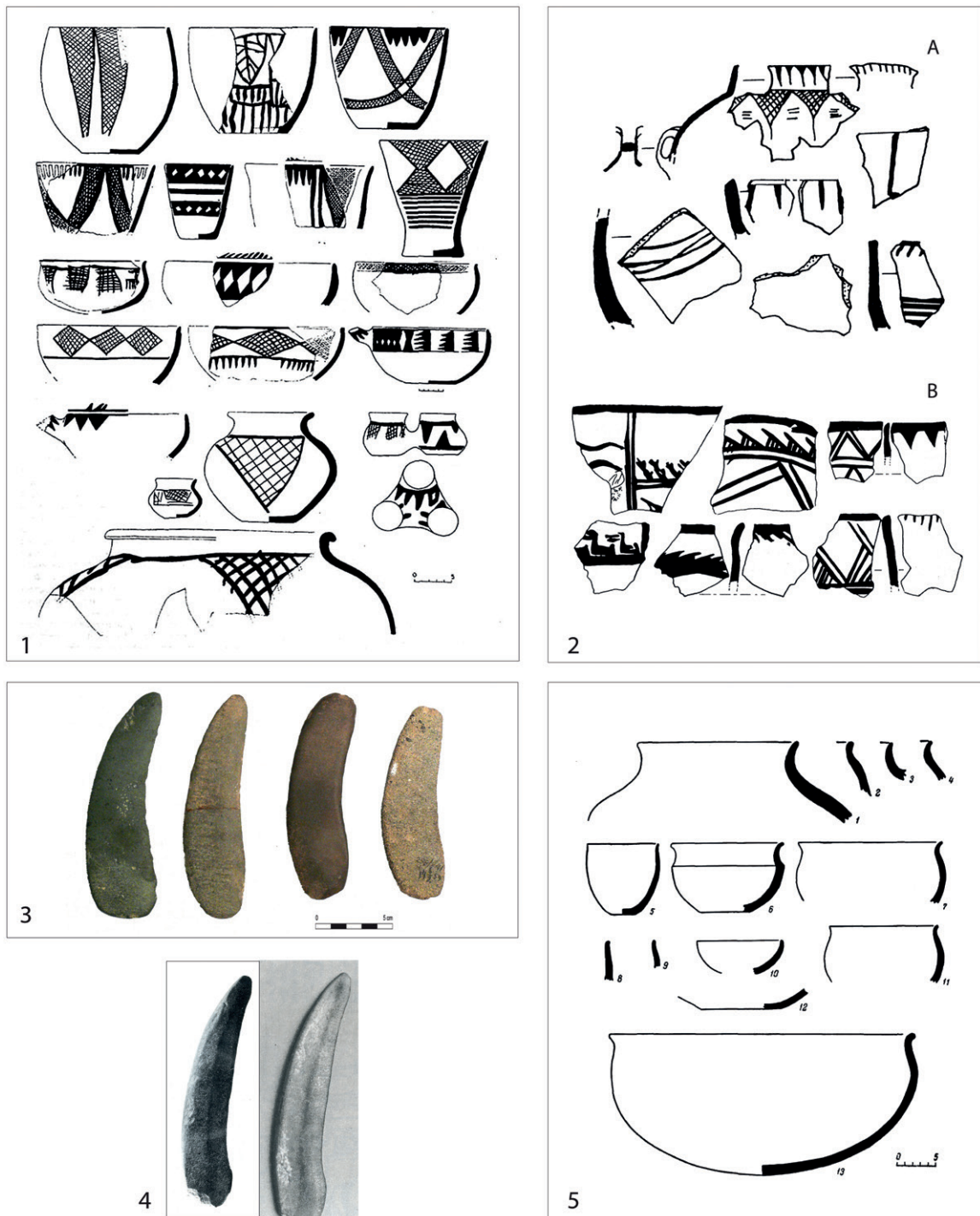


Fig. 6: Evidence of interaction with the cultures from Xinjiang.

1 – Painted pottery from the Chust culture (© MATBABAEV 1999: Pl. V); 2 – Painted pottery from Xinjiang: A. from Balikun (© DEBAINE-FRANCFORT 1988b: Fig. 7), B. from Xintala (© DEBAINE-FRANCFORT 1988b: Fig. 6); 3 – Stone sickles from the Chust culture (© J. Lhuillier/State Museum of History of Uzbekistan); 4 – Stone sickles from Aketala (© AN ZHIMIN 1992: Fig. 1; DEBAINE-FRANCFORT 1988b: Pl. III:4); 5 – Grey pottery from Dalverzin-tepe (© ZADNEPROVSKIJ 1962: Fig. 6).

Asian populations towards China; but the refinement of C14 dating no longer makes it possible to take this hypothesis seriously, especially since typically Central Asian objects are absent from Xinjiang.

More relevantly, the presence of grey ceramics in the eastern part of the Fergana Valley and the similarities (noted in certain types of pottery from the Fergana Valley and in the shape of some lithic tools from several regions of Central Asia) with those of different regions of Xinjiang seem to us more likely to be the result of occasional and probably bilateral contacts between the two cultural groups. Indeed, the absence of discoveries of material typical of Xinjiang (in particular of ceramics) at sites of the Burguljuk culture and around Maydatepa, as well as at some intermediate sites on the trail towards the latter, makes it impossible to convincingly support the hypothesis of a population displacement from Xinjiang. The apparent similarities in the agro-pastoral economy can be explained simply by an adaptation of the subsistence economy to the environment, while socio-cultural differences are too deep to allow one to see real kinship between the two cultural groups – the difference in funeral practices, in particular, reveals fundamental ideological and structural divergence.

The indisputable similarities observable for certain types of objects can be explained by the existence of interactions, most clearly evident with the Chust culture, the closest geographically to Xinjiang, located at the eastern limit of the territory of the Sine Sepulchro cultural community. The Fergana Valley may therefore have been an area of interaction between the two cultural groups. The discovery of the Sary-Bulun site (**Fig. 1**) on the south-eastern bank of the Issyk-Kul' lake in Kyrgyzstan (ZADNEPROVKSII 1997: 99–100) shows the extension of the sphere of influence of the Chust culture towards the east: in this site's ceramic assemblage, consisting mainly of steppe-type pottery, a number of vessels and stone sickles can be considered characteristic of the Chust culture. It is conceivable, in light of this discovery, that other comparable intermediate sites may yet be discovered further east. The Fergana Valley, bordered by the Pamir in the south and the Fergana mountain range in the north, forms a natural passage between Central Asia and Xinjiang, opening out after a series of passes into the Tarim Basin. It is therefore not surprising that it played the part of an interface area between the cultural groups of Xinjiang and those of Central Asia.

4 Interactions with the Archaic Dehistan culture

At the south-western edge of the territory of the Sine Sepulchro cultural complex, evidence of contact with the Archaic Dehistan culture (**Fig. 1**) was

observed. This is the other Early Iron Age culture widespread in south Central Asia, although much more limited in extent than the Sine Sepulchro cultural complex.⁵ It was initially discovered in the Misrian plain bordering the Caspian Sea to the west, in present-day Turkmenistan (MASSON 1956; MURADOVA 1991; LECOMTE 2005), and in the valleys of the Sumbar (HLOPIN 1975) and Chendyr (MURADOVA 2016) Rivers, where it flourished between ca. the 14th to 13th and the 6th century BCE. Its southward extension into the Gorgan plain in Iran has been shown by the excavations at Tureng Tepe (CLEUZIQU 1985; BESSEY-PROLONGE 2018). More recently, as from the 2010s, it was identified in the Atrek Valley and in the foothills of the Aladagh Mountains (THOMALSKY 2016; VAHDATI 2016). In these two areas, as well as in the northern foothills of the Kopet Dag on the Turkmen side, there is material evidence for contacts with the southern component of the Sine Sepulchro cultural complex.

In the Turkmen Piedmont of the Kopet Dag, in the territory of the Sine Sepulchro cultural community, some of the most characteristic forms belonging to the ceramic assemblage of the Archaic Dehistan culture (tripod bowls, hemispherical bowls with a horizontal handle, spouted pots) have been discovered scattered among the Yaz I and Yaz II–III (Middle to Late Iron Age) pottery assemblages at several sites: Dašli-30, Dašli-16/17, Hырlydepe, Garry-Kjariz I, Chile-depe, Kojne-Kala (illustrated in MURADOVA 1991; PILIPKO 2015).

A completely comparable situation was noticed in the upper Atrek Valley, where nine Early Iron Age sites belonging to the Sine Sepulchro cultural complex are attested, the largest of which is Tepe Yam (BISCIONE 1977; VENCO RICCIARDI 1980; VAHDATI 2018). The discovery of a few ceramic vases with typical Archaic Dehistan shapes (in particular tripod and hemispherical bowls with a horizontal handle) suggests contact in this area with the culture of Archaic Dehistan (description in BRUNO 2019).

The situation is different in the transition zone between the upper and middle Atrek Valley (banks of the Atrek River and Bojnord plain), where there are 11 sites dating from the Iron Age, in which pottery of the Handmade Painted Ware complex co-exists with that of the Archaic Dehistan culture in apparently comparable proportions (**Fig. 7:1**), making it an interface zone (VAHDATI 2018).

In the middle Atrek Valley itself, more sites were recorded, with a total of 35 identified in the Samangan plain, Tepe Rivi being the largest (**Fig. 1**). On these sites, ceramics from the Archaic Dehistan culture constitute the bulk of the findings, but the material of some sites located in the eastern part of the

5 For a recent synthesis on this culture, its geographical extension, and its material characteristics, see LHUILLIER forthcoming.

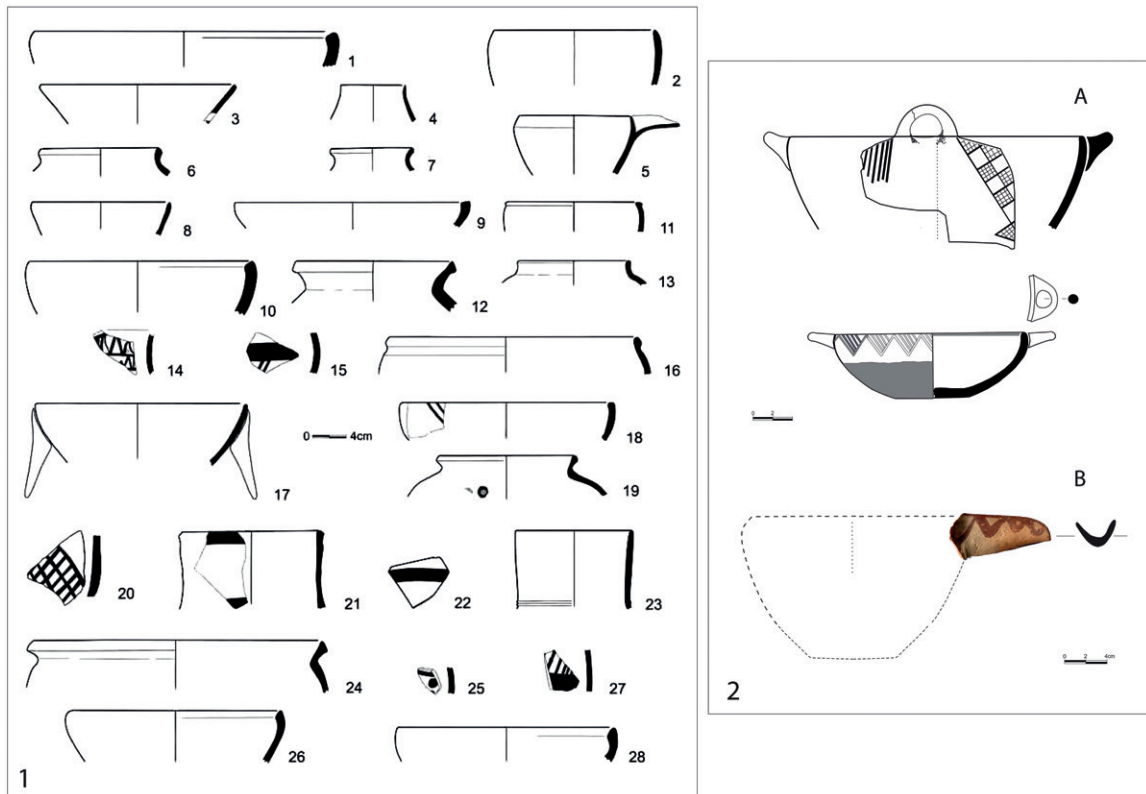


Fig. 7: Evidence of interaction with the Archaic Dehistan culture.

1 – Pottery of the Yaz I type and Archaic Dehistan type from the transitional zone between the middle and the upper Atrek Valley (© VAHDATI 2018: Fig. 4); **2** – Hybridised pottery: **A**. Painted bowls with horizontal handles from Jayran-Tepe and Anjirli-E in the Kal-e Shur River basin (© VAHDATI 2018: Fig. 8:9, 21), **B**. Painted gutter spout from Tepe Aq-Mazar in the middle Atrek Valley (© VAHDATI 2018: Fig. 7:24).

Samangan Valley includes a few sporadic potsherds of the Yaz I type (VAHDATI 2018).

The Kal-e Shur River basin, located south of the Atrek Valley in the foothills of the Aladagh Mountains, is another area of dense settlement during the Iron Age. Forty-two Iron Age sites have been identified there (see VAHDATI 2018 for a list and map), the most important being Jayran-Tepe (**Fig. 1**), including 25 connected to the Sine Sepulchro cultural complex in the plain of Jajarm-Esfarayen. Of these sites, 14 located in the northern part of the plain and near the Elburz Mountains have yielded ceramics from the Archaic Dehistan type.

Also in the Kal-e Shur River basin, five Iron Age sites were surveyed in the Shoqan-Armodlou Valley, and 10 in the Dasht-Kalpoush Valley, all of them related to the Archaic Dehistan culture; only isolated potsherds of the Yaz I type, however, were found on their surface.

At the western end of the Dasht-Kalpoush Valley, near the Gorgan plain, no Yaz I-type potsherds have been recorded, and the entire pottery complex is related to the Archaic Dehistan culture, thus marking the western limit of the interaction area.

These discoveries of pottery from both cultures thus point to the existence of repeated contacts, the

intensity of which becomes greater near the centre of each of the two cultural groups and diminishes in interface zones. Pottery of the Archaic Dehistan thus predominates over that of the Yaz I type in the Shoqan and Armodlou Valleys, as well as in the middle Atrek one; the proportion of the two types is roughly equal in the transition zone between the upper and middle Atrek Valley. Yaz I-type ceramics predominate in the Jajarm-Esfarayen plain. Finally, in the upper Atrek Valley and in the northern Kopet Dagh foothills, only a few isolated potsherds of the Archaic Dehistan type have been found on sites attributed to the Sine Sepulchro cultural complex. The regularity of the contacts between the two cultural groups or horizons is, in addition, demonstrated by the number and the nature of the sites in which these two types of ceramics are found: in all the occupied valleys, with the exception of the upper Atrek Valley and the northern Kopet Dagh foothills, they are settlements where the two populations apparently cohabited to varying extents. Other elements point to the existence of shared socio-cultural elements, since in both cultural groups iconography is absent, and no or very few prestigious objects have been collected. Mortuary practices also appear to be comparable, since in the Sine Sepulchro cultural

complex, just as in the Archaic Dehistan culture, no necropolis was discovered, and the very limited extent of discoveries of human bone remains suggests comparable practices (centred on excarnation with very few burials) (BENDEZU-SARMIENTO/LHUILLIER 2015).

A few rare occurrences of ceramic hybridisation also testify to cultural transfers linked to the close interactions between the two cultural groups, and to reciprocal influences (Fig. 7:2). For example, in the Kal-e Shur River basin, one finds several hemispherical bowls with horizontal handles, a characteristic form of the Archaic Dehistan ceramic complex, adapted to resemble the Yaz I style by the addition of a second symmetrical handle and a horizontal painted frieze, both typical elements of Handmade Painted Ware cultures (VAHDATI 2018: Figs. 8:9, 8:21). In the middle Atrek Valley, a similar process was observed on a different form: a gutter spout from a hemispherical bowl of Archaic Dehistan type was modified by adding painted decoration (VAHDATI 2018: Fig. 7:24). Given the small amount of published material for this region of north-eastern Iran, it is likely that these examples of hybridisation are not isolated.

Outside this interface area, there are a few rare finds of artefacts attributable to the Archaic Dehistan culture in the territory of the Sine Sepulchro cultural community. To the east of the Atrek Valley, a few potsherds of grey pottery attributed to the Archaic Dehistan culture were discovered at Topaz Gala Depe (Fig. 1) in the Serakhs oasis in Turkmenistan (pers. comm. M. Wagner). Topaz Gala Depe is a site dating from the Yaz I to Yaz II periods, which highlights the role of the Kashaf Rud River as a communication route extending the Atrek Valley towards the east.

Only one find from the Archaic Dehistan culture was recorded until now in the heart of Central Asian territory: a fragmentary tripod bowl from the upper layer of Molalitepa in Uzbekistan (Fig. 1), dated to the middle of the 2nd millennium BCE, at the very end of the Bronze Age (BOROFFKA/SVERCHKOV 2015: 4; Fig. 11:18). Very close to Molalitepa, the same authors suggests that some figurative figurines from Maydatepa and attributed to the Sine Sepulchro cultural community could be compared to a broken figurine discovered at Izat-Kuli (MURADOVA 1991: Fig. 22), a site of the Archaic Dehistan culture (BOROFFKA/SVERCHKOV 2021: 360). This suggests that the interactions may have already begun during the transitional phase between the Bronze Age and Iron Age.

Discussion: intercultural and economic interactions

This Archaic Dehistan find, and more generally the evidence of interactions with cultures traditionally attributed to the Late Bronze Age, shed a new light on the chronology of the Sine Sepulchro cultural complex – in particular on its formative phase. Despite the opening of excavations on sites of the Handmade Painted Ware cultures as early as the 1950s, only very few radiocarbon dates are yet available. C14 dates published from Yaz-depe, Maydatepa, Kuchuk-tepa, Koktepe, Dalverzin-tepe, and Sangir-tepe were recalibrated using the OxCal 4.1 calibration program, and were compared in Lhuillier (LHUILLIER 2013a: 207–213). The most ancient date was obtained from a charcoal sample from Yaz-depe, which after recalibration gave a date (92.7% probability) between 1562 and 1129 cal BCE. Another sample from Dalverzin-tepe yielded a date (93.6% probability) of between 1536 and 973 cal BCE. Other dates fall between the 15th and the 12th century BCE at Maydatepa, between the 13th and the 9th century BCE at Kuchuk-tepa, between the 14th and the 8th century BCE at Koktepe, and between the 14th and 12th century BCE at Sangir-tepe. Since then, other C14 dates have been obtained in Ulug-depe, at Dzharkutan, and in the Kayrit oasis, but these are still unpublished, although they can be integrated into this larger framework. Indeed, they lie somewhere between the 14th and the 11th century BCE in the Kayrit oasis, the 13th and the 10th century BCE at Dzharkutan, and the 14th and 11th century BCE at Ulug-depe. One can thus confirm the date of the beginning of the Early Iron Age to around the middle of the 2nd millennium BCE, roughly between the 15th and 13th century BCE. This time span is consistent with radiocarbon dates available for the Final Bronze Age, between the 18th to 17th and the 15th to 13th century BCE (FONTUGNE ET AL. 2021). These radiocarbon dates suggest a transition period with a possible overlap during the 15th to 13th century.

Above all, the discovery of interactions with Bronze Age cultures dating from the middle of the 2nd millennium BCE, anchored in older traditions and not limited to the exchange of objects but, on the contrary, based on deeper cultural interactions, makes it possible to reconsider the role of these cultures in the formation of the Handmade Painted Ware cultures.

This brief overview of the relationships that the Sine Sepulchro cultural complex had with contemporary neighbouring cultures makes it clear, moreover, that contacts existed. This permanently dismisses the idea that it was cut off from the rest of the world. It is obvious that the Sine Sepulchro cultural complex did not have clear boundaries, but

buffer zones of interaction where exchanges of material, cultural influences and shared cultural traits resulting from long-term contacts are noticeable. Several of them can be identified: in the north-west, around the region of Tashkent, in the Fergana Valley, and part of Bactria, an area of interaction with cultures originating from the steppes; in the east, around the Fergana Valley, an area of interaction with the cultures of Xinjiang; in the south-west, in southern Turkmenistan and north-eastern Iran, an area of close contact with the Archaic Dehistan culture. Given that exploration of these areas was not extensive and in fact quite recent, it is very likely that additional evidence of interactions remains to be discovered. More generally, it is likely that archaeologists will find further similar areas during future field projects.

When one looks at the south/south-east border of the Sine Sepulchro cultures, a delicate issue arises: that of the relationship between the Handmade Painted Ware cultures and the region south of the Hindu-Kush. The existence of painted ceramics in southern Afghanistan and Pakistan at Mundigak, Nad-i Ali, and Pirak has given rise to many comments, but seems to be too general a point to be relevant. Discussion is often limited to the mere presence of painted ceramics, and is not very significant in the light of the radiocarbon dates now available (see a synthesis on this question in LHUILLIER 2013a: 196–204; LHUILLIER 2017). This issue nevertheless deserves to be re-examined in the light of new discoveries. Indeed, the Akra and Ter Kala Dheri sites in the Bannu basin of north-eastern Pakistan (Fig. 1) have yielded some “Bannu black-on-red ware” ceramics, which show some similarities with the ceramics of the Handmade Painted Ware cultures, but are currently dated to their very end (MAGEE ET AL. 2005). Given that this area (and more broadly the territory where the Indus civilisation spread) had close contacts with the Oxus civilisation during the Bronze Age, it would not be surprising that contacts with this region were maintained during the Iron Age.

Within the vast territory of the Sine Sepulchro cultural community, northern Bactria in southern Uzbekistan was furthermore a “hub” maintaining direct relations with all the other groups of the community. Indeed, this area, located at the heart of the Sine Sepulchro cultural community, is the only one that shares cultural traits with both the northernmost and the southernmost cultures that are part of it (see LHUILLIER 2013: 184–187, Fig. 72). Moreover, the data presented here show that it also had more or less close interactions with cultures dating from the Final Bronze Age established in the same territory (the Oxus civilisation in its final stage and the Vakhsh culture), with which there was therefore a chronological overlap and a partial co-existence, and not merely chronological and cultural succes-

sion. More surprisingly, the Early Iron Age culture of northern Bactria also interacted with cultures centred on more distant territories, such as the steppe ones attached to the Andronovo cultural community, those of Xinjiang, and even occasionally with the Archaic Dehistan culture. This region is one of the best explored in Central Asia, and yet some of the most enlightening discoveries have been made only recently, emphasising all the more intensely the need for further research.

Discoveries of artefacts directly imported from distant areas are limited, but we should mention some cowries and other seashells – evidence of long-distance contacts.⁶ Other items, made of perishable materials, could be exchanged without leaving any trace. Nor should it be forgotten that the scarcity of objects linked to trade or exchange is probably also partly due to the context of discovery – namely, always in settlements – since the very nature of Early Iron Age funerary practices means that there are no burials and therefore no accompanying deposited material. The archaeologist is thus deprived of one of the richest sources of material. The relative scarcity of metal findings, especially in light of the stone moulds, suggests that metal artefacts played an important role in the economy of the Handmade Painted Ware cultures, but were likely re-used in later times. The search for metal ores might well have been an underlying cause for the development of these interactions, at least at a local level. Several tin deposits were exploited in the Zeravshan Valley (at Karnab, Lapas, Changali in Uzbekistan, Mushiston in Tadjikistan), in all likelihood by populations of the Andronovo-Tazabag'jab culture during the Bronze Age. The tin ore was apparently not mined during the following periods at these four sites (GARNER 2013), maybe with the exception of Karnab, where there are C14 dates that suggest it may have still been exploited until the 6th century BCE (FONTUGNE ET AL. 2021: 892–893). Deposits of various metals found in Afghanistan may go back to as early as protohistory, although no precise date is available for their exploitation (THOMALSKY ET AL. 2015). The existence of other deposits, for instance of rock salt, must also be taken into account, even if no studies currently exist. One should bear in mind that the search for deposits may have played a role

6 Some cowries (*Cypraea moneta*) from the Indo-Pacific area (MIZZAN 2007) were found at some of the sites of the Sine Sepulchro cultural complex: Yaz-depe (MASSON 1959: Pl. XXXVI, 3), Chirakchi (DUKE 1982: Figs. 3, 4), Dalverzin-tepe (LHUILLIER 2013a: Pl. 66), and Chust (MATBABAIEV/BATYROV 1992: 20), as well as Koktepe (unpublished). During the same period, they were identified at Archaic Dehistan culture sites (MASSON 1956: Fig. 16). Did these objects reach the Early Iron Age sites directly from the Indian subcontinent, or did they previously transit through the steppes of northern Central Asia or Xinjiang, two regions where they are frequently documented in the same period?

in the development of interactions. Generally speaking, interactions can be noticed through evidence of a deep and often bilateral influence of cultural or economic nature, more than in the direct exchange of objects.

Conclusion

The archaeological evidence presented here shows the variability of interactions between the Sine Sepulchro cultural complex and other cultures. Its huge territory was surrounded by buffer zones, whose extension depended on local geography, which defined small and limited “interaction spheres”. Within these buffer zones, the nature and intensity of interactions were variable, and demonstrate the great social adaptability of the cultures of the Sine Sepulchro complex in inventing different interactive patterns. On the eastern edge of the territory, interactions with the cultures of Xinjiang seem to have been limited mainly to the Fergana Valley area, where the traces of these contacts are relatively scattered and restricted to the material sphere. On the south-western edge of its territory, a very clear interface zone emerged, where populations clearly co-existed at certain sites and where exchanges were bilateral and duplicated by the probable sharing of some elements pertaining to the ideological sphere; this interaction, however, was not able to penetrate more deeply into the heart of the territory. Contacts with steppe cultures were of

a different nature. While they have durably impregnated the northernmost cultures, notably those of Chust and Burguljuk, they have also influenced more distant territories such as Sogdiana or even northern Bactria. This was probably due in part to the antiquity of contacts between these steppe cultures and the Central Asian territory, especially during the Final Bronze Age. Similarly, interactions with other cultures must also be seen in a chronological perspective. This is clear in northern Bactria at the very centre of the Sine Sepulchro cultural complex territory in southern Uzbekistan: in that region, evidence of contact with the Oxus civilisation in its final phase and with the Vakhsh culture suggests a short co-existence in time during the formative phase of the Handmade Painted Ware cultures. Many questions remain unresolved, particularly as regards the modalities of these contacts. In the current state of research, these contacts seem to be the result of individual interactions, or they were at least carried out by small social groups, perhaps of mobile pastoralists, rather than being organised exchange at the level of the entire society.

Acknowledgements: I express my warmest thanks to Dr. Juri Kutimov, who kindly authorised me to include an unpublished photograph of his finding from Tandyryul. I am also extremely grateful to Dr. Julio Bendezu-Sarmiento, Dr. Claude Rapin, and Prof. Frantz Grenet for allowing me to publish discoveries from Dzharkutan and Koktepe.

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Isotopic Studies and Archaeological Evidence in Bronze Age Tajikistan

The “Lady from Gelot”

Sonja Kroll*, Mike Teufer, Natalia Vinogradova, Yuri Kutimov, Giovanna Lombardo, Delphine Bosch, Marjan Mashkour

Abstract: Isotope analyses of human and animal remains provide data on the origin of individuals, the mobility during lifetimes, the subsistence of people, and the climatic conditions of the investigated region. The results indicate the composition of populations and the rate of migration. Respectively, information about sedentism or mobility of human populations and external cultural influences within societies can be reconstructed. The discovery of grave 2 from excavation 6 (G2N6) in Gelot delivered fundamental new insights concerning the chronological classification and the cultural constitution of the Bronze Age in southern Tajikistan. The unique inventory provoked further investigations, so that we are able to present here for the first time the results of isotope analyses of strontium and oxygen of this meaningful funeral. In correlation with the archaeological evidence, we can provide precise data about human interactions and social connections in southern Central Asia and Iran.

Keywords: Migration, Bronze Age Tajikistan, Gelot-Darnaichi, isotope analyses ($^{87}\text{Sr}/^{86}\text{Sr}$, $\delta^{18}\text{O}$).

Резюме: Изотопный анализ останков людей и животных дает возможность получить и исследовать данные о происхождении и составе человеческого населения, передвижениях людей в течение жизни и скорости миграций, рационе питания, а также климатических условиях среды обитания. Анализы позволяют сделать выводы об оседлом или кочевом образе жизни той или иной группы населения и выявить внешние культурные влияния на исследуемое общество. Материалы женского погребения 2 из раскопа 6 (G2N6) в Гелоте с уникальным сопроводительным инвентарем дали принципиально новое понимание хронологической классификации и культурной картины бронзового века на юге Таджикистана. Впервые при исследовании археологических материалов бронзового века Таджикистана в работе представлены результаты изотопного анализа стронция и кислорода женского захоронения из Гелота. В сопоставлении с археологическими свидетельствами получены новые данные о человеческих взаимодействиях и социальных связях на юге Центральной Азии и в Иране.

Ключевые слова: миграция, бронзовый век, Таджикистан, Гелот-Дарнайчи, изотопный анализ ($^{87}\text{Sr}/^{86}\text{Sr}$, $\delta^{18}\text{O}$).

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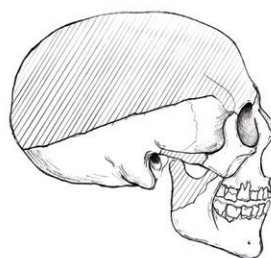


Fig. 1: Burial 2, excavation 6, from Gelot (Archaeological Expedition in Southern Tajikistan of the Academies of Science of Russia and Tajikistan) and graphic reconstruction of the so-called “Lady from Gelot” (elaborated and courtesy of Aleksey Nechvaloda).

1 Introduction

Many discussions have been held between scientists on the exchanges of material and technologies, cultural transfers and impacts, as well as territorial boundaries and areas of influences in southern Central Asia during the Bronze Age (cf. e.g. LYONNET/DUBOVA 2021). Correlated theories on migrations – the movements of people and mutual social interactions, respectively – were investigated to a greater extend through geochemical methods during recent years. The fact that mobility and migration are es-

sential strategies of humans and animals caused a certain scholarly trend in which movements and migration were implicated to explain many different issues. Indeed, the convergence of technologies and material cultures, and the exchange over long distances, always gave us the impression of active dynamics among populations. However, recent scientific investigations showed that the mobility of people was often not as high as we assumed, and theories about migration movements and a genetic mix of populations should be treated with caution. Yet sometimes, single exceptions appear in the bulk



Fig. 2: Collected strontium data: Jirzankal after WANG ET AL. 2016; Harappa, Ur after KENOYER ET AL. 2013; Bahrain, UAE, Failaka Island, Tepe Yahya, Allahdino after GREGORICKA 2013; Upper Khabur and Pütürge region after KIBAROĞLU ET AL. 2017; Northern Pontic steppe, Olennii, Sukhaya Termista II, Politotdel'skoe, Volga region after GERLING 2015; Bestamak, Lisakovsk after VENTRESCA MILLER ET AL. 2018; Tillâ-Bulak after KROLL ET AL. submitted; Gorgan Wall, Lut Desert after KROLL in preparation. For Gelot-Darnaichi, the ranges of the human bones are stated as the bioavailable strontium range. Pictures in the map after LOMBARDO ET AL. 2014: 10–11 Fig. 8–10.

of isotopic investigations. In the beginning these appear to be only outliers of the group but, with a closer look, they provide us with striking facts. Burial 2 from excavation 6 in Gelot was one of these outliers (Fig. 1 and Fig. 2). This burial already brought remarkable new insights during the excavation (cf. TEUFER/VINOGRADOVA 2010; LOMBARDO ET AL. 2014, VINOGRADOVA/KUTIMOV 2018). In correlation with the isotopic investigations, we are able to present here a perfect example of the method of determining one's origin through strontium and oxygen analyses, and the archaeological evidence of a single burial context. With the results we can substantiate

possible migration routes and distances and, respectively, existing interregional connections – not only through cultural distributions, trade, and trade goods, but also in the life of a single person.

2 Gelot and the Bronze Age in south-eastern Tajikistan

The necropolises of Gelot and neighbouring Darnaichi are located on the banks of the Yakh-Su River in the Kulyab District, south of the Khodzhasartes Mountains in the very south-east of Tajikistan

(cf. Fig. 2; TEUFER/VINOGRADOVA 2010; LOMBARDO ET AL. 2014, VINOGRADOVA/KUTIMOV 2018). The excavations in Gelot-Darnaichi were part of the archaeological research project in the southern Tajik Yakh-Su Valley, carried out co-operatively between the Institute of History, Archeology and Ethnography of the Academy of Sciences of Tajikistan, the Institute for Oriental Studies of the Russian Academy of Sciences (Moscow), the Eurasia Department of the German Archaeological Institute (Berlin), the Institute for the History of Material Culture (St. Petersburg), and the Museo Nazionale d'Arte Orientale (Rome). The excavations in Gelot-Darnaichi were conducted between 2007 and 2013 (for a summary cf. VINOGRADOVA/KUTIMOV 2018: 39–88).

The insights obtained by the excavations in Gelot-Darnaichi have led to a fundamental re-evaluation of the Bronze Age in southern Tajikistan. For the first time, the existence of a Middle Bronze Age is evidenced and proved by C14 data. The Middle Bronze Age continuously merged into the early Late Bronze Age (VINOGRADOVA 2021: 646–656; TEUFER 2021: 714–721, 725–727) and is understood as the Namazga V period, dated after Ljubov B. Kircho between 2350 and 2000/1900 BCE (KIRCHO 2021: 132–134). Through the excavations at the necropolis of Farchor in recent years, the Early Bronze Age could finally be verified in southern Tajikistan. The site is located south-west of the Yakh-Su Valley, close to the border of Afghanistan (BOBOMULLOEV ET AL. 2017). The necropolis is associated with the Namazga IV and early Namazga V periods (TEUFER ET AL. 2015: 112–113; VINOGRADOVA 2021: 636–643). In correlation with the sites of Saridzhar, Karim Berdy, and Kuduk in the Yakh-Su Valley, dating to the later Late Bronze Age (Saridzhar) and early Iron Age (Karim Berdy and Kuduk) (TEUFER ET AL. 2014: 118–143), a continuous sequence from the Early Bronze Age to the Early Iron Age is substantiated in southern Tajikistan.

Moreover, the data from Gelot-Darnaichi enabled scientists to define some long-established cultures more clearly and determine their time span more precisely. This applies, for example, to the Vakhsh culture. The “classic Vakhsh culture” showed – especially concerning the constructions of burial mounds (*kurgans*) – strong analogues to the eastern Bronze Age communities in the Altai and Saensaj in the north-eastern Xinjiang Mountains (TEUFER 2021: 728–729). It can therefore be considered as a part of the interregional transactions between the Central Asian oasis cultures and western China, along the Inner Asian Mountain Corridor (FRACHETTI 2012; TEUFER 2021: 729). Pottery types of this culture have also been found in several tombs from Gelot-Darnaichi. However, whereas the classical Vakhsh culture buried their deceased in kurgans, no burial mounds have been found in Gelot-Darnaichi (TEUFER 2021). Therefore, a distinction between

the classical Vakhsh culture and the newly defined “Pjandzh culture” seemed reasonable, while Gelot-Darnaichi belonged to the latter (TEUFER 2018: 161–166). The “Pjandzh culture” was first suggested by Henri-Paul Francfort (FRANCFORT 2016: 471) and is characterised by “the combination of a local Bactrian tradition with deep Mesopotamian and Elamite influences” (VINOGRADOVA 2021: 660). The sequence of the burials at Gelot-Darnaichi clearly demonstrated that grave 2 from excavation 6 was not related to the beginning of the occupation of the necropolis (TEUFER 2021: 715 Tab. 25.1), but belonged to a group of graves with wheel-made pottery inventories. The earliest burial of this group was grave 2 from excavation 4: this represented a typical burial of the Sapalli-Dzharkutan culture, which was widespread in the Surkhan Darya Valley in southern Uzbekistan (TEUFER 2015; KANIUTH 2021). Grave 2 from excavation 6 – the burial of the so-called “Lady from Gelot” – was slightly older. Radiocarbon results evidenced a time period between 2128–1981 cal BCE (1σ), respectively 2135–1965 cal BCE (2σ) (TEUFER ET AL. 2014: 116). The burial dated to immediately before the start of the expansion of the Sapalli culture, which in Gelot-Darnaichi was only attested by grave 2 from excavation 4 (TEUFER 2021: 714).

The 3rd millennium BCE in southern Tajikistan is therefore characterised by the co-existence of two phenomena, closely related to each other, and fluent transitions. Distinct differences can only be distinguished in the constructions of the burials. Towards the transition of the 3rd to the 2nd millennium BCE, an increasing influence from the Surkhan Darya region is noticeable, which led to the development of a specific eastern variation of the Sapalli-Dzharkutan culture.

3 Isotope analyses in archaeological material

Isotope analysis of strontium and oxygen constitutes a reliable method for tracking human and animal origins, and mobility on a lifetime scale (cf. e.g. BENTLEY 2006; BUDD ET AL. 2004, 2000; GRUPE ET AL. 2017, 1997; SEALY ET AL. 1995; SLOVAK ET AL. 2011; STYRING ET AL. 2019, VENTRESCA MILLER/MAKAREVICZ 2018). The basic principle is the comparison between humans’ teeth and bones in correlation with the local, bioavailable isotopic signature. Strontium and oxygen isotopes enter the human body mainly through drinking water, but also through the consumption of the contained water in ingested food. They are thus directly connected to the environment and the geological substrates of the habitat. Strontium substitutes Ca^{2+} , while oxygen is incorporated in the phosphate and carbonate group of hydroxyapatites. Hydroxyapatite forms up to 70%

of the main bone and tooth mineral, and is the basic substance of all hard tissues in the body (TÜTKEN 2003). Tooth enamel is synthesised during childhood and does not undergo any changes afterwards. Therefore, the isotopic ratio of tooth enamel reflects the environment in which a person evolved during the first years of their life. Whereas bones undergo a continuous modification during the whole life, the isotopic ratios reflect the situation of the final years before death (for detailed information cf. TÜTKEN 2003). Hence, differences between bones and teeth provide evidence for changes and the mobility of humans and animals during their lifetime (PRICE ET AL. 2002; BENTLEY 2006; BURTON ET AL. 2013).

The ratio of strontium $^{87}\text{Sr}/^{86}\text{Sr}$ depends on mineral salts extracted from rocks and soils through water and is directly connected to the nature of the geological substrates. Dissolved out of rocks by the groundwater, it permeates through rivers and other water sources and is ingested by humans, animals, and plants. Strontium 87, the only radiogenic daughter isotope of Sr, is the product of the radioactive decay of rubidium 87 (FAURE 1986; FAURE ET AL. 2005). Old geological formations and felsic rocks, such as granitoids, are characterised by a very high rubidium content and therefore by high $^{87}\text{Sr}/^{86}\text{Sr}$ ratios, between 0.710 and 0.740 (e.g. RUDNICK/GOLDSTEIN 1990; GOLDSTEIN/JACOBSEN 1988; FERNANDEZ ET AL. 2016), whereas younger rocks and basic rocks, like basalts, show a low rubidium content, resulting in lower $^{87}\text{Sr}/^{86}\text{Sr}$ values of 0.703–0.704 (BOSCH ET AL. 2014). Loess, predominant in the region around Gelot, is a clastic, predominantly silt-sized sediment that is formed by the accumulation of wind-blown dust and therefore shows a mixed signal of the surrounding rock formations.

The ratio of oxygen $^{18}\text{O}/^{16}\text{O}$ in homoeothermic mammals reflects the sources of incorporated water, like drinking water and the water of edible plants (e.g. BALASSE ET AL. 2002, 2009), and is also significant for the surrounding habitat. The values reflect the constitution of local meteoric water derived from precipitation such as rain, snow, or atmospheric moisture. The oxygen composition varies with different factors such as humidity, temperature, rain shadow effects, altitude, latitude, and distance from the sea (LONGINELLI 1984; WHITE ET AL. 2004, 1998). It can evidence local water sources and climate conditions in which an individual grew up and lived. It is therefore another indicator for the origins and movements of humans and animals (BUDD ET AL. 2004; WHITE ET AL. 2004; BENTLEY ET AL. 2005). The oxygen signal of an individual is not only impacted by the surrounding habitat, but also by several physiological factors such as individual metabolism and water intake, body temperature, or heat loss mechanisms (MAKAREVICZ/PEDERZANI 2017). Moreover, culturally related practices such as the intake of brewed, fermented, or cooked beverages

can affect the oxygen ratios (Brettell et al. 2012; ROYER ET AL. 2017). Additionally, Central Asia is dominated by dry, hot, and arid vegetation; groundwater sources such as springs, wells, rivers, or lakes may differ and are not necessarily stable over time (VENTRESCA MILLER 2018). For these reasons, and due to the lack of available data for archaeological material, oxygen ratios calculated by the *Online Isotopes in Precipitation Calculator (OIPC)* of the University of Utah and the Global Network of Isotopes in Precipitation (GNIP) will be used in the following discussion as an additional indicator. The distribution of oxygen in the environment can be predicted using models of isotope fractionating processes and data describing environmental conditions through space and time, resulting in an isotopic landscape model (BOWEN 2003). The OIPC (<http://www.waterisotopes.org>) and the GNIP (<http://isohis.iaea.org>) provide users with modern long-term annual averaged $\delta^{18}\text{O}_w$ values,¹ but the database and estimations are based on modern values recorded at around 398 stations and these only go back to 1960. The precipitation and climatic conditions in prehistoric times were not necessarily similar to today's climate, so the oxygen isotope of precipitation may differ from modern values and should be treated with caution (MAKAREVICZ/PEDERZANI 2017; VENTRESCA MILLER 2018). However, to provide an informative basis it became a common tool to use these isotopic landscape models on archaeological material and gain further insights into paleoclimates and individuals' places of origin.

For the identification of one's origin, the determination of the local, bioavailable isotopic signature is one of the most important issues. Archaeological sites do not show a specific strontium value; they have a bioavailable range, which has to be determined for every site or region. The determination and reliability of the local signal strongly depends on the available material. Concerning older excavations especially, it is often not easy (sometimes it is even impossible) to obtain suitable material. Proven as precise and reliable are, for example, soil samples, local plants, sedentary mammals, or reptiles. The samples should have been selected during the excavations and date to the corresponding period to avoid complications with the influence of fertilisers and modern pollution (BÖHLKE/HORAN 2000; PRICE ET AL. 2002; BENTLEY/KNIPPER 2005). More usual, in contrast, is the situation in which sheep, goat, and cattle represent the main animal bone repertoire of excavations. Especially in pastoral communities, they might provide a wide signal as they travelled around with the humans; they therefore reflect a

1 The OIPC $\delta^{18}\text{O}$ data are expressed after the V-SMOW standard, conversion from V-SMOW to V-PDB after COBLEN ET AL. 1988: $\delta^{18}\text{O}_{\text{Apa}}(\text{V-SMOW}) = 1.03091 \times \delta^{18}\text{O}_{\text{Apa}}(\text{V-PDB}) + 30.91$.

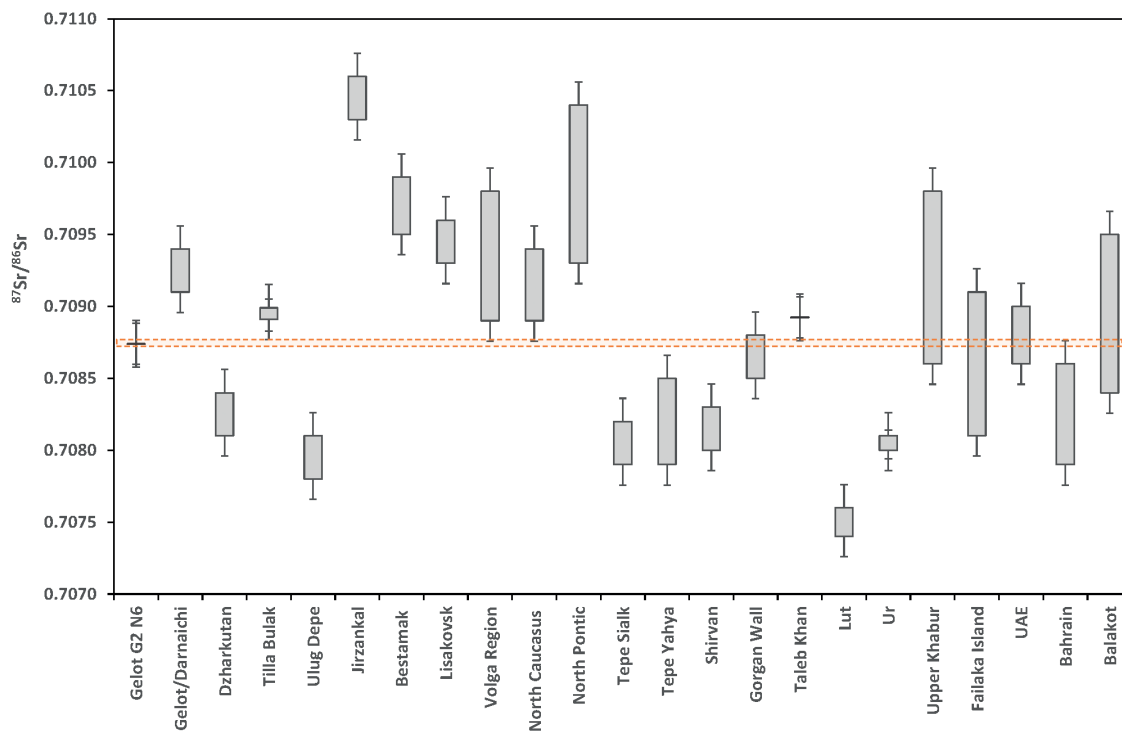


Fig. 3: Boxplot of $^{87}\text{Sr}/^{86}\text{Sr}$ ranges of the Lady from Gelot (dashed orange box) in correlation with the sites mentioned in the text. For Gelot-Darnaichi, the ranges of the human bones are stated as the bioavailable strontium range. References: Dzharkutan, Tillâ-Bulak, Ulug-depe after KROLL ET AL. submitted; Jirzankal after WANG ET AL. 2016; Bestamak, Lisakovsk after VENTRESCA MILLER ET AL. 2018; Volga region, Northern Caucasus and Northern Pontic steppe after GERLING 2015; Tepe Sialk, Gorgan Wall, Shirvan, Taleb Khan, Lut after KROLL in preparation; Ur after KENOYER ET AL. 2013; Upper Khabur after KIBAROĞLU ET AL. 2017; Tepe Yahya, Failaka Island, UAE, Bahrain, Balakot after GREGORICKA 2013.

similar mixed signal as the humans and not necessarily a precise range of the settlement. The local signals that are relevant to the following discussion were obtained in the course of the first author's PhD thesis. Samples of rodents and charred plants have been taken for the determination of the local ranges of Ulug-depe, Dzharkutan, and Tillâ-Bulak (Fig. 2). The detailed description of the methods and results of humans and animals from Ulug-depe, Dzharkutan, Tillâ-Bulak, Sapallitepa, Gelot/Darnaichi, and Saridhzar will be published soon (KROLL ET AL. submitted). The local signals from the Iranian sites of Tepe Sialk, the Gorgan Wall, and Lut Desert (Fig. 2) are presented here as preliminary results for demonstration purposes; the detailed results and methods will be published within the next year (KROLL in preparation).

4 The Lady from Gelot (G2N6)

It is very rare that so many lucky coincidences come together and you are dealing with a burial that is well preserved, not looted, precisely excavated and documented, published in exemplary detail, and with the material provided for isotopic and genetic

investigations. Unfortunately, the material did not yield enough DNA for further investigations. Nevertheless, burial 2 from Gelot has a special importance: it represents the first burial investigated with all available scientific methods, providing precise data for the archaeological evidence from southern Tajikistan.

As mentioned above, the burial dated between 2135 and 1965 cal BCE. Buried there was an approximately 40-year-old woman in a catacomb-type oval burial chamber; the entrance was closed by a mud-brick construction. The skeleton was placed in a crouched position on the left side in the north-eastern part of the chamber. In the south-western part, the skeleton of a sheep and 11 pottery vessels were found. A detailed description of the funeral, along with the typological categorisation and the iconographic attributes of the grave inventory with further references, can be found in VINOGRADOVA (2021: 646–647) and LOMBARDO ET AL. (2014: 9–12) and will be summarised only briefly here. The pottery ensemble belonged to the Sapalli-Dzharkutan phase, respectively the late NMG V/early NMG VI period. Comparable vessels are known from burials at Sapallitepa, Dashly 1, Altyn-Depe, Gonur Depe, and also from Tepe Chalow and Tepe Damghani in

north-eastern Iran. A circular bronze mirror and fragments of several small bronze objects were placed near her left hand. Beads of lapis lazuli and gold were found beside her head. Close to the mirror, a fragment of a marble seal with a rosette in relief was discovered. The rosette motif is well known on metal examples from Altyn-Depe and Shahr-i Sokhta (see **Fig. 1 on page 52**). Analogues to the barrel-shaped lapis lazuli beads have been found in large numbers at several Bronze Age sites including Susa, Shahr-i Sokhta, Altyn-Depe, and Gonur Depe. Yet the most remarkable – and until today unique – artefact in the region was a marble anthropomorphic figurine discovered below the woman's right foot. Although the size varies and the find context was different, it shows iconographic analogues to Early Dynastic worshipper figurines from e.g. Tell Asmar and Mari, but also to the grave statuettes from Shahdad or Dzharkutan (**Fig. 3**). Parallels with the “priest-king” statue from Mohenjo-daro can also be drawn. The excavators described the Gelot statuette as follows: “Probably manufactured in Bactria by local artisans and from local stone (anhydrite) under the influence of Mesopotamian standards. It belonged to a common cultural artistic substratum of which Eastern Iran and Northern Afghanistan were part and provided the links with Mesopotamia and Elam” (LOMBARDO ET AL. 2014: 16). As this burial was also in the burial ground of Gelot, unique in its richness, the question of this woman's identity arises. She was obviously a very important person with a high social status; today we would say that she was a sophisticated woman with international connections. However, what was the story behind her? Where did she come from and what can isotope analyses tell us about her?

5 Results and discussion

Although isotope analyses on archaeological material from the Near East and Central Asia has advanced in the past years, the state of knowledge – especially of strontium and oxygen data – is still fragmentary (cf. **Fig. 2**). The apparently randomly selected sites used as references in the following discussion are based on the available data. The overlap of measurements reflects the complex problems of strontium and oxygen isotopes, which depend on different natural factors and can be consistent in similar geological and climatic regions. The lack of data prompts us to stick to the facts and to exclude investigated sites, rather than target possible origins. Therefore, the following discussion represents a first step – things can change instantly with more data.

The first fact the isotope analyses delivered was that the Lady from Gelot was not only buried in southern Tajikistan. Her bone $\delta^{18}\text{O}_{\text{Apatite}}$ and $^{87}\text{Sr}/^{86}\text{Sr}$ ratios were in the same range as the other four in-

dividuals from Gelot, Darnaichi, and Saridzhar. All $^{87}\text{Sr}/^{86}\text{Sr}$ ratios were between 0.7091 and 0.7094; $\delta^{18}\text{O}_{\text{Apatite}}$ ratios of bone compacta were between -7.8‰ and -6.6‰ . This indicates that these five people, although the archaeological sites covered a chronological time period of around 500 years, lived in the same geological habitat and shared a similar groundwater source – at least for the last years of their life. On the contrary, the results of the isotopic ratios of her tooth enamel differed significantly from the rest of the group. The $^{87}\text{Sr}/^{86}\text{Sr}$ ratio was with 0.70874 ± 0.000005 (1σ) in lower ranges, while the $\delta^{18}\text{O}_{\text{Apatite}}$ ratio out of tooth enamel of -2.8‰ (± 0.046 , $\delta^{18}\text{O}_{\text{DW}} - 4.1\text{‰}^2$) was conspicuously higher, implying that she was born in a hotter, lower, more arid region.

Several intensive studies have been obtained by colleagues in different regions of the Near East and Central Asia (cf. **Fig. 2** and **Fig. 3** with references). According to the available literature, we can exclude as possible origins all investigated regions north and west of the Caspian Sea – such as the northern Caucasian steppes, the Pontic steppes, the Volga region, and also the Andronovo sites of Bestamak and Lisakovsk in the northern Kazakh steppes. All determined local signals are between 0.7090 and 0.7100 (after GERLING 2015; VENTRESCA MILLER ET AL. 2018) – significantly higher than the Lady from Gelot and therefore out of the question as a possible origin. Also, clearly eliminable is Harappa in the Indus Valley and Jirzankal on the eastern Pamir Plateau. Both local signals cover the upper range of the strontium scale (Harappa: 0.7158–0.7189 after KENOYER ET AL. 2013; Jirzankal: 0.7102–0.7106 after WANG ET AL. 2016), caused by very diverse geological realities. The Pamir highlands are geologically characterised by granitoid, resulting in high $^{87}\text{Sr}/^{86}\text{Sr}$ ratios, while the upper Indus Valley displays, due to the widely ramified network of several tributary streams of the Indus River, a wide range on the upper strontium scale (Kenoyer et al. 2013). Yet the local strontium ranges of Balakot near Karachi in the Indus Delta, Failaka Island off the coast of modern Kuwait, and the north-eastern coast of the United Arab Emirates and Bahrain are all in the same range as the Lady from Gelot (0.7079–0.7095 after GREGORICKA 2013). However, aridity and proximity to the sea in the UAE, Bahrain, and Failaka Island resulted in oxygen values around zero and therefore significantly higher (-0.2‰ to -0.6‰ after the OIPC). Meanwhile, Balakot is given by the OIPC with an $\delta^{18}\text{O}_{\text{Water}}$ ratio of -4.6‰ – the same range as the

2 $\delta^{18}\text{O}$ ratios undergo several fractionation steps when synthesised into carbonate. To compare the results with the available database water averages, they need to be recalculated into $\delta^{18}\text{O}$ of drinking water ($\delta^{18}\text{O}_{\text{DW}}$). The formula for medium-sized mammals after CHENERY ET AL. 2012 $\delta^{18}\text{O}_{\text{DW}} = 1.59 \times \delta^{18}\text{O}_{\text{Apatite}}$ (V-SMOW) – 48.634 results in a $\delta^{18}\text{O}_{\text{DW}}$ of -4.1‰ of the Lady from Gelot.

Lady from Gelot. Therefore, an origin in the Indus Delta is possible; and Balakot represents the first site where the resulting ranges suit the Lady from Gelot (**Fig. 3**). Another study investigated the isotopic composition of clay samples from the region of the Upper Khabur, Upper Tigris and Harran plain, and the Pütürge Mountains. While the clay samples from the Khabur and Tigris plains showed $^{87}\text{Sr}/^{86}\text{Sr}$ ratios from 0.7086 to 0.7098, the Pütürge region is characterised by Precambrian metamorphic rocks resulting in much higher strontium ratios ranging from 0.7123 to 0.7220 (after KIBAROĞLU ET AL. 2017). The strontium signature of the Khabur-Tigris region would fit but, due to the mountainous, inner-continental location, the regions showed $\delta^{18}\text{O}_{\text{Water}}$ values around -7‰ (after the GNIP and OIPC) – significantly lower than the Lady from Gelot and therefore excludable.

The pottery of her grave inventory showed clear influences from the Surkhan Darya Valley. Analyses from the region have been carried out on humans from Dzharkutan, Bustan, and Sapallitepa, and local signals have been determined from Dzharkutan and Tillâ-Bulak (KROLL ET AL. submitted). We do not have a determined local signal of Sapallitepa, but it can be assumed it is in a similar range to Tillâ-Bulak. The lower Surkhan Darya Valley is formed by two alluvial fans; Dzharkutan and Bustan were fed by the Sherabad River (KANIUTH 2021), while Tillâ-Bulak was fed by the Ulanbulaksaj River, which runs through the Pashkhurt Valley and continues to Sapallitepa (ASKAROV 1973; KANIUTH 2021). Dzharkutan is located only 25 km east of Tillâ-Bulak, but the two groundwater sources and respectively the strontium signatures are significantly different and well distinguishable. The results prove clearly that the Lady from Gelot does not fit in the determined local ranges of Dzharkutan or Tillâ-Bulak, but is close to the lower limit of Tillâ-Bulak (**Fig. 2** and **Fig. 3**). The local signal of Tillâ-Bulak showed quite a narrow range. The settlement was located in the sub-montane plain west of Dzharkutan, a bit isolated behind a small mountain chain (KANIUTH 2016, 2021), whereas Sapallitepa was not far from the northern bank of the Amu Darya River, in the valley where the Ulanbulaksaj and Amu Darya converge (ASKAROV 1973). It is therefore not excludable that the strontium signature of Sapallitepa covers a wider range, but none of the analysed humans from Sapallitepa conform with the Lady from Gelot (KROLL ET AL. submitted). Hence, for now, we have no evidence of an origin in southern Uzbekistan.

The same applies further west to southern Turkmenistan and sites like Gonur Depe or Altyn-Depe. No data are available from either site: the archaeological connections to Gonur Depe cannot yet be proved by isotopic results. However, Altyn-Depe is located on the northern foothills of the Kopet Dagh Mountains, only 40 km east of Ulug-depe, in the

same geological surrounding (MASSON 1981; BENDEZU-SARMIENTO 2013; LECOMTE 2013). It can be assumed that the strontium signal of Altyn-Depe does not differ much from Ulug-depe. However, the results are in far lower ranges than the Lady from Gelot; an origin in Ulug-depe and respectively Altyn-Depe can therefore be excluded (**Fig. 2** and **Fig. 3**). One interesting hint: several individuals from Ulug-depe showed similar high oxygen ratios to the Lady from Gelot (KROLL ET AL. submitted). Ulug-depe is located on the southern border of the Karakum Desert in a sparse environment with a very hot and arid climate. Although Ulug-depe was not her place of birth, we can assume she came from a region with similar temperature and aridity characteristics.

The iconographic attributes of the figurine strongly indicate analogues to Elamite artefacts, but also to eastern Iranian sites such as Shahdad and Shahr-i Sokhta (HAKEMI 1997; SALVATORI/VIDALE 1997). No data have yet been published from either site, but an expedition under the direction of Hossein Akhiani collected several plant samples from different stations in the Lut Desert (cf. TRESCHER 2017: 37; LYONS ET AL. 2020; RUDOV ET AL. 2021) and this has enabled the first strontium results of the region. The determined signal of 0.7074–0.7076 proved clearly the different geological realities, resulting in a lower range than all results obtained from Central Asia (MASHKOUR/KROLL unpublished report). The investigated area of more than 200 km² showed quite a homogeneous strontium signal, but settlements such as Shahdad might differ in the signal due to varying groundwater sources like dwells or underground streams. Shahr-i Sokhta owed its existence to the Helmand River in whose northern delta it was located, on the Ram Rud terrace (TOSI 1968). A single mouse from Tepe Taleb Khan, directly south of Shahr-i Sokhta, showed a strontium signal close to the Lady from Gelot (cf. **Fig. 3**; KROLL in preparation) and provide a bioavailable signal of the region in a different strontium range. Hence, an origin in the Lut Desert can clearly be excluded, but the signal of Taleb Khan is close – although results from one mouse is too little for a reliable statement. Therefore, Shahdad and Shahr-i Sokhta as a place of birth are, due to the lack of data, not definitely excludable yet. The local signal of Tepe Sialk on the Central Iranian High Plateau (KROLL ET AL. in preparation) ranged between Ulug-depe and Dzharkutan, and can therefore also be excluded. In the same range and therefore also excludable were the local strontium signals of Tepe Yahya in south-western Iran (0.7079–0.7085 after GREGORICKA 2013) and two samples from Ur on the Euphrates River in southern Mesopotamia (0.7080–0.7081 after KENOYER ET AL. 2013).

Up to now, the Gorgan plain in north-eastern Iran was the only investigated region that provided a

suitable oxygen signature and the same strontium range as the Lady from Gelot. Kindly supported by Eberhard Sauer and Marjan Mashkour, who collected charred plants on different excavations along the Gorgan Wall, it was possible to gain the first local strontium signature of the region (SAUER ET AL. 2013; SAUER 2017; KROLL in preparation). The wall is located at the south-eastern corner of the Caspian Sea in a geographic narrowing between the Elburz and Kopet Dagh Mountain ranges, which always connected the northern steppes and the Iranian heartland. The region is characterised by a hot and arid climate and showed, due to a homogeneous environment, a precise strontium signal of 0.7085–0.7088 (KROLL in preparation). The OIPC provided $\delta^{18}\text{O}_{\text{Water}}$ ratios for the region between -4‰ and -4.7‰, the GNIP around -6‰ (Teheran monitoring station), in a comparable range as the Lady from Gelot with $\delta^{18}\text{O}_{\text{DW}}$ -4.1‰. Of course, the Gorgan Wall was hardly her place of origin as this Sasanian fortification system did not exist yet – but, for example, the site of Tureng Tepe (see **Fig. 1 on page 118**) was close and in the same geological environment. No isotopic data are available from Tureng Tepe itself, but the settlement was a powerful urban centre during the Bronze Age and played an important role in interregional systems. Tureng Tepe is characterised by another mix of cultures through connections to southern Central Asia and sites such as Namazga Depe (see **Fig. 1 on page 52**), as well as to the Iranian heartland and sites like Tepe Sialk or Šahr-i Sōhta (OLSON/THORNTON 2019). The tradition of figurines as grave goods was also a common custom in Tureng Tepe. Several human figurines with disparate iconographic attributes have been discovered (cf. OLSON/THORNTON 2019: 14 Fig. 11). The very diverse burial ensemble of the Lady from Gelot could indeed be explained by a cultural background from Tureng Tepe as a hub between Central Asia and Iran, in combination with the traditions of the prevailing cultural communities in southern Tajikistan. Since the 4th millennium BCE, at least, a network of distribution and the frequent exchange of raw material – such as lapis lazuli, gold, tin, or copper – from Central Asia, through Iran and Caucasia, is evidenced (THOMALSKY ET AL. 2013). Apparently, people also migrated along these connecting trade routes and certain social interactions really existed.

6 Conclusion

The discussion above has demonstrated quite clearly the problem of the determination of one's origin through isotopic investigations. Although it seems that more questions arose with the results of the isotope analyses, some facts can be delivered as follows. The Lady from Gelot was a first-generation migrant. Whether she came to southern Tajikistan for

marriage, trade, work, exploration, or just human behaviour is a question we cannot answer. However, we know that she stayed and spent the last years of her life in the same region as the other people from Gelot and Darnaichi. She was well integrated in the local community and buried following the local funeral traditions. She was also powerful; if she was powerful because she was a foreigner or if it was an exchange of two powerful families is something we can also only speculate about. The figurine found in her grave was probably made by Bactrian artisans with local material. We do not know if it was made as a burial object or whether it belonged to her long before her death. Yet it reflects the empathy, knowledge, and skills of the local artisans who produced an artefact according to the idea of a foreign woman, with the iconographic attributes of a different cultural background. We cannot definitely name the place of her origin. However, we can demonstrate that, up to now, within a respectable number of investigated regions, the only isotopic signature corresponding to her signature is the south-eastern Caspian seashore, respectively the Gorgan plain in north-eastern Iran, where Tureng Tepe was an influential urban centre during the Bronze Age. Considering the Gorgan plain or Tureng Tepe as the place of her origin, we can not only demonstrate that she was a woman who travelled more than 1,000 kilometres between harsh deserts and high mountains, but we can also substantiate active dynamics – the elite, at least, migrated within a wide area between north-eastern Iran and southern Central Asia.

Acknowledgements: We would like to thank the Laboratory AASPE, UMR 7209 of the Museum National d'Histoire Naturelle in Paris, the Service de Systématique Moléculaire and Plateforme Paléogénomique et génétique moléculaire of the Museum National d'Histoire in Paris, and the Laboratory of Geoscience in Montpellier for hosting our project. The isotopic part of the project was funded by the LIA HAOMA – CNRS Project, the Nestlé Foundation (Grant N° SJ866-17), the Shelby White and Leon Levy Program for Archaeological Publication, and the INSU-MITI-ILIADE project (2018–2019; D.B.). The results for this article would not exist without the work, support and inspiration of Stephan Kroll, Mirko Novák, Julio Bendezu-Sarmiento, Johanna Lhuillier, Élise Luneau, Kai Kaniuth, Céline Bon, and Margareta Tengberg. Special gratitude should be addressed to Olivier Tombret, Denis Fiorillo, Olivier Bruguier, Elise Dufour, Antoine Zazzo, and Marie Balasse for constant advice and support during the lab work.

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Nomadic Influence in Sogdian Domains

New Discoveries of Ancient Weapons in the Bukhara Oasis (Uzbekistan)

Andrei V. Omel'chenko

Abstract: New excavations of the Paikend city site, conducted by the Bukhara Expedition of the State Hermitage (Saint Petersburg) and of the Institute of Archaeology of the Academy of Sciences of the Republic of Uzbekistan, showed that the Hellenistic fortress was rebuilt in the 2nd to 1st century BCE. Changes also affected the material culture: in these layers, there are numerous finds of weapons and military equipment. Some objects were apparently kept in the treasury of the local fire temple. After items became unusable, they were placed in special sacrificial pits – βόθροι. Similar practices existed in the temples of other parts of Central Asia: in Bactria, Sogdiana, and Chach. The finds in Paikend include fragments of swords, daggers, spear tips, and arrowheads, armour plates, bone siyahs from bows, and plaques from *gorytus*. Details of accoutrements are numerous: rivets, nails, plaques, onlays (belt ornaments), buttons, buckles, etc. made from bone, shell, copper, iron, and turquoise. Some artefacts had gold foil appliqué. Additionally, there were *phalera* with acanthus leaf decorations and a gold plaque with coiled griffin embossed images. The engraved figure on the bronze pommel of a dagger grip could be a portrait of the king Hyrcodes, the founder of one of Sogdian domains of the post-Hellenistic period. Finds have analogies with materials that were found in the ranges of nomadic objects of the 1st century BCE to the 1st/2nd century CE in Bukhara (Lyavandak, Kyzyltepa, Kuyumazar) and Samarkand (Orlat, etc.), Sogdiana, Bactria (kurgans of Bishkent Valley, the Oxus temple, Tillâ-Tepe), the middle reach of the Syr Darya River, and Chorasmia. Similar objects were discovered at the archaeological sites associated with Tokharians, Xiongnu, Sacaе, and Sarmatians in the broad territories from northern China to Afghanistan and the north Pontic area.

Keywords: archaeology, nomads, Xiongnu-Sarmatian era, weapons and warriors' accoutrements, Uzbekistan, Bukhara oasis, Paikend city site, temple treasury.

Резюме: Новые раскопки городища Пайкенд, проводимые Бухарской экспедицией Государственного Эрмитажа (Санкт-Петербург) и Института археологии Академии Наук Республики Узбекистан, показали, что во II–I вв. до н.э. крепость эллинистического периода была перестроена. Изменения затронули и материальную культуру: в этих слоях было найдено большое количество оружия и воинского снаряжения. Часть из этих предметов, по-видимому, хранилась в сокровищнице местного храма огня. После прихода в негодность они помещались в специальные жертвенные ямы — ботросы. Подобная практика существовала и в храмах других областей Средней Азии: в Бактрии, Согде, Чаче. В Пайкенде были найдены фрагменты мечей, кинжалы, наконечники копий и стрел, панцирные пластины, костяные накладки на лук и горит. В большом количестве обнаружены детали амуниции: заклепки, гвоздики, бляшки, накладки, пуговицы, пряжки, вставки и т. д., изготовленные из кости, раковины, меди, железа, бирюзы. Некоторые артефакты украшены аппликациями из золотой фольги. Обнаружен медный фалар с орнаментом из листьев аканта и золотая бляшка с изображением свернувшегося грифона. На бронзовом навершии одного из мечей, по-видимому, процарапано изображение царя Гиркода, основателя одного из владений в пост-эллинистической Согдиане. Находки имеют аналогии в кочевых комплексах Бухарского и Самаркандского Согда, Бактрии (могильники Бешкентской долины, храм Окса, Тилля-тепе), Средней Сырдарьи и Хорезма во временном промежутке с I в. до н.э. по II вв. н.э. Сходные предметы были обнаружены на археологических памятниках, связанных с присутствием тохаров, хунну, саков и сарматов на обширных территориях от Северного Китая и Афганистана до Северного Причерноморья.

Ключевые слова: археология, кочевники, хунно-сарматская эпоха, оружие и военное снаряжение, Узбекистан, Бухарский оазис, городище Пайкенд, храмовая сокровищница.



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DOI: 10.13173/9783447118804.167

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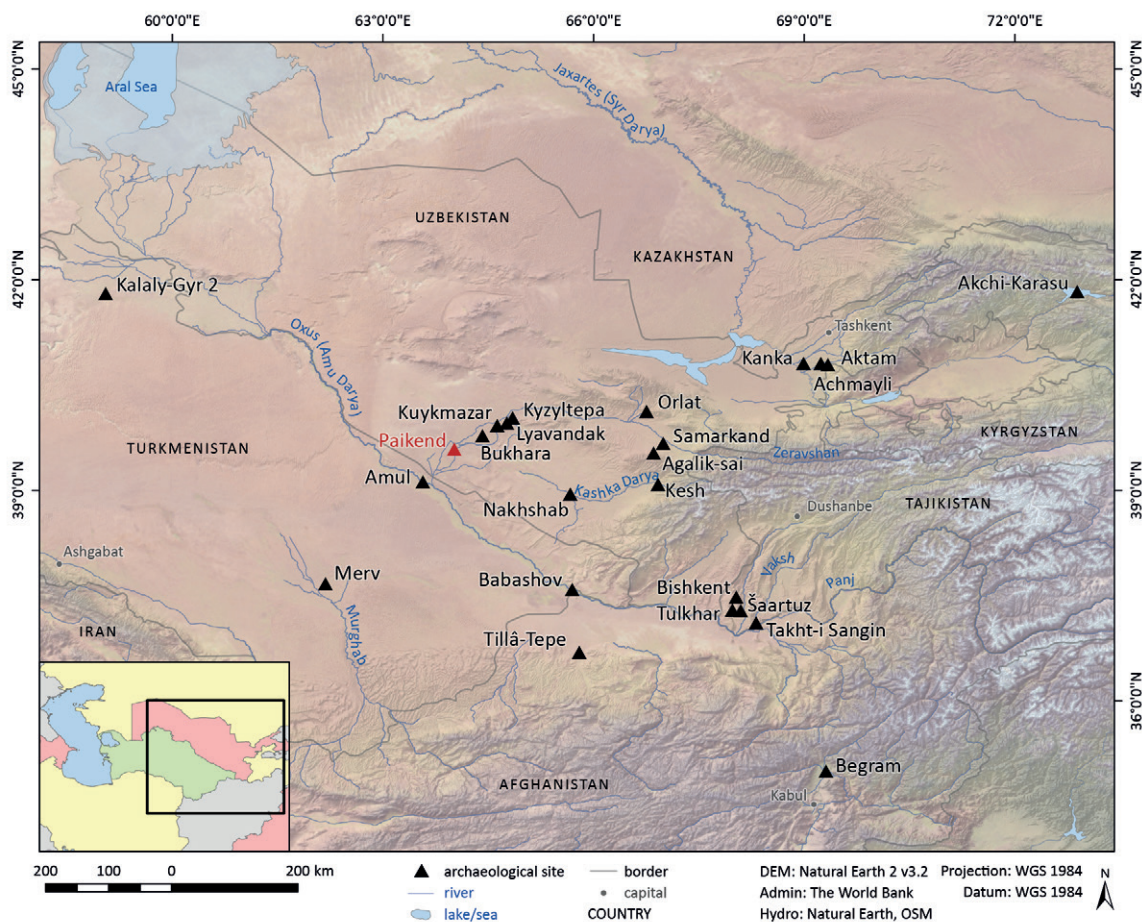


Fig. 1a: Some ancient sites of the Eurasian steppe belt with weapon assemblages, central regions (RUTISHAUSER/OMELCHENKO 2022).

1 Location, the history of archaeological investigation, and the first finds of ancient weapons in Paikend

Archaeological data have shown that Paikend (Paykand), the famous town-to-be in western Sogdiana, was founded during the Early Hellenistic period. The first fortress was apparently built under Antiochus I, when he was developing the eastern provinces of the Seleucid Empire. The choice of location was deliberate; it was at a distance of two caravan stages (50–60 km) from the central part of the Bukhara oasis and of two stages from Amul, the old and important crossing point of the Amu Darya River (Fig. 1a). Several trade routes meet in this area: one coming from central Sogdiana (Samarkand) leads towards Margiana (Merv); and one coming from Chorasmia (Khwarazm) leads towards southern Sogdiana (Nakhshab, Kesh) and Bactria-Tokharistan (Fig. 1a). Therefore, Paikend always played a large part in contacts between China and Iran, and the Eurasian steppes and India.

Medieval author Narshakhī reported that Paikend was older than Bukhara, well-fortified, and used to be called “Brazen city” (*shārestān-e rūīn*) (AN-NARŠAHĪ 1984: 26, 30, 61). Interestingly, Firdousi mentions a “Brazen castle” (*rūīn-dež* or *dež-e rūīn*) in his “Shahnameh” (FIRDOUSI 1969: 153, 158, 160–61, 182–84, 428). Also according to this source, Fereydun (Thraetaona) – the legendary Iranian king and ruler of Iran and Turan – constructed one of the oldest fire temples in Paikend (then called Kunduz) (FIRDOUSI 1965: 358–359). In this context it should be remembered that, according to al-Biruni, the Zoroastrian priests (mages) of Bukhara used to gather during the festivals (AL-BIRUNI 1957: 254).

It is quite possible (and archaeological data prove it) that Paikend’s castle had been destined to defend the fire temple all along. As the famous Oxus temple (Takht-i Sangin) was erected at the confluence of the Vakhsh and Panj Rivers, the source of the Amu Darya, Paikend’s temple was placed at a junction of two main Sogdian rivers – the Zeravshan and the Kashka Darya (Fig. 1a).

Initially, Paikend was a small promontory fort and remained such until the Later Antique period. Excavations led by Grigory L. Semenov, a founder

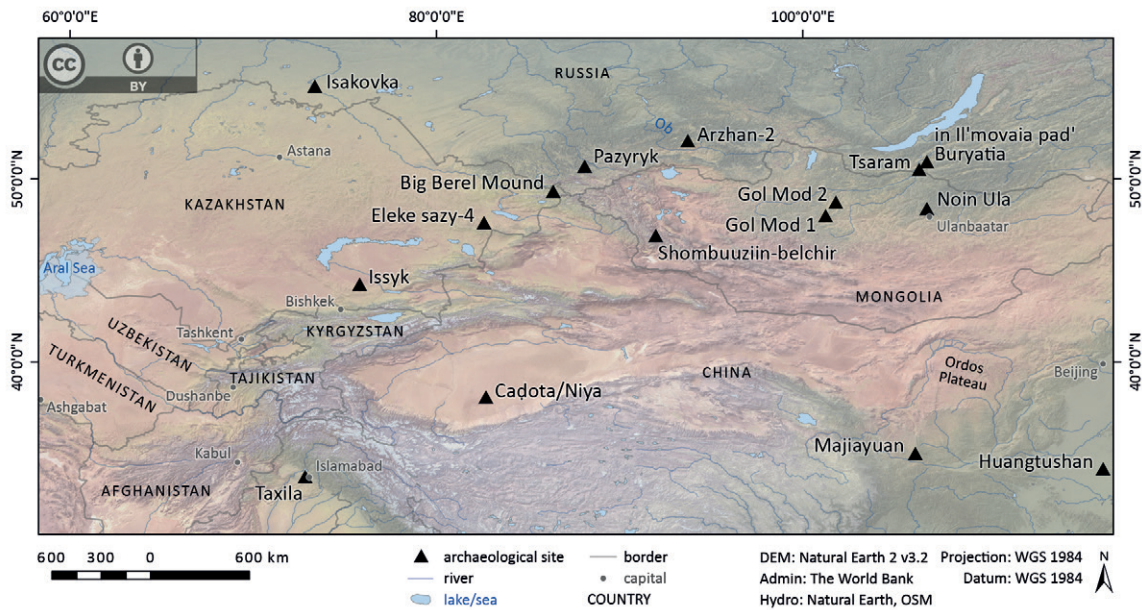


Fig. 1b: Some ancient sites of the Eurasian steppe belt with weapon assemblages, eastern regions (RUTISHAUSER/OMELCHENKO 2022)



Fig. 1c: Some ancient sites of the Eurasian steppe belt with weapon assemblages, western regions (RUTISHAUSER/OMELCHENKO 2022)

of the Bukhara Expedition of the State Hermitage Museum (St. Petersburg), and a specialist from the Institute of Archaeology of Uzbekistan, Sh.T. Adylov, revealed that the citadel of Paikend had reached its final size at the end of the 3rd to the 4th century CE. From the beginning of the research that started in 1981 (MUHAMEDŽANOV ET AL. 1988), ancient weapons and equipment were discovered continually. There was, for instance, a dagger (*acinaces*) found near the eastern fortification wall and a jet (gemstone) belt buckle decorated with gold cloves from

the northern “archer’s corridor”¹. Then some daggers and knives were discovered during the course of the excavations of the fire temple on the citadel.

It was evident that these finds were older than the defensive walls of the fortress studied up to that time. Relevant items were found in the north of the Bukhara oasis, in kurgans excavated by the famous investigator of nomads in Sogdiana, O.V. Obelchenko, during the 1950s to 1970s. He dated them to the 2nd–1st century BCE (OBEL’ČENKO 1992).

1 Not published. The find was made by A.I. Naymark.



Fig. 2: Paikend. Citadel. Aerial view (photo by Bukharan Archaeological Expedition, 2019).

1 – Fire temple; 2 – South bypass (“archer’s”) fortress corridor, the area of *bothroi*; 3 – Room with *favissa*; 4 – North-eastern sector, the area of a forge; 5 – North-western sector, entrance to the citadel; 6 – Barracks; 7 – Southern entrance.

Then interesting materials were obtained during excavations of Early Medieval layers in the south-eastern part of the citadel (Period 2). Ancient weapons hidden under the floor were found in an area adjacent to the south bypass (“archer’s”) fortress corridor (Fig. 2). However, related finds, including a fragment of a wall painting, bullae, and especially Bukhar Khudahs drachmas, dated the hoard to the very beginning of the 8th century CE. Traces of a big fire allowed authors of the research to connect the hiding of the antiquated arms to the attack on Paikend by the Arab troops of Qutayba ibn Muslim in 705/706. They also supposed that the items were initially stored in the fire temple’s treasury (SEMENOV/ADYLOV 2006: 36–43).

2 Modern excavations in Paikend; the discovery of *bothroi* and *favissa*

In the 2010s, the Bukhara expedition at the citadel of Paikend restarted excavations of the northern fortifications. Remains of the first Hellenistic fortress

were found and it was also shown that it was rebuilt in the second half of the 2nd century BCE. These cultural layers included many iron weapons (MIRZAAKHMEDOV ET AL. 2013: 13–20; Figs. 29–47, 61–63; MIRZAAKHMEDOV ET AL. 2016: 17–21; Figs. 44, 45, 47).

Finds appeared in large numbers after the excavations were resumed in 2016 in the southern bypass (“archer’s”) corridor of the citadel. During the works, it was established that hoarding was rather a common feature at the site. Investigations of Period 2 revealed a significant number of ancient weapons. Items were concentrated in special pits (35 × 25 cm, up to 30 cm deep) at the location of the transition from the *şufas* (adobe benches) to the floor (OMEL’ČENKO ET AL. 2018: Figs. 26–30). Judging by the discovery of a coin minted by king Asbar, the ancient items here, as well as in the adjacent area, were placed in a much later Early Medieval chronological context.

The floor and *şufas* of Period 2 were built on levelled structures of Period 3. In this horizon, the southern fortress corridor was split into compartments by thin walls, which had exits to a common passage. The same corridor-comb layout is typical



Fig. 3: Citadel. 1 – *Bothroi* of the southern corridor; 2 – Room with *Bothroi* (photos by the author, 2017).

for the barracks that occupied the south-western sector of the citadel. Archaeological finds had analogies in the so-called “Kushan-Sasanian complex” of the end of the 3rd to the 4th century CE (OMEL'CHENKO 2016: 81–84; Figs. 5, 8–10).

The room structures in the south-eastern sector overlapped filling on the floor of the corridor, which is 4.2 m wide (Period 4). It runs, like in the second horizon, along the inner façade of the fortress wall. The fourth floor, being the last one, lies 1.35–1.5 m below the base of the 3rd Period.² The floor was built

² Fragments of pottery from the lowest floor are few. There were only rims of cylinder-conical beakers; no stemmed

on a platform, which was over 2 m thick and made of adobe bricks measuring 46–48 × 26–30 × 9–10 and 38–42 × 38–42 × 9–10 cm.³

As in the second horizon, special pits were made near the *şuffa* benches along the walls, and then “hidden” by plastering grout (Fig. 3:1). We called them “*bothroi*” (singular *bothros*) analogically with the originals from Greece (βόθρος, βόθροι) and the Oxus temple in Bactria. They were up to 69 cm in

goblets were found.

³ Tunnels of Medieval “treasure hunters” (16th to 18th century) demolished constructions and floors along almost the entire corridor, except for the western section.

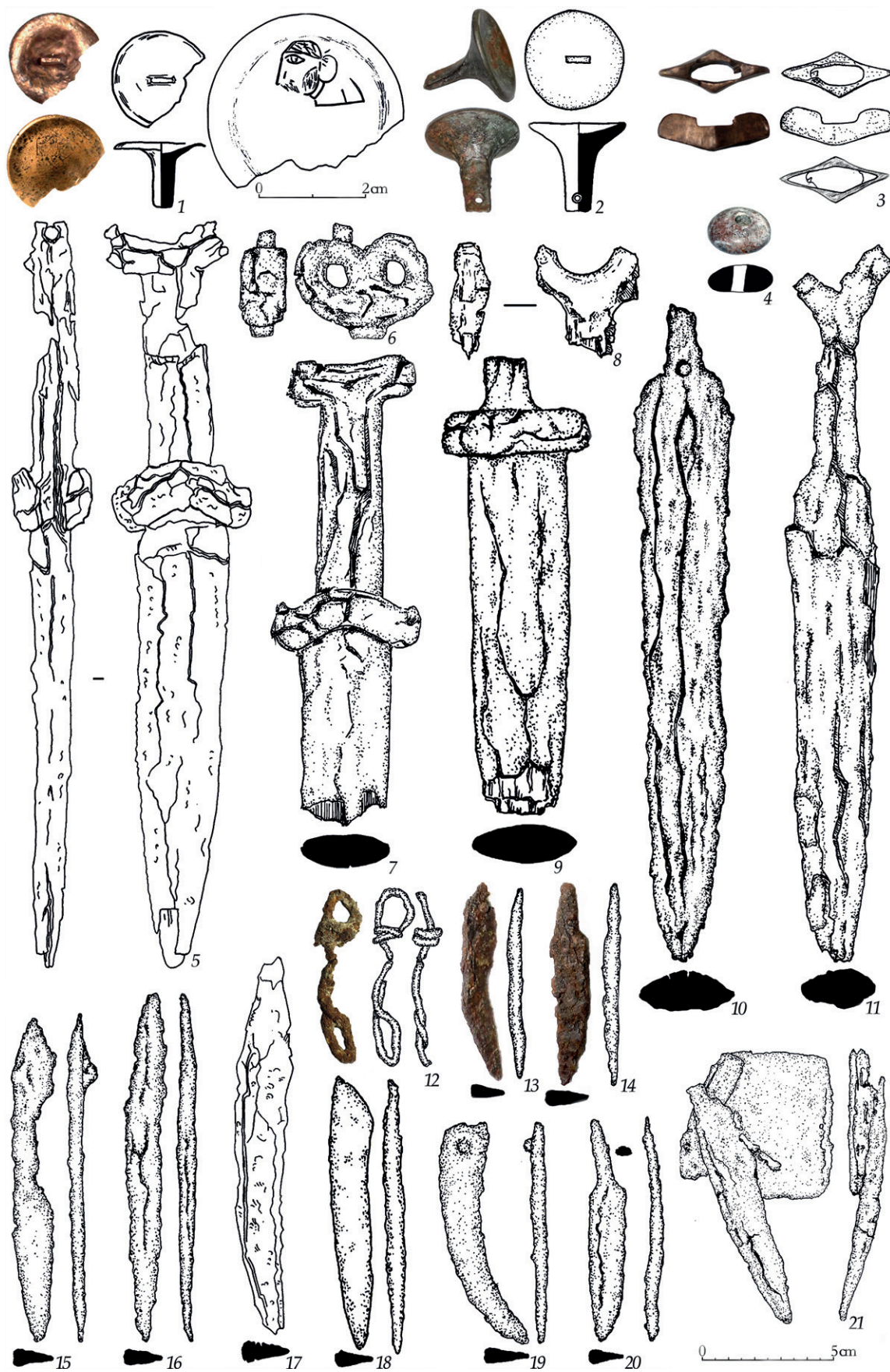


Fig. 4: *Bothroi* and *favissa*. Daggers, knives, details. 1-3 - bronze; 4 - stone; 5-21 - iron.

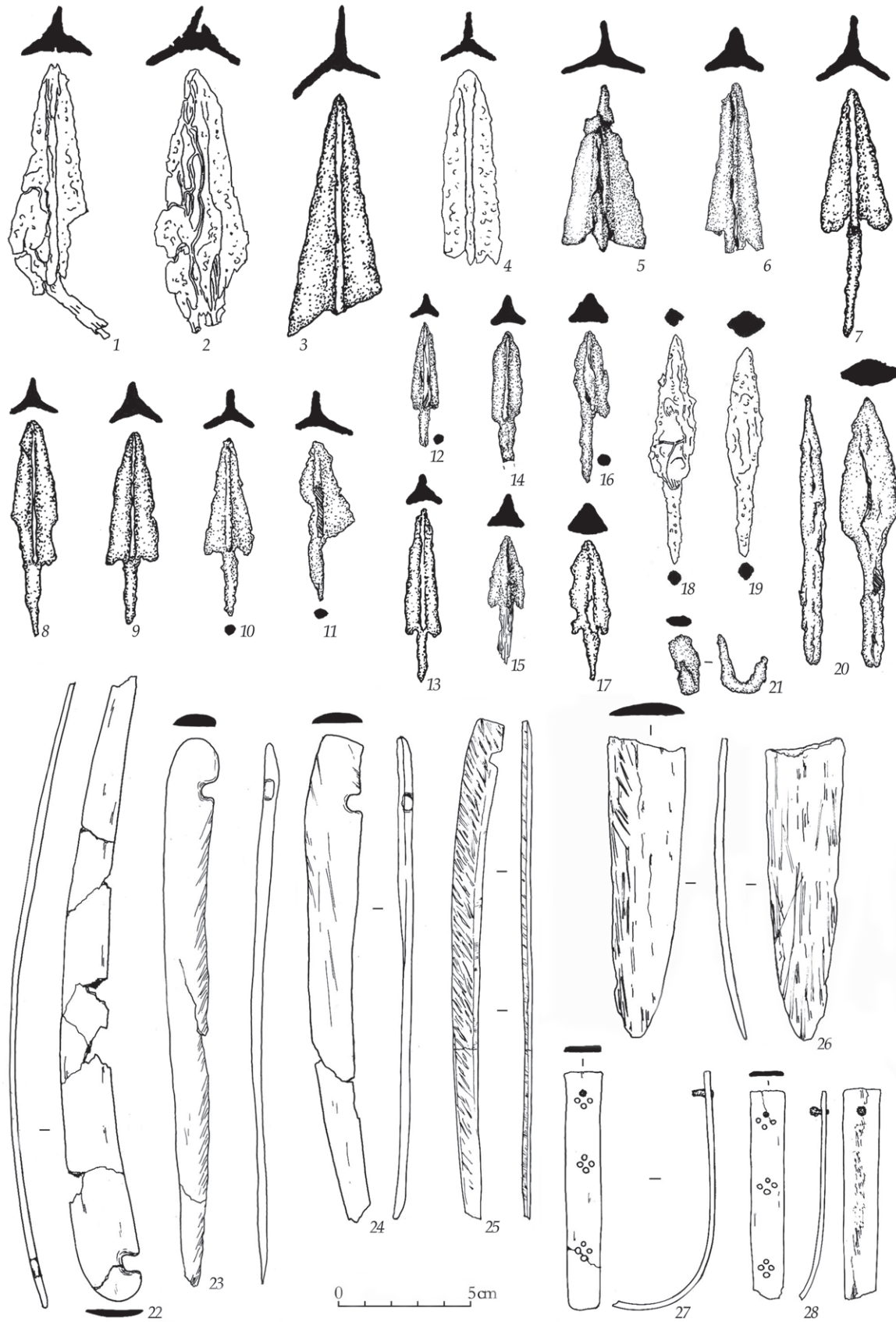


Fig. 5: Arrowheads, details of bows and quivers. 1-21 – iron; 22-28 – bone, 27, 28 – with copper nails.

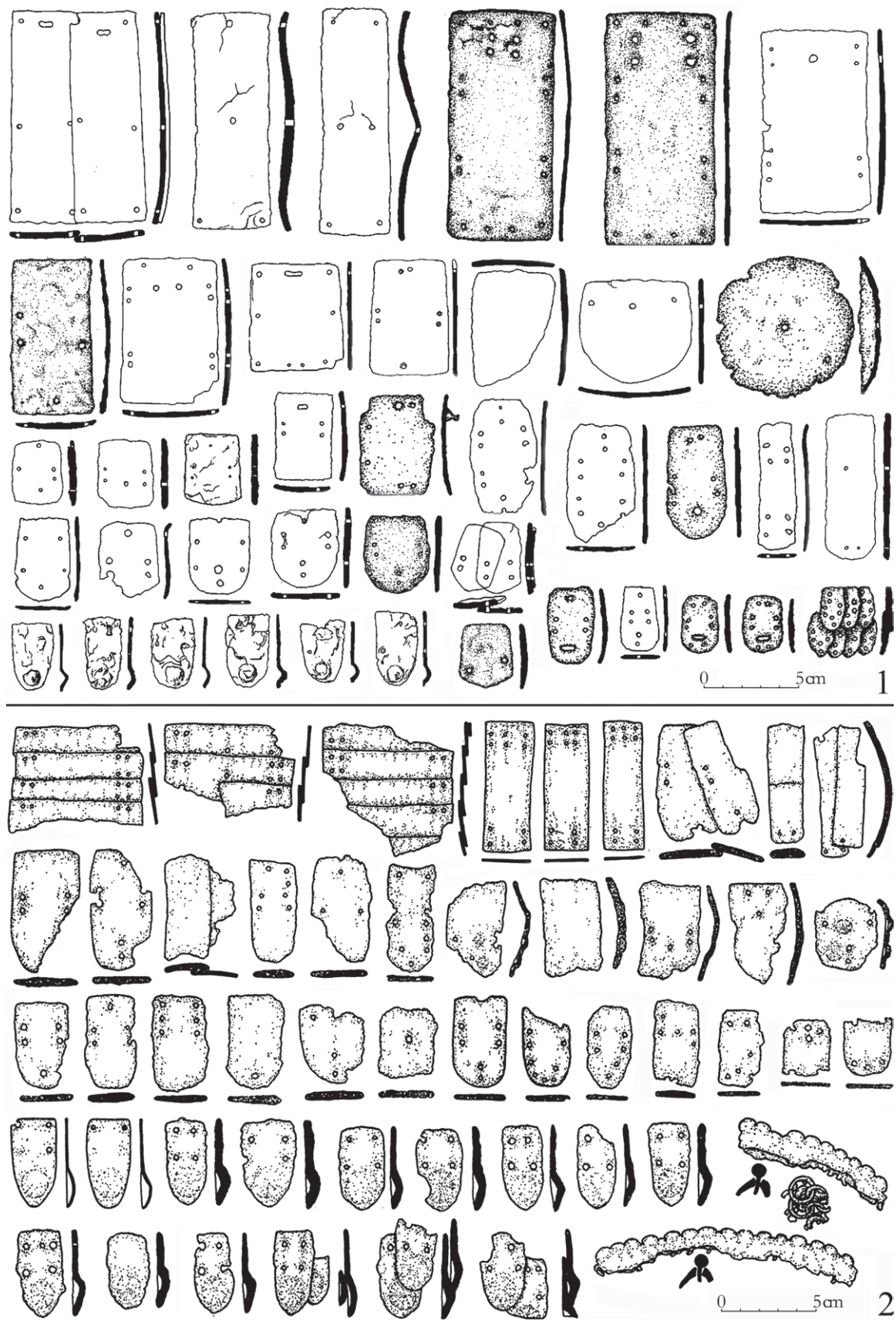


Fig. 6: Armour plates, iron.

1 – Paikend; 2 – Akchi-Karasu (after: KOŽOMBERDIEV/HUDÁKOV 1987: 92–97).



Fig. 7: *Bothroi* and *favissa*, ironworks.

7, 8 – with copper appliqué; 41 – red substances; 49, 50 – semi-finished products; 51 – part of a furnace wall.

diameter at the mouth, up to 146 cm at the bottom, and 90 cm deep. Some pits slightly overlapped one another. There was a smaller hole (30 × 20 × 50 cm) in the floor as well. All pits were filled with arms and accoutrements, mostly of iron, but also bronze, precious metals, stone, and bone. Scales of lacquer ware,⁴ and fibres of cloth and wood are marked; some fragments had traces of colouring. Currently, at least ca. 400 items with a recognisable shape can be considered.⁵

Objects were buried almost simultaneously. The contents of each *bothros* are similar, but the rules, according to which the *bothroi* were filled with items, remain unclear.

It is also obvious that many of the hidden things were already in a bad state of preservation before they were put into the pits. Thus, they had been lying somewhere for a long time. Therefore, the presence of a temple treasury in the citadel of Paikend is entirely possible.

An example of such a function is apparently provided by a room (7.8 × 7 m) that was excavated behind an inner wall of the southern bypass corridor and in the same stratigraphic conditions (Fig. 3:2). A prominent feature of the room was a tall, wide bench (2.5 × 0.9 × 0.9 m) with an attached box (2.1 × 1.3 × 0.45 m) of adobe bricks (45-46 × 40 × 10 cm). It was packed with fragments of burnt bricks and soil. Some objects were discovered in this layer and at the bottom of the box. They were missed in antiquity when transferring other items. Several items were also found on the two lower floors related to the box. Apparently, these were dropped during transfer. Other ones appeared to be in the upper layers, relocated there by Medieval treasure hunters who dug up their pits.

As for the function of the box, it is evidently a *favissa* – a place to keep obsolete temple utensils. The things hidden in the citadel's southern bypass corridor could originate from such a construction. Trapezoid-shaped burnt bricks, which were applied in repair structures and inside the box, give us the dates of a reconstruction of the room with the *favissa*. They were used for the reinforcement of walls, for *şufas*, etc. in the fire temple of Periods 3–4. Thus, the reconstruction could be dated to the end of the 3rd and the beginning of the 4th century CE, but the original constructions are obviously older.

Iron knives with curved blades (Fig. 4:13–21), stemmed three-vane arrowheads (Fig. 5:1–15), and

armour plates (Fig. 6:1) were abundant in the *bothroi*. There are also many iron and bronze rivets, nails, parts of a battle-belt set (especially spoon-shaped strap end-pieces, plaques, and buckles), one iron bell (Fig. 7:34), and one hollow copper plaque in the shape of a man's head (Fig. 8:8). In several cases, iron inlay with copper is recorded (Fig. 7:7, 8). There are many iron finger-rings with an extended part, but without inserts or images (Fig. 7:35–40). They are mostly very massive, suggesting that the items were used by warriors.

Also, iron fragments of a sword(?), daggers, a two-blade javelin-head(?) (Fig. 5:20), a counterweight, wire for weapon hanging (Fig. 4:12), and part of a quiver hook (Fig. 5:21) were found. The bronze object with a disk-shaped concave base and a dowel with a hole is considered to be the funnel-shaped finial (pommel) of a sword or dagger (Fig. 4:2). One more round pommel was made of stone. Otherwise, it could be a "lock" on a girdle (Fig. 4:4).

A large iron ring with rivets on the reverse side was found in situ, and inside of it was placed a bowl-shaped item with a "lobe" attached. The symmetrical lobe was lost. There were pebbles inside the "cup" (to create a sound effect?) and remnants of red leather (lacquer?) on the backside of all parts. Perhaps all of these are parts of an umbo. Nearby an eight-shaped iron object was found, possibly a handle (Fig. 7:41).

Bone objects are represented by plates of a composite bow, bent plates-appliqués of *gorytos*(?) with pointille ornament, spoon-shaped strap end-pieces (Fig. 8:17), and a plaque(?) imitating a jade one (Fig. 8:23), among other items. We also find cowrie shells, their imitations (Fig. 8:20–22), and fragments of glass vessels (Fig. 8:28–31).

Precious metal objects are few; apparently, valuable items were taken away in antiquity. These include two hollow barrel-shaped silver objects with wide openings to hang them on a thick cord or a dowel, a hollow mushroom-shaped object filled with mastic, bent pieces of silver plates⁶ up to 1.5 mm thick (maybe decorations for vessel surfaces), hats of two large iron rivets covered with silver foil (Fig. 8:4), and a round silver plaque with a central protrusion patched with gold (Fig. 9:17).

There were many pieces of gold foil, which could cover iron objects. Some curved items indicate that, in some cases, they formed geometrical, floral, and maybe stylised zoomorphic ornaments (Fig. 9:1–5). The technique of appliqué of gold on iron is unusual: the fragments are covered with fine notches. Strokes were made with a very tiny punch, which had a horseshoe-shaped end (0.03 cm diameter).

4 The analysis was held by Senior Researcher Olga G. Novikova, PhD, in the Department of Scientific and Technical Expertise of the Hermitage State Museum; the expert advice No. 2915 is dated 24 November 2021.

5 D.O. Holov, restorer of the Bukhara expedition and the Bukhara Museum (Ark), is working on the restoration of objects. However, almost half of the iron pieces are completely delaminated and, since there were heaped, it is impossible to imagine their appearance.

6 According to the expert advice of Sergey V. Khavrin from the Hermitage Department of Scientific and Technical Expertise, there was fine silver (97–99%).



Fig. 8: *Bothroi* and *favissa*, finds.

1, 6–16, 25 – copper (1 – with gold appliqué; 13 – with wood); 2 – jet (gemstone) and gold; 3, 5, 24 – silver; 4 – iron with silver; 17–20, 23 – bone; 21, 22 – shell; 26 – gold appliqué; 27 – lacquers; 28–31 – glass.

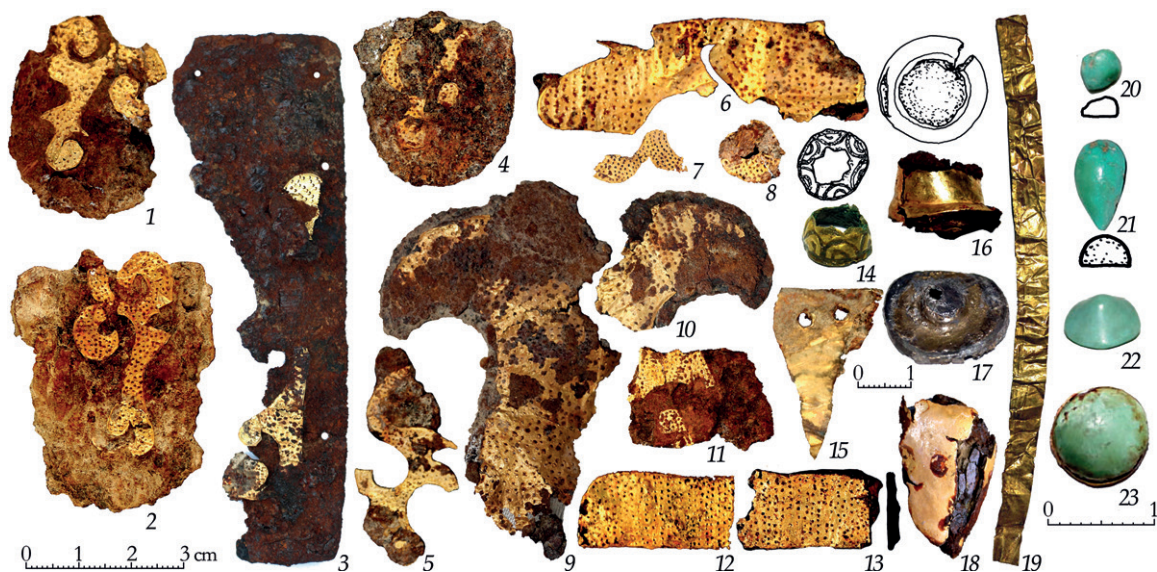


Fig. 9: 1–18 – Gold appliques; 20–23 – turquoise (23 – with gold).

Pieces of smooth foil are rare; one piece resembles an image of a griffin or a winged dragon on a black frame (Fig. 8:26). A thicker gold leaf covers a mushroom-shaped iron object (Fig. 9:16); in another case, only the precious hemispherical cover with embossed ornament is left (Fig. 9:14). A crumpled gold band (10.5 × 0.6 × 0.02 cm) (Fig. 9:19) and some turquoise insets (Fig. 9:20–23)⁷ were found as well.

The most remarkable find is a hollow plaque of cast gold, with a lead rod inside for attaching. It is decorated with a relief of a curled-up eagle-headed griffin (Fig. 10:4).

A piece of iron ingot and fragments of an iron-work furnace (Fig. 7:49–51) discovered there are of great importance. Similar objects were found in the “archer’s corridor” in the north-western corner of the citadel (MIRZAAHMEDOV ET AL. 2013: 18, 20; Figs. 61–63). Such finds evidence, with more and more confidence, that there was a local smithy or even metallurgical production in Paikend during antiquity.⁸

Fragmented iron sheath brackets, rings, a buckle with openwork scroll ornament (Fig. 7:1), plaques, and rivets (also copper ones) were found in the *fa-vissa* and on the floor nearby. They are not numerous, but are of various sizes.

A fragment of a thin-walled copper object was excavated between the bricks filling the box. The ob-

ject is shaped like a hemispherical bowl (Fig. 8:25) and is decorated with an embossed-relief acanthus ornament. It has small holes located symmetrically on the wide bent rim. The item could thus be interpreted as a *phalera* for a horse.

There was also a fragment of a jet (gemstone) or (rhinoceros?) horn buckle decorated with gold small nails on the edges (Fig. 8:2). Most remarkable is the find of a rhombic bronze cross-guard, one side of which was damaged by a chopping blow (Fig. 4:3),⁹ and a funnel-shaped finial. An image of a male bust in profile was scratched on the inner surface (Fig. 4:1).

As researchers who published the first “treasure hoard” from the so-called “burnt room” have shown, the dates of some objects were significantly different (SEMENOV/ADYLOV 2006: 40–43). To some extent, this is true for the new finds. However, most of them, in my opinion, could be dated as far back as the 1st century BCE to the 1st (possibly the beginning of the 2nd) century CE.

3 Analogies, historical and cultural markers, and chronology¹⁰

Paikend weapons – swords, daggers, arrowheads – have the greatest similarity with items from the burial mounds of the Bukhara oasis (OBEL'ČENKO 1978: Figs. 1–4), the Bactrian monuments such as

7 There were turquoise inserts in small things (nail-heads and earrings?) of the treasure of Period 2 (MIRZAAHMEDOV ET AL. 2016: Fig. 28: 2–4; 30, 7–9).

8 A smithy was found near the north-east corner of the early fortress wall in 2019. A furnace can be dated to the beginning of the 3rd century BCE and had fragments of linings. According to Olga A. Papakristou, it was intended for metal working of pointed or bladed weapons.

9 In 2000, the very same whole cross-guard was found here in the upper strata (SEMENOV ET AL. 2001: Fig. 44).

10 Detailed description and analysis of the finds from the Paikend hoards would deserve a special monograph – this paper represents one step in that direction.

the Oxus temple (LITVINSKIJ 2001), and the Tulkhar and Bishkent burials (MANDELŠTAM 1966: Tabs. XXXIX, XL, XLI, XLVII, XLVIII, XLIX; MEDVEDSKAÂ 1979) (Fig. 1a).

3a Ranged weapons

Numerous finds from Central Asia and neighbouring regions show that the size of triangular arrowheads with downcast vanes gradually increased during the 1st century CE (LITVINSKIJ 2001: Tabs. 22–25, 32). They were the predominant form in the set of *bothroi* from Paikend. Vanes were sharpened or rounded (Fig. 5:7); the same is true for the Tulkhar broad types (MANDELŠTAM 1966: 111; Tab. XLI: 1–5). The presence of arrowheads with vanes of straight or blunt bases give us a 1st century CE date (GORBUNOVA 2000: 47). There were also armour-piercing arrowheads with narrow and rhombic heads (Fig. 5:18, 19).

There were end and middle *siyahs* from bone for a composite bow of a “Xiongnu” type in Paikend *bothroi* (Fig. 5:22–26). The same items were found in the nomadic burial grounds of the 1st century BCE to 1st century CE in the left bank of Choras-mia (ÂBLONSKIJ 2000: 70; Fig. 7), and in the notable warrior complex of the second kurgan of the Orlat barrow cemetery in the middle reaches of the Zeravshan River in Sogdiana. Here were narrow *siyahs* with rectangular ends (PUGAČENKOVA 1989: Fig. 56), analogous with one of the Paikend types (Fig. 5:25). Fragments of a “Xiongnu” bow and other items of arms, similar in type and shape to those of Paikend, were found in the burial mounds of the Aktam barrow cemetery in the north-western part of modern Uzbekistan (LUNINA 1983: 46–47). In my opinion, these can be dated to no later than the beginning of the 2nd century CE.

Narrow, strongly curved bone plates with a carved circular ornament from Paikend’s *bothroi* had copper nails (Fig. 5:27, 28). They could originate from cylindrical bow-cases depicted on bone details of belts from Sogdiana, Bactria, and Choras-mia (Orlat, Takht-i Sangin, and Kalaly-Gyr; Fig. 1a) (IL’ASOV 2013: Fig. 2), on Bosporan steles (TREJSTER 2010: Fig. 4), and bow-cases found in situ in the Niya cemetery (eastern Turkestan).

3b Sword and baldrics

Two iron U-shaped so-called “sliding brackets” were parts of the sword’s girdle (Fig. 7:3, 4); for example, in the military equipment of Roman times (SIMONENKO 2015: 75–81; DZNELADZE/SIKOZA/SIMONENKO 2017: 264–266, Fig. 9).

Bronze funnel-shaped sword pommels (Fig. 4:1, 2) were found in the Bukhara region, not only in Paikend. One such pommel was found in a kurgan with an undercut grave of the Kuyumazar barrow

field on the border of the oasis (Fig. 1a). The sword had a straight (bronze?) guard as well (OBEL’ČENKO 1976: 533). Such a sword with a bronze lozenge-shaped guard was also found in kurgan no. 2 of the Kyzyltepa (Fig. 1a) cemetery (OBEL’ČENKO 1978: Fig. 2). An iron sword guard covered with nephrite plates from Orlat had a rectangular notch. Swords and daggers equipped with similar (Fig. 4:3) guards and pommels were adopted from Chinese weaponry (ZHONG 1998: 37, 39; SUK-BÈ 1998: Fig. 1: 25). Their spread to the west, i.e. to the Eurasian steppes and neighbouring regions, was determined by the eastern impulse (SKRIPKIN 2000: 19, 28–29; Figs. 1–3). Swords with short, bronze, lozenge-shaped cross-guards were found in Taxila (Gandhara; Fig. 1a) in the layers of the 1st century CE (Marshall 1951: 545; Pl. 164: 56, 57).

There are several suggestions concerning the functions of the things similar to the gold hemispherical item with an image of a griffin, which was found in one of Paikend’s *bothroi* (Fig. 10:4). For this reason, there are various names applied to them: small *phalera*, button, plaque, caps, and end-piece. The examiner of the so-called “Siberian Collection of Peter the Great” referred to them by the term “ornaments of bridle bands” (RUDENKO 1962: Tab. XXIII: 23–25, 28–31, 36, 37). Many items from the Eurasian steppe made in the technique of high relief and often decorated with images of “coagulated” (curled up) animals were fashioned in the so-called nomadic “gold and turquoise style” of the 1st century BCE to the 1st century CE (MORDVINCEVA 2003: 14, 25, 36–37; Tab. 7; Figs. 12–13; Cat. No. 26–31; Figs. 31, 37, 43, 45, 46: 1; Fig. 50:1; Fig. 51:2; LITVINSKIJ 2010: 274–275). Under nomad influence, this type of item was spreading in the noble complexes of China during the 1st century BCE to the 1st century CE (PSARRAS 2003: 113; Figs. 108, 109; KOST 2017: Figs. 2, 5). Similar items of horse harnesses of Xiongnu were often made of silver and without inserts (POLOS’MAK ET AL. 2011: 48; Fig. 10).

In Bactria, a very similar article with a coiled eagle-headed griffin, but in the “gold and turquoise style”, was found in the Tillâ-Tepe (Fig. 1a) royal burial (northern Afghanistan) (Fig. 10:1; SARIANIDI 1989: 101; Fig. 35). A similar find probably of the same nature, but depicting marching panthers, was made in the Oxus temple (Fig. 10:3; LITVINSKIJ 2010: 273–275; Fig. 27). In my opinion, these finds – as well as those from Paikend – should definitely be interpreted as parts of a special type of dagger scabbard with side projections (or lobed sheaths, after M.J. Olbrycht). Older specimens were found in Pazyryk culture burials (ca. 6th to 3rd century BCE) (SAVINOV 2016: Figs. 1–3) and were widespread in the Eurasian steppes from China to the northern Black Sea coasts (BROSSEDER 2015: 292–293; Fig. 8). As evidenced by archaeological data and depictions on the Bosporan (Fig. 1c: Bospor) gravestones and

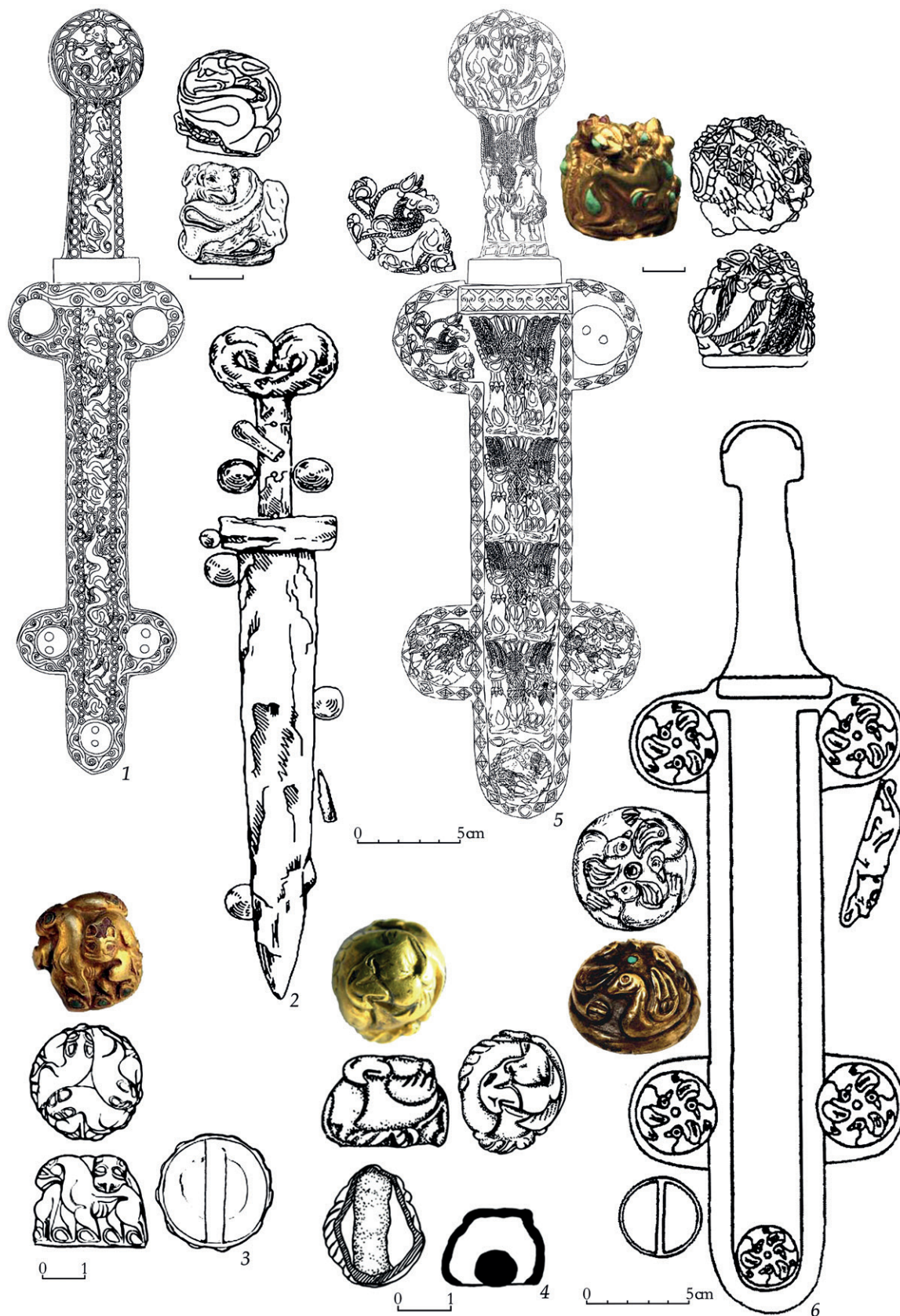


Fig. 10: Buttons on scabbards.

1 – Tillâ-Tepe; 2 – BM-V (after: MEDVEDSKAÂ 1979: Fig. 1); 3 – the Oxus temple (after: LITVINSKIJ 2010: 273–275; Figs. 27, 76); 4 – Paikend; 5 – Dachi (after: MORDVINCEVA 2003: Figs. 6, 31, 32); 6 – Isakovka (after: POGODIN 1998: Fig. 4).

in the reliefs of Western Asia, such scabbards were attached to the hip (TREJSTER 2010: 515–517; Fig. 1; OLBRYCHT 2015: Figs. 19, 20, 22, 24). Plaques were probably used to tighten straps that run through apertures in the prominent sides and additionally to decorate the scabbard.

Similar artefacts were documented in situ during the excavations of kurgan no. 1 at the Dachi site (Fig. 1c), near the Sea of Azov (on the lower reaches of the Don River) (Fig. 10:5; BESPALY 1992: 175–191; Fig. 2; MORDVINCEVA 2003: 90; Cat. No. 76), and of kurgan no. 3 of the Isakovka (Fig. 1b) barrow cemetery (Sargat culture) in the south of the West Siberian plain (Fig. 10:6; POGODIN 1998: 36–45; KORYAKOVA 2006: Fig. 12; MORDVINCEVA 2003: 56–58; Fig. 45:4; see also Fig. 1b), at the western and eastern edges of the Sarmatian world, respectively. A very interesting sample, similar to the Tulkhar examples, was found in one of the Bishkent (Fig. 1a) kurgans (Bactria) (Fig. 10:2). There was the dagger (*acinaces*) in situ with a volute-shaped pommel and a straight guard, and remains of a scabbard's system that included bronze nails with a large-diameter cap and "spoon-shaped" end pieces of straps for hanging (MEDVEDSKAÂ 1979: 115).

The griffin head on the Paikend plaque is similar to the ones from Tillâ-Tepe and on the scabbard from Dachi. Its position on a top of the article is compositionally closer to the griffin heads represented on objects decorated with various creatures from the Siberian Collection, as well as on the Xiongnu silver appliqués of iron cheek-pieces (*psalia*) with disk-shaped ends from Noin-Ula (northern Mongolia; Fig. 1b), kurgan no. 20 (POLOS'MAK/BOGDANOV 2016: 32). This position differs from a circular arrangement, but it is in a spiral: it is another idea, which does not mean "a movement in a circle" but rather "an expansion".

The griffins on the buckle from Nikolskoe (Fig. 1c) in the Lower Volga (1st century CE to the first half of the 2nd century CE), on the scabbard from Dachi (Don River), and on the "phalera" from Tillâ-Tepe have a relief edging featuring hair on their bellies (MORDVINCEVA 2003: 25, 51, 67, 90; Fig. 21; Cat. No. 58; Fig. 31, Cat. No. 76:1) – just as on the Paikend one. This feature, as well as a lack of a background and base relief line, can be associated with the plaque from the Zubovsky kurgan (Kuban River, north Caucasus; Fig. 1c), dated to the second part of the 1st century BCE, on which a griffin and an ox are depicted moving in circles (ZASETSKAYA 2019: Tab. XXX:a).

Regarding the issue of the image of the nature of the griffin itself, it is clear that this fantastic beast came to Central Asia and the Eurasian steppes from West Asia. The lack of a long caruncle and the presence of a triangular projection (a crest) points to the fact that Paikend's eagle-headed griffin had a Near Eastern (Iranian?), but not a Greek (5th to 4th cen-

tury BCE), origin. A similar coiled creature appears on the gilded bronze ornament from northern China (BUNKER/WATT/SUN 2002: Cat. No. 161). At another point, the idea to depict curled-up animals most likely originated in the east (China?) (BOGDANOV 2006: Fig. 4). So, why could two cultural traditions not give birth to the coiled griffin in the land of Central Asia during the Hellenistic period?

The filigree ring, embossed with the image in the form of a lion with coiled wings, in the Oxus treasure (DALTON 1905: Cat. No. 111) can be regarded as one of the earliest such examples in the oasis of Central Asia (5th to 4th century BCE). However, the presence of shaped hollows for incrustation allows us to propose that the ring should be categorised as an item of the "gold and turquoise style".

In general, the image of a griffin was popular among the tribes that came to Central Asia in the 2nd century BCE. It is presented on some items in Sogdiana, coming from the Paikend site, and from the Agalik-sai kurgans (OBEL'ČENKO 1972: Fig. 8; Fig. 1a), Bactria – Tillâ-Tepe, Tulkhar (MANDELŠTAM 1966: Tab. XLV:10, LIII:3), the Babashov barrow fields (MANDELŠTAM 1975: Tab. XXXIX:1), Chach (the Syr Darya region), and from the barrow cemetery near Achmayli (ALIMOV/BOGOMOLOV 2000: Fig. 3:4). Perhaps this is another piece of evidence of unity among nomadic groups that came to Central Asia in the 2nd century BCE.

Objects of the "gold and turquoise style" or "Sarmatian polychromy" were definitely present in the fire temple's treasury of Paikend: small inserts (0.4–0.5 cm) of turquoise were found in the *bothroi* (Fig. 9:20–22). They had a conical or drop-like shape that can be seen in Bactrian complexes, for example in Tillâ-Tepe (SARIANIDI 1983: Fig. 21; MORDVINCEVA 2003: Cat. No. 4, 5, 11, 16, and 20), as well as on many finds from the Eurasian steppe (MORDVINCEVA 2003: Cat. No. 36, 41, 43, 76, 77, 86, 106, etc.).

One large (1 cm in diameter) turquoise ornament from Paikend was encircled by thin gold leaf (Fig. 9:23). Similar decorations including those with conical inlays (but with granulation on gold underlay) were discovered in the Xiongnu tombs (EREGZEN 2011: Cat. No. 113, 114).

3c Armour

The armour plates have never been discovered in Sogdiana in such numbers (Fig. 6:2). They did not form great concentrations and were distributed between the *bothroi* area largely equally, i.e. the armour had already fallen into pieces (or had been disassembled) by the time it was hidden. It had been luxurious once: there was ornamental gold foil on some plates found in situ (Fig. 9:3).

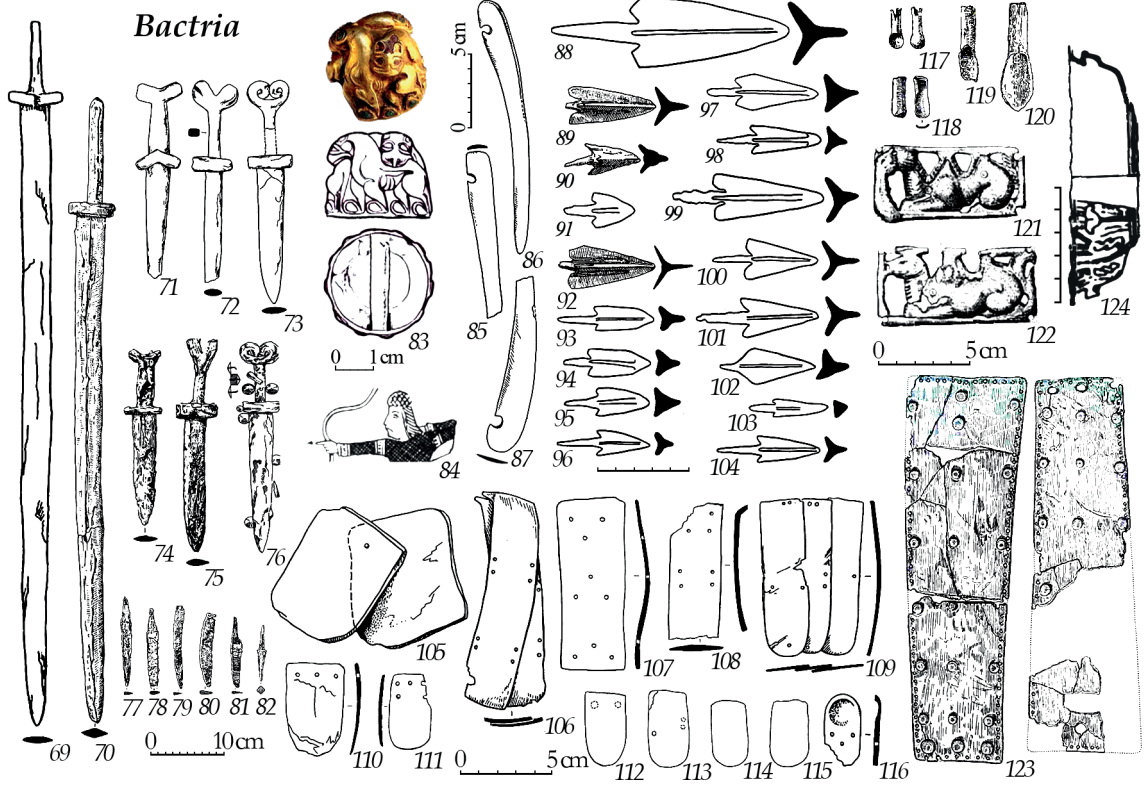
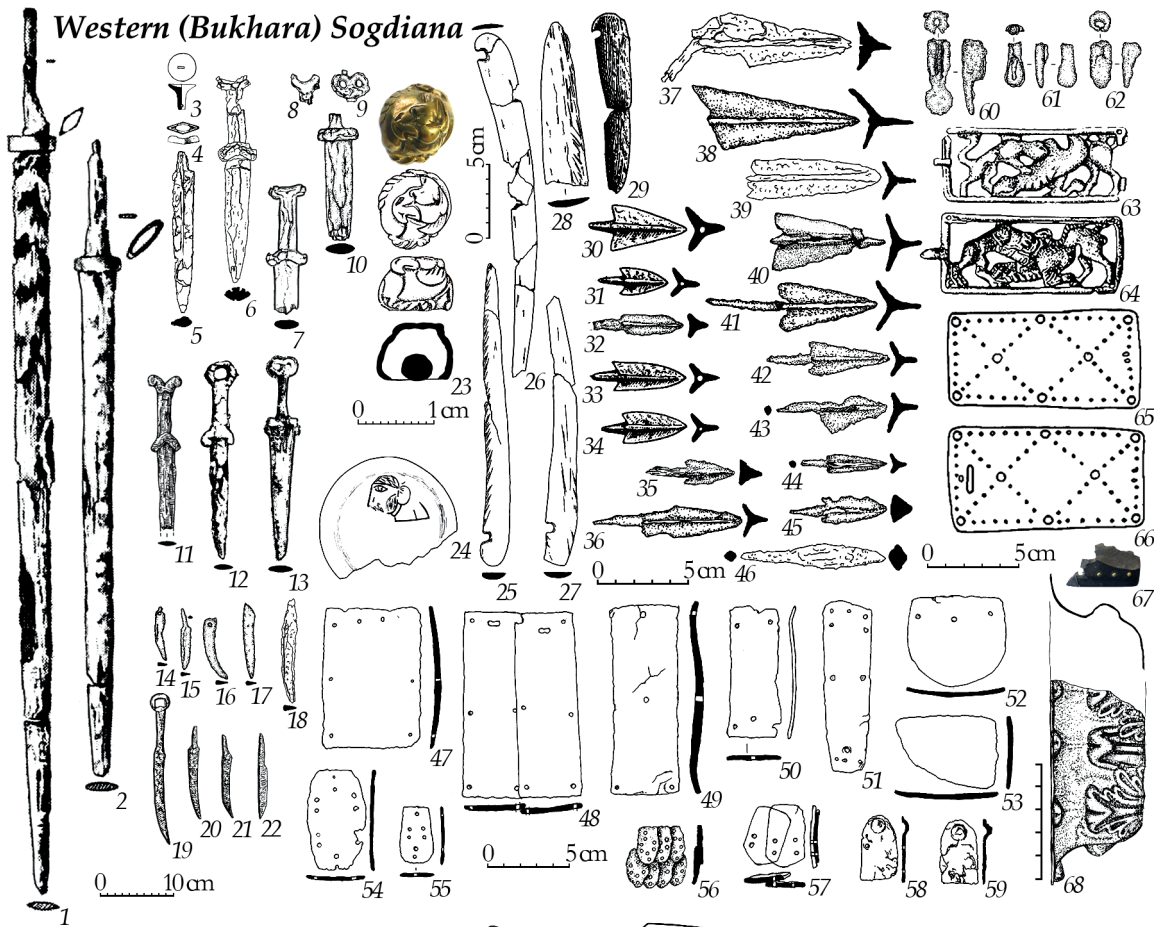


Fig. 11 (previous page): Nomadic armament and equipment from western Sogdiana and Bactria (1st c. BC–2nd c. AD).
1, 2, 11–13, 19–22, 29–34, 63–66, 69, 70, 74–82, 89, 90, 92, 117–124 – from barrows; **3–10, 14–18, 23–28, 47–62, 67, 68** – from the Paikend fire temple; **71–73, 83–88, 91, 93–116, 125** – from the Oxus Temple.
1, 2, 11–13 – after: OBEL’čenko 1978: Fig. 2; **19–22, 30, 31, 33, 34** – after: MOŠKOVA (ED.) 1992: Tab. 42; **63–66** – after: OBEL’čenko 1992; **69, 76** – Bishkent kurgan cemetery V, after: MEDVEDSKAĀ 1979: Figs. 2, 3; **70, 74, 75, 77–82, 89, 90, 92, 117–120, 123, 124** – after: MANDEL’štam 1966: Tabs. XXXIX, XL, XLI, XLV–L; **121, 122** – after: MANDEL’štam 1975: Tab. XXXVI; **71–73, 85–88, 91, 92–116** – after: LITVINSKIJ 2001: Tabs. 22–25, 58, 84–88; **83, 84, 125** – after: LITVINSKIJ 2010: Figs. 62, 74, 76.
1, 69, 76 – iron, bronze; **2, 5–22, 30–60, 62, 70–75, 77–82, 88–116, 119, 120** – iron; **3, 4, 24, 61, 63, 64, 68, 117, 118, 125** – copper (bronze, brass); **23** – gold, lead; **83** – gold, iron; **25–29, 84–87** – bone; **65, 66** – jet, turquoise; **67** – jet (or rhino horn?), gold; **123, 124** – horn, silver.

The sizes and shapes of the plates are varied – from small scales with an oval-shaped and sharpened edge and many small holes, to medium-sized rectangular ones with a rounded edge and a hemispherical projection, to large square and rectangular or elongated ones (for protection of the belly), to narrow and curved ones (from pauldrons?). The closest analogues to the Paikend plates are those found in sets of catacombs from the two burial kurgans of the Akchi-Karasu (**Fig. 1a**) barrow cemetery in western Tian Shan (Kyrgyzstan) (**Fig. 6:2**). These belong to the Kenkol archaeological culture of the 1st century CE. The types of plates are almost the same, although the sizes of the large ones are slightly smaller than those from Paikend. As researchers note, plates from Akchi-Karasu could belong to a combined armour that included lamellar connections as well (KOŽOMBERDIEV/HUDĀKOV 1987: 92–97). Perhaps this is also true in the case of the Paikend plates. Such combined armours with massive plates (up to 16–18 cm long), sometimes clad with gold, were also used by the Sarmatians (SIMONENKO 2015: 113–126). They were also known in the Chinese armour of the Western Han period (DIEN 1981: Fig. 15).

It could also be argued that some small items with a hole pierced through them, named “*vorvorka*” were used for strapping together edges of armour (**Fig. 8:3, 6, 9:14**).

In the Eurasian steppe, gold-clad iron was a popular technique for decorating weapons in the times of the Scythians-Saka. Items of the Arzhan 2 (**Fig. 1b**) kurgan in Tuva can be dated to the earlier stage of the period, and the Issyk (**Fig. 1b**) kurgan, in south-eastern Kazakhstan, to the later one (AKIŠEV 1983: Figs. 106, 107, 110, 111). Finds from the Philippovka (**Fig. 1c**) barrow cemetery (Southern Urals) give an example of the technique during the Sauromates-Sarmatian period (ĀBLONSKIJ 2011: Figs. 9–12). Daggers from Tillâ-Tepe, Dachi, and Gorgippia (**Fig. 1c**) (MORDVINCEVA 2003: Cat. No. 6, 7, 76, 86) are outstanding works with gold appliqué among the exemplars simultaneous (the first centuries CE) with the finds from the *bothroi* of Paikend. Gold covers (foils) are not uncommon on weapon and horse harness items in rich kurgans and hiding

places (“weird hoards”) of the Early and Middle Sarmatian cultures (Araltobe in western Kazakhstan, Zhutovo, Verkhnepogromnoe, Belokamenka, Baranovka-1 in the Lower Volga region, Razdol’naya in the Kuban region, Porogi in north Black Sea Region, etc.; see also **Fig. 1c**).

However, as noted earlier, most foil fragments from Paikend were covered with fine notches. There are actually no analogies in the western part of the Eurasian steppes and in Central Asia itself. The same design can be observed in the arts of Xiongnu. The most precise work is the gold appliqué on the buckle from kurgan no. 22 of the Noin-Ula cemetery. A “dot pattern” on foil was combined with a grid of curved triangles forming the so-called “dragon skin” design (POLOS’MAK/BOGDANOV 2016: 94). It seems that simplified versions with many dots can be seen on foils of iron buckles from the Shombuuziin-belchir burial ground (grave no. 15) in western Mongolia (EREGZEN 2011: Cat. No. 181) and in the Sudzha cemetery in Il’movaia pad’ (barrow no. 54), Buryatia (**Fig. 1b**), or on a plaque of a horse harness from tomb no. 20 of the Gol Mod 1 (**Fig. 1b**) cemetery in central Mongolia (ERØEL-ĒRDÈNÈ/GANTULGA 2008: Tab.).

However, in most cases, horse trappings were adorned with plain foil – in particular, the ones with disk-shaped ends on cheek-pieces, which were common in Xiongnu and the Middle Sarmatian culture in the Volga-Don interfluves (for an overview, see BROSEDER 2015: Fig. 12). Fragments of this type of iron horse harness were probably found in the *bothroi* of Paikend (**Fig. 7:46, 47**).

Additionally, gold foil with notches could be used to decorate iron plates and belt-ends (**Fig. 9:12, 13**) – like the Xiongnu items. This technique created not only an ornamental effect, but also provided good adhesion to the iron carrying base.¹¹

¹¹ Consultation given by O.Yu. Senatorova, restorer of the Laboratory of Restoration of Applied Arts of the Hermitage, who worked for the Bukhara Expedition. There were two types of foil: high-quality gold, and with an alloy of 30% silver.



Fig. 12: Images of nomads.

1 – Paikend; 2 – portrait of King Hirkod (after: http://www.sogdcoins.narod.ru/sogdiana/w_coins.html WS 5); 3 – the Oxus Temple (after: LITVINSKIJ 2010: Fig. 62); 4 – Tsaraam Valley, barrow no. 7 (after: MINIAEV/SAKHAROVSKAIA 2007: Fig. 12); 5, 6 – Orlat barrow cemetery, kurgan no. 2 (after: PUGAČENKOVA 1989: 150; Fig. 71); 7 – Kalaly-Gyr site (after: Il'âsov 2013: Fig. 1:1). 1 – on bronze pommel; 2 – on silver coin; 4 – on birchbark disk; 3, 5, 6, 7 – bone details of belts.

3d Lacquer wares

Fragments of smooth foil with zoomorphic and maybe geometrical-vegetal ornaments from the *bothroi* of Paikend, marked out by a dark outline (Fig. 8:26), were absent from the iron items. In Bactria, such images decorated wooden scabbards in the Tulkhar barrow cemetery (MANDEL'ŠTAM 1974: 191). It cannot be excluded that painted fragments, which were considered to be coloured leather, from these kurgans in reality represented lacquer items.

The Paikend finds of gold leaf with a beast (dragon?) and scales of lacquer ware (Fig. 8:27) have direct analogies to ones made in the *pingtuo* lacquers technique, which involves surface design with cut images of gold and silver foil (thin sheets). Scholars attribute its time of propagation in China to the 1st century BCE (the Middle Western Han period) (PIRAZZOLI-T'SERSTEVENS 2009: 37–38). Very often, *pingtuo* were used to decorate toilet (cosmetic) boxes as in the case of a high-status female burial – tomb 2 at Huangtushan (Henan; Fig. 1b) – in which a large number of gold sheets in the forms of animal figures were found (LIU 2018: 64–65; Fig. 2:9C). It is interesting that they resemble gold appliqués from the Big Berel Mound (Fig. 1b) on the western slope of the Altai Mountains, eastern Kazakhstan (SOKOLIN 1969: 222–223).

Fragments of a Chinese lacquer toilet box (*lian*) with gold zoomorphic foil were found in barrow no. 24/12 of the Xiongnu cemetery, Noin-Ula (MINIAEV/ELIKHINA 2009: Figs. A-13, 14). It is important that the box was made using the technique of *chia-chu* with a cloth liner (LUBO-LESNIČENKO 1969: 269). On the reverse of the Paikend lacquers, remnants of fabric created from plant fibres of hemp or Chinese nettle (ramie) were detected.

There was, perhaps, an item like a small chest in the *bothroi* because an iron angled chape with holes and a copper rivet were found with wooden remains (Figs. 7:32; 8:13).

So, in Paikend, we have perhaps a rare case of remains of *pingtuo* lacquers in the eastern part of the Eurasian steppes (and the first one in Central Asia). A similar design can be observed on some lacquered items from one of the burials of the Gol Mod 2 (Fig. 1b) cemetery (ERDENEBAATAR 2016: 115). It is interesting that, according to the analysis conducted in the laboratory of the Hermitage State Museum, some specific features of lacquers from Paikend are similar to ones from the burials of Sarmatian nomads of the lower reaches of the Don and Volga, and the kurgans of the Xiongnu nobility from Gol-Mod (central Mongolia) and Tsaram (Transbaikalia; Fig. 1b).¹²

In general, finds of plain lacquer objects were made in various parts of Eurasia: from Begram (Afghanistan; Fig. 1a) to the northern Black Sea region (see data sets: BROSEDER 2015: Fig. 21; List 19; PRÛH/TREJSTER 2019: Fig. 5). It is interesting that in many cases these were boxes of different types (ZHANG 2014; MÜLLER ET AL. 2013: 116–151). Therefore, a conclusion can be reached that there were certain substances inside. A hypothesis that there were Chinese cosmetics can be proposed.

3e Accoutrements and harnesses

The discovery of two fragmented jet belt buckles with gold nails in Paikend (Fig. 8:2), as well as in the Bukhara oasis (with turquoise, OBEL'ČENKO 1992: 55), is yet another indication of links in eastern directions for local weaponry and warriors' equipment. In this context, they are treated as a part of Sarmatian complexes (summary publications are: BROSEDER 2011: Fig. 6; List 4; RAEV 2017) and are sometimes even interpreted as a direct influence from the Xiongnu in one way or another. In the latter case, there are buckles dating back to the 2nd to 1st century BCE and slightly later (KILUNOVSKAÂ/LEUS 2020: 249–250). As noted by researchers, the Xiongnu put jet belt buckles in female burials; but in other complexes – from Central Asia to the Don River – these items of equipment were part of armed men's sets. So, maybe jet belt buckles were highly

12 Observation made by Olga G. Novikova.

valued not only by the Xiongnu, but also by other tribes in the eastern part of the Eurasian steppes – and warriors from here brought them to the West. For instance, bone belt plaques that followed a very similar design were found in the Tulkhar barrow cemetery (MANDELŠTAM 1966: 29; Tab. XLVI).

The circular bronze filigree belt plaques are also typical finds in Xiongnu archaeological complexes. Their smaller copies, including non-slitted ones, were part of necklaces (MINĀEV 2007: Tab. 91:2). There was a very similar stamped image on a gold plate from the Paikend *bothroi* (Fig. 9:14).

Another copper hollow plaque in Paikend has a three-dimensional image of a bearded, moustached bald person, who should obviously be recognised as Silenus, a companion of Dionysus (Fig. 8:8).

Belt plaques decorated with a face are well known in the eastern steppe area. In Gansu, in the Majiayuan (Fig. 1b) cemetery (Warring States period), they were cast just like in Paikend (but in gold) and made entirely in the form of human heads (WANG HUI 2011: Fig. 4). The steppe tradition had spread in northern Chinese countries as well (KOST 2018: Fig. 3).

It is possible that this is a reflection of the old idea of placing the heads (or scalps) of defeated enemies on horse harnesses, as was noted by researchers of the famous Pazyryk (Fig. 1b) bridle from kurgan no. 1. It was decorated with large wooden plaques in the shape of human heads – probably Xiongnu warriors killed by other nomads (KLĀŠTORNYJ/SAVINOV 1998: 176; Fig. 1). As historical sources and the images on the Orlat plates clearly demonstrate (PUGAČENKOVA 1989: 150; Fig. 71), such practices definitely existed among the nomads of the Eurasian steppe. As is the case with Paikend plaques of this type, the practice apparently evolved into apotropaic amulets.

Nevertheless, the Paikend item had the greatest similarity with the plaque from a rich Sarmatian burial of the 1st century CE near the village of Kosika (Fig. 1c) in the Lower Volga River region. The excavators noted some Oriental elements in the complex, the appearance of which between the Urals and the Don could be connected with the nomadic impulse from Central Asia (DVORNIČENKO/FEDOROV-DAVYDOV 1993: 175–177; Fig. 20:10).

The prototype of such plaques (or actually themselves) was *attaché* – decorative relief ornaments in the form of small head masks. They were usually put under the handles of metal vessels or on their bases, and also on caskets or furniture pieces of Greek and Roman (including provincial) manufacture (SIMONENKO 2011: Figs. 19, 40, 41, 77, 79, 80). Large quantities of these silver and bronze toreutic works began to be received by Sarmatians in the middle of the 1st to the 2nd century CE (KLEYN 1979: 220) and images of Pan and Silenus were widespread as soldered *attachés* (RAEV 1976: 133; Fig. 2; MYS'KOV/

KIĀŠKO/SKRIPKIN 1999: 150; Fig. 2; TREJSTER 2017: 210–211). These images are known in burials of Late Sarmatian culture as well (MOŠKOVA 2009: 110–111; Fig. 4).

The image of Silenus was so popular in Central Asia that it is also used in Sogdian coroplastic art. Another member of the Graeco-Roman mythology, Medusa, was also common on antique terracottas of Sogdiana (OMEL'ČENKO 2021: Fig. 2) and nomadic sets of the region as well. There was a gold plaque from barrow no. 6 of the Lyavandak cemetery, located on the edge of the Bukhara oasis (OBEL'ČENKO 1961: 112, 158). The image of Medusa was depicted on a *phalera*(?) in cultic accumulation no. 3 of the Oxus temple (LITVINSKIJ 2010: 171–175; Fig. 26).

A peculiar thing is the S-shaped bone buckle or belt mount from the Paikend *bothroi* (Fig. 8:23). Perhaps its polished surface imitated smooth stone (nephrite?). A form of the item remotely resembles known bronze belt ornaments (they were of jade previously) made in the style of animals, sometimes as griffins. They originate from modern northern China (Ordos, among others) and can be found in the upper Ob River and Altai regions as well (Fig. 1b). The items date back to the 5th to 3rd century BCE (BUNKER 1995: Cat. No. 84, 85, 86; ŠUL'GA 2011: 370–372; KOST 2014: 203–225; Fig. 16; Pls. 91:1, 94:1, 110, 113:1, 125:3, 126:1; 132:2, 133, 134:2).

It cannot be ruled out that cowries from the Paikend *bothroi* and the *favissa* belonged to a belt set, as was the case for the other ones from kurgan no. 70 of the Noviy (Fig. 1c) barrow cemetery in the Don River region (BROSSEDER 2011: Fig. 34). Interestingly, there were imitations of cowry in the Paikend complex (Fig. 8:20). This was typical of the Xiongnu antiquities in particular (MINĀEV 2007: Tabs. 53, 55, 85, 112, 114, 115, 120; EREGZEN 2011: Cat. No. 34, etc.) and shows the high value of these imported items on the one hand and the direction of cultural connections on the other. The latter is true for the “spoon-shaped” end pieces of straps that are known from the Sarmatian complexes (SKRIPKIN 2000: Fig. 5); and those made of iron, copper, and bone were found in high numbers in Paikend (Fig. 7:14–21; 8:16, 17).

The bowl-type fragment with a bent back edge and embossed ornament (Fig. 8:25),¹³ as well as a very similar item from the temple of Oxus (LITVINSKIJ 2010: Fig. 74:8), were probably *phaleras*, which are known in the monuments of the Sarmatians of the 2nd to 1st century BCE (ŠUKIN 1994: Fig. 51b; SIMONENKO 2015: 199, 203; Fig. 167; ZASECKĀ 2016: 94–97; Fig. 2:e–i). At the same time, the smaller Paikend and Takht-i Sangin *phaleras* have a typical high relief ornament in the form of acanthus leaves, which brings them closer to the so-

13 It cannot be excluded that the copper (bronze) base had precious plating.

called Bactrian bowls of the Hellenistic period (3rd to mid-2nd century BCE) (CARTER 2015: 106–109; Cat. No. 17, 49).

4 Conclusions

1. The characteristic sets of things from the Paikend *bothroi* and the *favissa* suggests that part of them could belong to a rich “set” of heavy-armed horseman’s equipment¹⁴ such as that shown on the famous belt-plates from the Orlat kurgans. According to one suggestion, the images on the belt-plates depict Kangju warriors (PUGAČENKOVA 1989: 144, 153–154).

2. It is important to note that there were some remains of iron making in the *bothroi* as well as in the north-western corner (“archer’s corridor”) of the citadel (Fig. 2). Moreover, the remains of a blacksmith workshop (a smithy) were found near the north-western corner of the first fortress. Presumably, the swamps surrounding the site served as a raw material source. It should also be added that workshops were often placed near temples in the ancient Near and Middle East.

3. Discovery of the third “treasure” in the southern part of the citadel, the most distant from the fire sanctuaries, indicates that in Paikend there was a traditional practice of moving items that had once been offerings to the temple from the “treasury” to special structures like pit-*bothroi* or *favissa*. The excavations at the ancient settlement of Takht-i Sangin in Bactria,¹⁵ where researchers noted numerous analogies with the practice that existed in the temples of the Middle East and Greece of Hellenistic and earlier times, demonstrate this ritual in detail (LITVINSKIJ 2001: 96–97).

4. Obviously, the same rituals were usual for Central Asia during the period of the domination of the nomadic states. It corresponds to the customs of nomads: the Sarmatians placed items connected with military and priestly functions in the mounds of older barrows, the so-called “treasure hoards” (DZIGOVSKIJ/OSTROVERKHOV 2010: 168). Indicative in this regard is the coincidence of the assortment of finds from the Paikend *bothroi* and the funeral sets found in the Sarmatian elite graves in the lower Volga and Don region dating to the first half of the 2nd century CE. Additio-

nal hide-pits (one or several) in their floors and walls were arranged under the barrows. Included was an iron knife, a short sword, a long sword, an umbo, arrowheads, an ornamented quiver, details and ornaments of a horse harness, a silver belt-tip, the spoon-shaped pendant of a belt, a gold/silver button, an imported bronze vessel, gold plaques, plates of armour with gold ornamentation, a glass drinking vessel (fragments in Paikend), a wooden vessel with gold/silver details (overlays in Paikend), lacquer ware, a spoon, a bell, a finger-ring, and gold threads (golden foils?) (MORDVINTSEVA 2019: 251–255).

The practice of “treasure hoards” also existed in the eastern steppes of Eurasia, as evidenced by the recent brilliant (in all senses) finds from the Kazakh Altai. These date back to the Saka period (TOLEUBAEV ET AL. 2020: 60; Figs. 16, 19, 20).

In Sogdiana, the tradition of hiding cultic, evidently devotional, votives – which included weapons and, rarely, precious goods – at the temple territory (“sacred sites”) is also documented by excavations at Erkurgan, the capital of Nakhshab-Xenippa. Here such votives were put as clusters in ash pits and sealed up with layers of clay; building constructions were also used to hide hoards (SULEJMANOV 2000: 102–104). Such practice finds full correspondence in Paikend: more than 20 whole daggers and knives were found in the floors and cinder heaps near the platform of the fire temple (OMEL'ČENKO 2013: 108).

Weapons and ammunition found in the temple of the Kanka fortress (BOGOMOLOV 1997: 79) are considered to be gifts (trophies). The latter site was the ancient capital of Chach (Tashkent oasis), the area attributed to the Kangju indigenous lands, whose inhabitants maintained close ties (judging by coins, also dynastic ones) with Bukhara Sogd.

5. Most analogies, in my opinion, allow the majority of the Paikend complex objects to be dated to the 1st century BCE to the beginning of the 2nd century CE. Many weapons and ammunition items are similar to the Sarmatian ones. At the same time, the eastern elements that find correspondence in Hunnu as well as Western Khan antiquities are obvious (Figs. 4:1–3; 5:8, 22–28; 7:14–21, 34; 8:2, 16, 17, 20, 23, 26, 27; 9:1–14, 19; etc.) A similar situation is also characteristic for the Bactria nomads’ burial grounds. The Celestial Empire was a “world factory” in the 1st century CE and its products reached far to the west, as evidenced by the finds in the Eurasian steppe and urban centres (for example, the northern Black Sea area). These items could have come to the Syr Darya River region, Sogdiana, and Bactria firstly in relation to the movements of

14 Thick armour plates were opposed by large triangular (up to 10 cm long) and medium-sized three-edged piercing arrowheads.

15 Sets of items from the Paikend *bothroi* are close to the ones from the Oxus temple – with the exception that some of those from the latter had a prominent Hellenistic identity.

nomads mentioned in historical sources from the areas bordering the Han state. Later, they were made locally according to the samples.

6. Thus, the Sogdian-Bactrian complex of weapons (**Fig. 11**), which dates back to the 2nd century BCE to the 1st century CE (GORBUNOVA 2000: 48–49), really had an “eastern-Sarmatian” origin in my opinion – i.e. it came to Central Asia as a result of the invasion of the Yuezhi and the tribes that came with them. Additionally, it had an impact on the panoply of the western regions of the Eurasia steppes.

7. On the other hand, given the dating and the eastern appearance of many of the Paikend finds, it is tempting to identify them with a particular historical event. It is a historical fact that, under Han pressure, the northern *chanyu* of the Xiongnu, Zhizhi, and his warriors moved west, to the lands of Kangju, in the second half of the 1st century BCE. It is hypothesised that the dissemination of jet belt buckles in this region and further westward is tangible evidence of the Xiongnu defeat in Central Asia by the Han and its allies (KILUNOVSKAÂ/LEUS 2020: 249–250). Therefore, eastern items in the Paikend complex could be trophies in the local fire temple’s treasure or could indicate a presence of Xiongnu warriors in a garrison of the fortress.

In this context, the engraved image on one of the sword or dagger tips from Paikend is curious. There are many examples of how different Xiongnu articles were decorated with engraving (**Fig. 12**). However, the picture on the Paikend tip is certainly different from male images on the Xiongnu items. In my opinion, the Paikend profile is very similar to the coin portrait of the king Hirkod (Hirkod) (**Fig. 12:1, 2**). He was the ruler of one of the domains in Sogdiana that was formed after the power of Hellenistic kings had fallen. Hirkod extended his power over a part(?) of the Bukhara oasis – and, obviously, he was not a Xiongnu.

8. The sources have not preserved any clear information about the events connected with the formation of nomadic dynasties in Sogdiana, including Bukhara. Judging by the coinage, this process began in the second half of the 2nd century

BCE. There is a point of view that they came from tribes that invaded Central Asia with the Yuezhi horde (MALÂVKIN 1989: 223, 257; VAJNBERG 1999: 273–279; RTVELADZE/SAIDOV/ABDULLAEV 2000: 53, 70). The analysis of characters on coins from these regions, which have direct analogies in Sarmatian *tamgas*, confirms the common origin of these tribes from which the ruling dynasties of Chorasmia, Bukhara, and Samarkand originated (VAJNBERG/NOVGORODOVA 1976: 69–72; Fig. 7:8).

9. The geographical proximity of Bukhara, Sogdiana, and Parthia evidently led to contact. The sources note the active interaction between nomadic tribes and the Parthian state throughout almost all of its history. It is possible that in the course of wars in the middle of the 2nd century BCE, when the Graeco-Bactrian kingdom weakened considerably (ÛSTIN 1954: Book XXXVI, Ch. 6: 1–5) and a number of Central Asian regions were captured by Parthians, the latter acted together with various nomadic tribes ethnically close to them (PILIPKO 2002: 209–210). Those also later took an active part in Central Asian affairs; it is no coincidence that since that time the number of burial mounds on the outskirts of Bukhara and Samarkand Sogdiana increased significantly. Returning “home”, the Sarmatians also brought with them notable Oriental elements that became a distinctive feature of the Central Sarmatian culture. It cannot be excluded that some of the Paikend items – for example, armour – had some relation to the Parthian panoply. It is also interesting that some items from some Sarmatian barrows of different times (Kosiki, Dachi, Lebedevsky), in the complexes of which finds from the south-west of Sogdiana also have analogies, are considered to have been made in the Parthian Empire (TREJSTER 2018: 127, 136, 143, 149, 153, 157).

10. Thus, in the post-Hellenistic era, Bukhara Sogdiana played a major role in the transit of peoples, goods, and technical achievements between the vast nomadic world of the Eurasian steppe and the states of the Middle East. This feature has been inherent in the region for centuries and became especially evident during the early Middle Ages when the pan-Eurasian trade flourished.

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Cross-cultural Exchange across Eurasia as Reflected in the Sealings from Kafir-kala in Samarkand

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Abstract: The archaeological excavations at Kafir-kala, which may have been the residence of the Sogdian kings (*Exšēds*), have brought to light some invaluable artefacts that not only exhibit complex Sogdian fine art resulting from intense cultural contacts, but also may allow us to elucidate some aspects of the obscure background and historical development of Central Asia during Late Antiquity and the Early Medieval eras.

These artefacts include pottery, metal and glass objects, coins, wooden carvings bearing the goddess Nana and her donors, and sealings. Sealing finds among these particularly demonstrate the versatility of pre-Islamic local art, which combines various art traditions including both geographically and historically distant cultures across Eurasia. This article focuses on a number of sealing specimens discovered at Kafir-kala.

Keywords: Central Asia, Sogdiana, Kafir-kala, sealings.

Резюме: Археологические раскопки на городище Кафир-кала, которое предположительно являлось резиденцией согдийских царей (ихшидов), выявили ряд ценных находок, которые не только отображают сложное согдийское изобразительное искусство, возникшее в результате интенсивных межкультурных контактов, но также позволяют нам прояснить некоторые вопросы, касающиеся малоизвестных предпосылок исторического развития Центральной Азии в период поздней античности и раннего средневековья.

Эти находки представляют собой керамику, металлические и стеклянные предметы, монеты, деревянные резные панно с изображением богини Наны и донаторов, а также многочисленные буллы. Находки булл, в частности, отражают многогранность местного доисламского искусства, которое сочетает в себе различные художественные традиции, включая культуры Евразии, далеко отстоящие друг от друга как в географическом, так и историческом отношении. Эта статья посвящена образцам булл, найденным на городище Кафир-кала.

Ключевые слова: Средняя Азия, Согдиана, Кафир-кала, буллы.





Fig. 1: **Left** – Satellite image of Kafir-kala (courtesy of Hirofumi Teramura); **Right** – Preliminary plan of the citadel at the fire layer level (prepared by Tomoyuki Usami, after DIMARTINO 2011: 41, Fig. 2.16). A and B are the areas in which the sealings were discovered.

1 Introduction

The increasing number of archaeological excavations in Sogdiana have been shedding light on the history, culture, art, and religions of the otherwise little-known Late Antique and Early Medieval Central Asia. The recent discoveries from Kafir-kala notably contribute to our understanding of pre-Islamic Central Asia. They simultaneously testify to the crucial role of Kafir-kala in both the political and social life of Sogdiana in the pre-Islamic and early Islamic eras.

Kafir-kala¹ (39°34'19N 67°1'17E) is the most monumental archaeological site in the south-eastern vicinity of Samarkand, located approximately 10.2 km south-east of Afrasiab, the site of pre-Mongol Samarkand.² The Dargom Canal, a branch of the Zeravshan River, flows on its north and Ilonsoy (lit. “snake stream”) runs on its east towards the Dargom Canal (Fig. 1). This site was first suggested by Suharev to be equated with *Rēwdāt*, a residence of

the Sogdian kings (*Exšēds*) as attested in the early Arabic textual sources, as opposed to the identification of Grigor’ev, who presumed *Rēwdāt* to be Tall-i Barzu, a rather smaller site located about 6 km south-east of Samarkand (SUHAREV 1935–1936). While the distance from Samarkand reported in the Arabic sources as 1 *farsakh* may seem more valid for the latter, the structure and size of Kafir-kala advocate for the former assumption, which is also independently stated by GRENET/VAISSIÈRE (2002: 188). Moreover, the recent discoveries from the citadel of Kafir-kala reinforce Suharev’s hypothesis.

The monumental area of the site extends approximately 16 ha, which is divided into three distinct sections: the citadel, the *shahristan* (inner city), and the *rabat* (suburb). The citadel is detached from its surrounding *shahristan* by a moat, and three towers from the north and south are respectively arranged. The *rabat* is attached across a moat to the *shahristan* from the north-west (MANTELLINI/BERDIMURODOV 2005).

The archaeological research, which has continued intermittently since the 1930s during the Soviet era on the *shahristan* and outer areas, such as the necropolis and pottery kilns, has resulted in introducing numerous unique artefacts (SUHAREV 1938; GRIGOR’EV 1946). In particular, specific potteries of Kafir-kala were fundamental materials for the study of Sogdian as well as Central Asian archaeology.

1 While it is variously spelled as Kafir Kala, Kafir Qala, or Kāfer Qal’a in English by different authors, I retain the spelling Kafir-kala, as I have written so in various reports and articles.

2 This distance has been calculated from the south-easternmost point of Afrasiab on Google Earth. It is usually stated to be located 12 km south-east of Samarkand, or about 18 km by car (see MANTELLINI/BERDIMURODOV 2005; BERDIMURODOV ET AL. 2020).

The excavations conducted by the Uzbek-Italian expedition (2001–2008) and now continued by the Uzbek-Japanese expedition (2013–present) began a new, significant phase of the research on Kafir-kala. These excavations focused chiefly on the citadel of Kafir-kala. During the earliest stage of excavations, a layer where an enormous fire had occurred was identified. Almost all of the sealing finds and other unique artefacts, such as wooden boards with depictions of the goddess Nana and her worshippers, have been unearthed from this layer, which will be referred to as the “fire layer” – although there are other, later layers bearing the remains of fire. The colossal fire that demolished the whole structure of this layer has been deduced as occurring at the beginning of the 8th century CE, according to numismatic data.

2 The citadel of Kafir-kala

The citadel of Kafir-kala³ is 75 × 75 m at its base and 60 × 60 m at its top, and rises over 20 m above its surrounding moat (MANTELLINI/BERDIMURODOV 2005). It was almost completely excavated to the level of the fire layer during the season of 2019. As a result, the overarching structure of the citadel before the fire incident has been ascertained. The gate to the citadel is in the south and can be accessed from the southern central tower via a hanging bridge. A courtyard (40 × 40 m) is in the centre, surrounded by *ayvan*. Two *sufas*, long benches made of *pakhsa* (rammed earth), have been set up along the eastern and western walls, which separate the courtyard from the corridors with several rooms. Both corridors are connected to corner towers at the four corners of the fortress. A number of square or rectangular holes with carbonised wooden bases of pillars generally marked with a darker colour in the plan that supported the *ayvan* have been identified. In the northern half, directly opposite the gate, a slope (ca. 180 cm) gradually rises towards a platform (12 × 20 m) with 18 (6 pillars × 3 lines) pillar holes and further leads to the central innermost room labelled 15/16, the floor of which had been covered with baked tiles (Fig. 1). The wooden carvings and other unique finds, including the wooden carvings depicting the goddess Nana and her worshippers, have been unearthed from the fire layer. The sealings were discovered mainly in two spots of the courtyard in the fire layer (BEGMATOV ET AL. 2020; BERDIMURODOV ET AL. 2020).

3 According to the local population, a large serpent with two plaits and two big teeth abides on the citadel and guards some kind of treasure. Once a year, it comes down to the Dargom River to drink water. As this story is very fragmentary, it is unclear which legend or tale it may refer to.

3 Date of the layer in which the sealings were unearthed, according to numismatic data

Throughout the excavations on the citadel of Kafir-kala, a few hundred copper, silver, and gold coins have been recovered, from both the early Islamic and pre-Islamic periods. None of the coins issued by the Muslim authorities were involved in the fire layer. Except for three specimens of Sasanian drachms, all the coins are Sogdian, with a square hole in the centre. The latest coins from the fire layer are the issues of Tarkhun (700–710 CE). These have been discovered from several spots on the floor that witnessed the enormous fire. We have thus suggested that the fire may have occurred in 712 CE, at the time of Qutayba ibn Muslim’s attack (BEGMATOV ET AL. 2020). In addition, the results of AMS dating of some wooden samples acquired from the fire layer indicate that the fire may have occurred between the late 7th and early 8th century CE with over 70% possibility, as will be separately reported in due time. Hence, the seal impressions discovered from Kafir-kala belong to the period no later than early 8th century.

The three (one complete and two fragmentary) specimens of Sasanian silver coins of Peroz I are the oldest coin types discovered from the fire layer. Although such Sasanian coins may have been in circulation for a long time and may not be valid to use for dating, certain artistic features on a few seal impressions and wooden boards acquired from the same layer also suggest that the earliest date may go back to the late 5th century.

4 The finding of the sealings and their classification

The total number of sealing specimens discovered is approximately 700 – this constitutes the largest collection of seal impressions in Central Asia from a single site thus far. Almost all of these have been discovered mainly in two spots of the fire layer: near the gate, highlighted A in the plan; and near the hearth along the south-eastern part of the *sufa*, highlighted B in the plan (see Fig. 1).

Approximately 300 sealing specimens were recovered near the gate of the citadel during the first excavations of the Uzbek-Italian expedition in 2001; an additional ca. 115 sealing specimens were unearthed in the same area in 2002 (BERDIMURODOV/MENGI/SAMIBAIEV 2003; CAZZOLI/CERETI 2005). In 2005, a further 84 specimens were found following the extension of the trench (BERDIMURODOV ET AL. 2006). Thus, the first group of seal discoveries encompass ca. 500 specimens, including fragments.

In 2014, during the second year of the Uzbek-Japanese expedition, the second group of seal impressions comprising approximately 180 specimens (including fragments) were excavated in and around the hearth along the south-eastern part of the *sufa*. Since the same type of sealing specimens are observed in the first and second groups, the two groups of sealings most probably belonged to one and the same archive. The first group of the sealings appears to have been thrown into the hearth together with the objects, presumably documents, to which the sealings were attached. In addition, over a dozen seal impressions have been found sporadically, from the same burnt level or without a stratified context.

The sealings from Kafir-kala depict impressions of divine, human, or animal (fantastic or natural) figures, occasionally accompanied by Sogdian, Bactrian, and Pahlavi (Middle Persian) inscriptions, and *tamğas* or fingerprints. Berdimurodov (BERDIMURODOV ET AL. 2020) has divided them into the following groups according to their impressions: 1. anthropomorphic (including combinations of anthropomorphic and zoomorphic); 2. zoomorphic; 3. epigraphic; 4. symbolic or geometric (fingerprints); 5. unidentified (due to their poor preservation).

The impressions on the sealings from Kafir-kala represent distinctive facets of Sogdian art incorporating various art traditions, including Hellenistic, Graeco-Roman, Kushan, Sasanian, Kushano-Sasanian, Indian, and Turkic. In addition, Bactrian (Tokharistan) and Sasanian art traditions have been vividly represented. While the majority of the sealings bear Hellenistic, Sasanian, or Bactrian impressions, Indian, Turkic, or other nomadic features are limited to a few sealing specimens. Although it is difficult to relate the seal impressions entirely to one or another period or culture, for reasons of expediency I present a number of sealing specimens depicting human figures by dividing them into several groups according to their artistic features.

5 Hellenistic and Graeco-Roman deities and their representation of local divinities

The seal impressions discovered from Kafir-kala once again verify the significance of Hellenistic and Graeco-Roman art in Central Asia. Among the Hellenistic and Graeco-Roman seal impressions, Eros, Nike, Herakles, and other Graeco-Roman divinities and heroes have been identified (CAZZOLI/CERETI 2005; ABDULLAEV/BERDIMURODOV 2005; BEGMATOV 2017; BEGMATOV ET AL. 2020; BERDIMURODOV ET AL. 2020). In the absence of inscriptions on most of these seal impressions it is difficult to ascertain

with any certainty which local deities they are representing, unless they have already been identified in Kushan, Parthian, Sasanian, or other closely related art traditions. However, there is at least one sealing depicting a figure modelled on a Hellenistic deity, followed by a Sogdian inscription. It is one of the largest seal impressions (42 mm in length, 30 mm in width), catalogued as N313, and was one of the earliest sealings to be published. Although it appears to have attracted much attention – as suggested by the number of articles that have included it – there is at present no consensus on the identity of the deity depicted on it.

This sealing depicts a nude human, according to the first authors a female figure, frontally; her head is turned to her right, and her right leg is straight and left knee bent. Her left hand is holding a long, slender branch downward to her shoulder level, and her right hand is slightly lowered and grasping a cornucopia, which is crooked and pointed downward to the level of her breast (**Fig. 2**) (CAZZOLI/CERETI 2005; ABDULLAEV/BERDIMURODOV 2005). The upper part of the cornucopia is highlighted by a transverse relief, from which three vertical lines, a symbol of harvest, depart. In Hellenistic art, this attribute is characteristic for the goddess Tyche-Fortuna, who is associated with luck, abundance, and fertility. In the Kushan religious pantheon, the cornucopia is more typical for the goddess *Ardoxšo*, who occupies a dominant position in the numismatic representation of Vasudeva (ABDULLAEV/BERDIMURODOV 2005).

The Sogdian legend, which comprises two words lying vertically between 11 and six o'clock may allow us to elucidate this figure. The first word consists of six or seven letters. The initial two letters have been well preserved, and the most probable reading is *ry-* or alternatively, although less likely, *rβ-*. A long tail of the sixth or seventh letter, *-c*, indicates that this word ends with it. The second word presumably consists of five letters, four of which have survived. Its final letter comes directly under the right leg of the figure (**Fig. 2**). CAZZOLI/CERETI (2005) explained it as a hardly legible or pseudo inscription. On the other hand, ABDULLAEV/BERDIMURODOV (2005) report that Professor N. Sims-Williams has suggested that the inscription may represent the goddess Nana, which was one of the main grounds for the authors to determine this figure as Nana, although from an iconographic perspective the authors explain that it shares common features with Tyche-Fortuna and *Ardoxšo*.

In fact, the second word has been considerably well preserved, and the three final letters, *-wšw*, are easily legible. The right half of the second letter is not well visible, but in a better-quality photo one can recognise letter *x* or *γ*, which would allow us to read it as *(γ)xwšw*. The initial letter is regrettably almost invisible, but I assume it to be either *vau* or *aleph*.



Fig. 2: Seal impression N313 and tracing of the legend on it (drawing by the author).

This word therefore must be read as $(w)wšw$ or $(ʿ)wšw$, which designates the deity Oxus or Bactrian Waxš. This may imply that the deity on this sealing is Oxus, if this inscription has any significance with respect to the deity. Although we know next to nothing regarding this deity in Sogdian art, Sogdian personal names with this theophoric component are frequently encountered, indicating that Oxus was one of the most popular divinities in Sogdiana, just as in Bactria and Chorasmia.⁴ Provided that the figure on the sealing (N313) is a female, the proposed reading suggests that the Hellenistic goddess Tyche may have been adopted to represent the deity Oxus in Sogdiana; or perhaps more appropriately, the Sogdians may have followed the Kushan tradition, which portrayed *Ardoxšo* in Hellenistic Tyche attire. It is difficult to identify the gender of this figure, however. The possibility of it being a male cannot be ruled out. An analogue seal impression to this is observed in UR RAHMAN/FALK (2011: 07.05.02). The figure here is apparently a male.

Oxus is portrayed as a male in the form of the Greek river god, Marsyas, on a small bronze statuette from the Oxus Temple at Takht-i-Sangin (Tajikistan), and as a bearded male holding a large fish in his left hand and a certain staff in his right in the

4 See LURJE 2010: 418, 420–421 on some frequently attested personal names with the theophoric composite of Oxus. In addition, *Xušufayn*, a settlement name recorded in the early Arabic sources, was rightly etymologised by LUR'E (2004: 209) as "Temple of Oxus". This suggests the existence of a temple dedicated to the deity Oxus in Samarkand.

Kushan numismatic pantheon (see SHENKAR 2014: 128). Although the second word of the legend on the Kafir-kala sealing evidently indicates that the figure on it might be the deity Oxus, the first word of the inscription, on the other hand, has been poorly preserved and may leave the possibility of interpreting the legend as a personal name.

DURKIN-MEISTERERNST (2013) has suggested an attractive reading of the first half as $rywδ'tc$, "of *Rēwdāt*" or "*Rēwdāt*-ian". As mentioned above, *Rēwdāt* is assumed to be the original name of Kafir-kala. If this reading is correct, then the meaning may be "Oxus of *Rēwdāt*".⁵ However, as this part has been partially reconstructed, we cannot be too certain of its accuracy. Alternatively, it may be some kind of adjective defining Oxus, or a patronym. DURKIN-MEISTERERNST (2014) has further proposed to read the second word as $wβw$, "lord", and to interpret the whole legend as $rywδ'tc wβw$, "lord of *Rēwdāt*"; however, it can hardly be confirmed from a paleographical perspective. Moreover, the early Arabic sources report that *Rēwdāt* was a royal residence of Sogdian kings (*Exšēds*), who must be as per tradition "lords of Samarkand". In fact, we now know of the seal impressions bearing a Bactrian legend containing "king of Samarkand" from Bactria, whose analogue types have been discovered in a

5 The etymology of *Rēwdāt* is "created or given by *Rēw*" (see LUR'E 2004: 211; DURKIN-MEISTERERNST 2014). *Rēw* is a vague, but important, god; this has been explained tentatively as an epithet for Mithra or the moon god (see SIMS-WILLIAMS 1992: 45)



Fig. 3a: She-wolf feeding twins (N315) (photo by the author).



Fig. 3b: Double-faced bust (A10) (photo by the author).

larger quantity from Kafir-kala, which will be mentioned below (see Fig. 5).

Among the Kafir-kala sealings, there are at least two distinct seal impressions reminiscent of Roman mythology; one of them is a she-wolf feeding twins, which is evidently evocative of the Capitoline Wolf feeding the mythical twin founders of Rome, Romulus and Remus, whose iconography is also known from Sogdian murals and other pictorial artefacts (Fig. 3a). This seal impression (N315: 10 × 22 mm) is tentatively dated to the 6th century CE by ABDULAEV/BERDIMURODOV (2005) and BERDIMURODOV/BOGOMOLOV (2016). The style of the Kafir-kala she-wolf, among other Sogdian representations, differs from examples known in Sasanian Iran, and is presumably influenced by Roman-Byzantine art.

The other one linked to Roman mythology is a sealing (A10: 18 × 16 mm) that portrays a human figure with two faces turned sideways. While the right face possibly has no beard, the left side has a thick beard. The left face has a prominent nose and large, elongated chin. This figure strikingly resembles the iconography of the Roman deity, Janus. An arch around his head and shoulders is also pointing to the function of Janus, i.e. the god of doorways (Fig. 3b). Berdimurodov (BERDIMURODOV ET AL. 2020) has suggested that this seal impression may represent Zurwān, the ancient Zoroastrian deity of time. Shenkar and Kurbanov (SHENKAR/KURBANOV 2018) suggest that a bronze pin with Janus-like two faces discovered at Sanjar-Shah may be influenced by the Sasanian tradition, due to their similarities to the “mace-heads” that originate in Sasanian Iran. Thus, it is possible that this sealing may well belong to the Sasanian seal impressions or be inspired by them.

6 Bactrian seal impressions and Sasanian circles of influence

The bulk of the Kafir-kala seal impressions fit into the wide range of Sasanian and Bactrian circles of influence. Some of these sealings are followed sporadically by Bactrian or Pahlavi inscriptions. Pahlavi inscriptions are less common, and occasionally accompany male busts with a *kulāf* (CAZZOLI/CERETI 2005: Fig. 36; BEGMATOV 2017: Fig. 5 (right); BERDIMURODOV ET AL. 2020: Figs. 4: 15, 16, and 17). CAZZOLI/CERETI (2005) state that the Pahlavi inscriptions may be dated to the late 7th century CE, according to their paleographic peculiarities. Bactrian inscriptions are employed more broadly and can also be found along with animal impressions.

A few seal impressions can be related to the Kushan tradition. SHENKAR (2014: 110) and SINISI (2019) have noted one of the seal impressions portraying a large standing figure with a rayed halo and two smaller figures, which can be traced back to the Kushan period. SINISI (2019) has further proposed that it represents the Kushan investiture scenes. The large figure with a rayed halo on this seal impression was first tentatively identified as Mithra by CAZZOLI/CERETI (2005) and later supported by COMPARETI (2013).

A sealing (B7: 15 × 12 mm), which was picked up without a stratified context on the platform of the citadel in 2017, depicts a male figure standing frontally, right shoulder slightly lowered, holding a long stick (a spear?) in his right hand, with his right leg straight and his left knee lightly bent (Fig. 4). His head with a hat or helmet leans towards his left – a theme similar to a figure with a Kushan dress on a seal impression from Gandhara (See UR RAHMAN/FALK 2011: 107, 07.06.17).

Furthermore, some of the human figures on the sealings closely resemble human figures on Bactrian sealings published by LERNER/SIMS-WILLIAMS (2011). One of the most frequently recovered sealing types is the bust impression depicted in three-quarter view with “Sasanian” attire, otherwise occasionally referred to as “Hunnic”, and accompanied by a Bactrian legend. From the “Sasanian-style” crown to the double pearl necklaces of the figure, all look identical to sealings from Bactria. The preserved part of the Bactrian legend (between three and five o’clock) of the Kafir-kala sealings can be read (κ)ορᾶνοβᾶο “Kushān-shāh” (Fig. 5) (BEGMATOV ET AL. 2020). The word “Kushān-shāh” can be observed in the legend of the analogue sealings of Bactria: “... lord Ularg(?), the king of the Huns, the great Kushān-shāh, the afshiyān of Samarkand” (GRENET/SIMS-WILLIAMS 2006: 125; LERNER/SIMS-WILLIAMS 2011: 72–74).

The Kafir-kala sealings (ca. 37 × 38 mm) are roughly half the size of their Bactrian doppelgangers. Therefore, other than the title “Kushān-shāh”, a personal name and another word could perhaps fit on them. Regrettably, the left side where we would expect to see the name has not survived. Nevertheless, these types (among nearly 600 specimens I have been able to observe thus far) represent the largest number (about 20 specimens), which may indicate the significance of this sealing in Kafir-kala. Although nothing certain can be proposed, “afshiyān of Samarkand” on the analogue sealings from Bactria might suggest that these Kafir-kala sealings may well have belonged to the kings of Samarkand.

The following sealing (B6: 23 × 16 mm), which depicts a male bust in three-quarter view, was unearthed during the 2013 excavations. Curly hair radiates from his crown (possibly) with a flower-like ornament on his right side. This ornament is separating the Bactrian legend that runs around the bust into two. The figure is oval-faced, without a beard, with the eyes wide open (Fig. 6). It is similar to the



Fig. 4: A male figure standing frontally (B7)
(photo by the author).



Fig. 5: Busts in three-quarter view with “Sasanian-style” crowns (photos by the author).



Fig. 6: Male bust in three-quarter view (B6)
(photo by Gennadiy Bogomolov).

seal impressions with male portrait busts published by LERNER/SIMS-WILLIAMS (2011: 67–71). The Bactrian inscription has been fairly well preserved from around 10 to four o'clock. The initial part (about four or five letters) has been poorly preserved. The remaining part can perhaps be read (ι/λ?)οβωμ(?) οσηανο.⁶ The suffix -ανο suggests that it may represent a patronymic or family name.

7 Turkic or other nomadic features

Some nomadic art traditions can be seen among the Kafir-kala seal impressions. In addition to the aforementioned Hunnic features, at least one kind of seal impression bears distinct Turkic features. This sealing (B1: 34 × 36 mm) has been discovered on three or four specimens – one of which is almost whole, and the others are fragmentary. Due to its iconographical features, it was first assumed to be a Buddhist divinity (see BERDIMURODOV ET AL. 2016).

The decipherment of the legend by Professor Yoshida has allowed us to speculate that it belonged to a certain khatun (wife) of a khagan (qaghan). The legend is as follows: left side: *'yrty 'p' 'wn'ynh*; right side: *x'ttwnh*. Its translation is: “Unen Khatun (daughter of) Erti-Apa.” Additionally, the three-horned halo of this figure is similar to the three-horned headdresses known to be one of the most

6 The letter β may also be part of a crown.



Fig. 7: Sealing of a khatun (B1) (photo by the author).



Fig. 8: An equestrian stabbing a recumbent man (A50)
(photo by Hiroshi Yamaguchi).

striking features of the Turkic queens (Fig. 7) (BEGMATOV ET AL. 2020).

Recently, BOBOJOROV (2020) has also argued that this sealing belongs to a khatun. Although he accepts the reading of the right side as *x'ttwnh*, he does not agree with the interpretation of the left side. Bobojorov, therefore, offers a new reading: *ZYk ZK t'pk cty'kh/cwy'kh* – “this seal (belongs to) *cty'kh/cwy'kh*”. This interpretation cannot be supported either from a grammatical or paleographical perspective of Sogdian. In fact, the problem with this reading is that Sogdian demonstrative pronouns and conjunctions are confused. There is no such demonstrative or any other determiner as *ZYk* in Sogdian.

The following sealing (A50: 24 × 26 mm) bears a scene of a horseman stabbing a recumbent man with his spear (see BEGMATOV ET AL. 2020). This scene is strikingly similar to Byzantine iconography – an equestrian attacking a defeated enemy or a beast – and is presumably adopted from Byzan-

tine prototypes. The equestrian on the Kafir-kala sealing is portrayed with a broad face and wears his hair in long braids, a typical hairstyle of early Turks (Fig. 8). It is also noteworthy that one of the sealings discovered during excavations of Panjikent in 2016 depicts a similar scene, i.e. a horseman attacking a serpent, followed by a legend in Sogdian, and was deciphered as $x^{\gamma}y^{\prime}n$, “Qaghan”, by P. Lurje (*apud* KURBANOV ET AL. 2017: 11).

8 Indian features

The iconography of Indian divinities has been well employed in Sogdiana, particularly in the mural art tradition. In the seal impressions of Kafir-kala, however, we do not witness the borrowing of Indian art as commonly as in the murals or other pictorial artefacts and textual sources. Nevertheless, there are at least two seal impressions with distinct Indian features. One of them is the sealing N127, whose depiction has been identified by COMPARETI (2013) as Wešparkar, the Avestan wind god Vāyu, whose iconography is modelled on the Indian deity Shiva.

The other one is a sealing (A29: 21 × 16 mm) that depicts a male bust *en face* with two different animal figures that face sideways on his shoulders. On his left shoulder, the front half of a boar with two front legs and a head with the tongue sticking out of its mouth has been depicted. On his right shoulder, the male bust probably bears a male lion with a maned head and neck, and two front legs. This figure wears a crown with three crescent moons, and he has a necklace with a single strand of pearls around his neck with a large ornament hanging on his chest. The figure’s face is oval with the eyes wide open and has a straight nose with a large tip. His lips are also large (Fig. 9). This bust resembles the iconography of Vaikuntha Vishnu, often seen in Kashmir (northern India).⁷ The Sogdian inscription around the triple-crescent crown, comprising two letters on the left side and three letters on the right of the figure, can be tentatively read as $^{\prime}pt\mathfrak{s}$, possibly a personal name (BEGMATOV ET AL. 2020).

This legend may alternatively be interpreted as an epithet for the deity, which may designate “protector” (cf. $^{\prime}pt$, past stem of $^{\prime}p^{\prime}y$ “to protect”), or less likely it may be related to “water” (cf. $^{\prime}pt$, plural form of $^{\prime}p$ “water”). In the case of the former, it may imply the function of the divinity on the seal impression, which again appears to coincide with the principal function of Vishnu.

On the other hand, the triple-crescent crown of the bust signifies its affiliation to the local religious



Fig. 9: Bust with a triple-crescent crown (A29)
(photo by Gennadiy Bogomolov).

pantheon. Thus, it has been tentatively proposed that it may represent the Zoroastrian deity of victory, *Vərəθrayna* (or Sogdian *wšyn*), grounded mainly on its boar “avatar” (see BERDIMURADOV ET AL. 2020). It is also important to note that Matteo Compareti has kindly informed me about its resemblance to the deity of Dokhtar-e Nušīrvān (an archaeological site otherwise known as Nigār in Afghanistan), who has also been depicted with different animals on his shoulders, but with a different kind of crown.

9 Concluding remarks

The sealings from Kafir-kala that have been studied thus far illustrate highly complex cross-cultural features of Late Antiquity and Early Medieval period Eurasia, in particular those of Western and Central Eurasia – Graeco-Roman, Kushan, Sasanian and, to a lesser extent, Indian, and other nomadic traditions such as the Turkic fashion. Some specimens may provide a key to finding out and distinguishing hitherto unidentified divinities or concepts.

Assuming that the greater part of these impressions belong to the 6th and early 8th century CE, the art traditions on them are quite conservative compared to the mural or other iconographic traditions of Sogdiana during this time period in which we witness increasing influence from Indian and Chinese art.

⁷ <https://collections.mfa.org/objects/14716/the-god-vishnu-in-three-incarnations-vaikuntha-vishnu?ctx=9fae7e2a-ab00-4a40-b946-38013a2a37e4&idx=0> (last accessed 27 December 2021).

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A Study of the Gold Folding Crown from Tillâ-Tepe as an Indicator of Cultural Exchange

Sara Peterson

Abstract: An elaborate folding crown was discovered in the grave of a woman at Tillâ-Tepe, an important burial site in Bactria (present-day Afghanistan). The crown was among thousands of objects excavated from six elite burials dating to the 1st century CE. This discussion falls into two sections, the first of which entails an analysis of the folding crown, as well as some remarks on the headdress worn by the only male incumbent of these graves, in light of related iconography on earlier and contemporary steppe headdresses. Secondly, the distribution of these headdresses prompts some preliminary reflections on connectivity across the vast areas of the steppes north of Tillâ-Tepe, which were occupied by pastoral nomads or people with a nomadic ancestry.¹

Keywords: Tillâ-Tepe, crowns, pastoral nomads, Bactria, Chorasmia.

Резюме: В женском погребении на городище Тилля-тепе — одном из важнейших бактрийских могильников на территории современного Афганистана — была обнаружена искусно сделанная складная корона. Она была одним из нескольких тысяч предметов, извлеченных из шести погребений представителей местной элиты I века н.э. Данная статья состоит из двух частей, первая из которых посвящена анализу складной короны и включает в себя некоторые замечания по поводу головного убора, принадлежащего единственному мужчине в этом захоронении, сделанные в свете соответствующей иконографии на более ранних и современных ему головных уборах степняков. С другой стороны, географическое распределение этих головных уборов наводит на некоторые предварительные размышления о различных связях, существовавших на обширных степных территориях к северу от Тилля-тепе, занятых кочевниками-скотоводами или населением кочевого происхождения.

Ключевые слова: Тилля-тепе, короны, кочевники-скотоводы, Бактрия, Хорезм.

1 This article is a development from earlier research published in PETERSON 2020.





Fig. 1: Tillâ-tepe and interconnected cultures across the Eurasian steppes (RUTISHAUSER/PETERSON 2022).

1 Introduction to Tillâ-Tepe

The excavation of the Tillâ-Tepe burial site by Russian archaeologist Viktor Sarianidi in 1978–1979 plays an important role in our understanding of the entire region.² Tillâ-Tepe is located at the Sheberghan oasis in the Upper Oxus (Amu Darya) basin (present-day Jowjan province, northern Afghanistan), in ancient Bactria, close to a network of roads and rivers in all directions.

Sheberghan was within reach of the easternmost borderlands of the Parthian Empire and was a stopping point on the long-distance route that passed through Merv (Turkmenistan) and then continued east towards Bactra, the capital city of Bactria (BERNARD 2005: 952, Fig. 7; 953), around 110 km away.³ The lands to the north opened out into the Eurasian steppelands via Chorasmia, while there was ready transit south via Anbar/Sar-i Pul (Fig. 1) and Bamian (see Fig. 1 on page 118) through the Hindu Kush to Gandhara (Fig. 1). Tillâ-Tepe, so close to Sheberghan, was therefore well placed at a nodal point on both local and long-distance routes.

Although the history of Bactria is poorly understood, we know that over time it interacted with many cultures, including the Iranians when it was part of the Achaemenid Empire, and then later with the Parthians. Its conquest by Alexander the Great triggered the ascendancy of Greek culture, which

persisted under subsequent Seleucid and Graeco-Bactrian rule. From the mid-2nd century BCE onwards, the sedentary cultures were disrupted by incursions by steppe peoples from the north and east – the Saka and Yuezhi-Kushans. The Tillâ-Tepe graves have been dated to the mid or later 1st century CE, based on coin evidence (ZEYMAL 1999: 243)⁴ and art historical analysis of several key artefacts, most notably the warrior's dagger case discussed below.

The Tillâ-Tepe burial structures and practices clearly indicate a steppe nomadic heritage. However, instead of spacious, log-lined tombs under a newly constructed mound – the kind of ostentatious kurgan associated with earlier steppe groups – these were simpler pit graves cut into a mound accumulated over an earlier building. This redeployment of pre-existing mounds also occurs among a small number of contemporary sites, including Koktepe (near Samarkand), Tillâ-Bulak (Bishkent) (see Fig. 1 on page 118), Kosika (Oblast Astrakhan), and Porogi (Middle Dneister) (Fig. 1). Tillâ-Tepe was located within sight of the fortified settlement, Emshi Tepe, which these buried people may have ruled.

Sarianidi excavated six unlooted, synchronous graves, containing one man and five women, all buried in an extended supine posture.⁵ A clear

2 FRANCFORT 2011; SARIANIDI 1985; 1989; SCHILTZ 2008 are essential publications on Tillâ-Tepe.

3 This route is attested in the itinerary of the merchant, Maes Titianos, ca. 100 CE.

4 Joe Cribb has suggested the third quarter of the 1st century CE, based on a heavily worn Heraeus obol in grave 1 (email May 2016).

5 See PETERSON 2016b for a recent summary of the burials with references.

social differentiation was apparent within this small group of richly endowed burials. The male and two of the women (graves IV, VI, and III) were interred within a privileged position towards the top of the mound within the walls of the original building. All three wore gold crowns (SARIANIDI 1985: 239, Cat. 3.24; 250, Cat. 4.28; 254, Cat. 6.1), their heads resting on precious metal dishes, and they owned the most important objects. Two other women (graves II and I) were buried with numerous items of jewellery and costume adornment, while a younger woman (grave V) – perhaps not yet an adult – had fewer, more modest items. She was interred within a tree trunk, an archaism recalling an earlier practice among the Pazyryk culture; therefore, perhaps a deliberate testament to an earlier nomadic ancestry.

The man's grave was orientated north and was surrounded by the five female burials. He was around 30 years old and was accompanied by a rich inventory of objects, including items attesting to his warrior status, many of which also reflected his steppe heritage.⁶ Positioned within the pit, but just outside his coffin, were horse bones and two quivers. He owned a folding seat of the type used in the field by the Roman commanders and resembling one from male burial 575 at Ust-Al'ma (Fig. 1), south-west Crimea (PUZDROVSKIJ 2013: 303, Pl. VII:4). Similar seats were depicted on coins issued by Kushan king Kujula Kadphises (r. ca. 40–90 CE) (FRANCFORT 2011: 283) and on an imported Bactrian textile from kurgan 20 at Noin Ula (POLOS'MAK 2015: 5, Fig. 2). His personal possessions included a gold necklace twisted into loops similar to one on coins worn by the Indo-Parthian ruler, Gondophares (BERNARD 1987: 764). The Tillâ-tepe necklace encloses a cameo, which may depict a local Bactrian king (FRANCFORT 2011: 328–330). The remains of a tree and ram headdress were also discovered, discussed below. His weaponry included a long sword, plus items decorated in the “gold-turquoise” animal style – most importantly, an opulent ceremonial scabbard for his dagger (discussed below) and a typologically related knife case, as well as belt fittings (SARIANIDI 1985: 247–248, Cat. 4.8, 248; Cat. 4.9; 251, Cats. 4.35–4.36).

Unlike the warrior's possessions, many of the objects from the female burials are decorated with imagery derived from Graeco-Roman art, including winged erotes and goddesses, and “man with dolphin” plaques (SARIANIDI 1985: 226, Cat. 1.1). Nevertheless, some important artefacts referenced the material culture of Eurasian steppes; particularly the folding crown in grave VI, which is the primary subject of this study.

The considerable wealth of the Tillâ-Tepe people is evident from their numerous gold artefacts, which exhibit a high degree of inventiveness in deploying

motifs and even styles drawn from different artistic traditions. That they were mostly manufactured in the same specialised workshop is illustrated, for example, by a small detail: the turquoise eyes with carnelian pupils featured on a dragon decorating the warrior's boot buckles produced in a pastiche “Chinoiserie” style (SARIANIDI 1985: 246, Cat. 4.1), as well as on the antelope-head terminals of bracelets that seemingly drew inspiration from Achaemenid art (SARIANIDI 1985: 231, Cat. 2.4.).

Importantly, the graves also contained imported items reflecting Tillâ-Tepe's location on long-distance routes between east and west – most notably Chinese mirrors, gems and metal vessels from the Graeco-Roman world, and coins from the Roman and Parthian Empires. This all bespeaks considerable economic power and political authority in this part of Bactria.

2 The Tillâ-Tepe woman and her folding crown

The woman in grave VI, aged 25–30 years old, was buried wearing the famous folding crown (SARIANIDI 1985: 254, Cat. 6.1). She was dressed in a costume covered in gold appliqués and wore lavish quantities of jewellery. A Chinese mirror lay on her chest (SARIANIDI 1985: 258, Cat. 6.1), and she held one coin in her hand and another in her mouth (SARIANIDI 1985: 258, Cats. 6.32–6.33). Small vessels imported from the Mediterranean world were placed just outside her coffin (BOARDMAN 2012: 105), while figurative imagery also deriving from this region featured on several articles of jewellery.⁷ While these items indicate distant connections with both east and west, her skull exhibited signs of artificial deformation reflecting practices whose roots lay in the pastoral world of the steppes.

This highly decorated crown was surely her most important possession and arguably the most likely to embody personal details relating to its owner (Fig. 2).

The structure comprises five symmetrical trees attached to a flexible band by means of vertical tubes soldered to both the trees and the band. This ingenious mechanism enables the crown to fold flat. Four of these trees are pyramidal and identical, and they surround a fifth tree that is broader in shape. Six-petalled flowers, executed in the “cut-out style” widely found at Tillâ-Tepe, are attached to the branches of the four trees. They were all originally inlaid with turquoise. Each petal is hung with gold discs attached by twisted wires, a typical technique used on Tillâ-Tepe's jewellery. The tree trunks are pierced by two hearts and a crescent. Each tree

6 FRANCFORT 2011: 298; see 296–303 for discussion.

7 See SARIANIDI 1985: 46–53, 254–259 for further discussion.



Fig. 2: The folding crown, grave VI, Tillâ-Tepe, 1st century CE; gold, turquoise; ht. 9 cm, w. 45 cm (photograph courtesy of Jane Hickman).

trunk is flanked by animals with spade-shaped tails and jagged undercarriages, representing either imaginary reptiles or, more probably in light of the watery themes on other Tillâ-Tepe jewellery, giant fish. A confronted pair of long-necked birds with outstretched wings perch in the upper branches. The fifth tree is decorated with flowers and pendant discs only. In order to wear the crown, the flexible band was bent into a circle and hence a three-dimensional crown was created from these two-dimensional elements. Variations of this three-fold configuration of a tree, birds, and fishy/draconic beasts also feature on two other pieces of jewellery at Tillâ-Tepe. In both cases a human figure is substituted for the tree: a “mistress of the animals” on pendants attached to the folding crown (SARIANIDI 1985: 254–255, Cat. 6.4); and a Hellenised soldier inside a foliated frame from grave III (SARIANIDI 1985: 236, Cat. 3.1).

This crown has several notable structural characteristics. Its folding mechanism enabled it to be assembled or dismantled easily – perhaps a throwback to the transhumant lifestyle of earlier generations. The attachment of the delicate flowers and discs, using flimsy wires, meant that any motion by the wearer would generate movement and the reflection of light. This was discernible during the “Hidden Treasures of the Kabul Museum” exhibition at the British Museum, London, in 2011. The crown was displayed within a freestanding case and the vibrations caused by visitors crossing the sprung floors caused a light quivering of these elements.

The tree-bird-animal arrangement – henceforth referred to as the “tree ensemble” – on this crown is not unique; there are comparable headdresses from previous and contemporary eras.

An early example is worn by a woman buried in an Early Iron Age elite burial in kurgan 6 at Taksai-1 (Fig. 1) in the Terekti district (Kazakhstan), excavated by Murad Sdykov and Yana Lukpanova in 2012 (ALTYNBKOV 2013; LUKPANOVA 2017) (Fig. 3). She was laid on her back in a small log construction within a rectangular pit grave covered by logs, dated to the end of the 6th to the mid-5th century BCE based on radiocarbon analysis of wood and bones (LUKPANOVA 2017: 145). The grave also contained gold jewellery, a bracelet depicting animal conflict scenes with turquoise blue inlays, dozens of appliquéés, a cauldron, a handled mirror, horse paraphernalia, precious metalwork vessels, and a glass vessel.⁸ Although this region was outside the Achaemenid Empire, the woman also owned several Achaemenid artefacts, including a poplar wood comb depicting a chariot scene, and elaborate gold temple-pendants.

The reconstruction of the tall headdress by Krym Altynbekov was based on the survival of its cone-shaped frame, which originally supported a leather or felt structure (LUKPANOVA 2017: 147). It was surmounted by a mountain ram’s head finial, a ubiquitous animal in steppe art, also found on the Tillâ-Tepe warrior’s headdress. Below the finial is a scene

⁸ This vessel with trailing decoration is compared with an example from grave 2, kurgan 1, Filippovka-1 (TREISTER/YABLONSKY 2019: 140–141).



Fig. 3: **Left** – Reconstruction of a woman's headdress, Taksai-1, ca. 5th century BCE; felt and gold decoration; ht. 66 cm approximately (photograph courtesy of Petya Andreeva); **Right** – Stag finial, kurgan I, Filippovka, ca. 4th century BCE; gilt wood, silver, bronze; ht. 49 cm (drawing by the author after ARUZ ET AL. 2000: 74, Cat. 1/4).

created from gold appliqués: rams flanking a tree with a bird at its apex, and other birds flying around.

The trees have scrolling branches that, if accurately reconstructed,⁹ imitate almost precisely the elaborate antlers belonging to a series of five gold-covered wooden stag hybrids excavated from the dromos leading into burial chamber 1, kurgan 1, at the Early Sarmatian cemetery, Filippovka-1 (**Fig. 1**) in the southern Urals (ARUZ ET AL. 2000: 72–79, Cats. 1–4). Filippovka is dated from the end of the 5th century to the third quarter of the 4th century BCE.

Even the ears of the Filippovka deer are replicated on the Taksai tree, although their presence on the tree makes no logical sense. This suggests that the Taksai tree design was adapted from the design of the Filippovka deer antlers. This raises several points.

Firstly, we appear to have clear evidence that the image of a tree is, in certain circumstances, interchangeable with a deer's antler. This provides visual

9 Note however ALTYNBEKOV 2013: 52, in which one small photograph also shows a reconstruction with a pole tree. The author has been unable to clarify the issue with Professor Altynbekov.

confirmation of the theory propounded by Anatoly Martynov (MARTYNOV 1991: 105–107) and Esther Jacobson: that antlers and trees might embody the same semantic values (JACOBSON 1993: 77, 82–84; 2006: 192–194); as Jacobson writes, “it is possible to understand the deer's bird-headed antlers as a metaphor for the branches of trees” (JACOBSON 1993: 83). Moreover, this Filippovka stag explicitly illustrates the connection with birds since the terminals of its antler tines are transformed into large-beaked birds. Transformation is a widespread phenomenon in steppe art.

This interchangeability is seen on a 5th century bronze deer finial, a chance find from Azov (Lower Don region) (**Fig. 1**), in the form of a symmetrical scrolling construction rising from the deer's head with a pair of confronted birds perched on its top volute (**Fig. 4**).¹⁰

Arguably, this correlation naturally arises from the innate visual similarity between branching antlers and a branching tree. We might speculate that the idea of a deciduous tree dropping its leaves each year is paralleled by a stag's annual shedding of its

10 With thanks to Warwick Ball for bringing this to my attention.



Fig. 4: Stag finial, Azov; bronze; ht. 44 cm (photograph courtesy of Warwick Ball).

antlers, and both allude explicitly to the yearly cycle of nature – reinforcing the notion of shared visual and semantic values.

The second point relates to dating, since this comparison means that the Filippovka deer must *predate* the Taksai tree appliqué. The potential date range for Taksai is earlier than the range for Filippovka-1, which is problematic. Further clues to Taksai's date are found in comparable pieces from a nearby Early Sarmatian burial in kurgan 2 at Pokrovka (Fig. 1) at the confluence of the Ilek and Khobda Rivers, dated to the 5th century BCE, possibly as late as the third quarter of the 5th century BCE.¹¹ Animal-style objects, weapons, and Achaemenid items, including a mounted chalcedony seal depicting the

“Persian hero” fighting a lion, dated no later than the early 5th century BCE (TREISTER/YABLONSKY 2013: Vol.1, 178, 189), were excavated at Pokrovka. Four oval costume appliques comprising opposing rams' heads (POPESCU/ANTONINI/BAIPAKOV 1998: 173, Cats. 263–266) from this kurgan are so typologically similar to gold appliques from Taksai that they surely came from the same workshop. Also from Pokrovka is an amulet pendant comprising a gold cone (enclosing a bear's tooth) with Achaemenid-style granulated triangles incorporating a tiny curl (POPESCU/ANTONINI/BAIPAKOV 1998: 170, Cat. 255),¹² which is directly comparable with five gold amulet pendants from Taksai (enclosing wolfs' teeth), either attached to the woman's dress (LUK-PANOVA 2017: 149) or part of a bracelet with biconical beads (ALTYNBEKOV 2013, 44–45), again implying the same source.

The radiocarbon dating of the Taksai finds plus these commonalities between Taksai and Pokrovka suggest that the reconstruction of the Taksai tree may be incorrect, since they seem to be earlier than the Filippovka deer. However, as Mikhail Treister suggests in light of this conundrum, the earliest burials at the Filippovka-1 necropolis could have dated to the very late 5th to early 4th century BCE,¹³ which might resolve the problem. Despite this uncertainty, the principle of the tree-animal-bird configuration holds true and the aforementioned Azov finial itself seems to confirm Jacobson's assertions of the shared semantics of trees and deer antlers.

Interestingly, a similar tree ensemble design was found on a medallion pendant at the Filippovka-1 cemetery, in an elite female burial – an unlooted grave pit typical of steppe cultures: grave 2, kurgan 1, excavated by Leonid Yablonsky in 2013 (YABLONSKY/TREISTER 2019) (Fig. 5). Among her many rich possessions were numerous Achaemenid and Achaemenid-style objects dating to the late 5th or the earliest 4th century BCE. The most elaborate of these pieces was a colourful cloisonné medallion with diamond and crescent motifs attached to gold chains,¹⁴ part of a set with simpler pendants and bracelets. The cloisonné scene features a palmette surmounted by a large bird with outspread wings¹⁵ and flanked by confronted gold griffin-like creatures.¹⁶

11 Mikhail Treister assigns this site to the first of three chronological periods, “Pre-Filippovka”, discussing the complexities in TREISTER/YABLONSKY 2013: Vol. 1, 303–304.

12 Treister discusses the technological details of this cone (TREISTER/YABLONSKY 2013: Vol. 1, 179–180).

13 Email from M. Treister, 8th January 2021.

14 See YABLONSKY/TREISTER: 2019: 92–93, 123–127 for a full description and discussion.

15 Described as a “symbol of the sun” in YABLONSKY/TREISTER 2019: 92. Although this might reflect Iranian perceptions, through nomad eyes a more literal interpretation of a bird is possible.

16 Described as birds of prey in YABLONSKY/TREISTER 2019: 92.



Fig. 5: Detail of plaque with pendants, kurgan 1, grave 2, Filippovka, Achaemenid, ca. 5th century BCE; cloisonné, gold, frit, glass cassiterite, sphalerite, pyrites; plaque diam. 50 cm (drawing by the author from YABLONSKY/TREISTER 2013: 85, Fig. 4:3).

This arrangement recalls the tree ensemble, in which the Achaemenid palmette represents the vertical vegetal element.¹⁷ Although this medallion was not locally produced and therefore would not embody the semantics of the tree ensemble, its subject-matter might nevertheless appeal to a rich nomadic customer who would interpret it according to her own worldview.

A complex version of the tree ensemble features on a tall headdress worn by the personage interred in a timber-lined chamber below a kurgan at Issyk (Fig. 1) in the southern Altai, excavated by Kemal Akishev in 1969, dated to the late 4th to early 3rd century BCE (AKIŠEV 1978: 42–43) (Fig. 6). This person is often described as a young Saka warrior because of the trouser suit, but the figure may have been female¹⁸ as trousers are essential riding kit for both sexes. The headdress has a strong vertical axis incorporating several zones of gold ornament. It is topped by a realistically rendered standing ram, towering over other motifs: notably soaring feathers and arrows, and a lower composition of two trees emerging from zig-zag rocks, each with a profile bird

at its pinnacle; and below all these motifs, a band of schematic winged felines, horses, and caprids.

Each tree comprises five tiers of wires wound around the trunk, creating symmetrical branches that recall the trees with pole trunks and rows of simple branches with scrolled tips decorating the horse saddlecloths on the pile carpet from kurgan V at Pazyryk (RUDENKO 1970: Pl. 176) – although the rug is of Iranian manufacture.¹⁹

There is a chronological gap before the next instances of this tree ensemble on headdresses. They appear in female burials in the North Pontic region, often described as Sarmatian, which are more or less contemporary with Tillâ-Tepe. The earliest example is from a female burial at Khokhlach (Fig. 1) in the Lower Don, dating to the mid-3rd to the third quarter of the 1st century CE (TREISTER 2004: 459–460). Although most of the grave was plundered, her crown survived intact in a lower chamber that also contained: gold torques; turquoise inlaid gold items depicting animals in the “gold-turquoise” animal style; gold clothing appliqués including crenellated plaque shapes similar to Tillâ-Tepe examples; and small vessels; as well as pieces showing an artistic engagement with Graeco-Roman art (ZASSETSKAIA 1995: 55–59). Her gold sheet crown is decorated

17 Similar palmettes also appear on this woman’s Achaemenid mirror (YABLONSKY/TREISTER 2019: 133–135).

18 AKIŠEV 1978 discusses the warrior as male, but LEBEDYNSKY (2009: 68) notes that the anthropologist who examined the bones later conceded that the small bones (no longer extant) probably belonged to a woman. See also DAVIS-KIMBALL 1997–1998: 78.

19 This study focuses on trees, but a broader discussion of headdresses with bird and ram imagery would include the two female burials at Ak-Alakha (Fig. 1), south-western Siberia – part of the wider Pazyryk culture.

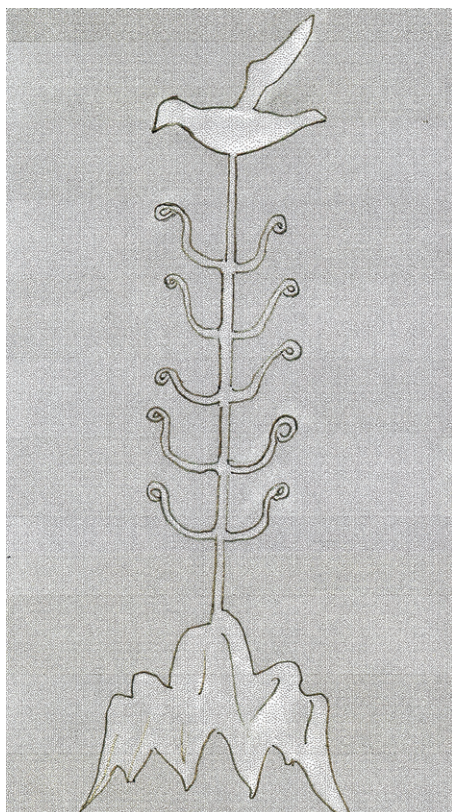


Fig. 6: Detail of the headdress tree, Issyk, 4th to 3rd century BCE; wood, gold, tree, and bird; ht. 14.5 cm (drawing by the author after AKISHEV 1978: 85).

with polychrome details in semi-precious stones and glass, all reflecting current Sarmatian fashions. At its centre is a cameo depicting the bust of a woman, flanked by cabochon gems and two bird reliefs. Small trees are arranged along the top of the diadem; these are hung with sculptural veined leaves, attached by the same means as seen on the Tillâ-Tepe warrior's headdress, and flanked by a stag and ram walking towards the centre (ZASSETSKAIA 1995: 58–59, Cat. 85; **Fig. 7 Top**). These leaves, and the rosettes and seed heads suspended from the diadem, would respond to any movement by the wearer.

A second typologically related crown from the Lower Don area was discovered in an unlooted square grave-pit in kurgan 10 at Kobiakovo (**Fig. 1**), dating to the late 1st or early 2nd century CE (SCHILTZ 2001: 219–223). The buried woman wore a red leather headdress decorated with flying birds around a pole tree, which was flanked by rows of deer at its base. These elements were cut from gold sheet to create a simple, flat composition (SCHILTZ 2001: 222–223, Cat. 239; **Fig. 7 Middle**). Unlike the Tillâ-Tepe women, she was buried with horse harnesses and weaponry usually found in male burials. Some of her possessions were decorated in the “gold-turquoise” animal style, and she owned a Chinese mirror and small imported vessels.

The final crown in this group came from an early 2nd century CE female burial Ust-Labinskaia (**Fig. 1**) in the Upper Kuban (LEBEDYNSKY 2014: 248) (**Fig. 7 Bottom**). This crown is also cut from thin gold sheet and features a pole tree, with the profile of a bird at its apex and affronted rams at its base. On either side are confronted pairs of deer, rams, and hares.

In sum, we have reviewed a range of headdresses and crowns that exhibit the tree ensemble, worn by elite women from steppe cultural groups, which are conventionally designated as Saka or Sarmatian. Although the animals across the comparanda consistently include antlered and horned species mostly presented on a ground line, at Tillâ-Tepe there are imaginary fishy or draconic beasts that seem to merge into trees. It is unclear quite what these spiny creatures represent, but if their domain was intended to be water, or a watery netherworld, then this correlates with the aquatic subject matter found at Tillâ-Tepe (SARIANIDI 1985: 226, Cat. 1.1; 231, Cat. 2.5; 236, Cat. 3.2; 254–255, Cat. 6.4), which is absent from the other sites in this study.

These headdresses, rising prominently from the axis of the head, were created not only for reasons of display, but were probably also emblematic structures. Their potential symbolism is not the primary topic here, but a summary of how the iconography might be interpreted demonstrates that the semantics of the Tillâ-Tepe folding crown were embedded in the ideology of steppe pastoralists. The imagery on these crowns and headdresses has been discussed in terms of a “tree of life” as part of a three-level universe in which the tree, which emerges from the depth of the earth and reaches towards the sky, functions as a central axis thereby assuming a cosmic dimension (FRANCFORT 2018: 134–135, 138–140; 2011: 306–307; JACOBSON 1993: 177–178).²⁰ Each tree is flanked at its base by aquatic (at Tillâ-Tepe) or herbivorous beasts. They are linked by the “cosmic” tree through the human world to sky-bound birds. This nomadic interpretation may be understood in light of the tree's fundamental, transcendental role in the minds of earlier Siberian and Altaic people, and its intimate association with the cycle of fertility, life, death, decay, and the annual regeneration of animal and vegetal nature – that is to say, the orderly functioning of the universe upon which human survival depends.

As Francfort has further noted, the encasement of corpses within tree trunks, including grave V at Tillâ-Tepe, may allude to ideas around the embodied tree as the source of life (FRANCFORT 2018: 140). This ideology was not confined to one specific group with shared kinship or ethnicity, but was found across the steppes.

20 See PETERSON 2020: 63–64 for further discussion and references.

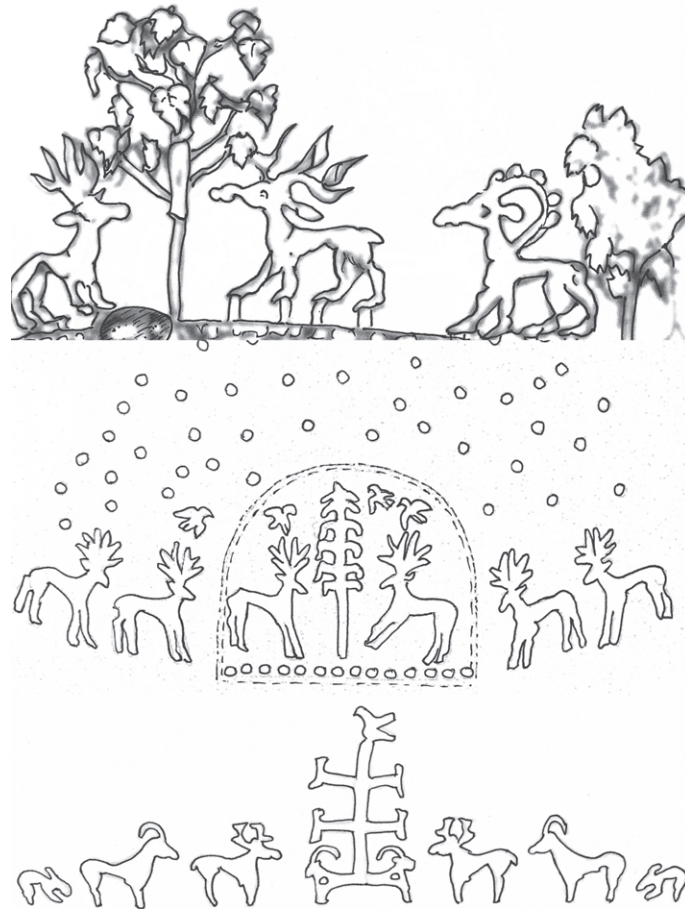


Fig. 7: **Top** – Detail of gold crown, Khokhlach, 1st century CE; gold, amethyst, almandine, turquoise, coral, glass; ht. 15 cm, lgth. 61 cm (drawing by the author after ZASSETSKAIA 1995: 59, Cat. 86); **Middle** – Headdress ornament, Kobiakovo, late 1st to early 2nd century CE; gold; tree ht. 11.4 cm (drawing by the author after SCHILTZ 2001: 222–223, Cat. 239); **Bottom** – Headdress ornament, tomb 46, Ust-Labinskaia, early 2nd century CE; gold; tree ht. 11.4 cm (drawing by the author after LEBEDYNSKY 2014: 284, Fig. 2).

3 The flowers

There is one major aspect in which the design of the Tillâ-Tepe folding crown differs entirely from the other examples, and that is the presence of 53 flowerheads on the trees. They have six pointed and lightly recurved petals surrounding the corona, which is delineated by granulation. These flowers are readily identifiable as narcissus flowers – the spring-flowering species of either *Narcissus poeticus* or *Narcissus tazetta* – and they have been discussed in detail in a previous article (PETERSON 2020: 64–72). These narcissi may be viewed in the context of the proliferation of distinct flower images at Tillâ-Tepe: in the female burials, identifiable species of flowers appear on a third of decorated gold artefacts (that is, locally manufactured items).²¹ Narcissi

specifically appear on a range of objects at Tillâ-Tepe (Fig. 8).

Of particular interest is the single narcissus flower, which is hung with discs and sits at the apex of the gold tree finial on the warrior's headdress. It has the same design and scale (2 cm across) as the narcissi on the folding crown. Sarianidi described this headdress as consisting of a tree attached to the side of the gold vessel on which the warrior's head lay, and a hollow cast figurine of a standing ram, and two balls (SARIANIDI 1985: 35–37; 247, Cat. 4.3; 250, Cats. 4.24, 4.28). The tree is an heirloom item structurally similar to three examples in Peter the Great's Siberian Collection (ARTAMONOV 1973: Figs. 274–276). It comprises a trunk with five tiers of radiating wire branches wrapped around it. Each branch has looped ends from which hang pearls and sheet gold discs identical to those on the woman's folding crown. The tree's base is made up of four strips of sheet gold, perforated for attachment by rivets to a cap, presumably made of felt or leather. So, in this

21 Calculated on the basis of artefacts in SARIANIDI'S 1985 catalogue, flowers only, excluding generalised vegetal ornament.

Grave number	Object type	Cat. no.	Qty	Material & technique	Signs of wear	Size	Weight
I-i	Hairpin, 4 petals only extant	1.3	1	Gold sheet, gold wire	Faint wear	6.5cm diam. flower	4.72g
I-ii	Appliqués	1.5	32	Sheet gold	Faint wear	Diam 3.5cm	60g all 32
II-i	Roundel enclosing flower	2.12	4	Sheet gold and turquoise	Faint wear	2cm and 1.4cm diam.	0.35g each
II-ii	Hairpins	2.31	2	Sheet gold and turquoise	Deformation	Disc diam. 2.7cm	50.3g each
III-i	Single flower	3.44	1	Thin sheet gold	Deformation	Diam. 5cm	1.68g
IV-i	Tree heirloom	4.28	1	Sheet gold, pearls	Deformation	Ht of tree: 9cm	
VI-i	Crown with 53 flowers	6.1	1	Sheet gold, turquoise inlay	?	Ht of tree: 13cm	214.14g
VI-ii	Hairpins 5-petalled	6.17	2	Thin sheet gold, pearls	Ancient(?) repairs	Rosette diam. 7cm	36.74g pair
VI-iii tentative	Sceptre	6.19	1	Sheet gold, wooden core	Poor state	Ht. 45cm approx.	

Fig. 8: Narcissus flowers at Tillâ-Tepe.

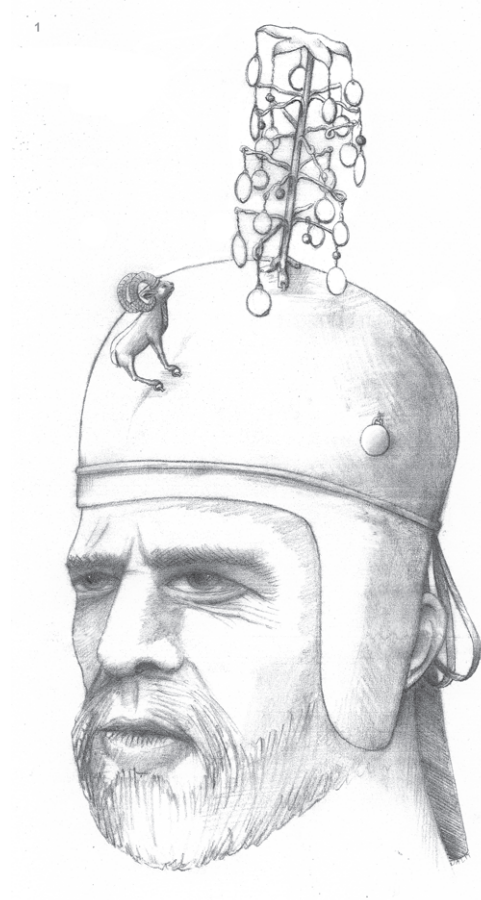


Fig. 9: The Tillâ-Tepe warrior's headdress (image courtesy of M. Shenkar).

case the older tree has been enhanced with a narcissus flower and discs of contemporary manufacture.

The ram, another heirloom item, is modelled with realistic details, particularly his finely rendered head, elaborate horns, and indications of his fur and beard. Rings were fitted to his hooves, presumably to enable attachment to the cap. Michael Shenkar has convincingly reconstructed the headdress's design, with the tree rising from its centre and the ram facing up towards it (Fig. 9).²²

Therefore, the warrior's crown has a similar, but not identical, configuration to the folding crown, with a tree, animals, and a flower, but no bird.

We now return to grave VI and note that in addition to her folding crown, this woman owned a gold sceptre or baton. Although it was in poor condition, Sarianidi mentions that its pommel was decorated with a six-petalled rosette (not visible in photographs or drawings) (SARIANIDI 1985: 256, Cat. 6.19; SARIANIDI 1989: 129), which we construe was also a narcissus flower. Furthermore, she wore a pair of pendant hairpins that were affixed to her folding crown, each with a narcissus flower (SARIANIDI 1985: 256, Cat. 6.17). These narcissi are identical in execution to the flowers on the crown, manufactured in gold sheet in the same "cut-out style", but are larger in scale (7 cm across). Curiously, unlike the other Tillâ-Tepe narcissi, they have only five petals – presumably an oversight by the craftsman since the number of petals on specific plant types was occasionally varied in error. Gold discs are attached by twisted wires to two of the petals and be-

²² See SHENKAR 2017 for a comprehensive analysis of this headdress.

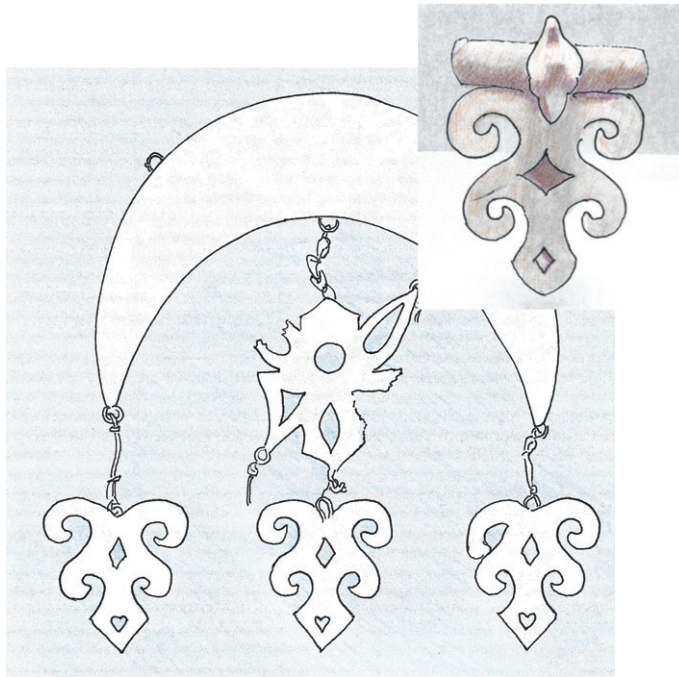


Fig. 10: Crescent hairpins; gold; ht. 7.3 cm (drawing by the author from SARIANIDI 1985: 238, Cat. 3.19); Inset **top right** – Wooden plaque with eagle-griffin, Tuekta. State Hermitage Museum, St. Petersburg, 2179/906 (drawing by the author).

low each flower is a crescent, which itself has pendant gold discs.

In fact, all four adult women wore hairpins with crescents, sometimes enhanced with pearls, each varying in design, but all related technically and stylistically (SARIANIDI 1985: 226, Cat.1.3; 235; Cat. 2.31; 238, Cat. 3.19). The crescent hairpins from grave III are of interest because they are hung with distinctive openwork pendants, which closely resemble wooden “leaves” from Tuekta (**Fig. 1**), the 5th-century nomadic burial site in the Ondugai Valley, southern Siberia. These distinctive “leaves” were originally covered in gold foil and are sometimes crowned by eagle-griffin protomes (**Fig. 10**).

They decorated bridle fittings whose ornamental repertoire largely consisted of vegetal motifs, and elaborate animal transformation and predator imagery. However, these curious “leaves” are rectilinear in contrast to the other scrolling, asymmetric foliage from Tuekta. The Tuekta people, ascribed to the Pazyryk culture, were buried in tree trunks placed in deep chambers and accompanied by horse sacrifices (JACOBSON 1993: 58). We do not know the significance of these putative leaves, nor why they feature on these Tillâ-Tepe hairpins as unique reproductions of a motif from nomadic art in the distant past.

Crescents themselves are a widespread motif reproduced in many cultures and a proper discussion of their role in art is beyond the scope of this study. It is briefly noted that they feature in graves of steppe nomads, usually gold-coloured and in conjunction with a disc, including on saddle wares at Bashadar (**Fig. 1**) (RUDENKO 1969: Pl. CXX; see also Pls. CXIX:2 and CXXIII:1), contemporary with nearby Tuekta;

and then later and further east in tombs belonging to the Xiongnu realm: at Takhiltyn Khotgor (MILLER ET AL. 2009: 301), Gol Mod, and Burkhan Tolgoi (BROSSEDER 2009: 265, fn. 30) in western Mongolia. Ursula Brosseeder notes a uniformity in their deposition, which might indicate similar beliefs (BROSSEDER 2009: 265–266), and Bryan Miller has proposed that the Takhiltyn examples might be “equated with Xiongnu ritual obeisance to the sun and moon” (MILLER ET AL. 2009: 306). On the other hand, crescents also appeared at Filippovka, attached to the aforementioned Achaemenid medallion, as well as in Bactria itself on a bronze crescent pectoral from Ai Khanum (**Fig. 1**) (BERNARD 2008: 114, Cat. 15), so it is difficult to propose the source of the motif. It is possible that these Tillâ-Tepe hairpin crescents may have specifically denoted a lunar motif with some symbolic significance.

The folding crown and the warrior’s headdress may be seen within the context of steppe crowns, but in both cases a decision was made to add narcissus flowers deriving from a different artistic source – the Mediterranean world – thereby creating a fantastical composition. It is unlikely that such significant possessions would include whimsical ornament; the narcissi were surely added for some reason. Since the trees on these crowns were chosen because they embodied a symbolic dimension, related to what Petya Andreeva calls a “Vertical Cosmos” (ANDREEVA 2018: 130), then the question is whether the narcissus flowers also played an emblematic role. The cultural significance of narcissi has already been studied based on their presence in art, literature, funerary rituals, and medicine. The conclusion was that, across all categories, narcissi

were consistently connected with the annual cycle of nature and associated ideas of death and rebirth or return (PETERSON 2020: 66–72), notions which were expressed in the tree ensemble. Therefore, although the narcissus flowers were an imported motif on both Tillâ-Tepe headdresses, they were so completely assimilated into the iconography that they became part of a symbolic assemblage that was a profound expression of the steppe worldview. This hypothesis is proposed in the context of the widespread and repeated use of specific floral imagery – not only narcissi, but also opium poppies and roses – across a range of Tillâ-Tepe artefacts. These floral motifs were all appropriated from outside the nomadic cultural sphere; and yet, as proposed here and elsewhere (PETERSON 2016a; 2020), their presence formed part of a sustained programmatic and nuanced use of plant iconography, in which motifs from different sources were combined in a convergence of interrelated symbolic values. This phenomenon is a distinctive characteristic of Tillâ-Tepe art.

This iconographical consistency was only possible because the folding crown and hairpins were manufactured in the same workshop, since they all have elements of the core repertoire of Tillâ-Tepe ornament (HICKMAN 2012).²³ Even the warrior's headdress, incorporating two earlier pieces each with different origins, was assembled into a recognisable Tillâ-Tepe artefact with the characteristic additions of the narcissus and discs. This presupposes a guiding hand in the design, although we cannot know who played this role for these discerning patrons.

4 Contacts and networks

The discussion so far has attempted to position the Tillâ-Tepe crown within the tradition of tree headdresses whose origins go back to at least the 4th century BCE and perhaps earlier. They occur in two chronological periods, the 5th/4th to the 3rd century BCE, and then in the 1st or early 2nd century CE, although we might anticipate that there was continuity between the two for which we currently lack evidence. There was some broad consistency in burial practices among these cultures – interment in various types of pit graves, often with wooden log structures, under mounds (notwithstanding differences in orientation of the bodies, details of funerary rituals, etc.). The grave goods of these various cultures reflected their nomadic lives or ancestry, based around horse riding and horse warfare (horse burials, horse gear, quivers). The weaponry, belt fittings and some horse gear exhibited an elite taste for possessions executed in gold or gold-covered wood, sometimes with turquoise inlays, dec-

orated with steppe animal imagery in a distinctive language of animal predation. These burial types at different sites did not necessarily indicate the same ethno-cultural groups, but denoted people who shared some cultural codes. Of course, there are considerable differences in detail between the pastoral nomads of Siberia and the groups in the southern Urals, compared with the North Pontic communities who interacted with their Greek neighbours and functioned within the Roman world, as well as the Tillâ-Tepe people. These latter two groups appropriated imagery from Graeco-Roman sources and repurposed them within their own art.

However, when it comes to the essential tenets of religion, deeply rooted in steppe pastoral culture and preserved down the generations over hundreds of years, it is not surprising to find continuities in belief. The headdresses discussed here have been interpreted as expressions of a pan-steppic religion, which had its origins in northern Siberia (JACOBSON 1993 and especially 2003; MARTYNOV 1991). It was shared across several cultures, of which Tillâ-Tepe represents a southern outpost. The precise nature of religious transmission is complex, since the sharing of ideologies among communities with cultural affinities or origins is insufficiently understood. However, religious beliefs are one of the most fundamental aspects of society, profoundly associated with a community's identity including, and perhaps especially, during times of change, such as migration. We therefore postulate that the occurrence of the tree ensemble on these headdresses in different places reflects, to some degree, the historic movement of people across the steppes.

Although we have to be cautious about any methodology that correlates migrations with the movement of objects – and therefore this discussion remains hypothetical – we can say that, in general, people and goods moved along the same routes. Our understanding of these routes is still fragmentary and there is much to be done on the reconstruction of networks. However, there is archaeological evidence for markets in prestige goods (whose nature, it is emphasised, is different from our religiously encoded headdresses). These would be transmitted along roads and rivers, the latter particularly relevant to mobile populations because rivers were essential for both temporary (passing through) and regular seasonal settlements,²⁴ as well as providing transport. To reiterate, this is not to say that the appearance of similar luxury artefacts in places A and B automatically denotes migration between the two, since prestige goods were traded or exchanged across local and long-distance networks, responding to demands for status symbols among

²³ See PETERSON 2016b: 14–15 on design and technical consistencies.

²⁴ Burial sites were not tied to rivers in the same way, but in many circumstances were strategically and prominently sited in the landscape nearby.

elite steppe cultures. As summarised by Brosse and Miller: “The equivalency of object assemblages at two different locales, whether in object styles or in whole parallel objects, may serve as a proxy for social interrelations, and scholars have accordingly (re)constructed networks of connectivity through similarity matrices that highlight these interregional equivalences” (BROSSE/MILLER 2018: 166–167).

For brevity’s sake, the following preliminary remarks on connectivity among steppe communities focuses on the two primary phases when our headdresses appear. Furthermore, although there is certainly scope to extend the investigations into many areas, just a few means of exploration are deployed here. Firstly, as Sören Stark has demonstrated, the existence of high-status objects from the Achaemenid world in the graves of nomads in the steppelands provides an invaluable guide to the existence of communication networks from around the late 6th and 5th century BCE onwards (STARK 2012: 113–121), long before the establishment of the “Silk Roads”. Secondly, in light of its prominence at Tillâ-Tepe, we reflect on the “gold-turquoise” style of animal art, with some observations on the Chorasman source of turquoise and the strategic location of Chorasmania itself.

The presence of related iconography on the headdresses at Taksai (the tree ensemble) and Filippovka (the antlered deer) reflects the network of contact between cultural groups in the foothills of the southern Urals, extending to Issyk in southern Siberia, from the early 5th to the later 4th century BCE. During this era, the southern Urals area saw an increase in population and a diversity of burial topologies, presumably reflecting the arrival of nomadic groups from the east (SCHILTZ 2002: 849–850). Artefacts manufactured in different workshops across the Achaemenid Empire have been found at these sites. Recent excavations at Filippovka-1 and consequent research by Treister and Yablonsky on the dissemination of Achaemenid imports to Filippovka and other sites in this region has shown that the main items were gold jewellery, especially granulated items and elaborate cloisonné pendants (including the Filippovka medallion mentioned above), glass vessels, stamp seals, and phialai.²⁵ They were acquired by nomadic communities: either through trade and exchange, reflecting the deliberate acquisition of desirable articles by elite societies; via gift-giving, perhaps rewards for military or other services to the Achaemenid Empire; or in relation to interethnic marriage alliances (TREISTER/YABLONSKY 2013: Vol. 1, 321). In addition, there were locally manufactured objects that incorporated elements of

Achaemenid style or techniques, reflecting the profound artistic impact of these imports.²⁶

Achaemenid or Achaemenid-related items were also discovered at Issyk, where our next headdress was found, including an imported silver spoon terminating in an elongated bird’s head (SIMPSON/PANKOVA 2017: 302, Cat. 217). Achaemenid influence is apparent in the stepped merlon rail on a square-footed tray found close to Issyk (STARK ET AL. 2012: 127, Fig. 7-23). In addition, there is potential evidence for connections between the southern Urals and the southern Altai in locally manufactured objects at Issyk and Filippovka: Treister has compared the technique of gold inlay on Filippovka swords with the ornament on a sword at Issyk (SHEMAKHANSKAYA/TREISTER/YABLONSKY 2009: 215). There is also an elaborate inlaid silver Achaemenid mirror at Filippovka, whose openwork handle is executed in the animal style, which Treister considers reminiscent of gold plaques and appliques from Issyk (YABLONSKY/TREISTER 2019: 134–135), comparable with items in AKIŠEV 1978: 100–103, 106). Therefore, there is evidence to suggest interregional connections across these sites, although the internal dynamics are not entirely understood.

The second cluster of headdresses occurred in the centuries around the Common Era, a period of high connectivity across Eurasia. They featured at Tillâ-Tepe and in the lands encompassing the North Pontic area and the Kuban region (southern Russia) at the north-west end of the Caspian Sea. The Pontic/Kuban localities were dominated by Sarmatian people, who had migrated across the steppes from the Urals;²⁷ seemingly, based on the headdresses, bringing their religion with them.

Research on artistic similarities between Sarmatian and Bactrian (Tillâ-Tepe) artefacts has been dominated by the “gold-turquoise” style on weaponry, belt fittings, and jewellery. Pale blue turquoise was the pre-eminent stone at Tillâ-Tepe. It had a long history of use in steppe animal imagery, initially mostly in the form of flattish cut inlays highlighting details such as the ears, eyes, snouts, hoofs, and beaks of animals,²⁸ and as beads on gold earrings.²⁹

26 Discussed in detail with some scientific investigations: Treister, “Achaemenid imports in the southern foothills of the Urals. Chronology. Dynamics, Composition. Interpretation”, in TREISTER/YABLONSKY 2013: Vol. 1, 308–313.

27 SCHILTZ 2002: 849–850 provides a brief overview.

28 The earliest turquoise was late 8th to 7th century BCE at Shilikty (Fig. 1), eastern Kazakhstan, kurgan 5 (ARTAMONOV 1973: 35, 37), and Shilikty-3, kurgan 82 (STARK ET AL. 2012: 50; 58–59).

29 E.g. Arzhan 2 (see Fig. 1b on page 169) in Tuva, southern Siberia (ARMBRUSTER 2009: 188); inlaid bracelets at Taksai (ALTYNBEKOV 2013: 58); earrings from Issyk (AKIŠEV 1978: 113). See TREISTER/YATSENKO 1997–1998, a proposal for the eight main areas where the style occurs.

25 TREISTER/YABLONSKY 2013; YABLONSKY/TREISTER 2019.



Fig. 11: Dagger scabbard, grave IV, Tillâ-Tepe, 1st century CE; gold, turquoise; lgth. 23.5 cm (after SARIANIDI 1985: 215, Pl. 161).

Turquoise became more prominent in goldwork from around the 4th or 3rd century BCE, as exemplified by gold plaques in the Siberian Collection of Peter; for example, the extravagant application of turquoise on a circular plaque where it embellished both framing elements and animal anatomy (SCHILTZ 1994: 236, Pl. 174). An even greater diversity of cabochon-cut inlays appears on a figurative scene with a boar hunt, where they enhance the hunters' costumes and the horse fittings (SIMPSON/PANKOVA 2017: 64, Cat. 22). In this case, the inlay material is actually blue smalt, perhaps in imitation of more costly turquoise. This and other plaques from the Siberian Collection have cloth impressions on their reverse relating to their casting technique (SIMPSON/PANKOVA 2017: 68–69). Interestingly, comparable impressions are visible on the reverse of the Tillâ-Tepe warrior's "Chinoiserie" boot buckles (illustrated HICKMAN 2012: 85, Pl. 12), implying the use of the same technique.

These Tillâ-Tepe buckles are heavily inlaid with cabochon-cut turquoise stones, many shaped as commas, which were also a revival of the Siberian plaque tradition. Typically, turquoise decorates the roundel frame, and it is also used to highlight the details of both the chariot and the rider's costumes, in a similar manner to the smalt inlays on the Siberian boar hunt plaque. In addition to the custom-

ary placement of turquoise inlay in steppe animal style imagery, comma-shaped turquoise was inlaid into roundels surrounding scenes that owe nothing to that source but whose subject-matter draws on Graeco-Roman and Parthian art. Turquoise inlay also defined flower petals on jewellery and costume appliqués.

Turquoise was used in combination with other coloured inlays on cast gold work from the Kuban/Pontic region. The Sarmatians favoured polychrome effects, primarily deploying pale blue and green-coloured turquoise as well as red carnelian and other vibrantly hued stones – in contrast to Tillâ-Tepe and the strong preference for turquoise blue colouring.

Stone-inlaid quadrilobe ceremonial dagger scabbards are sometimes used to illustrate the similarities between Tillâ-Tepe and Sarmatian art, primarily those from the western end of the steppes, at Dachi, Kosika, Porogi, and Gorgippia (Fig. 1) (BERNARD 1987; SCHILTZ 2002). These quadrilobe scabbards are a revival of a type of Siberian weaponry. They are status items found across a range of horse-riding societies, reflecting the power and wealth of their owners, which spread to Central Asia, the Parthian Empire, and the North Pontic area (BROSSEDER 2015: 222–226).³⁰ The scabbard from Dachi, a square pit burial on the Lower Don dating to the third quarter of the 1st century CE, is the closest in design to the Tillâ-Tepe scabbard and they are often discussed together.³¹ Animal imagery decorates the rounded hilts and blade coverings of both scabbards. These animals are heavily inlaid: with turquoise only at Tillâ-Tepe; and with an equal mix of blue and green turquoise and carnelian at Dachi. Their artistic styles vary. The Dachi ornament comprises images of a giant raptor attacking a camel, rather heavy and static in conception, while the Tillâ-Tepe scabbard features a long, undulating scene of dragons and felines in a chase, the liquid rhythms of the composition optimising the plasticity of the gold (Fig. 11).

Both draw on older art traditions that are represented by different stylistic strands seen in the Siberian Collection. The Tillâ-Tepe decoration is a progression from the fluid compositions of animal fights and hunts on plaques, drawing strongly on the legacy of earlier nomadic art. The raptor-camel scenes on the Dachi scabbard are closer to a 4th century BCE image of a ram held in the claws of an eagle-griffin, whose widespread wings are chased with finely detailed feathers and whose body is profusely studded with inlays (SCHILTZ 1994: 378, Cat. 296) – all somewhat redolent of Achaemenid armlets from the Oxus Treasure (CURTIS/TALLIS 2005: 138–139, Cat. 153). The four protruding lobes and

30 See BROSSEDER 2015: 292–293 for a list of all quadrilobe daggers.

31 See SCHILTZ 2002: 853–860 for a full description of the Dachi and Tillâ-Tepe scabbards.

the scabbard tips on both the Dachi and Tillâ-Tepe examples are decorated with steppe style coiled animals in high relief, which are relatively close in style and execution. The difference in style means that it is unwise to attribute a Bactrian origin to the Dachi weapons and indeed Treister further rejects such a possibility due to the diamond-shaped inlays and the profusion of carnelian, which are not features of Tillâ-Tepe pieces (TREISTER 2018).

These well-known scabbards and others listed above are all decorated in very different styles, indicating origins from different workshops.³² Other turquoise-inlaid gold items, such as belt fastenings, more strongly recall the Tillâ-Tepe pieces. It is possible that gold-turquoise items produced in the Tillâ-Tepe Bactrian workshop did indeed travel further afield, perhaps commissioned directly from the workshop, or bestowed as gifts, or otherwise acquired in the exchange of prestige goods. In such circumstances, it is not essential that the recipients were of the same cultural group as defined by burial customs. This might explain the presence of turquoise-inlaid belt fastenings and other decorations with heart and comma motifs similar to Tillâ-Tepe pieces at Porogi (BONORA 2007: Cats. 227, 243–244, 246–247), dated ca. 70–80 CE.³³

In sum, the circulation of the gold-turquoise style indicates connectivity, perhaps even direct contact, among communities in the North Pontic and Kuban regions and Bactria (Fig. 1), but there is insufficient evidence to correlate it directly with migrations between the two areas.³⁴ The style likely illustrated a shared aspiration by elite classes from similar, but different, cultures for flamboyantly decorated prestige objects (parade scabbards, belt fittings). Consequently, at present, we cannot convincingly extrapolate kinship between the Sarmatians and Tillâ-Tepe, despite our assertions that they shared some core religious beliefs deriving from their steppic origins. Additionally, we may postulate that the religious ideology expressed in the headdresses was transmitted via migrations directly from the Urals.

The source of this valuable blue-green stone was most probably Kyzyl-kum in Chorasmia (see **General map on page viii**), where turquoise deposits from several mines were intensively quarried in antiquity (VINOGRADOV/LOPATIN/MAMEDOV 1966).³⁵ Indeed, the foundation tablets for Darius's temple at Susa lists turquoise from Chorasmia among its

contributions from across the Achaemenid Empire (WIESEHÖFER 2001), seemingly in preference to turquoise from the closer mines at Nishapur (Fig. 1) – either as a symbolic inclusion, or implying that the Chorasmian stones were superior. The tablets mention gold from Bactria, also part of the empire. Its geographical location suggests that the Chorasmian mines also fulfilled the steppe nomads' demand for turquoise for their luxury gold products.

The numerous turquoise inlays on Tillâ-Tepe artefacts suggest that they had ready access to large quantities of this stone. The transmission of turquoise is possible from Kyzyl-kum along the Oxus River, which crosses the Turan plain³⁶ (Fig. 1) and heads south to Tillâ-Tepe. This prompts the question of whether the proliferation of turquoise was purely an aesthetic choice, or whether they also had privileged access to this desirable resource. Perhaps they even owned a stake in the supply chain, utilising down-the-line transactions, extracting taxes or tolls in the form of this precious and fashionable material, for southward-bound transportation and distribution across Afghanistan. For example, small, flat turquoise inlays feature in a cross motif alternating with garnet cabochons on the 1st century CE casket from stupa 2, Bimaran (Fig. 1), Darunta, Afghanistan.³⁷ Turquoise travelled south to Sirkap-Taxila (Fig. 1) (modern Pakistan), where various cut shapes, including hearts, commas, and crescents, were found in a jeweller's hoard (MARSHALL 1975: Vol. 2, 506). A piece of turquoise was also placed in a reliquary at Sirkap-Taxila (MARSHALL 1975: Vol. 1, 327). It was also used on 1st century CE Sirkap-Taxila jewellery: an amphora-type gold pendant in a Hellenised style, and a turquoise-paste and crystal encrusted ornament (MARSHALL 1975: Pl. 190:1; 188).³⁸ In addition, the V&A Museum in London has floral earrings with turquoise beads, again in a Hellenised style and probably from Sirkap-Taxila (Acc. IS.16-1948).

The presence of turquoise from Chorasmia shows that this area played a significant role in the complex, de-centred web of communications across the steppes.³⁹ Indeed, it is hoped that future scientific research into the chemical fingerprints of turquoise samples from different mines will provide insights into routes of dissemination. As we have seen, the export of turquoise north and east into the steppes is attested from around the 7th century BCE and it

32 See TREISTER 2018 for further discussion.

33 The Porogi burials are in a re-used mound, like at Tillâ-Tepe. However, the specific burials circumstances differ since the tomb has a dromos and the corpse is interred with bent knees.

34 See MORDVINTSEVA 2010 for a more detailed discussion of specific objects. BROSEDER 2015 supports the elite aspiration model.

35 Based on geography, this source is more likely than the mines at Nishapur in Iraq.

36 See MINARDI 2018 for a discussion of the geographical, historical, and sacred significance of the Oxus, and its importance for supporting several ancient Chorasmian settlements, especially Akchakhan-kala (Fig. 1).

37 One survives below the figure of the Buddha, British Museum, London, Museum no. 1900,0209.1.

38 However, it is possible that the paste was imitation turquoise made of glass.

39 BROSEDER/MILLER 2018: 163 defines the principles of this.

continued thereafter. The turquoise at Tillâ-Tepe is testament to transit via river or road south-east to Bactria. It is clear from the map that Chorasmia occupied a strategic location on routes between the nomadic steppe world of the Urals and Kuban, and between the Achaemenid and later Iranian empires further south. This observation can be supplemented by further evidence for connectivity across the steppes: the circulation of Chorasmian pottery, and vessels with inscriptions in the Chorasmian language.

In his discussion of the trans-Caspian and Aral region and contacts to the steppe belt further north, Marek Olbrycht has identified the Ustyurt plateau (**Fig. 1**) as an important connecting area “used by nomads crossing from their winter habitats to the summer camps” (OLBRYCHT 2015: 265). He cites the kurgan culture – which existed in the Ustyurt from the late 5th to the 2nd century BCE – some of whose graves contained early Sarmatian and Chorasmian pottery, showing that the region was in contact with these two neighbouring areas. Consequently, he proposes that Ustyurt provided a passage linking Chorasmia with the Southern Urals and lower Volga regions. He specifically traces a route from Ustyurt via two rivers: the Emba (Zhem) River, which connects the Caspian Sea 640 km up-river in a north-easterly direction, and the Ilek River in the Southern Urals. His evidence for this proposal is the presence of a silver vessel with a Chorasmian tamga in the Trans-Ural zone, thereby indicating contact with places as far as Siberia, as well as significant quantities of Chorasmian pottery in the southern Trans-Ural region (OLBRYCHT 2015: 265–266). Therefore, Chorasmia provides a transit route from the Urals in the north to Tillâ-Tepe in the south, and although one cautions against any assumptions about direct connection with Filippovka or nearby sites, the forebears of the Tillâ-Tepe people may have moved along these ways at some point.

The Chorasmian language also offers evidence for contact as far as the Trans-Ural area of south-western Siberia, where silver bowls inscribed in Chorasmian were found in kurgan 3, grave 6 – a timber-framed grave pit, dated to the 1st or 2nd century CE, at the Sargat culture site Isakovka-1 (**Fig. 1**) near Omsk, close to the Middle Irtysh River in the Siberian Forest Steppe zone. Olbrycht has compared the palaeographic style on the bowls with an inscription on a camel jaw from Burly-kala, in the Sultanuizdag Mountains (OLBRYCHT 2015: 264), within reach of the Kyzyl-kum turquoise mines. These bowls and other “foreign” artefacts from the Isakovka-1 grave were perhaps either diplomatic gifts or were acquired as trophies during southern raids (KORYAKOVA 2006: 109–112; OLBRYCHT 2015: 262–264). The interred elite male was “wrapped in gold textiles” and close to his head was an Achaemenid-style silver dish, in which traces of silk survived (KORYAKOVA

2006: 108–109). There are similarities with Tillâ-Tepe here: like the Tillâ-Tepe warrior, the Isakovka male’s head may have rested originally on the bowl with a silk cushion. He also owned a long sword and, more significantly, a dagger with a quadrilobe scabbard decorated with black lacquer, with gold roundels on each of the lobes and the tip, exactly as on the Tillâ-Tepe scabbard and, importantly in light of this discussion, animal combat imagery with turquoise inlay (illustrated KORYAKOVA 2006: 110, Fig. 12).⁴⁰ His considerable wealth is shown by prestige items originating in the Iranian Eastern Mediterranean, Bactrian, and Chinese worlds, reflecting Isakovka’s position at the northern edge of an interconnected nomadic world, sharing commonalities with far-distant Tillâ-Tepe at its southern periphery.

Furthermore, the legacy of Bactrian art is potentially observed far to the east in later centuries. Gold crowns with stylised trees, discovered in 5th–6th century elite tombs at Kyôngju, Silla, in Korea, exhibit similarities to the Tillâ-Tepe folding crown. Although the precise route of transmission is as yet unclear, one option is that the technique and style were spread via commercial interactions between the Silla and the Xianbei; the latter shared religious beliefs with the Tillâ-Tepe people that originated in Siberia and north Asia, expressed on these crowns as the “tree of life motif” (ROSÉN 2009: 4–5).

5 Summary

The folding crown and, to a lesser degree, the warrior’s headdress have been discussed in light of typologically related headdresses from the northern steppe belt. Their imagery was drawn from a specific repertoire of steppe motifs, executed in different styles appropriate to the cultures producing them. It was argued that these headdresses were symbolically charged objects with religious significance, created as expressions of a fundamental cosmological ideology that was shared by different communities with a pastoral heritage across the steppes. The shared tree-bird-animal iconography was construed as embodying three levels of the universe, an expression of the nomadic worldview focused on life and death, fertility, and rebirth – appropriate themes for keynote objects taken to the grave. The addition of narcissus flowers on the Tillâ-Tepe pieces also conforms to these notions.

It was hypothesised that these typologically and conceptually related headdresses were disseminated via migration. In order to understand better the potential transmission networks, some preliminary

⁴⁰ Turquoise inlay was found in several Isakovka graves, and turquoise-inlaid belt plaques were also found in the burial of warrior, kurgan 1, grave 2, at the nearby Sargat culture site, Sidorovka (**Fig. 1**) (Koryakova 2006: 106–108, 109).

analysis was provided. Connectivity amongst the earlier crowns may be demonstrated by both the presence of Achaemenid imported goods, which would have circulated along established routes, and some technical similarities.

The latter group of headdresses appeared in an era of far greater interaction. The presence of the gold-turquoise style demonstrates some degree of connectivity between the Pontic/Kuban and

Tillâ-Tepe people. The discussion was extended to reflections on the location of the turquoise mines in Chorasmia, which clearly emerges as a key contact zone between the northern steppes and Bactria.

It is hoped that by drawing all the various threads of evidence together, more light is cast on our understanding of Tillâ-Tepe's position among the interconnected cultures of the 1st century CE.

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Monumental Narrative Paintings of Karatepa in Old Termez, South Uzbekistan

Shakirdjan R. Pidaev

Abstract: This article is dedicated to the wall paintings discovered in 2016 on the northern hill of the Karatepa monastic complex in southern Uzbekistan. It is one of the first well-preserved polychrome narrative murals of the Kushan period found so far in the region. The Karatepa painting, a masterpiece in itself, reveals a new chapter in the history of the art of Uzbekistan and Central Asia. It also provides a rich source for scholars to recreate the appearance of the people of Kushan Bactria, their clothes, and jewellery. Thanks to it we can form a picture of what the Bactrians looked like and what kind of clothes they wore.

Keywords: Old Termez, Karatepa, wall paintings, Buddhism, Kushan.

Резюме: Статья посвящена настенной живописи, обнаруженной в Южном Узбекистане на Северном холме монастырского комплекса Каратепа в 2016 г. Это одна из первых хорошо сохранившихся полихромных сюжетных росписей Кушанского периода, найденных в данном регионе. Каратепинская живопись, представляющая собой истинный шедевр, открывает новую главу в истории искусства Узбекистана и Центральной Азии. Кроме того, она может служить богатым материалом для реконструкции внешнего вида жителей Кушанской Бактрии, их одежды и украшений. Она позволяет составить представление о том, как выглядели бактрийцы и какую одежду они носили.

Ключевые слова: Старый Термез, Каратепа, настенная живопись, буддизм, кушаны.



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DOI: 10.13173/9783447118804.225



Fig. 1: The northern hill of the Buddhist monastery complex, Karatepa (photo: Sh.R. Pidaev, 2016).

Termez (see **Fig. 1 on page 118**) is one of the largest urban centres in Uzbekistan. Due to its location at the strategically important crossing over the Amu Darya River (its Greek name Ὠξος – Oxus), the city had a special place among the various regional units in ancient and Medieval times. Moreover, it was also located at the crossroads of several trade routes running from north to south and from west to east. As a result, Termez had been involved in ethnocultural interactions since ancient times. Written sources and archaeological finds indicate that the city flourished under the rule of the Graeco-Bactrian kingdom (3rd to 2nd century BCE) and Kushan kingdom (1st to 4th century CE), and in the Medieval period (10th century to the beginning of the 13th century CE). During these periods, Termez was a major political, economic, cultural, and religious centre of Bactria-Tokharistan (-Tokhara). The city's leading position is confirmed by the archaeological evidence from different monuments of Old Termez. Among the finds from the area, works of art are worthy of particular mention. Many of them are unique and of great scientific and cultural value. Not only do they help to trace the development of the artistic culture of Termez through various periods of time, but they reveal new chapters in the history of the art culture of Central Asia – in particular, Bactria-Tokharistan. To such unique findings may be added the remarkable narrative murals from the Buddhist monastic complex on the northern hill of Karatepa, discovered by the Termez archaeological expedition of the Institute of Art Studies of the Academy of Sciences of the Republic of Uzbekistan.

The Buddhist monastery complex of Karatepa is located on the northern hill of the modern city.

Since 1998, it has been explored systematically. As a result of archaeological investigations carried out in different areas of the site, the eastern part of the monastery – consisting of a monumental stupa in the north and a temple court with the surrounding corridor and monks' cells in the south – has been fully excavated (**Fig. 1**). Archaeological excavations have shown that the monastery complex was built directly atop the Buddhist structures of earlier times. Analysis of architectural planning and engineering solutions exploited in Karatepa indicates that the builders of the monastery used advanced construction practices and design details, in particular dome-shaped roofs. Judging by the architectural remains that have been found there, it is possible to assume that the western facade of the platform of the monastery's monumental stupa was richly decorated with a stone relief depicting the lives of the Buddha as told in the Jataka tales. In front of the relief, clay-gypsum sculptures of the Buddha and donors were placed in recessed niches. Taken together, these sculptures and relief fragments constitute the exemplary artefacts representing the high and original artistic culture of Termez and Kushan Bactria.

Finding wall paintings at Karatepa was rare and, to date, only small fragments have been found (STAVISKIJ 1982: 38, Fig. 10; MKRYČEV 2002: 200–202). The painted images of the Buddha and monks from the surface and cave Complex B, built on the southern hill of the site, were somewhat better preserved, but they were also in fragmentary form (**Fig. 2**). Paintings were found on the four sides of the stupa platform in Room 11 of the monastery complex (PIDAEV 2004: 30–34). Unfortunately, their condition and execution leave much to be desired.



Fig. 2: Wall painting. Buddha with disciples under the trees (© State Museum of Oriental Art, Moscow).



Fig. 3: Paintings on the four sides of the stupa platform (photo: Sh.R. Pidaev, 2016).

Only silhouettes of the Buddha with monks and the Buddha with parishioners were rendered (Fig. 3).

In 2016, a new polychrome narrative mural was found in archaeological excavations of one of the premises of the Karatepa monastic complex (PIDAEV 2016: 45–51). The size of the building was not determined for it had not all been uncovered. Judging from the area investigated, it was a hall of at least 42 m². Wall paintings were found on the east and south walls of this hall, preserved to a height of more than 2.50 m. Regrettably, the painted walls have been damaged in places by termites and rodent burrows. That is why some of the images and details in murals are often difficult to identify precisely. Nevertheless, the wall paintings from Karatepa, compared to murals from other sites in Central Asia, are regarded as one of the best surviving mural

paintings of the Kushan period. During 2017–2018, archaeological study of the remains of the hall and its mural paintings continued.

The recent discovery of the mural painting from the monastic complex of Karatepa opens a new chapter not only in the history of the Buddhist art culture of ancient Bactria, but also of Central Asia as a whole. This is the first well-preserved polychrome narrative mural found so far in the region. Analysis of the placement of the mural in the hall shows that the artist who decorated the hall was one of the ablest painters of the time. This is suggested, first of all, by the ideal placement of mural paintings, taking into account the planning layout and interior of the hall. The vertical length of the walls in the hall was divided into three rows. The first (lower) row was painted in burgundy ochre. The second and third



Fig. 4: Wall painting. An images of four figures in the “frames”. East wall of the hall (photo: Sh.R. Pidaev, 2016).



Fig. 5: Depiction of a middle-aged man (detail of Fig. 4).

rows, placed at eye level, were divided into rectangular “frames”, each containing an individual painted story. All of this enhanced the visual impression of the murals. The hall amazes viewers with its continuous narrative paintings associated with the life of the Buddha. The division of murals into “frames” allowed the viewer to concentrate on the paintings’

subject, which enhanced the perception of visual storytelling.

One of these “frames” revealed on the east wall of the hall, near the entrance to the next room, contains images of four figures. The principal figure is on the left side of the compositional rectangle (Fig. 4). Depicted in a full-frontal view, the male figure is sitting cross-legged on a low throne. Unfortunately, his face did not survive the centuries. Only the upper part of the head has been preserved. The head is tied with a ribbon, the ends of which are joined on the left side of the forehead with a plaque. Above his head is an umbrella. To the left of him is a young man shown in profile. His face, with a genteel appearance, is turned toward the seated character. The young man is portrayed in a strikingly realistic manner. His facial tenderness fascinates. Behind him is an adult male standing in three-quarter view to the right. Next to him is a woman shown in a similar three-quarter view to the right. The left half of the female image was lost during repair work. All four figures are shown on a pink background. This painting can be called “a divinity and donors”.

Karatepa painters relied on five colours in their palette: red (with shades from pink to burgundy), black, blue, white, and brown. They were very skilled in creating a marvellous range of colours and effects in a painting. The paintings all have an organic beauty, and one cannot find two identical faces among the images represented on the wall surfaces.

The technique, style, and character of the composition also illustrate the artist’s high professionalism. In each case, the artist, taking into account the theme of the painting, successfully made compositional and colour palette decisions, as seen in the



Fig. 6: Wall painting. Depicts two figures on a blue background. Eastern wall of the hall (photo: Sh.R. Pidaev, 2016).

preserved paintings. Each image is original, individual, and unique. The figures are expressive of movement and represented in three main positions: profile, full-face, and three-quarter view. At the same time, all of them compositionally and organically accord with the entire theme of the mural paintings. Characteristically, one of the images is depicted in three-quarter view. This is the best-preserved example of the images in three-quarter view among the mural paintings of Central Asia. Karatepa artists taught themselves to make their paintings appear more three-dimensional, using light and shadow effects. The paintings of secular figures are painted in a manner that makes them realistic. The artist was able not only to convey the portrait of the represented, but also to emphasise the individual details, conveying the psychological and emotional state of a character. This is seen especially clearly in the carefully painted faces and eyes – they seem to be alive.

This is best illustrated by the depiction of a middle-aged man (**Fig. 5**). He is depicted in a three-quarter view to right. His face is oval. He is wearing a headdress, tied with a double ribbon, ending in a knot on the left side of the forehead and fixed with a plaque (brooch). The forehead is wide, the nose is straight, and the eyes are round. He has a rather peculiarly shaped moustache. His lips are compressed, giving an impression of focused concentration to the face. In general, the man's face has an expression of tiredness.

The painting within the “frame” from the south-east end of the eastern wall of the hall depicts two figures on a blue background. On the left side of the “frame” is a cave-like vaulted chamber painted in a light brown colour. Inside the chamber there is a nude male figure turned to the right (**Fig. 6**). His

right hand is bent at the elbow, leaning against the wall of the chamber. The man's body is painted dark brown. The hair is long, uncombed, and black-coloured. The forehead is high and wide. The eyebrows are thick and wide, painted black. The eyes are large and almond-shaped. He has a large nose with a hump, wide lips, a long wedge-shaped beard, and thin black moustache. Between his chest and right hand, a black staff is shown. The lower part of the male figure has not survived. On the right side of the “frame” is a female figure on a dark blue background. Preserved are the upper part of her body down to the shoulder and right hand. Her right arm, bent at the elbow, is stretched towards the vaulted chamber, the palm touching the outside of the vault. The head of the woman is in three-quarter view facing left. On her head the woman wears a turban-like headdress. The face is painted white. Facial details are badly abraded. Between the two figures there is an unidentifiable object in a burgundy colour. This scene can be interpreted as “an ascetic attended by a noble woman”.

It is well known that the ascetic image originated in Gandhara. Traditionally, the ascetic is portrayed as an adult male with a full, untrimmed beard and moustache, and long hair that is sometimes pulled back into a bun. He is usually depicted naked, except for a small loincloth, his face having an expression of intense concentration. Ascetics were considered wise men – sages – who had attained a higher spiritual level in the quest for salvation and truth.

Ascetics usually lived outside the monasteries, far from the noise of the city, in the solitudes of nature. They frequently settled in mountainous areas. All of this suggests that the painting described above was meant to depict an ascetic seated within a mountain



Fig. 7: Wall painting. Depicts a scene with three personages. South-eastern corner of the southern wall (photo: Sh.R. Pidaev, 2016).

cave-shelter. In this case, the blue background at the top of the painting signifies the blue skies, while the amorphous feature painted with burgundy ochre seems to represent a stone block lying at the entrance to the cave.

Another fragment from the south-eastern corner of the southern wall of the hall, depicting a scene with three personages, is represented in the second row, in a framed rectangle. The frame is outlined by three lines in a different colour. The figures are depicted on a blue background; the black border at the bottom represents the floor level. A blue background, which contrasts with the floor and light skin tones of the painted figures, makes the subject and image more visually attractive. By applying different shades of light and dark, the artist managed to create a sense of volume and roundedness (Fig. 7).

On the left side of the painting is a female figure preserved from the waist down. She is attired in a long, Ionic-style chiton, falling in loose folds, leaving the feet bare. The feet are painted with light brown. To the right of the woman is a girl (to judge by the bracelet around the ankle); her head is at the level of the middle of the woman's thighs. The girl faces the right in three-quarter view. The eyes look upward. She has full facial features, with chubby cheeks. The eyes are large and almond-shaped. The contour line of the eyelids is red, and black colour is used for the pupils. Her face is lively, depicted in many shades of pink. The volume of the face and body is accentuated using subtle changes in skin tone. The use of different skin tone shades enhances the sense of volume of the figure, making it look less flat and more alive. The girl is portrayed with a lighter skin colour. The right arm is elevated and slightly bent at the elbow.

The girl is dressed in a knee-length, short-sleeved garment in a red-brown colour. She is shown barefoot. Of the third figure, only the feet have survived, painted in red-brown. A red-brown colour is usually used in the painting of men's skin. Moreover, the position of his legs would appear to indicate that the figure might have been seated. The upper part of the figure has not survived. Preserved fragments of this painting indicate that the scene depicted within this "frame" includes a central image of a male seated on a chair or throne, a girl standing in front of him and stretching out her hands to him, and a female figure in the background, on the left side of the composition.

Fragments of the paintings were also found in archaeological excavations of the next room. These fragments probably belong to an earlier date as they were found below the level of the uppermost construction horizon.

One of these fragments preserves a portrait of a young man viewed in profile, wearing a turban-like headdress made of two strips of black cloth wrapped around the top of the head and tied into a bow over the forehead (Fig. 8). The face is mostly white. The neck, forehead, and cheeks are rendered in different shades of white and light brown, which gives the portrait volume. The body of the figure is shown in three-quarter view to the left. The head is surrounded by rosette-shaped flowers; the flowers were added after the main areas of the painting were filled and they are larger than the head of the youth.

The methods and techniques used in this painting indicate that it was the work of a truly skilled artist. This is seen also in the artist's ability to convey the character's personality, despite the small



Fig. 8: Fragments of wall painting. Portrait of a young man viewed in profile (photo: Sh.R. Pidaev, 2016).



Fig. 9: Wall painting. Head of a man facing forward (photo: Sh.R. Pidaev, 2017).

size of the portrait. Using subtle gradations of light and shadow, the painter aptly conveyed not only the person's ethnic identity, but also his physical appearance. From the specific facial traits it may be surmised that the man depicted in this painting was a Dravidian.

Near the abovementioned fragment, there was another painting fragment preserved on the wall. What is preserved, however, is not preserved well enough. Since the wall surface is deformed, it is difficult to detect some details of the image (Fig. 9). On the left of the fragment there is a minute image of the head of a man facing forward. Although the

painting is in a poor state of preservation, it clearly shows the artist's skill and talent.

The wall paintings from Karatepa are a testimony to the skill and talents of the artists. This is well illustrated by the overall compositional solution – in style and in the painting technique. They are characterised by great portrait accuracy, without any idealisation, thus conveying to us the image of the local population. The artist was well taught to take images of human figures and to freely and correctly paint them in any pose. The characters are illustrated in relation to the surrounding landscape in a small scale; almost all figures are correctly rendered anatomically.

cally. However, despite the images showing strong movement and rare positions, there is a certain rigidity and linearity of folds of clothing in the images, and the figures are transferred somewhat statically. The figures are illuminated by light, as if falling from above, which does not give sharp shadows. The contours of the body are clearly drawn, with the roundness of the body created by a smooth transition of light and shadow. Particular storylines are shown in three angles and the figures are grouped so closely that you do not feel the depth: the figures stand out as if to go out into the space of the hall, rather than go into the depths. This further underlines the importance of each piece. The artist's professional skill is expressed in the colour decisions of the whole painting from the frames to the figures. The colour palette in Karatepa wall paintings has been extended. Naturally, this opened up new opportunities for artists and creative searches for the transmission of characteristic details of the painted figures and their clothing – they have become more expressive, precise, and natural, and their artistic standard has increased dramatically.

Thus, the newly discovered paintings from Karatepa considerably enlarge our understanding of the artistic traditions, religious ideas, gods, and iconography of the population of Kushan Bactria – in particular, Termez. Although fragmentary in their remains, the gorgeous paintings from Karatepa, which once formed part of the decoration of the Buddhist temple, display the fact of a great local tradition of Buddhist mural painting, which has its roots in the art of Bactria of previous eras and the Buddhist art of India.

The painting style and technique used in the Karatepa murals show that the artist was influenced by the art traditions of the Graeco-Bactrian kingdom. This is evident in many of the poses of figures, as well as in the artistic techniques used to create the illusion of volume and liveliness.

The wall painting discovered in the hall of the monumental monastic complex at Karatepa dates from the 2nd to 3rd century CE. The *terminus ante quem* is given by two imitations of Kanishka III's coins found under the rubble of the collapsed ceiling

and parts of the walls. According to most scholars, these coins were in circulation in the second half of the 3rd century CE.

Characteristically, the use of framing devices for Buddhist wall painting was not known to Central Asian art. However, it was popular among the eastern Turkestan artists, as evidenced by mural paintings discovered there. Yet, the murals of eastern Turkestan (Dongguan) with a frame-like separation of scenes depicting the Buddha date from a later period. It may thus be assumed that the division of paintings into "frames" was introduced into eastern Turkestan by artists from Bactria, including the Termez artistic school, travelling along the Silk Road. As is well known, the Silk Road allowed not only an exchange of goods, but also an exchange of cultural traditions. Apart from merchants, Buddhist missionaries and pilgrims, artisans, and artists travelled along the Silk Road. The Chinese chronicles preserved the names of many Buddhist missionaries, including those from Bactria, who went to China and preached Buddhism, translated Buddhist sutras into Chinese, and built Buddhist temples.

The Karatepa painting – a masterpiece in itself – reveals a new chapter in the history of art of Uzbekistan and Central Asia. It also provides a rich source for scholars to recreate the appearance of the people of Kushan Bactria, their clothes, and jewellery. Thanks to it, we can form a picture of what the Bactrians looked like and what kind of clothes they wore. The mural paintings of Karatepa complement the images of Bactrians known from reliefs, sculpture, and coinage. Together, they allow us to recreate the true appearance of Bactrians more precisely. The analysis of costume design shows that Bactrians preferred wearing elegant and exquisite clothes, displaying good taste.

The hope is that further exploration of the paintings of the main assembly hall of the Karatepa monastic complex in Old Termez will allow the now hidden images to reveal themselves, and we will continue to expand our knowledge of the rich and diverse artistic culture of Kushan Bactria, which certainly occupies a worthy place in the cultural history of world civilisation.

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The Iron Gates Wall near Derbent (Uzbekistan)

From Alexander the Great to the 19th Century

Claude Rapin, Mutalib Khasanov, and Shokhimardan Rakhmanov¹

Abstract: The Iron Gates wall near Derbent in Uzbekistan is a fortified system built by the Graeco-Bactrian ruler Euthydemus in the second half of the 3rd century BCE to counter the threat of the nomads who had just taken control of northern Sogdiana. It later became the border between the Kushan Empire and the Kangju confederation. In the Hephthalite period, a small fortress was added to the wall by the Chaganiyan principality to guard the road to Samarkand. In the 14th century CE, Tamerlane rebuilt a wall and a customs post there, enabling him to earn substantial income from international trade.

Comparative analysis of data collected during excavations conducted by a team of the Franco-Uzbek Archaeological Mission of Sogdiana, together with a revision of the ancient texts, expands our understanding of the history of this monument and its influence over the centuries on administrative, political, and military levels. The data also allows us to formulate certain hypotheses – today subject to various controversies – about the original territory of pre-Kushan Sogdiana, and to address the debate on the definition of borders from antiquity to the modern era.

Keywords: Iron Gates (Uzbekistan), Derbent (Uzbekistan), Sogdiana, Bactria, Graeco-Bactrian kingdom, fortifications, frontier, Alexander the Great, Euthydemus, Kushan empire, Kangju, Tamerlane.

Резюме: Железные ворота близ Дербента в Узбекистане представляют собой фортификационную систему, построенную греко-бактрийским правителем Евтидемом во второй половине III века до н.э. с целью противостоять угрозе, исходящей со стороны кочевников, которые только что взяли под свой контроль северную Согдиану. Позже эта укрепленная стена стала границей между Кушанской империей и конфедерацией Кангюй. В эпоху эфталитов усилиями княжества Чаганиан к стене была пристроена небольшая крепость для охраны пути в Самарканд. В XIV веке Тамерлан перестроил стену, добавив к общей диспозиции таможенный пост, что позволило ему получать значительный доход от международной торговли.

Сравнительный анализ данных, полученных в ходе раскопок членов Узбекско-Французской археологической миссии в Согдиане, и новое прочтение античных текстов расширяют наше понимание истории этого памятника и его значения на протяжении веков с точки зрения административной, политической и военной. Эти данные также позволяют нам сформулировать ряд гипотез в отношении вопросов, которые активно дискутируются в настоящее время, а именно о первоначальной территории докушанской Согдианы и об определении границ между Бактрией и Согдианой от древности до современной эпохи.

Ключевые слова: Железные ворота (Узбекистан), Дербент (Узбекистан), Согдиана, Бактрия, Греко-бактрийское царство, фортификация, граница, Александр Македонский, Евтидем I, Кушанская империя, Кангюй, Тамерлан.

1 Shokhimardan Rakhmanov, who died in 2007, had invited the Franco-Uzbek Archaeological Mission of Sogdiana (then directed by Frantz Grenet on the French side and Mukhammadjon Isamiddinov on the Uzbek side) to carry out an archaeological exploration of the Iron Gates region. The mission's work was the subject of several writings by Rakhmanov and Rapin, and an exhaustive publication of its results is forthcoming. On the members of this mission, see footnote 10 below.



Introduction

Located on the traditional main route connecting the north and south of Central Asia,² from Samarkand to Bactra, the Iron Gates near Derbent³ (Fig. 1) and their border wall have been a rich source of study in historical geography since antiquity, particularly with regard to the function of borders and communication routes crossing mountain ranges, rivers, oases, and steppes.⁴

This region has been the focus of several research programmes, notably over the past forty years, beginning with Eduard Rtveladze, who was the first archaeologist to carry out surveys and archaeological excavations on the wall and surrounding sites (PUGAČENKOVA/RTVELADZE 1990; RTVELADZE 2019). He was followed by archaeologists including Shokhimardan Rakhmanov, who later joined the Franco-Uzbek Archaeological Mission (MAFOuz) of Sogdiana (RAHMANOV/RAPEN 2003; 2004), Kazim Abdullaev (ABDULLAEV 2007), Leonid Sverchkov (SVERCHKOV 2005; 2008; SVERČKOV 2013), and Ladislav Stančo (STANČO 2018; 2021; STANČO ET AL. 2019; STANČO/TUŠLOVÁ 2019).

These archaeological studies have been supplemented by historical texts that shed new light on key periods in the history of Central Asia from the end of the Achaemenid period to the Middle Ages. In addition to the accounts reported by Alexander the Great's historians, we may add the testimonies of numerous travellers who passed through the Iron Gates, such as the Buddhist monk Xuanzang in 630 CE, the envoys of General Kültegin of the second Turkish khaganate around 712,⁵ and Ruy González de Clavijo, ambassador of the king of Castile to Tamerlane's court in Samarkand in 1304. The same Iron Gates appear in the accounts of many Arab-Persian geographers. Finally, the region was also explored and described by travellers and scientists during Russian colonisation in the 19th century (ARŠAVSKAYA/RTVELADZE/HAKIMOV 1982: 42–43;

2 By Central Asia – a region with multiple definitions (GORSHENINA 2014) – we mean the configuration corresponding to the western part of the heart of Asia, i.e. the former Soviet Central Asian Republics plus the northern part of Afghanistan.

3 The term “Derbent”, used on Soviet maps and maintained in many contexts, is the one we favour here. However, the name has been changed to “Darband” in the new toponymy of Uzbekistan, and other spellings exist.

4 By a fortuitous accident the main geographical locations presented here are practically aligned graphically along a straight line coinciding with the same meridian (ca. 66°57'E). While the distance as the crow flies between the ancient site of Bactra and Afrasiab (ancient Maracanda-Zariaspa) is about 320 km, the wall of the Iron Gates lies almost exactly halfway between them.

5 The Iron Gates are mentioned three times in the 8th-century Orkhon inscriptions (those of Kültegin, Bilge Khan, and Tonyukuk).

KAMALIDDINOV 1996: 122–125; RAHMANOV/RAPEN 2003).

1 Geographical and geological settings⁶

The Iron Gates of Derbent in the Hissar chain between the Surkhan Darya and Kashka Darya districts not only belong to the historical Bactra-Samarkand route, but also constitute one of the nerve points in the communications between the north and south of Central Asia.

The Hissar chain, which borders the Surkhan Darya plain to the north-west, is made up of a longitudinal succession of vast anticlines with a shell of Jurassic limestone half a kilometre thick and forms a powerful barrier that dominates the plateaux of Piedmont from 1,000 m to more than 1,500 m and the plain of Surkhan Darya itself from 2,000 m to 2,500 m.

The Iron Gates are more precisely located on an intra-mountainous and transverse trough of this Hissar Range; its origin is explained by the sudden lowering of the great anticlinal barrier Kugitang-Susyztag, at the level of the locality of Derbent, due to an axial plunge towards the north-west, revealing in the hollow of the trough the preserved cover of gypsum, sandstone, and red argillite of a Late Jurassic-Early Neocomian age.

This trough is closed to the north by a vertical limestone cliff due to a transverse fault cutting the thrusting overturned anticline of the Sarymas-Baysuntau massif and falls steeply on the hollow.

The crossing related to these Gates is not reduced to a single point, but develops over about 22 km between the villages of Derbent and Akrobat (Figs. 1–2). The present administrative border between the districts of Kashka Darya and Surkhan Darya runs to the east of Akrobat where the watershed between the Oxus and Kashka Darya basins is located. Throughout history Akrobat, situated at the foot of the Kapkagly Auzy Mountain,⁷ was mainly a crossroads where the roads from Derbent in the east, Guzar in the west, and Shahr-i Sabz in the north met. This position is still symbolised today by the ruins of an ancient fortress with a postal function erected in the 19th century by Tsar Alexander III to control the communication routes within the Bukhara Emirate (Fig. 2b).

6 The geological data of this chapter were formulated by Aymon Baud (see footnote 10).

7 A mountain that can be identified with the “rock” of Simithres, hyparch of Nautaca (whose capital was Kish, represented by the sites of Uzunkir, Padayatak-tepe, and Sangir-tepe) (see footnote 20). A synthesis on this subject will appear in a forthcoming monograph.

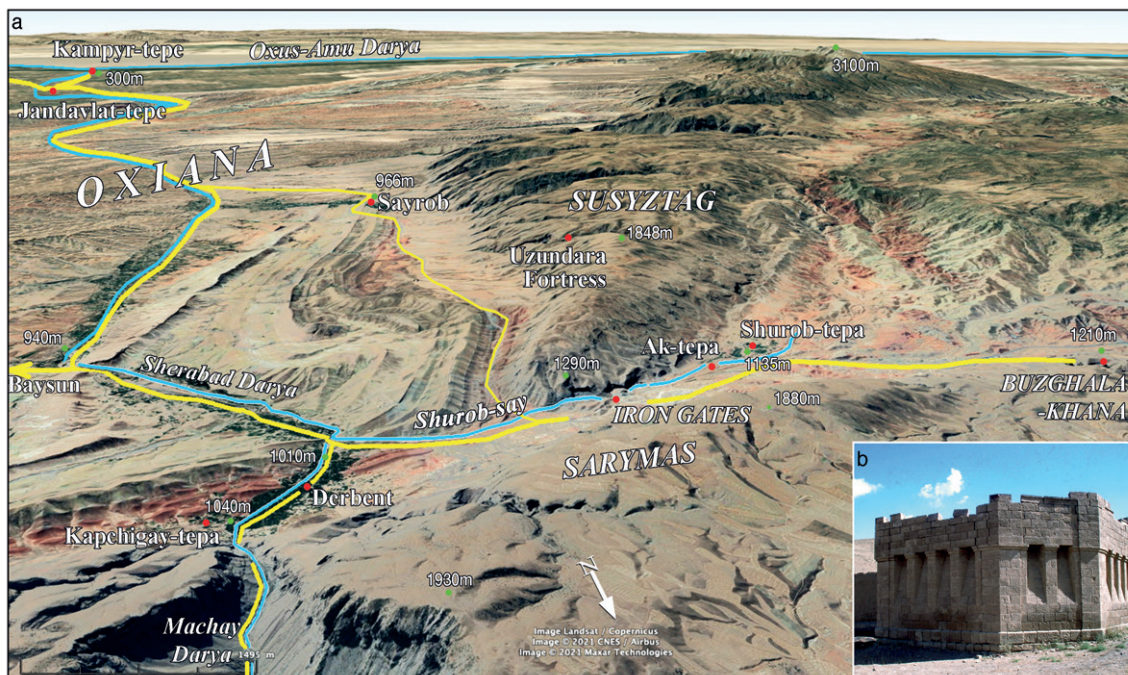


Fig. 2: **a** – View of the Iron Gates area from the north (source: Google Earth); **b** – Russian castle of Akrobat (19th century); photograph taken in 2000 before it was severely damaged (© C. Rapin).

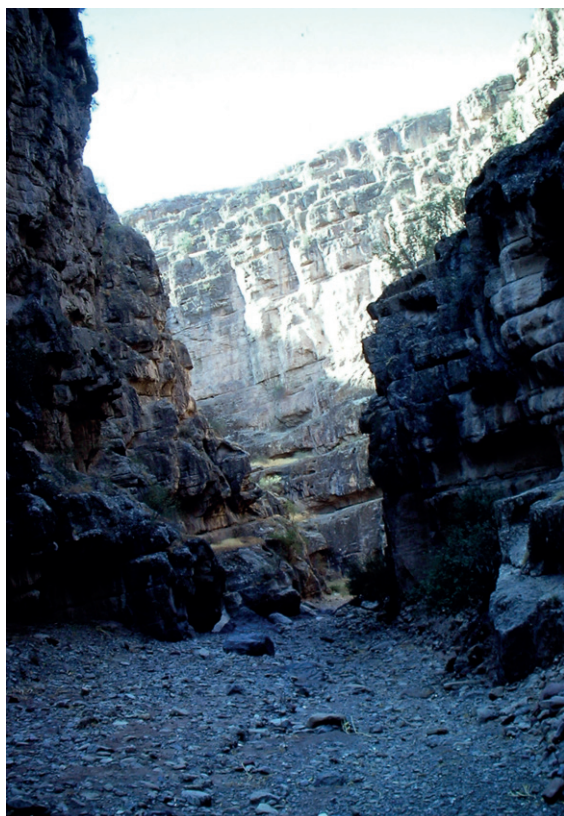


Fig. 3: Gorge of Buzghala Khana (western section of the Iron Gates) (© C. Rapin).

Eleven kilometres south-east of this fortress of the tsarist era, the ancient road descended to Derbent through a second gorge at the south-western end of Mount Sarymas, the bottom of which is supplied with water by a seasonal stream. This impressive gorge, bearing the name Buzghala-khana (“House of the Goat”), was long considered the true Iron Gates (Figs. 2 and 3) (RTVELADZE 1986: 38; RTVELADZE 2019: 177–178). However, it could never constitute a real border because it can be easily bypassed by the route that the modern road takes before reaching the Iron Gates 7 km further on.

The second centre of gravity in this region is represented by the oasis of Derbent in the south east, between the Susyztag and Sarymas mountains, which mark the transition between the Kugitangtau and Hissar chains mentioned above.⁸ This oasis is fed by two rivers that merge to the south of the present-day village, giving rise to the Sherabad Darya. This river in turn reaches the plain of the same name near the city of Sherabad after emerging from the mountainous terrain 70 km to the south. It then joins the Amu Darya 45 km southwards, near the archaeological site of Kampyr-tepe (Figs. 1–2).

At Derbent, the first tributary, the Machay Darya, enters the village from the north after passing through a cross-valley – a deep gorge in Mount Sa-

8 From these two chains, one is a plunging anticline and the other corresponds to an inclined slight slope starting at the top by vertical bedded limestone cliffs. This type of relief is important in terms of military strategy to locate vulnerable points to fortify.



Fig. 4: Gorge of the Shurob-say (eastern part of the Iron Gates) (© Chr. Meyer).

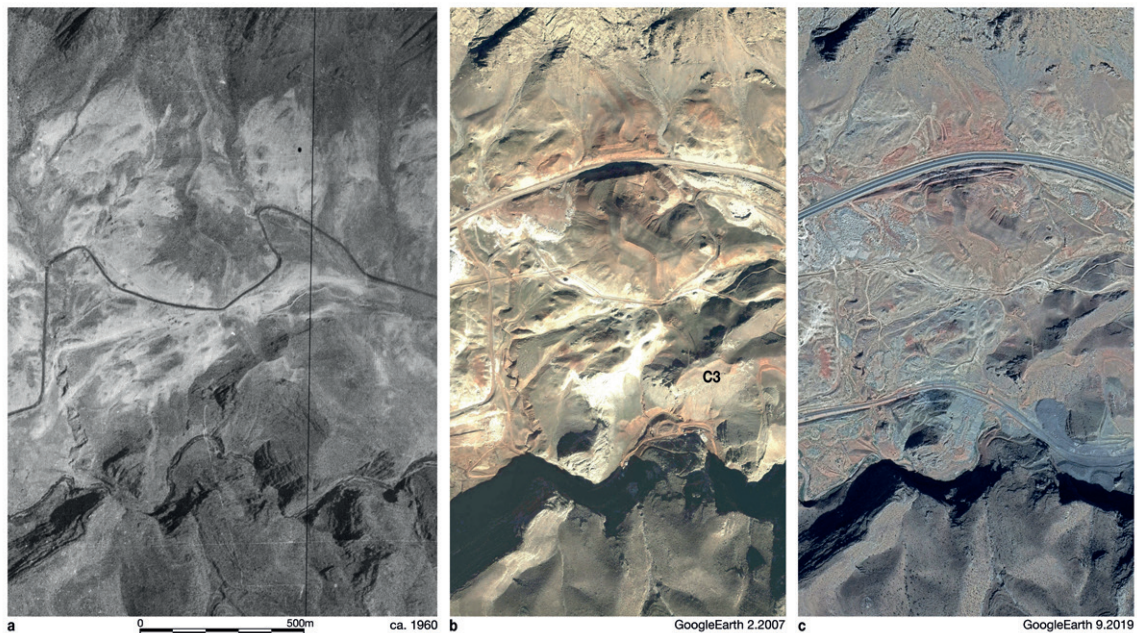


Fig. 5: Aerial views of the wall from a: ca. 1960, b: 2007, and c: 2019 (sources: images b and c, Google Earth).

rymas. This gorge can be used to reach the village of Yukary-Machay a dozen kilometres upstream, from where alternative routes can in turn reach the Kashka Darya to the north-west.

The second tributary, the Shurob-say, reaches the oasis from the west through a cross-valley of the same name. Near Buzghala-khana, about 10 km west of Derbent, this Shurob valley turns to follow the foot of the Sarymas mountain crossing the gypsum cover of the northern end of Mount Susyztag, while making its way towards Derbent through a carved gorge (Figs. 4–5).

The part of the valley followed by the Shurob-say gorge crosses a conical hill, Sher-Khoja, whose top rises above the riverbed by 130 m (Fig. 5b:C3 and Fig. 7:C3) (RTVELADZE 1986: 35) and is a part of a kilometre-long serpentine frontal moraine overlying the gypsum cover of the Susyztag anticline (i.e. the central hill of the wall) (Fig. 6:C2 and Fig. 7:C2). It is the whole of this natural barrier that today bears the name of the Iron Gates of Derbent.



Fig. 6: View of the wall of the Iron Gates from the north (© MAFOuz-Sogdiane/C.R.).

2 The wall and the gorge of the Shurob-say

The barrier of the Shurob Valley and its gorge have throughout history served as the main fortifiable line between the basins of Sherabad Darya and Kashka Darya. The function of the Derbent pass and wall has varied over time. Although it has often served as a state border with a predominantly military function, it has also played the role of an internal border. In this case, the fortifications may have been intended to provide mountain security for inter-provincial communications or to control the flow of trade for customs administration.

However, the structure of the defensive elements may also have varied according to the geopolitical situation, depending on whether this boundary was to be controlled from the east or the west, or even in both directions during the periods in which this passage was geographically within the borders of a single satrapy or empire. Thus, as early as the Achaemenid period, guard posts were erected on the nerve centres of this strategic zone, as in the case of Kurganzol, or at the entrance to the Machay gorge and probably on the Susyztag (Fig. 2, Kapchigaytepa, Uzundara).⁹ The top of the Sher-Khoja spur may also have

housed a fort or observation post, but modern work on the top of the hill has unfortunately removed all traces of ancient occupation (RTVELADZE 1986: 35; SVERCHKOV 2005: 13). However, the main defensive system was concentrated on the transverse ridge of the valley, the top of which was reshaped during the Hellenistic period from Sher-Khoja to the Sarymas for the construction of a monumental wall one kilometre long, to which one must add another 400 m from Sher-Khoja to the edge of the gorge (Fig. 7:C4). As the gorge was blocked by large boulders and the river stream was too strong during the thaw, it was possible to cross the pass north of the Sher-Khoja hill by a road that reached the lowest point of the wall and was controlled by a small fort in the early Middle Ages (Fig. 7:M, T, R, no. 5). In the Timurid period, as is evidenced by faience finds and Clavijo's account, travellers could also stay in a large building built below the wall on the Derbent side.

3 The excavations of MAFOuz of Sogdiana

The wall of the Iron Gates was explored in 1996 and 1997,¹⁰ but the mission also carried out surveys in

⁹ SVERCHKOV 2005: 13, 11; STANČO ET AL. 2019: 148–150; STANČO 2021: 250, Fig. 11.1. See, however, footnote 16 for the opinion of Ladislav Stančo on the absence of early remains.

¹⁰ The excavations on the wall were carried out in spring 1996 and spring 1997 under the direction of Shokhimardan Rakhmanov and Claude Rapin, with the participation of Mutalib Khasanov and Samariddin Mustafakulov, as well as two trainees, Juan Fernandez and A.R. Kayu-

the surrounding mountains and valleys for several years, particularly in the Belibayli area,¹¹ 9 km north-east of the castle of Akrobat, and in the regions where the “rocks” captured by Alexander are likely to have been located. Christian Meyer also completed a topographical survey of Ak-tepe, one of the main sites on the plain east of the village of Shurob (Fig. 2),¹² and the fortress of Uzundara on Mount Susyztog.¹³

At the time of its (re)discovery in the 1980s by Eduard RTVELADZE (1986), a length of about 110 m of the ancient wall had just been demolished to build a new road connecting Samarkand to Termez (RTVELADZE 2019: 178–179). By 2006, the bottom of the gorge was partially filled in and reshaped for a new railway (Fig. 5b), which also heavily damaged the Ak-tepe site. Finally, in 2010 the wall itself lost a further 100 m when the national road was converted into a motorway (Fig. 5c).

The location of MAFOuz’s trenches corresponds to various strategic points at the top of the wall,

mov. A short excavation mission was carried out in autumn 1997 in collaboration with Lyudmila Sokolovskaya (Samarkand Institute of Archaeology). Topographical surveys (of the wall and sites of Ak-tepe and Uzundara: see also footnotes 12 and 13 below) were carried out in spring 1997 by Christian Meyer (honorary engineer of the IGN, the Institut national de l’information géographique et forestière, Bordeaux), with the assistance of Farhad Maksudov (now director of the Institute of Archaeology of the Academy of Sciences of Uzbekistan). The plans were drawn up by C. Rapin. The geological study was carried out in September 2005 by Aymon Baud (former director of the Musée cantonal de géologie of Lausanne): see RAPIN ET AL. 2006. On the technique of topographical recording and the conditions of living on the site, see MEYER 1997. The ceramics study (unpublished) was carried out by Sh. Rakhmanov, Bertille Lyonnet, and M. Khasanov. Three monetary findings were identified by Kazim Abdullaev and Anvar Atakhodjaev.

- 11 On the left bank of the Kuchuk Ura Darya River stands a fortified site on a platform of about 200 m on each side reinforced by a citadel of 80 m on each side (co-ordinates: 38°20’14”N; 66°50’29”E). The ceramics collected date from the early Kushan period (late 1st century BCE) to the Medieval period (11th to 12th century CE). Map of the area: RAPIN 2013: 65, Fig. 7.
- 12 Co-ordinates: 38°12’05”N; 66°57’21”E. It is a small quadrangular manor house, 35 × 40 m on each side, with apparently four towers. It comprised a courtyard in the southern part and an upper structure in the north-eastern quarter of the building. It was accessed from the eastern side of the courtyard. The pottery collected on the surface dates from the 10th to 12th century CE. See also the history of previous research in SVERCHKOV 2005: 12–14.
- 13 Co-ordinates: 38°08’45”N; 66°56’53”E. The surface pottery showed that the site was already functioning in the Hellenistic period. Since 2013, this site has been extensively excavated by a mission of the Moscow Institute of Archaeology of the Russian Academy of Sciences under the direction of Nigora Dvurečenskaja (DVUREČENSKAYA 2019a).

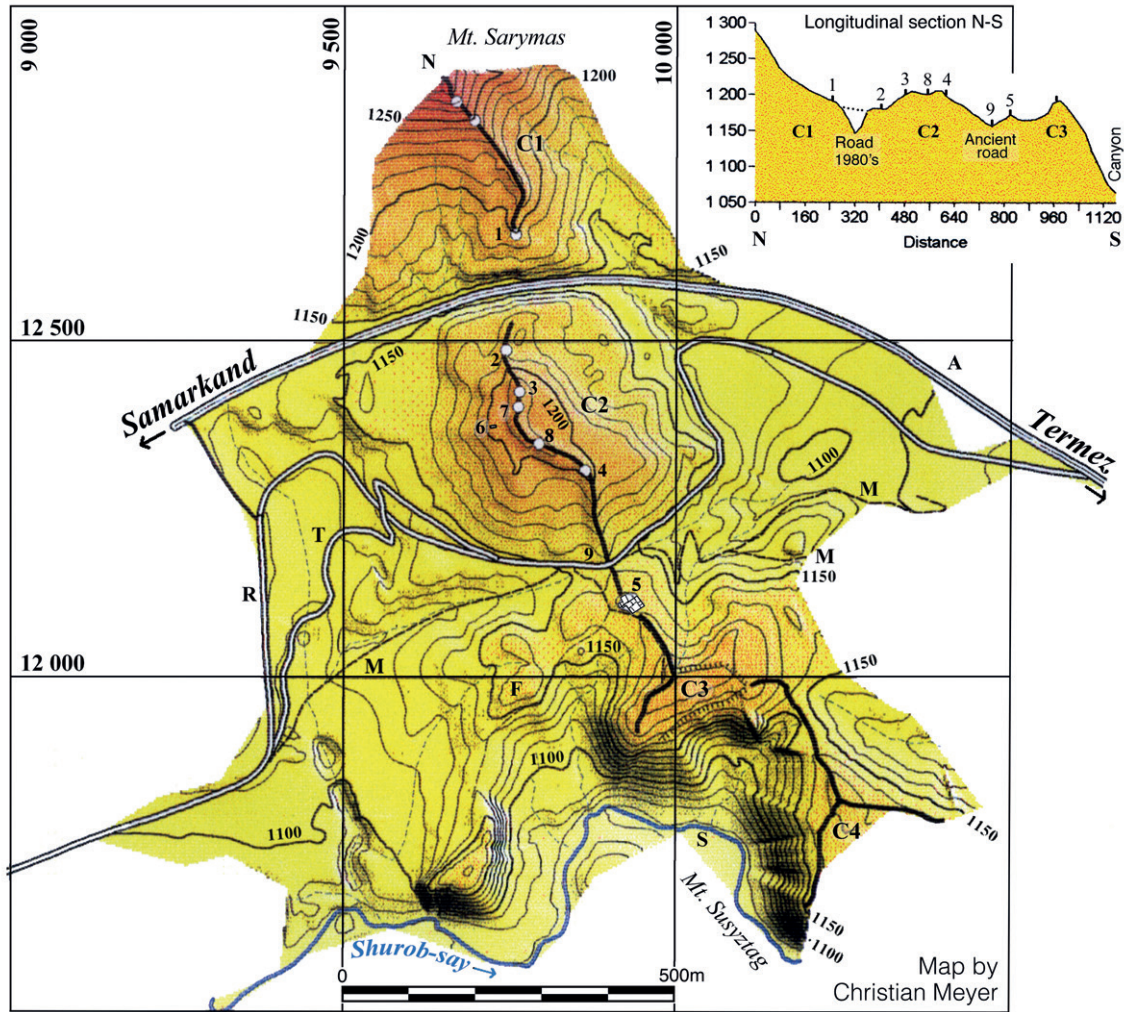
including two of its five identifiable towers. These excavations allow us to reconstruct representative images of the life of this fortification over more than 16 centuries, from the first monumental building by the Graeco-Bactrians in the 3rd century BCE to the Timurid period. They revealed five periods of occupation, corresponding schematically to the major historical phases of Central Asia: (1) the Graeco-Bactrian period; (2) the Kushan period; (3) the early Middle Ages; (4) the Middle Ages; and (5) the Timurid period. Although its status as a frontier has never been forgotten in history, this defensive system has not had a continuous existence, as the layers of several periods of abandonment show.

Although evidence suggests that the wall originally dates to the 3rd century BCE, it was during Alexander’s conquest of Sogdiana in 329–327 BCE that the Iron Gates region really entered history. As archaeological evidence is limited, our understanding of this period lies mainly in analyses of the accounts of Alexander’s historians.

3a Before the wall: Alexander and the end of the Achaemenid period in Sogdiana¹⁴

The route taken by Alexander is often described in contradictory ways by his historians. None of them clearly refer to the Iron Gates.¹⁵ A comparison of

- 14 The historical hypotheses relating to the Hellenistic period are here more extensively commented on than for other periods in order to respond to recent publications relating to the fortress of Uzundara and to recent prospecting in the region. The aim is also to allow a comparison of the contributions the excavations of the Iron Gates wall have made with the syntheses developed in the recent volume edited by Rachel Mairs (MAIRS 2021).
- 15 The association of Alexander with the wall that enclosed Gog and Magog (often referred to as the “Gates of Alexander”) goes back to popular Medieval literature, beginning with an early Medieval version of the Alexander Romance, before passing into Arab-Persian literature. The gates behind which Medieval cartography located Central Asia are in fact an amalgam of several traditions related to the “Caspian Gates” (the entrance to Central Asia located south-east of the Caspian Sea, often confused with the Iron Gates of Derbent in Dagestan), or the “Caucasian Gates” (often used to refer specifically to the Darial pass, but sometimes also confused with the Iron Gates of Derbent in Dagestan). This confusion over nomenclature stems from the belief conveyed from antiquity by the authors of the Vulgate tradition (i.e. Diodorus and Curtius) that Alexander had crossed the Caucasus mountain range between the Black and Caspian Seas only once, when in fact he had crossed the Hindu Kush in both directions. In describing the Iron Gates, which he only knew as the “Iron Gates of Termez”, Clavijo drew a parallel with the “Iron Gates of Derbent” in Dagestan, in order to avoid confusion, while emphasising that both belonged to Tamerlane despite the distance of 1,500 leagues between them (GORSHENINA 2014).



1-9: trenches (5, "Castle": coordinates: 38°12'25"N / 66°58'29"E). F: empty graves?
 N-S: longitudinal section of the wall. C1: Mount Sarymas; C2: Central Hill; C3-C4: Sher-Khoja.
 M, T, R, A: roads. M: early roads. T: 19th century. R: 20th century. A: 1980's (today highway).

Fig. 7: Topographical plan and section of the wall of the Iron Gates (map by Chr. Meyer, with additions by C. Rapin).

the texts shows that the original sources were fragmented in the 3rd century BCE and "reassembled" in an almost random way in the sources of Arrian and the Vulgate. A number of archaeologists working in Central Asia propose variants that tend to minimise the importance of the Derbent region in Alexander's repeated trips back and forth between Bactra and Samarkand, or even deny any textual or material evidence for the reconstruction of the route of the Macedonian conquest. In their view, Alexander would have reached Samarkand via Kilif in the spring of 329 BCE, then through Margiana in the spring of 328, and only once passed the Iron Gates in 327 in the west-east direction from the Kashka Darya. In such a scenario, it becomes clear to them that the border between Bactria and Sogdiana ran along the Hissar Range rather than the Oxus. To support this demonstration, they wrongly locate the

centre of gravity of Alexander's expedition towards the Uzboy in Turkmenistan, where they believe Alexander crossed the Ochus and the lower Oxus.¹⁶

The new analysis proposed here was originally triggered by a geographical observation of the Iron Gates. In Alexander's time the wall did not yet exist, but the terrain shows that this pass presents no major military obstacle to an approach from the west,

16 This hypothesis is supported by, among others, I.V. P'ankov, G.A. Košelenko, and N.D. Dvurečenskaâ (DVUREČENSKAÂ 2019b). On the archaeological side, STANČO ET AL. 2019: 170 consider that the Iron Gates region does not have any remains that can be traced back to Alexander and the Achaemenid period. The geographical aspect (although already detailed in different ways in numerous studies, for example in RAPIN 2021) is too complex to be developed here and will be the subject of a later monograph.

while for an approach from the east the declivities overlooking the oasis of Derbent are sufficiently steep to allow the passage to be blocked without significant military force. To be able to justify and combine all the feats accomplished in 328 BCE, it is thus from the east that Alexander must have reached Derbent (**Fig. 1**).¹⁷ Leaving Bactra in the spring of that year for Samarkand, he probably made a loop through eastern Bactria where he would have crossed the Ochus and Oxus Rivers, that is, the Darya-i Panj at the level of Ai Khanum, and then the Vakhsh, where he entered Sogdiana before joining the upper Surkhan Darya. From there he would have first assaulted the “rock” of Choriènes near Sina¹⁸ before reaching the Baysun oasis (Marginia of Curtius VII, 10, 15), whose nearby road network he protected by positioning forts on the neighbouring heights (including the fortress of Kurganzol: SVERČKOV 2008; SVERČKOV 2013).

From Baysun, Alexander would have finally reached Derbent (**Fig. 2**) where the passage towards Samarkand by the defile and the neighbouring heights (the “Oxian rock” represented by the Sarymas, the Sher-Khoja, and the Susyztag) had been blocked by Arimazes, the governor of Oxiana.¹⁹ Alexander was then informed by his spies that it was possible to bypass the Iron Gates via a secret passage. This passage is probably the defile of Machay Darya, which from Derbent allows one to go up to the reverse, northern slope of the Sarymas. After having destroyed the defences of a fort that guarded the access, Alexander would have gone up the torrential current of Machay Darya by means of a footbridge (RAPIN 2013: 64–69, Figs. 6, 7 [maps], and 12) in order to reach and attack the Sogdian defenders from the rear. He then had no difficulty in capturing the enemy positions, some of which probably

occupied the site of the fortress of Uzundara (this site was indeed in Oxiana, then governed by Arimazes).²⁰ As we shall see, it should not be inferred that this border between Oxiana and Nautaca coincided with that between Bactria and Sogdiana.

3b The Hellenistic period

The initial phase of the fortification across the Shurob Valley dates to the Graeco-Bactrian period. Although the architectural remains that have been uncovered are very fragmentary due to the accumulation of later constructions, it is to this period that we can attribute the greatest efforts to fortify and defend the Oxus basin from a threat from the northwest.

The wall was built on top of a pre-existing natural barrier represented in places by rock or gypsum layers, as well as a moraine consisting of a gravel conglomerate including on the eastern flank large stone blocks ranging in weight from 100 kg to two tonnes. This natural relief was previously reworked by a regularisation of the edge of the plateau on the western side and a flattening of the terrace on the eastern side. Between trenches 3 and 9, the wall stands on a high base of a triangular cross section about 15 m high at the highest point of the hill where it is formed by a rocky mound and the gravel conglomerate cut to form a glacis (**Figs. 6–7**). The alignment of the wall on the western edge of the plateau and the parallelism between the two structures show that the defensive system was originally intended to counter an attack from the west (i.e. in the opposite direction compared to the situation before the wall at the time of Alexander and Arimazes).

The fortification wall is represented by square mudbrick masonry (trenches 2 and 3) and layers containing Hellenistic ceramics (trenches 2–4 and 8; **Fig. 8**).

At the location of **trench 3**, opened on the highest point of the central hill (**Fig. 9**), the Hellenistic wall, 2.75 m thick, rests directly on the conglomerate crest. It consists of two screens of bricks separated by a space filled with earth and stones.

The square bricks, 41–43 cm wide and 10 cm thick, have been preserved over a height of six rows. The wall also appears to have been provided with a niche that served as an inner tower accessible from the east and probably marked the location of an arrow slit. After a period of abandonment, this section

17 The hypothesis of a route by the east was proposed for the first time in the Commentary on Arrian's History by A.B. Bosworth, then renewed, independently of this publication, in GRENET/RAPIN 2001. For a reconstitution of the itinerary followed by Alexander from the Caspian Gates to Taxila, see RAPIN 2021.

18 In the spring of 327 BCE, Choriènes, the governor of Paretacene, welcomed Alexander in his capital, Gazaba, where he organised the banquet that led to Alexander's marriage to Roxane. These events are explicitly described in the Metz Epitome 28–29 (a source that archaeologists have ignored for more than 30 years). As a result, Choriènes's defeat on his “rock” to Alexander could only have occurred the year before, in the spring of 328 BCE: RAPIN ET AL. 2006: 108–110; RAPIN 2013: 72, Fig. 14, and 74–78; RAPIN 2022. This “rock” may have been the peak of Kyzkurgan near Sina, where a survey of the site in 2005 allowed us, like E. Rtveldadze, to collect pottery dating to the Achaemenid period: see RAPEN 2020; RAPIN 2021. Gazaba could be the actual site of Kyzyltepa. On the divergent interpretations currently provided on the toponymy, see STANČO 2021: 258.

19 His capital was probably in the Sherabad Darya oasis, perhaps at Jandavlat-tepe (RAPEN 2020; RAPIN 2021).

20 E. Rtveldadze proposes to identify Uzundara with the Sisimithres “rock”; the latter, however, cannot have belonged to the Sherabad Darya (Oxiana) basin but must have been located to the west, beyond the watershed, within the boundaries of Kashka Darya (Nautaca). The mountain that best matches this description on the road from Shahr-i Sabz to Derbent is Kapkagly Auzy above Akrobat: RAPIN ET AL. 2006: 107–108; RAPIN 2013: 64–65 (maps: Fig. 6–7), 70–72; RAPEN 2020; RAPIN 2021.

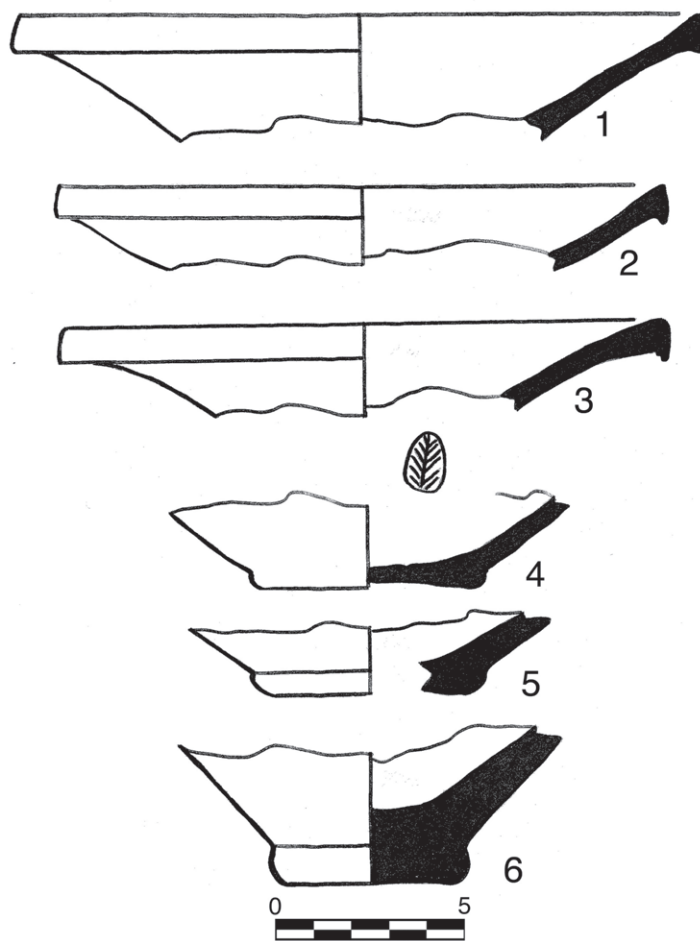


Fig. 8: Ceramics of the Hellenistic period (drawings by Sh. Rakhmanov).



Fig. 9: Trench 3: masonry of the Hellenistic period (© MAFOuz-Sogdiane 1997/C. R.).

of the wall was topped by a platform and, in a final phase, by masonry probably dating from the early Middle Ages, the stones of which were scattered on the crest of the present level.

An extension of the same wall was observed in **trench 2**, opened over a length of 23 m to the north of the central hill (**Figs. 6–7** and **11**). In contrast to the constructions on the latter, the Hellenistic wall in this lower area was built without a glacis, directly on the gypsum rock some 40 m back from the western edge of the plateau. Apart from the fact that the approach from the west was slowed down by a difference in level of more than 20 metres from the plain, the wall was thickened to 3.60 m (**Fig. 11:H**). The masonry of the wall was reduced to two screens of two square bricks each (42–43 cm wide and 10–12 cm thick) on either side of a space filled with compact earth. The bricks were marked according to the traditional custom of Central Asian architecture (**Fig. 10:6**) (LECUYOT/RAPIN 2000: 52).

Historical geography

As we have said, the Hissar Range is traditionally considered the administrative border between Bactria and Sogdiana, according to an assumption that is all the more vivid since the recent discovery of the Derbent wall seems to provide material proof of this delimitation of the provinces. However, a philological study undertaken on the sources of Alexander's expedition shows that at the end of the Achaemenid period the border between the two satrapies was situated on the Oxus (corresponding to the Vakhsh and the Amu Darya from the confluence of the Vakhsh with the Darya-i Panj/Ochus) (**Fig. 1**). The territory of Sogdiana should therefore encompass a much wider area than that generally attributed to it. This would be the case in particular for the period from the beginning of the Iron Age to the Achaemenid period when this "great" Sogdiana on either side of the Iron Gates witnessed a cultural unity that might have originally radiated from its first capital of Koktepe-Gava (*infra*).

This redefinition of the border between the two satrapies had repercussions on the historical geography. In terms of the political-administrative organisation of Bactria-Sogdiana, it was possible to identify the relationships between the territorial subdivisions represented by the oases and the governors who opposed Alexander. In this context, it is in Sogdiana that most of the events of 329 to 327 BCE took place, in particular the repeated attacks of the last Sogdian satrap Spitamenes, as well as the capture of the three "rocks" locatable in the area of the Iron Gates (those of the provincial Sogdian hyparchs Chorienes, Arimazes, and Sisimithres) (RAPIN 2021; GORSHENINA/RAPIN 2021; RAPIN 2022). In the case of Oxyartes, the father of Roxane, he was probably the former satrap of Bactra under the orders of Bes-

sus and never held an administrative position on the right (i.e. Sogdian) bank of the Oxus.²¹

From the geography reconstructed from classical sources, one can deduce that the Iron Gates did not constitute the administrative border between Bactria and Sogdiana. Rather, they occupied an important place for the control of the communication axes and of Sogdian spaces traditionally occupied between the oases by nomadic peoples. As we shall see, the construction of the Derbent wall was also a response to strategic and military considerations independent of the old administrative borders between Bactria and Sogdiana.

In the north: the rise and fall of Greek power in Samarkand

The monetary findings of recent years between the Syr Darya and the Amu Darya now make it possible to propose a more precise chronological range for the construction of this wall in the transition between the Seleucids and the first Graeco-Bactrian rulers. In particular, this study cannot be separated from that of the two archaeological poles represented by Maracanda/Afrasiab and the fortress of Uzundara located 7 km south of the wall of Derbent.

From the ceramic studies on the pottery from Afrasiab (LYONNET 2010: 145–148), later confirmed by monetary findings collected by Anvar ATAKHODJAEV (2013; 2021) in Samarkand and its surrounding region, it can be established that Maracanda/Afrasiab remained under Greek control until Diodotus I, a little beyond the middle of the 3rd century BCE (the reign of the Diodotidae is dated to around 250–230 BCE).²² At the same time, the excavations carried out during the last quarter of the 20th century have shown that the city was still in full development at the time of its sudden abandonment as the Greek authorities were in the process of rebuilding a new wall on the 5.6 km perimeter of the urban pla-

21 Oxyartes intervened to the north of the Oxus only as a negotiator in the service of Alexander after having rallied to him when he felt in 329 BCE that any resistance had become futile. The attribution to Oxyartes of a "rock" (in reality that of Chorienes) in the area between the Oxus and the Iron Gates results from an error in the text of Curtius (VIII, 4, 21) and cannot be used as an argument to allot this area to Bactria. E. Rtveldadze rightly considers that the Kyz-kurgan hill near Sina was indeed captured by Alexander, but his approach to the texts of Arrian and Curtius (the Metz Epitome does not appear among his sources) leads him to incorrectly attribute this "rock" to Oxyartes: RTVELADZE 2019: 215–226, esp. 224–225. This question has been analysed several times (in English, French, and Russian) by C. Rapin, who will take up the whole problem in a forthcoming monograph.

22 The chronology of the transition between the Seleucids and the Graeco-Bactrians is the subject of various controversies between a "high" and "low" date: GORIN/DVUREČENSKAĀ 2018: 63–67. Among those defenders of a low date that have convincingly argued in favour of 246 (year of Antiochus II's death), see BALAHVANCEV 2014.

teau²³ to replace the one that the Achaemenids had erected shortly before Alexander's arrival. According to the layout of the masonry in the various sections, this reconstruction was carried out in a few stages or was assigned to different architects, but the use of the same square brick module (36–37 cm wide and 16–17 cm thick) allows us to estimate the duration of the whole work in a narrow range of about ten years. However, it was only possible to complete about 90% of the programme. In the section under construction to the north-east of the upper city, a large breach remained through which attackers could have penetrated the ramparts, unless the city had simply been abandoned under the pressure of the nomads.

If this urban programme is of a certain duration, it cannot be excluded, as the monetary findings seem to indicate, that it could have started as early as the reign of Antiochus II (261–246 BCE),²⁴ at the time when Diodotus I occupied the satrapic office, and that it continued during the first months or years of Diodotus's reign after he had established Graeco-Bactrian independence. This is suggested by the fact that his monetary findings in Samarkand are less numerous than those of Antiochus II (ATAKHODJAEV 2021). The absence of monetary findings from the reign of Euthydemus I, on the other hand, seems to support the hypothesis that Euthydemus did not rule northern Sogdiana after the region came under the political control of nomads of Saka origin. In this respect, the hypothesis that Euthydemus took power north of Derbent and, above all, that he launched the construction of the wall to protect himself against the threat of the Diodotidae established in Bactra can be excluded: from the very beginning, the wall was conceived to face an enemy from the west (*supra*).²⁵

The regression of Hellenic power to the north of the Hindu Kush mountain range was the result of a long process that began with Alexander's conquest and the ensuing fragile balance with the nomadic populations present on the outskirts of the oases.²⁶

From the 2nd century BCE, classical and Chinese sources testify to the arrival in Bactria and on the right bank of the Oxus of invaders coming from the east and the north-east,²⁷ but no text explicitly mentions northern Sogdiana in the 3rd century BCE. Archaeological investigation aside, nothing allows us to reconstruct the relations between the Hellenic centres of power (in Maracanda and in the capitals of the provinces) and, on the one hand, the shepherds and nomads of the periphery of the oases and, on the other hand, the sedentary or semi-sedentary peoples beyond the frontiers, such as the Sogdians of the lower Zeravshan (STARK 2016; 2021) or the Dahae and Scythians or Massagetae in western and northern Sogdiana²⁸ (Fig. 1).

Contrary to what was believed during the excavations in Samarkand in the 1990s, the abandonment of northern Sogdiana did indeed occur long before the invasions of the Oxus basin east of the Iron Gates and may have taken place in several stages. According to the ceramics study of Bertille LYONNET (2010: 148–149; 2013: 268–271; 2021: 323), the fortress of Koktepe (ancient Achaemenid Gabai), 25 km north-northwest of Afrasiab, was abandoned rather early in the Seleucid period. At the same time, there are numerous Saka-type kurgans along the foothills, such as the groups of large tombs explored by us at Akdžar-tepe and Yangirabat, 5 km and 8 km north-east of Koktepe, respectively.²⁹ From the findings provided by these excavations, it can be seen that a pastoral or nomadic population lived at that time in symbiosis with a traditional sedentary population capable of producing quality ceramics. It is therefore not clear whether the right bank of the Zeravshan was abandoned by the Greeks before the downfall of Samarkand itself. Similarly, in terms of material culture, the departure of the Greeks does not mark the end of ceramic production linked to urban centres, as evidenced by the resurgence of a certain form of Hellenism after Eucratides (*infra*) and the testimony, among others, of the aristocratic tomb of Koktepe in the 1st century CE.³⁰

23 Total area of the city: 182 hectares; area of the upper city: 13.4 hectares.

24 The most numerous coins of Antiochus II were found in Samarkand and the surrounding region. Moreover, apart from a sample from Uzundara (GORIN/DVUREČENSKAÂ 2018: 63–64), the inventory of coins from "Northern Bactria" compiled by GORIN/DVUREČENSKAÂ (2018: 163: table 6) includes only one of them.

25 For an opposite hypothesis concerning the presence of Euthydemus in northern Sogdiana, see STANČO 2021: 265.

26 It is possible to refer to various chapters of MAIRS 2021 for references to the analyses of the invasions by Soviet, Uzbek, and European archaeologists (on the French side, see e.g. members of the former DAFA [French Archaeological Delegation in Afghanistan] who had worked at Ai Khanum such as Paul Bernard, Henri-Paul Francfort, F. Grenet, B. Lyonnet, and C. Rapin).

27 On the fall of Ai Khanum and the conquest of the Oxus basin by the Sacae and Yuezhi, the forerunners to the Kushans, see RAPIN 2021; LYONNET 2021; MARTINEZ-SÈVE 2021.

28 Ustrushana (Scythia intra fines) was a distinct province under Hellenic power from the conquest until the first Seleucids; see RAPIN 2021. If Antioch of Scythia remains identifiable as Khojent on the left bank of the Syr Darya, the other capital, Alexandria Eschate ("of Scythia"), must now be located differently from the traditional identifications, namely near Zaamin and not in Khojent.

29 Co-ordinates: 39°55'26"N; 66°58'01"E and 39°56'01"N; 67°00'13"E. On these excavations under the direction of C. Rapin and J. Vallée-Raewsky, see VALLÉE-RAEWSKY 2013.

30 RAPIN/ISAMIDDINOV/KHASANOV 2001.

In the south: the wall of the Iron Gates, Uzundara, and the Oxus basin

The Oxus basin to the south-east of the Iron Gates belongs to a different geopolitical context. In contrast to initial hypotheses that attributed it to the Kushans (RTVELADZE 1986: 37–38), the ceramic findings show that this wall belongs to a monumental project of the Graeco-Bactrian period that can be linked to the reign of Euthydemus I (ca. 230–200 BCE). The most precise dating was provided by the exploration of the fortress of Uzundara, where rich documentation was collected including about a hundred coins ranging from the posthumous issues of Alexander to those of Eucratides I (GORIN/DVUREČENSKAÂ 2018; DVUREČENSKAYA 2019a; STANČO 2021). Their inventory shows that the fortress existed from Antiochus I onwards, but the site may have been occupied already in the late Achaemenid period. The discovery of 79 coins of Euthydemus I, some of which date back to the beginning of his coinage, shows that it was during his reign that the fortress reached its apogee and that it is therefore probably also to him that we owe the initiative of the construction of the wall of the Iron Gates on which two of his coins were recently discovered.³¹

In 206 BCE, Euthydemus had to resist Antiochus III who tried to take back Bactria and reimpose the Seleucid authority (Polybius, XI, 39.5). An agreement could be reached only after Euthydemus had insisted on the danger that inter-Hellenic hostilities caused in front of the “barbarians”.³² However, the monetary findings show that at the time of these events, the defence line on the Hissar Range had already been equipped with observation posts for a long time and that the wall had been built already in the early years of Euthydemus. The initial hypothesis that this wall was linked to the nomadic threat evoked by Euthydemus must therefore be nuanced. The loss of Samarkand undoubtedly weighed on Antiochus III, who knew his own Sogdian roots as a descendant of Spitamenes, the former satrap of Maracanda who had opposed Alexander most vigorously, but it is unlikely that he could have returned to this city during his stay on the banks of the Oxus.³³

31 STANČO ET AL. 2019: 147, No. 29 (coins of Euthydemus, Demetrius I, and Soter Megas); STANČO 2021: 276, Fig. 11.13. These discoveries were made possible by the use of metal detectors – instruments that could not be used at the time of our excavations.

32 RAPIN/ISAMIDDINOV/KHASANOV 2001; RAPIN 2007; 2017; LYONNET 2021.

33 Anvar Atakhodjaev has highlighted the existence of a monetary workshop in Samarkand that he attributes to Antiochus III, but according to the scenario presented here it is more likely that these coins were issued on the spot by Antiochus I, or even under Antiochus II if one wants to draw a parallel with his programme to reconstruct the ramparts of Samarkand (ATAKHODJAEV 2013; 2021); see criticism of this hypothesis by Alexander NAYMARK 2014.

As has already been pointed out by Archil S. BALAHVANCEV (2014: 40) and Laurianne MARTINEZ-SÈVE (2017: 291–292), the explanations transmitted by Polybius about the “barbarians” cannot be taken at face value, but must be interpreted as a pretext to end an exhausting war. The campaign to India led by Euthydemus’s son Demetrius I shows moreover that at the turn of the 3rd to the 2nd century BCE, the northern border required only moderate control.

This chronology leads us to question the original function of the Uzundara site, where its archaeologists locate the border *between Bactria and Sogdiana* without distinguishing between periods. If the site was occupied as early as the 4th century BCE, the Hissar Range cannot have been a state border – because from the time of Cyrus onwards the border of the empire was on the Syr Darya, whereas up until the construction of the Derbent wall and even under Eucratides the administrative border between the two satrapies was on the Oxus (*infra* and RAPIN 2021; RAPIN 2022). On the other hand, from a strategic point of view one would expect to find on the Susyzttag a fortified system looking west, towards the Kashka Darya. The opposite, however, is the case, since the fortress stands on the eastern side of the mountain (Fig. 2). Its function there would be more precisely to watch over the Sherabad Darya plain and its communication routes, while controlling a secondary defile that allowed the mountain to be crossed without passing through the Iron Gates (see also STANČO 2021: 265). The fortress was therefore not designed to mark a border, but to ensure economic and military control over the main communication route between Bactra and Samarkand, and over the north-south ridge of the Susyzttag. Its role is explained by the desert terrain of the areas separating the oases of Central Asia. This region was indeed administered on an essentially agricultural economic basis from the centre of the oases, while the foothills were entrusted to a semi-nomadic pastoral population. The mountains and steppes between the provinces, however, required specific attention for the control of semi-independent nomadic populations such as those that provided contingents to Achaemenid and later Graeco-Bactrian governors. It is in this context that the fortress of Uzundara should properly be seen, especially as the Seleucids, like their predecessors, likely struggled early on to preserve the security of the main axes of the northern periphery of the kingdom. This was all the more important in the Derbent area, since in the south the Susyzttag plateau did not offer any real obstacles to traffic away from the traditional road axes and the Sarymas in the north could be bypassed by Belibayli (*supra*). It cannot therefore be excluded that the Derbent wall had a politically symbolic rather than a real military function.

3c The invasions of the 2nd century BCE and the dispersion of Graeco-Bactrian refugees

In Uzundara, Graeco-Bactrian coinages stopped with Eucratides I without any perceived recrudescence of coins that could underline a possible role as a base for military movements of this king towards northern Sogdiana.³⁴ This interruption means that the abandonment of the right bank of the Oxus occurred during his reign, perhaps at the time of his death in 144 BCE,³⁵ in the wake of the fall of Ai Khanoum. The Graeco-Bactrian coinage that succeeded him in the region is later represented only by imitations of Heliocles I, which shows that the Graeco-Bactrian power must have lost political control north of the Oxus as early as in his reign.

The identity of the first nomads who arrived between the Oxus and the Iron Gates is not known. The historical sources are in this respect relatively confused both in describing the reign of Eucratides and in reconstructing the chronology of the invasions. In his *Geography*, Claudius Ptolemy seems to present some additional data for these last two historical phases (RAPIN 2021). His scheme reflects the cartography resulting from the reign of Eucratides in which Ai Khanoum appears under the name of Eucratideia. At the time, the Sogdiana between the Oxus and the Oxian mountains (approximately the Kugitang and Hissar Ranges) is still under Hellenic rule, while the Polytimetus River, symbolising the Zeravshan plain beyond the Oxian mountains, has already been attributed to Scythia in association with the Sacaraucae.

Originally, the latter were probably Sacae who had arrived in Zeravshan from the north, from where they would have introduced their funerary customs, which were materialised in the kurgans of the region.³⁶ However, the texts do not make it possible to understand whether they were linked to the independence of northern Sogdiana in the 3rd century BCE, or whether they were part of one of the waves of invaders in the 2nd century BCE. It is also not known whether it is to them or to the Sai/Sacae who captured Ai Khanoum that we owe the occupation of the Sogdian side of the Oxus basin between 144 BCE (date of the death of Eucratides) and 130 BCE (date of the arrival of the Tochari/Yuezhi before they crossed the Oxus). However, the Derbent frontier was probably already established as a new boundary between what later became the Kushan

Tokharistan in the east and the Kangju confederation in the west. This uncertainty stems mainly from the fact that the sources have probably amalgamated several historical phases in the evocation of the occupation “of Bactra and the Sogdians” by the Scythians Sacaraucae and Asiani (= Ases/*Kangju*) (Pompeius Trogus) or of Bactria alone by the Ases “or Asiani”, Tochari, and Sacaraucae (Strabo).³⁷

Almost at the same time, as Bertille LYONNET (2021: 324–326) points out, this period of invasions saw in Afrasiab (during phase Afrasiab IIB) a period marked by Hellenic influences, not linked to a return of Greek power as was initially believed but perhaps resulting from a movement of Hellenised population – composed of refugees from southern Sogdiana or Bactria – which could have occurred at the death of Eucratides. The same phenomenon seems to have occurred as far as the Bukhara oasis, as some imported findings might suggest (STARK 2016; 2021), and it is in the same wartime context that the hoards of coins – such as the one of Kitab – discovered west of the Iron Gates must be understood. This phenomenon in regions where Greek institutions had disappeared for a century did not, however, have a real future for Hellenism, if one compares it to its counterpart on the Indus side where Indo-Greek society was still under Hellenic rule when, around the same time, it welcomed Graeco-Bactrian refugees.

3d The pre-Kushan and Kushan periods

After the period of abandonment following Eucratides’s death in 144 BCE, the border wall was completely rebuilt from the 1st century BCE onwards from the foothills of Mount Sarymas to the citadel of Sher-Khoja (masonry identified in trenches 1, 2, 4, 5, and 8). No traces of a gateway have been identified and it is possible that the transit was through the Shurob gorge. The two low areas to the south and north could be monitored from the top of the central hill, on which were several watchtowers. Some segments of the wall were initially built from stone, but most of the masonry is of mudbrick. These bricks are, as in the Hellenistic period, square in shape and differentiated by series of finger marks (**Fig. 10**). Their dimensions are, however, reduced to a format 28–35 cm wide and 9–12 cm thick, according to a standard corresponding to that of the Kushan architecture of Khalchayan and Dalverzin-tepe in the Surkhan Darya (**Fig. 1**) (LECUYOT/RAPIN 2000: 33, 42–43, 46, 52).

Other chronological data are provided by monetary findings, including two “barbarised” imitations

34 Justin, *Epitoma Historiarum Philippicarum*, XLI, 6.

35 On this date and the anchoring of Eucratides I’s dates in the chronology of the Graeco-Bactrian rulers through the data of the Amphipolis and Asangorna parchments, see RAPIN 2010.

36 See e.g. a group of smaller disused tombs we discovered at Koktepe: RAPIN/ISAMIDDINOV/KHASANOV 2001: 41–42, 66–69, 76–77 (phase d, Koktepe V).

37 Justin, *Prologues*, XLI: “Scythicae gentes, Saraucae et Asiani, Bactra occupavere et Sogdianos”. Strabo XI, 8, 2, lists from a map the Ἄσιοι, “ἢ Ἀσιανοί” (in his text Πασσιανοί), Τόχαιοι, and Σακάρωλοι.

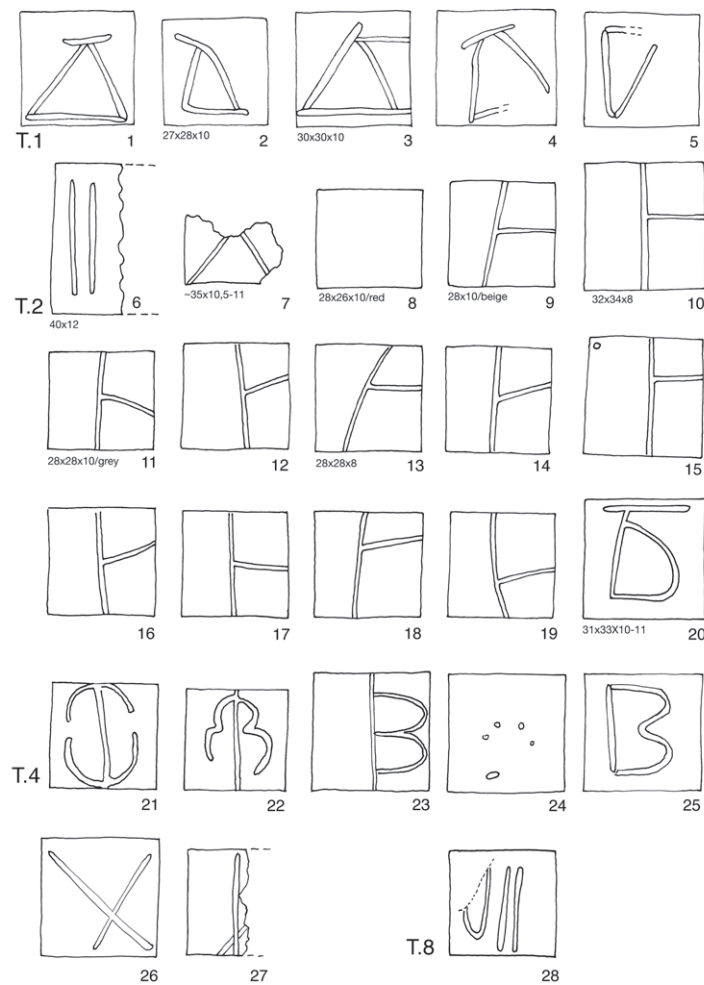


Fig. 10: Marked bricks of the Kushan period in trenches 1, 2, 4 and 8 (no. 6: Hellenistic period) (drawings by C. Rapin).

of Heliocles I – a drachma with Zeus in a standing position on the reverse (trench 5), dated to the end of the 2nd or beginning of the 1st century BCE, and a bronze (not weighed) with a rider on the reverse (trench 7) – and a didrachm of Soter Megas (trench 5) dating to the period of Vima Taktu I around the end of the 1st century CE.³⁸ The pottery found along the rampart shows a variety of forms characteristic of the 1st century BCE to the 3rd century CE, including kitchen ware and numerous water containers.

The first excavation on this fortification was carried out in 1986 by Eduard Rteladze at the foot of the Sarymas (trench 1). The masonry found there (and revisited by us in 1996) was exclusively

38 Another coin of Soter Megas was discovered on the wall in 2018: STANČO ET AL. 2019: 147. The coinage of Heraios has not been clearly identified among the monetary finds, but obols of this ruler appear among the finds of Uzundara (GORIN/DVUREČENSKAĀ 2018: 39), which also implies that the wall functioned around the beginning of the reign of Kujula Kadphises (from ca. 30 CE).

Kushan, as shown by the format of its bricks, whose marks were mostly delta-shaped (Fig. 10:1–5) (RTELADZE 1986: 37–38).

In the most vulnerable part of the fortification (trench 2; Fig. 11), the Kushan constructions above the Hellenistic ruins originally consisted of stone masonry that extended southwards to the hillside at the foot of trench 3. In the segment explored, the stone wall reached a height of 3.80 m. A small opening at 1.80 m from the base of the stone wall may have served as a (false) loophole, rather than as an observation window. The wall underwent two further phases of repair marked by various additions and thickenings: the first with the laying of square, marked mudbrick masonry at the top (Fig. 10:7–20), and the application of an inner walkway on two steps (Fig. 11:K2); the second with the addition of a platform of compacted gypsum taken from the area (Fig. 11:K3) and a final thickening of the Kushan wall. Stones from the masonry fell in front of the northern face of the wall (Fig. 11:K/M), but it is not



Fig. 11: Trench 2: Hellenistic and Kushan wall; a – Section; b – Plan; c – View from the west
 (© C. Rapin; MAFOuz-Sogdiane 1997).

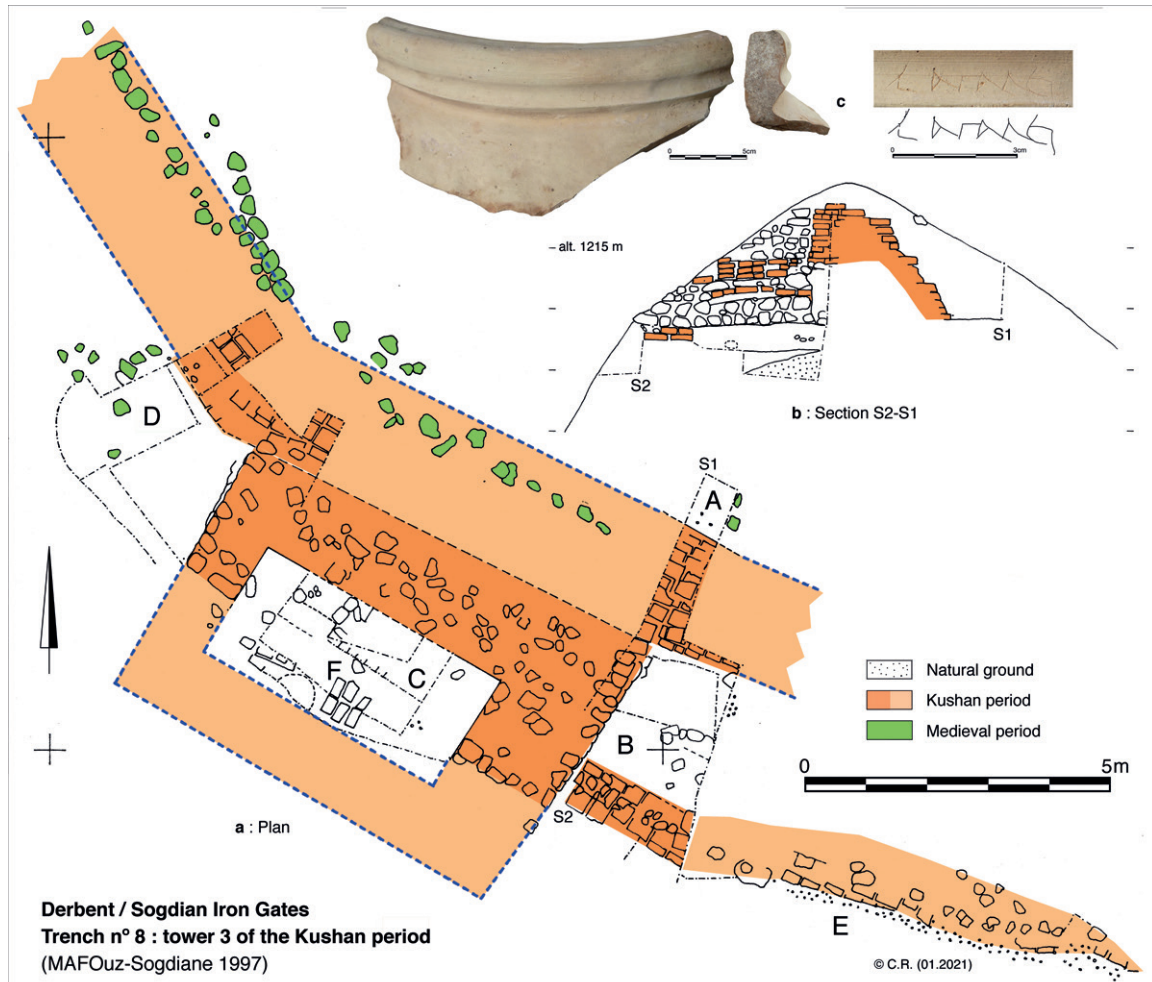


Fig. 12: Trench 8: tower 3 of the Kushan period; a – Plan; b – Section; c – Graffiti in Greek letters (drawings by C. Rapin; MAFOuz-Sogdiane 1997).



Fig. 13: Trench 8: tower 3 of the Kushan period; view from the south-west (© MAFOuz-Sogdiane 1997/C.R.).

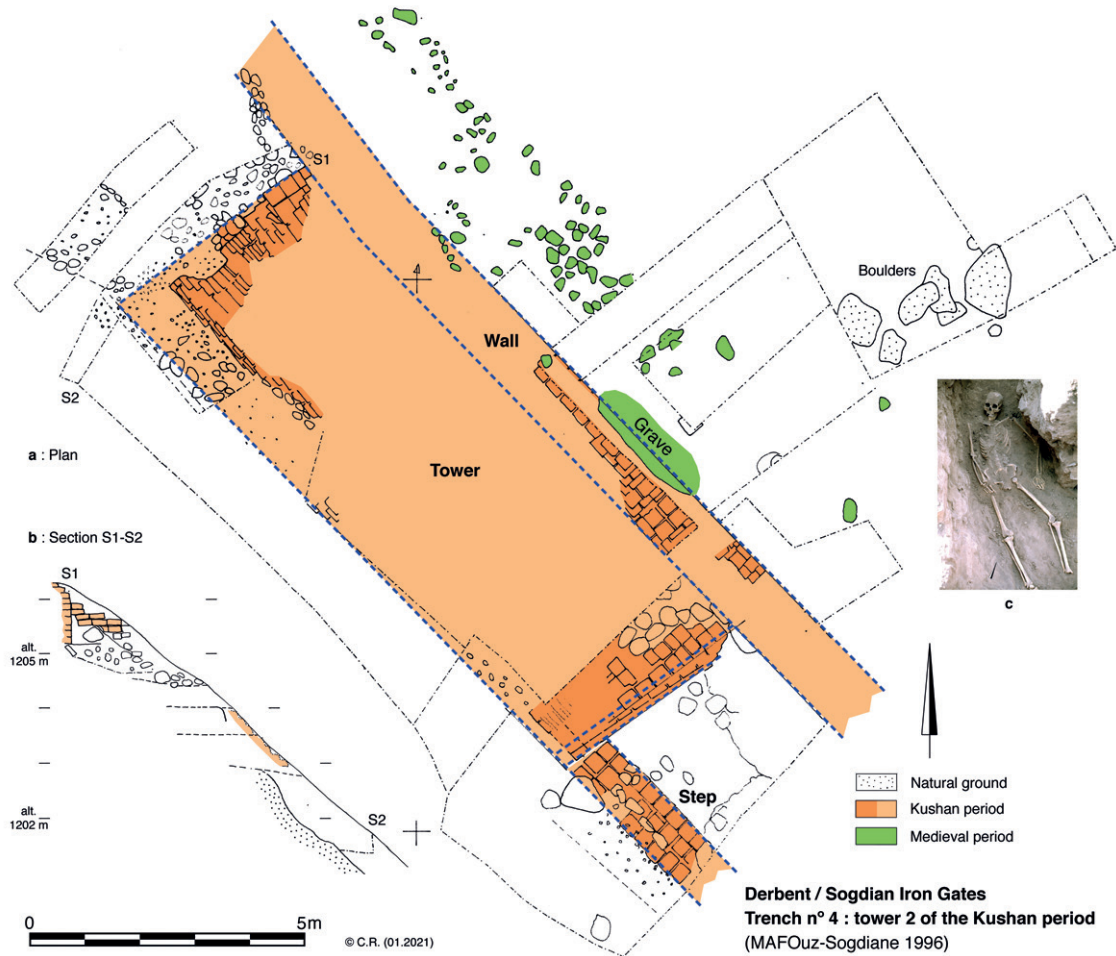


Fig. 14: Trench 4: tower 2 of the Kushan period; a – Plan; b – Section; c – Grave on the top of the wall (Medieval period) (drawings by C. Rapin; MAFOuz-Sogdiane 1996).

definite whether they came from the Kushan wall or from an early Medieval layer (RAKHMANOV 1994).

Although the Hellenistic wall survived in some places such as in **trench 3** (Fig. 9), the best-preserved remains are those of the Kushan period. The surface of the conglomerate was then consolidated by a clay covering to avoid erosion, while the crest of the defensive system received a new mudbrick rampart of varying thickness. The curves of the curtain walls were reinforced with about five exterior watchtowers, of which those in trenches 8 (tower 3) and 4 (tower 2) are representative of two different architectural settings.

Tower 3 (trench 8; Figs. 12–13) was built on the outer face of the mudbrick wall (brick mark in Fig. 10:28), which at this point reaches a thickness of 2 m.

Two phases of construction can be distinguished, consisting of mudbrick masonry erected on Hellenistic remains and a stone base, followed by a quadrangular stone construction of about 7.50×4.80 m. The tower has an interior chamber of 4.30×1.85 m,

which was inhabited as indicated by the presence of a brick fireplace. Notable finds include a 2nd century CE jar rim with a graffito engraved in Greek characters (. αγαλει: Fig. 12c).

Tower 2 (trench 4; Figs. 14–15), the largest (11×4 m), stands upon a base of mudbricks applied in two phases against the conglomerate slope and the wall (thickness: 115 cm, equivalent to 3.5 bricks) (Fig. 10:21–27). Although badly eroded, this masonry probably served as the foundation of a hollow tower. Pottery finds show that this complex stood on Hellenistic remains, while the two levels of the tower date to the Early (1st century BCE) and Middle Kushan periods. After a period of abandonment the wall was replaced by stone masonry, the blocks of which are scattered on the present ridge. This location was chosen in the Middle Ages for the tomb of a man discovered with his shaving razor (Fig. 14c). Near his remains was found an iron mace, although it is not known if it played a role in his death.



Fig. 15: Trench 4: masonry of wall and tower 2 of the Kushan period (© MAFOuz-Sogdiane 1996/C. R.).

Derbent: The border between the Kushan Empire and the Kangju confederation

The wall of the Iron Gates is unanimously accepted as the northern border of the future Kushan Empire and, more particularly, of Tokharistan, the name that the Oxus basin was given after the replacement of the Sogdian and Bactrian names after the fall of the Graeco-Bactrian kingdom.

As attested by ceramics and monetary findings (*supra*), the wall was rebuilt rather early in the 1st century BCE, and then again in the middle of the 1st century CE on the ruins of the wall of Euthydemus and Eucratides. Although a precise chronology is lacking, it appears that the new builder was the westernmost *yabghu* (Yuezhi clan) that occupied the Sherabad Darya, probably the fifth *yabghu* related to the principality of Gaofu (FALK 2018: 33). From

a military point of view, the wall continued to be associated with the Uzundara defensive system, but its geographical scope was now much wider, as it constituted the border of an already organised state. In particular, it aligns with the road that reached Bactra in a straight line through Kampyr-tepe and the military settlement of Zadiyan (at the northern edge of the Bactra oasis: LA VAISSIÈRE/MARQUIS/BENZU-SARMIENTO 2015). Until the 3rd century CE, the system responded to long-term strategic issues. The opposition between the Kushans and the Kangju/Ases was not, however, limited to a rivalry between sedentary and nomadic people. The Yuezhi were not the only ones to have settled by merging their culture with that of their Graeco-Bactrian predecessors. The Kangju also preserved ancient cities such as Afrasiab (LYONNET 2021), while founding

new ones such as Kala-i Zakhoki-Marón in Karshi (ABDULLAEV 2007). Apart from the different geopolitical context, the cleavage is mainly on the level of acculturation to Hellenism, insofar as the Yuezhi directly succeeded the Graeco-Bactrians (which may have facilitated the revival of a certain Hellenism among the Kushans of the 1st century), while to the west of Derbent, Hellenic institutions had already disappeared for a long time when the invasions of the mid-2nd century BCE occurred.

The advent of new leaderships of nomadic origin coincided with the emergence of a real network of international exchange. As we have seen with Ai Khanum, the Graeco-Bactrian kingdom experienced intense cultural exchanges with the Mediterranean world in the 2nd century BCE, but the trade only materialised in the city in the form of rare, imported products. The same occurred with India, whose luxury goods and coinage were deposited only in the royal treasury as part of the booty brought back by Eucratides, outside of any commercial network. From the fall of the Graeco-Bactrian kingdom, and then, above all, from the time of Augustus, there is increasing evidence of all kinds of openings up of the region towards the world of the steppe, China, India, and the Mediterranean that resulted, among other things, in a resurgence of Central Asian Hellenism (see e.g. the cases of Khalchayan and Dalverzin-tepe). The royal necropolis of Tillâ-Tepe, for example, synthesises numerous cultural characteristics: Bactrian, Parthian, Hellenic, Roman, Steppic, and Chinese (FRANCFORT 2020).

To the west of Derbent, the ancient northern Sogdiana experienced a very different development. Hellenic influences were not nearly as rich. The aristocratic tomb of Koktepe shares with the contemporary necropolis of Tillya-Tepe elements inherited from steppe culture, such as the artificial cranial deformation that is also found in the woman buried in the sixth tomb of Tillya-Tepe. The discovery of Chinese mirrors from the early Han period recalls the important role played by the nomads in the exchange of precious goods with China. In this context of very permeable cultural identities, there is still too little data to identify the political environment in which the ruler – probably Saca – of Tillya-Tepe lived, between the Kangju/Ases to the north, the Kushans to the east, the Seistan to the south, and the Parthians to the west.

The only certainty, from a geopolitical point of view, lies in the role played by this major monument, the Derbent wall. One should thus not exclude a relationship between this symbol of opposition to the Kangju and the iconography of the Khalchayan reliefs, which can be seen as commemorating the victory of Heraios over his neighbours beyond the Iron Gates.

Although the wall thus demarcated areas of political influence, it is difficult to assess its impact

on trade. The ancient Hellenised territories west of Derbent (Kashka Darya and central Zeravshan) have not yielded as many archaeological discoveries of imported production from the west or east as the Oxus basin has. The border wall thus forms a striking contrast with the south and north-eastern openness of the Kushans, whose commercial vocation dates to the very origin of their settlement in the Pamir and the Oxus basin.

The boundary between the Kushans and the Sera (Seres) was not blocked by a wall, but took the form of a rallying point, the Stone Tower, which was alluded to by the envoys of Maes Titianos in the 1st century CE. Researchers generally tend to locate this tower at Daraut-Kurgan on the road to Kashgar, but this identification has been questioned by Harry Falk who argues in favour of Tashkurgan west of Yarkend, a crossroads near the passes that connected the region to China and India (FALK 2018). According to Falk, this location of the tower on the south-western side of the Tarim basin coincides with the border of the Kushan Empire, which, from Derbent in the north-west, covered the whole of the Oxus basin and, further east, the entirety of the Pamir and Wakhan Valleys. The formation of this vast territory began during the Yuezhi invasions of the 2nd century BCE before taking on its definitive structure in the 1st century BCE during the territorial distribution of the five *yabghus*. The occupation by the *yabghus* of the area between the Oxus basin and the edge of the Tarim gave them control over the major trade routes linking the steppe to India and China, which would prefigure the economic power of the empire from the 1st century CE.

3e The early Middle Ages, Middle Ages, and Timurid period

The early Medieval fort (Figs. 16–18)

While during antiquity the Iron Gates' remains are limited to those of the wall itself, the early Medieval period – essentially corresponding to the Hephthalite and Turkish periods – is marked by the opening of a passageway (trench 9) and the installation of a small surveillance fort (trench 5).

The fort (**trench 5**) is located at the northern foot of Sher-Khoja and about 10 m above the tsarist road used until the early 1980s. The structure, constructed of rectangular mudbricks³⁹ in an irre-

39 The rectangular formats (proportion: 2 × 1) vary according to the stages of construction from 50 × 25 cm to 40 × 20 cm. In the upper part, the main format is 48 × 24 × 12 cm. The format of the bricks of the early Middle Ages gradually reduced over the course of time without a precise module being imposed between the Tashkent region and Amu Darya. In Sangir-tepe (Kashka Darya), the castle of the early Chionite period (4th century CE) was built with bricks of 60 × 30 × 8–10 cm,



Fig. 16: View of the castle and the wall of the Iron Gates from the south (© MAFOuz-Sogdiane 1997/C. Rapin).

gular plan (max. area of 33×33 m), stands on two levels astride the ancient wall. The lower part, to the east (**Fig. 17:A, C, F, H-L**), consists of a building forming a parallelogram of about 18.75×22.50 m, with a trapezoidal courtyard ($8-10 \times 13.50$ m) surrounded on three sides by half a dozen rooms of non-orthogonal quadrangular design. At the western corner of the lower level, the upper part stands on a fill of large stones about 2 m thick above the remains of the Kushan masonry. Its irregular plan is divided into two interconnected constructions in a V-shaped pattern. The smaller building is a compartmen-

while in the 6th century the bricks of Penjikent measured $50 \times 25 \times 7$ cm. The same variations are found in Afrasiab where the bricks in the 7th century were reduced to $48 \times 24 \times 9$ cm.

talised tower – the plan of which has yet to be analysed – on the west side of which there were some traces of a ramp of undetermined function, but which may have represented some entrance hall of the building (**Fig. 17:B, P**) as in the case of Balalyk-tepe (AL'BAUM 1960: 116). The main construction, to the north (**Fig. 17:G**), stands, similar to a dungeon, 3 m above the lower courtyard and includes a large parallelogram-shaped room oriented in line with the rampart. The roof of this space (interior dimensions: approx. 9×7 m) was supported by wooden pillars, only one of which could be positioned thanks to its charring in a fire that seems to have destroyed this part of the building.

Although it was occupied for a long time, especially in its “dungeon” part, this building did not yield any findings related to its function. The mili-

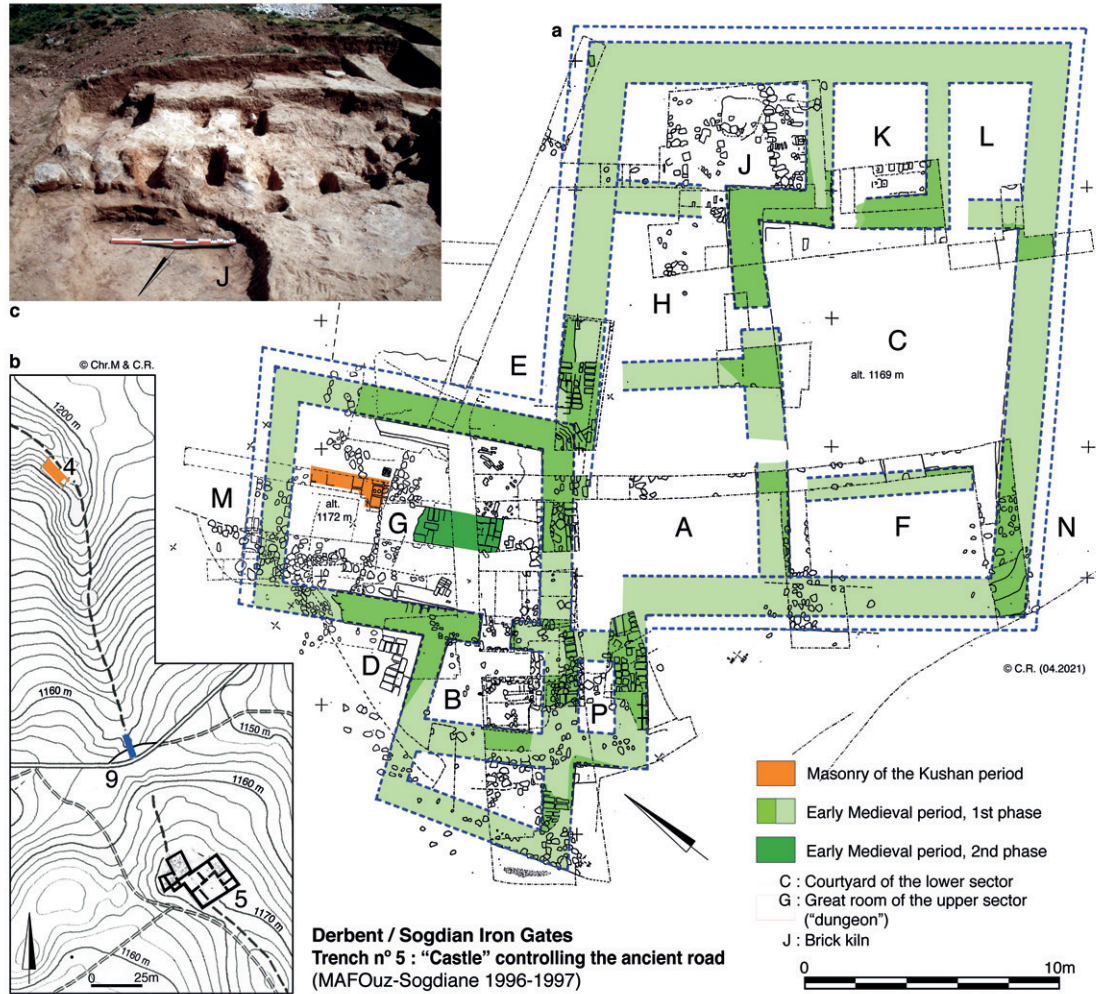


Fig. 17: a – Plan of the castle dating to the early Middle Ages (trench 5) (plan by C. Rapin); b – Topographical plan of the wall with trenches 5, 9, and 4 (Chr. Meyer and C. Rapin); c – View of a brick kiln in room J
(© MAFOuz-Sogdiane 1996–1997).

tary context is only represented by an arrowhead found on the surface and which might date from the Hellenistic period. Apart from a fragment of an undetermined coin, the economic role is not confirmed by any coinage contemporary with the building, since the only identified finds (a barbarised issue of Heliocles I and a coin of Soter Megas: *supra*) come from the Kushan levels. The only contemporary findings of the fort are ceramics characteristic of the 6th to 8th century, but some parts of the building also show traces of a Medieval occupation of the 10th to 12th century, including a lime or potter's kiln (Fig. 17:J, K, and C).

Because of its position directly adjacent to the wall, this fort has no architectural parallels. Its size and plan place it in the tradition of fortified settlements in the context of an agricultural economy, which can be found from antiquity to the Middle Ages (among geographically and chronologically close examples, e.g. Balalyk-tepe). Although its function as a frontier post is undoubted, it is still unclear

who its owner was, but from its location in the river basin of the Sherabad Darya, one can imagine that it served as a border post for the Chaganiyan principality. The steepest side of the terrain faces west. It was not possible to identify the entrance(s) to the building due to its very poor condition and the fact that it has undergone modifications during its existence.

The wall and gate at the foot of the early Medieval fort (Figs. 19–20)

Trench 9, which was made about 50 m north of the fort, on the northern edge of the old disused modern road, uncovered the remains of the passageway used from the early Middle Ages to cross the wall without having to pass through the Shurob canyon. The opening of this passage during long periods of history has left numerous compact layers of earth, the oldest of which – prior to the early Middle Ages; that is, around the time of the Chionites and Kidar-



Fig. 18: Excavation of the castle (trench 5), sounding along the southern wall of courtyard C: view from south-east to north-west (© MAFOuz-Sogdiane 1996).

ites – rest directly on the same gypsum bedrock observed at the base of the wall in trench 2.

In the 6th to 8th century, the Hephthalite fort was linked to a mudbrick wall, also rectangular, built in line with the Kushan rampart, to protect the lowest point of the fortified system between Sher-Khoja and the central hill. This wall was pierced by a gateway whose northern jamb could be delineated 55 m from the fort, although the total width of the gate could not be identified (Fig. 20:A, B, R1). In the absence of monetary findings, the chronological data is relatively unclear. Apart from the pottery, the artefacts consisted only of a few iron objects (nails, a knife) and a fragmentary horse statuette. It is therefore not possible to affirm that a gate with wings existed for a long time. Furthermore, there is no evidence to link the gate in this wall to the iron gates that some travellers have mentioned. When Xuanzang, for example, crossed the wall from the kingdom of Kesh to the “Tokhara” in 630 CE, he looked at the landscape and the iron-stained rocks and reported that the gates were – or were once? – reinforced with iron and that bells hung from them (WATTERS 1904: 100–102).

By the time Kültegin’s Turkish expedition arrived 80 years later, however, the political situation

in the region had been destabilised by the arrival of the Arabs. It is therefore not impossible that the fort and the wall had already ceased to function by then. However, the Iron Gates remained important throughout the Middle Ages, as evidenced by archaeological finds in the region and mentions of it in the works of Arab-Persian geographers (KAMALIDINOV 1996: 122–125).

As evidenced by a coin minted in Samarkand in 1388, Tamerlane reactivated the Gates as a place of tolls, rather than as a political border. In order to be able to channel and tax goods coming from the south, he secured the old passageway with a powerful stone wall facing east, as shown by the presence of the walkway at the foot of the façade on the Samarkand side (Fig. 20: C). As a direct witness, Clavi-jo also reports that he spent the night of 25–26 August 1404 in a luxuriously decorated residence (located on the east side of the wall facing Derbent: *supra*). When he crossed the Iron Gates (the Shurob-say and Buzghala-khana canyons) the next day to reach Tamerlane’s court, he heard the anecdote that the passage was once closed by iron-covered gates, which evokes the same kind of anecdote told to Xuanzang almost eight centuries earlier and which was popularised later, in 1460, in the famous Fra Mauro map (GORSHEENINA 2014: 71–178).

The 19th century is represented by a coin found on the road, minted in the 1880s by the Manghit dynasty of Bukhara. With the Russian conquest and Kaufmann’s 1875 reconnaissance mission to the south of the Hissar Range, there are no more obstacles around the old wall. The curiosity of travellers, however, focused on Buzghala-khana (MAEV 1879: 146–150), whose gorge, drawn by Nikolaj Karazin, was soon reproduced in geography books such as *L’Asie russe* of Élisée RECLUS (1881: 502–503), while Wilhelm Tomaschek tried to connect Curtius’s account to this place (TOMASCHEK 1877: 94). The real road junction was then at Akrobat where the Russian governorate of Turkestan had a fortified post office built (Fig. 2b, *supra*).

Conclusion

Due to their position on the main road between Bactra and Samarkand, the Iron Gates have played a major role in the history of southern Central Asia from the Achaemenid period to the present day. Their function has evolved both economically and politically, as a communication axis or as a border (crossable or impassable). The Hissar Range cannot therefore be considered a “natural border” between the north and south, especially not as a fixed border between sedentary and nomadic populations.

While the urban civilisation of the Bronze Age (BMAC period) had only extended south of the Iron Gates, from the Oxus basin to Margiana, a new cul-



Fig. 19: View of the ancient road and Timurid wall from the south (© MAFOuz-Sogdiane 1997).



Fig. 20: Trench 9: early Medieval gate and Timurid wall. Plan (a) and Sections (b, c, d) (drawings by C. Rapin; © MAFOuz-Sogdiane 1997).

tural distribution developed around the middle of the 2nd millennium BCE, giving rise to the Iron Age. Known for its handmade painted ware, this community covered a wide area from the Tashkent oasis and Ferghana to Bactria and the Kopet Dagh region (LYONNET 2013: 261–266; LHUILLIER ET AL. 2013: 370; LHUILLIER 2019: 116–117; WU 2021). Astride the sedentary world and the steppe, one of its major centres, Koktepe, later became the first capital of Sogdiana under the name of Gava. According to the geography of *Vidēvdād I*, written around the 6th century BCE before the arrival of the Achaemenids, and the *Mihr Yašt* (Yašt 10.14), the Avestan religion encompassed the whole of Central Asia and the border regions of north-west India. The limits within this cultural area therefore owe nothing to those of the Bronze Age, even less after the Achaemenid conquest of Cyrus. No river or mountain can then be considered a “natural border”. Whereas the Scythian territory had previously extended on both sides of the Syr Darya, Cyrus established the official northern boundary of his empire on this river, across the original Scythian territory of the early Iron Age. South of the river, he probably did not change the ancient boundaries. Thus, the inner Scythian province, whose capital was Kyreschata (Cyropolis), extended across the Ustrushana between the Syr Darya and Tamerlane’s Gates that separated this region from the more sedentarised populations of the Zeravshan Valley and Sogdiana (RAPIN 2021).

Similarly, in the south of this country, there is no reason why a mountain range should necessarily be considered a definitive cultural or political boundary.

The case of Derbent is instructive in this respect. As an artificial barrier, the wall only functioned from time to time according to the movements of populations. Before this frontier became fixed with the invasions of the 3rd to 2nd century, the Shurob-say gorge was more of a bridge than a barrier. It was thus rather to ensure the security of the internal roads that the Seleucids provided checkpoints there, and there is no reason to think that the Achaemenids did not do the same in their time by distributing this task to the local hyparchs. In this context it is impossible to ignore the few – but very explicit – historical texts of the Hellenistic period, according to which the right bank of the Oxus was part of Sogdiana from the Achaemenid period until the fall of the Graeco-Bactrian kingdom. It was in Sogdiana, for the control of Samarkand, that Alexander invested most of his resources, before being able to set out again to conquer India.⁴⁰

40 RAPIN 2022. The new approaches proposed (mainly by C. Rapin) for the north of the Oxus have, however, been systematically discarded without methodical analysis by I.V. P’ánkov, G.A. Košelenko, and a number of archaeologists who often work on editions or anthologies with flawed

This approach could mark a new starting point for research into what constitutes the cultural unity of real Sogdiana throughout the Iron Age. Today, archaeologists on both sides of the Kugitang Range operate without much mutual interaction. Unfortunately, this lack of dialogue reinforces the old idea, difficult to sustain in the light of new data, that Derbent was an immutable frontier in time.⁴¹ The name “Northern Bactria” attributed erroneously since the 19th century to the territory of the right bank of the Oxus has led to the creation of a large country prestigiously called “Bactria”, which leads to the exclusion from history of everything that took place beyond the Iron Gates. Samarkand and its Achaemenid and Hellenistic past are rarely mentioned by specialists of this “Bactria” because the city only receives its letters of nobility in scholarship from the early Middle Ages, in the context of the activities of the famous “Sogdian merchants”.

Historically, it was only with the establishment of the Yuezhi *yabghus* that the wall gradually became a cultural border between Tokharistan and the area of influence of the Kangju confederation, and then an empire border under the Kushans. The wall lost its military importance with the collapse of these empires. The arrival of the Hephthalites and the Turks in the early Middle Ages led to the reunification of the whole of Transoxiana, which resulted in a new development of trade in the two east-west and north-south axes. The wall then became an administrative rather than a military frontier with the installation by the principality of Chaganiyan of a relatively weak fortress that seems to have served more as a “customs office”. Although the monetary findings are very limited, this economic function continued throughout the Middle Ages in the form of regional forts and castles such as, among others, that of Ak-tepe and Belibayli and probably small surveillance posts on the mountain ridges. Tamerlane occasionally rebuilt the wall in the service of his centralised power over Samarkand, but since the 15th century the only remaining memory of it is that of its past reputation.

translations or limit themselves to one or another of Alexander’s historians.

41 Besides the ceramics studies, the cultural links between the two slopes of the range can be evidenced through other contributions such as the understanding of the emergence of the Avestan cults and the recent discoveries of several pre-Achaemenid and Achaemenid fire temples at Koktepe (excavations under the direction of M. Isamidinov and C. Rapin), Sangir-tepe near Shahr-i Sabz (M. Khasanov and C. Rapin), Kindyk-tepe near Bandykhan (Viktor Mokrobodov), and Kyzyltepa near Dalverzin-tepe (Leonid M. Sverčkov, Wu Xin, and Nikolaus Boroffka).

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Bactrian Influences in the Early Medieval Re-foundation of Vardāna

Silvia Pozzi and Sirojiddin Mirzaahmedov

Abstract: The site of Vardāna, located in the northern fringes of the Bukhara oasis (Uzbekistan), was the capital of an important pre-Islamic district named Obavija. The discovery of a palace, built around the 4th to 5th century CE on the ruins of the Late Antique castle and in use until the beginning of the 8th century CE, represents one of the most important achievements of the ongoing archaeological investigations led by a Swiss-Uzbek project. A very peculiar type of pottery unearthed in the foundation layers of this palace is evaluated in this paper in order to frame the political context responsible for the construction of the palace. Parallels with the neighbouring areas, in particular Bactria, would suggest the existence of interregional connections that contributed to the circulation of material culture and models of ideology at Vardāna during the beginning of the Early Middle Ages.

Keywords: Vardāna, fine ware dishes, Bactria, Huns, Sasanids.

Резюме: Городище Вардан, расположенное на северо-восточных окраинах Бухарского оазиса (Узбекистан), некогда являлось столицей известного доисламского княжества Варданхудатов, а впоследствии рустака Обавия. Обнаружение на цитадели городища дворца правителей, построенного около IV–V вв. на руинах предшествующего позднеантичного замка и просуществовавшего до начала VIII века, представляется наиболее важным достижением продолжающихся археологических исследований швейцарско-узбекской экспедиции. В публикации исследуется своеобразный тип глиняной посуды, выявленной в слоях основания фундамента дворца, что позволяет рассуждать о возможном политическом контексте, повлиявшем на его строительство. Параллели с соседними территориями, в частности с Бактрией, предполагают наличие межрегиональных связей, способствовавших распространению особенностей материальной культуры и моделей идеологических концепций в начале раннего средневековья в Вардане.

Ключевые слова: Вардана, парадная посуда, Бактрия, гунны, Сасаниды.



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DOI: 10.13173/9783447118804.261

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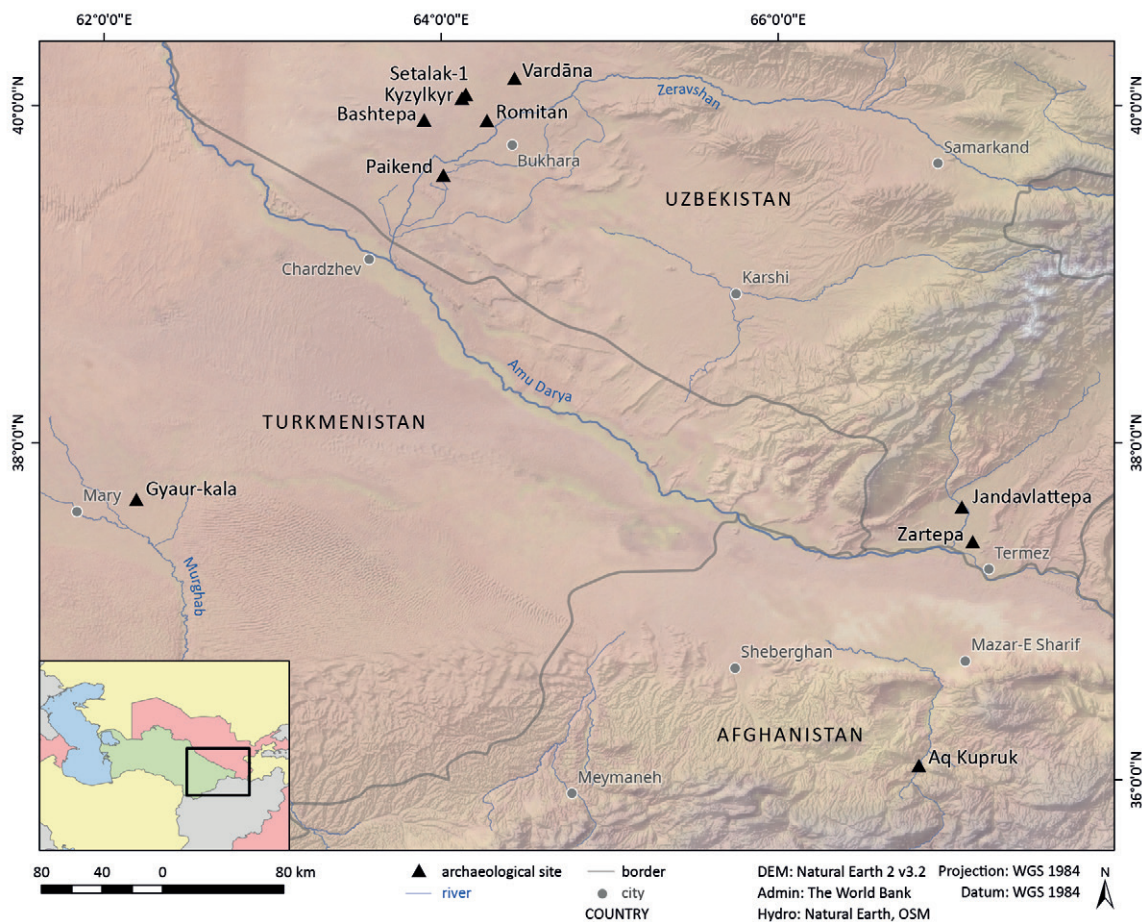


Fig. 1: Map with sites mentioned in the text (RUTISHAUSER/POZZI 2022).

1 Introduction

The citadel of Vardāna, one of the most relevant archaeological sites of the Bukhara oasis (Uzbekistan), still characterises the local landscape with its impressive 15 m height; it is easy to imagine it in its past role as an “earthen lighthouse” both for the people living in the surrounding cultivated lands of the Early Medieval Obavija¹ district and for those approaching the region from the northern steppe (Fig. 1).

The results of the Swiss-Uzbek archaeological project,² promoted since 2009 by the Swiss non-profit organisation The Society for Exploration of EurAsia, in collaboration with the Institute of Archaeology of Academy of Science of Uzbekistan, elucidated a sequence of phases of occupation which, according to the present state of knowledge, can be

framed between the beginning of the Common era and the first decades of the 20th century CE. Even though the most well-known is the Early Medieval period (4th/5th to 8th century CE), significant evidence of the Late Antique phase (1st to 3rd/4th century CE) is now under investigation. Particularly challenging is the chronological and historical definition of the transitional period leading from the Late Antiquity to the Early Middle Ages.

The nature of Vardāna, a frontier bazaar located on the northern fringes of the Bukhara oasis – thus still inside the cultivated lands, but at the same time at the “gate” of the steppe – is emblematic and evocative of the idea of “meeting with foreigners” that has characterised the history of Bukhara and more generally of Sogdiana. As a crossroads of cultures, Sogdiana has experienced the effects of continuous interactions with neighbouring areas throughout history, both in terms of disadvantages, but also – and perhaps more prevalently – of the benefits derived from this continuous movement of people. This long tradition of interacting with non-local cultures and traditions may have contributed to making the Sogdian mentality more inclined toward the integration of ideas brought from abroad into the

1 Naršakī (FRYE 1954: 32) describes the territory around Vardāna as “the villages of Abūya”. ADYLOV/MIRZAACHMEDOV (2001: 151) quoted the Russian translation of Naršakī and refer to this land as Obavija.

2 For the recent results of the excavation, see MIRZAACHMEDOV ET AL. 2019, POZZI ET AL. 2019, and the online reports at http://www.exploration-eurasia.com/inhalt_english/frameset_projekt_0.html

local reality. The application of a flexible approach, rather than a restrictive position, could be seen as an opportunity to create profitable situations, in both political and economic terms. This attitude is certainly evident in material production, where various degrees of influence from neighbouring areas can be distinguished in several spheres such as architecture, mural paintings, tereutics, and coins.³ However, although the foreign contributions are often recognisable, we are not always able to understand the chronological dynamics and the real meanings behind these mergers.

The present paper investigates a particular type of fine ware found at Vardāna that has revealed strict links with Bactrian pottery production of the Kushano-Sasanid period and considers the motivations behind the arrival of this ware so far from the original homeland. Thanks to the analysis of this type of ware, we can now consider the history of Vardāna and, in particular, the urbanisation of Obavija between the 4th and the 5th century CE.

2 Pre-Islamic Vardāna: a brief excursus of the main building phases

Before going into the proper pottery analysis, it is useful to summarise the archaeological context in which this ware was found.⁴ As mentioned above, the investigations led at Vardāna revealed the existence of two main building phases, both of which date to the pre-Islamic period. As confirmed by the excavation of several parts of the citadel these phases are always, and very clearly, separated from each other by a huge infilling of pebbles and sand that reaches a thickness of almost 3 m in some places.

Our knowledge of the lower phase (hereafter referred to as the *Late Antique phase*), which likely followed an even older occupation, is limited to circumscribed areas of the citadel since the removal of the pebbles and sand and of the upper layers, both pre-Islamic and Islamic, requires a lot of effort in terms of time and is still going on (**Fig. 2:3**). Nevertheless, important features of the Late Antique occupation can be traced from the unearthed sectors. During this phase, the castle had a rectangular shape slightly smaller than the present day one that incorporated it. The main gate was on the eastern side. The castle was built on a *paksha*⁵ plinth and

probably had perimeter corridors on four sides as suggested by the discovery, in the north-western corner of the citadel, of a segment of corridor.⁶

As far as the inner layout is concerned, the main features unearthed up to now consist of four rooms, a N-S oriented wall and two segments of large corridors, E-W oriented. Thick walls delimit the corridors, and holes in the upper sections of the wall of the northern corridor suggest that there were wooden beams in support of a ceiling or of a second floor. At some point in time, the rooms fell into disuse and a system of interconnected vaulted galleries was built in the same area without destroying the rooms. Two galleries were built inside the above-mentioned corridors: the northern one is still well preserved and rises from the west towards the east, while the southern gallery rises from east to west, but is very ruined. Two other structures were built in this area, partially above the galleries: a mudbrick circular pit, and another pit made of baked bricks and located in a larger mudbrick rectangular structure. It is not excluded that the galleries and the pits, although built at the level of the Late Antique structures, actually functioned in the later phase, i.e. the Early Medieval one. A hypothesis that still needs to be confirmed is that the galleries constituted a sort of communication route connecting the Early Medieval palace on top of the citadel with the eastern gate, which in the Early Medieval period was downgraded to a secondary way out of the fortress, being the new and main one located in the southern side, in front of the *shahristan*.

As stated above, the infilling of pebbles and sand that covered the Late Antique structures represents a clear marker between this phase and the following one (hereinafter referred to as *Early Medieval phase*), characterised by a new palace covering the majority of the top surface of the citadel (**Fig. 3**). The new palace was raised on a *paksha* platform laid both on the crest of the Late Antique walls and on the pebbles and sand infilling, levelling the top of the citadel. In this way, the walking area was raised ca. 4 m from the ancient floors and the new aspect acquired by the citadel made it higher and more massive – also thanks to the reinforcement of the external walls by a new curtain of mudbricks (*rubashka* in Russian). The investment of time and material was noteworthy and we can read this event as a sort of re-foundation of the site.

The palace had a NW-SE oriented rectangular plan (inner perimeter measures 70 × 34 m) and was delimited by large perimeter walls made of *paksha* and mudbricks (preserved thickness of ca. 2.7 m). These walls, now very eroded, bordered an inner

3 For the Sasanian influence on the coinage, see NAYMARK 2012; on the religious architecture, see OMEL'CHENKO 2016: 79–80; and on the mural paintings, see LO MUZIO 2014. For architectural and artistic influences from Bactria, see GRENET 1996.

4 For a general introduction to the site, see POZZI ET AL. 2019: 229–235.

5 This term usually refers to large blocks of rammed earth.

6 Fortresses with a rectangular plan, entrance on the short side, and perimeter corridors of four sides are attested in Chorasmia; see for example Kaparas, Dzhambas-kala, Ayaz Kala, and Kurganshin-kala (KHOZHANIYAZOV 2006: Figs. 21, 28–30, 32).



Fig. 2: Vardāna citadel, Late Antique structures (© The Society for the Exploration of EurAsia).

corridor ca. 4 m wide that ran on the four sides of the palace, delimiting the core of the palace itself. Most probably, the corridor originally functioned as a surveillance area, but in a later period it was partially refilled, the floor raised, and then partitioned into several rooms. The inner part of the palace was formed by three sectors of quadrangular shape that probably had different functions (conventionally labelled as the *western*, *central*, and *eastern sector*).

It is supposed that the residential area was located in the *western sector*, where several rooms with *sufa* (earthen benches) were found. A peculiarity of this sector consisted of an inner corridor that delimited this area on four sides, connecting the *western* to the *central sector*. Here we found a large and empty area, possibly a yard connected to the entrance of the palace, delimited on the north by three contiguous rooms. The *eastern sector*, separated from the central one by a large wall, presented elongated rooms characterised again by *sufas* and originally painted with mural paintings.⁷ Considering the size

and the decorative layout, we cannot exclude that this area was the wing of the palace that hosted the reception halls.

The pottery found in the first layers of occupation of the palace and the chronological indications

was found on the northern wall of Room 32, but the bad state of preservation, due to a fire in the later phases of occupation, allowed only the colours (white, red, black, blue) to be recognised. Consolidated on the site and removed by the Uzbek conservator D. Kholov, the fragment was restored and is now on display at the Ark Museum in Bukhara. Better preserved fragments, also removed and stored in the Ark Museum, were found both on the lower part of the walls of Room 38 and in the fill of Room 32. Particularly interesting are the fragments from the fill, showing the same motif – parallel stylised leaves of a black colour – depicted on two backgrounds of different colours: red and pale brown. The fragments from Room 38 decorated the lower part of a wall and consisted of three horizontal bands: a lower one (21 cm high) in red, a middle white band (3.5 cm high) decorated with black motifs (wavy lines?), and an upper band of red – preserved to a height of 5.5 cm – that probably continued further up on the wall.

⁷ Traces of mural paintings were found during the years 2016–2017 in Rooms 32 and 38. A fragment still in situ



Fig. 3: Vardāna citadel, plan of Late Antique and Early Medieval structures (from CERASUOLO 2009: Fig. IV.34, topography updated by Mirzaachmedov).

offered by the C14 analysis⁸ would suggest that the re-foundation of Vardāna occurred between the 4th and the 5th century CE. It must be said, however, that this dating is still under evaluation since there is not a marked difference between the potsherds unearthed in the Late Antique phase and those found in the Early Medieval deposits, especially as far as the storage jars (*khum*) are concerned (Fig. 4). However, the fine ware dishes that were found in the very first phase of the Early Medieval palace, and are the object of this study, constitute a significant exception and represent a distinctive marker of the

8 The analyses were made in the CEDAD laboratory of the Department of Mathematics and Physics “Ennio De Giorgi”, University of Salento (Italy). Samples collected from the Late Antique contexts provided the following results: S21 (2018): 66–257 CE; samples collected from the first layers of the Early Medieval palace provided the following results: S16 (2018): 324–539 CE; S23 (2018): 234–423 CE.

Early Medieval palace since they were not found in the Late Antique context or in the later phases of occupation of the palace itself.

Even though the general layout of the palace remained unaltered until its downfall, which occurred in the 8th century CE, significant changes are registered in the *eastern sector* between the 7th and the 8th century CE. During this period, this wing of the building changed its function – passing from a reception area to a storage area (POZZI ET AL. 2019: 235). The walls of the reception were almost totally demolished, preserving only the base to a height of ca. 0.5 m. The inner space was filled with mudbricks organised in parallel rows that formed multiple platforms.⁹ The area was then equipped with a new floor and partitioned into storage rooms sep-

9 For further details, see the online report of the 2015 campaign available at http://www.exploration-eurasia.com/inhalt_english/frameset_projekt_0.html

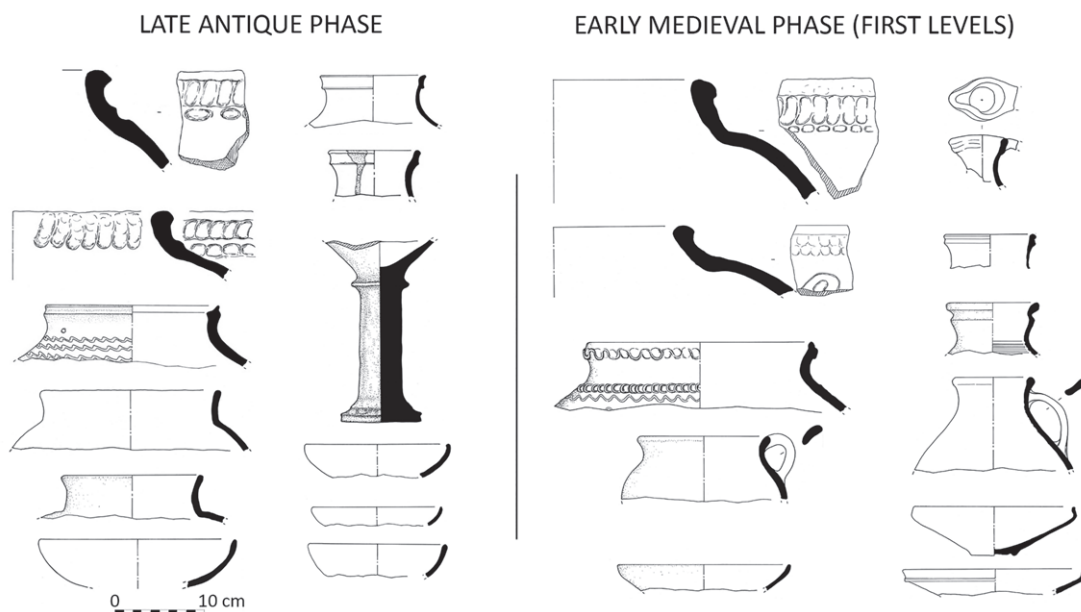


Fig. 4: Vardāna pottery from the Late Antique phase and from the first layers of the Early Medieval palace (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

arated by thin walls; traces of fired wooden beams still in situ suggest the presence of other unidentified wooden structures such as floors, shelves, or dividing walls. Several large jars (*khum*) still in situ and a lot of smaller storage vessels, some of them still wrapped in their straw baskets, were found in the storage rooms. This context was sealed by a fire that allowed the preservation of organic material and froze the last moments of life of this sector and probably of the whole palace. This event is certainly connected with the Arab conquest of the region and signalled the end of the occupation of the palace, which was then abandoned for at least a century.

3 Vardāna fine ware dishes

As stated above, six fragments of thin-walled dishes with indented rims were found in the first layers of occupation of the palace (Fig. 5). Four specimens (317-1, 351-1, 417-1, 417-2) come from the floors of the residential quarters located in the *western sector*. A fragment (251-1) was found on the floor of the northern corridor of surveillance, while another one (1078-13) was unearthed inside a mudbrick structure in the eastern sector. We must mention a seventh, rim fragment (1160-9) found inside the infilling of the northern gallery, which we hypothesise connected the palace with the eastern gate.

The fragments correspond, in size and decoration, to the “Late Antique fine ware dishes with indented rim” (FWI) discovered in Bactria and considered by L. Stančo to be a specific local production (Stančo 2014). According to this scholar, who pro-

duced the most comprehensive and updated study of this type of ware¹⁰ from several Bactrian sites located both to the north and south of the Amu Darya River, the FWI represents an archaeological marker of the Kushano-Sasanid period in Bactria and was in use between 230 and 350 CE, possibly up to the second half of the 4th century CE.

All the Vardāna FWI fragments, made on the potter’s wheel, are of light beige fine clay and have red slip of different tones on both the inner and external surfaces of the vessel (Fig. 5). The surface is smooth to the touch and traces of burnished decoration, also of red colour but darker than the slip, can be seen on the inner surface of most of the fragments. On the largest specimen (417-1), the decoration consists of dense radial lines that curve toward the rim, forming elongated petals of a rosette-like or sunburst motif, a typical motif of the Bactrian FWI dishes. On the smaller fragments, probably also decorated with sunburst motifs, only small segments of radial lines, sometimes superimposed and rough, can be distinguished. On three rim fragments (351-1, 417-2, 1160-9), there are no visible traces of burnished decoration.

Judging from the angle of inclination between rims and walls, the vessels found at Vardāna had a shallow truncated cone shape with almost straight

¹⁰ On this type of ware, see also KOLB 1983, 1977, and SCHACHNER 1995–1996. The archaeometrical study of Kushan-Sasanian pottery from the Buddhist monastic complexes at Karatepa, conducted by the IPAEB project, led by J.M. Girt and Sh. Pidaev, also included examples of FWI-A dishes with burnished decoration (TSANTINI ET AL. 2016).

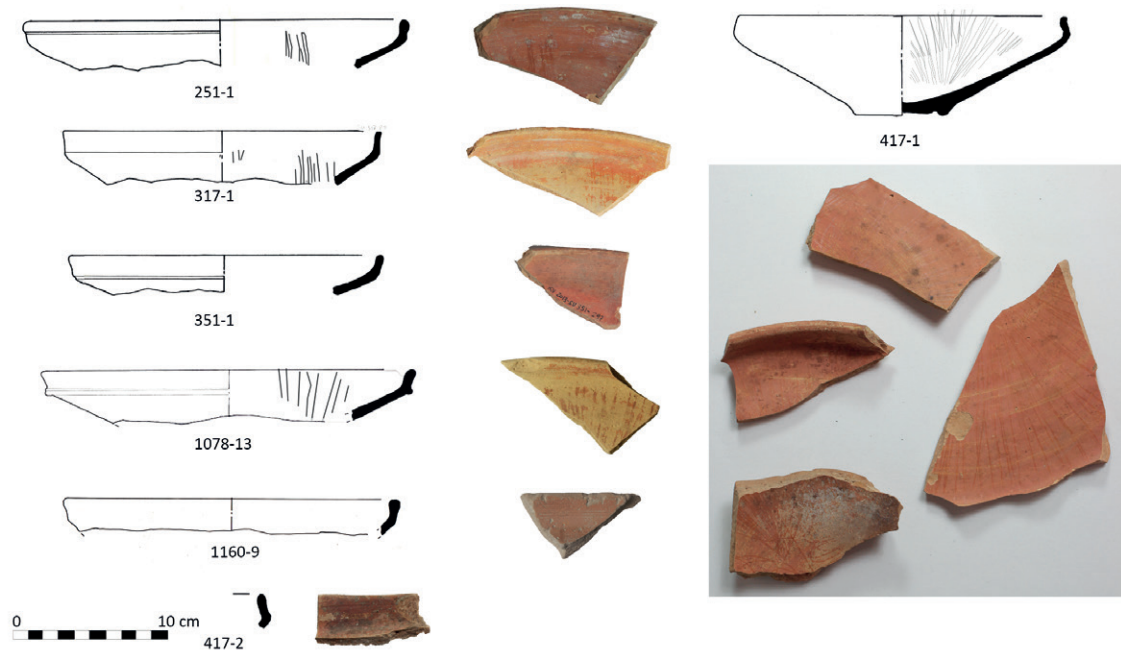


Fig. 5: Vardāna FWI-A (drawings by M. Sultanova, photos by S. Pozzi, © The Society for the Exploration of EurAsia).

SPECIMEN ID	Rim diam. (cm)	Base diam. (cm)	Height (cm)	Thickness (cm)	Drawings
251-1	22			0,5	
317-1	19			0,5	
351-1	18,5			0,5	
417-1	19	5,2	5,7	0,4	
417-2	17?			0,4	
1078-13	22			0,5	
1160-9	20,5			0,4	

Fig. 6: Metric plate of Vardāna FWI-A dishes (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

walls (**Fig. 6**). The diameter of the mouth ranges from ca. 18 to 22 cm, the thickness of the walls is about 0.4–0.5 cm, while the height of the one archaeologically complete specimen is 5.7 cm. These measurements are all in line with the metric features of the Bactrian vessels. Rims tend to be vertical, but they can be slightly inturned or upturned, with a rounded lip. One specimen (1078-13) has an upturned rim and protruding carination at the angle with the wall. The only base found (diam. 5.2 cm) is flat and characterised by a hint of a foot with an indentation on the underside.

3a Comparisons

Most of the dishes found at Vardāna are characterised by a similar shape, surface treatment, and decoration, but also reflect the variety of rims attested in Bactria. Similar diversity can co-exist even in the production of the same site, as demonstrated by the material from Jandavlattepa (STANČO 2014: 131, **Fig. 3**; **Fig. 1**). Stančo divided the FWI dishes in two main groups, FWI-A and FWI-B, according to the turning in or out of the rim (ivi. 128). The FWI-A usually has an out-turned extremity and is characterised by a flattened shape, while the FWI-B has an inturned rim, quite high, and the general shape is taller than the previous one. Specimens of FWI-B were also found in the early Sasanian phase (end of the 4th to 5th century CE) at Gyaur-kala (Merv region; **Fig. 1**), where they are defined as “bowls with waisted profile and simple rim” (PUSCHNIGG 2006: 131–134).

At Vardāna, only dishes of type FWI-A, attested in both northern and southern Bactria, were found. Correspondences between the Vardāna finds and the southern Bactrian dishes are visible in fragment 251-1, similar to the finds from Aq Kupruk (**Fig. 7:9–10** on left; **Fig. 1**), in specimen 317-1, which recalls a bowl from Bactra (**Fig. 7:12** on left), and in fragments 417-1 and 471-2, also comparable to a specimen from Bactra (**Fig. 7:13** on left). Fragment 1078-3 shows analogies with finds from northern Bactria, in particular with the pottery unearthed in the Šerabad district (**Fig. 7:14–15**). As in the case of Jandavlattepa, the Vardāna FWI-A dishes were also found only in the citadel, while no examples were unearthed in the probing trench opened in the *shahristan*. This fact could point towards the luxury character of this vessel type, possibly used exclusively by the elite living in the citadel. General analogies with the dishes of type III from Zartepa (northern Bactria) that correspond to the FWI-A type can be also traced, even though the excavators pointed out that only a few specimens of this type were found in this site, while dishes of type II (correspondent to FWI-B) seem to be more numerous (ZAV'ĀLOV 2008: **Fig. 82:1–2**, 98:1).

One of the most important aspects of the Vardāna FWI-A dishes is that they are the first published evidence of this type of vessel characterised by burnished decoration from the Bukhara oasis. Among the pottery material unearthed at Paikend (**Fig. 1**) we can see several dishes whose shape has some resemblance to that of the FWI-A. This is the case of the dishes unearthed in *shahristan I*, in House no. I, dated around the 5th to the first half of the 6th century CE (**Fig. 8:1**), in House no. VIII (**Fig. 8:2–5**), dated from the 6th to the 7th century CE, and in House no. VIIIa (**Fig. 8:6–8**), dated to the end of the 7th to the beginning of the 8th century CE. Other dishes, attributed to the end of the 6th/7th century CE, were unearthed in the area in front of the citadel (**Fig. 8:9–10**). A fragment with red slip, dated to the second half of the 3rd to the first half of the 4th century CE, was found in the barracks and it could be the only find of FWI-A from this site, even though the burnished decoration is lacking (**Fig. 8:11**).

Generally speaking, the Paikend vessels have a truncated cone shape, taller than that of Vardāna, with vertical or slightly inturned rims that form a sort of “collared profile”. Except for two examples that have red slip but no burnished decoration (**Fig. 8:11–12**), the others are plain and the walls thicker than those from Vardāna. These features could suggest that they are later imitations or, possibly, that the original shape evolved toward a plain and simple one, in which the variety of rims so characteristic of the Bactrian production has been replaced by more standardised types. It is striking to note that only a single specimen of an original FWI-A dish (without burnished decoration) was found in Paikend among the ceramic complex dated to the Kushano-Sasanian phase. This is quite strange, if we consider that a Bactrian influence was identified in several artefacts from the same deposit (OMEL'CHENKO 2016: 84). Possibly, this scarcity is due to the nature of luxury items hypothesised for this shape: luxury items were not attested in the military context of the garrison barracks and other excavated areas where this phase was identified.

According to STANČO (2014: 143), evidence of coarsened dishes with indented rims can also be seen at Setalak 1 (3rd to 6th century CE) and Romitan (**Fig. 1**) (phases dated to the late 4th and 5th century CE), both located in the Bukhara oasis. In these sites the vessels have the red slip, but no burnished decoration; in some cases the walls are thicker and the rim indentation not very marked. Considering the dating of the vessels, close to that of the Bactrian FWI dishes, we are possibly in the presence of rough local imitations of the original Bactrian shape. With regard to the centre of production of the FWI found at Vardāna, as stated above, the Vardāna dishes correspond in detail to the Bactrian vessels described by Stančo, including the fabric that, accord-

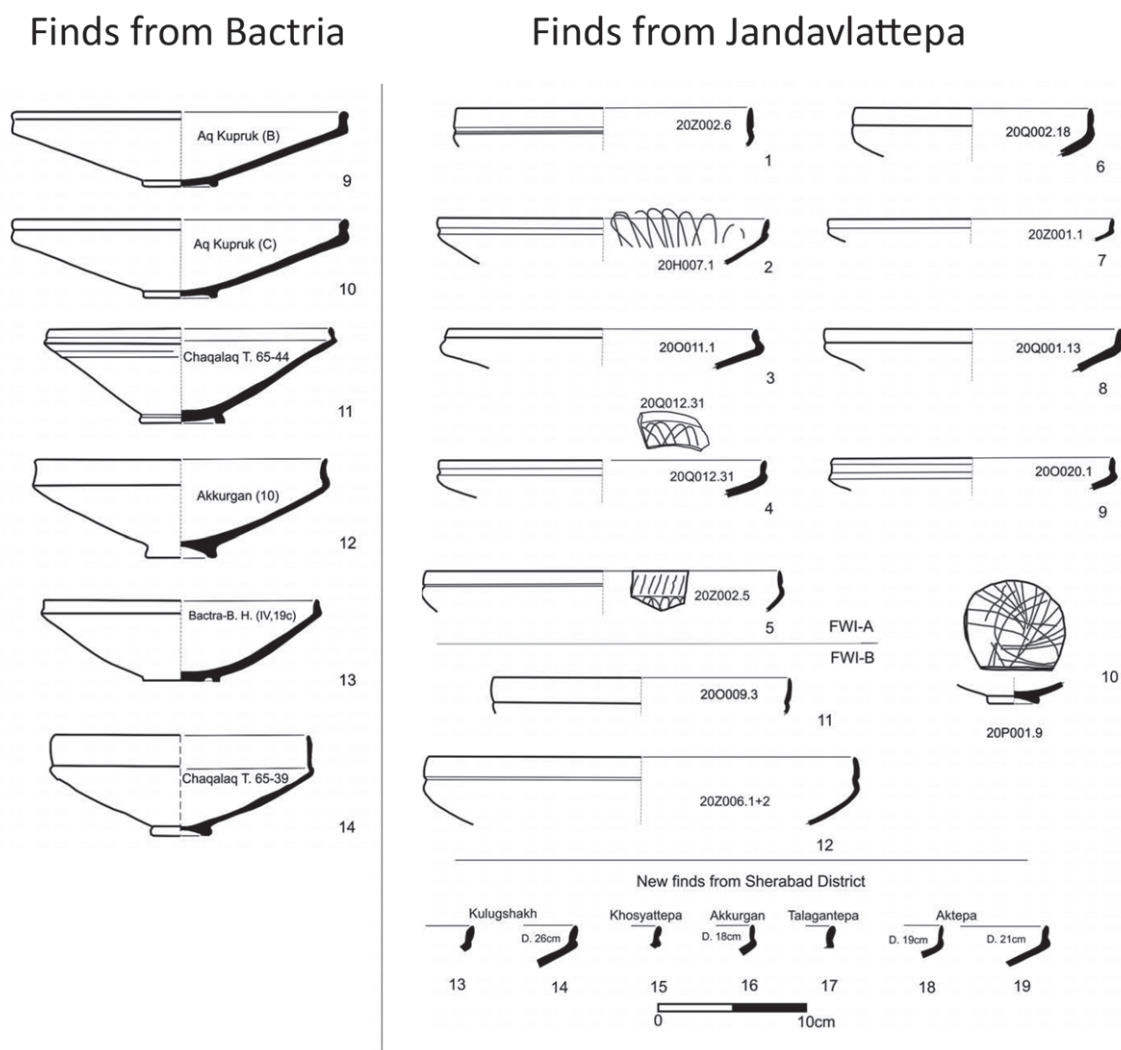


Fig. 7: Fine ware dishes with indented rim (FWI-A) from Bactria (elaboration after STANČO 2014: Fig. 2:9–14; Fig. 3:1–19).

ing to this scholar, “is made of finely washed creamy orange to light pinkish red clay with a small proportion of tiny particles” (STANČO 2014: 128). However, without a comparative archaeometrical study of the Vardāna sherds with those from Bactria, it is difficult to establish if we are in the presence of imported goods or local products. In the second case, the hypothesis of a local production realised by itinerant specialised craftsmen from Bactria must be also considered.¹¹ The possible involvement of itinerant specialists in the Bukhara oasis was already noted by Fiona Kidd¹² in an unpublished paper given in Berlin in June 2019 – especially for the mould-made hemispherical bowls of “Megarian” type found at

11 On the itinerant specialised potters from Bactria, see TSANTINI ET AL. 2016: 19 and MARTÍNEZ FERRERAS ET AL. 2018.

12 We thank Fiona Kidd for the exchange of opinions on the possible production area of the FWI dishes found at Vardāna.

Bashtepa (Fig. 1),¹³ located in the western periphery of the Bukhara oasis – even though the possibility that these finds were imported from Bactria is reliable (STARK 2016: 139–141).

3b Chronology and historical considerations

In the absence of primary sources for dating both the Late Antique and the first layers of the Early Medieval phase, the re-foundation of Vardāna (i.e. the palace) would necessarily be placed in a large timespan (3th to 5th century CE), challenging the comprehension of the historical background behind this building. Pottery complexes of each phase offer clues to narrow this dating, but are still not enough

13 The fortified site of Bashtepa was inhabited between the 4th/3rd century BCE and the 1st/2nd century CE. For the recent results of the excavation, see STARK ET AL. 2019 and 2020.

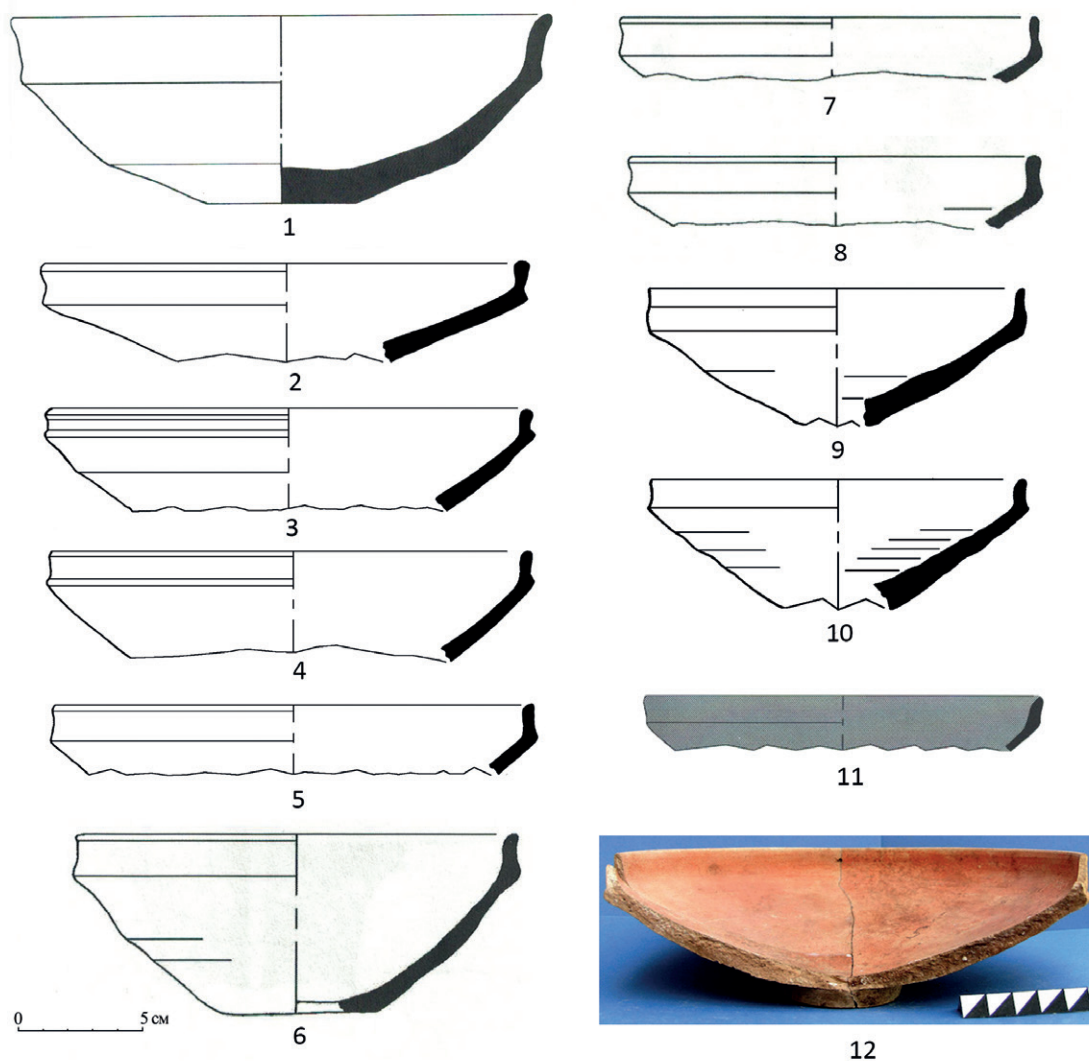


Fig. 8: Fine ware dishes from Paikend (elaboration after Paikend reports).

1 – after MIRZAAHMEDOV/OMEL'ČENKO 2018: Fig. 104:10; 2–5 – after MIRZAAHMEDOV/OMEL'ČENKO 2016: Fig. 121:3–7;
6–8 – after MIRZAAHMEDOV/OMEL'ČENKO 2018: Fig. 125:1–3; 9–10 – after MIRZAAHMEDOV/OMEL'ČENKO 2016: Fig. 88:1–3;
11 – after TORGEOV/MIRZAAHMEDOV 2011: Fig. 26:2; 12 – after SEMENOV/MIRZAAHMEDOV 2007: Fig. 40:4).

to provide a targeted chronology – mainly because the differences between the material from the two phases are not very marked. As recently pointed out by RANTE ET AL. (2019: 265), this is quite typical for the Bukhara oasis between the 4th and the 5th century CE when a true pottery evolution is not attested there. At Vardāna, this conservative trend is confirmed for the vessels of the so-called “Kizil Kir-Setalak” type, mainly represented here by jars with finger mark impressions and red or dark brown paint drained down the surface.¹⁴

Also, the results of C14 analysis of Vardāna charcoals from both phases offered a broad timespan not decisive enough to solve our questions. With these premises, focusing attention on a very particular type of pottery represents an alternative approach, which helps to contextualise, from the historical and cultural point of view, the re-foundation of this settlement.

Dating to the second half of the 3rd to the first half of the 4th century CE?

If we consider the Vardāna dishes co-eval to the Bactrian production of FWI-A (first half of the 3rd to the mid-4th century CE), the re-foundation of the site could have occurred in the same period during

¹⁴ This component has been attested in both the Late Antique phase and the first layers of the Early Medieval phase.

which the Paikend barracks were in use (end of the 3rd to first half of the 4th century CE). An opinion now shared by several scholars (OMEL'CHENKO 2016: 85–86; GRENET forthcoming; NAYMARK 2001: 69–72) is that the Bukhara oasis – probably from the time of Šapur I and for less than a century – came under Sasanian or Kushano-Sasanian political influence, absorbing traits of Sasanian and, to some extent, also Bactrian material culture. This seems to be particularly evident in Paikend, where OMEL'CHENKO (2016: 86) demonstrated that, from the second half of the 3rd to the mid-4th century CE, the fortress became “an important stronghold for them [the Sasanians]” (emphasis added).

Considering the location of the site, Vardāna could have had a similar purpose, serving as a frontier outpost. In effect, looking at the legend of foundation narrated by Naršakī there are echoes of the Sasanian origin of this place. According to this author, the settlement would owe its construction to the Sasanian king, Šapur (FRYE 1954: 16), who arrived in Bukhara after a confrontation with his father, Kistrā.¹⁵ Bukhar Kudah welcomed the noble and gave him the lands of today's district of Shafirkan (ivi. 31–32), where Šapur dug a canal, and built a village and the castle of Vardāna. In this area rose the district called “the villages of Abuya”. Without entering into the discussion of the identification of the characters quoted by Naršakī,¹⁶ the influence exerted on this area by the Sasanian world is evident – at least at a cultural level.

However, pottery from the Vardāna palace (foundation layers and first occupation) does not correspond to the typical vessels found in the Paikend barracks such as the hemispherical bowls with red slip and the decorated basins (*taghara*) characteristic of the Bactrian production during the Kushano-Sasanid phase. Instead, hemispherical bowls similar to those so frequently attested in Paikend were found in the Late Antique phase of Vardāna that yielded, among others, some fragments of bowls with slightly inturned and curved rims. This shape recalls similar vessels from Zartepa, found in archaeological contexts dated to the second half of the 3rd to the first half of the 4th century CE and considered reminiscent of the metal prototypes of Sasanian production (ZAV'ÁLOV 2008: 223–225). The absence of FWI-A dishes from the Vardāna Late Antique deposits can be theoretically explained by the same argument proposed for Paikend, i.e. the military role of the investigated area, even though at the present state of research it is still difficult to establish if the excavated structures served this specific function. In light of these considerations, it is

likely that during the Sasanian control of the Bukhara oasis, i.e. until the mid-4th century CE, the palace had not yet been built, while the Late Antique castle was still in use.

Dating to the second half of the 4th to the beginning of the 5th century CE?

Another possible chronological scenario for the Vardāna dishes, and thus for the construction of the palace, places them in the second half of the 4th to the beginning of the 5th century CE. As suggested by Stančo, the very last period of circulation of this shape in Bactria can be extended to the second half of the 4th century CE, so it is not excluded that this pottery travelled outside Bactria some decades later, at the beginning of the 5th century CE.

To understand how this shape could have reached the Bukhara oasis, we must turn our gaze to the political situation of that period. In around 370 CE, the Kushano-Sasanids lost power in Bactria because of the arrival of waves of nomadic groups of Huns. The identification of these “Huns” with the Chionites and the Kidarites is still debated and, especially for the latter two groups, scholars have developed different opinions on the basis of the historical sources used in their interpretations.¹⁷ According to Cribb, the Kidarites already started to rule in Bactria in the second half of the 4th century CE (CRIBB 2010: 116; JONGEWARD/CRIBB 2015: 227–228), while a later perspective is sustained by Grenet and de La Vaissière, who both place the conquest of Bactria by the Kidarites and their arrival in Sogdiana – with some differences – in the first half of the 5th century CE (GRENET 2002: 207–208; DE LA VAISSIÈRE 2005: 107–108). It is the opinion of Grenet that after 437 CE the Kidarites replaced, in Samarkand, a certain Xiongnu king “Huni”, reported by the *Wei shu* as the third of that line reigning in Sogdiana (GRENET 2002: 207–208); a Kidarite presence would be confirmed by the notorious silver “archer coin” series, carrying the name Kidara (*kydr* in Sogdian). Instead, DE LA VAISSIÈRE (2005: 107–108), focusing on the same episode of the *Wei shu*, identifies Huni as a Kidarite king already and states that their expansion began at the end of the 420s in Bactria, arriving in Sogdiana after 440 CE. Importantly, both scholars argue that the Kidarites' presence in Sogdiana coincides with the urban expansion and with the “Bactrianisation” of the region (GRENET 2002: 208–209; DE LA VAISSIÈRE 2005: 103–108).

As far as the Bukhara oasis is concerned, we can assume that, after the loss of its “Sasanian frontier land” status as a result of Hun invaders, the region did not suffer a prolonged period of decadence, but rather experienced a progressive development that continued in the 5th century CE. As demonstrated

15 On this topic, see LURJE 2006 and ADYLOV/MIRZAAHMEDOV 2001.

16 On this topic, see LURJE 2006 and ADYLOV/MIRZAAHMEDOV 2001.

17 On this topic, see GRENET 2002; DE LA VAISSIÈRE 2005; CRIBB 2010.

in Paikend, the barracks fell into disuse, suggesting that the military contingents (Sasanians or Kushano-Sasanians?) left this place; but we have no evidence of massive destructions, and in the following decades the lower city expanded again. Recent research led by the Uzbek-French archaeological expedition on several key sites of the Bukhara oasis also demonstrates that in the 4th to the 5th century CE the region underwent important urban developments, the most relevant comprising the fortification of the already existing villages located at the base of the fortresses (RANTE ET AL. 2018: 265).

Following the historical interpretation of Grenet and de La Vaissière, it seems logical to turn our gaze to the Kidarites as the main sponsors of the widespread building activity in the Bukhara region during this period, including the important re-foundation of Vardāna. However, it should be considered that the chronology established for the Kidarite kingdom in Samarkand is not necessarily a foregone conclusion for the Bukhara oasis as well. Significant differences between these regions may suggest a different historical path for Bukhara: Samarkand, unlike Bukhara, was never a focus of Sasanian or Kushano-Sasanian expansion. This circumstance points toward a privileged role of Bukhara at the time of the Kushano-Sasanian dominion. As recently suggested by OMEĻCHENKO (2016: 86), the Šāpur I inscription on the Ka'ba-ye Zardošt would indicate that the north-eastern limits of his realm extended up to Chach, a circumstance made plausible only by imagining that Bukhara bordered on Chach along the Nuratau range. With these premises, the control of this strategic area could have been, for the Huns, a good reason for establishing a seat of power earlier here than in other Sogdian territories.

A passage in Tabari would indicate a possible Hun presence in Bukhara at the very beginning of the 5th century CE. The episode, narrated also by other Arabic sources,¹⁸ occurred during the reign of the Sasanian king, Varahran V, who is said to have defeated the “Turks” pressing on the border of his reign, probably in vicinity of Merv, as well as those living in Transoxiana (BOSWORTH 1999: 94–97). According to Grenet, these “Turks” may be associated with the Kidarites, and the region reached by the end of the 420s could be identified with the Bukhara oasis (GRENET 2002: 208, 220). Tabari specifies that the fighting occurred at the very beginning of Varahran's reign, which is dated between 421 and 438 CE (ivi. 94). This chronological detail would indicate that Bukhara was under an unspecified “Hun” dominion in the years prior to the 420s.

It is difficult to establish if the Hun groups who possibly inhabited the Bukhara oasis were already powerful enough to sponsor the urban development

of the region, but the presence of FWI-A dishes limited to the foundation layers of the Vardāna palace would point in this direction. It is possible to argue that the palace was sponsored either by local powers in strict contact with Bactria at the end of the 4th century CE, or directly by Huns from Bactria. Dating this foundation event to the first decades of the 5th century CE would not stray too far from the last circulation of this shape in Bactria (end of the 4th century CE) proposed by Stančo. However, placing the construction of Vardāna palace slightly later, at the time of the Kidarite reign at Samarkand (middle of the 5th century CE), would probably render the dating of the dishes too late and would not explain why this shape is absent from Afrasiab archaeological contexts.¹⁹ The urban development and the “Bactrianisation” registered in Sogdiana could be the result of successive waves of Huns from Bactria; and an early arrival of Huns in Bukhara does not necessarily exclude that, later on, the Kidarites reigning at Samarkand could also have extended their dominion in Bukhara, re-invigorating an already present Bactrian substrate implanted by the first nomadic waves. This is, of course, only one of the possible chronological hypotheses for explaining the presence of FWI-A dishes at Vardāna, but does not solve the question of the centre of production of these vessels. As stated above, we cannot exclude the possibility that the vessels were produced by specialised artisans who had arrived from Bactria already by the end of the 4th century CE; but again, the discovery of these finds only in the foundation layers of the palace would suggest a direct relationship with the sponsors of this construction.

4 Conclusions

The fine ware dishes with burnished decoration (FWI-A) found at Vardāna offer the possibility of reconsidering the political background of the construction of the palace on top of the citadel. Starting from the assumption that this event can be read as a real re-foundation of the settlement, contextualised within the urban development registered in the Bukhara oasis in those centuries,²⁰ we can assume that – at least at the beginning of the 5th century CE – this area was under a political authority in some way connected with Bactria. The dominion that sponsored this building activity could have had a local origin, or have been a foreign power that, in these decades, can quite inevitably be linked with the Hunnic movements from Bactria. A key position of Bukhara in the target of their conquests can like-

18 For a summary of the literary sources that quoted this passage, see MARŠAK 1971.

19 We thank Frantz Grenet and Bertille Lionnet for having confirmed that, at the present state of research, there is no evidence of this type of pottery in Samarkand.

20 For the recent discussion of this topic, see RANTE/MIRZAAKHMEDOV 2019.

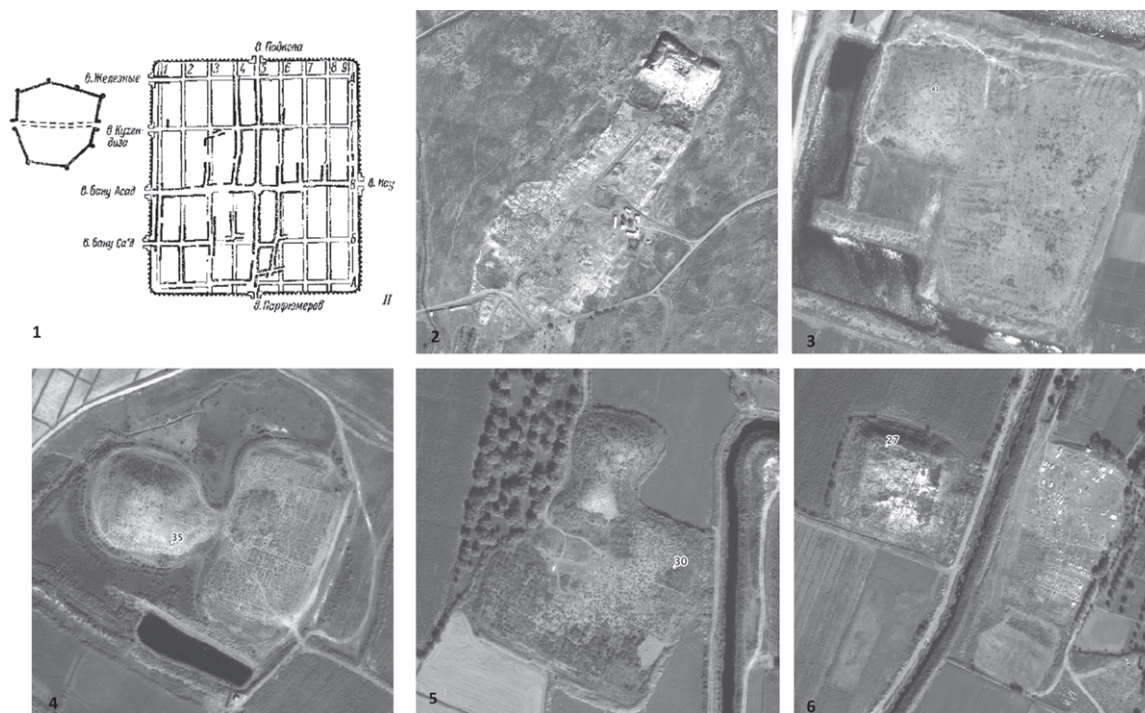


Fig. 9: 1 – Schematic reconstruction of Early Medieval Bukhara (after BELENITSKIJ ET AL. 1973: 236, Fig. 94-II); archaeological sites with regular *shahristan*, in Obaviija principality, actually Šafirkan district: 2 – Vardāna; 3 – Kashik; 4 – Sunuk tepe; 5 – Kul tepe; 6 – Kurgon tepe (Satellite image courtesy of the Digital Globe Foundation).

ly be related to its previous status as the “extreme northern border” of the Sasanian or Kushano-Sasanid realm (see *supra*), during which the region followed a historical path to some extent independent from that of Samarkand, the core of Sogdiana. An attribution of Bukharan urban development to the Kidarites of Samarkand is also plausible, but rather as a second Hunnic wave preceded by earlier Hun groups: a Kidarite presence in the oasis cannot indeed be proved by numismatic finds, and the archaeological evidence attests that the urbanisation of the region had already started in the second half of the 4th century CE when, according to the chronology of Grenet and de La Vaissière, the Kidarites were not yet formed. The lack of FWI-A dishes from Samarkand archaeological contexts may just mirror the existence of distinct Hun groups that realised diachronic movements to different parts of Sogdiana: this supposition would explain why the Bactrian contribution brought “abroad” can be present in one place and absent in another. The similarities of the Vardāna FWI-A vessels with those from Bactra, Aq Kupruk, and the Šerabad district could suggest that one of these areas was the starting point of the Huns who moved to the oasis. In Bactria, the production of FWI-A dishes had a long history that did not, however, extend beyond the end of the 4th century CE. Without excluding an early circulation of this shape in Bukhara during Late Antiquity, it can be safely stated that the FWI-A dishes were certainly present at Vardāna by the end of the 4th or

at the beginning of the 5th century CE. Here, the production (or the import?) of the FW dishes seems to have run out quickly – already during the first half of the 5th century CE – while continuing to exert a certain influence on the later local bowls that evolved towards a more a simplified shape (higher collared rim, no slip or burnished decoration) as attested in Paikend archaeological contexts dating to the 5th to 6th centuries CE.

The FWI-A dishes may have represented a “niche product” in use by the elites, as suggested by the paucity of fragments and also by the fact that in Vardāna, as at Jandavlattepa, this shape was found only on the citadel. Its characterisation as a luxury good is confirmed by the valuable origin of this vessel, linked to an influence of Mediterranean forms (Eastern *sigillata*) on an already existing local evolution of Graeco-Bactrian cups (STANČO 2014: 143). The diffusion of this fine ware in distant places may reflect an adhesion of the users to the most influential cultural models of that epoch, as those proposed by the Sasanians and adopted by the Kushano-Sasanians in Bactria. As pointed out by CANEPA (2010: 144), during Late Antiquity the cultural interactions among the main empires (Rome, Sasanian Iran, and China) aimed to establish and maintain an imperial identity capable of legitimating the strength of the king and the hierarchical relationships. This result was reached using ritual and visual materials that in many cases incorporated and reworked symbols of the antagonist powers.

These models also exerted a cultural influence on the regional elites, who became aware of the visual material of the imperial courts. The FWI-A dishes, certainly a modest example of luxury goods at that time still in use by Bactrian elites, if compared to other richer displays of power, could possibly be part of this circuit. If the “means of transport” of this vessel from Bactria to Bukhara was the Huns, we can argue they were motivated by the necessity to adopt it in order to consolidate their image as new lords.

The assertion of one’s own political identity should have been a target not only of the imperial powers, but also of the local principalities that emerged in Sogdiana during the Early Middle Ages. This is a conclusion achieved by one of the authors (Pozzi) during her PhD research, which focused on the analysis of the spatial and geo-morphological organisation of settlements that belonged to Obavija, the district governed by Vardāna. It was demonstrated that a consistent number of settlements dated to the 4th and the 5th centuries CE mirrored the model of Vardāna, characterised by a citadel and a detached *shahristan* of quadrangular shape.

Grenet had already recognised a similar Hypodameian plan in other important Sogdian urban cities founded or re-founded in those centuries, such as Bukhara, Paikend, and Panjikent, suggesting for them a possible Sasanian influence borrowed from the Bactrian experience (GRENET 1996: 372–383). In the case of the Obavija settlements, the widespread adherence to the model represented by the capital may attest to the necessity to validate, also thanks to tangible signs such as the town planning, a high hierarchical position within a very populated and thus competitive territorial context. The use of various types of “displays of power”, also of minor impact as in the case of the FWI-A dishes, would show that this mentality was not limited to the main urban centres, but also penetrated the rural areas. This strong orientation toward the integration of models of foreign origin was probably one of the winning strategies that allowed Sogdiana to reach a strategic role in the historical events that occurred in Central Asia during the pre-Islamic period.

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Reflections on Ceramics in the Bukhara Oasis

New Data from the MAFOUB Project

Jacopo Bruno and Gabriele Puschnigg

Abstract: In this paper, we focus on the corpus of pottery found in the recent excavations of the Franco-Uzbek archaeological mission in the Bukhara oasis and, in particular, in the sites of Ramitan, Site 250, Kakishtuvan, and Iskijkat, located in the central, north-western, and eastern sectors of the oasis, respectively. Within these assemblages, we select some individual shapes, surface treatments, and decorations that have proved to be significant in the ceramic data recorded so far. This selection can provide an overview of the characteristics of the ceramic complexes used/re-used over time in the different sectors of the oasis.

Keywords: Central Asian archaeology, Bukhara oasis, ceramic complex.

Резюме: Данная статья посвящена главным образом керамике, обнаруженной франко-узбекской археологической экспедицией при раскопках в Бухарском оазисе, а именно на участках Ромитан, Объект 250, Какиштуван и Искийкат, которые расположены соответственно в центральном, северо-западном и восточном секторах оазиса. Указанные комплексы включают целый ряд форм, отделок поверхности и декоративных элементов, признанных значимыми при сопоставлении с керамическими комплексами, которые были описаны до этого. Выборка позволяет сделать обзор характеристик керамических комплексов в различных секторах оазиса.

Ключевые слова: археология Средней Азии, Бухарский оазис, керамические комплексы.

1 Introduction

Since 2009, the activities of the French-Uzbek Archaeological Mission in the Bukhara oasis (MAFOUB) have been carried out by the international collaboration of the Department of Islamic Arts of the Louvre Museum, the Archaeological Institute of Samarkand, and the Institute of Iranian Studies of the Austrian Academy of Sciences (RANTE/MIRZAAKHMEDOV 2019). The scientific aims of MAFOUB's activities are to investigate the long-term transformations in the settlement patterns, environmental conditions, and water resources, along with the cultural horizons of the oasis. To achieve these aims, a comprehensive geo-archaeological survey of the area and excavation at the sites of Ramitan, Bukhara, Paikend, Iskijkat, Kakishtuvan, and Site 250 were carried out (**Fig. 1**).

2 Ceramic research and the MAFOUB

The analysis of material culture, with the study of the pottery constituting one major focal point,¹ falls within the framework of the MAFOUB project. The archaeological activities carried out in the Bukhara oasis produced a huge amount of pottery sherds that were collected and processed during the fieldwork, although limitations in the size of the ceramic team meant that the recording of the pottery often lagged behind actual excavations. Furthermore, several sediments and charcoal samples were subjected to scientific dating techniques, including C14 and thermoluminescence analyses, providing an absolute chronological grid for our study of the ceramic development. In line with the stratigraphic sequence, we recognised seven main chronological macro-phases to compare the relative chronology of material culture (**Fig. 2**). Particular attention was devoted to the assemblages from the trial trenches and the discrete excavations carried out in the main

¹ The other main subject of material investigations is glass (SHINDO 2017).





Fig. 1: Bukhara oasis (authors' elaboration of a satellite image © Google Earth).

sites of the oasis examined by the MAFOUB. The aims of the pottery study were to answer questions related to ceramic chronology, typology, and production techniques. Taking into account data from different sites simultaneously, it was possible to build a broader overview of the ceramic production in the oasis, analysing possible variations that provide both a spatial (oasis framework) and chronological (long-term framework) point of view.

Macro-phases	Chronology
1	3rd century BCE – 1st century CE
2	2nd century CE – 3rd century CE
3	3rd century CE – 4th century CE
4	5th century CE – 6th century CE
5	7th century CE – 9th century CE
6	10th century CE – 12th century CE
7	13th century CE – 14th century CE

Fig. 2: Chronological macro-phases (authors' elaboration).

In this paper, we focus mainly on the ceramic material from excavations at Ramitan, Site 250, Kakishtuvan, and Iskijkat. We are initially examining pottery from the north-western (Kakishtuvan), south-eastern (Iskijkat), and central (Ramitan, Site 250) sectors of the oasis, as well as the sites of primary importance and those within their influence, such as Ramitan and Site 250. Furthermore, within these assemblages, we highlight a series of individual forms, surface treatments, and decorations, which have proved to be significant within the ceramic assemblages recorded so far. This selection can provide an

overview of the similarities and differences within the ceramic complexes of different sectors of the oasis. For each shape, the unique code of the shape is provided (PUSCHNIGG/BRUNO forthcoming) with a brief description, the number of samples is calculated in rim EVEs (Estimated Vessel Equivalent; ORTON/HUGHES 2013: 203–218), and the number of rim fragments and their spatial and chronological distribution is revealed within the investigated sites. In this way, it is possible to evaluate how the selected shapes were used in different contexts over time. Furthermore, we underline the chronological phases in which these shapes are mostly represented, linking this information with the characteristics of the archaeological contexts in which they were found. This approach enables us to evaluate and highlight the continuity of use and production of typical shapes, along with the phenomena of redeposition, intrusion, residuality of potsherds, or the re-use of vessels for building activities in the framework of mudbrick architecture.

3 Chronological and spatial patterns of the ceramic assemblages

In this section, we focus on individual vessel forms – three open shapes (bowls) and two closed shapes (jars/jugs and storage jars) – along with some typical surface treatments and decorations that appear in connection with these shapes. This simple selection allows us to evaluate the distribution of vessel forms in the oasis, especially in the pre-Islamic pe-

Shape Code R006: bowl, rounded, with upright thickened rim, and related shapes (R006.1, R006.2)

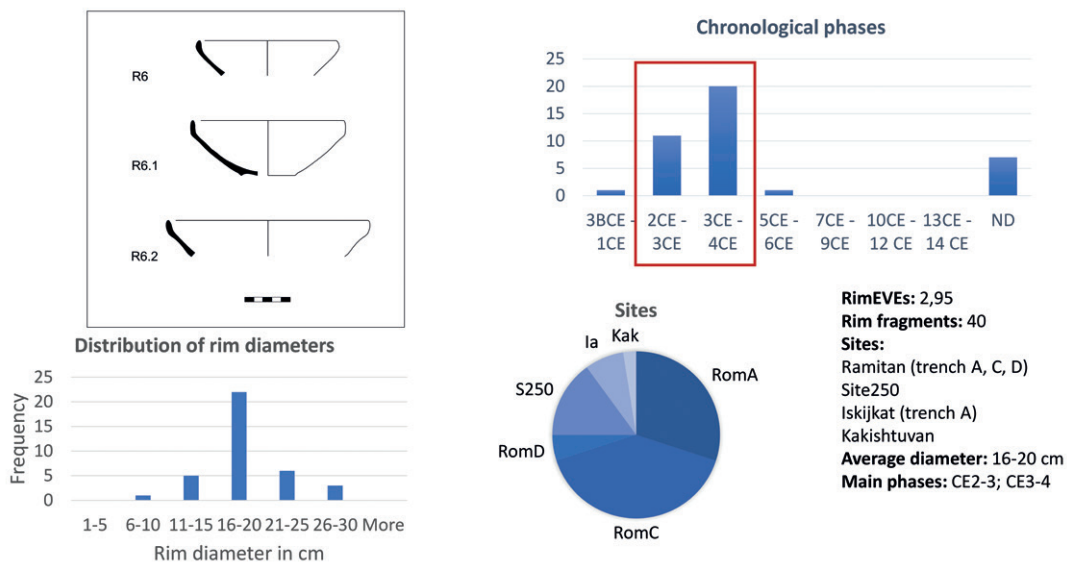


Fig. 3: Rounded bowls with upright thickened rims (drawings and charts by J. Bruno).

riod, as well as the continuity of production, use, or re-use of some of them over time.

Open shapes

Shape Code R006: Rounded bowls with upright thickened rims (Fig. 3). These medium open shapes are well-attested within the ceramic complexes of the oasis during the pre-Islamic period. Most of the specimens fall in the chronological framework of the second and third macro-phases, 2nd to 3rd century CE and 3rd to 4th century CE, in all the sites considered here. According to the previous literature, these shapes, especially the versions of R006 and R006.1, mainly date back to between the 3rd and 5th century CE (STARK/MIRZAAHMEDOV 2015: 93; KOŠELENKO 1985: 287, 423; MUHAMEDŽANOV/MIRZAAHMEDOV/ADYLOV 1982: 96), with some continuity also in the 6th to 7th century CE (SILVI ANTONINI 2009: 163). The same results coming from the MAFOUB excavations show a high presence of these shapes, especially in the 3rd and 4th century CE.

The other shape, R006.2, shows a slightly different profile with more flaring walls and an upright thickened rim. The chronological distribution of this shape within the MAFOUB excavations is the same as the related shapes, except for one fragment found in Site 250 in a context dated to the 1st century CE. However, similar shapes previously excavated in the oasis suggest a different chronological range for these vessels. Specimens from the excavations in Romish (KOŠELENKO 1985: Pl. 134) and Paikend (OMEL'CHENKO 2019: 213 Fig. 7:8) were attributed to the phases that could be dated to between the 3rd

and 2nd century BCE. It is then possible that shapes related to R006.2 appear in the ceramic complexes of the oasis in its early phases, and some of the fragments found in later contexts could be considered residual. However, the specimens found in the MAFOUB excavations did not show traces of wear that could point to a residual or redeposited material in later contexts. It is very possible that this type of bowl continued to be produced during the early centuries CE, as also suggested by similar shapes found in the citadel of Paikend in contexts dated to the 4th and 5th century CE (SEMENOV/MIRZAAHMEDOV 2007: 13–14, 73, Fig. 21:5, 74, Fig. 22:4).

Shape Code R007: Rounded bowls with thickened rims (Fig. 4). A number of distinct shapes that share the same common morphological elements fall under this broad definition. Similar shapes occur across the whole stratigraphic sequence of the oasis in all the investigated sites, with fluctuating popularity.

Our evidence clearly shows continuity in the production of the same basic shape throughout time. Wherever it is not attested in a chronological phase, this appears to be accidental rather than an actual absence of this vessel form from specific occupational phases. In our set of data, we can see that there are three main phases of occurrence of this shape: 3rd century BCE to 1st century CE; 3rd to 4th century CE; and then after the Islamic conquest of the oasis. We can outline some differences in this sequence related to the dimension, fabric, and surface treatment of the considered specimens.

In the early phases of the ceramic production in the oasis, the round simple bowl is a medium shape

Shape Code R007: bowl, rounded, with upright thickened rim, and related shapes (R008)

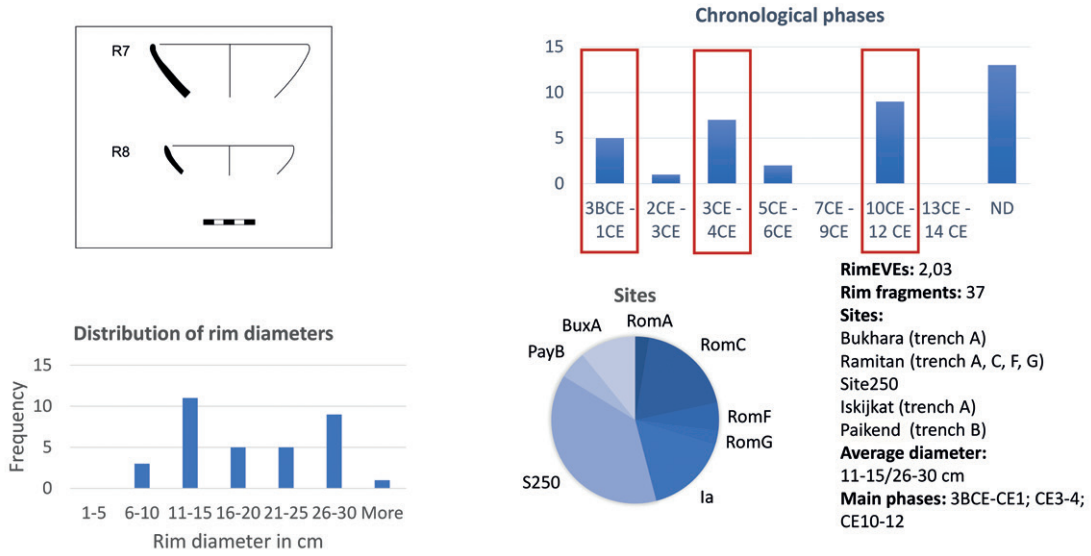


Fig. 4: Rounded bowls with thickened rims (drawings and charts by J. Bruno).

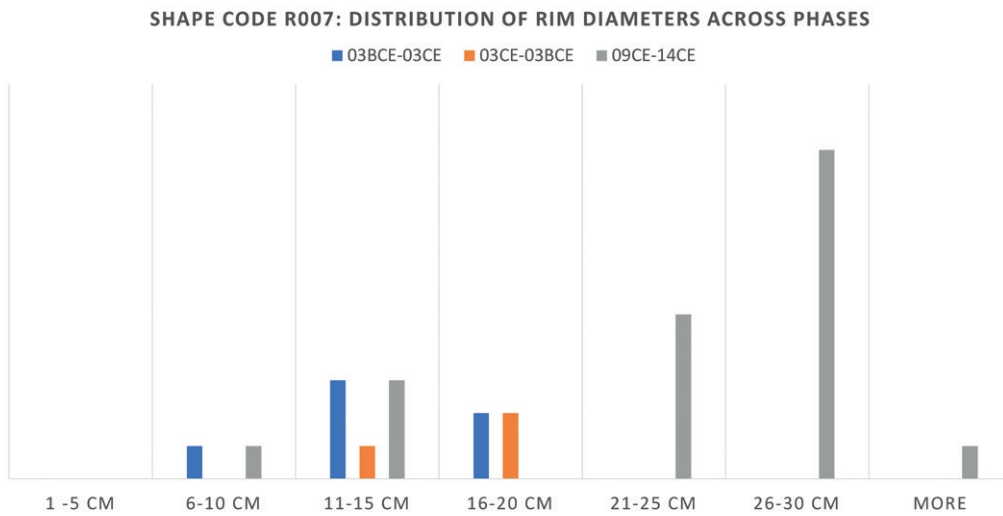


Fig. 5: Distribution of rim diameters across phases (chart by G. Puschnigg).

Shape Code R010: bowl with waisted profile and upright, slightly thickened rim

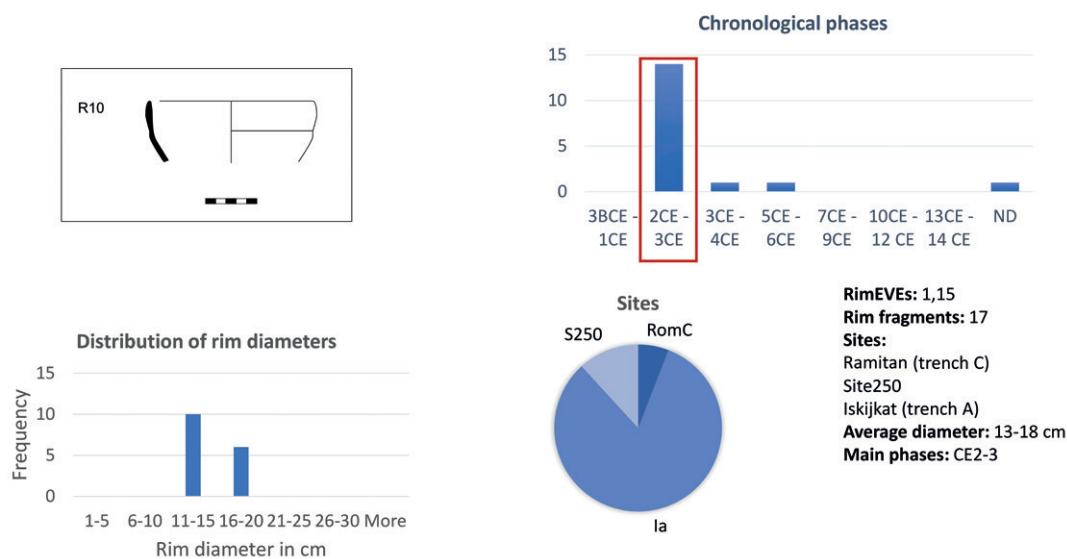


Fig. 6: Bowls with waisted profiles (drawings and charts by J. Bruno).

with an average rim diameter of 11–15 cm, increasing progressively over time. During the later phases, larger rim diameters prevail (Fig. 5) – obviously connected to a difference in the use – transforming the vessel from a bowl for individual servings to a plate of larger dimension, potentially for communal use at the table connected to a change in dining habits. As for the surface treatments, we can highlight that in the early phases, this type of bowl occasionally exhibits traces of slip, although there are also plain fragments (see below). In the later phase, we can see the introduction of glazed decoration on these vessels with a peak during the 10th to 12th century CE when most specimens are glazed. Parallel to these changes in surface treatments, it is possible to trace developments in the pottery manufacturing and firing technology as ceramic fabrics turn from the red-orange colour of the early phases to a progressively lighter colour and, in the early Islamic period, new fabric compositions are being introduced previously not attested in the ceramic complex of the oasis.

Rounded bowls are often illustrated in the ceramic sequences of the main excavated sites of the oasis, including Paikend (OMEL'CHENKO 2019: 210, Figs. 5:15–16; 213, Figs. 7:37–38; 214, Figs. 8:32–33; SEMENOV/MIRZAAHMEDOV 2007: 13–14, 74, Fig. 22:5), Bashtepa (STARK ET AL. 2016: 237, Fig. 29:6, 240) and Romish, phases 2 and 5 (KOŠELENKO 1985: Pls. 134–135), and Bukhara, phases 1, 3, 4, and 6 (MUHAMEDŽANOV/MIRZAAHMEDOV/ADYLOV 1982: 82, Fig. 1:17 (Bukhara I), 87, Fig. 2:14 (Bukhara III), 9 (Bukhara IV), 92, Fig. 3:16 (Bukhara VI)).

Shape Code R010: Bowls with waisted profiles (Fig. 6). These are medium open shapes with an average diameter of 13–18 cm. In contrast to the previous open forms, occurrences of this form are mostly restricted to one specific chronological phase, namely the 2nd to 3rd century CE, with fewer specimens coming from contexts dated to subsequent phases (3rd to 4th century and 5th to 6th century CE). Furthermore, within the ceramic complex of the MAFOUB excavations, this type is well-documented mostly in the sequence of the trench in the citadel of Iskijkat, while at the other sites, it is only sporadically attested.

Open shapes comparable to R010 can be found in the ceramic sequences of Kyzylkyr (FILANOVIČ 1983: 33 Fig. 8:23–24, 28; 50, Fig. 16:34–35, 40) and Setalak (FILANOVIČ 1983: 59 Fig. 19:8–9, 30; 100, Fig. 37:8, 70) within contexts dated to between the 3rd and 4th to 5th century CE. Compared with this data, the findings in the sequence of Iskijkat suggest a slightly earlier introduction of this shape in the ceramic production of the oasis.

Closed shapes

Shape Code R041: Jars or jugs with short necks and slightly everted and externally thickened rims (Fig. 7). This definition covers a wide range of closed shapes of short-necked jars or jugs that are widespread in Central Asia from the Hellenistic period onwards (PUSCHNIGG/HOUAL 2019: 125–26, Fig. 3). In the Bukhara oasis, similar jars or jugs are almost ubiquitous in all the excavated sites. Due to their fragmentary conditions, it is often difficult to

Shape Code R041: jar/jug, with short neck and slightly everted and externally thickened rim, and related shapes (R038, R041.1, R041.2, R051)

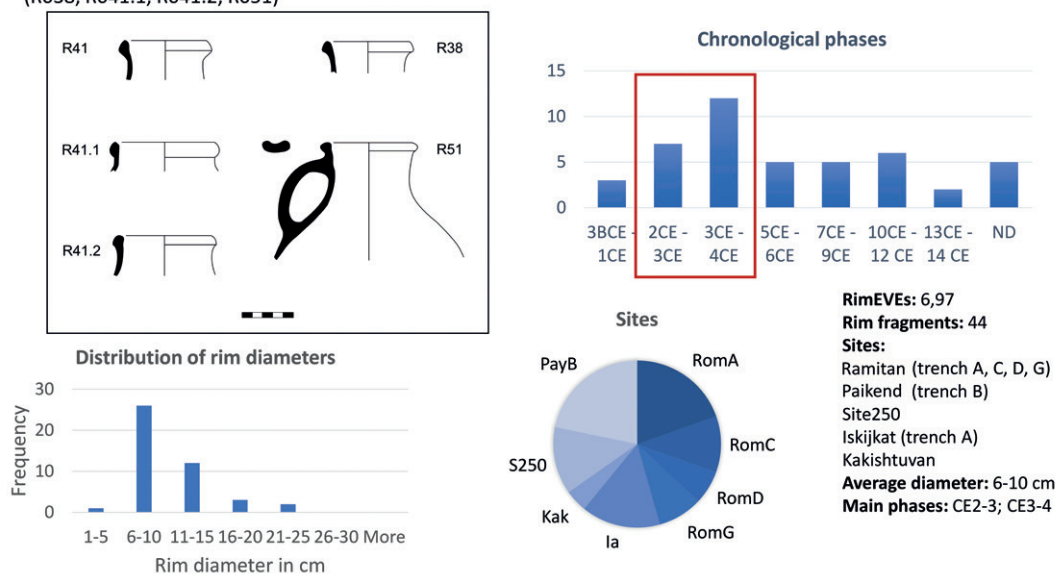


Fig. 7: Jars or jugs with short necks and slightly everted and externally thickened rims (drawings and charts by J. Bruno).

reconstruct the whole shape and to assess whether they should be considered simple jars or jugs – with one handle attached to the rim and shoulder. These vessels are between the first shapes that appear in the oasis in its early phases, and their chronological spread covers the entire ceramic sequence. The peak of occurrences is documented in contexts dated to the 2nd to 4th century CE, and they slightly decrease during the following phases. The production of these vessels did not stop, though, and many rim sherds were found in contexts of the later periods that also show lighter fabrics or firing groups typical for the Islamic period, suggesting that they were produced during these later phases. We can see here a continuity of production and use of these vessel forms during the whole span of time considered in this paper. Even the average rim diameter, 6–10 cm, remains the same throughout the sequence.

This group of vessels is well known within the ceramic complex of the oasis. Shapes analogous to R038 or R051 are illustrated in the main sequences of the oasis (KOŠELENKO 1985: 422, Pl. 134 (Romish II–III), 423, Pl. 135 (Romish IV–VI); MUHAMEDŽANOV/MIRZAAHMEDOV/ADYLOV 1982: 82, Fig. 1:11 (Bukhara I), Fig. 1:12 (Bukhara II), 87, Fig. 2:5 (Bukhara III), 92, Fig. 3:34 (Bukhara V)), in the citadel of Bukhara (MUHAMEDŽANOV 1983: 63, Fig. 2.A), at Kyzylkyr and Setalak (FILANOVIČ 1983: 50, Fig. 16:19–20; 100, Fig. 37:75), and more recently at Paikend (OMEL'CHENKO 2019: 210, Fig. 5:17, 46; 212, Fig. 6:16, 24; 213 Fig. 7:16–17, 47) and Bashtepa (STARK ET AL. 2016: 238, Fig. 30:3), with a chronological range that runs from the 3rd century BCE to the 4th to 5th century CE (MUHAMEDŽANOV/MIRZAAHMEDOV/ADYLOV 1982: 95; FILANOVIČ 1983:

120; MUHAMEDŽANOV 1983: 60; OMEL'CHENKO 2019: 220, Fig. 10, 221; STARK ET AL. 2016: 240–242).

Within a similar chronological and geographical span, we found jars or jugs such as R041 and its related shapes that are comparable to specimens from Kyzylkyr and Setalak (FILANOVIČ 1983: 50, Fig. 16:32; 100, Fig. 37:13, 37, 50, 73), and from excavations at the citadel of Paikend (SEMENOV/MIRZAAHMEDOV 2007: 74, Fig. 22:7). In the ceramic sequence of the oasis described by KOŠELENKO (1985: Pl. 135), rim shapes R041 and R041.2 could be dated to phases Romish V and VI. The suggested dates of these analogies fall within the 3rd to the 5th century CE (FILANOVIČ 1983: 120; SEMENOV/MIRZAAHMEDOV 2007: 12–14; MIRZAAHMEDOV ET AL. 2013: 106–107).

Shape Code R062: Storage jars with short necks and upright, thickened rims (Fig. 8). These large storage jars of varying sizes ranging between 60 cm and 100 cm in height, 20 cm and 40 cm in rim diameter, generally appear to be shaped from coils, probably with the help of the wheel, although they are not completely wheel-thrown. It is difficult to assess a precise chronological span of the production of these jars within the oasis as such vessels are often re-used with various functions, especially in the later contexts. Accordingly, sherds of storage jars were found in varied states of preservation, which can suggest a long cycle of re-use or re-deposition within the archaeological context. Rims and body sherds of storage jars occurred already in contexts dated to the 3rd to 2nd century BCE, and the gap in the following phases is clearly due to finding accidents – i.e. small or incomplete contexts of these periods without any specimens of rim sherds – as is

Shape Code R062: storage jar (khum), large, with short neck and almost upright or slightly everted, thickened rim, thick-walled and related shapes (R062.1, R062.2, R062.3, R062.4)

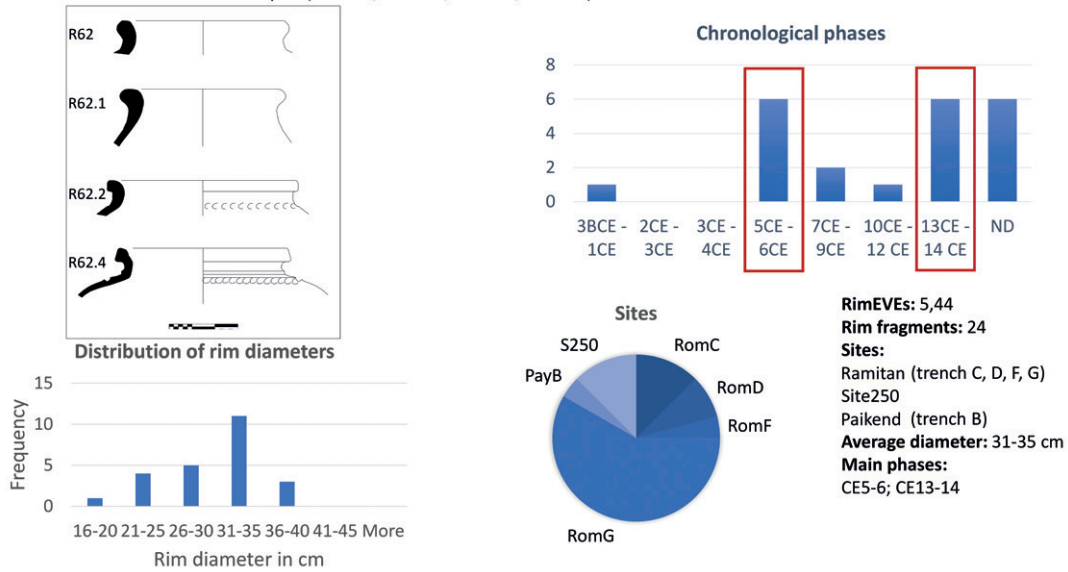


Fig. 8: Storage jars with short necks and upright, thickened rims (drawings and charts by J. Bruno).

Slip-coated vessels (DC005.1, DC005.2) of the previous shapes (R006, R006.1, R006.2, R007, R008, R010, R025, R026, R038, R041, R041.1, R041.2, R051)

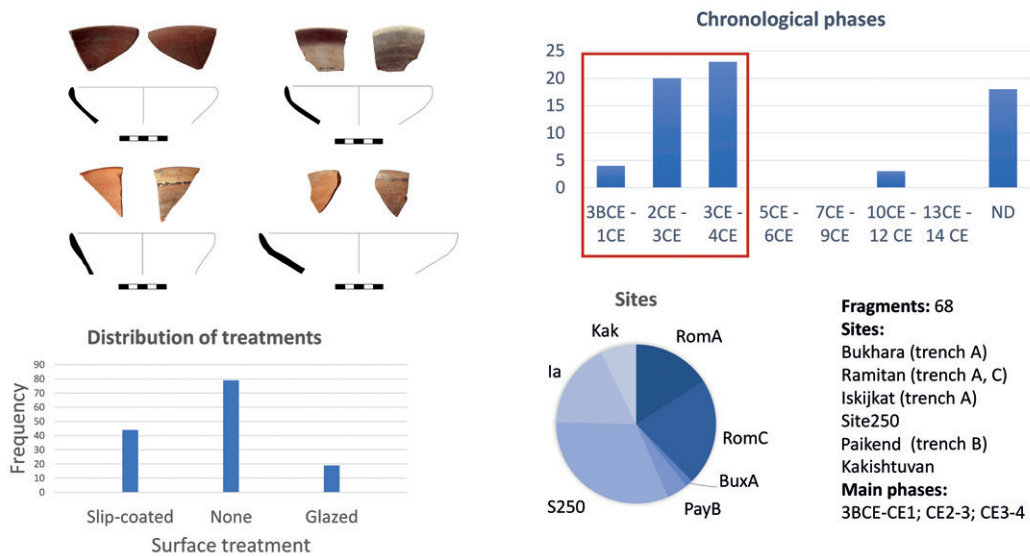


Fig. 9: Slip-coated vessels (drawings and charts by J. Bruno; photos © MAFOUB).

evident through the comparisons of the trend of the decorated body sherds of the same types of storage jars (see below). However, the archaeological contexts that contained the majority of the specimens of these shapes consist of two distinct chronological phases: 5th to 6th century CE and 13th to 14th century CE. This data exemplifies the problems of re-use and/or re-depositing of ceramic material within archaeological contexts.

One of the most immediate patterns of re-use for the storage jars are the sewage facilities or *badrabs* (Šiškin 1963: 113, Fig. 53), built during the Islamic period, that rely heavily on large storage vessels and water jugs that have their base chiselled out to facilitate the unhindered passage of waste. Often, some of the vessels used in these facilities belong to preceding phases, which complicates the exact chronological assessment of the storage jars. Another form of material re-use is reflected in a number of buildings of the Islamic period, which show either floor pavements or wall tiling of large ceramic sherds (RANTE/MIRZAAKHMEDOV 2019: 192, 211, Fig. 193), mostly belonging to earlier storage jars that appear to provide the bulk of the material. Such practices remind us that many interventions occur in the course of the stratigraphic build-up, which affects the expected order. The careful evaluation of site formation processes in conjunction with the study of the ceramic material thus becomes all the more indispensable.

Surface treatments

In this section, we selected the most significant techniques and decorative patterns used for the finishing of the vessel forms previously discussed that allowed us to follow the diachronic variations in the use of surface treatments in the ceramic complexes of the oasis (BRUNO/PUSCHNIGG 2022). As for the related vessel forms, some of the surface treatments of the shapes described here show a chronologically consistent distribution, while others seem to appear throughout the whole chronological sequence. The long chronological distribution of some of these techniques and patterns could reflect continuity in use over time or, on the other hand, it could imply patterns of re-deposition and re-use of vessels with certain surface treatments and decorative elements in contexts later than their original one.

Treatment Code D005: Slip-coated vessels (Fig. 9). Many of the specimens of the shapes described above show their extant surface evenly covered by a layer of slip. According to our data, the slip was primarily used to coat tableware vessels or medium-sized jars. Unfortunately, as most of the pottery is highly fragmented, it is difficult to judge how much of the vessel surfaces were usually covered or whether there is a variation in style between complete and partial coating. The evidence of the specimens of slip-coated vessels collected so far suggests that bowls were

usually almost entirely covered with slip, while jars or jugs show this treatment only in their upper half or two-thirds of the vessel body. The colour of the slip ranges from red to reddish-brown and black tones, mostly without any traces of burnishing. The slip is of good quality, even though it is sometimes heavily worn and peels off around the vessel rims. In some of the slip-coated bowls, the upper part of the rim is of a darker colour, reflecting different levels of exposure to the kiln atmosphere due to the staking of the vessels during the firing.

Fragments of slip-coated vessels were found in all the investigated sites, especially in the archaeological context of the pre-Islamic periods. The earliest evidence of these treatments in our ceramic assemblages belongs to contexts of the Bukhara citadel and Iskijkat dated to between the 3rd and 1st century BCE, while during the first centuries CE, we can discern a huge increase of the findings of slip-coated vessels throughout the oasis. In our assemblages, we can see a peak of findings around the 2nd to 3rd century CE and the 3rd to 4th century CE, while in later complexes, a sharp decline is noticeable, and the rare specimens of slip-coated vessels are probably residual. This distribution follows the trend attested for some of the previous shapes, especially in the chronological phases of the pre-Islamic period. During the later phases, the sharp decline and the progressive disappearance of these treatments is followed by the introduction of glazed ware during the early Islamic period. Simple open shapes such as R007 are then produced in different fabric or firing groups often with glazed surfaces.

Treatment Code D001: Slip-painted decorations (Fig. 10). The trickling pattern of slip paint is usually found on large storage jars (such as R062 and related shapes) and less frequently on other closed shapes such as jars or jugs (R051) and small pots. This pattern is obtained by pouring a watery slip on the shoulder of the finished vessel dried to the "lather-hard" stage and letting it trickle down the external surface. Depending on the kiln temperature and atmosphere, as well as the composition of the slip, the pattern assumes a reddish or brownish colour of different shades that creates a sharp contrast with the light or cream-coloured background of the vessel surface.

The use of clay slips for decorating ceramic vessels with a trickling pattern is a well-known technique widely used in the Bukhara oasis during pre-Islamic times. According to our data so far, the slip-painted decoration seems to be introduced in the Bukhara oasis at an early stage in its occupational history. The first evidence of this technique derived from archaeological contexts is dated to the 3rd/2nd to 1st century BCE and between the 1st century BCE and the 1st century CE in Iskijkat. In a slightly later phase, this technique appears in the ceramic complexes of Kakishtuvan and Ramitan,

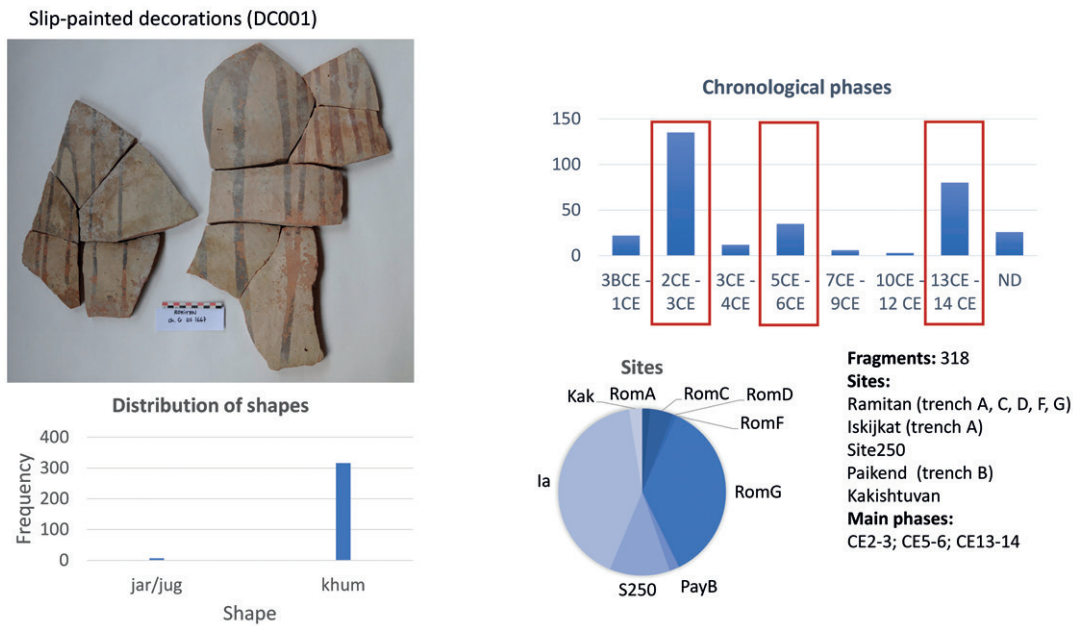


Fig. 10: Slip-painted decorations (charts by J. Bruno; photos © MAFOUB).

with a peak of findings in contexts dated to the 2nd to 3rd century CE. During the 5th to 6th century CE, the technique is still well-attested in the archaeological contexts, although the number of specimens slightly decreases over time; by the 7th to 9th century CE, the slip-painted decoration is rarely found in our assemblages. The third peak of findings is linked to the phase of the 13th to 14th century CE. We can follow here the same pattern of re-use already seen for R062 during this later phase when storage jars – with or without a slip-painted decoration on their surface – were used as building materials in the mudbrick architecture. As pointed out above, the re-use of vessels and sherds affected the correct definition of the chronology of the ceramic materials since the fragments used in these contexts are not always contemporary and might derive from various preceding phases.

Comments and current perspectives

Our selective overview of some of the most prevalent vessel types in our pottery collection to date provides a glimpse of the chronological and spatial distribution of certain forms, firing groups, and decorative styles of the ceramic repertoires. At the same time, this discussion highlights the problems posed by the stratigraphy and archaeological contexts in the oasis. Contexts and occupational phases with rich pottery assemblages and independent scientific dating provide good anchor points for the chronological assessment of individual ceramic types. A diachronic perspective, taking into account the complete occupational sequence documented

in the recent excavations, is most revealing with regard to aspects of resilience as well as processes of innovation within the ceramic industry of the region, but requires the analysis of the assemblages with awareness of the specific archaeological situation and the quality and state of preservation of the individual pottery fragments. This is not always possible, and our interpretation remains fragmented at this stage. As more material is being processed and added to our data, patterns will become clearer; this will improve our understanding of modifications in the pottery repertoires and possible underlying cultural and technological changes.

A good example is the rounded bowls, which illustrate the perseverance of a basic form with changes to the firing patterns, decoration, and size. Such observations provide us with the opportunity to view the ceramic developments in conjunction with the occupational history of the oasis and its historical narratives. The evidence of the large storage vessels, on the other hand, opens up perspectives of material re-use and the building history in the region, although chronological interpretations become more difficult in this case.

Spatial variations are difficult to assess at the moment, since individual chronological phases are not equally represented across the excavations. Specific shapes, such as the bowl with waisted profile, appear to have been more popular at particular sites, in this case Iskijkat, than at others. Still, we cannot conclude that sub-regions with distinct ceramic fashions existed within the oasis; and in the case of the bowls with waisted profile, the parallels found at Kyzylkyr and Setalak, which are located on the west-

ern fringe of the oasis (whereas Iskijkat lies on its east side), contradict such an assumption.

Nevertheless, we may assume that individual pottery workshops varied in their stylistic traditions and areal coverage. While we lack sufficient evidence regarding ceramic kilns across the whole extent of the oasis, a petrographic study on selected fabrics of all the MAFOUB excavations is ongoing and might add some information on potential differences in clay composition or shaping techniques within the region and across functionally distinct vessel groups. What appears to be relatively uniform over the entire sequence and geographical study area is a preponderance to coat the surfaces of serving dishes – either with slip, as in the earlier phases, or with glaze, as in the Islamic period. It is important to note that slip-coated table ware is equally characteristic for the pre-Islamic period in Bactria (HOUAL 2020: 56–57, Fig. 34). The decoration with splashy or trickling slip paint is equally bound to specific vessel groups, including medium-sized or large closed forms and, in particular, storage jars. Aside from its particular link to these ceramic types, the splashy or trickling patterns offer some inter-regional perspectives and show links with neighbouring areas, specifically Chach and/or Chorasmia. The particu-

lar affinities of individual decorative patterns and, to a lesser extent, specific vessel forms to certain regions in the vicinity seem more or less dissolved with the introduction of the early Islamic ceramic repertoire, which reflects considerable uniformity across a much wider geographical range. Still, single slip-painted designs at the beginning of the Islamic era suggest that different cultural traditions are still palpable in the ceramic production of the oasis at least at this early stage. Interestingly, decorative features generally appear to be the prime indicators of cultural interactions.

We hope that our study adds to the understanding of how the ceramic industry of the Bukhara oasis developed and how different cultural exchanges become visible in the pottery through time. Due to the structure of the MAFOUB project, which covers several sites and their entire occupational sequences, we can gain insights into the long-term transformation of the ceramic repertoires and some of the major technological changes. Part of our research also concerns the preparation of our data as a digital resource, which will facilitate the broader use of this material and its integration with other studies or data sets from the oasis and beyond.

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Uch Kulakh: Cultural Contacts in the Early Medieval Period

Ilaria Vincenzi

Abstract: The Early Medieval settlement of Uch Kulakh is a fortified castle with two living areas connected to it – both with stunning examples of the oldest paintings of the Bukhara oasis – and also a fortified southern complex outside the castle. It is located on the western portion of the Bukhara oasis, in the Varakhsha territory, along the road that leads to Chorasmia across the Kyzyl-kum Desert. Uch Kulakh was occupied from the 4th or 5th to the early 13th century CE. Seven phases of building activity have been identified and their chronology has been established on the basis of the archaeological data coming from the stratigraphic sequence. The study of the archaeological finds, the building techniques, and also the unique layout of the site suggests very strong contacts and relationships with the nomadic groups that were crossing the steppes of Central Asia. The iconographic patterns characterising the wall paintings and detected from the coinage, as well as the architectural models adopted, are the result of the fusion and interaction between two different cultural realities: settled people with an Iranian-Central Asiatic cultural heritage, and those typical of the Eurasian steppes. During the last two campaigns of excavation, new rooms with their own peculiarities and function, and architectural structures, were identified both inside the castle and in the living areas connected to it. They allow new hypotheses to be advanced regarding their functions and the role of Uch Kulakh within the territory.

Keywords: Central Asia, Bukhara oasis, Sogdiana, Early Medieval period, cultural contacts, urban planning.

Резюме: Раннесредневековое поселение Уч-Кулах представляет собой укрепленный замок с двумя прилегающими к нему жилыми помещениями, в обоих из которых были найдены поразительные образцы древнейших росписей в Бухарском оазисе, а также укрепленный южный комплекс за пределами замка. Расположенный в западной части Бухарского оазиса, на территории Варахши, вдоль дороги, ведущей в Хорезмию через пустыню Кызыл-кум, Уч Кулах был заселен с IV или V до начала XIII веков нашей эры. На основе археологических данных, полученных из стратиграфической последовательности, выделено семь фаз строительной деятельности и установлена их хронология. Результаты изучения археологических находок и техники строительства, а также уникальная планировка памятника предполагают весьма тесные контакты и активное взаимодействие с кочевыми племенами, населявшими степи Центральной Азии. Иконографические мотивы, характерные для настенных росписей и обнаруженные на чеканных монетах, а также принятые архитектурные модели являются результатом взаимопроникновения двух разных культурных традиций: носителей ирано-среднеазиатской культуры и обитателей степей Евразии. В ходе двух последних полевых сезонов были обнаружены новые помещения, обладающие своеобразными функциями, а также архитектурные сооружения как внутри замка, так и в примыкающих к нему жилых помещениях. Недавние находки позволяют выдвигать новые гипотезы о функциях этих помещений и о роли Уч Кулаха в жизни региона.

Ключевые слова: Средняя Азия, Бухарский оазис, Согдиана, раннее средневековье, культурные контакты, городское планирование.



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DOI: 10.13173/9783447118804.289

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Fig. 1: Map of Sogdiana (created by Anna Petrocchi, 2013).

1 Preliminary remarks: geographical and historical framework

As a member of the archaeological research project at Uch Kulakh¹ and founding president of the Turkistan International Group of Research and Excavation (TIGRE), I would like to draw your attention to the work carried out during the last two campaigns of excavation in the years 2008–2009 at Uch Kulakh located in the western part of the Bukhara oasis (Figs. 1–2), in that region known before the Arab conquest as Sogdiana, which nowadays is located in central Uzbekistan and western Tajikistan, between the course of the Oxus River (Amu Darya) to the west and the Jaxartes River (Syr Darya) to the east. The systematic archaeological investigation in

the field undertaken during the years 2008–2009 allowed us to clarify the chronology of one of the earliest periods so far attested in the archaeological monument: Period VI (second half of the 4th to the 5th century CE),² which is now better documented by architectural remains, mural paintings, and pottery. Moreover, structures from a previous period have been identified, Period VII (first half of the 4th century CE), which we can conventionally refer to as the “Ancient” phase – the period before the edification of the complex of the castle that occurred in the Early Medieval period (5th century CE), when the ancient structures were sealed by a foundation in *pakhsa* blocks (clay mixed with finely chopped straw compacted in layers or blocks) and filling with thick layers of clay (1.50–3.00 m) to create a platform where structures of the following Period VI were erected.

Before moving on to the descriptions of the site and its peculiarities, it is worth stressing the decisive role that the environmental geography played in the Bukhara oasis for the evolution of the historical events: the presence of the Zeravshan River, Πολυτίμητος of the Greek sources (Arrian IV, 5.6; 6.5; 6.7; Aristobulus *FGrH* 139 F28a; Ptolemy VI, 14.2; Curtius Rufus VII, 10.2), and the geomorphology of the soil, rich in loess deposits, provided this strip of land with all the essential features to develop large-scale agriculture. From the 2nd millennium BCE, groups of nomadic and transient herdsmen, probably descendants of the Andronovo culture, began to penetrate this area, as evidenced by various

1 The Italian-Uzbek archaeological mission was a joint project of the Sapienza University of Rome and the Institute of Archaeology of the Academy of Sciences of Uzbekistan (Samarkand), under the scientific direction of C. Silvi Antonini and Dž.K. Mirzaachmedov. The archaeological data provided by the systematic scientific activities in the field suggest very strong contacts and relationship with the nomadic group that were crossing the steppes of Central Asia. Since 2012, the research activities are theoretically under the supervision of TIGRE, a crowdfunding project created to resume the archaeological excavations that were suspended in 2009 because of the difficulties in traditional fundraising activities (www.oasisofbukhara.com). The results of the excavation activities carried out until 2007 were published in SILVI ANTONINI/MIRZAACHMEDOV 2010. See also: SILVI ANTONINI/NOCI/LO MUZIO 1995: 417–428; SILVI ANTONINI/NOCI 1998: 221–244; SILVI ANTONINI 2001: 248–258; SILVI ANTONINI/FILIPPONI 2002: 17–26; FILIPPONI 2006: 47–49; SILVI ANTONINI 2010: 157–168.

2 The activities of excavation carried out between 1997 and 2007 shed light on six building phases (we refer to them as Periods I–VI) spaced out between the 5th and the 13th century (SILVI ANTONINI/MIRZAACHMEDOV 2010).



Fig. 2: Map of the Bukhara oasis (after a map created by C. Lo Muzio).

elements of material culture brought to light by archaeological research.³ This would be the beginning of the amalgamation process with those sedentary cultures whom had settled along the banks of the Zeravshan and its tributaries.

Sogdiana was subject to the Achaemenid Empire, and consequently it also entered the orbit of Alexander the Great's successors, but the Bukhara oasis, as both archaeological evidence and historical sources of the region show, always maintained a marginal and autonomous position in comparison with all those historical events, of great international scope, which involved the same Sogdiana. This fact would be a consequence of the fusion of two great traditions that have contributed equally to the formation of the area's cultural landscape, which reached its peak during the Early Middle Ages.

The period between the mid-4th and 5th century CE was characterised by important upheavals for Central Asia. New waves of nomadic tribes from the Eurasian steppes, which we know as the Chionites, Kidarites, Hephthalites, and Türks,⁴ disrupted the

economic status of the sedentary peoples in different regions of Transoxiana.

The situation changed for Sogdiana in the mid-5th century when Classical⁵ and Chinese⁶ sources state that the region fell under the rule of a group identified as Chionites or Kidarites. The presence of Kidarites in Sogdiana is indicated by the discovery of seven coins dating back to the 5th century and minted in Samarkand: on the obverse there is a representation of an archer, while on the reverse it is possible to read a legend $\kappa\gamma\delta\rho$, i.e. Kidara.⁷ For Sogdiana, the period under the Kidarites was a time of economic recovery, as evidenced by the development of urban civilisation, agriculture, and the revival of centres located along the main commercial roads such as Bukhara, Varakhsha, Paikend, Samarkand (Fig. 2), and Panjikent (see Fig. 1 on page 328).⁸ It was during this period that the phenomenon identified as "Central Asian Feudalism" manifested; the Early Middle Ages (5th to 8th century CE) is the time to which we can chronologically ascribe the rise and growth of Uch Kulakh.

Over this turbulent time a large number of fortified settlements and castles, often flanked by a village, characterised the rural landscape of the

3 ASKAROV 1965: 53–60; ASKAROV 1981: 99–110; RUZANOV 1998: 141.

4 The Hephthalites put an end to the rule of their predecessors, the Kidarites. Under the Hephthalites, trade and commerce continued to flourish. In the archaeological sites investigated in the area, the level related to the 5th to 6th century is that of the Hephthalites. They were annihilated by the rise of a new group of nomads: the Türks, who retained control of the region from the mid-6th century through to 673 CE, when the Arabs entered the Bukhara oasis. The governor of Bukhara at the time was the widow of Bidun, or Bandun Bukhār Khudāh, as regent for their son, Tuğšāda. In 710 CE, Qutaiba b. Muslim, after conquering the city of Paikend and defeating his enemies, was installed as ruler of Bukhara (NARŠAĪH

1954: 43–48 and cf. fn. 10 below; see also BARTHOLD 1968: 5–10; CANNATA 1981: 17–19; FRYE 1998: 169).

5 The Roman historian Ammianus Marcellinus refers to the Chionites first fighting against Saphur II in 356 CE, and two years later concluding an alliance with him (Amm. XVI.9.4; XIX.1.7).

6 The Chinese text of the *Weishu* relates that in 457 CE, a group, maybe descendants of Xiongnu, occupied the throne of Samarkand. This group could probably be identified with the Kidarites (ZEIMAL 1996: 12; see also DE LA VAISSIÈRE 2004: 100–101 = 2005: 95–97).

7 ZEJMAL' 1978: 208.

8 FRYE 1998: 173.

Bukhara oasis, which constituted a new architectural reality in the Early Medieval Sogdiana, and in particular in the Bukhara oasis there was a substantial presence of ceramics belonging to the culture of Kaunchi (Tashkent region) and Jeti Asar, the north-eastern regions between Syr Darya and the Aral Sea.⁹ The territory of Bukhara, as well as a large part of Sogdiana, in fact, was fragmented into many semi-autonomous centres of power; those centres, some big and others small in size, were governed by a new social class of landed aristocracy (*dihqān*). The castles functioned both as places of defence against enemy attacks and as prestigious residences, and were also the fulcrum around which economic and craft activities took place. A long mudbrick wall, the *Kampīr Duval*¹⁰ (Narshaki's *Kampirak*), was also erected to protect the whole territory of the oasis. The construction of this latter structure may have been dictated by the intent of the sedentary people to restrain the constant threat of nomads, who were crossing the steppes of Central Asia. Moreover, the territory of the Bukhara oasis, being on the edge of the steppes, has always seen the interaction and clash between the two types of societies over the centuries. At first, scholars had highlighted above all the contrast between the two worlds, then instead, thanks to archaeological discoveries, the hypothesis was advanced that in addition to the clashes described by written sources, there could also be relationships of co-existence that enabled beneficial and mutual exchanges for both cultural entities.

In the Bukhara oasis, the nomads undoubtedly found all the characteristics necessary for subsistence and to be able to establish a perfect relationship of symbiosis with the sedentary people. In support of this thesis, the work carried out over the years – but not completed – at Uch Kulakh has revealed important aspects regarding this matter. In fact, a conspicuous number of “open sites” (unfortified settlements without structural remains, often denoting a short-term occupation, sometimes of large dimensions), attributable to a period between the 5th and 8th centuries CE, were detected in the territory of Varakhsha.¹¹ The presence of unfortified settlements and the appearance of the fortified castle of Uch Kulakh, together with the particular typology of the monument, as compared with the castles in Sogdiana where a castle is found as the residence of a local lord with a village next to it, highlights two important anomalies: one is that outside the walls of the castle, two residential areas – eastward and westward – were found, decorated with wall paintings; the second is the scarcity of domestic pottery inside the castle, which would suggest that the in-

habitants lived their representative life outside the castle and took refuge there only at the moment when the enemy attack took place. This factor helps us to understand further the relationships that existed between nomads and settled people: it indicates that although there was undoubtedly some kind of conflict, the two cultures certainly had a reciprocal relationship based on economic and cultural exchanges, as the particular archaeological physiognomy of the site indicates.

It is also worth remembering that this geographical area was crossed by the great Silk Road, which acted as a network for cultural interactions. The entire economy and wellbeing of the region depended on the relations between the peoples settled along this road; it is therefore more than legitimate to say that even the nomads tried not to unsettle the relationship, so that everyone could profit from trade.

2 Uch Kulakh: the archaeological site

The archaeological site of Uch Kulakh (**Fig. 3**), where an Italian-Uzbek archaeological mission worked for more than ten years (1997–2009), is located in the western part of the Bukhara oasis, in the Varakhsha territory, approximately 40 km from the city of Bukhara and around 8 km from the site of Varakhsha. From the 7th century CE onwards, Varakhsha was the residence of the last pre-Islamic dynasty, the Bukhār Khudāh¹² (5th to 8th century), and the last urban centre of importance along the road that leads across the Kyzyl-kum Desert to Chorasmia.

After a survey of the area, C. Silvi Antonini decided to investigate the site of Uch Kulakh for three reasons. Firstly, for the average size of the tepe (85 m in width, 75 m in length, and 8 m high from the plain below). It was not very big, but it had very interesting physiognomy; in the western part, the profile of the tepe was higher in respect to the rest and it showed three aligned protuberances (**Fig. 4**), from which the site's name derives, since in modern Uzbek languages it means “three hats”.¹³ Secondly, for the variety of the pottery shards found on the surface of the tepe which, after a preliminary examination, appeared to belong to different eras, covering a period of time between the second half of the 4th to the 5th century CE and the 8th century CE. Finally, the proximity to Varakhsha led the archaeologist to consider this castle as one of the 700 castles – the residence of a *dehqān* – that were in the oasis at the time of Qutaiba's conquest, as reported by Naršakhī

9 SULEJMANOV 2000: 60–62.

10 NARŠAĪ 1954: 33–34, 35 fn. 146; FRYE 1998: 19; ADYLOV 1995: 45–47; MUHAMEDOV 1972: 131–136; SIŠKIN 1963: 27.

11 CERASUOLO 2009: 193–214.

12 NARŠAĪ 1954: 60–65.

13 The three *kulakhs*, which initially characterised the tepe, turned out to be archaeological formations created by the stratification of the structures in *terra cruda* (mud building techniques).



Fig. 3: Plan of Uch Kulakh Phase VII (4th to 5th century) (after SILVI ANTONINI 2010: 60; drawing by G. Ivanov, 2009).

in the pages of the *History of Bukhara*,¹⁴ and located in this area.

The *tepe* covers an area of 3,425 m². The excavations, carried out systematically between 1997 and 2009, affected just 50% of the surface of the *tepe*, although they began from the central part of the *tepe* and then extended progressively to the western, southern, and eastern zones. The main identified structure is a fortified castle equipped with two bastions, one placed on the south-western corner (Fig. 5) and the other on the south-east, with slits. There are two residential areas outside the castle, one located on the western side and the other one on the eastern side; both had very important representation rooms with walls paintings. A fortified southern complex (other walls with slits) was built later than the system of the castle itself.

14 SILVI ANTONINI/NOCI/LO MUZIO 1995: 422.

The occupation of the site can be dated from the first half of the 4th to the 5th century CE, to the early 13th century. In this long period of time, seven periods of building activities have been documented. Their chronology has been established on the basis of the archaeological data coming from a stratigraphic sequence; on one hand, pottery,¹⁵ terracotta figurines,¹⁶ and consistent fragments of wall paintings;¹⁷ on the other hand, the building material and the building techniques.¹⁸ After the early 8th

15 SILVI ANTONINI 2009: 137–164, 171–180; MIRZAACHMEDOV/ADYLOV 2010: 73–88.

16 LO MUZIO 2009: 165–169.

17 The archaeological finds are preserved in the Archaeological Museum of Bukhara; the wall paintings are in situ (LO MUZIO 2010: 88–94; LO MUZIO 2014: 225–236; SILVI ANTONINI 2010: 157–168).

18 A precise comparison with building materials (big *pakhsa* blocks and adobe bricks) and construction techniques



Fig. 4: Profile of the tepe, showing three protuberances aligned in the western part (photo by F. Filipponi, 1997).



Fig. 5: South-western bastions (photo by F. Filipponi, 2008).



Fig. 6: Bowl in fine red ceramic (photo by F. Filipponi, 2008).



Fig. 7: *Mustahara* flask (photo by F. Filipponi, 2008).

century (Period II-I), a big fire – probably linked to the Arab invasions – marked a *caesura* so that the site lost its original function (the walls with the slits were obliterated) and it was only occasionally and partially re-occupied in the early Islamic period; then the site was definitely abandoned in the 13th century.

The repertoire of the pre-Islamic ceramics includes small handmade or wheel-made jugs with a globular body and vertical handle, jugs with a globular body, flat base, and vertical handle; small jars; and bowls of fine red ceramic (Fig. 6). Enough samples of the latter were found to propose a chronology. The oldest type of bowl is globular with straight or incurved rim; this typology of ceramics appears in the region already during the Hellenistic period and persists also later during the Kushan and post-Kushan times, and can be dated to the 4th or 5th century; these samples have also been found in Varakh-

sha and Paikend.¹⁹ The bowls with straight rim and flat or disk base are of later date and may have persisted up to the 6th or 7th century CE.²⁰ The objects of the earliest period (4th century CE) include a cup and some *mustahara* flasks (Fig. 7) with hemispherical body, flat base, and the rim on the side; they can be attributed to a type already known in the Bukhara oasis (nomadic tombs; site of Kyzylkyr) and in other regions of Central Asia.²¹ Of particular interest are the spindle whorls, some of which have an incised decoration, found in large quantities inside the rooms, together with some small pots, goblets, lids, and kitchen wares. Belonging to the Islamic period are a number of jars and amphorae of exquisite craftsmanship, some of which are decorated with engraved patterns of lines, zig zags, or semicircles.²² They were found in the upper levels, often buried in large holes.

In the western area and inside the castle, five anthropomorphic terracotta figurines have been

(different types of walls) with other sites in the area, starting with Varakhsha, seems to indicate dates ranging from the end of the 3rd to the 8th century CE (FILIPPONI 2009: 109–136).

19 SILVI ANTONINI: 2009: 162–164; ADYLOV/MIRZAACHMEDOV 2010: 73–88.

20 SILVI ANTONINI 2009: 157–168.

21 MIRZAACHMEDOV/ADYLOV 2010: 73–88.

22 MIRZAACHMEDOV 2009: 170–180.



Fig. 8: Terracotta figurine
(photo by F. Filipponi, 2008).

found; only one was in a certain stratigraphic context. The first discovered terracotta (UK45) (Fig. 8) was made of red depurated clay; a number of iconographic elements including the proportions, the rigidity of the pose, and the fact that the figurine was armless correspond to other Sogdian figurines such as a find from Kyzylkyr²³ (Fig. 2) and others from Dalverzin-tepe (Tokharistan)²⁴ (see Fig. 1 on page 118). The iconographic features of the other figurines (a large face, eye shape, the prominent cheek bones and chin, the headdress, and ornaments) are very similar to a female figurine of the 3rd to 4th century CE found by V.A. Shishkin in the *shahrstan* of Varakhsha.²⁵ The date suggested for this material corresponds therefore to the 4th to 5th century CE.

3 The castle

The castle proper is located in the central part of the tepe. It was built on a podium, it had a rectangular shape, and it is characterised in its northern and central areas by a series of rooms connected by entrances and passages, while the southern part was kept for defensive purposes, as evidenced by the presence of two angular bastions with a rectangular section, equipped with slits that were arranged in a vertical position in front and oblique at the corners. It formed a chessboard on the surface of the structures, to which were attached rooms related to a defensive system (Fig. 9). On the western side, extend-

ing to the north-south directions, there was another defensive wall, M36 (see Fig. 10); the slits were arranged both in vertical and oblique positions, even if they were not angular, and the wall was facing the western residential area. This arrangement of the slits had a long tradition in the military structures of Chorasmia²⁶ and on the delta of the Syr Darya²⁷ until the first centuries of the Common Era (1st to 4th century), where the slits were still arrowheads, as attested at the sites of Kavak Kala and Ayaz Kala (see Fig. 1 on page 118).

The shape of the slits, which can be arrowhead or rectangular, is an element often used as an *ante* or *post quem terminus*. The arrow-shaped slits disappear between the 4th and 5th century CE.²⁸ The co-existence of these data at Uch Kulakh on one hand places the construction of the castle in the 5th century (shape of the slits), but on the other hand recalls an older tradition (the arrangement of the same). It would suggest a transitional construction phase (second half of the 4th to the 5th century) when building innovation techniques had not completely replaced the oldest traditions. In the southern defensive complex, which began to be erected shortly after the castle (5th century) was later enlarged, there are no oblique slits and the angular slits are found only in the oldest structures, which could confirm this fact. The presence of the fortified southern complex characterised by several walls with slits lends support to the idea that it was built to defend the access road to the castle itself.

The technique used for building the defensive walls (in rectangular and trapezoidal blocks of *pakhsa* of various sizes: 60 × 50 cm; 75 × 30 cm;

26 This arrangement has a long tradition in the military structures of Chorasmia, which last until the 4th century CE; however, the slits were still arrowhead-shaped. At Dzhanbas kala (dated by Tolstov, Francfort, Khozhaniyazov between the 4th and 2nd century BCE; Voronina suggests a broader chronological period of the 4th century BCE to the 1st century CE), on the façade, the orthogonal arrow-shaped slits are systematically interspersed with groups of triple slits, two of which are oblique. In correspondence with these triple slits there is always a shooting compartment. The combination of slits on the façade with different angulation obviously offers a better view and consequently a better control of the area near the defensive walls, as this data would confirm (TOLSTOV 1948a: 88–97; FRANCFORT 1979: 23; KHOZHANIYAZOV 2006: 73–74; VORONINA 1964: 40–45).

27 The co-existence of straight and oblique slits on the façade is also detected at the site of the Babish Mulla I fortress of the Syr Darya delta, considered a late Achaemenid satrapal fortress, founded around the end of the 5th century BCE and abandoned unfinished in the last part of the 4th century BCE. Here, the slits in the outer walls of the castle are arranged in groups of three, and in each group at least two are oblique (TOLSTOV 1948b: 57–60; ITINA 1992: 49–52; RAPOPORT/NERAZIK/LEVINA 2000: 129–130; KHOZHANIYAZOV 2006: 29).

28 SEMENOV 1989: 136–143.

23 ADYLOV 1983: 65–75.

24 PUGAČENKOVA 1992: 51.

25 LO MUZIO 2009: 165–169; SHISHKIN 1963: 122.



Fig. 9: Castle defensive system
(photo by F. Filipponi, 2008).

90 × 50 × 30 cm, and big adobe bricks) was a system of double-combined walls, while on the southern side, the two corner bastions were defined by scarp walls with slits.

Between the 5th and the 8th century, the castle's system was not substantially modified, despite the construction of two new walls with slits (M8 and M13; see Fig. 3).

In the south-eastern area, the Ancient period (Period VII) is evidenced by the presence of two big walls (M219–M220; see Fig. 3), built with blocks of *pakhsa*, which continue beyond the present limits of the excavation; these two large walls were part of a more ancient defensive system.

The castle of Period VI (second half of the 4th to the 5th century CE) was built on top of the previous structures of Period VII (first half of the 4th century), as testified in the area inside the castle by the presence of two rooms, A91 and A92. The floors of these rooms presented burnt residues and a remarkable quantity of pottery datable to the 4th century: flasks, containers with a flat bottom for transporting water and other liquids; jars for storing food; jugs

with and without handles (Fig. 6); and bowls with an oblique wall and straight or flat rim²⁹ (Fig. 7). The date of the pottery found in these rooms coincides with the results of C14³⁰ dates obtained from coal samples found on the burnt floor of A91, and corresponds to a lapse of time between 80 and 345 CE. In this area, the rooms were closed by two compact layers of clay, the lowest one (2 m thick) was without materials, while the upper one (1.20 m thick) had different layers of burning on which room A42 of Period VI (5th century) was built. Coal found on the floor of room A42 has been dated by C14 to the period around 205–410 CE.

29 ADYLOV/MIRZAACHMEDOV 2010: 73–88.

30 The coal samples collected during the 2008–2009 seasons of excavation were subjected to dating with the radiocarbon method using the technique of high resolution mass spectrometry (AMS), at the Center for Dating and Diagnostics (CEDAD) of the University of Salento, Brindisi (Italy) and the Department of Innovation Engineering, University of Salento, under the direction of Prof. L. Calcagnile.

a series of remakes were carried out and this area assumed a sophisticated character in Period V (6th to 7th century), as demonstrated by the presence of new rooms intended for a different use built on the previous structures and a consequent decrease in the domestic area. At the end of the 7th century, room A14 (Period IV, corresponds to A67 in Period VII, see Fig. 3) was decorated with a wall painting, of which only a fragment of considerable size was preserved, but not complete, representing a leopard³¹ (now exhibited in the Museum of the Ark of Bukhara). Above A14, a large single room (A9, Period III, 8th century) was built with four *sufa* (earthen benches) against the walls. A big breakdown of the structures and a fire due to the advance of the Arab armies mark a *caesura* between the Early Medieval Period and subsequent periods until the 13th century CE; during this interval of time, however, the site was not completely abandoned.

5 The eastern area (Fig. 3)

This sector was less investigated than others; until 2007, levels belonging to the last period of the site's occupation had only been observed. A series of rammed floors were identified, characterised by the presences of several holes with baked bricks and *khum* (large jars) inside, which could suggest that this was a working area; there, the presence of an Islamic drainage system was also identified, consisting of a series of non-bottomed *khum* inserted inside one another and connected by cylindrical pottery tubes.

31 When it was discovered, this figure was in bad condition and the only visible elements of the animal were the elongated shape of its body and its four paws. The lines were drawn in a stressed manner, while the coat was realised by roughly disposed circles in dark blue colours. The knees were drawn with two concentric circles highlighted with a central point. The tail was just a sketch. On the wall and under the body of the animal were some patches of white and red colour. The first comparison can be established with the Varakhsha paintings. The chronology proposed by Shishkin for the city of Varakhsha has been revised by A. Naymark on the basis of a re-interpretation of the Arab sources. The scholar proposes a dating of the palace of Varakhsha and its reconstructions, attributing the paintings in rooms 6 and 11 to the reign of Bukhār Khudāh Toghshada; therefore not later than 738 CE, the year in which Toghshada was assassinated by order of Nasr ibn Saiyar. However, the stylistic peculiarities of Uch Kulakh's leopard – marked contour lines that are noticeable above all in the joints (attachment to the body of the foreleg and kneecaps of the rear ones) – would suggest different artists than those of Varakhsha, even if belonging to the pictorial school of the Sogdiana of Bukhara, and lead to the proposal of an older dating. *Lacerti* of wall paintings of red or black colour had also been found in other rooms and in a different area of the archaeological complex (SILVI ANTONINI 2010: 157–168).

Located in front of the south-eastern bastion, room A13 was identified – this was operative during Period V (6th century CE) and IV (7th century CE) and connected with the rampart of the castle. This space has four *sufa* against the walls and a rectangular structure in its centre. In a hole nearby, but outside of it, an imitation of a late Kushano-Sasanian copper coin was found.

During the 4th and the 6th century CE, the residential area was located in this sector as evidenced by the discovery of two important rooms (A83, A84); their walls have wall paintings³² (partially preserved), with *sufa* against the walls and, in A83, a hearth in the centre of the room. Represented on the fragment of the western wall of room A83 was a fight between animals, maybe camels; only the lower part of three legs of an animal with a red coat, walking or standing in profile to the right, are preserved. One of the three legs seems to have been bitten by an animal with grey paws (Fig. 11). The legs of the latter are rendered in a rather particular way: a circle in which a dot is inscribed. This stylistic artifice is present in representations of animals in the art of the steppe, whose inhabitants have left us the so-called “Animal Style Art of the steppes” with pieces of great value.

A horizontal black band with a wavy white ribbon was decorated with two parallel lines of red colour. The lines of this band were also preserved on the eastern and northern walls. The iconography of fighting camels is a subject typical of the Eurasian steppes.³³

Some patches of murals were also preserved on the western, eastern, and northern walls of room A84. The western wall presented a partial image of a harnessed horse with a *phalerae*, a white disk decorated with geometric elements from which a white

32 These fragments of wall paintings have been studied by Ciro Lo Muzio (Lo MUZIO 2010: 88–94; Lo MUZIO 2014: 225–236).

33 The fight between camels is an iconographic theme common to the nomadic world of the Eurasian steppes. Iconographic representations relating to this subject have been encountered in different sites of western Kazakhstan (bronze plaques of the Besoba necropolis, see SILVI ANTONINI/BAJPAKOV 1999: 142 nn. 188–191); and in the Ural basin and in the Sauromatic/Sarmatic plain (plaques in bronze and gold from Filippovka, see ARUZ/FARKAS/ALEKSEEV/KOLKOVA 2001: 188 n. 124, 245 n. 209).

In Sogdiana, this subject has been recorded by a bone plaque found in the necropolis of Orlat, near Samarkand, and dated at the 3rd to the 4th century CE. Pugachenkova believes the plaques were made by the inhabitants of Kanju, thought to have been closely related to the Kushana and Tocharians. The soldiers would be either Sogdians or Saka, much less probably Yuechi or Parthian (PUGAČENKOVA 1989: 122–154).

Ilyasov suggests a date, related to this iconographic theme and based on the bone plaque, of the 1st to the 2nd century CE (ILYASOV 2003: 274).



Fig. 11: Uch Kulakh, A84, western wall, *lacrto* of the harnessed horse (photo by C. Silvi Antonini, 2009).

ribbon with black lines hangs. Strong similarities have been identified with Sasanid rock art, that is, of the dynasty that reigned in Persia in the 3rd to 4th century CE (Fig. 12). On the eastern wall, there is an image of two horsemen facing each other, on two harnessed horses at a gallop with the tails wrapped with white bands. Of the two horsemen, only part of the trousers are still visible; one of them wears a kaftan with a vegetable decoration, while the rider on the right wears white trousers with black spots. Once again, possible analogies are found in Sasanid rock art, which certainly played an important role throughout Central Asia as far as China. The analogies with Sasanid art would confirm the dating of the wall painting to the 4th to 5th century, considering the time required for the transmission of iconographies and stylistic features from one region to another.

This data can validate that the relationships between the two ethnic entities – settled people with an Iranian-Central Asiatic cultural heritage and those typical of the Eurasian steppes – were very strong, and the creations of the iconographic patterns characterising the Uch Kulakh paintings could be considered as an osmosis between these two different cultural realities.

Therefore, the Uch Kulakh paintings can be counted among the oldest paintings of the Bukhara oasis and should be dated to the 4th or 5th century CE.³⁴

It would represent a formative stage of what will be known later as the Sogdian school of painting of the Early Middle Ages, whose activity is dated from the 6th to the 8th century CE.

To conclude, it is not possible to advance a definitive interpretative hypothesis on the social-political structure and the economic history of the settlement as well as its relationship with the other sites in the area, since the excavation of the archaeological monument is not yet completed. However, a relative chronology of the complex can be established in the seven periods of building activity: the fortified castle of Uch Kulakh was built on top of a settlement of a previous period (Period VII – first half of the 4th century CE); it had a first phase of life in the second half of the 4th to the 5th century CE (Period VI); the other three periods are related to the Early Medieval period (Period V–III); and the last two periods are related to the Islamic period (Period II–I).

Some objects clearly indicate a period of activity prior to the edification of the castle (Period VII) – for example, some red ceramic bowls or other bowl sherds similar to the types of vases of the Kushana and post-Kushana era, or the imitation of the late-Kushana coin. Within the repertoire of female divinities, just one was found in a room, the others in the walls and in the slits (therefore not in a stratum); numerous specimens have been found in Sogdiana, Bactriana, and Margiana, dating back to

34 Lo Muzio 2010: 88–94; Lo Muzio 2014: 225–236.



Fig. 12: Uch Kulakh, A83 mural western wall, “camel fight” (detail) (photo by C. Silvi Antonini, 2009).

different eras. Those of Uch Kulakh have some peculiarities that can be related to a relatively ancient period, probably between the 4th and 5th century CE, as for the *mustahara* flasks.

Some structural elements of the defensive system common to the Chorasmian sites can be noted and M.I. Filanovič³⁵ had highlighted similarities between some of Chach’s architectural models and those of Chorasmia. This data would show that the castles began to be built with the arrival of nomadic populations from the north-east who had brought their own cultural traditions with them and that there was a commercial axis linking Chorasmia to Bukhara. Castles and strongholds had been built since the Kushan era as a defensive system against the nomads’ incursions. Assuming that the border between the nomads and sedentary people was very thin, there must have been cultural and economic interactions between these two worlds. At Uch Kulakh, the presence of the representation rooms with wall paintings, found in the two living areas outside the castle, seems to point to a fusion between these two different cultural realities: the iconographic patterns recall Sasanian dynastic art as a source of inspiration (the *phalare* and the symmetrical scheme) and subject matter typical of the Eurasia steppes (the camel fight). In fact, the eurythmic iconographic scheme of the camel fight, adopted at Uch Kulakh, differs from that of the nomadic compo-

sition scheme in which the figures are represented superimposed and twisted.

The settled people lived their everyday lives and their representational lives outside the castle; they would only find refuge inside when enemy attacks took place. This factor, along with the individuation of the open sites, helps us to understand the relationships between nomadic and sedentary populations; and it clearly indicates that, although there was some kind of conflict, the two cultures certainly entertained a special relationship based on economic and cultural exchanges, as archaeological excavations show. It is also worth remembering that this geographical area was crossed by the great Silk Road, always considered a network of cultural interactions. It is also understandable that along the route that linked Rome to China – the Bukhara oasis was just the heart of this caravan route – trade involving all types of goods was certainly important, as well as the transmission of ideas, religious beliefs, and artistic expressions.

The particular and unique layout of Uch Kulakh allows us to put forward the idea that the site could have had a very important role within the territory, thanks also to its proximity to the city capital of Varakhsha, and it could be considered a sort of “regional chief place” – perhaps the residence of a very wealthy *dehqān* of the area.

35 FILANOVIČ 1994: 205–212.

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Gesticulationes Sogdianorum

A Preliminary Study of Hand Gestures in Sogdian Iconography: their Origins and Significance

Ehsan Shavarebi

Abstract: A significant aspect of Sogdian pictorial art is the depiction of narrative scenes inspired by ancient Indo-Iranian legends, as well as the illustration of banquet and battle scenes. Although many aspects of these scenes have been exhaustively scrutinised in the past decades, no sufficient attention has been paid to the gestures of the characters. The purpose of this article is to collect, classify, and analyse the iconographic evidence for six hand gestures that are attested in Sogdian art. Also, the previously proposed interpretations of these gestures will be reassessed in light of literary evidence. This study will show that these gestures originated from different cultures and bear divergent meanings. On the one hand, certain analogous gestures are found in the Zoroastrian art of Sasanian Iran. On the other hand, some Sogdian finger gestures are comparable to certain Buddhist *mudrās*, which may highlight the influence of Buddhism in Sogdiana.

Keywords: Sogdian iconography, hand gestures, Panjikent, Sasanian iconography, Zoroastrianism, Buddhism.

Резюме: Особенностью согдийской живописи является изображение эпических сцен, вдохновленных древними индоиранскими легендами, а также изображения банкетных и батальных сцен. Хотя многие аспекты этих сцен были исчерпывающе исследованы в последние десятилетия, жестам персонажей не уделялось должного внимания. Целью этой статьи является сбор, классификация и анализ иконографических свидетельств шести жестов, засвидетельствованных в согдийском искусстве. Кроме того, предложенные ранее интерпретации этих жестов будут пересмотрены в свете письменных источников. Данное исследование покажет, что эти жесты происходят из разных культур и имеют разные значения. С одной стороны, определенные аналогии можно найти в зороастрийском искусстве Сасанидского Ирана. С другой стороны, некоторые положения пальцев в согдийском искусстве сопоставимы с некоторыми буддийскими мудрами, что может свидетельствовать о влиянии буддизма в Согдиане.

Ключевые слова: согдийская иконография, жесты, Пенджикент, сасанидская иконография, зороастризм, буддизм.



Gebärde ist Bewegung; Bewegung aber haben die Bildwerke nicht, sondern nur Pose, mag auch den frühesten Dichtern jenes als Ideal der Kunst erschienen sein. Infolge dessen wird, wie sich aus den Registern archäologischer Werke leicht nachweisen läßt, der Unterschied von Bewegung und Haltung oft verkannt. Erblicken wir also die Hand an einem Teile des menschlichen Rumpfes, so ist an sich nicht klar, ob sie dort ruhig liegt oder eben dahin gelegt wird; desgleichen ist nicht immer zu entscheiden, ob eine zweite Person oder eine Sache angefaßt oder gehalten wird (CARL SITTL 1890: 262–263).

Gesture is movement; the sculptures, however, have no movement, but only a pose, even though this might have been regarded by the earliest poets as the ideal of art. Accordingly, as the records of archaeological works clearly show, the difference between movement and posture is often misjudged. Thus, when we see the hand on a part of the human torso, it is not actually clear whether it simply lies there at ease or is being laid there; likewise, it cannot always be settled whether a second person or an object is touched or held (tr. by the author).

Prologue¹

In 1953, a reception hall with colourful fragments of mural paintings was excavated at Panjikent (Sector VI, Chamber 13), which later became known as the “House of the Gambler”. On the paintings of the western wall of this room, we find an interesting scene that involves two male characters playing a board game,² each accompanied by a beardless, perhaps female, attendant (**Fig. 1**) (BELENICKIJ 1959: 19–20, Pl. XIV).

All the characters in this game scene appear to show, indicate, or confirm something with their gestures. The player sitting on the left side raises his left hand, pointing to his face with his forefinger. With

the raised forefinger of his right hand, however, he points to the opponent in front of him. The player on the right side raises his right hand, holding a die or pointing overhead. Both attendants, too, raise a hand pointing at the centre of the scene; the one sitting on the left side with his left hand, and the other one with the forefinger of his right hand.

The gestures of these four characters, altogether, might be interpreted in different ways. One possibility is that the player on the right side raises his hand as a sign of victory, whereas his opponent shows his submission or astonishment by raising the forefinger of his right hand in the direction of his own face, close to his lips.³ In an alternative interpretation, the latter player might be considered as the winner of the game, claiming victory by pointing to himself. In this case, the opponent and both attendants seem to confirm the result and applaud the winner by their gestures. While the gesture of the player on the left side is understood in the latter scenario as a sign of claiming victory, the former scenario interprets the same person’s gesture as an expression of submission, silence, astonishment, or even regret for losing the game.

However, the paintings of this hall, taken as a whole, are interpreted by B.I. Marshak and G.L. Semenov as illustrations of a series of episodes from the *Mahābhārata*’s fourth book, *Virāṭa Parva* (BELENITSKII/MARSHAK 1981: 28; SEMENOV 1985: 222–227; MARSHAK 2002: 142).⁴ If we regard the game scene in this context, the aforementioned *a priori* interpretations should both be ruled out; for the depicted gestures appear to have nothing to do with the winner or loser of the game. Semenov (SEMEN-

- 1 The idea for this article was developed during my multiple research visits to the State Hermitage Museum, Saint Petersburg, between 2013 and 2019, as well as my field research with the Russian archaeological expedition at Panjikent, Tajikistan, in July 2015. For his kind encouragement and support during all these visits, I wish to express my utmost gratitude to Dr Pavel B. Lurje (State Hermitage Museum). I am grateful to Dr Judith A. Lerner (ISAW, New York University) for her invaluable remarks on various aspects of the subject, especially during our long discussions at a conference in Saint Petersburg in September 2016, and to Dr Abolfazl Khatibi (Academy of Persian Language and Literature, Tehran), with whom I discussed the evidence from the classical Persian literature on multiple occasions. Photos of the coins used in this article are kindly provided by Dr Klaus Vondrovec (Kunsthistorisches Museum Wien, Münzkabinett). I should also thank Prof. Frantz Grenet (Collège de France), Prof. Ciro Lo Muzio (Sapienza Università di Roma), and Dr Andrej V. Omelchenko (State Hermitage Museum), who kindly provided me with photographs of the ossuary of Molla-kurgan, the terracotta figurine of Takhmač-tepe, and the statuette of Sarāy-tepe, respectively. I am grateful to Ekaterina A. Bolashenkova (Saint Petersburg State University) for her substantial help with Russian and Japanese references. The quoted Middle and New Persian passages are translated to English by the author, with whom solely lies the responsibility for all possible deficiencies and errors in the article. All the dates given in this article are in Common Era (CE), unless otherwise stated.
- 2 On board games in ancient Central Asia and Iran, see SEMENOV 1996: 11–24.

- 3 A similar interpretation is put forward for a backgammon scene depicted on a late Sasanian silver bowl kept at the Arthur M. Sackler Gallery in Washington, D.C. (GUNTER/JETT 1992: 163; also cf. DARYAEE 2002: 293–294).
- 4 This painting might equally be associated with the *Mahābhārata*’s second book, *Sabhā Parva*, in which gambling by playing a game of dice plays a pivotal role. This, however, requires a reassessment of the whole set of paintings in this room, which is beyond the scope of the present article.



Fig. 1: Game scene of the “House of the Gambler” from Panjikent (VI/13), Tajikistan; State Hermitage Museum (photo by the author).

ov 1985: 224–225) identifies the two players of this game scene with King Virāṭa (right) and Yudhiṣṭhira alias Kanka (left). According to the story (*MBh* 4.68.17–47 = GARBUTT 2006: 442–449), when the news of Prince Uttara’s triumph over the Kauravas arrived, his father, King Virāṭa, ordered the celebration of this event. Meanwhile, he joyfully began playing a game of dice with Yudhiṣṭhira. During the game, Virāṭa praised his son’s courage and prowess, but Yudhiṣṭhira disagreed and said that Uttara would not have won the battle without Br̥hannalā, i.e. Arjuna. Enraged by these words, the king struck Yudhiṣṭhira in the face with a die, which made blood flow from his nose. In this narrative context, the Panjikent painting seems to display a moment from the middle of the game, when King Virāṭa threw a die at Yudhiṣṭhira’s face.

A character with similar facial features (perhaps Yudhiṣṭhira’s brother, Arjuna) is depicted, making the same gestures, in another scene painted on the western wall of this room, to the left of the game scene (SEMENOV 1985: Figs. 3–4). He points to his own face with the forefinger of his right hand, while the forefinger of his left hand is extended towards the warrior in front of him. The latter scene is interpreted by Semenov (SEMENOV 1985: 224) as the moment when Arjuna disclosed his identity to Uttara and forbade him from revealing it to his father (*MBh* 4.67.8–11 = GARBUTT 2006: 434–437). Should this interpretation be the case, the gestures of Arjuna would symbolise his warning (left hand’s forefinger) and demand for silence (right hand’s self-pointing forefinger). These meanings are, however, not applicable to the gestures of Yudhiṣṭhira in the game

scene. Rather, the gestures of the figures in the game scene seem to signify their argument.

These are not the only cases of hand gestures in Sogdian iconography. Various hand gestures with different types of significance are depicted on numerous pieces of cultural material from pre-Islamic Central Asia in general, and from Sogdiana in particular. The present study deals with six hand gestures, which although they occur in the Sogdian iconography of the 7th and 8th century CE, may each have an older background and individual origin. While considerable attention has been paid in the past two centuries by art historians and archaeologists to the origins and significance of hand gestures in Egyptian, Mesopotamian, Graeco-Roman, Western Iranian, and Indian contexts, the gestures in Central Asian pictorial art have thus far hardly attracted much scholarly attention. The purpose of the present study is certainly not to offer any definitive answer to the questions of the origins and significance of Sogdian hand gestures, but rather to classify selected pieces of evidence from the Sogdian material culture, and to compare them with the extant evidence from Persia and Bactria. A preliminary examination of selected pieces of literary evidence in Middle Iranian languages, which are often neglected in archaeological and art historical discourse, would also lead, as we shall see, to new interpretations and, potentially, to new questions.



Fig. 2: The “Cycle of Rostam” from Panjikent (VI/41), Tajikistan; State Hermitage Museum (photo by the author).



Fig. 3: The “Riding Couple” from Panjikent (III/17), Tajikistan; State Hermitage Museum (photo by the author).

1 Raised forefinger: approbation, acclamation, admiration

Beside the abovementioned game scene, the raised forefinger gesture occurs on further pieces of Sogdian mural painting. For instance, in a scene from the famous “Cycle of Rostam” found in the citadel of Panjikent (Sector VI, Chamber 41), the Iranian hero, Rostam, is depicted on horseback, while behind the mountains, in the background, a young lady raises her right hand with her forefinger outstretched

(Fig. 2). With this gesture, she seems to express her approbation, acclamation, and admiration for the heroic deeds of Rostam, who is met here by a small winged lion providing him with divine protection.⁵ As Marshak (MARSHAK 2002: 40) has rightly noticed, the function of this female figure in the “Cycle of Rostam” is to stress the greatness of the hero, as

⁵ The association of this fantastic creature in the “Cycle of Rostam” with “supernatural protection” is formulated by Marshak (MARSHAK 2002: 37), who cautiously identifies this creature with “the Simurgh who in the later tradition is the protector of Rustam and his father Zal”.



Fig. 4: The “Banquet of the Artists” from Panjikent (XXIV/1), Tajikistan; State Hermitage Museum (photo by the author).

“the painter invites his viewers to share the girl’s admiration”.

A rather similar scene is depicted on another mural painting from Panjikent (Sector III, Chamber 17), which shows a young couple on horseback (Fig. 3). Marshak (MARSHAK 2002: 120) interprets this scene as an illustration of the story of Rostam’s daughter, or a typologically similar epic. Here, too, the female rider raises her right hand with her outstretched forefinger pointing overhead. The gesture of the female character in these two Sogdian paintings reminds us of the hunting scene depicted on a Sasanian silver plate kept at the State Hermitage Museum (Inv. No. S-252), which is usually associated with the story of the Sasanian king, Wahrām V Gōr (r. 420–438), and Āzādeh (cf. TREVER/LUKONIN 1987: No. 13).

This gesture is also found in the so-called “Banquet of the Artists” from Panjikent (Sector XXIV, Chamber 1), where two seated figures, facing each other, make the same gesture with the forefingers of their right hands (Fig. 4). A large platter full of food is placed between them. The man on the left side holds a rhyton, perhaps offering a drink to his companion. The rhyton is shaped like a camel holding a ring in its mouth. It reminds us of the fantastic creatures symbolising *farn* (Middle Persian *farr/xwarrah*, “divine glory, splendour”⁶), which are found abundantly in Sogdian iconography.⁷ Two

such creatures are depicted in this very scene, flying right over the heads of the seated figures and bringing them ribboned wreaths. The composition of this banquet scene is far too complex to permit an adequate interpretation of the depicted forefinger gestures. By their gestures, the seated figures may have meant to show their satisfaction with the quality of the food and wine, or perhaps to express their respect and gratitude to the divine power who, via the flying fantastic creatures, bestows *farn* upon them.

This and other finger gestures are represented on more wall paintings from Panjikent and other sites in Sogdiana, but the stories behind them are more obscure, so it is hardly possible to be certain of what the gestures on those paintings mean. Admiration and approbation, as perceived from Panjikent’s “Cycle of Rostam”, remain the most dominant types of significance of the raised forefinger gesture in Sogdian iconography. Now, the question is whether this Sogdian gesture shared its meanings with the rather similar forefinger gestures found in Persian and Bactrian iconography of the Sasanian period. The Sogdian paintings discussed above are generally from the 7th and 8th century, whereas the pieces of evidence from Sasanian Persia and Bactria, which I shall briefly address below, belong to earlier times – mostly the 3rd and 4th century – and may signify divergent notions.

6 On the etymology and conception of *farr/xwarrah*, see SHAVAREBI/QAEMMAQAMI 2016, with further references. On Sogdian *farn* and its compounds, see PROVASI 2003; also GHARIB 1995: 155; SIMS-WILLIAMS/DURKIN-MEISTERERST 2012: 81.

7 On these creatures, see AZARPAY 1975; BELENITSKII/MARSHAK 1981: 70–73; COMPARETI 2006; COMPARETI 2016.



Fig. 5: Detail of the rock relief of the Sasanian king, Wahrām II (r. 276–293 CE), and his courtiers at Naqš-e Rostam, Iran (photo by the author).

2 Bent forefinger: reverence, homage, adoration, worship

On a number of early Sasanian imperial rock reliefs (Fig. 5) and the reverse of certain Sasanian coin types (Fig. 6), raising a hand (often the right hand) with bent forefinger is a gesture of reverence and homage made by kings and nobles before a Zoroastrian deity or a sacred fire, and by dignitaries before the king of kings (*šāhānšāh*).⁸ The ultimate origin of this reverential gesture seems to be in ancient Mesopotamia. It was passed to the western Iranians at a later time and survived through the Sasanian period.

A similar reverential gesture occurs on a painted ceramic tile, probably from 3rd-century Bactria, on which a worshipper is depicted making a gesture of deference with his right hand's forefinger – apparently not bent – before a Zeus-like deity, perhaps Ohrmazd or Serapis (Fig. 7) (CARTER 1997; SHENKAR 2014: 63). Also, in a fragmentary mural painting from the Buddhist monastery of Fayāz-tepe near Termez, probably from the Kushano-Sasanian period or slightly later, two male figures, perhaps Buddhist worshippers, appear to perform the same gesture with the bent forefinger of their right hands (Lo MUZIO 2008: 197–198, Fig. 6).

As we have seen, a completely different notion lies behind the bent forefinger gesture in Sasanian culture. This may also apply to the scenes on the Bactrian tile and the painting of Fayāz-tepe,

both dated to a time after the Sasanian conquest of Bactria. Although the rise of a new political power should not have immediately affected the local cultures and traditions, it may be presumed that a new polity would have naturally attempted to propagate and strengthen its own cultural and ideological values, which might have eventually affected certain aspects of the local traditions. Amongst these aspects were the gestures associated with religious practices, like those depicted on the Bactrian tile and the painting of Fayāz-tepe.

Interestingly, the use of this Sasanian reverential gesture seems to have been transmitted to the Sogdian culture at a later time. An arguable piece of evidence is a stamped ossuary from Molla-kurgan near Samarkand, probably from the 7th century (PAVČINSKÁ 1983; GRENET 1986: 101–104). On one side of this ossuary, a fire altar is depicted, flanked by two Zoroastrian priests performing a ceremony (Fig. 8). Both priests wear a long girdle (*kustīg*), a headdress, and a mask (*padām*) covering their mouth and nose to avoid polluting the sacred fire. While the kneeling priest holds two ritual instruments (*barsoms*) with his both hands, the standing one holds tongs in his right hand and raises the left hand probably with his forefinger outstretched in adoration and reverence for the sacred fire.

The appearance in Sogdiana of this reverential gesture ought to be regarded from the perspective of the socio-political upheavals of the mid-7th century. This gesture seems to have been transmitted to Sogdiana not from Bactria, but rather directly from Persia by the Sasanian elite who, after the collapse of the Sasanian Empire, emigrated from Iran and sought refuge in the rich urban centres of Transoxiana. Through this steady flow of immigration, starting from the latter half of the 7th century, Sasanian elements began to penetrate various domains of Sogdian culture and, subsequently, made a strong

8 The bent forefinger gesture in Sasanian iconography is discussed extensively by FRYE 1972; SHAHBAZI 1986; CHOKSY 1990: 204–205; BROMBERG 1991; SHAVAREBI 2014a: 32–41; SHAVAREBI 2014b: 283–284. On the investiture scenes depicted on the reverse of certain Sasanian coin types, in which this gesture is occasionally made by the king, see GÖBL 1960; GÖBL 1968: 19–20. GHIRSHMAN (1962: 294, Pl. 380–382) also compares this Sasanian gesture of deference with an analogous forefinger gesture in the Christian art of Medieval Europe.



Fig. 6: Silver drachm of the Sasanian king Ohrmazd I (r. 271/2–273 CE) with investiture scene on the reverse; 4.04 g., 27.0 mm, 3 h.; ALRAM/GYSELEN 2012: Type Ia(1)/2a(1); Kunsthistorisches Museum Wien, Münzkabinett, Inv. No. GR 44206 (photo: courtesy of Kunsthistorisches Museum Wien).



Fig. 7: Painted ceramic tile reportedly from Bactria; 3rd century(?); 56.8 × 52.3 × 5.4 cm; Metropolitan Museum of Art, Acc. No. 2000.42.2 (photo: courtesy of the Metropolitan Museum of Art).

appearance in the art and architecture of 8th-century Sogdiana.⁹

Mention should be made here of two verbs attested in classical Persian literature, which may refer to the two hitherto discussed forefinger gestures: *angošt (be) dar kardan* and *angošt bar āvardan*, both literally meaning “to raise finger” (DEHKHODA 1998: s.v. *angošt*). Although these verbs are, to my knowledge, not attested in the extant Middle Persian liter-

⁹ Various aspects of the diffusion of Sasanian elements in Sogdian material culture were addressed recently by P.B. Lurje in a talk at the First International Congress of the Eurasian Association of Iranian Studies held in Saint Petersburg in February 2019.

ature, they seem to perfectly correspond to the forefinger gestures depicted in Sasanian and Sogdian iconography. Shahbazi (SHAHBAZI 1986) associates the former verb with the Sasanian bent forefinger gesture of deference. The latter verb, however, seems to have denoted approbation, testimony, and confirmation (cf. SHAHBAZI/KHATIBI 2009: 211–212; KHATIBI 2013: 135). These observations show that the meanings of these two forefinger gestures, or at least the verbs associated with them, could still be distinguished in the Islamic period. However, the gestures themselves were perhaps performed in a mixed way, i.e. sometimes with straight and sometimes with bent forefinger for both meanings.



Fig. 8: Terracotta ossuary from Molla-kurgan, Uzbekistan; 7th century; 52.0 × 24.0 × 75.0 cm; State Museum of History of Culture of Uzbekistan, Samarkand (photo: courtesy of Prof. Frantz Grenet).

3 Straight forefinger (*tarjanī mudrā*): admonition, warning, threat

Another forefinger gesture, similar to those mentioned above, is found on a painting from Panjikent's Temple II (Sector II, Chamber A), where a group of equestrian nobles rides forward and extends their right hands with raised forefingers pointing upwards (Fig. 9). Since this scene was painted on the interior wall of a sacred place and most probably bears a religious message, we should treat the riders' gesture more cautiously. It is traditionally interpreted as a sign of adoration for the sacred place (BELENICKIJ 1954: 33). Since the right part of the painting, i.e. the part in front of the riders, is heavily damaged, it is not possible to accept this interpretation with certainty. Only if we assume that a divinity or a sacred monument was depicted before the riders would their gesture have signified their reverence, homage, and adoration. In a novel proposal, however, Compareti (COMPARETI 2008: 15, Fig. 7) associates this gesture with the *tarjanī mudrā* that implies admonition, warning, and threat. Whether we accept the latter interpretation or not, the *tarjanī mudrā* remains an essentially Buddhist/Hindu concept, thus it should not necessarily have been the dominant notion of this gesture among all the Sogdians. However, it is possible that this *mudrā* was known to the Buddhist community of Sogdiana, as were other Buddhist *mudrās*. A fragmentary Sogdian text from the Pelliot Collection appears

to be a treatise on Buddhist *mudrās* (BENVENISTE 1940: 137–139, Text 14). In line 17, it bears the title [w]yspw pwt'yšty ptβr'wyn'k mwtr pδkh ("Rule of *mudrās* for remembering all the Buddhas"). Returning to the scenes from Panjikent's "House of the Gambler" (*vide supra*), it seems likely that Arjuna, in fact, makes this *mudrā* while warning Uttara to keep his identity confidential.

4 Self-pointing forefinger: astonishment, perplexity, silence

The gesture of pointing to one's own face with a forefinger appears not only in the paintings of the "House of the Gambler" (Fig. 1), but also in a banquet scene from the so-called "Rings and Dragons Cycle" of Panjikent (Sector VI, Chamber 1) (Fig. 10) (BELENICKIJ 1959: 15–16, Pl. VIII).¹⁰ In the first episode of this cycle, a young man is seated to the left of the "Rings" camp, pointing to his own face with the forefinger of his left hand. Since the story behind this painting is not known, we cannot be sure of what this man intended to express by his gesture.

According to our *a priori* interpretation of the scenes from the "House of the Gambler" (*vide su-*

¹⁰ The name of this painting is proposed by Marshak (MARSHAK 2002: 145, Fig. 98) after the shapes of the pommels of swords and daggers of the depicted characters.

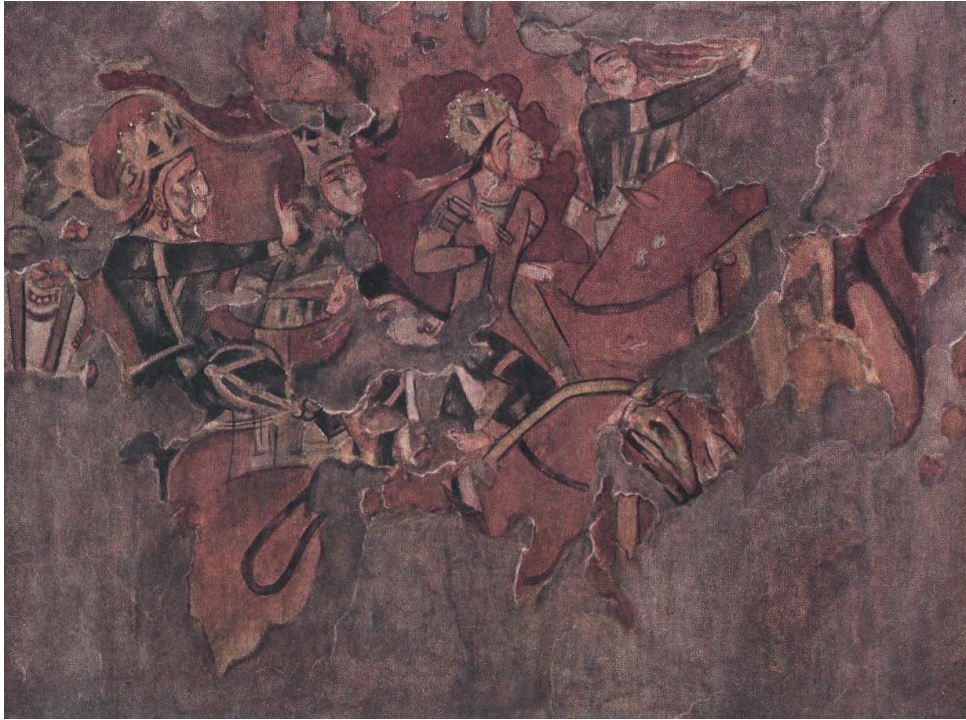


Fig. 9: Wall painting from Temple II of Panjikent (II/A), Tajikistan; State Hermitage Museum (painting after BELENICKIJ 1954: Pl. XVI).



Fig. 10: The "Rings and Dragons Cycle" from Panjikent (VI/1), Tajikistan; National Museum of Antiquities of Tajikistan, Dushanbe (photo by the author).

pra), four meanings might be construed from the self-pointing forefinger gesture: submission, silence, astonishment, and regret. The latter two definitions are also reflected in the classical Persian literature by expressions involving such a gesture. For instance, the idioms *angošt bar/be dahān* ("[holding] finger on mouth"), *angošt bar/be lab* ("[holding] finger on lip"), and *angošt bar/be dandān* ("[holding] finger on tooth") are usually used to express astonishment, perplexity, surprise, and (rarely) regret

(DEHKHODA 1998: s.v. *angošt*). In Panjikent's game scene, if we follow the *Virāta Parva*'s plot, the gesture of Yudhiṣṭhira seems to indicate his astonishment and perplexity at King Virāta's reaction to his words. In the neighbouring scene, however, Arjuna's self-pointing gesture may express his demand for silence and secrecy to Prince Uttara.¹¹

11 Also see RUSSELL 2005: 23–25 for a Roman example of the self-pointing forefinger gesture, probably signifying

5 Raised forefinger and middle finger (“*śrī mudrā*”): blessing, benediction, mercy

A rather different gesture is exhibited on the reverse of some coin types of the Kushan kings Kaniška I and Huviška, where certain deities (Helios/Miuro, Salene/Māo, and Ašaēišo) are depicted raising their right hand with both forefinger and middle finger outstretched (Fig. 11).¹² Göbl (GÖBL 1984: 40–42, 45) describes this gesture as “*Segensgestus*”. Considering an analogous gesture in Gandhāran art, Carter (CARTER 1987) gives this gesture the Buddhist name “*śrī mudrā*” and interprets it as symbol of divine blessing bestowed upon the Kushan king, who is depicted on the obverse of the coins. This notion might also have been perceived from the iconography of certain late Indo-Greek, Indo-Scythian, and Indo-Parthian coins from the 1st century BCE onward, on which a deity is depicted making a similar gesture with the right hand, probably expressing divine blessing, benediction, and mercy for the ruler depicted on the other side (Fig. 12).¹³ The iconography of these coins reveals that this blessing gesture had an old tradition in the Indo-Iranian borderlands.

Yet another possible example of this gesture might be found in a Hellenistic-style terracotta statuette of a nude lady discovered at Sarāy-tepe in southern Sogdiana (Fig. 13) (OMEL’ČENKO 2000; DVUREČENSKAĀ 2016: 204, Pl. 24/14). The date of this statuette is uncertain; it probably belongs to a time between the 3rd and 1st century BCE. Omel’čenko identifies this statuette with a female

silence, which seems to be influenced by Iranian religious themes.

- 12 On the iconography of these deities on Kushan coins, see ROSENFELD 1967: 75, 77, 80–82, 98; GÖBL 1984: 40–42, 45; JONGEWARD/CRIBB/DONOVAN 2015: 269–274, 288.
- 13 The details of this blessing gesture are often unclear on these coins. From the Indo-Greek period, a clear example is the depiction of a female deity (Tyche?), making a blessing gesture with her right hand, on the reverse of certain silver coins of Hippostratos (BOPEARACHCHI 1991: Série 1–2) (Fig. 12). The deities performing this blessing gesture on the Indo-Scythian and Indo-Parthian issues are Zeus/Poseidon, Athena, and Hermes on coins of Azes [II] (FRÖHLICH 2008: Série 6–8, 10–21, 24, 32–33); Athena on coins of Aspavarma (FRÖHLICH 2008: Série 1); Śiva and Zeus on coins of Gondophares (FRÖHLICH 2008: Série 5–6); Zeus on coins of Abdageses (FRÖHLICH 2008: Série 3–7); and Zeus on coins of Sases (FRÖHLICH 2008: Série 1–2). Here I should mention that, beside his partly inaccurate statements on coins, Choksy (CHOKSY 1990: 204) seems to have confused this blessing gesture with the Sasanian gesture of reverence, assuming that both gestures were performed with only a bent forefinger. A similar confusion has occurred with Shahbazi (SHAHBAZI 1986), who compares the blessing gesture on the Sogdian ossuary of Biya-Nayman with examples of the Sasanian gesture of reverence.

deity of fertility posing with an “adoration gesture” by raising the forefinger and middle finger of her left hand; this gesture originates, in his opinion, from Buddhism or Zoroastrianism (OMEL’ČENKO 2000: 177). The first problem is that the details of the gesture on this statuette are hardly recognisable. Central Asian terracotta figurines of a similar type usually show ladies raising one hand (often the right hand) to the level of their chest to hold either an object or their breast.¹⁴ The other problem is that one expects an adoration gesture from the worshipper to a deity, and not vice versa. If the statuette from Sarāy-tepe indeed represents a goddess, her gesture most probably indicates blessing and mercy, not adoration.

This pre-Kushan evidence of Hellenistic style from Sogdiana reveals that the gesture of raising the forefinger and middle finger as a sign of blessing might originally have been an eastern Iranian gesture from Central Asia. While the diffusion of Buddhism into Bactria goes back to the time of the Kushan Empire, the earliest traces of Buddhism in Sogdiana are only from later centuries (MKRTYČEV 2002: 34, 232; COMPARETI 2008: 1). For this reason, the statuette of Sarāy-tepe can hardly be interpreted in the context of Buddhism.

In her exhaustive survey of the evidence of “*śrī mudrā*”, Carter (CARTER 1987) draws a sketch of the evolution of this gesture in Central Asia, India, and the Far East. As she convincingly concludes, this gesture was not originally a Buddhist *mudrā*, but an ancient Central Asian gesture that was transmitted to the Gandhāran culture probably by the Scythians, who invaded the Indo-Iranian borderlands in the mid-2nd century BCE and established the Indo-Scythian (*Śaka*) kingdom a few decades later (CARTER 1987: 58). This hypothesis finds confirmation in the light of the abovementioned numismatic evidence. The statuette of Sarāy-tepe, if indeed representing the “*śrī mudrā*”, should be considered early evidence of this blessing gesture from pre-Buddhist Sogdiana. The use and concept of this gesture spread widely throughout the Indo-Iranian world during the Kushan and Sasanian periods. Interestingly, it returned to Sogdiana centuries later by the expansion of Buddhism from India and Zoroastrianism from Iran. Since the Buddhist aspect has already been discussed by Carter (CARTER 1987: 56–57), I merely concentrate here on the Zoroastrian side, starting with an important piece of evidence from Sasanian Merv.

An interesting, yet rather enigmatic, object from the ancient city of Merv is a painted ceramic vase, dated to the late 5th or early 6th century (KOŠELENKO 1966; MANASSERO 2003; COMPARETI 2011; SCHULZ

- 14 For some examples of Central Asian terracotta figurines of ladies in this pose, see DVUREČENSKAĀ 2016: Figs. 167, 174, 247, 256, 260, 261.



Fig. 11: Gold dinar of the Kushan king, Kaniška I (r. 2nd century CE?), with the sun deity Miuro on the reverse; 7.92 g., 19.8 mm, 12 h.; GÖBL 1984: No. 68; Kunsthistorisches Museum Wien, Münzkabinett, Inv. No. 44042 (photo: courtesy of Kunsthistorisches Museum Wien).



Fig. 12: Silver tetradrachm of the Indo-Greek king, Hippostratos (r. ca. 65–55 BCE), with a female deity (Tyche?) on the reverse; 9.65 g., 29.8 mm, 12 h.; BOPEARACHCHI 1991: Série 1A; Kunsthistorisches Museum Wien, Münzkabinett, Inv. No. GR 35191 (photo: courtesy of Kunsthistorisches Museum Wien).

2019: 189–192). It was discovered during the Soviet archaeological excavations in 1962. Although the vase was found in a Buddhist *stūpa*, where it was allegedly used for keeping written documents (KOŠELENKO 1966: 92), its iconography reveals that it was probably a Zoroastrian commemorative or funerary object originally, perhaps an ossuary, as Lukonin suggests, which was removed from its original context and re-used by the Buddhist community of Merv at a later time (LUKONIN 1977: 219). The vase was probably dedicated to the person who is illustrated on it. Around the vase, four scenes from four different moments or phases of his life are painted: hunting, banqueting with a lady (probably wedding), lying on his deathbed, and a funeral procession (probably to a *dakhma*). The bearded man, wearing a diadem with floral ornaments in the hunting and banquet scenes, was probably a prince or local ruler of Merv in the Sasanian period. Given his black hair and beard in the death scene, he seems to have died at a rather young age. In the death scene, the dead/dying man is attended by two ladies who outstretch their arms toward his head. Behind the prone figure's head, a man is seated cross-legged, holding a bowl in his left hand, and raising the middle finger and forefinger of his right hand (Fig. 14). He is usually identified as a physician (KOŠELENKO 1966: 96; GRENET 1984: 197) or a priest (LUKONIN 1977: 219), and his gesture is interpreted as sign of a blessing associated with death (COMPARETI 2011: 33).

Surprisingly, little attention has so far been paid to the close resemblance of the facial features of the seated man to the protagonist of the cycle, who lies on his deathbed. The seated man, making a blessing gesture with his right hand, is in fact the same



Fig. 13: Terracotta statuette from Sarāy-tepe, Uzbekistan; 3rd to 1st century BCE; 7.5 × 2.5 × 2.0 cm; Historical Museum of Shahr-i Sabz (photo: courtesy of Dr Andrej Omelchenko).

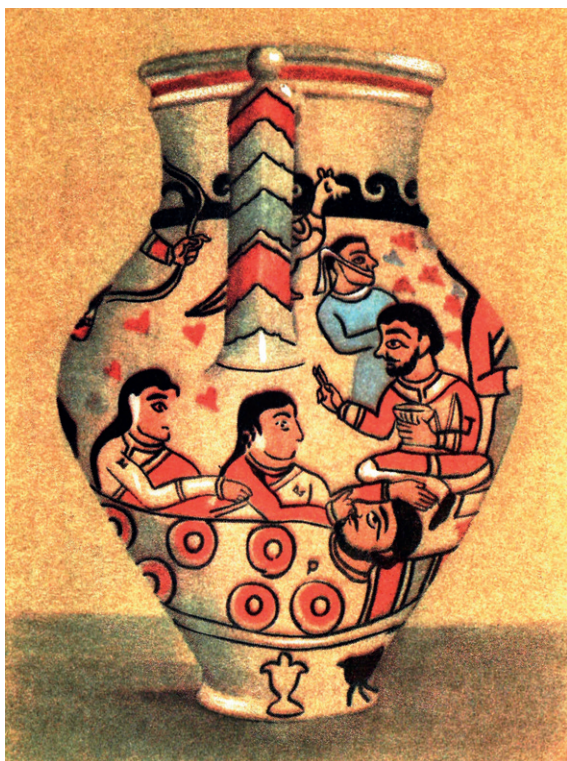


Fig. 14: Painted ceramic vase from Merv, Turkmenistan; 5th or 6th century; National Museum of Turkmenistan, Ashgabat (painting after KOŠELENKO 1966).

person who lies on the bed, and this is exactly what makes the death scene of the Merv vase mysterious. If we regard the seated figure in connection with the death scene, we should think of a “spiritual” interpretation for the scene. As I shall argue in another paper, the seated figure of this scene seems to be a depiction of the protagonist’s *fravaši* (“pre-existing, immortal soul”), raising his middle finger and forefinger as a symbol of blessing and benediction. Although the word *frauuāši* is grammatically feminine in Avestan, there is no indication of the spirits themselves being conceived as “Valkyrie-like beings” (BOYCE 2000). Moreover, it has been suggested that the equestrian figure on the Sasanian rock relief at Tāq-e Bostān, who is traditionally interpreted as Khosrow II Aparwēz (r. 590–628), is in fact a representation of the warrior aspect of his *fravaši*, illustrated below his investiture scene (KELLENS 1973). Following this hypothesis, an anthropomorphic representation of the *fravaši* as a male figure appears possible. The presence of a bird (eagle?) above the death scene of the Merv vase – if not connected to



Fig. 15: Detail of stamped ossuary from Biya-Nayman, Uzbekistan; 7th century; State Hermitage Museum (photo by the author).

the hunting scene – reinforces our interpretation,¹⁵ for the *fravaši* swoops down like an eagle, according to the *Fravardīn Yašt* § 70 (KELLENS 1975: 21). Therefore, the bird seems to symbolise the descending *fravaši*, while the gesture made by the *fravaši*’s anthropomorphic figure ought to signify benediction for the deceased and/or his family. The appearance of the deceased’s *fravaši* before his surviving family is reminiscent of the Zoroastrian feast of *Hamaspadaēdaya* (*Frawardīgān*) in honour of the spirits of the dead at the end of the year (MALANDRA 2000), followed by the New Year’s festival (*Nowrūz*), with which Carter (CARTER 1974: 192–193) associates the vase of Merv.

The blessing gesture in question also found its way to the Sogdian pictorial art of the 7th and 8th century. Particular attention should be paid to the iconography of several Sogdian stamped ossuaries, on which certain Zoroastrian divine figures, per-

15 Despite his different interpretation of the Merv vase, Schulz (SCHULZ 2019: 190), too, agrees with a possible association of the depicted bird with the *farn* or *fravaši* of the deceased.



Fig. 16: Detail of Sasanian silver plate from Mys Strelka, Perm Region, Russia; 7th century; 982.6 g., 26.0 cm; State Hermitage Museum, Inv. No. S-520 (photo by the author).



Fig. 17: Detail of post-Sasanian silver plate from Lukovka, Perm Region, Russia; early 8th century; 959.5 g., 23.2 cm; State Hermitage Museum, Inv. No. S-47 (photo by the author).

haps *Aməša Spəntas* (cf. GRENET 1986: 120–128), are depicted making this gesture, probably bestowing their mercy and blessing upon the deceased.¹⁶ Among them are a famous terracotta ossuary and a similar fragment from Biya-Nayman (Fig. 15) (MARSHAK 1995/96), and an ossuary from Yumalak-tepe near Shahr-i Sabz (BERDIMURADOV/BOGOMOLOV/DAEPPE/KHUSHVAKTOV 2008). These examples show that this blessing gesture was known especially to the Zoroastrian community of Sogdiana.

6 Crossed arms (*dastkaš*): reverence, submission, obedience

On certain specimens of late and post-Sasanian silverware from the 7th and 8th century, submission and deference to the king is shown by crossing the arms on the chest.¹⁷ In some rare cases, both hands are hidden under the opposite armpits (Fig. 16), while in other cases the palms are pressed against the opposite half of the upper chest (Fig. 17).

16 Despite various proposals by different scholars, the identity of the deities depicted on Sogdian ossuaries remains uncertain. On this point, see SHENKAR 2014: 85, 170–174.

17 For example, two silver plates from the Perm region, Russia, kept at the State Hermitage Museum (Inv. No. S-520, S-47; see TREVER/LUKONIN 1987: Nos. 9, 16), a broken silver plate from Qazvin, Iran, kept at the National Museum of Iran, Tehran (see GHIRSHMAN 1962: Fig. 246), and a post-Sasanian silver plate reportedly from Tabaristan, Iran, kept at the British Museum (Reg. No. 1963,1210.3).

Regarding this gesture and its significance, we have more literary evidence at our disposal. In the opening passage of the Middle Persian text *Husraw ī Kawādān ud Rēdag-ē* (“Khosrow Son of Kawād and a Page”) (ed. AZARNOUCHE 2013: 43), this gesture of deference is described as being made by a page before the Sasanian king, Khosrow I Anūšīruwān (r. 531–579): *ʔl'n wyn't kw'tyk lytk HD w'spwhl ŠM YDE ʔdlkš LOYN' Y MLKAN MLKA YKOYMWN't* [Ērān-winnārd-Kawādīg rēdag-ē Wāspuhr nām dast ēr-kaš pēš ī šāhān šāh ēstād] (“A page from [the city of] Ērān-winnārd-Kawād, named Wāspuhr, stood before the King of Kings [with] the hands [crossed] under the armpits”). In the Pāzand didactic manual *Handarz ō Kōdakān* (“Advice to the Children”) (ed. GHEIBY 2003: 5, 8), children are advised to make this gesture before their parents: *ka abāz xānag šawēd pēš ī pid ud mād dast pad kaš framān-burdārīhā ēstād* (“Once you come back home, stand before your father and mother obediently [with] the hands [crossed] under the armpits”).

The word *ēr-kaš* is also attested in Manichaean Middle Persian (DURKIN-MEISTERERNST 2004: 81 s.v. *ʔyrkš*); for example, in the *Hymns to Šād-Ohrmezd*, Frag. M198a, V/1 (ed. COLDITZ 1992: 334). The same gesture is mentioned, along with the verbs *nigōzēdan* (“to bow”) and *namāz burdan* (“to prostrate, to pay obeisance”¹⁸), in the Manichaean Middle Persian text M7984 (T III D 260), II R ii 25–34 (ed. ANDREAS/HENNING 1932: 179; also BOYCE 1975: 63), as a sign of tribute and veneration: *ʔwd b'g ʔwhrmzydby ʔwd rwšn'n xw'ryst ʔwd nwgšhr'pwr*

18 ANDREAS/HENNING 1932: 179: “Verehrung darbringen”; also see SUNDERMANN 1964: 276.



Fig. 18: Terracotta figurine from Takhmač-tepe, Bukhara Oasis, Uzbekistan; 7th century; 7.0 × 4.0 × 2.5 cm; Bukhara Citadel Museum (photo: courtesy of Prof. Ciro Lo Muzio).

yzd hndym'n wy whyšt'w šhry'r dstkš 'yst'd hynd. 'wš'n ngwcyd 'wd zwwpr nm'c bwrđ [ud abāg Ohrmezd bay ud rōšnān xwārist ud nōgšahrāfur yazad handēmān ōy wahištāw šahryār dastkaš ēstād hēnd. ōyšān nigōzēd ud zořr namāz burđ] ["And [together] with God Ohrmazd, and the Friend of the Lights,¹⁹ and the divine Creator of the New Aeon,²⁰ in the presence of the Lord of Paradise,²¹ they stood [with] the hands [under] the armpits.²² They bowed and paid a deep obeisance").²³

The Middle Persian terms (*dast*) *ēr-kaš*, *dast pad kaš* and *dastkaš* describe the very gesture repre-

19 *rōšnān xwārist* = "Geliebtester der Lichten" (literally); ANDREAS/HENNING 1932: 179, fn. 2: "der erste Gott der zweiten Schöpfung"; SUNDERMANN 1979: 99 No. 2/6: "Freund der Lichten"; also cf. DURKIN-MEISTERERNST 2004: 365 s.v. *xw'ryst*.

20 *nōgšahrāfur yazad* = "Neue-Welt-Schöpfungsgott" (literally); ANDREAS/HENNING 1932: 179, fn. 3: "der große Erbauer"; SUNDERMANN 1979: 102 No. 4/7: "großer Baumeister"; also cf. DURKIN-MEISTERERNST 2004: 247 s.v. *nwgšhr'pwr*.

21 *wahištāw šahryār* = "Herrscher des Paradieses" (literally); cf. ANDREAS/HENNING 1932: 179, fn. 4; SUNDERMANN 1979: 102 No. 4/1: "Vater der Größe"; also cf. DURKIN-MEISTERERNST 2004: 342 s.v. *whyšt*, *whyšt*; *whyšt'w*, *whyšt'w*.

22 The adjective *dastkaš* is interpreted (ANDREAS/HENNING 1932: 179) as "grüßend"; also cf. DURKIN-MEISTERERNST 2004: 142 s.v. *dstkš*: "making salutation, bowing".

23 For historical remarks on the gestures described in this passage, see ALTHEIM 1950: 274; SACHSEN-MEININGEN 1960: 165–166.

sented in the banquet scenes of the Sasanian silver plates. In New Persian, the verb *dast be kaš kardan* and the adjective *dastkaš*, literally meaning "to put hand under armpits" and "hand [under] armpit", respectively, describe the same gesture of reverence (cf. SUNDERMANN 1964: 283–284). In classical Persian literature, the latter adjective metaphorically means "obedient" (DEHKHODA 1998: s.v. *dastkaš*). In the chapter on the reign of Kawād II Širūyeh (r. 628) in the *Šāhnāme* (ed. KHALEGI-MOTLAGH 2008: 329–330), the Iranian poet Ferdowsī relates that when Širūyeh's messengers arrived at the prison of Khosrow II, Galinūš entered Khosrow's cell with his hands under his armpits (*dast karde be kaš*) and asked the messengers to do the same. "They covered their faces with Chinese kerchief" (*be dastār-e čīnī beband rūy*), and "once they saw [Khosrow], they prostrated [in homage] before him" (*čo didand, bordand pīšaš namāz*).²⁴

In a Middle Persian–Sogdian glossary (Gloss. Frag. b = M111+M725), compiled by the Sogdian-speaking Manichaean community,²⁵ the Middle Persian word *ēr-kaš* appears twice in two independent entries. In the first entry, it is translated by *'xwš'kyy* (V 1(15) = HENNING 1940: 21) deriving from the Sogdian verb *'xwš* ("to respect, to give precedence?") (cf. SIMS-WILLIAMS/DURKIN-MEISTERERNST 2012: 41 s.v. *'xwš*). The second Sogdian equivalent of *ēr-kaš* is *prbrtdst* (V 2(16) = HENNING 1940: 21), meaning "with arms crossed (in greeting)" (cf. HENNING 1940: 23; SIMS-WILLIAMS/DURKIN-MEISTERERNST 2012: 141 s.v. *prbrtdst*), i.e. a literal translation of the Middle Persian term. Despite the existence of these two Sogdian equivalents for *ēr-kaš*, the Middle Persian word itself, too, seems to have been borrowed and used by the Sogdian-speaking Manichaeans as a loanword meaning "respectful greeting" (cf. SIMS-WILLIAMS/DURKIN-MEISTERERNST 2012: 42 s.v. *'yrkš*). This loanword for the gesture in question is attested in a passage of a Manichaean Sogdian letter from Bezeklik in Chinese Turkestan, probably from the early 11th century (Letter A = 81 TB 65: 1, § 3: 30–37; ed./tr. YOSHIDA 2019: 76–77; also cf. YOSHIDA/MORIYASU 2000: 145–146): [*ptšk-w'nw MN*] *δwry 'br'z-nt'kw RBfrny krz 'wšwγ βγγ'ky*

24 The same story occurs in Ṭabarī's *History* (ed. DE GÖEJE 1881/82: 1048). Nöldeke (NÖLDEKE 1879: 367), followed by Shahbazi (SHAHBAZI 2010: 207), interprets the gesture of crossing the arms as "Reverenz mit den Händen", and the prostration before the king as "sich huldigend niederwerfen". Nöldeke (NÖLDEKE 1879: 367, fn. 1) also notices that the kerchief, with which the messenger covered his face, might be same as *padām*. As we saw earlier on the Molla-kurgan ossuary (Fig. 8), *padām* was normally used by Zoroastrian priests before the sacred fire to avoid pollution. Certain banquet scenes on Sasanian silverware (e.g. Fig. 17) show that *padām* was also used by the attendants of the Sasanian kings.

25 On the traces of Manichaeism in Sogdiana, see LUR'E 2013.



Fig. 19: Terracotta ossuary from Sary-tepe near Samarkand, Uzbekistan; 7th or 8th century; State Museum of History of Culture of Uzbekistan, Samarkand (photo after KHAKIMOV 2004: 100).

pyrnm ʔy(r)[kš] sry kw z-ʔy prm pstw nmʔc brym. cʔnkw kw ʔδwʔ rwxšʔntʔ wrtʔntsʔr ʔxw nmʔcβrty pwtʔny ʔz-prt rwβy wyspw ʔkrtʔny kmpwny pr mz-yxw z-ʔrcn-wkyʔ [krmšwxwnw] ʔwʔnwʔcy ʔptškwym rt rxynym βy. prβrtδs[twʔspʔtzʔ-] nʔwky pr δynmync pδkʔ pr z-ʔmʔwy (ZY) pr (ʔ)[xšnkʔwy] šyr z-ʔm ptwysty (“In front of the great shining glory and wonderful and holy deity, we pay homage from afar, [holding hands under the armpits], with the head fallen to the ground in the same way as homage has been paid to the two light chariots (i.e. the sun and the moon). We humbly ask [the absolution] and remission of sins for every sin and failing (by your) pure mouth of the Buddha and by (your) great mercy. We venture to offer (our request) with arms crossed and knees [bent], according to the religious law, with humility and with [honour], and very humbly, sir”).

As we saw in the literary evidence, the gesture of crossing the arms is often mentioned alongside the verb for prostration (Middle and New Persian *namāz burdan*; Sogdian *nmʔc βr-*).²⁶ They both seem to have been parts of an Iranian court protocol in late antiquity. While meeting a person in superior position (e.g. the king), those lower in rank were apparently obliged to prostrate in homage.²⁷ They then had to stand respectfully with crossed arms, either

with their hands hidden under the opposite armpits, or with the palms pressed against their upper chest.

This gesture is also evidenced in the Sogdian art of the 6th to 8th centuries. Among the available evidence are two heavily damaged mural paintings from Panjikent (southern wall of the portico of Temple I: BELENITSKII/MARSHAK 1981: 57–58, Fig. 25; and near the eastern wall of the ancient town (Sector XXVI, Chamber 40): KURBONOV/ČIŽOVA 2012: 17, Fig. 19, Colour Fig. I), as well as terracotta figurines from Panjikent (BELENICKIJ 1961: 95, Fig. 20/2), Varakhsha in the Bukhara Oasis (Šiškin 1963: Fig. 12/4–5), Takhmač-tepe near Varakhsha (Fig. 18) (LO MUZIO 2010a: 181–182, Fig. 5a–b), and Zaamin in Ustrushana (GRITSINA/MAMADJANOVA/MUKIMOV 2014: 18–19, Fig. 13). This gesture is also performed by the standing “guardian angels” on the exterior surface of certain Sogdian ossuaries,²⁸ e.g. from Sary-tepe near Samarkand (Fig. 19) (PAVČINSKAĀ/ROSTOVCEV 1988), uncertain sites near Samarkand (Fig. 20) (POTAPOV 1938: 131, Figs. 5–6), the necropolis of Krasnorečensk in Semirečʔe (Semirechye) (GRENET 1984: 181, Pl. XLVI/c, Fig. 7; PUGACHENKOVA 1994: 230, Fig. 3), and the necropolis of Taraz (REMPELʔ 1957: Fig. 38/1, 39; GRENET 1984: 179). Unlike the attendants of Khosrow II on the Sasanian silver plate of Mys Strelka (Fig. 16), most of the Sogdian ossuaries and figurines show the palms pressed against the opposite *brachia* or upper chest; thus the hands’ *dorsa* are exposed (Figs. 18–20).

26 On the etymology of Sogdian *nmʔc*, see GERSHEVITCH 1975: 197. For further attestations of *namāz burdan* in the Middle Persian and classical New Persian literature, see SUNDERMANN 1964.

27 Prostration in homage (*namāz*) reminds us of the Iranian reverential posture at the Achaemenid court, which was termed *proskynēsis* by the Greeks. For the literary and iconographic evidence of this Achaemenid posture, see WIESEHÖFER 2003; ABE 2017/18; RUNG 2020.

28 For the chronology of Sogdian ossuaries, see PAVCHINSKAIA 1994: 220.



Fig. 20: Detail of fragmentary terracotta ossuary from uncertain site near Samarkand, Uzbekistan; 8th or 9th century; State Hermitage Museum (photo by the author).



Fig. 21: Detail of silver vessel from Šuryškarskij District, Yamalo-Nenets Autonomous Okrug, Russia; 11th century; Šemanovskij Museum of Yamalo-Nenets Okrug, Salekhard, Inv. No. OF-801 (photo after MARŠAK/KRAMAROVSKIJ 1996: 88).

Shenkar (SHENKAR 2014: 95) cautiously identifies the female figures on the Sogdian ossuaries of Sary-tepe and Krasnorečensk with *Daēnā* (the divine notion of religion; cf. ČUNAKOVA 2004: 61–64). He thus argues that the Sasanian reverential meaning of this gesture is inappropriate for divine beings, but he does not propose any alternative significance for the gesture. In fact, the gesture made by these figures on Sogdian ossuaries, which appears analogous to the gesture made by the kings' attendants on Sasanian silver plates, may only signify their respect and service for the owner of the ossuary. It is a remarkable coincidence that the abovementioned Sogdian ossuaries and figurines are all dated to the 7th and 8th century, i.e. roughly the same time as the late and post-Sasanian silver plates were produced. It implies that this gesture was commonly practiced in different parts of the Iranian world during this period. More than 60 years ago, Rempel' (REMPEL' 1957: 104), following an older proposal of Inostrancev (INOSTRANCEV 1917: 138), had identified the figures on the ossuary of Taraz as anthropomorphic representations of *fravašis*, protecting the bones of the deceased. Considering the Sasanian notion of this gesture, the latter identification seems more convincing than any association of these figures with deities.

This gesture, in all probability, remained a common way of expressing deference among the eastern Iranians in the Islamic period. It was even borrowed by other inhabitants of Central and Inner Asia, including the Turkic peoples. Lo Muzio (LO

MUZIO 2010a: 181–182; LO MUZIO 2010b: 433–434) observes Turkic stylistic features in the terracotta figurine of Takhmač-tepe (Fig. 18). Furthermore, an 11th-century silver vessel, found by accident at a Khanty sanctuary in the Yamalo-Nenets Autonomous Okrug, north-western Siberia, represents a banquet scene of Sasanian style, in which an enthroned ruler is flanked by two attendants. The standing attendants show their respect and obedience by crossing their arms, with their palms pressed against the opposite *brachia* (Fig. 21). The origin of this vessel is uncertain. In one hypothesis, Kramarovskij identifies the depicted characters, due to their beardless faces, with Turkic nomads of Inner Asia (MARŠAK/KRAMAROVSKIJ 1996: 85–89). In another hypothesis, Marshak distinguishes them from the Iranian and Central Asian peoples of the 11th century, but traces “Europid” features in their faces and ascribes the manufacture of the vessel to Volga Bulgaria (MARŠAK/KRAMAROVSKIJ 1996: 14–16). Whichever of these attributions is the case, the transmission of this gesture and its significance beyond the cultural boundaries of the Iranian world is unequivocally evidenced by this vessel.

Epilogue

The significance and iconographic evidence of the abovementioned hand gestures is summarised in Fig. 22.

To sum up, the following provisional conclusions may be drawn from our discussions:

1. The forefinger gestures in Sogdian iconography represent, at least, four divergent notions, depending upon the context of their use.
2. The Sogdian hand gestures did not necessarily have Central Asian origins. Some of them reveal influences of other Indo-Iranian neighbouring cultures.
3. Certain gestures were used primarily in religious contexts. Among them are Zoroastrian ritual gestures and Buddhist *mudrās*, which reached Sogdiana by the spread of these religions in Central Asia.
4. The finger gestures bearing positive or ritual significance (e.g. admiration, reverence, or blessing) were usually performed with the right hand, while the gestures for secular purposes (e.g. the self-pointing forefinger for astonishment or silence) appear to be made sometimes with the left hand.

5. The reverential gesture of crossing the arms was originally performed in a way that the hands were hidden under the opposite armpits, as shown in late Sasanian iconography. However, it seems to have been simplified over time, as the hands appear to be just pressed against the opposite *brachia* in post-Sasanian and Sogdian iconography. This originally Sasanian gesture was later transmitted to the nomads of Inner Asia via Sogdiana.

In this study, I attempted to classify the hand gestures attested in Sogdian iconography, and to analyse their possible significance and origins. Neither my assemblage of iconographic material nor my analysis of literary evidence claims to be complete. The interim conclusions presented here remain subject to change in the light of further evidence. A comprehensive scrutiny of gestures and their significance in eastern Iranian cultures still belongs to the realm of *desiderata* in the field of Central Asian archaeology and art history.

No.	Gesture	Term(s) (if known from literary evidence)	Significance	Function	Transmission route, as indicated by iconographic evidence
1	Raised forefinger	NP. <i>angošt bar āvardan</i>	Approbation, acclamation, admiration	Secular	Iranian world
2	Bent forefinger	NP. <i>angošt (be) dar kardan</i>	Reverence, homage, adoration, worship	Secular, Zoroastrian, Buddhist?	Ancient Mesopotamia > Sasanian Iran > Sogdiana
3	Straight forefinger	Skt. <i>tarjanī mudrā</i>	Admonition, warning, threat	Buddhist	Buddhist India > Sogdiana
4	Self-pointing forefinger	NP. <i>angošt bar/be dahān/dandān/lab</i>	Astonishment, perplexity, silence	Secular	Iranian world
5	Raised forefinger and middle finger	Skt. <i>*śrī mudrā</i>	Blessing, benediction, mercy	Zoroastrian, Buddhist	Hellenistic Sogdiana > Buddhist India > Kushan Empire > Sasanian Iran > Late Antique Sogdiana
6	Crossed arms	Sgd. <i>*xwškyy, prθrtδst</i> ; MP. <i>(dast) ēr-kaš, dast pad kaš, dastkaš</i>	Reverence, submission, obedience	Secular, Zoroastrian, Manichaean	Sasanian Iran > Sogdiana > Turkic Inner Asia

Fig. 22: Synopsis of the significance and transmission route of Sogdian hand gestures.

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The Eastern Zeravshan Valley in the Early Islamic Period (8th to 9th Century CE)

New Evidence from the Sanjar-Shah Excavations (2016–2019)

Michael Shenkar, Sharof Kurbanov, Abdurahmon Pulotov, and Firuz Aminov

Abstract: This article presents the main results of the recent excavations (2016–2019) at the Sogdian site of Sanjar-Shah near Panjikent in north-western Tajikistan. They have brought to light evidence of large-scale building activities and the construction of a monumental palace during the 740s CE. These activities can be attributed to the policies of the last Umayyad governor of Khurasan, Naṣr b. Sayyār (738–748). It seems that during this period, Sanjar-Shah was the residence of the most important local Sogdian *dehqān*. The palace was burned in the third quarter of the 8th century, possibly during the al-Muqanna' uprising. However, unlike neighbouring Panjikent and other smaller settlements in the region, which were mostly abandoned in 770s–780s, life at Sanjar-Shah continued into the 9th century, providing a rare example of a transition of a Sogdian urban space from the 8th to 9th century.

Keywords: Sanjar-Shah, Panjikent, Sogdian, early Islamic, palace.

Резюме: Данная статья содержит основные результаты последних раскопок (2016–2019 г.) согдийского памятника Санджар-Шах, расположенного рядом с Пенджикентом на северо-западе Таджикистана. Наши исследования выявили свидетельства масштабного строительства и возведения монументального дворца в 740-х годах. Эта деятельность, вероятно, была результатом политики последнего омейядского наместника Хорасана, Насра ибн Сайяра (738–748 г.). По-видимому, в этот период Санджар-Шах становится резиденцией важнейшего из местных согдийских аристократов (дехкан). Дворец был сожжен в третьей четверти VIII века, возможно, во время восстания Муканны. Однако в отличие от соседнего Пенджикента и других мелких поселений и замков, которые были окончательно покинуты жителями в 770–780-х годах, Санджар-Шах представляет собой редкий пример крупного согдийского поселения в данном регионе, продолжившего свое существование и в IX веке.

Ключевые слова: Санджар-Шах, Пенджикент, Согд, ранний исламский период, дворец.



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DOI: 10.13173/9783447118804.327

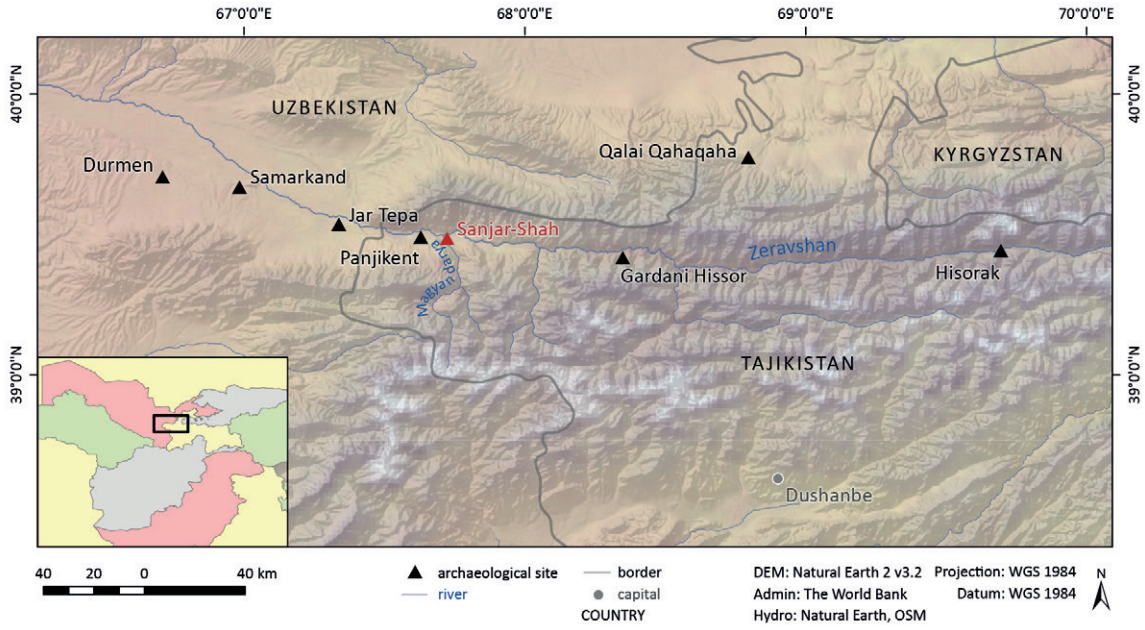


Fig. 1: Upper Zeravshan region (RUTISHAUSER/SHENKAR 2022).

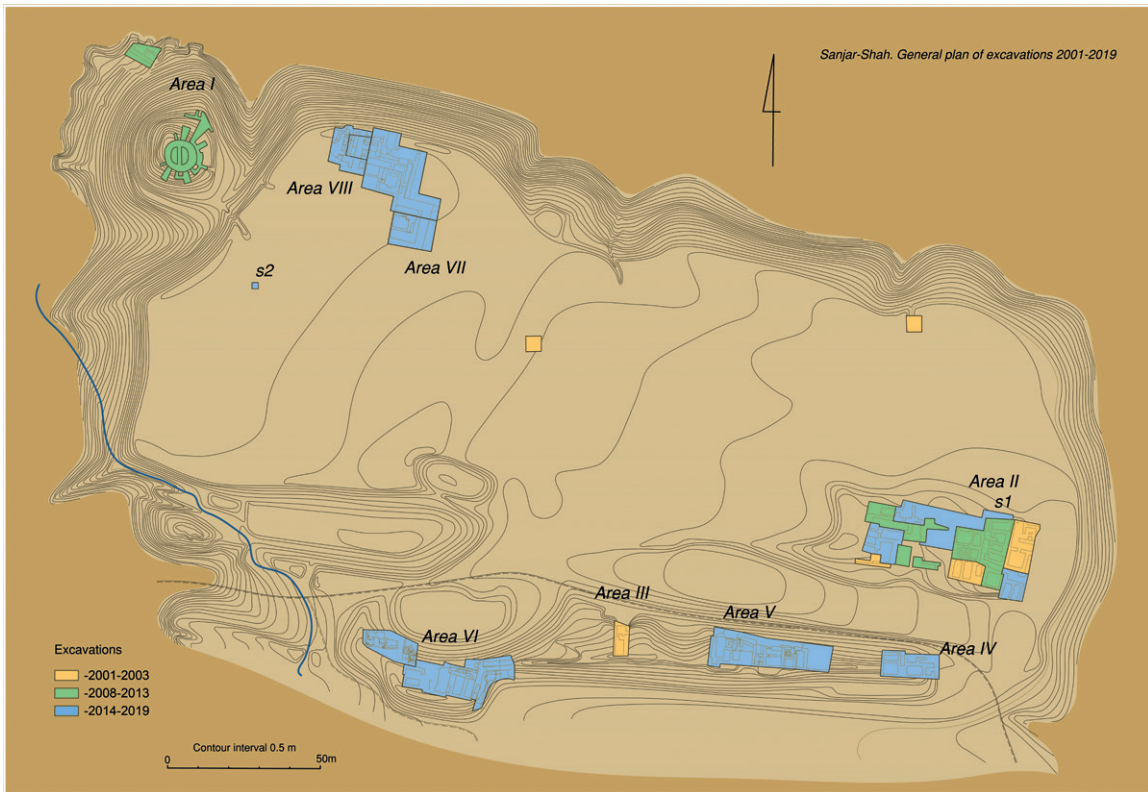


Fig. 2: General plan of the site showing excavated areas (drawing by Elena Bouklaeva).



Fig. 3: Area V during excavations in 2018 looking south (photo by the authors).

The site of Sanjar-Shah is situated in north-western Tajikistan, 12 km east of Panjikent at the confluence of the Zeravshan and Magian Darya Rivers (see **Fig. 1**). It was first excavated in 2001 and 2003 by the German-Tajik mission led by Gerd Gropp and Sharof Kurbanov (GROPP/KURBANOV 2007). Between 2008 and 2013 the site was excavated by Sharof Kurbanov and Alexey Savchenko with the support of the Swiss *Society for the Exploration of EurAsia*. The current mission has conducted the excavations at Sanjar-Shah since 2014.¹ Until 2015, the work mainly focused on Area I (“Round Tower”) and Area II (“Craftsmen’s Quarter”). Starting from 2016, the investigations gradually shifted to new areas situated along the southern wall (Areas IV–VI), and to Areas VII–VIII in the western part of the *shahristan*, near the Round Tower (**Fig. 2**). The material obtained during seasons 2016–2019 has transformed our views on the chronology of the site and sheds new light on the settlement patterns in the Eastern Zeravshan Valley in the crucial period between the 8th and the 9th century, when the Sogdian civilisation experienced a sharp decline and Sogdiana became part of the Islamic Caliphate. The present article offers a brief presentation of the most important results of our recent excavations, along with preliminary conclusions, and discusses the potential implications of this material for settlement history of the Panjikent region in the early Islamic period.

1 For the publication of some preliminary results and a bibliography of previous excavations, see SHENKAR/KURBANOV 2019. Short reports are published annually on the website of the *Society for the Exploration of EurAsia*: http://www.exploration-eurasia.com/inhalt/projekt_5.htm.

1 Area V

Our investigations in the areas along the southern city wall (Areas IV–VI) uncovered exceptionally well-preserved architecture. Especially noteworthy is Area V, where parts of the third storey were preserved in Room 1 (**Fig. 3**). Thirteen rooms belonging to two households were uncovered here, including a spacious reception hall with four columns, which was at a later stage divided into two rooms: Room 8 and Room 12 (**Figs. 4–5**). These households were built along the southern wall of the town and faced a street to the north. To the east of Area V, the excavations exposed an open courtyard. Two surface levels were identified in the street and the courtyard. On the second, earlier floor, a pottery fragment with a stamped image of a mountain goat decorated with a floating ribbon was found (**Fig. 6**). At least in one location, we have identified the remains of the floor of the third storey (Room 1). Numerous small fragments of paintings found in the fill in Rooms 2–5 indicate that the living rooms were located on the second and the third storeys and that at least Room 1 was painted with figurative paintings. The rooms on the ground floor often served as utility rooms or as warehouses, like Room 7, where plastered boxes for grain storage were installed adjacent to the wall. Many of these storage rooms on the first floor were vaulted, like in Panjikent (RASPOPOVA 1990: 158). Therefore, it seems that the first storey comprised mostly utility rooms while the living spaces were located on the upper floor. Still, perfectly preserved wooden elements of the ceiling of the first storey were uncovered in Room 7 under the fill of the second floor (**Fig. 7**). It seems that following

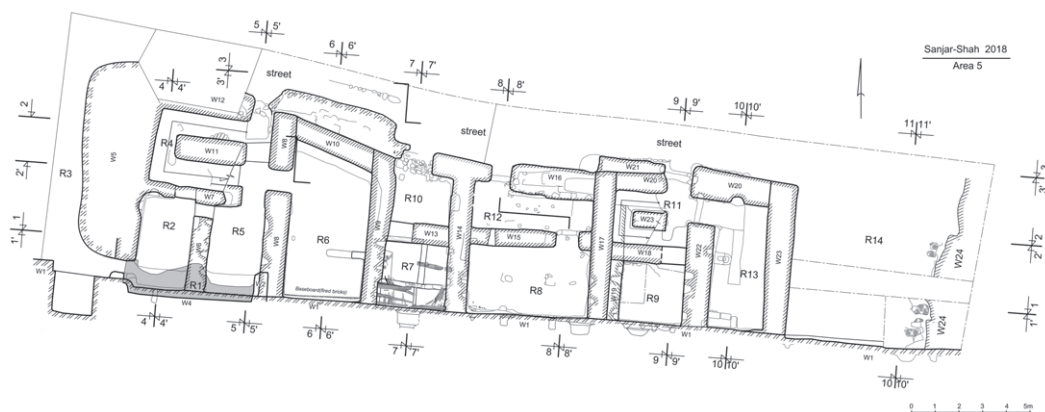


Fig. 4: Plan of Area V (drawing by Elena Bouklaeva).

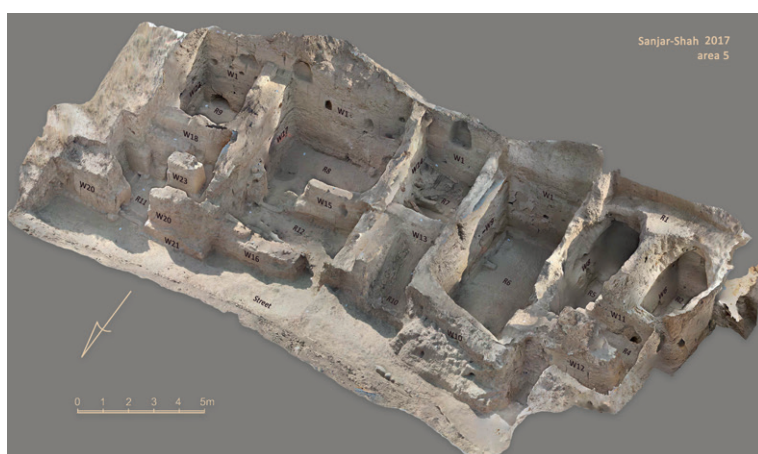


Fig. 5: Area V (3D by Elena Bouklaeva).

the collapse of the second storey, the beams of the ceiling also broke down and fell (**Fig. 8**). The average length of the large beams, which were laid on the west-east axis, is 18–22 cm, and the smaller supports of the ceiling, which were laid on the north-south axis, are 6–8 cm. Their diameter is between 2 cm and 6 cm. Wood was, of course, widely used in Sogdian architecture, but it very rarely survives in



Fig. 6: A pottery fragment depicting a mountain goat (photo by the authors).

the Sogdian lowlands, unless in a carbonated state.² In Panjikent, for example, only small fragments of wood have ever been found (LURJE 2016: 17). The quantity and the perfect preservation of the wooden beams from V/7 is comparable only to sites from the mountainous areas of the Upper Zeravshan Valley, such as Gardani Hissor and Hisorak (see **Fig. 1**). The discovery from Sanjar-Shah presents a unique opportunity for studying the intact wooden ceiling in a lowland Sogdian settlement. An additional feature of this room worth noting is a simple decoration of rows of stamped circles (diameter 2 cm) on one of the walls (**Fig. 9**).

Two remarkable finds were made in Area V: a fragment of a Chinese bronze mirror and a unique bronze pin, which were already published separately (SHENKAR/KURBANOV 2018). The mirror belongs to a type known as “Zhenzifeishuang” 真子飞霜 and is dated to the Tang period (**Figs. 10–11**). It is the first time that a mirror of this type has been found outside of China. The bronze pin with a finial of two

² For the discussion of the wooden elements in Sogdian architecture, see LURJE 2016.



Fig. 7: Area V, Room 7 looking south (photo by the authors).



Fig. 8: Area V, Room 7. Collapsed wooden ceiling of the first storey (photo by the authors).

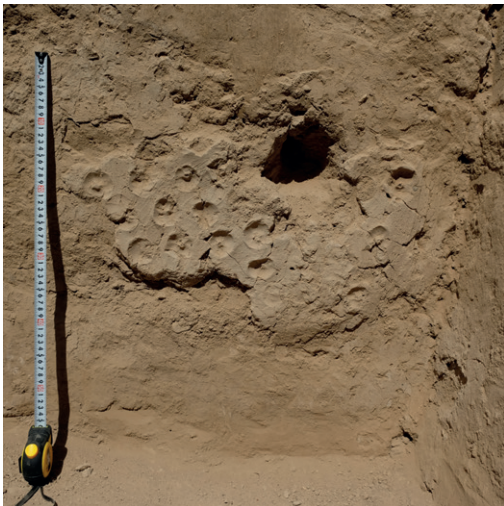


Fig. 9: Area V, Room 7. Stamped decorations (photo by the authors).

Janus-like faces is unique to date in Sogdian art, but finds close parallels in Sasanian Iran (Figs. 12–13).

Another interesting find in this area is a fragment of a terracotta figurine, which was recovered from the surface during the excavations, but most probably originates from the fill of Room 6 (Fig. 14). It shows an upper part of a bareheaded and beardless

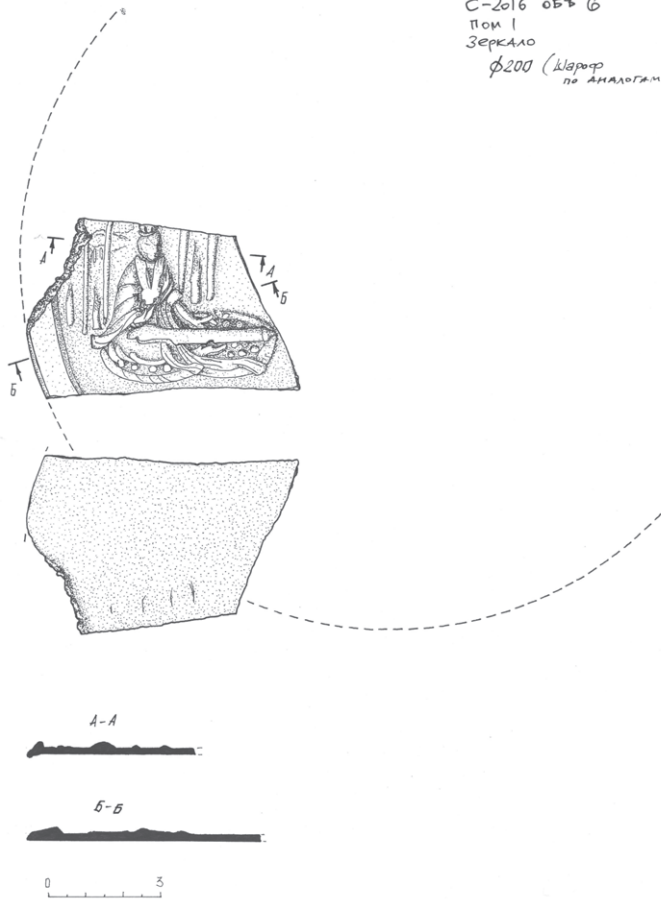
male character, depicted frontally, with large eyes and a distinctive haircut covering his forehead. It has a suspended, round earring. Although the figurine is broken exactly at the waist, from several examples depicting the same character found at Panjikent (see Fig. 1) it is clear that he is holding in both hands the ends of a belt fastened across his waist with a com-



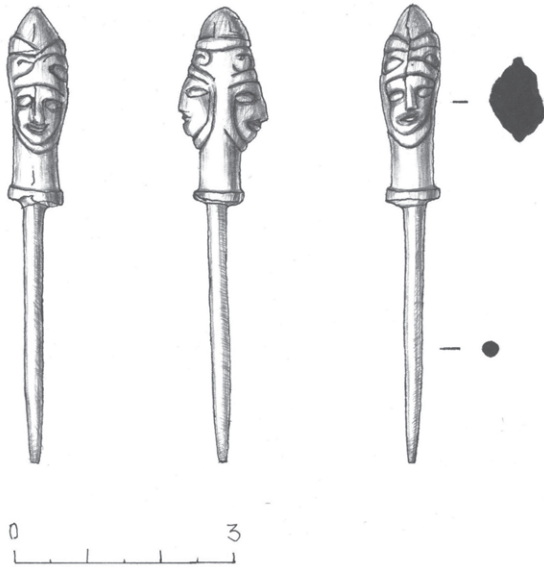
10



12



11



13

Fig. 10: Area V, Room 1. A fragment of a bronze mirror (photo by Darya Zhulina).

Fig. 11: Area V, Room 1. A fragment of a bronze mirror (drawing by Darya Zhulina).

Fig. 12: Area V, Room 6. A bronze pin with a finial of two Janus-like faces (photo by the authors).

Fig. 13: Area V, Room 6. A bronze pin (drawing by Darya Zhulina).

posite tripartite knot (MEŠKERIS 1989: 219–221; Fig. 15). It also seems clear that the character on the terracotta is depicted during the act of tying or untying of *kustīg* – a sacred girdle worn by Zoroastrians after their initiation ceremony (CHOKSY/KOTWAL 2014). The *kustīg* is traditionally worn encircling the waist three times, precisely as depicted on the terracotta.

Boris Marshak assumed that this character is a young god (probably since such terracottas usually depict deities) and tentatively identified him as the Zoroastrian god Sraosha, who is closely associated with prayer and priesthood (MARŠAK 1999: 181–182). However, the youth has no crown or diadem, which are obligatory in Sogdian divine iconography. If the Sogdian rituals and prayers indeed included the tying of the *kustīg*, these terracottas might have served as *ex-votos*, as suggested by Frantz Grenet (GRENET 2013: 208), which were placed in sanctuaries by worshippers. It is noteworthy, however,



Fig. 14: Area V, A fragment of a terracotta figurine (photo by the authors).



Fig. 15: Reconstruction of this type of terracotta based on the Panjikent examples (after GRENET 2013: Fig. 7a).

that the girdle with three encirclements around the waist, as on our terracotta, is only attested to once in the entire Sogdian iconography – with the priests on the ossuary from Krasnaya Rechka (PUGACHENKOVA 1996: Fig. 15). It is never found in other Sogdian representations, including in scenes of worship and sacrifices. Sogdians in these scenes wear typical elite garments, while characters wearing a priestly ensemble with specific accessories are encountered only on ossuaries. A possible reason for this distinction is that most Sogdian priests were probably magistrates appointed from the civic community,³ whereas those depicted on ossuaries, including on that from Krasnaya Rechka, may have formed a separate category of “permanent” and “hereditary”



Fig. 16: Area V, Room 8. A gold-plated bronze buckle (photo by the authors).

priests. The priests are the only figures to wear distinctive garments and were perhaps connected with burial rites (SHENKAR 2017: 206–207). It is possible, therefore, that these terracotta figurines showing a youth tying a *kustig* were somehow related to funerary rites.

An additional noteworthy find was made in V/8 in the sounding under the earliest floor. It is a bronze buckle with a gold-plated surface and an iron tongue (Fig. 16). Bronze buckles similar in shape, but simpler, were found in Panjikent in layers dated to the 8th century CE (Raspopova 1999: 23). The closest parallels to the shape of the Sanjar-Shah buckle are provided by a hoard of seven belt buckles from Panjikent VII/11, dated to the first decades of the 8th century (RASPOPOVA 1980: 87–89). This corresponds perfectly to the dating of the Sanjar-Shah buckle, which was found together with a Turgar coin (738–750 CE). From the written sources, we know that in the 8th century golden belts were distinctive accoutrements of the Sogdian elites – especially their aristocracy. Furthermore, the nobles depicted on the Panjikent paintings always wear yellow belts, undoubtedly representing gold (BELENICKIJ/RASPOPOVA 2019: 409–410). It is noteworthy that in Panjikent only one belt buckle coated with gold foil was uncovered from the palace (BELENICKIJ/RASPOPOVA 2019). The buckle from Sanjar-Shah and other abovementioned finds from this area testify to the presence of the elite culture at the site. The aforementioned Turgar coin found in the sounding in this room under the earliest floor (built on the bedrock) provides a *terminus post quem* for the households and for the building activity in this area.

3 On the Sogdian civic communities, see SHENKAR 2020.



Fig. 17: Area VI in the process of excavations in 2019, looking south (photo by the authors).



Fig. 18: Area VI, general view in 2019, looking west (photo by the authors).

2 Area VI

This area is situated west of Area V, along the southern city wall (Figs. 17–18). One of the objectives of our work in this area was to verify the assumption that one of the city gates was located here, to the east of Room 4, where the wall creates a rectangular

projection making a sharp, almost 90°, turn to the south. The rooms of this area are constructed inside this projection. Immediately to the north of the area there is a sharp slope descending into a large depression, which probably served as a water reservoir. The excavation revealed that there was no gate in this section and the wall seems to follow the to-

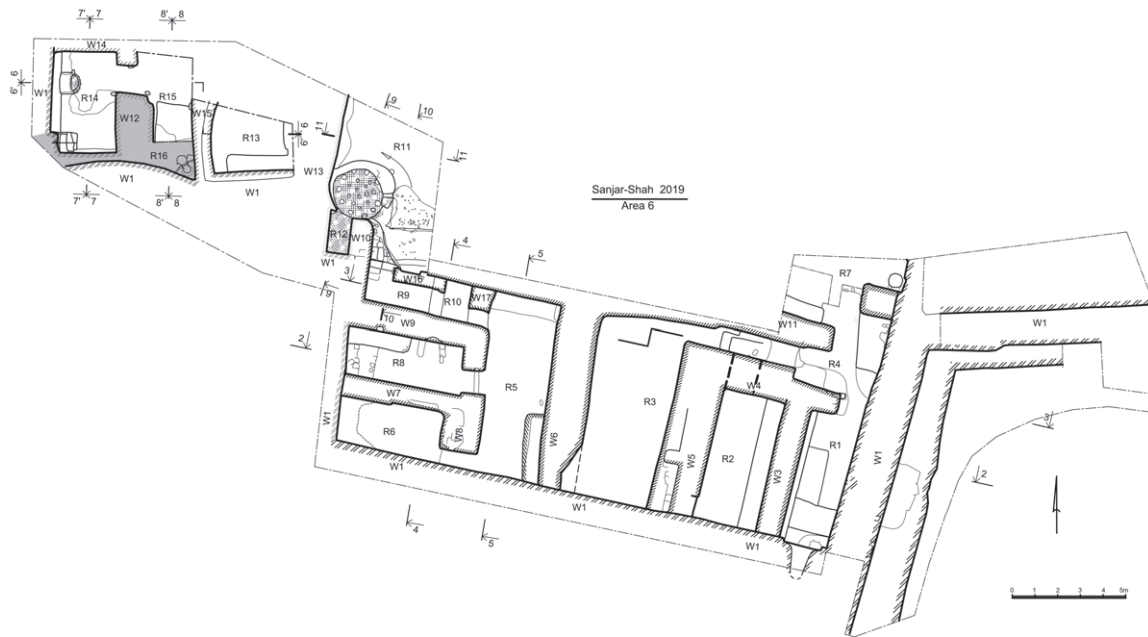


Fig. 19: Area VI (drawing by Elena Bouklaeva).

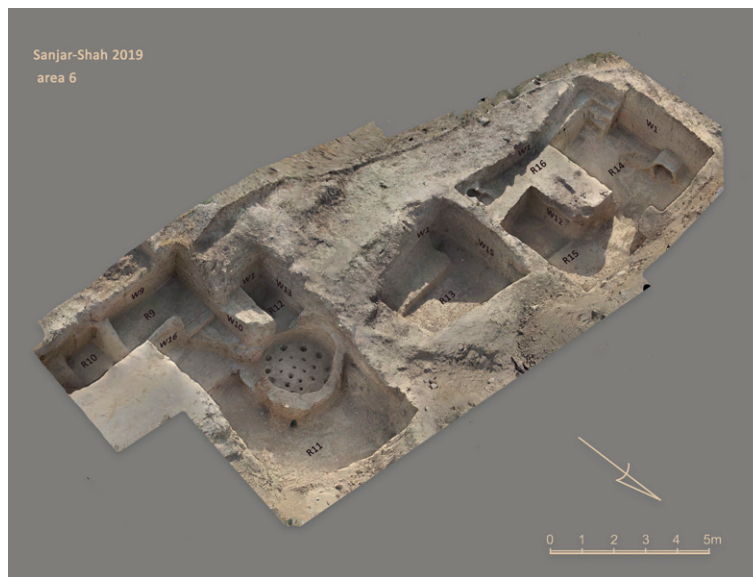


Fig. 20: Area VI (3D by Elena Bouklaeva).

pography. The excavations showed that the city wall in Area VI consists of two parallel walls attached to each other; their width is 3.3 m.

Between 2016 and 2019, 16 rooms were excavated in this area (Figs. 19–20). Some of them, like Room 1, where a hearth was found, were probably residential rooms. Others, like Room 8, where boxes were installed, were storage spaces. As in Area V, at the later stage, large rooms were divided into lesser spaces (Rooms 9 and 10). A round pottery kiln (inner diameter is 2.1–2.55 m; outer – 2.7–2.8 m), was installed in Room 11 (Figs. 21–22). A noteworthy find from the floor of room VI/6 is a pair of stones from the turning mechanism of a potter's wheel (Figs. 23–24). Similar stones were found at Afra-

siab (ŠIŠKIN 1961: 42–43), and at Paikend (SEMENOV 2000: 20–24).⁴ The kiln functioned only during the first building period, since the upper floor of the second period seems to cover it. Some rooms, like Room 16, continued to function also in the beginning of the 9th century.

This is the second pottery kiln found at Sanjar-Shah. In 2003 the German-Tajik mission had uncovered the remains of another pottery kiln in the western part of Area II (Room 38) (GROPP/KURBANOV 2007: 103, Fig. 32). Unlike the kiln we excavated in Area VI, this kiln was rectangular and had

⁴ Marshak dates them to the 8th to 9th century (MARŠAK 2012: 66).



Fig. 21: Area VI, Room 11 (photo by the authors).



Fig. 22: Area VI, Room 11, pottery kiln (photo by the authors).



Figs. 23–24: Area VI, Room 6. The first (above) and second (below) stone from the turning mechanism.

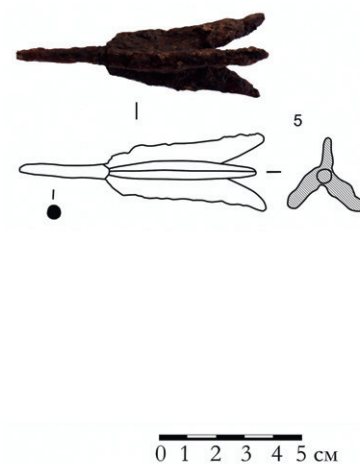


Fig. 25: Area VI, Room 8. A tripartite iron arrowhead (drawing by the authors).



Fig. 26: Areas VII–VIII, general view looking west (photo by the authors).

dimensions of 3.20 × 2.35 m. Few pottery sherds published from the area of the kiln (GROPP/KURBANOV 2007: Fig. 42:4–6) date from the first half of the 8th century, which probably makes the two kilns contemporary. Interestingly, in neighbouring Panjikent, pottery kilns are yet to be found after more than 70 years of excavations, although there is clear evidence for the existence of ceramic industry in the city (RASPOPOVA 2010: 7).

Another interesting find in this area is a tripartite iron arrowhead used for hunting, uncovered from the second floor in Room 8 (Fig. 25). Two similar arrowheads were found in Panjikent in the 8th century layers (RASPOPOVA 1980: Fig. 46, 21–22). One of them was uncovered in the layer related to the reconstructions, which took place in the city in the 740s (RASPOPOVA 1999: 19).⁵

3 The palace: Areas VII–VIII

In the Soviet period the western area of the *shahristan*, like most of the surface of the site, was completely levelled by bulldozers for agriculture. In 2003, the German-Tajik expedition has excavated a small sounding in the west, but they soon reached the bedrock without recording any archaeological remains.⁶ Nevertheless, they have already insightfully

⁵ On this period, see below.

⁶ GROPP/KURBANOV 2007: 107.

ly suggested that the “Palace District” of Sanjar-Shah was situated in this part of the site (GROPP/KURBANOV 2007: 107). Sharing this assumption, in 2015 we initiated the first systematic investigations in the areas situated in the north-western part of the site, close to the Round Tower (Area I). Because of the Soviet agricultural works, the soil in this area is extremely hard, making the excavations here a difficult and time-consuming process. Although the work is far from completion, it is already clear that the hypothesis about the location of the “Palace District” was correct – we have uncovered sections of a large complex, most probably of a spacious palatial building, which was originally situated in this location. In 2019, Areas VII and VIII were combined with a total excavated space of 717 m² and an overall number of 12 rooms (Figs. 26–27).

The palace in Area VII–VIII has two distinct building phases. This is readily apparent in Room 2 in the western part of Area VIII. Its first stage is characterised by solid, unusually thick and long walls. In the second period, a smaller wall (Wall 5) was built parallel to the earlier Wall 2 at a distance of 1.3 m to the west and the room became much narrower. The space between the walls was filled with dense clay and was no longer in use during that stage. The function of this later Room 2a was clearly different from Room 2, since two taboo ovens were installed in the *sufa*, and it seems that it was converted into a utility room. In the mortar between the bricks of Wall 2, which belongs to the first building stage, we

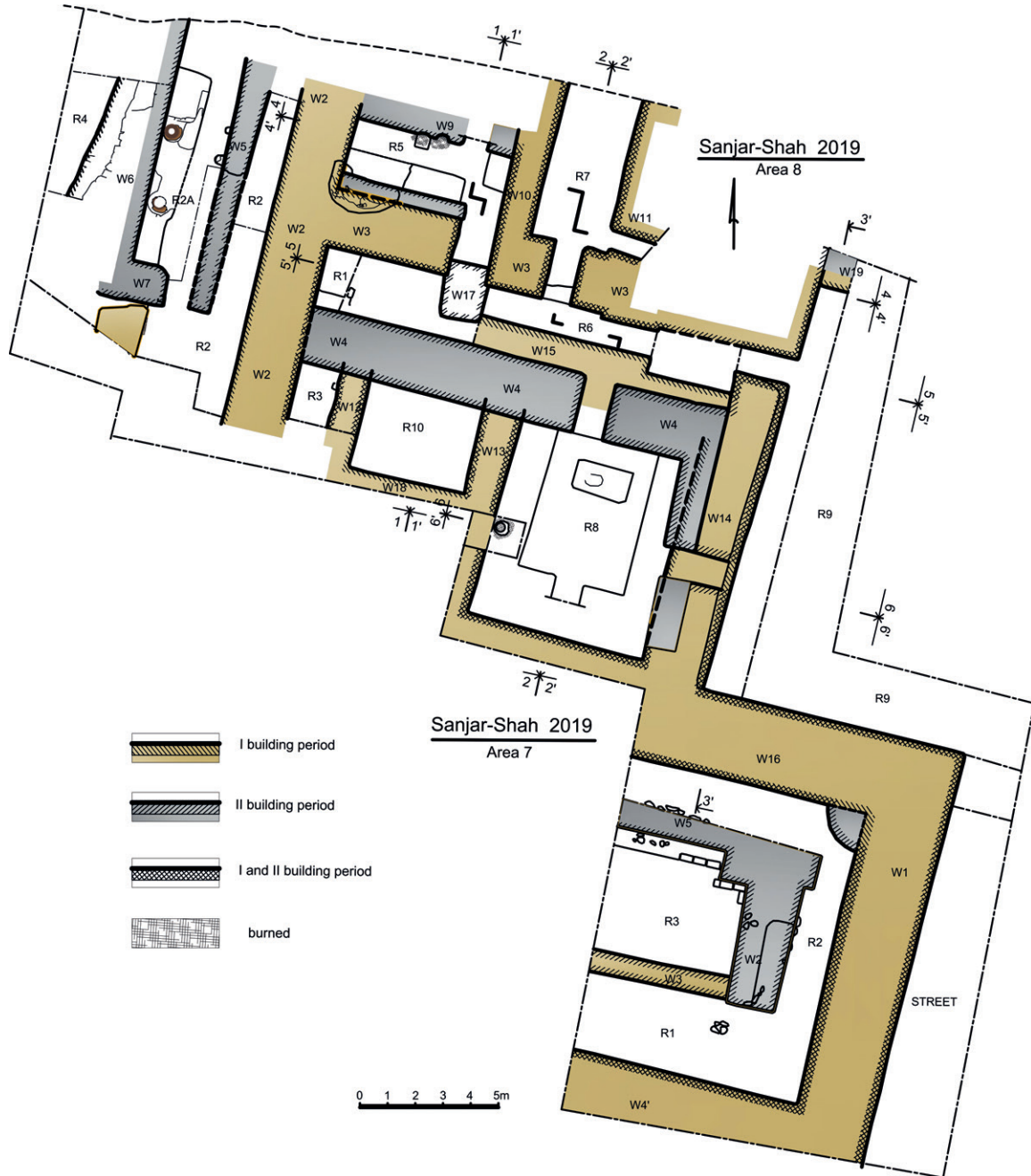


Fig. 27: Areas VII–VIII (drawing by Elena Bouklaeva).

uncovered a Turgar coin. It provides a *terminus post quem* for the construction of this room and other rooms of the first period.

Although small fragments of wall paintings were already discovered at Sanjar-Shah in previous years in Area II and in Area V, they were recovered from either soundings or from the fill. In 2017, a fragment of wall paintings (80 cm × 190 cm) was discovered *in situ* for the first time at Sanjar-Shah on the above-mentioned Wall 2 in VIII/2. The following season, this painting underwent restoration and conservation by Maria Gervais from the State Hermitage Museum of Saint Petersburg (Figs. 28–30). Unfor-

tunately, the initial condition of the preserved fragment was very bad, but there can be no doubt that it was originally part of a figurative painting. The technique and the pigments employed, as well as its artistic quality, are comparable to the best examples of wall paintings from Panjikent. Only two blue lotus flowers on a long white stem are clearly visible on our fragment. One flower is fully open (Fig. 29), while the second one is depicted as a flower bud. Black vertical lines could be the legs of an animal, possibly a horse. There is a border of “pearls” framing the paintings, which is typical for the Sogdian paintings from the 7th century onwards.



Fig. 28: Area VIII, Room 2. Fragment of painting *in situ* (photo by Maria Gervais).

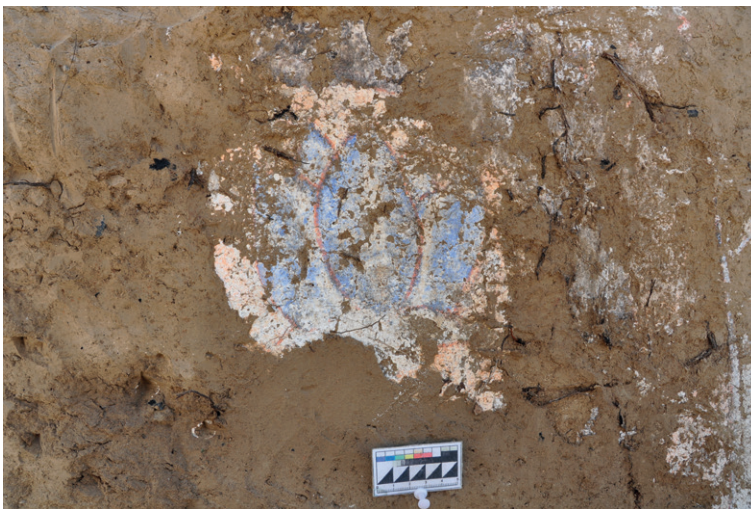


Fig. 29: Area VIII, Room 2. Blue lotus flower (photo by Mari Gervais).

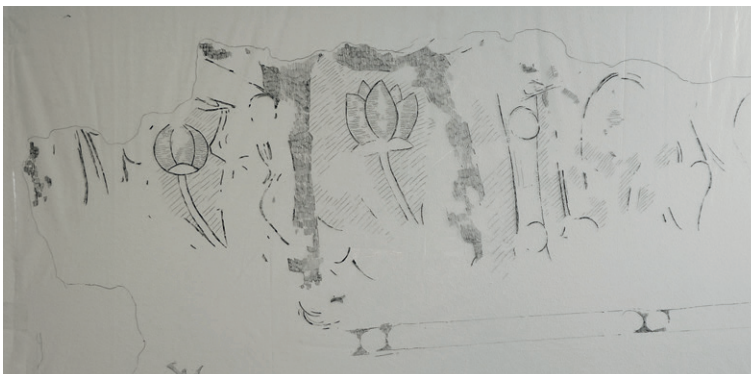


Fig. 30: Drawing of the painting with elements of reconstruction by Maria Gervais.

In 2019, an additional fragment of wall painting, probably belonging to the first building stage, was uncovered in VIII/5 on the other side of the same wall. The fragment's length is at least 70–80 cm; the rest is currently hidden beyond the later wall (9). It shows traces of red, white, and blue colour. The painting was covered with soil in order to preserve it, until it is possible to remove it with the assistance of a professional restorer.

In addition to the wall painting, several fragments of burned wooden beams and panels were discov-

ered in VIII/8, which also belongs to the first building stage and bears traces of intense burning. Some of the panels have traces of carving (**Fig. 31**). On one of them in particular, a floral design or perhaps part of a bird's wing was visible (**Fig. 32**). Paraffin was poured over these fragments and they were covered with soil with the intention of removing them in 2020, which unfortunately turned out to be impossible due to the Covid-19 pandemic.

The first building period of the Sanjar-Shah palace is characterised by monumental architecture, mas-



Fig. 31: Area VIII, Room 8, fragment of burned wood decorated with flowers *in situ* (photo by the authors).



Fig. 32: Area VIII, Room 8, fragment of burned wood decorated with bird's wing (?) *in situ* (photo by the authors).

sive walls (up to 3 m thick), figural wall paintings, and ceiling elements that included carved wood. Based on the Turgar coin and on ceramic assemblages, it can be dated to the 740s CE. Room VIII/8 particularly stands out for its monumentality. It appears that it has the layout of a typical Sogdian reception hall.⁷ In the northern part of the room, there is a rectangular platform (2 m × 1.5 m), which has a circular deepening in its upper surface. Similar free-standing, raised platforms are well-known from reception halls in other Sogdian palaces, such as Panjikent (Room 1) (ISAKOV 1977: Fig. 31), Kum (Room 27) (ÂKUBOV 1988: 92), and the Red Hall of Varakhsha (ŠIŠKIN 1963: 58, Fig. 20). They were probably intended for ritual activities, such as offering libations on a portable incense burner. In the Red Hall, the site of two such platforms, it is possible that one of them supported a throne. In some cases, as with the Red Hall, there is evidence for some upper structure above them, perhaps a baldachin (ŠIŠKIN 1963: 58).

Another remarkable room, only partially exposed until 2019, is VII/2. It has the thickest walls

(3 m) attested so far at Sanjar-Shah. It is noteworthy that they are constructed of mudbrick of non-standard dimensions for the region (51–52 cm × 34–35 cm × 9–10 cm). The standard mudbrick commonly used at Sanjar-Shah is similar to that from Panjikent and is about 48–50 cm × 24–25 cm × 9 cm (SEMENOV 1996: 33). In Panjikent, the mudbrick of similar size to that found in the VII/2 (50 cm × 35 cm × 10 cm) is attested in two places: in the wall of the citadel and in the *sufa* of Room 4 in the *donjon* (castle) on the citadel of Panjikent, which was constructed no earlier than the 7th century (SEMENOV 2020: 39–40).

Clear traces of intense burning attested in VIII/1, VIII/2, and especially in VIII/8, and in the corridor adjacent to it (VIII/6), indicate that the palace of the first period was destroyed by a great fire, which probably occurred in the third quarter of the 8th century. There is no evidence of abandonment. On the contrary, it seems that the second building phase took place shortly thereafter. By 2019, it had become clear that the second stage should be dated to the late 8th to early 9th century. Although no coins have been found yet under the floors of the second stage, the ceramic assemblages, which include glazed vessels and numerous fragments of

⁷ For the study of the Sogdian domestic architecture including reception halls, see RASPOPOVA 1990.



Fig. 33: Glazed pottery. 1–3 – Bowls; 4 – Lamp; 5, 6, 8, 10, 11, 16 – jars; 7 – Cooking pot; 9 – A small cup or a juglet; 12 – plate; 13–15 – Cups. 1–3, 7, 12, 15 – VIII/2a, fill of the second building period; 4–6, 13 – VIII/6, fill of the second building period; 9 – VIII/1, fill of the second building period; 10 – VIII/7, fill of the second building period; 8, 11 – VIII/2a, floor of the second building period; 14, 16 – V/14, fill of the second building period.



Fig. 34: Glass vessels. 1–4 – Glasses; 5 – Small cup; 6–8 – Mugs; 9–10 – Flacons; 11–12 – Cups; 13–15 – Beads; 16–21 – Jars; 22 – Bottle. 1–4, 10, 13, 14, 16, 18, 19, 21 – V/14, fill; 5–7, 9, 12, 20 – VIII/2a, floor and fill of the second building period; 8, 11 – VIII/10, fill of the second building period; 14 – VIII/5, floor of the second building period; 17 – VIII/8, fill of the second building period; 22 – VI/4, fill of the second building period.

glass vessels, provide a firm basis for this dating.⁸ Mass finds of glazed ceramics appear in Sogdiana starting only from the last quarter of the 8th cen-

8 The detailed study of the glazed ceramics and the glass objects from Sanjar-Shah is currently being prepared for publication by Firuz Aminov and Abdurahmon Pulotov.

ture, after the consolidation of the Muslim rule and the firm integration of the region into the Caliphate (ŠIŠKINA 1979: 67). Therefore, it provides a reliable chronological marker for precise dating when excavating the layers of the 8th century. Many fragments of glazed ceramics were uncovered in the fill of the rooms belonging to the second building phase in

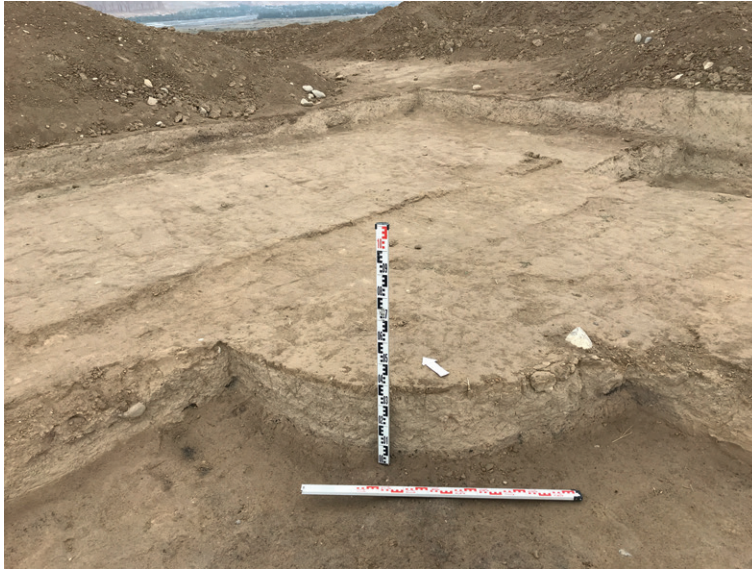


Fig. 35: Area VII, Room 2. A semi-circular *sufa* (photo by the authors).

Area VIII (2a, 3, 5, 6, 8, 10), but also in V/14 near the southern wall of the site (Fig. 33) (AMINOV/PULOV 2021). Assemblages of glazed pottery consist of fragments of jugs, bowls, cups, and lamps typical for the production of the Samarkand workshops. They are dated to the late 8th to the 9th century. Numerous fragments of glass vessels were also found in the abovementioned layers (Fig. 34). Glass vessels are found abundantly in Sogdiana starting only from the last quarter of the 8th to the beginning of the 9th century (RASPOPOVA 2010: 40). The finds from Sanjar-Shah include tableware (cups, glasses, mugs, and juglets), perfume bottles, and beads. All of them find parallels dated to the same period.

For more exact dating within the 9th century, it is important to mention the unusual semi-circular *sufa*, which was installed in the second period in the south-eastern corner of VII/2 (Fig. 35). Similar *sufas* were excavated in the bath complex in the north-western quarter of Samarkand and dated by Galina Šiškina to the 870s CE (ŠIŠKINA 1973: 140, Fig. 6). Therefore, it is possible that the ruins of the former palace continued to be used and modified as late as the early Samanid period.

Both building phases identified in Areas VII–VIII have the same orientation, but it seems that the function of the complex in the second period was different. The space was reorganised; earlier monumental walls were still in use, but they were divided into smaller rooms by building additional thinner, inner walls. Taboon ovens and hearths installed in some rooms suggest that large parts of the former palace were turned into utility rooms.

4 Sanjar-Shah and Panjikent in the 8th to 9th century

The findings of the recent excavations enable a reassessment of the chronology of the site. The earliest material (end of 5th to the 6th century CE) was obtained from the small terrace below the Round Tower by the previous mission. The round core of the tower itself was probably constructed in the early 6th century (SHENKAR/KURBANOV 2019: 315). It seems that this area, closest to the confluence of the rivers, marks the beginning of human occupation of the site. Area II in the easternmost part of the *shahristan* has a complex stratigraphy and several building stages (SHENKAR/KURBANOV 2019: 315–319) (Fig. 36). Early pottery from the 5th to 6th century was found here only in the soundings. The majority of finds from Area II, however, are dated to the 7th to 8th century. Most of the coins are from the first half of the 8th century, but the ceramic material includes many vessels from the second half of the 8th century. Based on stratified complexes, it seems that the earliest excavated rooms in Area II should be dated no earlier than the end of the 7th century, most probably to the beginning of the 8th century. Rooms 21–22 of the “Western Household”, containing burned wooden panels with carvings and simple wall decorations of “trees” and “waves”, were built in the second quarter of the 8th century and destroyed by fire in the second half of the 8th century (SHENKAR/KURBANOV 2019: 315–316). Possibly, this was the same fire that also destroyed the palace in the west.

In previous publications we have suggested that prior to the events of 722, when Panjikent was captured by the Arabs, Sanjar-Shah was the residence of the *framāndār*, the highest administrative authority in the Panjikent principality after the ruler (HAIM/SHENKAR/KURBANOV 2016: 144–146). However, it

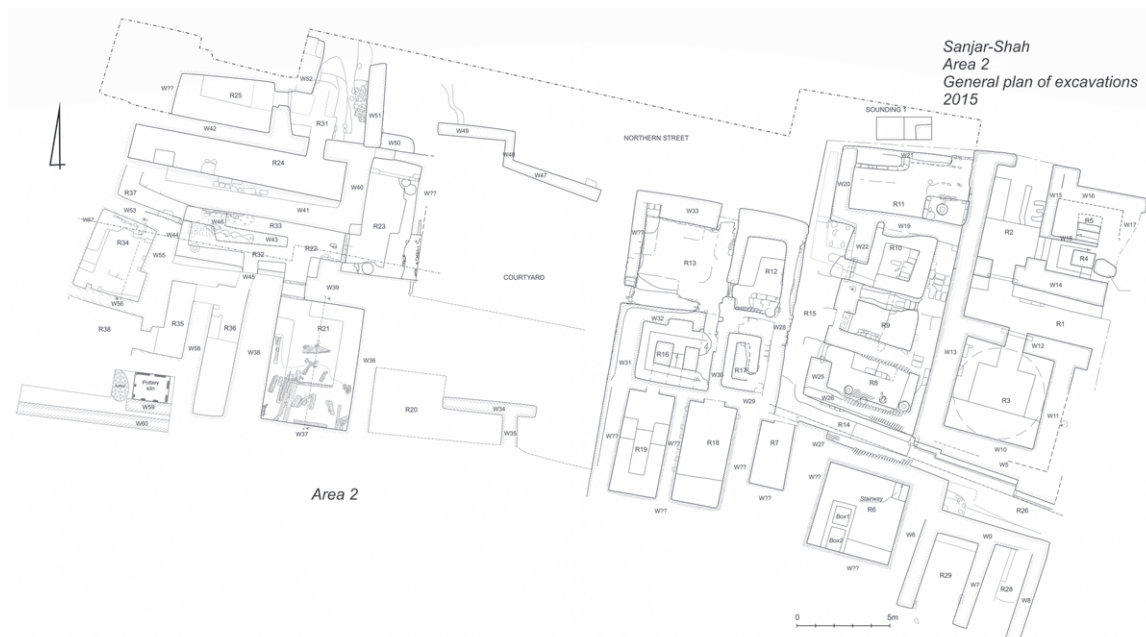


Fig. 36: Area II (drawing by Alexey Akulov and Elena Bouklaeva).

is not yet clear if some previous monumental structure(s) existed in the western part of the *shahristan* at Sanjar-Shah before the 740s and our understanding of the nature of the site before this date remains incomplete.

It is well established that after being partially burned by the Arabs in 722 CE and abandoned for some two decades, Panjikent was rebuilt in the 740s (MARŠAK/RASPOPOVA 2015; for the abbreviated English version, see MARŠAK/RASPOPOVA 2016). This restoration was the result of the pacifying policies of the last Umayyad governor, Naṣr b. Sayyār (738–748), who allowed the Sogdians who had fled during the previous uprisings and unstable period to return home, as reported by al-Ṭabarī:

“When Naṣr b. Sayyār became governor, he sent messages to the Soghdians inviting them to return home and he complied with all their requests. They had asked for conditions that (previous) amirs of Khurāsān had rejected: namely, that those who had been Muslims and then apostatized from Islam should not be punished; that no excessive demands for repayment of debts should be inflicted on any of the people; that they should not be required to pay any tax arrears which they owed to the treasury; and that they should have to return Muslim prisoners only at the decree of a qādī and on the testimony of trustworthy witnesses” (AL-ṬABARĪ Vol. 26: 56–57).⁹

In Panjikent, we see that many households were reconstructed and new ones built,¹⁰ but the temples – the only public buildings in the city – and the palace of the ruler on the citadel were not restored (ABDULLOEV 2009: 62; MARŠAK/RASPOPOVA 2015: 373–374; SHENKAR 2022). No new monumental or public buildings were constructed in Panjikent after the 740s, with the exception of the barracks of the Arab garrison, which consists of several clusters of uniform rooms dispersed throughout the citadel without forming a coherent complex (ISAKOV 1977: 108–109). Surprisingly, the situation at the neighbouring, smaller Sanjar-Shah site appears to be different. The monumental palace, which we are currently excavating in the western part of the *shahristan*, was built in the 740s. Moreover, the find of the coin of Turgar under the earliest floors of Areas IV and V demonstrates that the households in these areas were also built only after 738. Probably the same is also correct for the other areas (Areas III and VI) along the southern wall, since there can be little doubt that they belong to the same architectural programme. It seems, therefore, that the urban development here took place only in the 740s. In contrast to the reconstruction of some private households in Panjikent, Sanjar-Shah under Naṣr b. Sayyār experienced an unprecedented urban expansion into new, previously uninhabited areas, and a new monumental administrative centre was built in its western part.

9 See also BOLŠAKOV 1973: 154; KAREV 2015: 90–91.

10 Raspopova, in her seminal study, lists 70 households for the period of the 740s to 750s (RASPOPOVA 1990: 134). See also MARŠAK/RASPOPOVA 2015: 370–371.

The only monumental building known from the region and dated to this period is the so-called “Palace of Naṣr b. Sayyār”, which was excavated from 1989 to 2003 by the French-Uzbek archaeological mission on the citadel of Afrasiab (GRENET 2008). This huge complex covers an area of about one hectare (115 m × 80–84 m). The building was only partially exposed, but it seems clear that it had two distinctive parts with a large central courtyard. The walls of the palace included semi-circular towers. Both the external and internal walls of the Afrasiab complex were built combining rows of *pakhsa* and mudbrick, which continues the Sogdian building tradition, but the rooms were paved with baked bricks, some of them bearing Arabic inscriptions. This is the earliest example of a massive employment of such pavement, which is rarely used in Sogdian architecture (GRENET 2008: 20). The Afrasiab palace was never completed and part of it was destroyed by fire, which the excavator tentatively attributes to the al-Muqannaʿ revolt (775–780 CE) (GRENET 2008: 23).¹¹ Not every fire detectable archaeologically is, of course, related to violent events recorded in historical sources. Fires happened and still happen accidentally for rather mundane reasons. However, it is tempting to suggest that the Sanjar-Shah palace was destroyed during the uprising of al-Muqannaʿ, thus providing tangible evidence for the violent historical events of this revolt recorded by Muslim sources.

From this comparison it is evident that, unlike the Afrasiab complex, the excavated parts of the Sanjar-Shah palace show full continuation of the traditions of the Sogdian pre-conquest architecture without any new elements like baked brick pavements or Arabic stamps. While these innovations in the “capital” Samarkand can be attributed to the direct involvement of the highest Arab officials present in the city, the architecture of the Sanjar-Shah palace is local – although the complex itself appears to be remarkably large for such a small site. To whom did it belong? Following the Arab conquest, Sogdian society underwent profound social upheavals. Michael Shenkar has suggested elsewhere that the Arab conquest led to the dismantlement of the self-governing civic communities that played a pivotal role in the culture and economy of the Sogdian city states, while many nobles (*dehqāns*) were able to sustain their position and power – and even increase it – under the auspices of the new overlords (SHENKAR 2022).

The barracks of the Arab garrison on the citadel appear to be the only public structure present in Panjikent after 740. The partial repopulation of the city during the 740s most probably took place under the direct administration of the local Arab

commander.¹² The most impressive palatial structure which, judging by its architecture, probably belonged to a local Sogdian noble, was constructed at Sanjar-Shah. These findings indicate that in the 740s and thereafter Sanjar-Shah, rather than Panjikent, became the seat of a regional Sogdian *dehqān* (whose name unfortunately remains unknown), explaining the opulence of this relatively small site. Such a pattern may have a precedent in the exile of the defeated Sogdian ruler, Ghūrak, to the relatively small city of Ishtikhan, situated 60 km west of Samarkand, following the conquest of the latter by the Arab General Qutayba b. Muslim in 712.

The second half of the 8th century was a period of dramatic changes for the region of the Eastern Zeravshan. Numerous small castles and minor settlements that were the most characteristic feature of the landscape during the previous three centuries all but disappeared.¹³ Among the large cities in Sogdiana, only Durmen (27 ha) (see Fig. 1), 20 km to the west of Samarkand, ceases to be a city from the 9th century onward and turns into a village (ŠIŠKI-NA/INEVATKINA 2005: 40). In contrast, Panjikent, the largest city in the Eastern Zeravshan Valley, but only a middle-sized settlement in comparison with central Sogdian cities, was abandoned in the 770s to 780s.¹⁴ Ceramic complexes from the end of 8th to the beginning of the 9th century were found in Panjikent in only three Areas: IX, “Qaynar West”, and “Wine Pressing Basins”. The last two areas are located on the first terrace of the Zeravshan – at the foot of the citadel, and 300 m to the west of it (SAVVONIDI 1992: 12). It seems that in the 9th century, the settlement shifted to the area of “Qaynar West” and covered perhaps several hectares (SAVVONIDI 1992: 147). Savvonidi, who studied the pottery from these areas, observed that for the third quarter of the 8th century, the percentage of tableware declines with a corresponding increase in the share of cookware and vessels for storing and transporting liquids. He suggests that this shift indicates changes in the orientation of the economy (SAVVONIDI 1992: 117). Savvonidi estimates that the combined volume of wine pressing basins in Panjikent was about 6,000 litres, which greatly exceeds the capabilities of local consumption. Therefore, he concludes that even after the city itself was abandoned, there was still a developed commodity-based economy in the hinter-

11 On the al-Muqannaʿ uprising, see KAREV 2015: 161–233.

12 For the impact of the Arab conquest of 722 on Panjikent, see MARŠAK/RASPOPOVA 2015; MARŠAK/RASPOPOVA 2016.

13 ĀKUBOV 1988: 63–64 correctly attributes this transformation to the social changes and the inclusion of the region into the centralised state.

14 Raspopova writes that “[B]y the late eighth century, Panjikent and other small cities of Sogdiana ceased to exist as urban settlements as their elites moved to serve the Arabs in larger cities” MARŠAK/RASPOPOVA 2015: 261.

land, but the former citizens became peasants (SAVONIDI 1992: 119–123).

Recent investigations suggest that in 10th to 13th century, Panjikent re-emerged in the eastern part of the modern city (AMINOV 2018). Some ceramic material dated to the 9th century was also found in soundings in one of these investigated areas (Kuk-tosh), but no floors or walls can yet be dated to this period (AMINOV 2019). It is possible that in the future, when the excavations reach deeper layers, the fact that the settlement was indeed situated here already in the 9th century will be confirmed.

Interestingly, the pottery from Sanjar-Shah from the second building phase in Areas VII–VIII also shows the same picture of an increase in cooking and storage vessels, and a decline in tableware. It seems, therefore, that the same social and economic transformation attested in Panjikent also took place at Sanjar-Shah. However, unlike Panjikent, Sanjar-Shah remained in the same place. Here, for the first time, we present evidence of continual habitation of an urban site in Eastern Zeravshan during the early Samanid period. A similar picture emerges at the abovementioned Durmen, where new rural settlement in the 9th to 11th century did not move to another place as in Panjikent, but continued to occupy part of the former city (ŠIŠKINA/INEVATKINA 2005: 40–42).

5 Town or village?

In previous publications, we have assumed that Sanjar-Shah was a small town. This was based on several considerations. In the 8th century, Sanjar-Shah was the largest settlement in the region after Panjikent. Although Hisorak occupied a larger area (7 ha) than Sanjar-Shah, it is located quite far from Panjikent (240 km) in the upper part of the Eastern Zeravshan Valley, and in terms of its material culture is more closely related to Ustrushana and even Bactria to the south (LURJE 2019: 338–340). This is hardly surprising given that even today the road from Panjikent to Hisorak is difficult and in the pre-modern period travel between the two sites probably took more than a week (LURJE 2019: 337).

Valentina Raspopova suggested that the essential difference between Sogdian cities and villages was the space occupied by a citadel, which was quite small in cities, but could take up to one third of a village (RASPOPOVA 1979: 23–24). Sanjar-Shah lacks the elevated, separate citadel of Panjikent or Bukhara¹⁵ and it is now clear that, at least after the 740s, the palace was located within the city, in its western part. Since its excavations are not complete, we do not

yet know exactly which area was occupied by it. Another important criterion is the nature of the architecture, its layout, and building techniques. The domestic architecture in a Sogdian city (exemplified by Panjikent) was completely different than that of a mountainous village (Gardani Hissor). While urban households all had individual plans with numerous rooms and had a second or even third floor, village houses were single-storey, mostly with one room divided into living and storage parts (RASPOPOVA 1979: 24–25). The households uncovered at Sanjar-Shah clearly share the typical Sogdian urban architecture of neighbouring Panjikent and have nothing in common with the rural dwellings of Gardani-Hissor. Sanjar-Shah is, of course, much larger than any other settlement in the region after Panjikent.

An additional difference between a city and a village, according to Raspopova, is that villages were characterised by a subsistence economy, which made very limited use of coinage. Although no shops have yet been identified at Sanjar-Shah, numerous coins and craftsmen's tools found during the excavations (DOVUDI/KURBONOV 2012; SHENKAR/KURBANOV 2019: 315), as well as forging waste and two pottery kilns, indicate that at least after 740 Sanjar-Shah should be considered an urban settlement. Another indicator of urbanisation is the ratio of handmade to wheel-made pottery. The former is associated with production in villages, while the predominance of wheel-made pottery is typical of cities. At Sanjar-Shah, the percentage of wheel-made ceramics is about 80%, which is comparable with the figures from Panjikent.¹⁶ In contrast, in the mountainous villages of the Upper Zeravshan, such as Gardani Hissor, the percentage of wheel-made pottery is between only 30% and 40% (ĀKUBOV 1988: 197), and the same is also correct for the remote and highland Hisorak (LURJE 2019: 338).

The essential difference between the village and the city in Sogdiana was perhaps the presence of the self-governed civic community in the latter, while in a village all inhabitants were probably personally dependent on a single lord. However, in the absence of written sources, it is impossible to establish its existence at Sanjar-Shah. In her study dedicated to establishing the differences between a Sogdian city and a village, Raspopova notes that in order to fully understand the settlement patterns of the Late Antique Sogdiana, "it is necessary to investigate rural settlements of lowland Sogdiana, where the economy may not have been as subsistence oriented as the highland settlements" (RASPOPOVA 1979: 25).

15 The Round Tower of Sanjar-Shah, although also separated from the *shahristan* by a ravine, clearly had only a defensive function.

16 This updated figure is based on the new analysis of the ceramic assemblages carried out by Abdurahmon Pulotov. For the previous discussion of the Sanjar-Shah pottery, see KURBANOV 2019.

Perhaps Sanjar-Shah was, in fact, such a lowland settlement as Raspopova suggests.

6 Conclusions

Despite our earlier assumption that Sanjar-Shah was abandoned simultaneously with Panjikent in the 770 to 780s (SHENKAR/KURBANOV 2019: 319), these new findings unambiguously reveal that the occupation of the site continued well into the 9th century. This provides important evidence for the continuation of an urban site in the area of the Upper Zeravshan after Panjikent was abandoned during the 770s to 780s. This new and surprising material supplements the picture of the settlement pattern in the region in the early Islamic period, and differs considerably at some points from the fate of Panjikent. It has also become clear that most of the remains uncovered so far at Sanjar-Shah belong to the 8th century, so our current knowledge of the

site before the Arab conquest of the region is in fact quite limited. The majority of the architecture excavated so far at Sanjar-Shah is dated to the 740s and later periods, when the Sogdian society underwent fundamental transformations and the social and administrative realities were already different. Before the 740s, Sanjar-Shah was probably a small settlement of the Panjikent principality. However, in the 740s it experienced a major urban expansion, with new areas built inside the city walls and a monumental "palace" constructed in the western part of the *shahristan*. A possible interpretation of this shift is that the most important Sogdian *dehqān* in the region relocated to Sanjar-Shah and transformed the site into his residence.

In the third quarter of the 8th century, the palace was burned, perhaps during the al-Muqanna' revolt. However, the site was not abandoned, but parts of the building were used in the 9th century as utility rooms, and the settlement seems to have become a village.

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The Three Brothers' Houses?

An Elusive Modular Block in Ancient Panjikent

Pavel B. Lurje

Abstract: The article scrutinises a block of ordinary houses in Area XI-B at the northern wall of Ancient Panjikent, which has been studied by the author since 2014. Fifteen rooms of the block, which were erected not earlier than in 708 CE, are organised into three very similar dwellings with an area of 52–96 m² each. Each one had two oblong vaulted rooms, a kitchen, an entrance corridor, and a passage to the upper floor that did not survive. There are no traces of decoration and all the houses belong to the lower social class of city folk. At a series of synchronous monuments in Sogdiana and beyond, modular houses of lower and middle class people are attested; however, in Panjikent, the most researched city, those have not been documented so far. However, after a more profound examination, the planning and dimensions of the three houses in Area XI-B are not suited to uniform modular sections: there are walled-in passages between the dwellings and all three have the entrances next to one another. Having examined the data on fraternal property according to the Bactrian and Sogdian documents, the author carefully puts forward a hypothesis that the area was built by a modest family, perhaps three brothers that separated from one another over the course of time.

Keywords: Sogdiana, Panjikent, urban developments, modular houses, family relations, beginning of Islam in Middle Asia.

Резюме: Предметом анализа в данной статье является блок рядовых домов на объекте XI-B у северной стены городища Древнего Пенджикента, который исследуется автором с 2014 г. Пятнадцать помещений этого блока, возведение которых следует датировать временем не ранее 708 года, представляют собой три очень сходных жилища площадью 52–96 м²: в каждом из них имелось два вытянутых сводчатых помещения, кухня, входная зона и подъем на несохранившийся второй этаж. Отсутствие декора и скромная площадь указывают на то, что эти жилища принадлежали представителям бедных слоев населения. Для ряда синхронных памятников в Согде и за его пределами характерно наличие модульных домов бедняков и среднего класса, однако в Пенджикенте, наиболее изученном городе, они не засвидетельствованы. Вместе с тем более пристальное рассмотрение показывает, что планировка и размеры трех домов объекта XI-B не отвечают представлению о единообразных модульных секциях: между жилищами имеются заложённые проходы, выходы из всех трех расположены рядом. Изучив свидетельства о собственности, находящейся во владении нескольких братьев, по бактрийским и согдийским документам, автор осторожно предполагает, что постройка этого блока домов была организована небогатой семьей, возможно, состоящей из трех братьев, которые со временем отделились друг от друга.

Ключевые слова: Согдиана, Пенджикент, городская застройка, модульные дома, семейные отношения, начало ислама в Средней Азии.





Fig. 1: Plan of ancient Panjikent (by Alexei Akulov with additions by the author). Area XI-B is in a darker outline.

1 Panjikent as the most researched Early Medieval city in Middle Asia

Ancient Panjikent (see **Fig. 1 on page 328**), the Sogdian city that flourished between the 5th and 8th century CE, is located at the eastern end of the ancient land on the Zeravshan River within the limits of the modern homonymous city in Tajikistan, and is best known for its monumental art: mural paintings and sculpture. The excavations conducted there annually since 1947 have revealed, moreover, a great amount of precious materials relating to its everyday life. More than half of the city, which occupied 13 hectares, has been excavated so far. The significant part of the excavated area comprises temples, a citadel, a palace, fortifications, streets, workshops, bazaars, village houses, and a necropolis outside the city wall (**Fig. 1**).

The major part of the excavations, however, is constituted by the houses of Panjikent's inhabitants, who once adhered to different social levels. The principal reference concerning the houses is the book of Valentina I. Raspopova, in which the houses of different strata and different periods are

compiled and analysed in great detail, with particular emphasis on the sociology of the ancient city (RASPOPOVA 1990). The significant part of the book consists of the catalogue of households and rooms, encompassing roughly 900 rooms organised into some 160 households of the late 7th to the third quarter of the 8th century CE (ibid: 27–68), and is appended by a number of plans, axonometric projections, cross sections, and photos of the houses of different areas.

Raspopova recognised the houses¹ of rich, medium, and low social status city inhabitants, depending first of all on the size and presence of decorations. The low social level houses had a ground area between 36–100 m², and the rich ones 330–900 m², and the biggest one occupied an area of 2,100 m² (ibid. 1990: 129–134). The houses adjoined one another, forming blocks between the streets of the city. There were poor blocks, and even among the rich blocks the aristocratic houses intermingled with

¹ According to Raspopova's classification, a household (*domokhozjajstvo*) was a house with adjoining, yet separate, space such as (work)shops; and a dwelling (*žiliše*) is an integral residence of one family.

humble ones. There were no unified house plans (few typical plans are drawn in RASPOPOVA 1990: 148), although they consisted of similar structural elements: an economic area, a living area and, in the case of more prosperous houses, a reception area. Decorations have been recognised in all houses exceeding 170 m². The houses were of two, or maybe three, storeys with winding ramps (*pandus*) and staircases leading upward. Among the typical rooms there were vaulted rooms with a maximum width of 3 m, often with an attic, granaries with chests covered with alabaster plaster, kitchens with ovens, antechambers (next to the entrance), and open verandas (*ayvān*) at the entrance. The reception could consist of square rooms with a wooden ceiling, L-shaped couloirs, and so-called “chapels” with a decorated fire-niche attached to the wall.² Inner yards were a rarity, which is not a surprise given the high density of habitation within the city.

One should note that several areas that were studied during the first decades of the excavations were not included in the catalogue due to insufficient data.³ For more than 30 years after the publication of this book, the excavations continued and the information on the living blocks of Panjikent has been constantly increasing. There are over 200 rooms excavated between 1990–2021 in Areas VI-C, XI-B, XXIII, XXV, XXVI, XXVI-C, XXVIII, XXIX, and XXX. The results of 1998 and the following years have been published on a yearly basis in the fascicles of *Materialy Pendžikentskoj arheologičeskoj ekspedicii*, and more condensed reports have appeared in the collective volumes of *Arheologičeskie raboty v Tadžikistane* and *Arheologičeskij sbornik Gosudarstvennogo Ėrmitaža*. Meanwhile, the results of Areas XXI and XXIII have been published as monographs (ABDULLOEV 2009; RAHMATULLAEV 2015).

Of course, the majority of households follow the patterns described in Raspopova's book. I want to stress that, while casting relatively little new light on the household patterns, the excavations of the last decades have enriched the archaeologists with new materials on the fortification and planning of the city, as well as its stratigraphy, and have provided numerous new finds ranging from many examples of monumental art to coins and rich pottery assemblages. However, there are a few noticeable exceptions in respect of the households. One of them is a three-room upper layer structure, which obviously belongs to the latest period of the city's life, located at the eastern city wall; a central fireplace in the square room was its distinctive feature (Area XXVI/32, 37, 38; KURBONOV/ČIŽOVA 2012; KURBAN-

ov/LUR'E 2019: 30). Another one, in Area XI-B, will be discussed below.⁴

2 Excavations in Area XI-East during 2016–2021 – main results

Area XI-B (XI-Восток, i.e. East) is located at the northern edge of the *shahristān* (the walled city) of Panjikent (Fig. 2, Fig. 3). It is immediately to the north of Temple II, and depressions of moderate depth separate it from Area IX to the east (at 80 metres' distance) and Area XI to the west (at 30 metres' distance). The excavations started in 2014 and are to be continued. The author of this paper is a supervisor of the area. However, the excavations are always a collective work and I am grateful to the team members who assisted me at various stages: Ė. Kurbanov, A. Čižova, Š. Kurbanov, N. Frolov, R. Garsia, and especially V. Paršuto, who led the excavations during my frequent absence from the field. In this area, as in all others, the excavations would have been impossible without earthwork conducted by high school pupils and students from Panjikent.

The dimensions of the area after the 2021 season are 53.5 m (E-W) by 20 m (max. 36 m), the overall area is ca 1,000 m², the depth of excavation varies between 1 and 4 m (one has to keep in mind that more than one third of the area is occupied by walls, which were not removed). Thirty-one ambiances (among them three open-space) have been excavated so far (six of them partially). They all belong to one block of the city.

On the northern side, the block immediately adjoins the northern fortification wall. It is noteworthy that the northern wall has not been recognised at any other spot of the site, and it was supposed that it was lost in the steep slope of the terrace (SEMENOV 1996: 20). However, the excavations at XI-B revealed the wall, consisting of the core wall and outer cover. The initial wall, ca 1.5 m wide at the top, had at least one tower (re-used later as Room 13 from inside) with archers' loops, the upper part of the outer façade of the initial wall was almost vertical (preserved to 1.9 m in height), and an escarp was below it and a sloping wall underneath. The upper part of the wall was made of bricks; and the lower

2 As I argued, these rooms were likely winter living chambers (LUR'E 2014).

3 Regrettably, they include area XI excavated by K.G. Bol'shakova in 1954 (VORONINA 1964: 58).

4 L.O. Smirnova (SMIRNOVA 2019) in my view overestimated the unusual features of the “House of Tišfarn” in Area XXVI-S. It seems to be a rather standard house of the first half of the 8th century CE, with two undecorated square rooms on the ground and upper floors, and small storage rooms that she interprets as shops (abnormally located in the centre of the house). The small square at the junction of the streets with entrances to this house and two other houses was indeed an unexpected feature of the city plan.



Fig. 2: Area XI-B. Aero photo at the beginning of excavations in 2014, view from the north (by the author). Room 1 is in the foreground, Area XI on the right-hand side, Temples II and I are behind Area XI-B.

one, as well the secondary cover, of rammed earth (*pakhsa*). The pottery of the secondary wall belongs to the period Panjikent IV–V–VI and thus is dated to the 7th century CE at the earliest. The initial wall, due to the presence of a rectangular tower and archer loops, bears closest similarity to the initial wall of Panjikent dated to the 5th century (second stage, SEMENOV 1996: 80–83).

To the south of the block, a cross section of the street leading from the east to the west was cleaned. The street adjoins the northern outer wall of Temple II and probably originates at the north-eastern gate of the city, and its other section is perhaps detected on the southern side of Area XXX in the west, although its reconstructed run was hardly straight. The width of the street is 1.7 m, and eight surfaces of the street were detected; and although the depth of the trench reaches 3 m from the surface, only material not earlier than 7th century has been recognised so far.

The eastern part of the block is occupied by a third, minor temple of Panjikent. It comprised an open yard (26) no less than 12 m long and perhaps 11 m wide, and a 3 m wide veranda (*ayvān*, 20) to the north of it. To the west, a low ramp led to the central portico of the temple (14) (7 × 8.5 m), where two square stone bases of columns survived. To the west of it, there was a small sanctuary (9) (5 × 2 m)

with a depiction of the goddess Nanaia; traces of a depiction of warriors and a geometric pattern were detected at the portico. To the west of the northern *ayvān*, there was a room partially encompassing the fortification tower (13) (6 × 3.5 m) and another one to the west of it (9) (8 × 4 m); they were probably used as a storage facility (treasury?) of the temple. To the south of the shrine, there is a complex of two small rooms (4 and 5) (8 × 4 m) with a passage to the street – we believe it to be a shop.

Several stages of the temple's development have been recognised. It is noteworthy that the temple was probably rebuilt after the fire of 722 CE, when one of the main temples of Panjikent was burned and another one shows mostly secondary squatter inhabitation (ŠKODA 2009: 48–49). This third temple, so far as we can judge from the unfinished excavations, is most similar to minor shrines of Sogdiana, such as that of Jar-tepe (see **Fig. 1 on page 328**); moreover, Markus Mode recently put forward compelling arguments in favour of considering some rooms of the residence Area III as minor shrines (MODE 2019). The publication of the third, minor temple awaits its complete excavation. The subject of the present paper is, however, the residence area in the western half of Area XI-B.

In Area XI-B, we tried our best to conserve the excavated space. Therefore, almost all rooms were

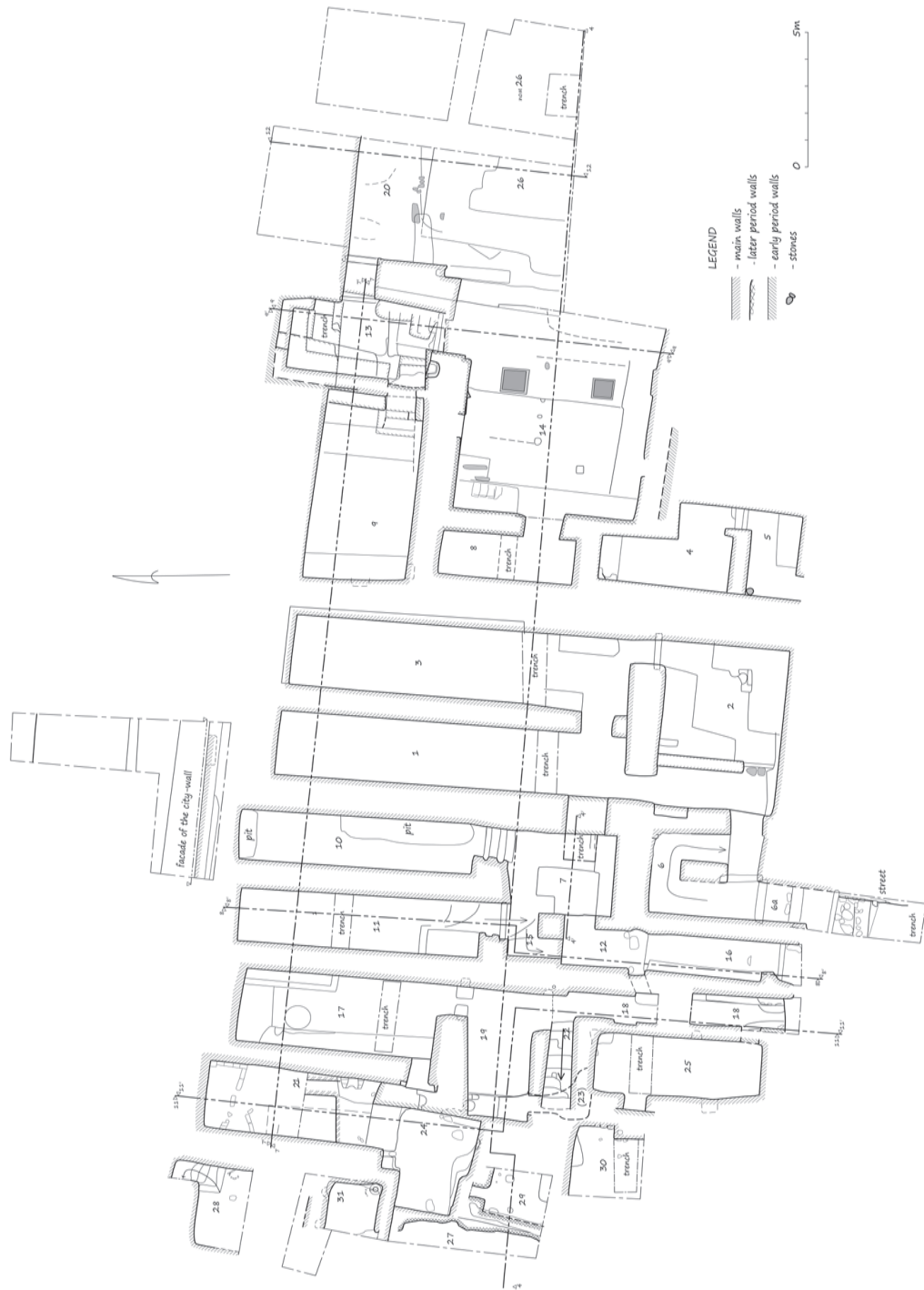


Fig. 3: Area XI-B. Plan (by Alexei Akulov and Elena Bouklaeva with additions by the author).

No.	1	3	10	11	17	21	25
Dimensions	11.65 × 2.3 m	11.2 × 2.7 m	7.9 × 1.9 m	8 × 2 m	6.5 × 2.8 m	6 × 2.9 m	5.5 × 1.75–2.4 m
Attachment to the city-wall	A secondary brick wall built under the vault	A secondary brick wall, plaster continues behind it	To the body of the wall proper	To the body of the wall proper	A secondary <i>pakhsa</i> and brick wall, largely destroyed	A secondary brick wall	Does not adjoin
Plaster	Fine plaster on all walls	Coarse plaster (traces)	Traces of fine plaster	Without plaster	Traces of plaster	No	Traces of fine plaster
Attic	1.75 m above the floor	2 m above the floor	1.6 m above the floor	No data	1.6 m above the floor	No	No
Storage facilities	A niche?	A granary chest of slates with alabaster covering on the attic	A pit with broken <i>khums</i> at the W wall; a pit at the N wall	A plastered chest at the SW corner	A pit for a <i>khum</i> ; another pit; a passage to the W turned into a cupboard	No	Niche from the passage in the W wall
<i>Sufas</i> (podiums)	Low <i>sufa</i> in the SE corner	Low <i>sufa</i> at the W wall	No	No	At N, W, and E walls	E wall (early floor) N wall (later floor)	No
Number of floors	One (secondary floor above garbage level?)	Two?	One	One	Two	Two	Two
Passages	S, to Room 2; E to Room 3; W (walled up and plastered)	S, to Room 2; W to the room 1	S, to Room 7 with two thresholds	S, to Room 15	S, to Room 19, W to Room 21 (walled and re-used as a cupboard)	S, Room 24 (with stair) E, Room 17 (rebuilt as a cupboard, the back wall is within Room 21)	NE, Room 23; E, Room 18 (walled from inside) W, Room 30 (walled from outside)
Other features	Significant pottery complex from the garbage deposit above the floor	The earlier floor was recognised only at the E wall	<i>Khums</i> were deliberately broken and placed into the pit; bricks 40–42 × 22–25 × 10–11 cm form the vault (from the debris)	Broken <i>khums</i> in the garbage level above the floor	Some bricks of the vault are 40 cm in length	A two-storey oven from the second floor	

Tab. 1: Vaulted rooms oriented N-S.

recultivated with waste soil (usually of the neighbouring room), having been completely excavated at the end of the season or in the following season. Consequently, it is impossible to provide overall photography of the excavation and we have to rely on plans and cross sections for a more general picture. Moreover, with this method of recultivation it appears very difficult to reconsider a room with additional cleaning, and to examine the junctions of rooms from different sides.

3 The living block in the western part of the area

Eighteen rooms have been excavated in the area (28 × 20 m), and they show all the features of a Panjikent residence. They consist of oblong vaulted rooms (1, 3, 10, 11, 17, 21, 25), shorter rooms with household facilities (2, 7, 19, 24?), narrow corridors leading to the street (6a, 16–12, 18), a winding ramp (*pan dus*) (6), and staircases (15, 22). The nature of five rooms on the western end (24, 27–31) is unclear

Number	2	7	19
Dimensions	6 (E-W) × 4 m	3.5 (N-S) × 2.9 m	4.6 (E-W) × 2 m
Ceiling	Vault 4 m wide	Vault	Vault?
Plaster	Fine	Fine	Did not survive
Number of floors	Three (lower in a trench)	Two (upper above the debris level)	Two (?) (lower not excavated)
Passages	One to the W (Room 6), two to the N (1 and 3)	One to the N (Room 10), two to the W (Rooms 15 and 12), walled-in one to the E (Room 1)	Two to the south (Rooms 18 and 23), one to the N (17)
<i>Sufas</i>	Two L-shaped <i>sufas</i> in the eastern part of the second floor; <i>sufas</i> at the N and S walls from the upper floor	Along the S, E, and N walls; a smaller <i>sufa</i> or chest at the S wall of the upper floor	At the western wall with several stages
Ovens	Oven at the S and E <i>sufas</i> with a dug-in jar in front	A small pit-oven on the N <i>sufa</i> ⁶	On the <i>sufa</i> in NW corner
Storage facilities	Granary chest without covering; storage niche under Ramp 6	Tagara (basin) dug in the floor, chest or <i>sufa</i> of the upper floor	Not attested
Other features	Tambour wall separating the entrance to Rooms 1 and 6 from the E; covering of <i>khum</i> walls on the second floor		

Tab. 2: Kitchens.

due to the unfinished excavations.⁵ The architectural structure of the more common types of rooms is better represented in the following table.

3a Architecture

A. Vaulted rooms oriented N-S (all rooms except no. 25 attach to the northern city wall with their short side); see **Tab. 1**.

B. Kitchens; see **Tab. 2**.

C. Entrance corridors leading from the street; see **Tab. 3**.

5 This short conspectus is based on the detailed description in the volumes of MPAË. Rooms 1, 2, and (partially) 3 are published in MPAË Fasc. XVIII: 19–28; Rooms 3 (continuation) and 6, 7 (beginning) in MPAË Fasc. XIX: 11–15; Rooms 6 and 7 (second part) and 10 in MPAË Fasc. XXI: 17–22; Rooms 11, 15, 12–16 (partially) are in MPAË Fasc. XXII, 6–10; Rooms 12–16 (second part), 17, 18, 19 in MPAË Fasc. XXIII: 16–24; Rooms 21, 22, and (partially) 23, 24, and 25 in MPAË Fasc. XXIV: 16–25; All these fascicles can be consulted online at <https://hermitage.academia.edu/PavelLurje/Excavation-reports>. The continuation of excavations of Rooms 21, 23, 24, 25 as well as the beginning of Rooms 27–31 appeared in the Fasc. XXV of MPAË (2022).

6 Not mentioned in the report, but visible in the photo (**Fig. 4**).

D. Ramps and staircases (6, 15, 22).

These elements are so different in construction from one another that tabular representation cannot be maintained.

Room 6 is a classic winding ramp (*pandus*) of Panjikent. It is square in plan with a size of 3.5 (E-W) × 4 m. Its centre is occupied by a pillar. Three flights of the ramp, on its W, N, and E sides, have been excavated. The elevation winds clockwise and reaches a height of 2 m, almost up to the surface. The flights were covered with vaults (some of them survived), and in the corners were squinches made of small mudbrick arches. The height of the flights was 1.8 m in the centre. The walls were made of bricks. Interestingly, some bricks of the construction had an unusual length of 40 cm; some others were hewn in a trapezoid shape. The ramp was placed on bricks of initial stairs, which were largely worn. Two floors have been identified. In the lower part of the ramp, the top one was covered with sherds and was separated from the lower one by a thick garbage layer. From the bottom, a passage to the south led to the short inner corridor (6a), and another largely destroyed one under the eastern flight led to Kitchen 2. A niche at the N end of the W wall of Room 2 was initially probably a storage chest under the ramp (not unlike the cupboard under the stairs where Harry Potter used to live in his uncle's house!).

Staircase 22 is a very easy, straight flight leading from the east (Room 18) and reaching a height of 2 m with a length of 3.8 m; the width of the stairs is 75–90 cm and it is separated by a wall 55 cm thick from neighbouring Room 19. Under the stairs, there

Number	6a ⁷	12–16	18
Dimensions	2 (N-S) × 1.5 m	7 (NS) × 1.4–1.7 m	8 (NS) × 1.3 m
Ceiling	Unclear	Vault (preserved in central part)	Vault (partially preserved)
Plaster	Not preserved	Fine	Fine
Number of floors	Two	One (maybe two at the entrance)	Two (one above the <i>sufa</i>)
Passages	N, to Ramp 6 and passage under the ramp; S to the street	E, to Room 7 on the N side; S to the street; possibly a walled-in passage in the W wall at the junction of Rooms 12 and 16	N, to Room 19; northern side of the W wall, to Staircase 22; southern side: to Room 25 (walled in), S, to the street; probably walled-in one to the E at the end of <i>sufa</i>
Structure of passage from the street	Three passages with wooden threshold, at different depths and belonging to two stages of development	Wooden threshold enhanced with pebbles; elevation towards the entrance	Thresholds of the upper and lower strata; probable remains of initial entrance to the 1.7 m to the north
<i>Sufas</i>	No	At the W wall	At the E wall
Other features	Upper floor covered with large sherds	2.8 m from the north there is a threshold that divides it into Rooms 12 (north) and 16 (south)	

Tab. 3: Entrance corridors leading from the street.



Fig. 4: Room 7 with an oven; under the horizontal scale, passage to Room 10 (unfinished) (photo by the author, 2016).

was a so-called “Room 23”, which was later identified as a collapsed passage to Room 25. Looking at the simple structure of the stairs, one would suppose that it was a secondary construction, yet there is no definitive proof of this assumption.

⁷ The number used for convenience in this paper. During the excavations, it was not separated from Ramp 6.

Room 15 is unusual (**Fig. 5**). It starts as a ramp leading from the west wall of Room 7 and adjoins the entrance from Room 11 from the north; there is significant elevation from there. Along the north and east flights it is 2.1–2.3 m long, it reaches a height of 1.3 m, and abruptly ends in what looks like a window in the upper part of the northern wall of Room 12. In the upper part of the eastern and western walls

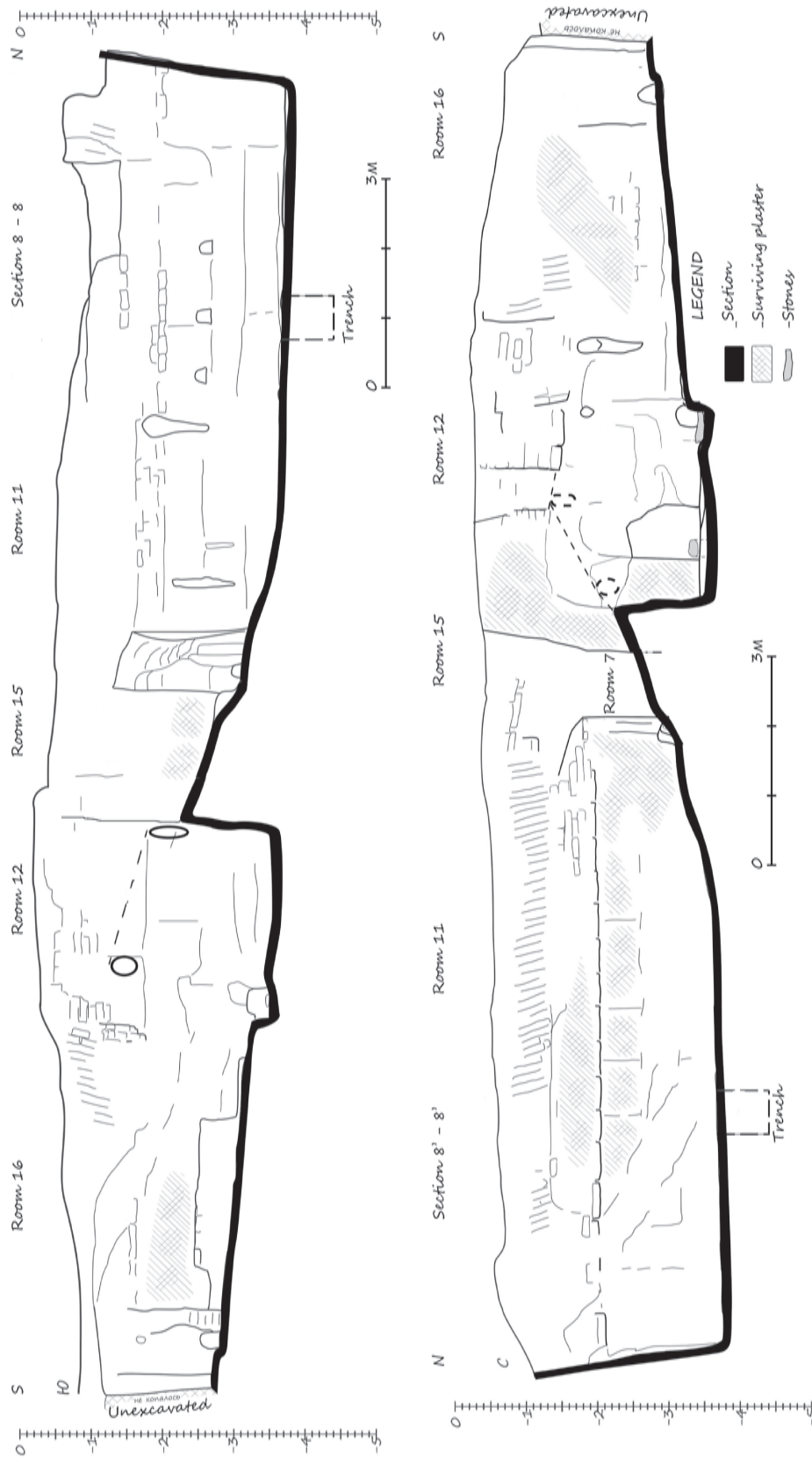


Fig. 5: Architectural cross section 8, 8' through Rooms 11, 15, 12, and 16. A dashed line indicates the reconstructed wooden ramp (by Alexei Akulov with modifications by the author).

of Room 12, however, we notice sockets for beams: one (recognised in the west wall) closer to the north wall at an elevation of 1.3–1.8 m; another one 1.35 m from it at an elevation of 1.85–2.2 m. In the east wall only a socket at a height of 1.8–2.1 from the floor and 1.5–1.65 m from the northern wall survives, the existence of a lower one closer to the stairs might be presumed. To its right in the east wall, we recognise a passage at a height of 2.4 m. The south end of the latter corresponds to a protrusion of the wall above the passage between Rooms 12 and 16. We suppose thus that the lower part of the ramp here was made of adobe bricks, and its upper section was placed on wooden beams. A similar structure has been recognised in the rather large “House of Tishfarn” in Area XXVI-C.⁸

Anticipating the following discussion, we can say now that the rooms belong to three similar houses or dwellings. House A consists of Rooms 1, 2, 3, 6, and 6a, House B of Rooms 7, 10, 11, 15, and 12–16, and House C of Rooms 17, 18, 19, 22 and 25. The relation of these rooms to those to the west (21, 24, etc.) will be analysed further.

3b Stratigraphy, coins, and dating

The majority of the rooms discussed above have one floor and the floors are located on roughly the same level. The difference of two floors is often in the disposition of *sufas*, and the position of the walls on different floors remains the same; the difference in the height of these floors is small. The floors of the entrances to the houses (6a, 16, 18) show an elevation of the floor towards the street. Obviously, the rise of the street deposits was faster than that within the houses. The upper floors in Rooms 1, 2, 6, 7, 17, and 18 are located above the garbage level and they look like secondary habitation. However, in Room 2 it is clear that the original planning of *sufas* and a tambour wall was deliberately restored above the garbage. We do not encounter attachments of secondary walls (save those reinforcing the city wall from the inside). The larger part of the debris within rooms consists of fallen brickworks. These bricks once belonged to now collapsed vaults and walls of the lost upper floor of the houses.

In many vaulted rooms attached to the city wall (as well as some others) we made trenches E-W, which allowed us to distinguish the same substructions (Fig. 6): the ground was levelled and above it pebble and loess virgin filling were placed, from where the walls were erected. The living floor was placed on a pavement of adobe bricks. In no case, however, did this construction take place on virgin soil. In the trenches below constructive floors we see debris with some pottery (often looking quite archaic), as well as ashes, and there are garbage pits

and elements of earlier construction (especially in Room 21). All in all, there is no reason to doubt that the habitation of the rooms on the main floor was simultaneous.

Coins are the main instrument for understanding the absolute chronology of the building, here represented in a tabular way (anticipating the consequent discussion, they are organised according to three houses; Rooms 24 and 21 that adjoin to the west are included in the discussion as well) according to the well-established sequence of coins of Panjikent (Tabl. 4).⁹

Of these 100 coins, the majority are well-known types in Panjikent and elsewhere in Sogdiana; just a few require some commentary (Fig. 7).

1. A bronze coin of Chamukyan without a square hole. Diameter 2.5 cm, weight 5.9 g. The coins of Chamukyan (outdated reading *Amogian*) are a rather common type in Panjikent and to my knowledge have not been found elsewhere. The reading of the coin *pncy MR'Y cmwky'n* “Chamukyan, ruler of Panch”, as well as the similarity of one *tamga* on the reverse with the one present around the square hole on the coins of Bilge and “Panjikent Queen”, and the significant size and quality of these coins make it clear that it is a Panjikent issue, predating the latter two (SMIRNOVA 1963: 91–92). Normally these coins have a square hole, while here the hole is completely filled with metal. The enormous weight of this specimen (5.9 g, normally 4–5 g) is no doubt due to this extra metal. There are known specimens where the bronze has leaked and is visible inside the hole,¹⁰ but here it is totally occupied. Moreover, one can recognise a small triskelion within the square hole on the recto (cf. the same positioning on later Kesh issues of Akhurpat) and a large dot on the verso, so I prefer to think that the filling of the hole was intentional.

2. A fals (copper Muslim coin), diameter 2.3 cm, weight 2.8 g. Very little of the marginal legend survives, so that it is impossible to read the date and place of issue. The recto can be read as stan-

⁹ Here is not the proper place to discuss the principles of this dating, which is based on identification of rulers and stratigraphic considerations. See first of all the catalogues (SMIRNOVA 1963; 1981) and the important article of Belenickij and Raspopova (BELENICKIJ/RASPOPOVA 1981). The name *Ukkurt Chamuk* is a presently accepted reading of the outdated *Ukar, Chamukyan of Amogian, Bilge of Bidyan, Bidkan*.

It should be noted that the earlier coins were not removed from the exchange by the later rulers of Panjikent, but continued to function alongside the newer ones.

¹⁰ For example the one at Zeno.ru website, #211750, accessed on 11.10.2021.

Stratigraphy	Second half of the 7th century	Eve of the 8th century	Before 722	738–750	750–770	Without date	Unclear
House A, debris							
Room 1, brick deposit	Varkhuman (?)		Ghurak without hole; "Panjikent Queen"	Turghar type II (3 pcs)			
Room 2, brick deposit				Turghar type II			
Damp from Room 3(?)	Chamukyan without hole						
Room 3, below the cornice			Ghurak without hole				
Room 3, debris lower part					Fals of Dāwud of unusual type		
Room 6, brick deposit						Chach coin with a feline	Unidentified fals or copper plate
House A, garbage above the main floor and secondary floor							
Room 1, above the main floor			Ghurak without hole				
Room 2, between the upper and second floors							With square hole; Samarkand(?)
Room 6, above the main floor		Ramchitak(?)		Turghar type II(?)			
Room 6a, in the second socket of threshold					Fragment of unidentified fals		
House A, the main floors							
Room 2, second floor from above			Ghurak without hole (2 pcs), "Panjikent Queen", Tarkhun				
Room 3, on the floor	Varkhuman of minor size? ¹¹						With square hole and inscription on two sides
Room 6, attached to the wall			Tarkhun				
Room 6, floor			Tarkhun, Ghurak without hole				

11 In the field and report (MPAÈ XIX: 33), the coin was attributed to Turghar type I. However, re-examination shows that it is most likely a minor issue of Varkhuman or a coin of Tarkhun.

Stratigraphy	Second half of the 7th century	Eve of the 8th century	Before 722	738–750	750–770	Without date	Unclear
House B, debris							
Room 7, debris				Turghar type II			
Room 10, fallen vault		Ukkurt Chamuk				Chach coin with a feline	A coin with square hole; a scyphate coin; a coin or a copper plate(?)
Room 11, debris		Ukkurt Chamuk					
Room 12, lamination							Fragmented with square hole (2 ex)
House B, garbage level							
Room 7, above the floor				Turghar type II (2 pcs)			A coin with square hole; a fragmented coin(?) without hole
Room 10, above the floor							A coin with square hole
Room 11, potsherd deposit above the floor		Bilge (2 ex)					
Room 15, next to the floor			Ghurak without hole				
House B, main floors							
Room 7, attached to the fallen brick of vault							A weathered coin(?) without a hole
Room 7, on the floor			“Panjikent Queen”			Bukharan drachm of small flan	
Room 10, on the floor				Turghar type II		So-called “Parghar” coin	
Room 10, a pit with fragmented <i>khums</i>			Tarkhun; Ghurak without hole	Turghar type II (3 pcs); and type I; Ghurak with hole (2 pcs)		Chach coin with a feline	
Room 11, on the floor, chest, and ramp (entrance)		Bilge (3 ex)	“Panjikent Queen” (4 ex)	Turghar type II		Coin of Sumetan(?)	Fragmented coin of Samarkand(?)
Room 12, floor				Turghar type II (2 pcs)		Chach coin with a feline	

Stratigraphy	Second half of the 7th century	Eve of the 8th century	Before 722	738–750	750–770	Without date	Unclear
Room 16, floor							Four destroyed coins
House B, under the floors							
Room 11, trench, constructive floor(?)			“Panjikent Queen”				
House C, debris							
Room 18, debris		Bilge	“Panjikent Queen”				
Room 19, debris		Bilge	Ghurak(?) without hole (fragmented)	Turghar type I			
Room 25, debris			“Panjikent Queen”				
House C, garbage level above the main floors							
Room 17, slightly above the floor							Samarkand
Room 18, upper floor							A fragment with square hole
Room 19, above the floor							Panjikent coin(?)
House C, main floors							
Room 17, main floor		Bilge					Destroyed one with square hole(?)
Room 17, in the entrance		Bilge					Panjikent one(?); unidentified with square hole
Room 17, from the pit at the entrance	Varkhuman (?)		Tarkhun (?)				
Room 17, from the pit for <i>khum</i>		Ukkurt Chamuk					
Room 19, on the floor		Bilge (2 pcs)					Destroyed one with square hole
Room 25, the first floor		Bilge (2 pcs)					
Room 25, the first or second floor		Bilge					
Appendix, Rooms 21 and 24 to the west							
Room 21, main floor			“Panjikent Queen” (2 pcs)				

Stratigraphy	Second half of the 7th century	Eve of the 8th century	Before 722	738–750	750–770	Without date	Unclear
Room 21, below the main floor		Bilge 2 ex					
Room 21, in a trench below the constructive floor	Varkhuman						
Room 24, debris		Bilge	Tarkhun(?)				
Room 24, between the first and second floors							Two fragments without hole
Room 24. Second floor			Ghurak without hole (fragmented)				
Room 24, between the second and third floors	Chamukyan						
Room 24, on the bottom of a pit		Ramchitak					

Tab. 4: Stratigraphy, coins, and dating.

dard (*lā*) *ilāha* | (*ilā*) *Allāhi* | (*w*)*ahi(d)*[*uhu*]; the inscription on the verso can be reconstructed as *lā as(a)lukum alayhi | ajra* (*i*)*lā al-mawaddat*^m *fi al-qurbī* “I do not ask of you a wage for this, except love to the kinsfolk” (Qur’ān 42: 23, Tr. ARBERRY 1955: Vol. 2, 195). There are three dots at the bottom. The legend and layout of the coin are almost identical to those issued by *amīr* Dāwud b. Kurāz(?) in Samarkand in 143 AH (760–761 CE), a very common type in Panjikent (SMIRNOVA 1963: 139–141; NASTICH n.d.: 17–18). However, in all other issues of Dāwud that I was able to see, the dots below form a triangle pointing down (°), while on this specimen it is inverted (°.); an example with this orientation is described by Smirnova (SMIRNOVA 1963: 140, No. 810), but not illustrated. There are no traces of the “spiral rosette” usually seen below the text on the recto of Dāwud’s coins. The inverted dotted triangle (°.) is, however, attested on the fals series of al-Ḥasan b. Ḥamrān of Balkh (142 and 145 AH) and on unidentified fals (140 AH) found in the Surkhandarya region (NASTICH n.d.: 11–12), but the inscriptions on both do not fit well. We are probably dealing here with a variant issue of Dāwud.

3. The single silver coin (with significant copper alloy) found in the houses is a Bukharkhuda drachm, diameter 2.5 cm, weight 2.2 g (note the loss at 10–12 o’clock). The Bukharkhuda

drachms, starting as local imitations of Sasanian Varahran V drachms of Merv (420–438), and lasting until the reign of al-Amīn (809–815), and in use even in the Karakhanid period, are one of the longest imitative series. There were very few changes in the iconography and epigraphy over the course of five centuries, so the dating of Bukharkhuda coins is difficult. This coin, like many others found in Panjikent (GARIBOLDI 2017: 62–81), belongs to the category “Later drachms, struck on small compact flans, ca. AD 725–750” according to the recent classification of Aleksandr Naymark (apud <https://www.zeno.ru/showgallery.php?cat=2580>).

4. The copper coin of the so-called “Parghar principality”, diameter 2.2 cm, weight 3.7 g, belongs to a very rare series. Smirnova (SMIRNOVA 1981: 229, No. 734) knew of only one specimen kept in the Samarkand Museum; four more have come to light by now (<https://www.zeno.ru/showgallery.php?cat=2747>, one of them reportedly from Beiting near Urumqi!), and our one is the only example discovered during archaeological excavations. The obverse of the coin contains the common Sogdian words *prn* “glory” and *βγγ* “lord”, as well as Samarkand *tamga* and a *tamga* in the shape of crescent with dot atop. Smirnova read the recto Sogdian inscription as *pr/γr (?) γwβw* ‘... and interpreted it as the coinage of Parghar

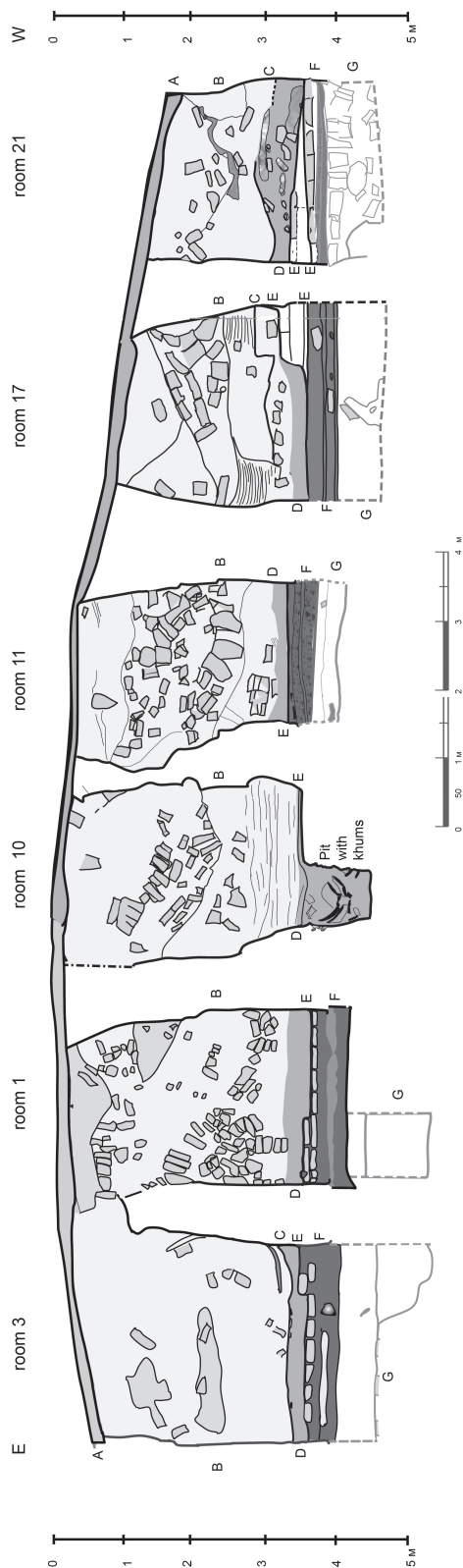


Fig. 6: Stratigraphic cross-section through the vaulted rooms attached to the northern wall (by the author, V. Parshuto, and K. Trofimova). A – Surface layer; B – Destruction layer; C – Secondary floors; D – Garbage layer above the main floors; E – Main floors and sufes; F – Constructive floors; G – Layers of the lower horizon.

(Falghar, modern Ayni in the Upper Zeravshan Valley); I would prefer to transliterate *ynt(kn?) p'(x'k?) xwβw*. I will leave the explanation for another occasion, but would note here that the Samarkand *tamga* and crescent relate this type to the coins of Turghar, and the overall size and execution is most similar to the coins of Ghurak with the square hole. Moreover, our specimen has been found on the floor of Room 10, where (on the floor and in the pit, as well as in the neighbouring Room 11) many coins of Turghar and Ghurak with the square hole have been found. It all allows us to date the coin to the second quarter of the 8th century CE and to locate its mint in the Samarkand Sogdiana or a region with close ties to the latter.

As we can see from this table, the construction of the houses did not start earlier than the beginning of the rule of Dewashtich (supposedly in 708), since the coin clearly bound with his rule (the “Panjikent Queen”) was found in the constructive floor of Room 11. The coins in the substruction of Room 21 (Bilge, the predecessor of Dewashtich, eve of the 8th century) and Varkhuman (the king of Samarkand in the third quarter of the 7th century) do not contradict this dating. As for the occupation of the houses, it seems that the main floors of Houses A and C do not have post-722 coins. There are a number of coins of a later date (730s to 740s; Turghar and Ghurak with hole) on the floors of House B. It is noticeable that, unlike the neighbouring houses, its oblong rooms do not have secondary floors above the garbage levels. Probably, after the temporary abandonment of the city in 722, garbage was collected in Houses A and C, while House B remained clean enough, so occupation continued there on the main floors, and the house was abandoned around 750. In the other houses, there were attempts at habitation during the 730s to 760s with new floors above the garbage.

The relatively rich pottery complexes of the houses also are characteristic of the first half of the 8th century CE. We should bear in mind, however, that most of the potsherds were discovered in the garbage layer and debris,¹² so they witness the end of the habitation of the site. A probably homogeneous complex was collected from the pit in Room 10 (Fig. 8). The *khums* are the major part of the deposit and they were deliberately broken before being stored: many of them, having been broken, were placed one inside another. The complex is accompanied by coins of the 730s to 740s. The diameter

12 As in the case of the fairly rich complex of Room 1, MPAÈ XVIII: 138–158. Another rich complex in the garbage layer from Room 11 (MPAÈ XXII: 94–105) is noteworthy for the near absence of slip on the tableware which, together with a number of mugs with a round body and vertical rim, would tentatively suggest a somewhat later date.



Fig. 7: Rare coins from the object. 1 – Chamukyan coin without square hole; 2 – Rare type of Dāwud b. Kurāz fals; 3 – Bukharkhuda drachm; 4 – Coin of “Parghar”.

of the *khums* is 35–43 cm; most of them have pronounced rims of different shapes. The often-present traces of chalk on the *khums* would suggest that they were once installed in some storage facility. The *khums* are accompanied by two half-spherical bowls, a handmade cauldron, and two diagnostic pieces of jugs. Quite similar shapes are in the pavement of the secondary floor of Rooms 6 and 6a (Fig. 9), but here *khums* with a light-coloured slip are present.

Speaking of the location of various vessel types in the rooms, one should note the finds of very rude handmade cauldrons with an admixture of grog and large gravel; these are of light grey colour, indicating low-temperature baking (Fig. 10). They were either formed in a bowl or were consolidated with straw strips before baking. They are much ruder than the average cooking cauldrons of Panjikent and, moreover, have little soot; however, these vessels do not resemble crucibles previously discovered in Panjikent (RASPOPOVA 1980: 45–47). Three of them were found in the garbage level of Kitchen 2, another one in Kitchen 19, and a similar fragment in Ramp 6 (Fig. 9, below). In Kitchen 7, an almost complete cauldron of typical shape with a rim formed on a wheel was found. Inside, however, there was a burnt organic substance, and we expected it to be “Sogdian porridge”. The chromatogram kindly conducted at our request by Sergey Urûpov (laboratory of natural-scientific analysis of the State Hermitage) signified on the contrary the presence of probably organic oil and natural organic leaner inside, which did not survive but resembled cattle dung. Indeed, the technology of pottery made of a mixture of clay

and dung is attested among the mountain Tajiks in ethnographic times (PEŠEREVA 1959: 48), but it was applied to storage vessels and not to cookware; a huge pottery basin was installed in the floor of the same Kitchen 7.

The rather numerous individual finds in the area of the houses do not add much to the discussion of its architecture and social position. Noteworthy are stone sockets for door shafts discovered in Rooms 2, 6, 10, and 17.¹³ There were fragments of massive iron instruments in Rooms 7, 10, 12, and 21.¹⁴ One could see a bronze belt set with remains of leather in Room 21.¹⁵

It is important to note that there were no finds of traces of mural painting anywhere in the living block, so even the rooms of the upper floor were not decorated.

4 The division of rooms into households and modular living quarters in Early Medieval Middle Asia

As we mentioned briefly above, the rooms of the quarter are divided into three very similar blocks, which we have named A, B, and C. Each of the blocks

13 MPAÈ XVIII: 205; MPAÈ XXI: 160; MPAÈ XXIII: 146.

14 MPAÈ XIX: 140; MPAÈ XXI: 157; MPAÈ XXII: 120, 122; MPAÈ XXIV: 157.

15 MPAÈ XXIV: 155.

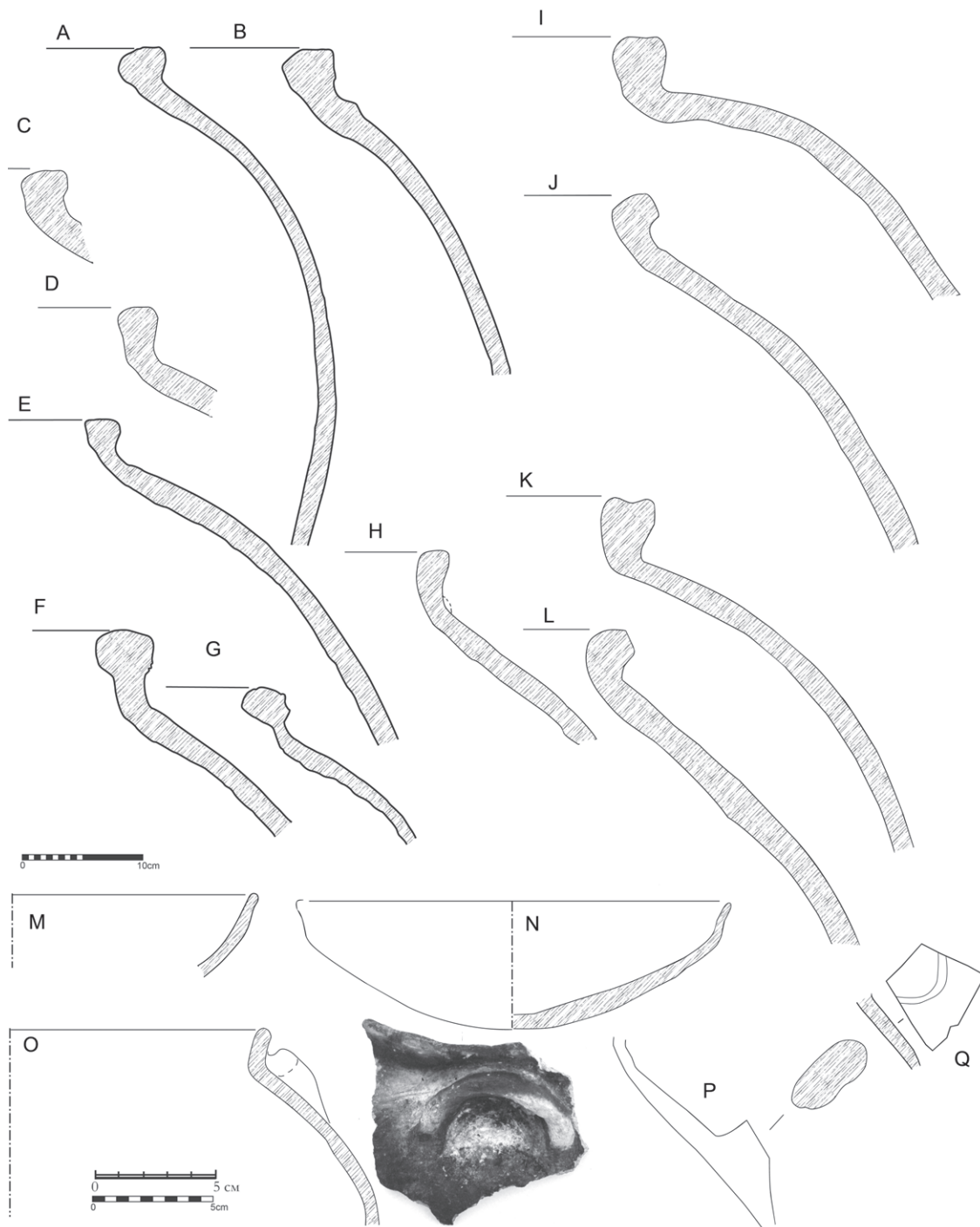


Fig. 8: A pottery complex from the pit in Room 10.

A – \emptyset - 35 cm, chalk inside; **B** – \emptyset - 40 cm; lime, small bubbles in the paste; **C** – \emptyset - ?; admixture of grog, pebbles; **D** – \emptyset - ?; grog admixture; **E** – \emptyset - 41.5 cm; **F** – \emptyset - 43 cm; grog admixture, small bubbles in the paste; **G** – \emptyset - 40 cm; admixture of grog, pebble, minor bubbles, covered with chalk; **H** – \emptyset - ?; small bubbles in the paste, covered with chalk; **I** – \emptyset - 40 cm; admixture of chalk, pebbles, drip of brown slip; below repair with gypsum; **J** – \emptyset - 39 cm; admixture of pebbles, grog, chalk outside; **K** – \emptyset - 41 cm; admixture of pebble, gypsum, small bubbles, defective firing; **L** – \emptyset - 40 cm; **M** – ; **N** – Sand admixture; **O** – Handmade, grog and sand admixture; **P** – Sand admixture; **Q** – Sand admixture.

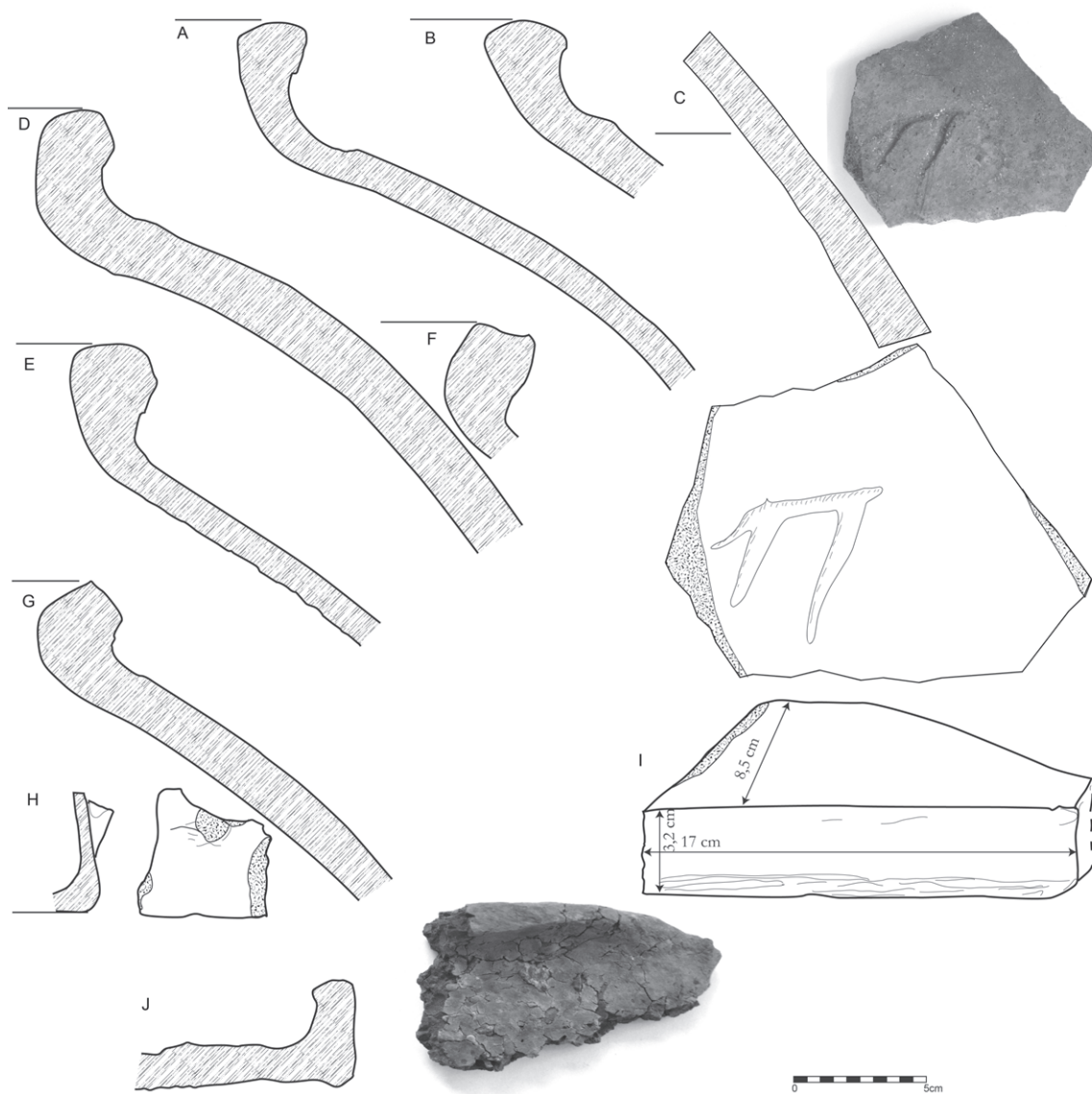


Fig. 9: Khums of the pavement of the secondary floor in Room 6 and 6a.

A – \emptyset - 32 cm; minor admixture of chalk; **B** – \emptyset - ?; admixture of chalk, grog, small pebbles; **C** – \emptyset - ?; admixture of pebbles, chalk; **D** – \emptyset - 40 cm; admixture of grog, pebbles, chalk, traces of pale slip outside; **E** – \emptyset - 33 cm; moderate admixture of chalk, pebbles; **F** – \emptyset - 47 cm, admixture of grog, traces of whitish slip; **G** – \emptyset - ?; admixture of grog, chalk, gypsum inside; **H** – \emptyset - ?; handmade, pebble admixture; **I** – Fragment of a baked brick; H 3.2 cm, L 17 cm; W 8.5 cm; **J** – Handmade, not rotated object, large pebbles, imprints of straw at the bottom.

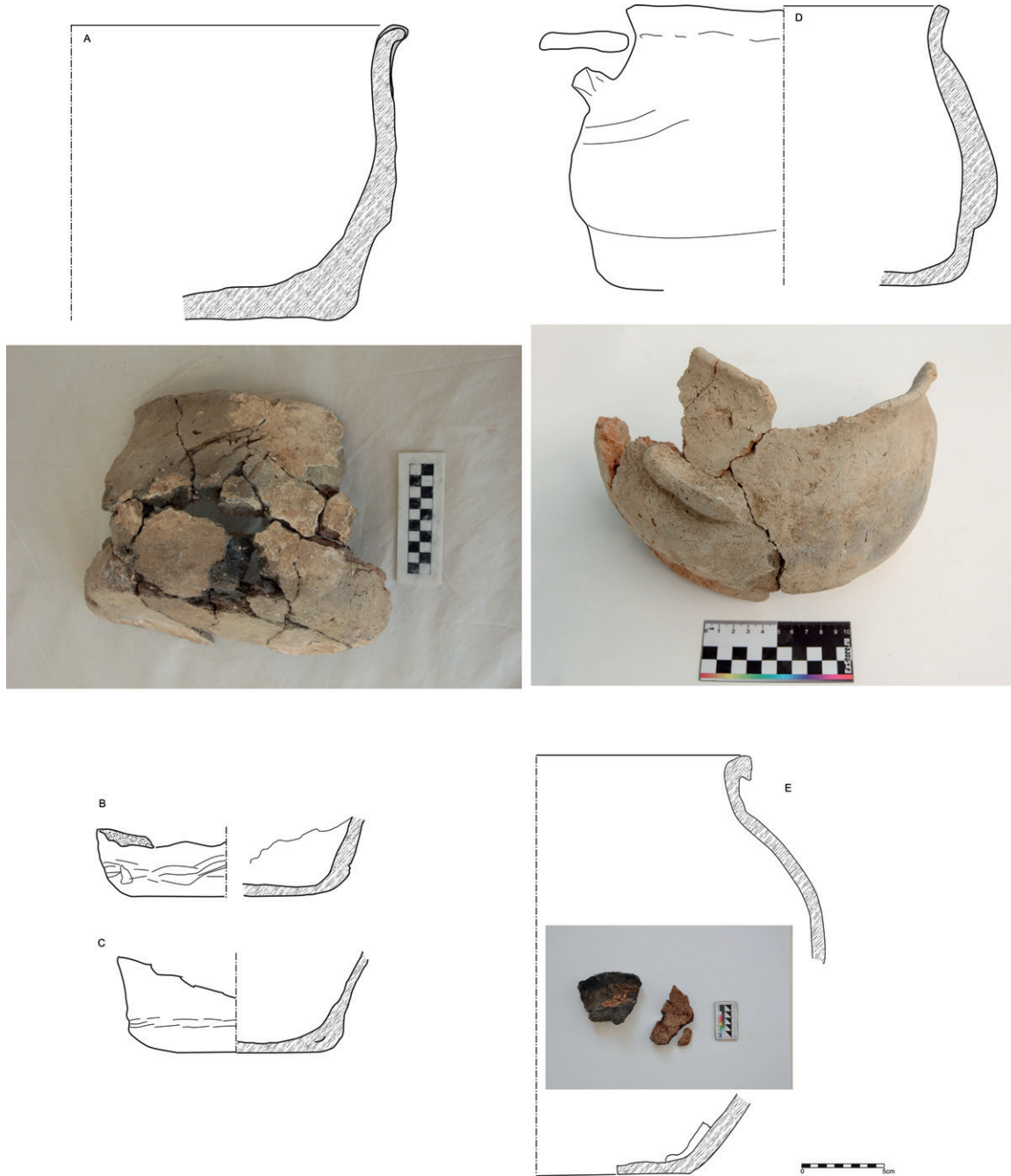


Fig. 10: Cauldrons.

A–C – Room 2, between the upper and the second floor; **D** – Room 19, debris; **E** – Room 7, trench under the second floor.
A – Handmade admixture of slate and grog, weak baking, traced of gypsum on the rim; **B** – Handmade, much admixture, grey colour, weak baking, trace of a straw strip; **C** – Admixture of grog, brown-grey paster, grey colour, weak baking, bubbles, some soot inside, trace of a straw strip; **D** – Handmade, very solid grog, quartz, bubbles, shaped in a bowl, uneven baking, almost without soot; **E** – Handmade, the rim corrected on the wheel, large grog, bubbles, soot inside and outside, organics inside.

comprises an entrance corridor (6a, 16, and 18), a kitchen (2, 7, and 19), stairs or a ramp to the upper floor (6, 15, and 22), and a vaulted room with fine plaster (1, 10, 25) that can be defined as a living room,¹⁶ and one with rude plaster (or its absence) and more pronounced storage facilities (3, 11, and 17) that probably had more economic features. Due to insufficient preservation, we cannot say what the upper floor of these houses looked like.

The area to the east of this block is clearly different and represents the minor temple. In the area to the west of it, where excavations are ongoing, the structure is somewhat similar, but different. Room 21, which was to some extent included in the above discussion, looks like other oblong vaulted rooms yet has a very solid two-storey oven – but it does not join any of the households save Room 24 to the south of it, which has a very complicated stratigraphy and does not show ties to the discussed household. In any case, the unfinished Rooms 27–31 have a different structure; moreover, their main floors are 1.5 m deeper and the numismatic material from there is dated no later than 722 CE. In Area XI some 30 m to the west, there are also oblong rooms that are oriented N-S. The principal difference is the remains of mural painting there (VORONINA 1964: 58).

This type of dwelling consisting of such elements is known in Panjikent, and Raspopova (RASPOPOVA 1990: 148) noticed houses with two vaulted rooms and an antechamber on the ground floor and a ramp to the upper floor. What is uncommon, however, is a *cluster* of houses of similar structure. Most similar to our houses are two sections of Area III, comprising Rooms 92, 94, 97, 99 and 100, 95, 96 (Fig. 11:A). The difference, however, lies in the passage between the two inside the block and the apparent absence of stairs or a ramp in the second section (VORONINA 1964: 54; Fig. 1; RASPOPOVA 1990: 29, 50).¹⁷ They are dated to the first half of the 8th century CE and are considered to be one household of two dwellings. Two dwellings of our structure adjoin one another in Area XII, but their entrances are to two different streets (ibid. 75; Fig. 11:B). In Area XIV, two similar poor dwellings of two rooms each (1–2, 16–17) are separated by two bigger houses (ibid. 76). In Area XXIII–XXV, several two-room dwellings based on one axis had openings towards the street from two sides (MPAË I: Fig. 9; Rooms 88–84; 67–68; 69–63; 72–73; 82–84).

However, three houses in Area XI-B resemble modular dwellings. The modular houses are not attested in Panjikent, but one can look to other sites

in Middle Asia, even given the limited scale of excavations of living blocks of cities. Two somewhat similar houses have been excavated in Area VI of Sanjar-Shah in 2019 (SHENKAR ET AL. 2019). The excavated block at Shahristan I of Paikend can also be divided into a set of similar houses occupying 55–60 m² (SAPAROV/TORGEOV 2013: 66–68; SAPAROV/TORGEOV forthcoming: 65ff.).

Six almost identical dwellings of four rooms each occupy the area behind the northern wall of Tok-Kala in northern Chorasmia (GUDKOVA 1964: 44–85; Fig. 11:C). Seven identical small oblong houses on one axis occupy Areas II–III at Qahqaha I in Ustrushana (see Fig. 1 on page 328); they are intermingled by at least three houses that occupy two modules, and the complex is dated to the 6th to early 8th century CE (MANÂHINA/ŠETUHINA 1994; Fig. 11:D). Three modules of similar size and structure, consisting of two almost square rooms and two corridors each, were excavated in Area VI of the same site, at its southern wall (NEGMATOV 1977: 127–129; Fig. 11:E); the pottery assemblage there belongs to the 7th to 10th century, but Sogdian coins found there cannot be later than the 8th century. It is noteworthy that one of the blocks had its entrance through the corridor of another one. All the houses at Tok-Kala, Paikend, and Shahristan were of one floor. All of the houses described are contemporary or almost contemporary with our block at Panjikent.

5 The irregularities of the supposed modular block in Area XI-B and a hypothesis about its social position

With the analogies from the sites of similar date and geographical proximity to Panjikent, one would be inclined to explain this block as a modular structure. However, there are some facts that disagree with this straightforward explanation.

If the area occupied by three houses is almost rectangular and even square (16 × 17.5 m), Houses A and B are not rectangular, and have an L-shaped plan. This complex planning is a norm for Panjikent, yet it would hardly be a norm for a modular block. The second observation concerns the non-egalitarian division into blocks. The useful space of House A (96 m², without counting passages) is much bigger than House B (54 m²), which is in turn almost equal to House C (52 m²). Moreover, House A has a normal mudbrick winding ramp to the second floor while two others have less monumental stairs or a half-wooden ramp; this fact also indicates that House A was more prestigious.

It is important to note that there is a walled-in passage between Room 1 of House A and Room 7 of House B. The bricks of the walled-in passage start

16 An unusual feature is the absence of large podiums (*su-fas*) in the living rooms. Perhaps, it was due to a low attic (1.6–2.0 m above the floor).

17 I wonder whether a separate compartment on the west of Room 95 could be a rebuilt or destroyed ramp or staircase?

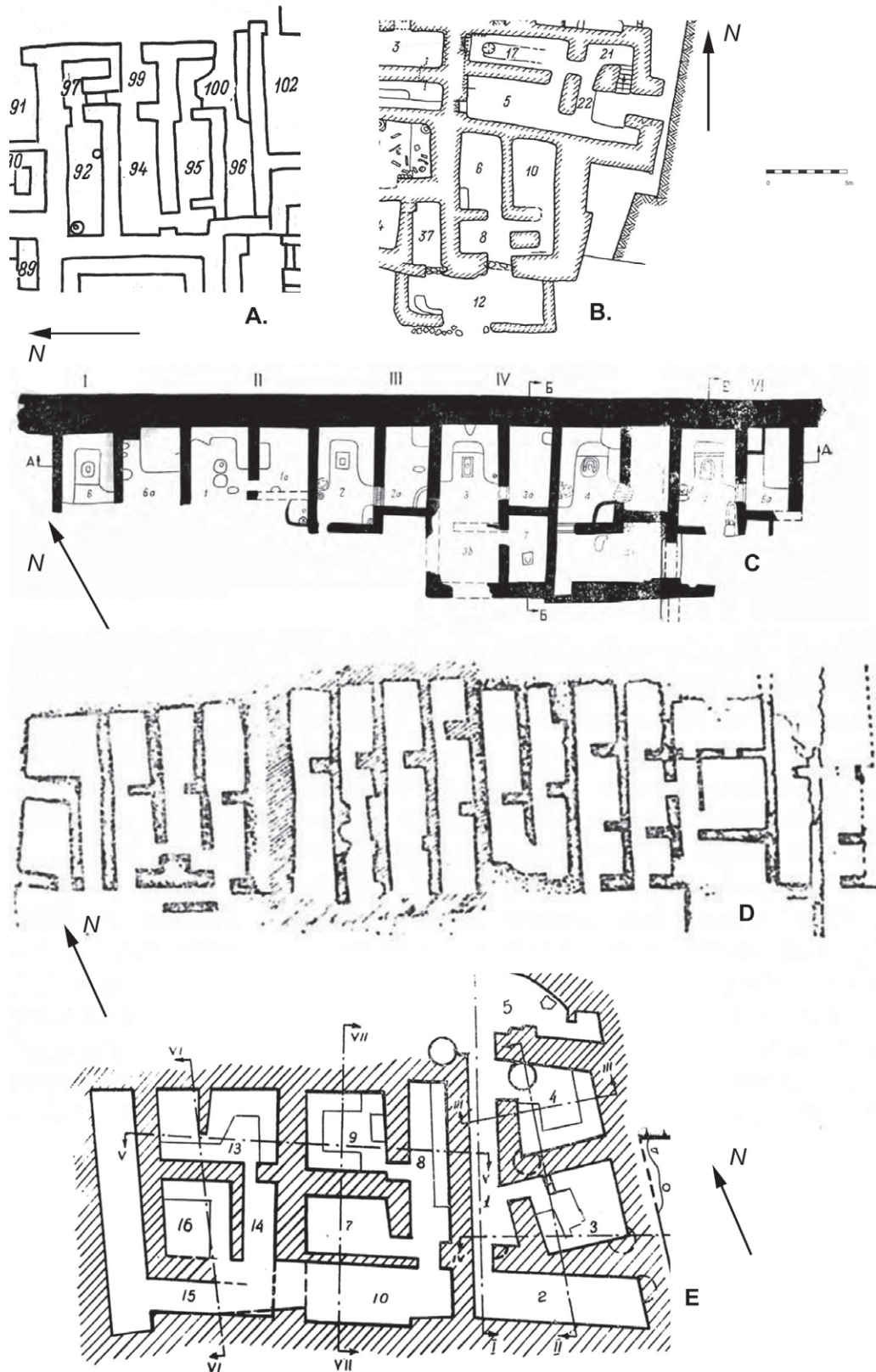


Fig. 11: Similar blocks in Sogdiana and adjoining areas in the Early Middle Ages.

A – Panjikent, Area III (after RASPOPOVA 1990, inlay); B – Panjikent, Area XII, upper building (after RASPOPOVA 1990: 75); C – Tok-Kala (after GUDKOVA 1964: Fig. 11); D – Qahqaha, Area II–III (after MANĀHINA/ŠETUHINA 1994: 43); E – Qahqaha, Area VI (after NEGMATOV 1977: 128).

from the main living floors, and the corners of the passage are not rubbed off – this fact indicates that the period when the passage functioned was very short after the houses were built. Another passage between Room 17 of House C and Room 21 to its west was secondarily transformed into a storage facility, and the same was true for the smaller storage niche in Room 25 of House B, looking to the west, into Room 30. I cannot rule out, moreover, that there was a walled-in passage between Room 18 of House C and Rooms 12–16 of House B, but it was not cleaned properly before recultivation. Another important feature is the location of the entrances of all three houses from the street immediately one after another. We did not find evidence that any of these passages was secondary. The location of the three together was the reason for the construction of rather long and narrow entrance corridors in Houses B and C, which are usually absent in Panjikent.

The owners/residents of the three houses adjusted the space for themselves in somewhat different ways. So, in Houses A and C they strengthened the city wall with additional brickwork, while in House B they did not take pains to do it; the walled-in passage between Room 1 (House A) and Room 7 (House B) was carefully plastered from the latter's side, but not from the former; a passage between Rooms 18 and 25 of House B was plastered only from the side of Room 25.

These facts show that when constructed, the three houses were intended to be separate ones with separate entrances – yet not independent – with internal passage(s?) that were soon closed, and they were unequal in size and prestige. Consequently, we cannot explain them as dwellings allotted for some service to three different families. Nevertheless, we do not find a similar group of three or more houses of almost identical planning elsewhere in the published blocks of Panjikent.

With these observations, I step on unsteady ground of social explanation of this modular or quasi-modular block. I am totally aware that all the hypotheses below are speculative and cannot be confirmed, but still I consider them the most likely possibility.

As for the usage of these modular houses, A.I. Gudkova (GUDKOVA 1964: 149) suggested that those at Tok-Kala (see **Fig. 1 on page 118**) witness the survival of the archaic society of Kerder (northern Chorasmia); the oblong houses at Qahqaha were explained as a dwelling and handicraft complex (NEGMATOV 1976: 123), and the four-room modules as a complex of small isolated sections of the residence of city folk (ibid. 124–125). Neither explanation can work for Panjikent: the society here, as we know from excavations and Mount Mugh documents, was developed enough for great variability of income and the main residence area in the city followed

much greater variety than in limited-scale excavations of the *shahristan* of Early Medieval Qahqaha.

We have indications of joint property in pre-Islamic Iran; even an individual and a temple could be co-owners of a slave (PERIHANÂN 1983: 51ff.). The Greek document Avroman I (225 BCE) concerns the purchase (or *emphyteusis*) from two brothers of the elder brother's share to another person (ibid: 73–74).

The Bactrian documents, discovered since the 1990s in Afghanistan and dated to the 4th to 8th century CE, show many cases of fraternal and other joint co-ownership (ed. SIMS-WILLIAMS 2007; 2012; PARŠUTO 2020 for analysis of brotherly relations). Apart from the famous contract of two brothers' marriage to the woman Ralik (Doc. A, 330s), there are contracts of brothers' lease of land (Doc. m, third quarter of the 5th century); the ownership of a slave by three persons, probably brothers, is mentioned in the manumission Document F (480). Four owners of a slave woman are mentioned in Doc. ed (475). Two brothers sell a slave boy to three other brothers (Doc. P, 669), where the term “our brotherly property” (χοβο μηνο βραδδιγο) is attested. The lease of 40 drachmae from two brothers to the family couple appears in Doc. Q (671); three brothers receive a gift from the ruler of Lizg (Doc. Tt, 705), and the elder brother gets special guarantees of the ownership over one third of the gift. Land ownership document Nn (659) lists three brothers and a separate person from a common house as one side of the contract and two brothers as the other side. Two brothers appear in the document of the end of a blood feud (Doc. O, 662); a person and his two brothers swear in another termination of a blood feud deed (Doc. R, 675), and two brothers in yet another deed of the same type (S, 693). Document Uu concerning clearance of debt (722) has pairs of brothers on both sides of the contract. Document V (729) is the sale of land by three brothers to three other persons, perhaps brothers as well.¹⁸

In almost all documents, the clause of renouncing the claims includes “neither by me/us, nor by my/our brothers nor by sons, nor by descendants”.

One would specially mention the brotherly property of the generations of the family of Beg, these “Forsytes of Bactria”. Document U (712–13) is a deed of *emphyteusis* lease of a vineyard from brothers Urol and Hilitber, and Wakhshmareg, the son of the former, towards Bek II and his son, Kamirdfar II. In Document W (747), Wahran and Mir, sons of

18 Of course, fraternal property was not the only instance of joint property in Bactria. A few examples: the common ownership of father, son, and another person appears in land sale Doc. I (483 CE); two people with different patronyms sell land to a father and son, and the father could be brother of one of the selling party (Doc. J, 517); the joint lease of some products by two non-brothers from a single person is the subject of Doc. K (579).

Bek II, buy the land from two brothers, Wurol and Hilitber, and Zard, the son of the former. Document X (750) is a peace treaty between two parties among the sons of Bek II: Kamirdfar II and Bab on one side, and Wahran and Mir from the other – the interesting feature is that only three of the brothers (excluding Bab) agree to hold the woman, Zeran, together. Two brothers, Bek III and Khamir, the sons of Kamirdfar II, are mentioned as well. The following Document Y (771) on the contrary states that Mir, son of Bek II, separated from his brother, Bab, who has gone away.

From the later Arabic documents (KHAN 2007) of the same family, dated to 764–775 CE, we see that Mir, son of Bek II, and his brother, Bab, indeed paid their taxes separately, as well as Qarwal, the son of the former, and Meyam, the son of his brother, Wahran. However, being surely found in the same context, their quittances were kept in the same family archive. The slave woman, Zeran, the mother of the sons of Sa'īd (apparently, the name of Kamirdfar II after conversion), was freed in July 755. From Document X (750) onward, it is clear that the brotherly property and marriage started to fall out of usage, be it due to changes in the taxation system (Azad 2016) or any other impact of the coming of Islam.

There are no indications of fraternal polyandry in Sogdiana, neither in the documentary nor narrative sources, and we can be sure that this custom did not exist here at the eve of Islam.¹⁹ Brotherly property, however, is attested in Mount Mugh Document B-8, where Mākhch and Khshumvandak, the sons of Asmānch, purchase half of a *naus* from Shirvaghch and Asatafsarak, the sons of Farnkhund (LIVSHITS 2015: 37–44). On two sides, the brothers acted together (the object of the sale was, however, related

to the mourning of the joint ancestors of the brothers). Be it a coincidence or not, the contract is the earliest document of the Mount Mugh collection dated to the Panjikent ruler Chegin Chur Bilge (reigned before 708 CE).

Returning to our subject, I think it plausible that three houses of identical structure on the same rectangular plot of land with entrances next to one another were the residence of a family, perhaps of three brothers.²⁰ The bigger house (A) perhaps belonged to the elder brother and his family (or the father?) and the remaining smaller houses to the juniors. Over the course of time, when the brothers matured and became more independent, the initial passages between the houses were closed, and the owners lived on their own. In the similar cluster of two dwellings in Area III, the inhabitants did not close the internal passage. I cannot discount that the separation of the dwellings was somehow motivated by the coming of Islam, although it is too much of a conjecture.

All three houses can be considered to be lower class ones. There are no traces of the decoration. I refrain from examining what the occupation of the family was, but would like to recapitulate the location of the area. The plot of land adjoins the temples and the city wall. The similar dwellings of Area III adjoin the initial western wall of the city (at its outer side) and are close to the rooms classed as shrines by M. Mode (2019); the larger modular houses at Qahqaha also adjoin the wall (inside the city) and the hypostyle mosque(?); another modular block at Qahqaha and the one at Tok-Kala adjoin the wall from the inside, too.

19 The same Suishu that describes fraternal polyandry in Tokharistan (AZAD 2016: 45 No. 41) mentions the next-to-kin marriage (Zoroastrian *xwēdōdah*) in Bukhara – see HUBER 2020: 33.

20 From words in the Bactrian Document X, line 19 “and it will be proper for us jointly to possess (and) to receive (everything) in the house, (both) good and bad”, one can suppose that the sons of Bek, despite their large quantity of possessions, lived in one house (*χανο*).

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Abbreviation:

MPAË – Materialy Pendžikentskoj arheologičeskoj èkspedicii, St. Petersburg.

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End of a Long Way

Tamga Signs on Ceramics from Qarshovul Tepa

Djangar Ilyasov

Abstract: Signs of ownership used by peoples of nomadic origin known in scholarship under the term “*tamgas*” serve as sources for various kinds of information. Although multiple publications on *tamgas* from the Chach/Shash domain have come out in recent years, the material on this subject is far from being exhausted. Excavations at the Qarshovul Tepa settlement revealed over 40 signs cut into ceramic vessels prior to firing. These were extracted from layers dating to the last period of the town’s habitation: the 7th to the first half of the 8th century CE, i.e. the Turkic period. The following article deals with the publication of this group of signs, some of which find analogies in Chach and some in a broader Central Asian context. Over time, the collection, publication, and analysis of signs will enable us to differentiate between those belonging to the Kangju heritage and those belonging to the Turkic, and how traditions of *tamga* use remained alive in the process of the sedentarisation of nomads.

Keywords: Chach, Qarshovul Tepa, ceramics, signs.

Резюме: Знаки собственности, применявшиеся у народов кочевого происхождения и получившие в науке название «тамга», служат источником разнообразной информации. Несмотря на то, что в последние годы вышло несколько подробных публикаций о тамгах владения Чач/Шаш, материал по этой тематике далеко не исчерпан. В ходе раскопок на городище Каршовултепа были найдены более сорока знаков, вырезанных до обжига на различных керамических сосудах. Они происходят из слоев, относящихся к заключительному периоду жизни городка и датированных VII – первой половиной VIII в., то есть тюркским периодом. Статья посвящена публикации данной коллекции знаков, находящих аналогии частично в Чаче и частично – на более широком среднеазиатском фоне. Сбор, публикация и изучение знаков позволят со временем понять, какие из них являются наследием кангюйцев, а какие – тюркским наследием, и как традиции тамгопользования у этих народов продолжали жить в процессе оседания кочевников.

Ключевые слова: Чач, Каршовултепа, керамика, знаки.



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DOI: 10.13173/9783447118804.377

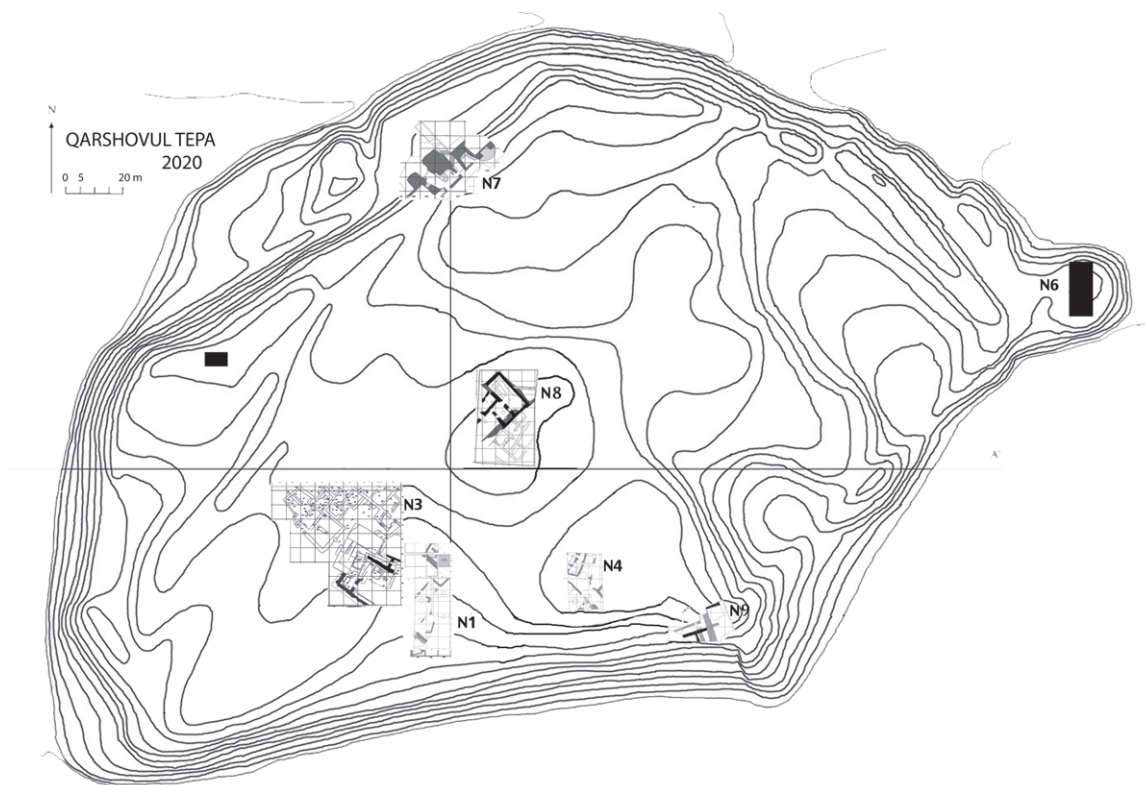


Fig. 1: Qarshovul Tepa. Plan, 2020 (elaborated by G.P. Ivanov).

1 Introductory remarks

Signs of ownership used by Iranian and Turkic speaking peoples in Eurasia for many centuries attract great interest among scholars. The Turkic term *tamga* (*tamgha*) is mostly used for their designation; another term, common for Iranian speaking populations, is *nishan*. Several monographs and numerous articles have been dedicated to this subject.¹ These deal with both theoretical problems in the research of the signs and specific material gathered from the vast area of their distribution.

The latest extensive work, the first publication dedicated entirely to *tamgas* and signs from the Central Asian region, is the collective bilingual monograph “*Tamgi doislamskoj Central’noj Azii/Tamgas of Pre-Islamic Central Asia*”. It has been compiled by researchers from Kazakhstan, Kyrgyzstan, Russia, and Uzbekistan and published in 2019 with financial and organisational support from The International Institute for Central Asian Studies, located in Samarqand, Uzbekistan. This work summed up a series of results of the investigation of *tamgas/nishans* from a vast region that played an important role in the history of Eurasia and can serve as a base

for further research. However, the subject has not nearly been exhausted and promises many interesting discoveries in the future. The gathering, studying, and publishing of new materials is still crucial at this point. This task is taken up in the following article, which deals with *tamgas* discovered through controlled archaeological investigations at the Qarshovul Tepa (see **Fig. 1 on page 118**) archaeological site in the Tashkent region in the Republic of Uzbekistan (**Fig. 1**).

The settlement is located in the Chinaz district of the Tashkent Province and has been studied since 2008 by the Qarshovul Tepa Team of The Ikuo Hirayama International Caravanserai of Culture (Tashkent).² From 2010 the work is being conducted with financial support from the Society for the Exploration of EurAsia (Switzerland). Some research results have been published³ and have served as the subject of papers presented at international conferences or-

1 The most attention was received by Sarmatian signs: see SOLOMONIK 1959; DRAČUK 1975. A broader circle of Iranian speaking peoples is provided by H. Jänichen and S.A. Ācenko (JÄNICHEN 1956; Ācenko 2001).

2 A structural sub-unit of the Academy of Arts of Uzbekistan.

3 For publications of the findings and excavation reports, see AŠIROV/POTOROČINA/ŠEJKO 2010: 40–43; POTOROČINA/ŠEJKO 2015: 487–491; ŠEJKO/IVANOV/IL’ASOV 2018: 266–269; SHEYKO/IVANOV/ILYASOV 2019: 261–282; http://www.exploration-eurasia.com/inhalt_english/frameset_projekt_7.html (last accessed 17 September 2021).

ganised by the Society and the University of Bern in 2016 and 2020.⁴

2 *Tamgas* from Qarshovul Tepa

Before directly turning to our new material, we should note that a number of scholars have dedicated their works to the *tamgas* from the Chach Principality (modern Tashkent). In part, these are publications of materials and studies related to the pre-Islamic coinage in Chach, for which *tamgas* play a particularly important role in typology (RTVELADZE 1998; RTVELADZE 2006; SHAGALOV/KUZNETSOV 2006; BABAĀROV 2007; BABAYAROV 2019). The remainder of the articles deal with signs on ceramic and bronze vessels, seals, stone plates, and mudbricks (GRICINA 1984; BOGOMOLOV 2003; BOGOMOLOV 2006; BOGOMOLOV 2011; ERŽIGITOVA/SMAGULOV/DEMIDENKO 2009; YATSENKO/SMAGULOV 2019).

Qarshovul Tepa is the ruin of a small, fortified town (around 6 ha), which likely emerged in the first centuries CE, the period when the process of sedentarisation of nomads intensified in Chach, and existed until the mid-8th century. During excavations and the surface investigation of the site, *tamgas* were detected on two categories of objects: bronze coins of the pre-Islamic rulers of Chach,⁵ and ceramic vessels. The signs on coins with characteristics common for the entire Chach Principality will not be dealt with in this article.

Qarshovul Tepa revealed ceramics decorated with signs cut into raw clay, that is, before the vessel was dried, covered with slip, and fired. This ware dates to the 7th to early 8th century and clearly demonstrates that the ancient tradition of using tribe/clan/family signs prevailed in the region up until the period of the Arab invasion.

So far overall, we have identified seven types of ceramic vessels marked with signs. These are mugs, bowls, ewers, pots, butter churns,⁶ *khums*, and lids.

4 http://www.exploration-eurasia.com/inhalt_english/frameset_Congress.html (last accessed 17 September 2021); http://www.exploration-eurasia.com/inhalt_english/frameset_Congress2020.html (last accessed 17 September 2021).

5 We also discovered a number of Sogdian coins with a square hole and a drachm of the Chorasmian king Bravik, which are marked by *tamgas* accordingly.

6 The term “butter churn” used for this group of large wide-necked vessels with one massive horizontal handle is provisional because one of the exemplars from Qarshovul Tepa has a hole made into the shoulder of the vessel before firing. G.V. Grigor’ev, one of the first researchers to conduct excavations in the Tashkent region, labels this type of ware as “large vessels to contain liquids” (GRIGOR’EV 1940: 14, Fig. 76, b). We cannot exclude that these replaced ceramic flat-convex-shaped flasks characteristic of the Kaunchi archaeological culture dated to the

That is, the ware decorated with *tamgas* can be divided into table/banquet dishes (ewers, mugs, bowls), household/kitchenware (pots, butter churns), and big storage vessels (*khums* and *khumchas*⁷).

Let us take a closer look at these groups, starting with the tableware.

1. Mugs (**Figs. 2, 3**). Thirteen vessels with signs were unearthed. All mugs can be assigned to the category of banquet tableware. They are thoroughly crafted, covered with slip, mostly of red-orange colour, and polished. One mug is covered with black slip, which could be the result of over-firing it (**Fig. 2:5**). Apparently, for the same reason, the colour of another mug is dark grey (**Fig. 3:2**). In three cases, the mugs also show a rich relief décor (**Fig. 2:8, Fig. 3:1, 2**). *Tamgas* were cut into the raw clay before the vessels were covered with slip.

On nine mugs, the *tamga* is set under the handle (**Fig. 2:1–8, Fig. 3:1**). In one case, it is located lower and further to the left, possibly because the sign itself is big in size and did not fit immediately underneath the handle (**Fig. 3:2a, b**). On two pieces, the *tamgas* are cut into the body next to the handle; moreover, in the first case, the same signs are placed on both sides of the handle (**Fig. 3:3a, b, c; Fig. 8:11, 12**) and in the second, the *tamga* is set to the right of the handle (**Fig. 3:4a, b; Fig. 10:31**). On another mug, the *tamga* decorates the body on the side opposite to the handle (**Fig. 3:5a, b; Fig. 9:19**). We can conclude that the most common method of marking mugs was the placement of the *tamga* under the handle.

Fourteen signs can be found on the 13 mugs because, as said previously, the same *tamga* was applied twice (**Fig. 3:3b, c; Fig. 8:11, 12**). In two cases, the *tamgas* are preserved only fragmentarily (**Fig. 2:6b, Fig. 3:4b; Fig. 10:31, 41**).

2. Bowls (**Fig. 4**). Eleven bowls with signs have been excavated. They are moulded, with a rounded base, sometimes thick-walled, covered with a thick layer of red-orange slip, and polished. The slip on one bowl is dark grey, almost black-coloured (**Fig. 4:11**). The inner bottom of two bowls is decorated with a relief (**Fig. 4:7, 8**). *Tamgas* were applied prior to the firing and slip on the bottom part of the bowls, usually near the edge. The overall number of signs on the bowls is 11, and since one and the same *tamga* can be found on two bowls (**Fig. 4:2b, 3; Fig. 9:17,**

2nd century BCE to the first half of the 6th century CE (BURĀKOV 1982: 100).

7 A designation used in Central Asian archaeology for large (up to 1 m high and higher) vessels with thick walls intended for the storage of liquids (water, wine, vegetable oils) or grain, etc. The smaller variations with thinner walls are called *khumcha*.



Fig. 2: **Mugs:** 1 – R(Raskop/Excavation)-8, room 10, year 2020; 2 – R-3, room 14, 2016; 3 – R-9, tower, 2020; 4 – R-4, 2020; 5 – R-3, square FF 91, 2017; 6 – R-3, room 9, 2016; 7 – R-1, 2011; 8 – R-3, room 15, 2016.

18), the number of different signs thus amounts to 10.

3. Ewers (Fig. 5:1–4). Two ewers belong to the moulded banquet tablewares with a dense layer of red-orange slip and polish. On the first of them, the *tamga* is placed on the flat bottom (Fig. 5:1a, b; Fig. 9:16); on the second one, which is decorated with relief ornament, it is set into the body (Fig. 5:2a, b; Fig. 8:6). Two other ewers are simpler in ornamentation. One is decorated with drips of dark brown slip; on its shoulder to the right of the handle an S-shaped sign is roughly cut out (Fig. 5:3a, b; Fig. 11:50). The other one has a tubular pitch and traces of repair. It is marked with

two cross signs: one on the handle; one beneath the handle (Fig. 5:4a, b, c; Fig. 8:9, 10). Thus, on four ewers, five signs have been placed, two of which coincide.

4. So far, a single exemplar of a pot (probably with two handles) with a *tamga* has been found. It is placed underneath the handle (Fig. 5:5a, b; Fig. 9:27).

5. Vessels of the butter churn type were also decorated with signs set under the horizontal handle. To date, two such marked objects are known

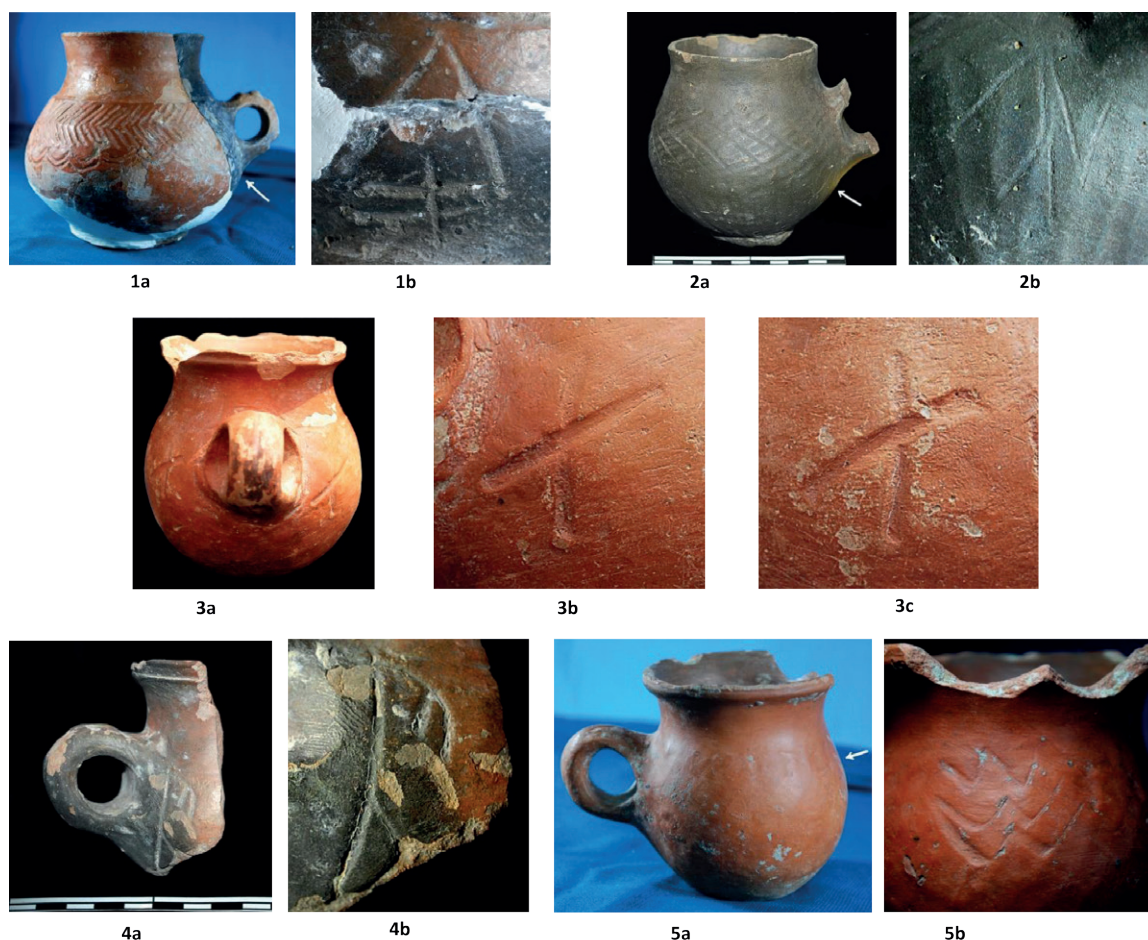


Fig. 3: Mugs: 1 – R-8, room 4, 2018; 2 – R-8, room 7, 2018; 3 – R-9, tower, 2020; 4 – R-8, near room 1, 2019; 5 – R-3; square DD-91, 2017.

from Qarshovul Tepa⁸ (Fig. 5:6a, b, 7a, b; Fig. 9: 4; Fig. 10:32).

6. *Khums* and *khumchas* so far represent the most numerous category of vessel with signs (Figs. 5, 6). Fifteen pieces marked with *tamgas* were collected. With one exception (Fig. 7:7a, b; Fig. 8:5), all signs had been cut into raw clay. They were placed in the shoulder area of the vessels. *Khums* were usually dug into the floor of storage rooms (*khum-*

8 The fact that it was a common practice for this type of ware is demonstrated by three vessels, one of which, with a V- or X-shaped *tamga* under its handle, was discovered at the Shuralisay site near Yangi-Yul (GRIGOR'EV 1940: 14, Fig. 76, b). The second was found by S.R. Ilyasova during excavations at the Ak Tepa Yunusabad castle; the *tamga* under the handle was in the shape of a "heart" with three lines directed downwards (L'ASOVA 1997: 119–120, Tab. 3: 8). The exact find spot in the Tashkent oasis of the third vessel with a sign in the shape of two triangles merging with their tops is unfortunately not given by G.I. Bogomolov (BOGOMOLOV 2011: Fig. 4: 1). I should note that the *tamga* from Ak Tepa was not included in Bogomolov's list of the signs of Chach.

hana); nonetheless, the location of the signs on the shoulder made them visible. Due to the incomplete preservation of the vessels, it is not always possible to reconstruct the complete shapes of the signs (Fig. 6:5b, 6b, 7b, 8b; Fig. 7:1–3, 5, 6; Fig. 9:20, 21; Fig. 10:39, 42, 43; Fig. 11:44–47). Sixteen signs are found on 15 vessels. Some of them coincide – for example, on the *khum* unearthed in 2011,⁹ two roughly rendered pentagrams are set next to each other (Fig. 6:1a, b; Fig. 8:7, 8). Signs on two different *khums*, in turn, possibly are variations of the same *tamga* (Fig. 6:6b; Fig. 7:1; Fig. 9:20, 21). Therefore, *khums* and *khumchas* of Qarshovul Tepa give us 14 various *tamgas*.

7. Massive flat lids served to cover the mouths of the *khums*. We found a fragment of a lid 3.2–3.4 cm thick, with one of its handles still intact. The *tamga* drawn in the central part of the lid into raw clay is,

9 Excavation R-1 [http://www.exploration-eurasia.com/inhalt_english/frameset_projekt_7.html (last accessed 17 September 2021)].



Fig. 4: **Bowls**: 1 – R-3, 2015; 2 – R-8, to the south of room 10, 2020; 3 – R-8, corridor, floor 2, 2020; 4 – R-3, 2013; 5 – Surface find, 2016; 6 – R-8, 2020; 7 – R-8, to the west of room 7, 2019; 8 – R-1, square C 99, 2012; 9 – South-eastern part of the site, surface find, 2013; 10, 11 – Surface finds, 2016.

unfortunately, preserved only partially. We can still see a half oval and an additional line next to it. Furthermore, a small dog walked over the lid while it was drying (Fig. 7:8; Fig. 11:49).

In total, 50 signs on 47 vessels have been detected at Qarshovul Tepa. For convenience, when working on them, we assembled them into tables and numbered them (Figs. 8-11). On three vessels of three types, namely on a mug, a bowl, and a *khumcha*, the same *tamga* is cut out (Fig. 3:2b; Fig. 4:11; Fig. 7:4b;

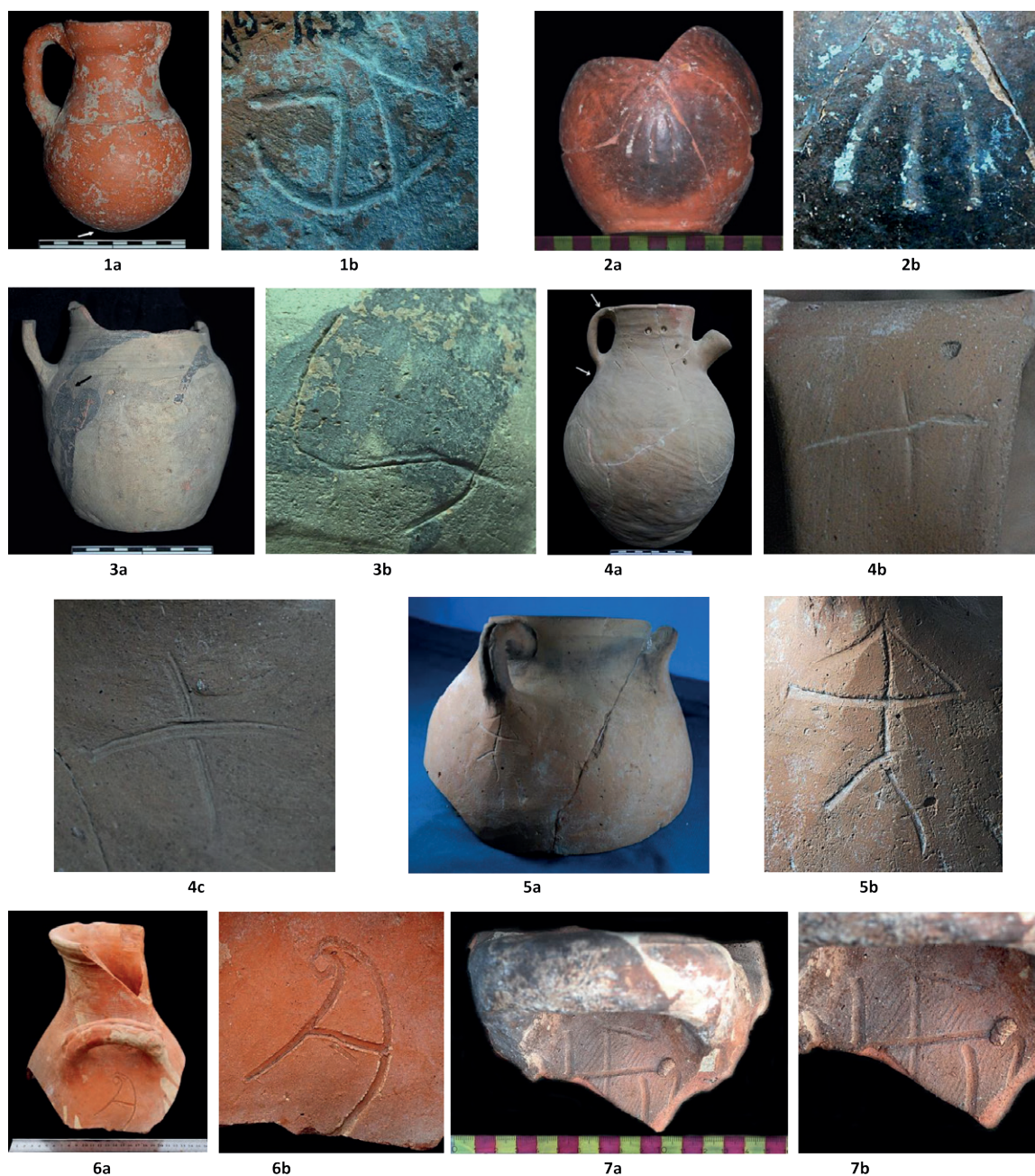


Fig. 5: 1 – Jug, R-1, 2012; 2 – Jug, R-4, 2011; 3 – Jug, R-4; 4 – Jug, R-1, 2011; 5 – Pot, R-8, room 2, 2018; 6 – Liquids vessel, R-3, room 13, 2016; 7 – Liquids vessel, R-3, room 12, 2016.

Fig. 8:1-3). An almost identical *tamga* decorated a bowl and a ewer (**Fig. 4:7b; Fig. 5:1b; Fig. 9:15, 16**). There are two tip-shaped signs on different vessels (**Fig. 2:7b; Fig. 7:7b; Fig. 8:4, 5**), and twice we encountered two of the same crosses on one vessel (**Fig. 3:3b, c; Fig. 5:4b, c**). Two bowls are marked with the same *tamgas* (**Fig. 4:2b, 3; Fig. 9:17, 19**), which so far presents the only example of the usage of identical signs to mark vessels of the same type.

We find mirrored swastikas on a bowl and a liquid vessel/butter churn (**Fig. 4:8b; Fig. 5:7b; Fig. 9:13, 14**).

Thus, if we subtract the number of identical signs out of 50, 41 *tamgas* remain. This is the overall quantity of separate *tamgas* identified to this point. They all date to the period preceding the rout of the town, which is evidenced by the traces of a severe fire. We assume that the rout occurred as the result of the victorious campaign of the Arab commander Qutayba ibn Muslim to Shash and Fergana in 713–714 CE (TABARI/HINDS 1990: 206/1257; BOĽŠAKOV 2010: 111). We can speak of about at least 40 clans or family groups with their own signs of ownership existing on the eve of these events.

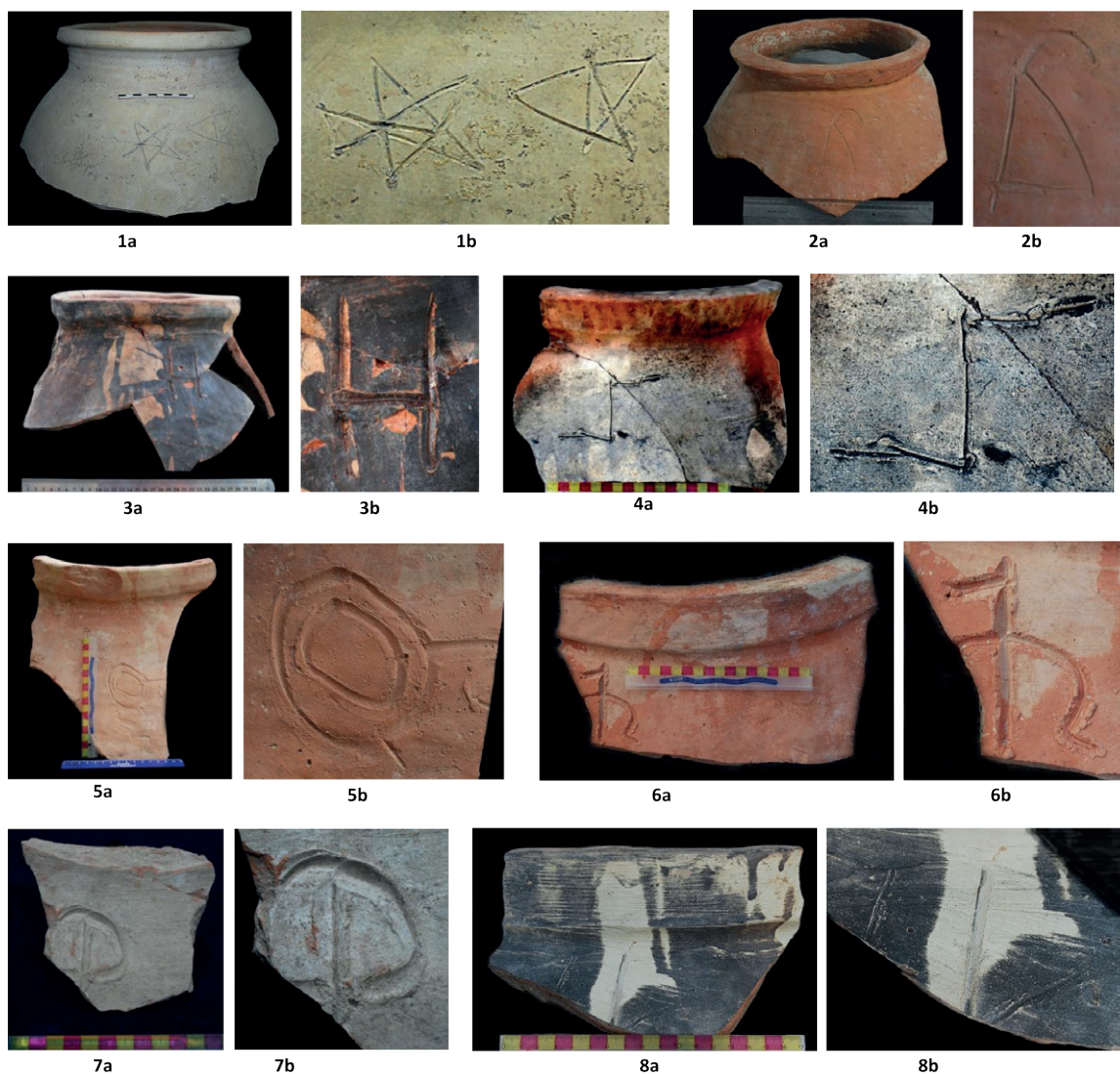


Fig. 6: *Khums*: 1 – R-1, 2011; 2 – R-8, room 1; 3 – R-3, 2016; 4 – R-3, room 12, floor 1, 2016; 5 – R-8, 2020; 6 – R-3, room 16, 2016; 7 – R-3, square BB 94 to the south of platform, 2013; 8 – R-3, 2016.

3 Analogues

During excavations at Shaushukum Tobe (modern spelling *Shashykum*) in western Chach,¹⁰ 36 different signs were detected on ceramic vessels. Together with the signs discovered on the surface of the settlement, the overall number of *tamgas* reached 48 (AGEEVA 1968: 117, Tab. 3, 5, 8, 9, Fig. 12). According to E.I. Ageeva, the majority of signs were found on the wares from the upper layers dated by the researchers to the 6th to 8th century CE and none of them occurred twice. She notes that the signs were applied under the handles, at the bot-

tom and the upper parts of the vessels, but, unfortunately, she did not indicate the exact spot for each sign. The illustrations given in this publication do not provide any clarification. Thus, we are not able to conduct a full comparative analysis between the signs from Qarshovul Tapa and Shaushukum Tobe. Nevertheless, there are parallels to our signs among the latter (Fig. 12:2). It is also notable that the quantity of signs collected from settlements of the same size correspond. This tells us that in this respect, Qarshovul Tapa is not a unique case in Chach of the 7th to 8th century CE.

Let us focus on the interpretation that E.I. Ageeva gives for the presence of various signs on ceramics at Shaushukum Tobe. The author introduces ethnographic data and refers to materials collected by E.M. Peshereva in the mountainous region of Tajikistan. There, domestic tableware was being fired col-

10 Located 100 km to the west of Tashkent and 90 km to the west-northwest of Qarshovul Tapa, to the north of the Chardara/Shardara settlement in the Shardara district in the Turkestan region of Kazakhstan, i.e. in the western part of the historical region of Chach/Shash; 6 ha in size.

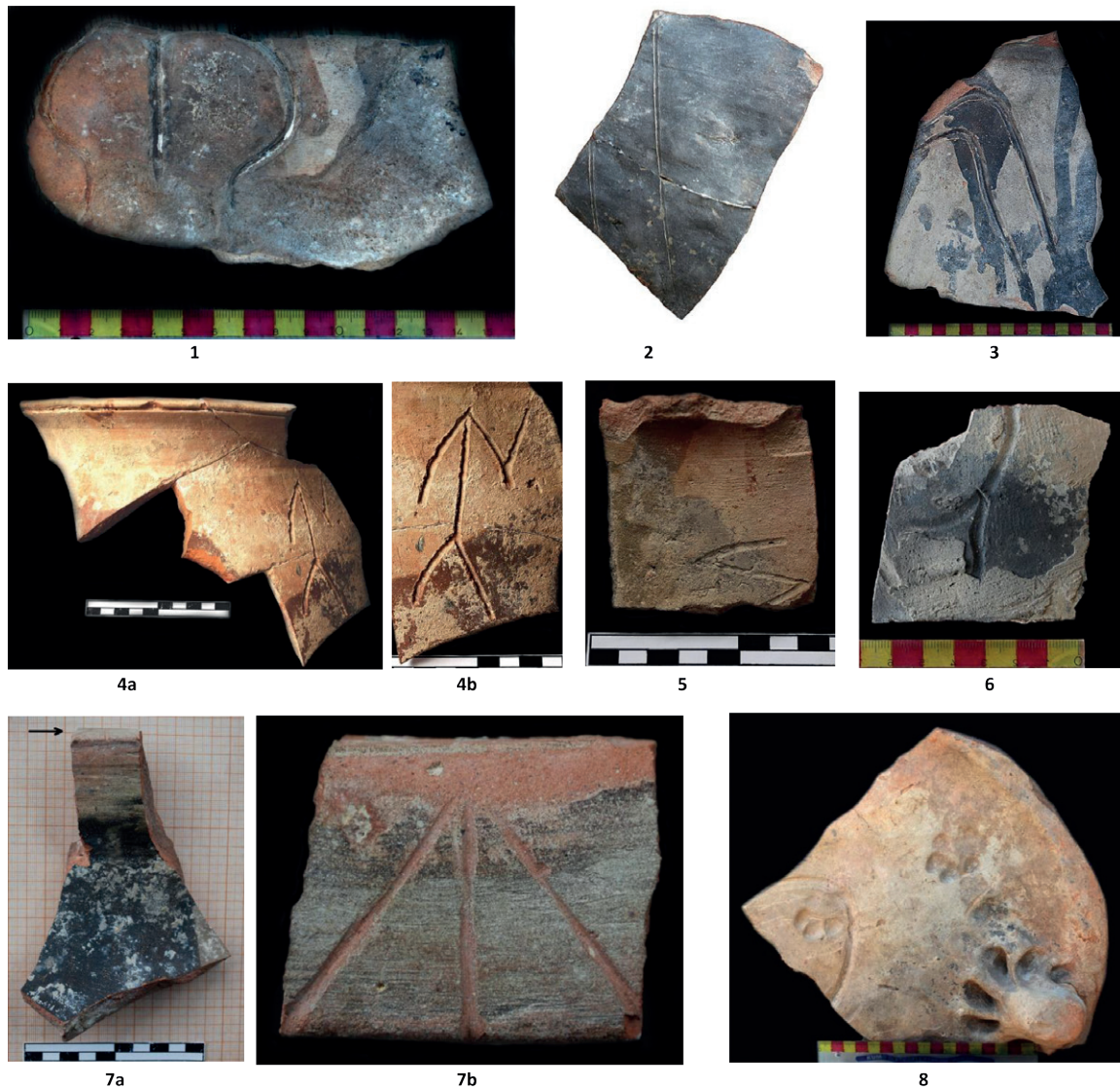


Fig. 7: *Khums*, *khumchas* and lid: 1 – R-3, room 12, 2016; 2 – R-3, 2016; 3 – R-3, room 15, 2016; 4 – R-3, 2013; 5 – R-3, square FF 96, 2014; 6 – R-3, 2016; 7 – Surface find, 2020; 8 – R-3, room 12, 2016.

lectively, that is, the participants contributed their part of the firewood and put their vessels into a collective kiln. In order to identify their objects afterwards, they marked them with signs prior to firing. She concludes that the residents of Shaushukum Tobe must have produced their ware for themselves and fired them collectively (AGEEVA 1968: 118). I cannot support this explanation. From 47 vessels with *tamgas* found at Qarshovul Tapa, 26 are from the category of banquet/tableware.¹¹ They stand out due to the high quality of their production, especially the polishing over the thick layer of slip; six vessels are also decorated with a relief ornament. It is obvious that these works were produced by pro-

11 I.e. 55.5% of the vessels with *tamgas* belong to the banquet/tableware category.

fessional potters, as were the storage vessels, which are also of high quality.¹²

With this in mind, we can hardly assume that we are dealing with domestically produced ceramics that were fired collectively and marked with signs by their owners to distinguish their belongings. Rather, we can speak of ware made on commission by craftsmen who labelled the vessels with the *tamga* of the commissioner. We should also reject the hypothesis that the *tamgas* on the objects were the signs of the potters – we would have to accept the

12 Among the ceramics from Qarshovul Tapa there are also vessels coarsely made by hand, including mugs, which were possibly domestically produced. None of them are marked with signs.

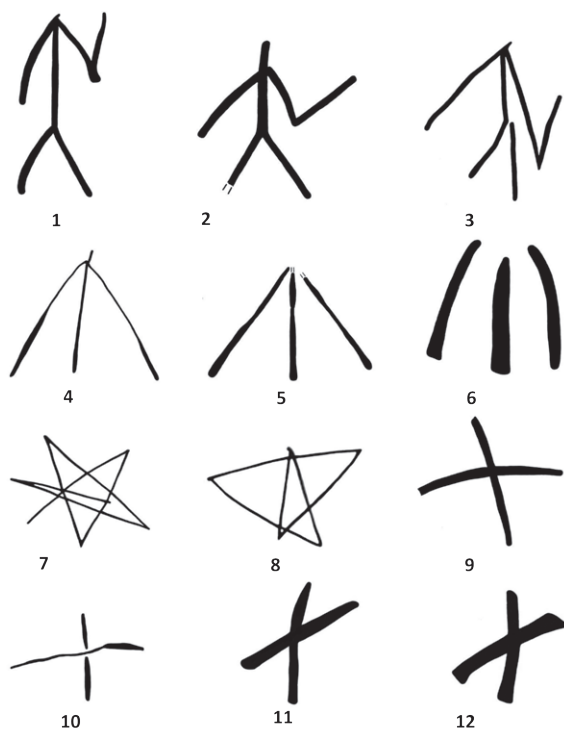


Fig. 8: *Tamga* signs of Qarshovul Tepa.

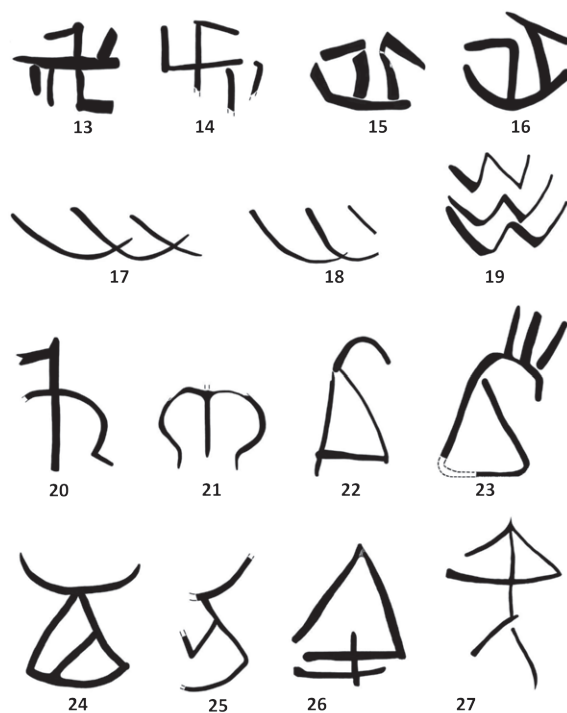


Fig. 9: *Tamga* signs of Qarshovul Tepa.

existence of over 40 pottery workshops inside a small town.

Let us continue with the parallels to our *tamgas*. A number of the signs from Qarshovul Tepa belong

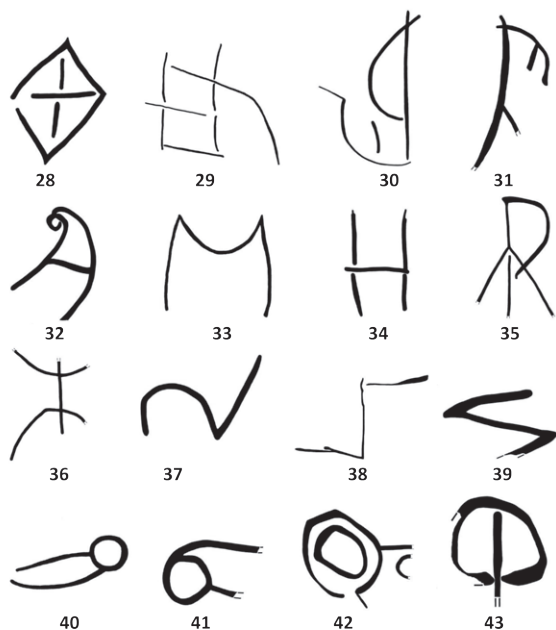
to the so-called “universal signs” widely spread in antiquity not only throughout Eurasia, but across the world. Among such signs we can name pentagrams (five-pointed stars), swastikas, and crosses. They are assigned with various properties depending on the religious-cultic and symbolic context, a great amount of scientific and esoteric literature is dedicated to them,¹³ and I do not consider it necessary to analyse their semantics here. We should only note that the universality of a sign could not hinder a clan, family, or individual from using it as a sign of ownership. The circle of analogies can be very wide even in the Central Asian context; for example, the swastika-shaped *tamgas* from the Kushan fortress Kampyr-tepe in northern Bactria (Surkhandarya region in Uzbekistan) that have been published multiple times (IL’ASOV 2006: 75–76, Figs. 11, 12; ILYASOV 2010: 219–220, Figs. 10–14; ILYASOV 2019). A swastika without additional elements was put on some types of pre-Islamic coins from Chach (Shagalov, KUZNETSOV 2006: 199, 205, 206, 221, 231, 233, 317–319); such coins were also found during excavations at Qarshovul Tepa.

We did not find a pentagram among the signs of the Tashkent oasis, thus, the Qarshovul Tepa *tamgas* are so far unique to the region. This sign can be found on a 4th to 5th century CE *khumcha* with a Bactrian inscription and several other *tamgas* (a so-called “encyclopaedia” of *tamgas*) discovered in the territory of a necropolis with ceramic coffin burials to the south of the citadel of the famous Dalverzin-tepe site in northern Bactria (ILYASOV 2003: 136, Pl. I:23; IL’ASOV 2006: 106; ILYASOV 2019: 134, Fig. 6:8, 9). Inside the courtyard of a residence dated to the 7th to the first half of the 8th century CE at Shurob-Kurgan, a monument neighbouring Kampyr-tepe, V.S. Solov’ev discovered a ceramic table (*dastarkhan*) with a pentagram inscribed into it prior to firing (SOLOV’EV 2004: Fig. 20; SOLOV’EV 2011: 70, Fig. 31). Among earlier examples of the usage of pentagrams to mark vessels, we can name the Chorasmian flask found at the excavations of the Sidorovka burial ground in the Omsk Priyrtishye region, dated to the turn of the eras (1st century BCE to 1st century CE) (YATSENKO/ILYASOV 2019: 319, Fig. 4: 3).

However, the majority of signs from Qarshovul Tepa do not belong to this kind of universal sign-symbol, and the search for parallels enables us to define the historical and cultural circle within which the material and spiritual culture represented at the monument under investigation was given form.

In our quest for parallels to the *tamgas* of Qarshovul Tepa we will limit ourselves to signs discovered in the territory of Chach and its adjacent regions. Once again, we will begin with the universal signs. A banqueting bowl and a “butter churn” are deco-

13 See for example BAGDASAROV 2001.

Fig. 10: *Tamga* signs of Qarshovul Tapa.Fig. 11: *Tamga* signs of Qarshovul Tapa.

rated with a swastika with a vertical line added next to one of its ends. In one case – on the bowl – the additional line is placed on the left side; in the other, on the right (Fig. 9:13, 14).

Tamga no. 13 (Fig. 4:8b; Fig. 9:13) finds a parallel at the Yunusabad Ak Tapa, where the extra line is placed on the left (Fig. 12:4), like on our bowl (GRICINA 1984: 86, no. 2). But the vessel and the exact spot of the swastika are not specified. In his table, G.I. Bogomolov introduces two signs of this kind from the Tashkent oasis, which he included in group III in his systematisation (BOGOMOLOV 2011: 97, Fig. 2: 11, 12). He also does not provide further details. The occurrence of two multidirectional swasti-

kas at the same monument suggests that these were signs of two related clans or families.¹⁴

From the range of universal signs, we often find straight and skewed crosses on ceramics from Chach. Straight crosses can be seen on finds from the Yunusabad Ak Tapa (IL'ASOVA 1997: 121, Tab. III: 18), Kugait Tapa, Usman Tapa, the Kanka settlement, and the Niyazbash burial ground dated to an earlier period; skewed crosses occur on ceramics from Kugait Tapa and Kanka/Qanqa (GRICINA 1984: 86, nos. 3, 8, 25, 26, 27; BOGOMOLOV 2011: Fig. 2:4, 5, Fig. 5:2, Fig. 6:1). On a polished banquet mug from the aforementioned Shaushukum Tobe,¹⁵ located on the western border of Chach, a skewed cross is set to the left of the handle; curiously enough, like on our mug (Fig. 3:3), to the right side of the handle we find a second sign – in the shape of a skewed cross with a crossbar on top (YATSENKO/SMAGULOV 2019: 225, Fig. 4:3).

A parallel to our sign no. 26 (Fig. 3:1b; Fig. 9:26) can likewise be found at Shaushukum Tobe (AGEEVA 1968: Fig. 12). The same sign is presumably given in G.I. Bogomolov's catalogue (BOGOMOLOV 2011: Fig. 1:19). In our case the *tamga* was placed under the handle of a banquet mug with a relief décor; on which vessel and in which spot the sign of Shaushukum Tobe was detected is unknown (Fig. 12:2).

Parallels, or shapes similar in outline, to several Qarshovul signs can be seen among the finds from the Zhuan Tobe (see Fig. 2 on page 504), a settlement located on the Arys River about 170 km to the north of Qarshovul Tapa.¹⁶ Remains of 7th to 8th century buildings that were destroyed by a fire were detected on its citadel (BAJTANAEV/ERGEŠBAEV/SULEJMEANOVA 2013: 71, 74). The excavations revealed *khums* with shoulders decorated with *tamgas* that were cut out prior to the firing. The outline of one of them is very close to our sign no. 32 (Fig. 5:6b; Fig. 10:32), except for the stronger tilt and a double crossbar instead of a single one, as in our case (BAJTANAEV/ERGEŠBAEV/SULEJMEANOVA 2013: 74, Fig. 2:10) (Fig. 12:6). Another sign on one

14 On the forming principles of family signs, see Ācenko 2001: 19–21.

15 This particular mug belongs to an object group consisting of five bowls, a mug, and an oil lamp in the shape of a small jug, labelled by the authors as the “cultic(?) set” and housed in the Turkestan regional historical museum in Shymkent. All objects are marked with *tamgas* (three of them with two signs each) and all but the mug belong to that same type of ceramic with a relief décor that we found at Qarshovul Tapa (Fig. 2:8a; Fig. 3:1a, 2a; Fig. 4:7a, 8a; Fig. 5:2a). S.A. Ācenko and E.A. Smagulov suggest that this set could have originated from the same complex of a preserved burial, or rather that it was a “votive contribution to the sanctuary or [it] formed a part of the sanctuary's utensils” (YATSENKO/SMAGULOV 2019: 225, Fig. 2:1, Fig. 4:2–5). This ware dates to the 6th to 8th century CE (ARENOVA 2018: 99).

16 About six days' journey for a caravan.

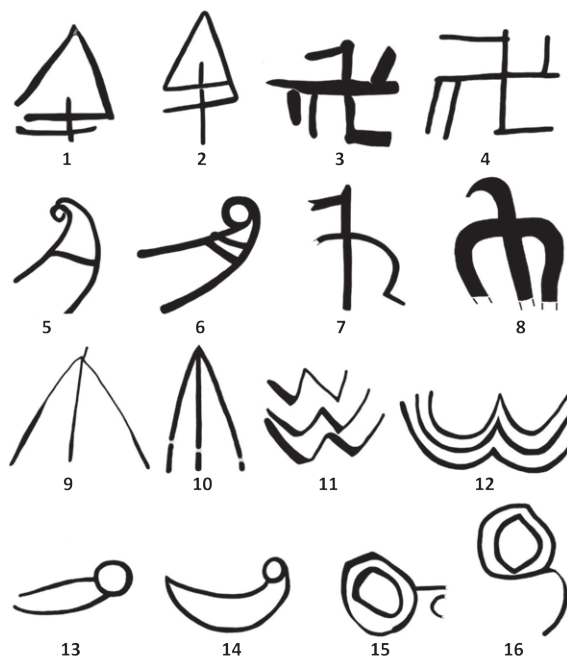


Fig. 12: *Tamgas* from Qarshovul Tapa (1, 3, 5, 7, 9, 11, 13, 15) as well as analogues and similar signs (4 – Ak Tapa, Tashkent; 10 – Dombraobod, Tashkent; 16 – Kugait Tapa, Tashkent; 2 – Shaushukum Tobe; 6, 8, 12, 14 – Zhuan Tobe).

of the Zhuan Tobe *khums* (Fig. 12:8), which is for some reason described by the authors as a “figure in the form a latin letter psi”,¹⁷ resembles two *tamgas* from Qarshovul Tapa, likewise placed on *khums* (Fig. 6:6b; Fig. 7:1). Our *tamga* no. 19, composed of three W-shaped signs situated above each other, placed on the body of a mug (Fig. 3:5b; Fig. 9:19), finds a parallel with the sign on another Zhuan Tobe *khum*, which has smoother outlines (Fig. 12:12). A second sign of this kind can be found on a *khum* from the Sidak settlement,¹⁸ located 18 km westwards of the city of Turkestan (SMAGULOV/ÂCENKO 2013: Fig. 7:4; SMAGULOV/YATSENKO 2019a: 177, Fig. 3 (3):2). On the same site, we find parallels to our sign no. 34 in the shape of the letter H (Fig. 6:3b; Fig. 10:34) decorating several *khums* (SMAGULOV/ÂCENKO 2013: Fig. 7:2; SMAGULOV/YATSENKO 2019a: 177, Fig. 3 (3):4). In his article on signs from Chach, G.I. Bogomolov mentions one such sign on ceramics

17 Firstly, the letter *psi* is not a letter of the Latin, but the Greek alphabet; and secondly, it is written upside down, its arcuate part being arched downwards and not upwards, as it is on the *tamga*.

18 As was the case at Qarshovul Tapa and Zhuan Tobe, the habitation of the Sidak settlement ceased in the 8th century CE. During works at the *khumkhana* in Room 1 of the 2009 excavation, which belongs to the upper building horizon, about 10 *khums* und *khumchas* with *tamgas* and graffiti images were found (SMAGULOV/ÂCENKO 2013: 210, 211; SMAGULOV/YATSENKO 2019a: 183, Fig. 3). The authors of the publications relate the *khumkhana* to a sanctuary that functioned in the last phase of the city's existence.

from Kanka, which he combines into group XVII together with signs on 5th to 6th century mudbricks; but he does not provide dating for the ceramics (BOGOMOLOV 2011: 102).

The sign no. 29 on a Qarshovul Tapa mug (Fig. 2:8b; Fig. 10:29) is typologically similar to signs from the Kanka and Shaushukum Tobe settlements (BOGOMOLOV 2011: 99, Fig. 2:18–21; AGEVA 1968: 111, Fig. 12), but is not identical to them. According to Bogomolov, it could symbolise a field with a canal leading to it. I find such an interpretation doubtful. Similarities could be seen between our *tamga* no. 42 (Fig. 6:5b; Fig. 10:42) and a sign from Kugait Tapa in Tashkent (GRICINA 1984: 86, no. 11) (Fig. 12:16).

The Qarshovul Tapa *tamga* no. 37 (Fig. 2:8b; Fig. 10:37) is a mirrored image of a sign known from ceramics of Sidak (SMAGULOV/YATSENKO 2019a: 177, Fig. 3 (3):4) and the Kayragach “estate” in Southern Fergana, which E.A. Smagulov and S.A. ÂCENKO interpret as a sanctuary (SMAGULOV/YATSENKO 2019b: 238, Fig. 4 (I):25).

Some similarities could be detected between Qarshovul Tapa sign nos. 40 and 41 (Fig. 2:5b, 6b; Fig. 10:40, 41) and *tamga* on the *khum* from Zhuan Tobe (BAJTANAIEV/ERGEŠBAEV/SULEJMEANOVA 2013: 74, Fig. 2: 11) (Fig. 12:14).

Tamgas from Qarshovul Tapa preserved only partially (Fig. 9:25; Fig. 10:31, 36, 39, 41–43; Fig. 11:44–49) unfortunately do not enable a full comparative analysis and interpretation. Nevertheless, their registration and publication will eventually make this possible, after more signs in a better state of preservation are discovered.

4 Some conclusions

The problem of interpreting the signs in general, and particularly on ceramics, is very captivating – but complex. Concerning broad theoretical considerations – from the genesis of sign systems to their employment in various spheres of life – we direct the interested reader to the abovementioned general works (ÂCENKO 2001: 3–30; PIM/YATSENKO/PERRIN 2010; YATSENKO/ROGOŽINSKIY 2019: 8–42). In order to stay focused on the subject of this article, we should limit ourselves to the discussions about *tamgas* from Chach.

There are several multidirectional tendencies in the interpretation of signs from Chach. According to one of them, each sign is regarded as a magical one, and scholars eagerly try to “extract” deep, centuries-old semantics out of them. We will name this tendency “magical” or “romantic”. Its proponents are A.N. Gricina and G.I. Bogomolov. In accordance with the second tendency, which we will call “pragmatic”, *tamgas* are assigned a purely utilitarian function: an identification mark intended to help

to distinguish individuals' ware after a collective firing. E.I. Ageeva is treating the Shaushukum Tobe collection exactly like this, leaving aside the magical meaning of the signs (see above). However, I am instead a supporter of the third tendency, which can be labelled as the "ethno-geneologic interpretation". This type of balanced approach was chosen by S.A. Ācenko and E.A. Smagulov in their chapter on *tamgas* from Chach. The authors critically analysed the methodology of the author who is most actively dealing with the interpretation of Chach signs: G.I. Bogomolov (YATSENKO, SMAGULOV 2019: 200, 205, 219–224).¹⁹ There is one thing that can be added to their critique: it would be interesting to look at such an interpretation of Qarshovul Tapa sign nos. 30 and 31 (**Fig. 10:30, 31**), which stand out with their unusual configuration. Of course, in almost every geometric shape, allowing for a certain amount of fantasy, one can see astral, chthonic, vegetal, zoomorphic, anthropomorphic, phallic, or other kinds of symbols. We can also not exclude the idea that certain apotropaic meanings played into the choice of a *tamga*. However, the decipherment of these semantics, which could have lost their initial meanings even for the descendants of the inventors of these signs after one or two generations, is an unproductive task. The magical theory of the application of signs cannot provide an answer to one question: why was the protection of the vessels contents' selective?²⁰ At Qarshovul Tapa, we have so far unearthed more than 30 mugs, but only 13 of them are marked with *tamgas*. Other mugs, among which we find polished vessels of high quality, wheelmade ware of the Sogdian type (imports?), and coarsely moulded vessels in domestic contexts, do not carry any marks on them. How can we explain this? Is it that their owners did not believe in magical symbols? That they did not worry about their health?

19 To the category of Chach signs of group XVI, Bogomolov also adds relief rosettes at the bottoms of red-slip wares of the 7th to 8th century CE (BOGOMOLOV 2011: 101–102). Earlier we mentioned a group of polished banquet vessels that is characteristic for a number of 7th to 8th century monuments in Chach (see Fn. 15). It includes ewers, mugs, bowls, pots, and lamps. If we follow G.I. Bogomolov's argument, we would have to treat all the relief décor on these vessels as *tamgas*.

20 A.A. Gricina, who was the first in his attempt to compile data on the semantics of the signs on the ceramics of the Kaunchi culture, poses the question on why signs were not put on every vessel. He suggests the following answer: "In our opinion, signs were only placed on those vessels that were intended to contain specific products, considered special for particular reasons, sacred, and which required special protection by supernatural forces. Such a product could have been barley used for ritual purposes, and some others, i.e. these vessels initially had a cultic function as well" (GRICINA 1984: 93–94). However, banquet tableware was intended for food and drink, and not for the storage of sacred products; therefore, this argument is insufficient.

That they were fatalists? It is much easier to imagine that *tamgas* were put on those commissioned objects that were intended to serve as offerings to a temple, or some other place where people gathered for social activities and ceremonies accompanied by a collective meal and drinking. In this case, it was visible which clan or family made this donation. It is exactly this function of the signs that is suggested for the 7th to 8th century sanctuary at Sidak and for the temple Kayragach in Fergana (SMAGULOV/YATSENKO 2019b: 239).²¹ Another possible motivation could be the usage of people's own tableware during collective feasts. Sometimes scholars discuss the function of the marks for the counting of end products in a workshop. However, the overcomplexity of some of the signs speaks against this assumption (**Fig. 10:30**).

Another problem in the interpretation of the signs is their chronological linking. The 40 signs published here date to the 7th to early 8th century CE, which corresponds to the Turkic period in the history of Chach.²² In order to understand which of the signs collected by us can be related to the Kangju heritage, and which signs and traditions of their application are related to Turkic tribes that conquered Central Asian domains in the middle of the 6th century CE, we have to have a clear view of the chronology of the Chach sign corpus. Unfortunately, we do not always find chronological links of findings in the extant publications. After titling his article "On the semantics of signs on ceramics of the Kaunchi culture", A.A. Gricina writes about signs from Shaushukum Tobe that E.I. Ageeva dates to the 6th to 8th century, and mentions signs from Ming-Urûk, Yunusabad Ak Tapa, and others that are dated, as a matter of fact, to the later Turkic period. It is possible that the "universal" signs described above could have been products of the Kangju heritage because they occur among the materials of the first centuries CE on monuments in Chach and the adjacent territories. Parallels to the remaining signs from Qarshovul Tapa are rarely found, or are yet unknown in early materials. On the other hand, among the Turkic signs that mostly occur on cultic-memori-

21 "Professional potters used to work at the sanctuary (Kayragach in southern Fergana - Dj.I.) in its active stage. Probably, as was the case in Sidak, they made vessels to order for pilgrims visiting the temple and put clan/family signs on them" (SMAGULOV/YATSENKO 2019b: 238).

22 In accordance with the periodisation of archaeological cultures of the Tashkent oasis, suggested by Ū.F. Burâkov who studied antique Chach for several decades, the period from the mid-7th to mid-8th century CE corresponds with the second phase of the Ming-Uryuk archaeological complex. In the 6th century, this complex replaces the archaeological complex of the third period of the Kaunchi culture (BURÂKOV 1982: 80–86, 100). In this case, the change in archaeological complexes and the respective archaeological cultures is clearly relatable to the Turkic conquest of Central Asia.

al complexes built from stone, on steles, sarcophagi, statues, zoomorphic sculptures, petroglyphs, on objects of weaponry, and household items (SAMAŠEV/BAZYLHAN/SAMAŠEV 2010; ROGOŽINSKIJ 2012: 91–104; ROGOŽINSKIJ 2013: 226–240; TABALDYEV 2019: 364–386), as well as on coins (BABAĀROV 2007; BABAYAROV 2019: 333–363), there are also no signs fully coinciding with our *tamgas*, except for the universal signs like a cross, swastika, or arrow.²³ Therefore, we suggest that it is too early to make final conclusions about the attribution of the signs collected and published in this article.

Nonetheless, some conclusions can be drawn based on the presence of a rich and diverse sign system in a rather small town in the south-west of the Tashkent oasis, as we can characterise Qarshovul Tepa:

The application of family-clan or individual *tamga* signs was widespread in the sphere of the nomadic and semi-nomadic population of the Kangju confederation, which included the Chach domain from the first centuries BCE to the first centuries CE.

The sedentarisation of nomads and their inclusion into processes of urbanisation within the so-called “Kaunchi” archaeological culture dated to the 2nd century BCE to the first half of the 6th century CE probably did not lead to the full disruption of the family-clan structure of the population in the cities.

The existence of identical *tamgas* in the territory from the Tashkent oasis to southern Kazakhstan (Zhuan Tobe, Sidak) rather advocates for tribal and clan signs, not individual ones. Their dissemination outlines the resettlement area of certain related tribes or clans.

Our finds from the Qarshovul Tepa settlement – over forty different signs, circulating shortly before the Arab conquests to Chach/Shash in the second decade of the 8th century CE – testify to the fact that the family-clan structure still existed at that time.

However, whether the existence of these signs attests to the longevity of Kangju traditions, or whether we are dealing with *tamgas* of the Turkic tribes

that conquered Central Asia after defeating the Hepthalites around 560 CE, is still to be investigated.

Apparently, in the assimilation process of the descendants of the Kangju population – the carriers of the Kaunchi and Otrar-Karatau archaeological cultures – particular clans preserved their tribal symbolism, but their identification within the corpus of signs gathered from Qarshovul Tepa requires the further collection and research of well-dated materials.

The same goes for signs of Turkic origin, for the comparative analysis with published Turkic *tamgas* has not yet revealed many parallels.

Through archaeological works at Qarshovul Tepa, we hope to expand our collection of *tamgas* and at the same time realise their layered/stratigraphic fixation, which will eventually enable us to speak about the chronological, ethnic, and historical-cultural attribution of the Chach signs with more confidence.

In the process of Islamisation, which began in Chach/Shash in the 8th century CE, *tamgas* gradually fell out of use, at least in the marking of ceramics. Although in general, as our observations of the early Islamic coinage demonstrate, *tamgas* in some Central Asian domains, included into the Caliphate by force, transformed themselves into a kind of emblems of cities and for decades complemented Arab legends on coins (YATSENKO/ILYASOV 2019: 323–326).

Although urban life signified to yesterday’s nomads the end of their long way across the steppes and foothills, the investigation of signs from Qarshovul Tepa reveals that the process of sedentarisation could not extinguish the centuries-old tradition of the application of *tamgas*. This is highly interesting and informative material that enables us to follow the routes and the chronology of the movement of particular ethnic groups. Our research conducted also demonstrates that we are only at the beginning of a long journey of collecting, investigating, and publishing signs of ownership that can reveal much more about the history of Central Asian peoples.

23 For the swastika, see OSAWA 2010: Fig. 1: h. The Qarshovul sign no. 36 (Fig. 4:5b; Fig. 10:36) resembles sign no. 5 from the list “Tamgas of the horses of vassal principalities” of the Chinese source of the 8th to 10th century CE (ROGOŽINSKIJ 2013: 239), but due to the fragmentary preservation it is not fully reliable.

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Early Karakhanid Glazed Ceramics of Bukhara

Based on a Corpus of Material from the Citadel of Vardanzeh

Djamaliddin K. Mirzaahmedov, Munira N. Sultanova and Shuxrat T. Adylov

Abstract: Despite significant archaeological research during the past decades in the Bukhara oasis, the study of one of its main aspects – ceramic production or, to be more precise, the glazed ceramics of the Medieval period – lags far behind the other neighbouring regions of Central Asia.

An interesting complex of glazed ceramics of the late 10th to mid-11th century CE was found in Vardanzeh, reflecting the formation of a new chronological phase in the development of the decorative style of glazed ceramics that also became distributed in other regions of Maverannakhr. The complex from Vardanzeh allows the revision of the previously established views on the primacy of the Afrasiab-Samarkand ceramic school among other pottery centres of Central Asia.

As a result of a comparative analysis of the earliest stylistic features, which spread throughout the neighbouring regional ceramic centres, we can definitely consider Binket-Tashkent or, in a broader sense, the ceramic school of the north-eastern regions as the leading stylistic school of Maverannakhr pottery of the late 10th to the first half of the 11th century CE.

Keywords: Vardanzeh settlement, Bukhara Sogd, glazed ceramics, dishes, bowls, ceramic school, Afrasiab, Binket-Tashkent.

Резюме: Несмотря на то, что в последние десятилетия в Бухарском оазисе проводилось множество археологических исследований, один из главных аспектов его изучения – керамическое производство, а именно производство глазурованной керамики периода развитого средневековья, – остается гораздо менее проработанным, чем на материале соседних регионов Центральной Азии.

В последние годы в крупном городском центре оазиса – городище Варданзе – был обнаружен интересный комплекс поливной столовой посуды конца X – середины XI в., отражающий становление новой хронологической фазы в развитии стиля художественного оформления глазурованной керамики, который получил широкое распространение и в других регионах Мавераннахра.

Комплекс керамики с городища Варданзе позволяет пересмотреть ранее утвердившиеся взгляды о главенствующей роли керамической школы Афрасиаба–Самарканда среди других гончарных центров Средней Азии этого периода.

Результаты анализа наиболее ранних особенностей стиля, впоследствии повсеместно распространившихся по региональным центрам изготовления керамики, позволяют с уверенностью считать школу Бинкета–Ташкента или, в более широком смысле, школу северо-восточных регионов ведущей стилистической школой керамики Мавераннахра конца X – первой половины XI века.

Ключевые слова: городище Варданзе, Бухарский Согд, поливная керамика, блюда, чаши, керамическая школа, Афрасиаб, Бинкет–Ташкент.



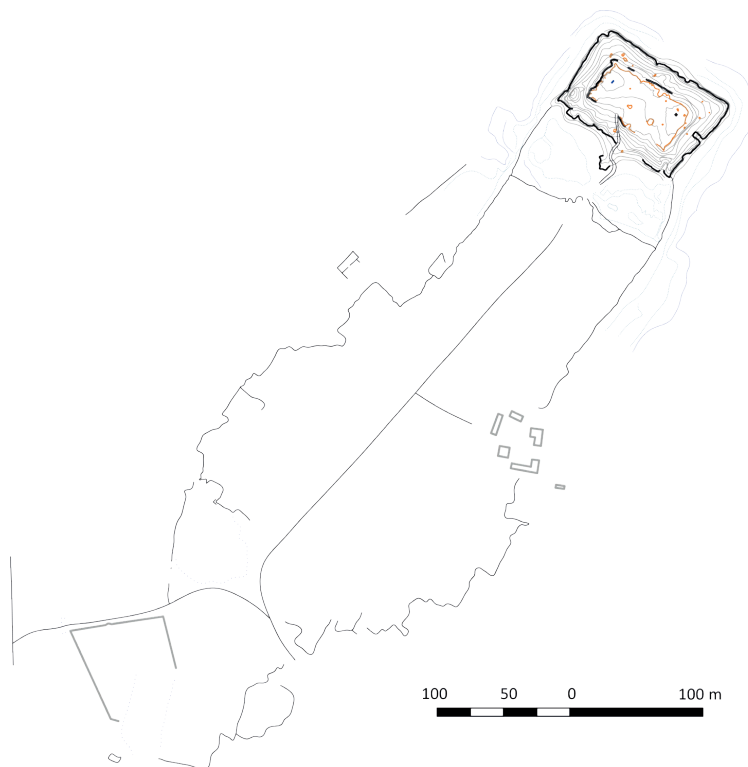


Fig. 1: Topographic plan of the Vardanzeh settlement (by Orlando Cerasuolo).

1 Introduction

Vardanzeh (ancient Vardāna; see **Fig. 1 on page 262**) is one of the most famous urban centres of Bukharan Sogd, the capital of a local principality, which according to legendary sources was presented as a gift at the marriage of prince Shapur of the Sasanian dynasty and the daughter of Afrasiab, the king of Turan¹ (a marriage between a Sasanian prince and later king of kings, Kavad, and a Hephthalite princess) (AN-NARŠAHI 2011: 29, 41; ADYLOV/MIRZAAHMEDOV 2001: 151–157).

It became well-known due to the activities of its last ruler, Vardankhudat, who usurped power from the legitimate heir of Bukharan kings, Bukharkhudat Taghshoda, during the Arab conquest of western Sogd, when the latter failed to resist the aggression of the invaders and turned into their faithful servant. Vardankhudat, on the other hand, managed to temporarily unite forces and create an anti-Arab coalition both inside and outside the Bukhara oasis, putting the Caliphate troops led by Quteiba b. Muslim into a very difficult position. Only after the death of Vardankhudat in a fierce battle in 709–710 CE could the Arabs count Bukhara as a conquered land. In this regard, large-scale repressions were con-

ducted here by Quteiba against local landowners, or *dihqans*, who participated in an anti-Arab coalition, and the oasis was turned into a springboard for further systematic conquest of the rest of Sogd and Maverannakhr (see **Fig. 1 on page 262**).

The citadel, which was the residence of the ruler of Vardāna, was destroyed by the Arabs and subsequently settled poorly or periodically, while the district of Obawiya – a former possession of Vardankhudats – was turned into a *Shakhsh-Bakhsh rustak*² (shah's gift) under the Samanid dynasty.

2 Glazed ceramics from the citadel of Vardanzeh as an indicator of a transition

Archaeological research, which started on the citadel of Vardanzeh in 2009 with the financial support from the Swiss Foundation of Eurasia, continues to this day (**Figs. 1–2**). The latest results of this research are reflected in articles in the last collective volume by the Swiss Foundation for the Exploration of EurAsia (POZZI 2017; MIRZAAHMEDOV ET AL. 2017), where the problem of the periodical

1 From detailed research of the written sources, it seems that this legendary story is based on a real marriage between a Sasanian prince and later king of kings, Kavad, and a Hephthalite princess (ADYLOV/MIRZAAHMEDOV 2001: 151–157).

2 Rustak is a term used for an administrative-territorial unit within the Bukhara Soghd. It was also usually a separate, semi-independent principality that was formally under the Bukharkhudat rule.



Fig. 2: The citadel of the Vardanzeh settlement. View from the south-east
(photo: International Institute of Central Asian Studies, 2020).

habitation of the Vardanzeh citadel after the Arab destruction is discussed based on the glazed ceramic finds of the 10th to 19th century CE. One of the most interesting closed complexes, only partially discussed in this publication, consists of materials obtained from a garbage pit in the south-western part of the citadel with a rich set of glazed ceramics from the end of the 10th to the first half of the 11th century. This complex quite clearly characterises changes occurring during the transition from the bright Samanid-era glazed ceramics with their wide range of trends in ornamental art, to a new direction with more restrained, standardising stylistic canons of the next chronological stage in the production of glazed ceramics of Maverannakhr, closely linked with the the Karakhanid dynasty's rise to power.

In our opinion, these changes in the character of ceramic decoration were caused by a combination of reasons. First of all, this might be due to deterioration of the economic situation in the region and a decrease, in this regard, of the purchasing power of the population to afford more expensive samples of artistic ceramics of the previous period (MIR-ZAAHMEDOV 2013: 357–372).

No less important is the entry and wide dissemination of new stylistic trends into the design of glazed ceramics of this period that spread from the northern regions of Maverannakhr, associated with the innovative, mass perception of ornamental compositions of the Binket-Tashkent pottery school.

This certainly includes a design of a vortex rosette surrounded by ring lines and vegetal shoots, which is one of the most commonly used decorative pattern on objects within our complex, as well as the motifs of bouquets that are found on glazed ceramics of the first half of the 10th century CE from Binket-Tashkent (BRUSENKO 1986: Tables 47, 37 and 15). Since the issue received little academic attention in the 1960s, the opposite opinion dominated. A reconsideration of the influence of the Samarkand pottery school on the character of ornamental compositions (vortex rosettes, stylised inscriptions and images of birds, the appearance of bouquets) on the glazed ceramics of Central Asia was suggested. In particular, its influence during this period on northern and north-eastern regions of Maverannakhr, such as Tashkent, Fergana, and Semirechye, was highlighted (TAŠHODŽAEV 1967: 147–148).

One of the most important stylistic trends of this period that we can observe on glazed objects is a gradual replacement of Arabic as a state language, seen in a total stylisation of Arabic inscriptions on ceramics and their transformation into a decorative motif (BELENICKIJ/BEN TOVIČ/BOLŠAKOV 1973: 280). Along with readable Arabic inscriptions, zoomorphic and, more rarely, anthropomorphic motifs that existed in the previous period also disappear on the objects of the Karakhanid period; this is probably explained by the dissemination of stricter religious conservative tendencies in everyday life. These

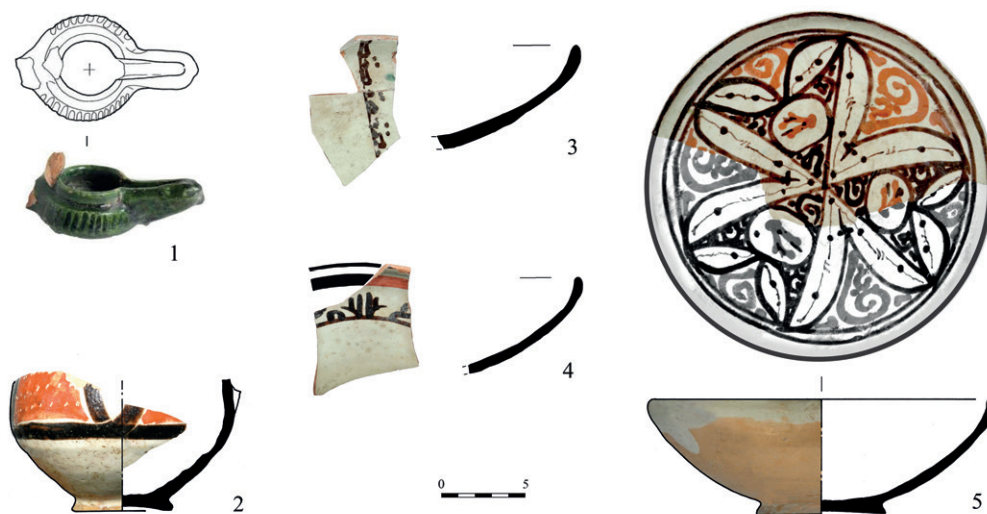


Fig. 3: Glazed ceramics of the middle to the second half of the 10th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

changes undoubtedly occurred with the influence of nomadic rulers, who often followed simpler, dogmatic positions, as well as with the introduction of Sufism³ into the moral way of life of the population. This latter religious trend, which demanded the refusal of an idle lifestyle and encouraged occupation by labour while being with God in one's thoughts, was initially regarded as heretical, but in a very short time became widespread among the masses of craftsmen and the educated population. From the beginning of the Karakhanid period, several factors demanded that ceramicists renounce the more expensive zoomorphic, anthropomorphic, and epigraphic motifs that required skilled professional labour: new, more constrained economic conditions; more stringent moral standards; and the introduction of the simplified philosophy of Sufism, corresponding to the worldview of the popular masses, into the fairly educated craft environment. The motifs were replaced by short, single word benedictions, such as "*Baraka*" (abundance, prosperity), or with spiritual concepts, such as "*Al-mulk*" ("power" belongs to Allah), which were very comprehensive, understandable, and in demand in the popular environment.

According to the shapes of the objects, the complex consists mainly of fragments of dishes, a small number of bowls, a jug, and an oil-lamp. In chronological terms, on the basis of broad analogies, it can be subdivided into glazed products of the mid to second half of the 10th century CE (Fig. 3), which

are very insignificant and fell into the complex as a relic of a previous era, and the bulk of the finds, which with a certain degree of confidence can be attributed to the materials of the late 10th to mid-11th century (Figs. 4–12).

I. An oil-lamp covered with green glaze and decorated with a ribbed ornament along the base of the reservoir can be attributed to the first group of glazed objects, which are identified by analogy with neighbouring monuments and regions datable to the middle of the 10th century (Fig. 3:1). The upper part of the loop-shaped handle is chipped off (KONDRAT'eva 1961: Table VIII, Fig. 1 and 5; ĀKUBOVSKIY 1940: Ills. 1 and 2; INEVATKINA/SOKOLOVSKAĀ 1998: Fig. 3: 2 and 3).

The base of a polychrome table ewer of a spherical shape (Fig. 3:2), which is contrastingly decorated along the body with a sector ornament of black and red colours on a white background (ŠIŠKINA 1979: Table LXIII, Fig. 4).

A fragment of a small dish decorated diagonally on the interior with a repeated stylised inscription in "Kufic" script with diacritical signs dividing the dish into two sections against the white background (Fig. 3:3). There is no engobe on the outer surface, which is partially covered with colourless glaze, highlighting the reddish-brown tone of the fragment (ŠIŠKINA 1979: Table LV, Fig. 1 and 2; IL'ASOVA/MIRZAAHMEDOV/ADYLOV 2000: Fig. 3:16).

A fragment of a hemispherical wall of a small dish with a black decorative inscription around the upper surface of the object (Fig. 3:4). There is a contrasting red circular line under the rim. As on the fragment of the previous dish, the ornamentation

3 Sufism began to spread in the Bukhara oasis, starting from the 10th century (MIRZAAHMEDOV D.K./MIRZAAHMEDOV S.D. 2020: 248).

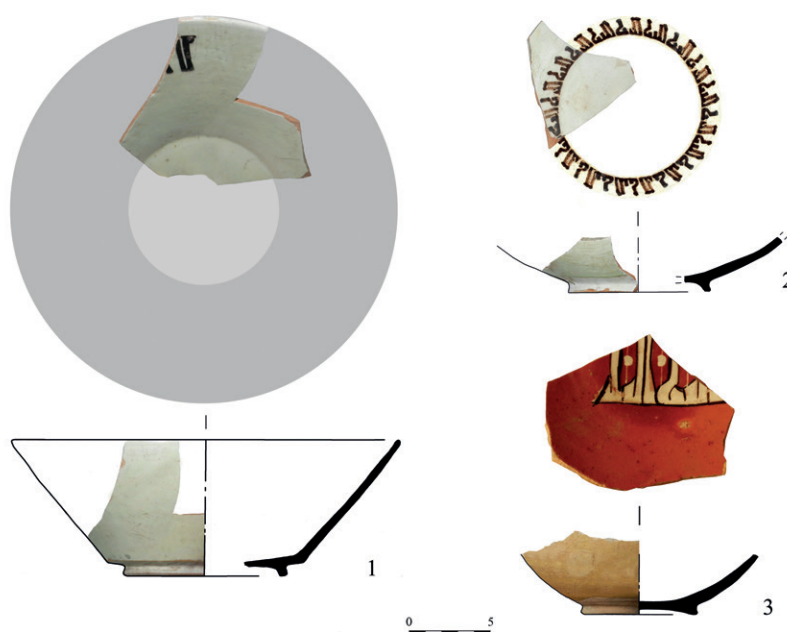


Fig. 4: Glazed ceramics with stylised epigraphic motifs from the late 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

is applied on the white engobe of the inner surface. On the outside there is no engobe, and a transparent glaze, for the most part, covers the reddish-brown tone of the fragment (diameter of the rim 19 cm).

A small archaeologically complete dish with hemispherical walls on a disc-shaped concave base (Fig. 3:5). Polychrome ornamentation with contrasting vegetal and floral designs consists of a large petalled rosette alternating with spiral-like motifs in dark brown and red colours on a white engobed background of the fragment. The engobe, which spreads to the outer surface of the walls, is carelessly limited to the rim. Below, a colourless, transparent glaze covers the reddish-brown background of the fragment (diameter of the rim 19 cm, diameter of the base 7 cm, height 6.5 cm).

In addition, within the complex there are several small fragments of glazed ceramics with non-definable shapes, but with a fairly clear character of decoration datable to the 10th century CE. Among them, the most common are the fragments of dishes with a green-yellow background and scratched ornamentation.

In general, the lamp with green glaze, the lower half of a table ewer, as well as three samples of small dishes, one of which has a disc-shaped concave base, have features characteristic of ceramics of the 10th century, such as the absence of both engobe and ornamentation on the outer surface, and the use of reddish-brown colour under the colourless, transparent lead glaze. Polychrome ornamentation and

epigraphic motifs can be considered as indicators of the ceremonial-decorative character of these objects. The dishes were used as tableware, but, given the decorative nature of their design, in most cases they could have been displayed in an upright position on shelves of the living room or *mekhmonkhona*, similar to the use of ceramics in traditional interiors as seen in ethnographic materials of the 19th and early 20th century. That is why the external surface of the presented dishes is not artistically decorated. It should also be noted that all the abovementioned objects from the period under consideration had a reddish-brick colour and a shiny lead glaze of fine quality.

II. The second, more significant group of ceramics from the closed complex consists of fragments of tableware from the end of the 10th to the first half of the 11th century CE. In terms of shapes, they consist of several fragments of bowls, a cup, and primarily of dishes of various sizes, and saucers. They can be divided into several sub-groups according to the nature of their ornamentation.

II.1. In the first small sub-group we can include objects whose main decoration consists of an epigraphic décor.

Fig. 4:1 shows a truncated-conical bowl on a ring base. Both surfaces of its walls, including the base, are covered with a white engobe, while a transparent lead glaze reaches to the base of the bottom. Part

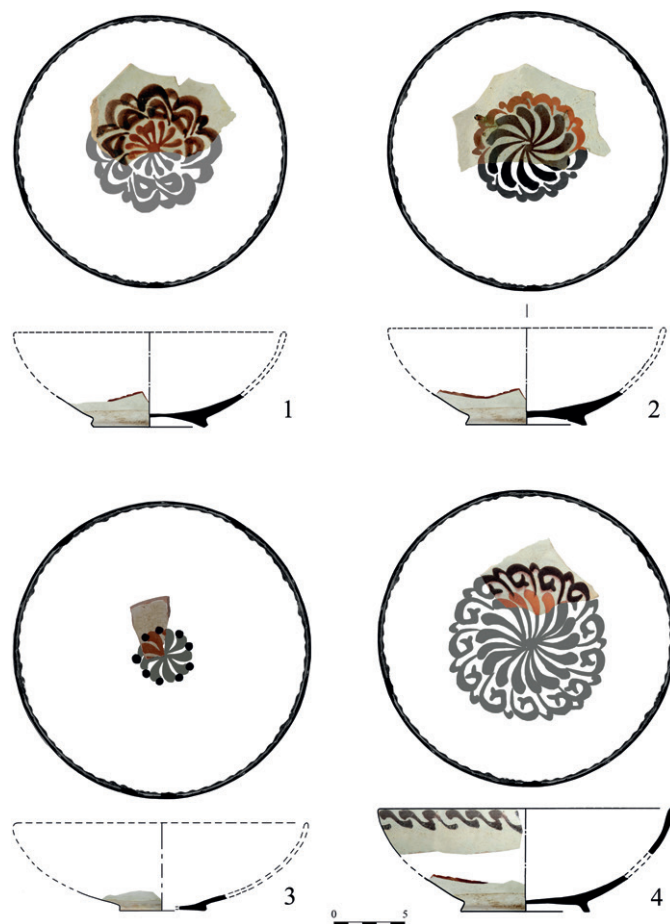


Fig. 5: Types of glazed ceramics with a vortex rosette of the late 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

of the stylised inscription is visible along the rim. Most likely, it was located in sectoral order, with a single word on each side. No other ornamentation on the dishes is noted (diameter of the rim 22.5 cm, diameter of the base 9 cm, height 8.5 cm). Based on the iconography of the inscription, the bowl is confidently dated to the materials of Afrasiab (Samarkand) from the first half of the 11th century (ŠIŠKINA 1986: Fig. 42:3).

A fragment of a small, hemispherical dish on a ring base with a repeated stylised epigraphic décor located along the inner bottom surface of the object (Fig. 4:2). White engobe covers the surface, including the base, while a transparent lead glaze in some places reaches the outer surface of the bottom (diameter of the base 9 cm). Judging by the nature of the epigraphic décor, by analogy with the materials from Afrasiab (Samarkand) and Binket (Tashkent), this dish can be attributed to the end of the 10th to the first half of the 11th century (MOULIÉRAC/MARIN/REY-DELQUÉ 1992: Cat. Nos. 213, 215; BRUSENKO 1986: Table 38, Fig. 1; Table 41, Fig. 1).

A small hemispherical dish on a disc-shaped concave base. A stylised inscription is located in the centre of the inner surface on the red engobe covering (Fig. 4:3). Engobe is not found on a fragmentarily preserved outer surface of the object. The transparent lead glaze reaches the base of the bottom of the dish, covering the outer surface of the reddish-brown coloured body (diameter of the base 8.5 cm, preserved height 4 cm). The disc-shaped concave base and transparent glaze on the outer surface brings this object close to materials of the 10th century, but the character of the stylised epigraphic inscription – based on analogies with materials from neighbouring, better studied regions – places its date at the end of the 10th to the beginning of the 11th century (MOULIÉRAC/MARIN/REY-DELQUÉ 1992: Cat. No. 199; ŠIŠKINA 1986: Fig. 42:1; TAŠHODŽAEV 1967: Fig. 10:B).

II.2. The second and the most significant sub-group of objects from the end of the 10th to the first half of the 11th century CE consists of dishes of various sizes with a white background that are united by

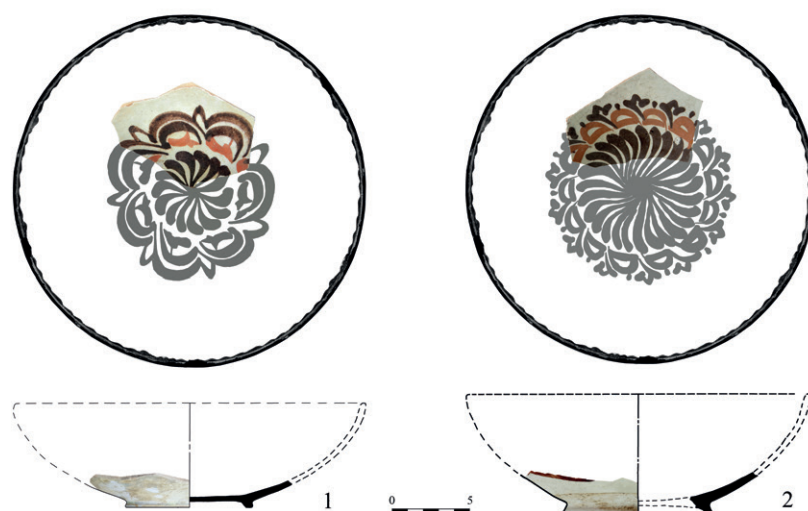


Fig. 6: Types of glazed ceramics with a vortex rosette from the end of the 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

the general character of the style of decoration. We would like to emphasise once again the predominance of dishes among the materials of our complex, constituting 30 specimens of archaeologically complete objects and fragments, while bowls are presented by no more than three forms in fragments.

A central ornamentation of a vortex petalled rosette, as well as various stylised petalled and floral vegetal motifs that enclose it, dominate in the character of the decoration on these dishes. All of the motifs were applied in various sizes, with the use of contrasting black and red colours. Further, the main middle part of the inner surface of the walls remains plain and only a concentric wavy motif is applied to the edge of the rim, which on a number of samples turns into an all-over design, made with the use of black and dark brown colours. We should also note that in most cases the central vortex rosette was made with red and, to a lesser extent, black colours. All rosettes rotate clockwise (**Figs. 5–9**).

On individual examples of dishes, a décor of diagonal hatchings or other motifs is observed along the edge of the outer surface of the rim walls which is also applied in dark brown tones. The shapes of the objects also have a general nature. Disc-shaped concave bases that are present on a small number of these objects bring them close to the remnants of forms of the 10th century. However, the majority of the tableware objects within the complex have a ring base. Walls with a hemispherical shape are also common, including the characteristic white engobe covering of the surface up to the base of the object. A transparent, white, shiny lead glaze, mostly of good quality, covered the walls up to the bottom of the outer surface of the objects.

The significant free white background of the objects with contrasting combination of black and red colours on a white, bright, shiny background can be included as the one of the characteristic canons of technical and artistic design, which became the new characteristic trend in artistic taste of the Karakhanid period encompassing the whole region of Maverrannakhr, along with the standardisation and stylisation of a set, and various combinations, of certain widely used motifs.

Based on the materials of the presented complex, it can also be noted that on all samples of dishes of the new artistic trend, within the framework of the new chronological period of the late 10th to mid-11th century CE, we can observe a complete covering with white engobe and application of transparent glaze up to the base on the outer surface of dishes and bowls, including their predominantly ring-shaped, and occasionally disc-shaped, bases.

The fragments of objects from the complex have pinkish and yellowish shades. Judging by the wear on the engobe, it is possible to say that they were intensively used as serving dishes when guests were received. It is possible to assume, based on the number and variety of the presented objects, that the owner of the complex was a wealthy man who lived in the Vardanzeh citadel. This can be confirmed by the fine artistic and technical quality of the dishes, placing them into the ceremonial-decorative type of objects and also suggesting their use as decorations for the interior of rooms.

Turning to the description of the second group of objects from the end of the 10th to the first half of the 11th century CE, we can note that it included the greatest number of dishes with vortex rosettes

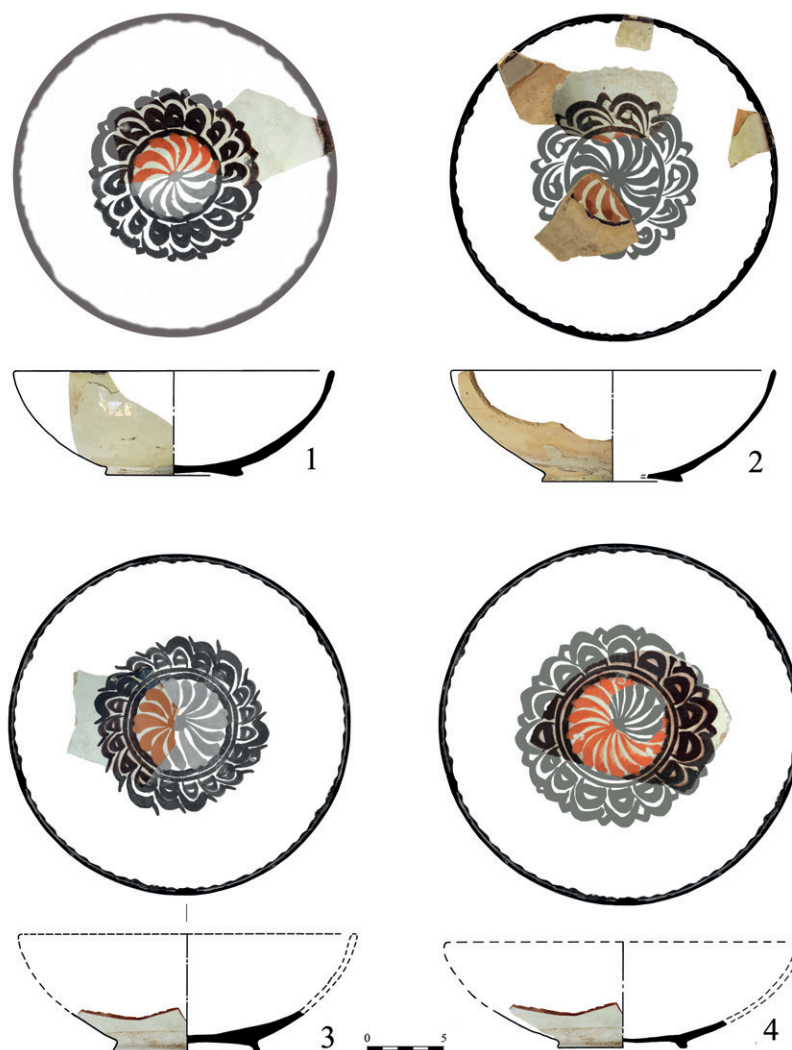


Fig. 7: Types of glazed ceramics with a vortex rosette from the end of the 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

encircled by concentric and petalled motifs as the basis of their ornamental compositions. There was an obligatory concentric wavy border along the rim. **Fig. 5** shows four dishes that were conventionally selected on the basis of the presence of disc-shaped concave bases on the three of them and the absence on all of them of the concentric frames enclosing rosettes. The rosettes on three dishes are red in colour, except for the second, which is made in a black tone. The fourth dish has a circular base and a concentric “r”-shaped décor along the rim of the outer surface. The disc-shaped concave base brings them closer to the objects of the 10th century, but regarding all the other features they fully correspond to the style of the new artistic trend and date to the end of the 10th to the first half of the 11th century (**Fig. 5:1**, diameter of base 8 cm; **Fig. 5:2**, diameter of base 8 cm; **Fig. 5:3**, diameter of base 6 cm; **Fig. 5:4**, diameter

of base 10 cm (ŠIŠKINA 1979: Table LXVII, Fig. 1; TAŠHODŽAEV 1967: Fig. 22).

The next two dishes (**Fig. 6:1–2**) feature rosettes of black colour on the base, and ring-shaped bottoms, although concentric lines enclosing rosettes are absent (**Fig. 6:1**, tray diameter of base 9 cm; **Fig. 6:2**, diameter of base 10 cm).

In **Fig. 7**, two archaeologically complete dishes feature a disc-shaped concave base, while the other two possess ring bases. The rosettes are in a red colour on all four dishes. These rosettes are enclosed into a single concentric frame on samples with disc-shaped concave bases, while a double concentric frame is used to surround the rosettes on two dishes with a ring base (**Fig. 7:1**, diameter of base 8.5 cm; **Fig. 7:2**, diameter of base 8.5 cm; **Fig. 7:3**, diameter of base 10.5 cm; **Fig. 7:4**, diameter of base 10.5 cm) (TAŠHODŽAEV 1967: Fig. 22).

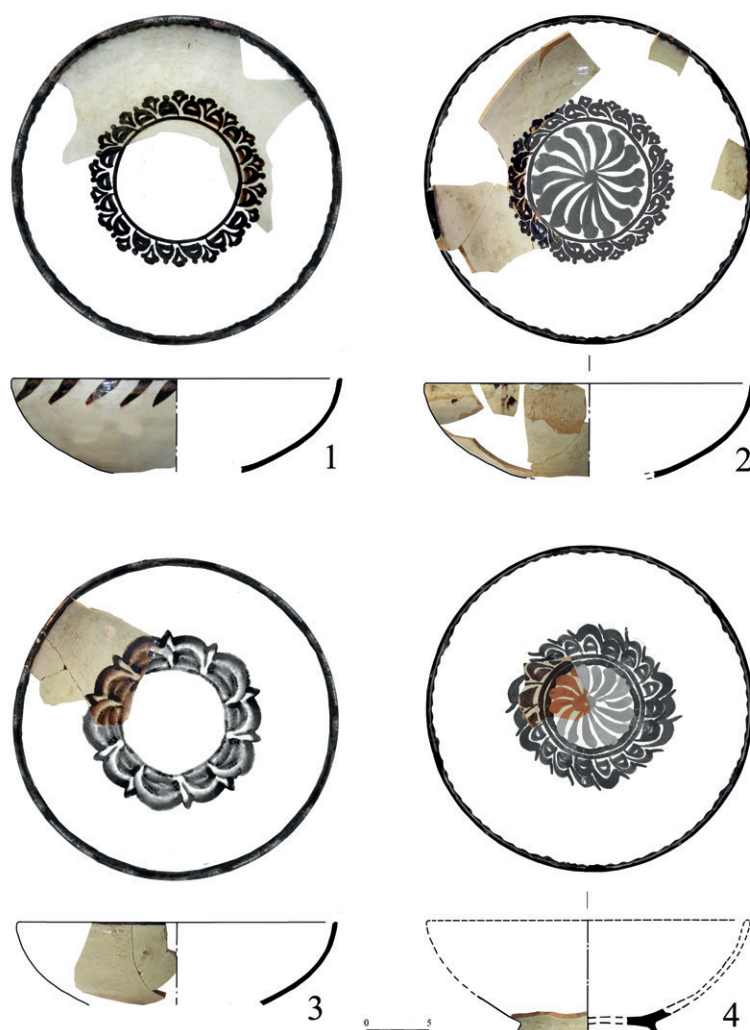


Fig. 8: Types of glazed ceramics with a vortex rosette from the end of the 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

In the next figure (**Fig. 8:1–4**), the walls of three large dishes are preserved, although without bottoms. On the first dish, the diameter of the rim reaches 28 cm and there is an ornamentation of diagonal hatched strokes along the outer rim. We can assume that there was a small rosette on the base, based on the symmetry of the intended ornamentation on the missing base (**Fig. 8:1**). On the second dish, the base is also absent, but an edge of a red petal is preserved along the circular line that encloses the rosette. The diameter of the rim is approximately 22 cm. On the edge of the outer side of the rim, despite the crumbling glaze, it is possible to see the fragments of a design of diagonal hatched strokes (**Fig. 8:2**). On the third plate, the diameter of the rim is 24 cm and the base is not preserved (**Fig. 8:3**). The fourth sample is represented by the base of the dish with a large

petal rosette in the centre (**Fig. 8:4**) enclosed by a double ring frame (diameter of base 11 cm).

Fig. 9 shows four samples of large dishes, which were decorated using new ornamental motifs. A motif of a broken toothed concentric line is added above the rosette on the first dish (diameter of base 11.5 cm) (**Fig. 9:1**). On the second, archaeologically complete, dish a concentric red band line filled with scrolls and dots is placed above a small black rosette (diameter of rim 27 cm, diameter of base 9.2 cm, height 7.7 cm) (**Fig. 9:2**). On the third dish, with a partially preserved base, the rosette is absent. There is a double concentric frame that encloses some sort of stylised vegetal motifs in the centre, and a dotted concentric line along the top. The outer surface of the rim is decorated with a concentric décor of “T”-shaped motifs (diameter of rim 26 cm, diameter of base 9.5 cm, height 8 cm) (**Fig. 9:3**). On the fourth

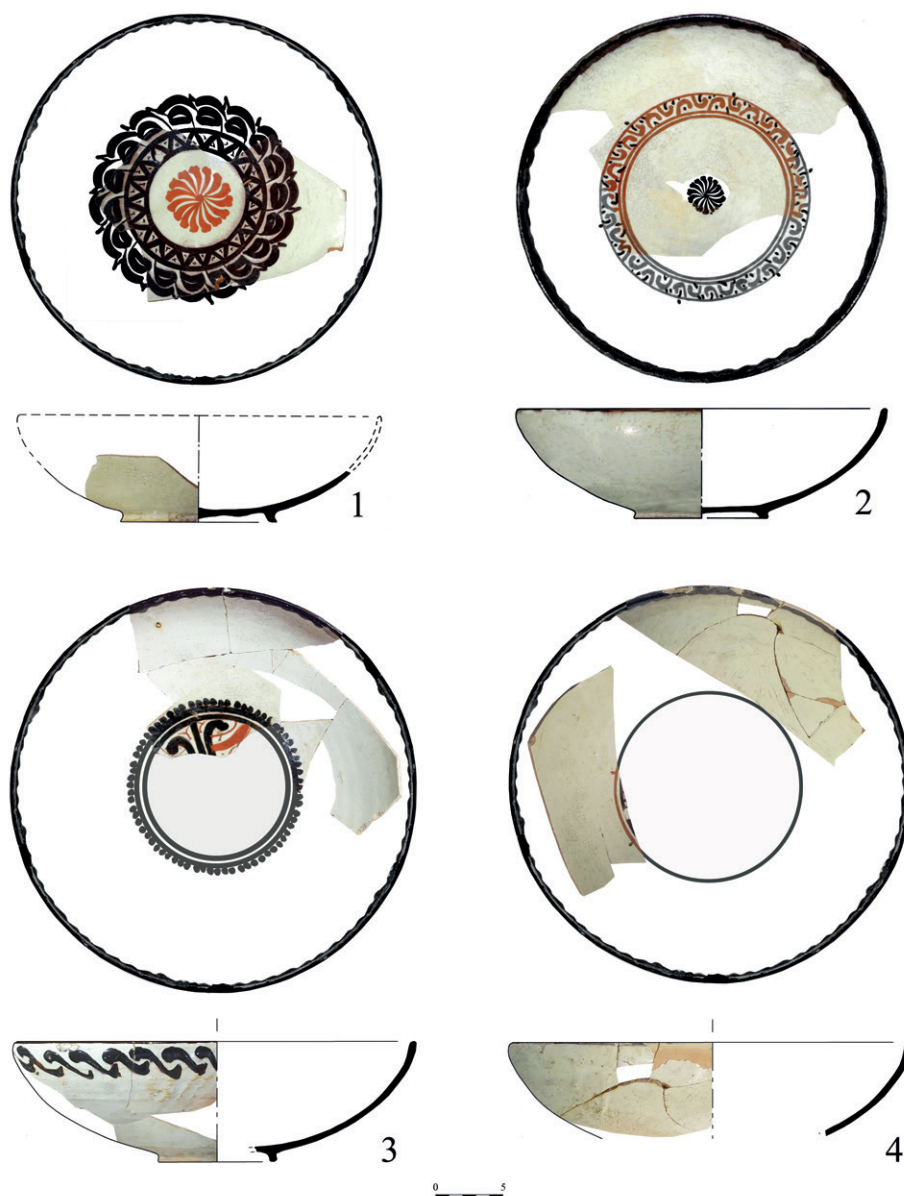


Fig. 9: Types of glazed ceramics with a vortex rosette and undetected central ornamentation from the end of the 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

dish the base is absent, but the remains of the red line made in black paint are partially preserved (diameter of rim 26 cm) (Fig. 9:4).

Fig. 10 shows fragments of walls and bases of four dishes (Fig. 10:1–4). On two of them that have similar decoration, there is no base (Fig. 10:1 and Fig. 10:3) but, unlike the first one, the next example features a “r”-shaped concentric motif along the outer rim. The diameter of the rim of the first dish is 21 cm; the second is 28 cm.

The two following fragments are represented by bases of dishes. The ornament of the first consists of

two concentric lines, between which a dotted motif is applied. In the centre there are traces of a small rosette (diameter of base 10 cm) (Fig. 10:3). The ornamentation of the second base consists of stylised plant elements traditionally placed above a double concentric line, while the interior is decorated with a motif of alternating red and black dots in a circle (diameter of base 10.5 cm) (Fig. 10:4).

III. The third group of objects from the period under consideration includes two dishes of the same standard forms, the basis for the decoration of

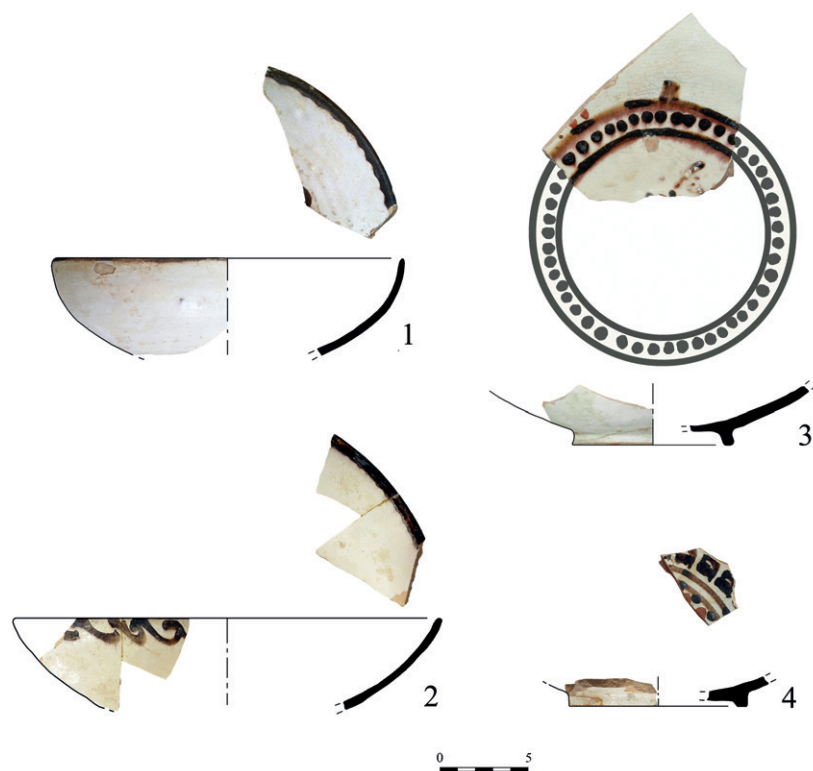


Fig. 10: Types of glazed ceramics with undetected ornamentation in the centre from the end of the 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

which is another characteristic symbol of the period – stylised bouquets. Similarly to rosettes, bouquets appear on Tashkent ceramics earlier than in neighbouring regions (BRUSENKO 1986: Figs. 37 and 47), while its use in Sogd is attested from the 11th century (ŠIŠKINA 1979: Tabel LIX, Figs. 3 and 4). Moreover, the absence of the traditional concentric wavy motif along the edge of the rim of the dishes is another distinctive feature of the third group that differs from the preceding one (Fig. 11:1–2).

On the first, archaeologically complete dish four stylised flower bouquets are arranged in sector order, feature a simplified form, and alternate with stylised inscriptions. The style of the inscriptions also corresponds to chronologically similar objects from the neighbouring regions, as well as to the inscription on the bottom of the dish with a red background from the first group (Fig. 4:3) (diameter of rim 25 cm, diameter of base 9.3 cm, height 7.8 cm).

The second dish was preserved by the rim (diameter of rim 27 cm) and contained a more complex pattern of a flower bud (Fig. 11:2), which can be identified by parallels with a motif of a “bud on a leg” found on ceramics from Afrasiab dating from the 11th century CE (ŠIŠKINA 1979: Table LIX, Figs. 3 and 4). According to his findings, Š.S. Tašhodžajev attributed this motif of a bud to the second half of the 11th to the first half of the 12th century (TAŠHODŽAJEV 1967: Fig. 31). In terms of the com-

position of our complex and the totality of the data presented in previous publications, we consider the point proposed by G.V. Šiškina to be more acceptable. Moreover, it is necessary to include the presence of four neat pin holes that once served to repair the dish (Fig. 11:2) among the characteristic features of the object described above. In previous articles, we have already noted the appearance of the first repair holes on the dishes based on individual samples of ceramics of this period (IL’ASOVA/MIRZAAHMEDOV/ADYLOV 2000: 239, Fig. 3:15; MIRZAAHMEDOV 2013: Figs. 7:3 and 7:14). This was associated with the beginning of a general, gradual economic recession, a deterioration in consumer demand and a reduction in artistic styles in connection with this, the general processes of painting simplification, and the gradual transition of the rich, original ornamental art of the 10th century to the canonised framework of standard craft products. In general, this was reflected in the practical disappearance of naturalistic zoomorphic motifs on the dishes, the complete stylisation of epigraphic inscriptions, and the transformation of floral compositions that were rich in colour and variety of subject matter into stylised, standard bouquets and vortex petal rosettes in the centre of the dishes. In turn, the simplification of the artistic style, the cheapening of the cost of products, as well as the availability of repairs with the reuse of more expensive ceremonial tableware – which can all be

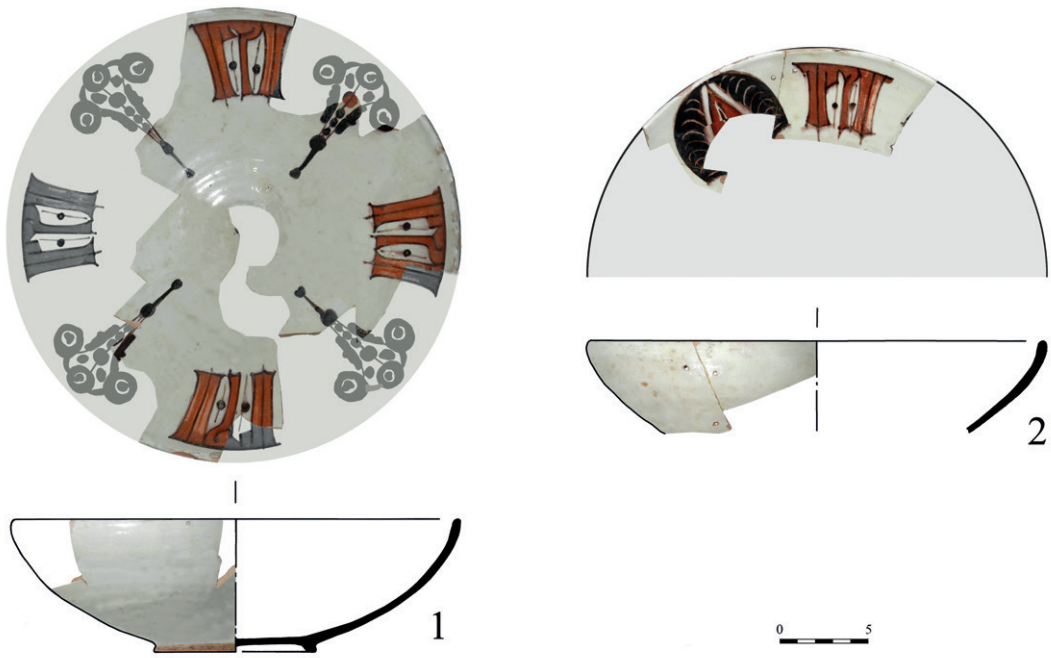


Fig. 11: Types of glazed ceramics with ornamentation of bouquets and stylised epigraphy from the late 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

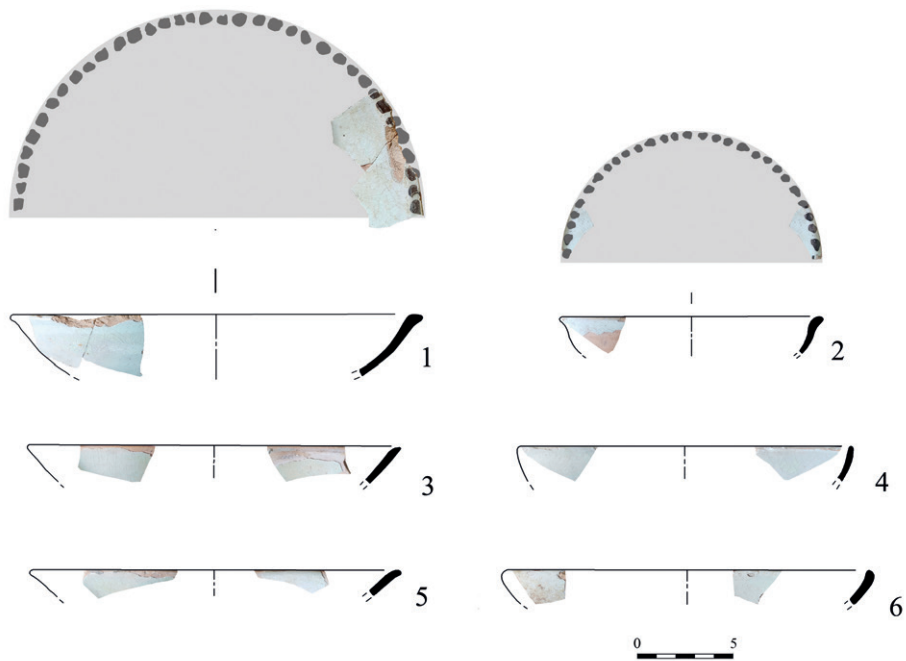


Fig. 12: Samples of saucers with limited and undetected ornamentation from the end of the 10th to the first half of the 11th century (drawings by M. Sultanova, © The Society for the Exploration of EurAsia).

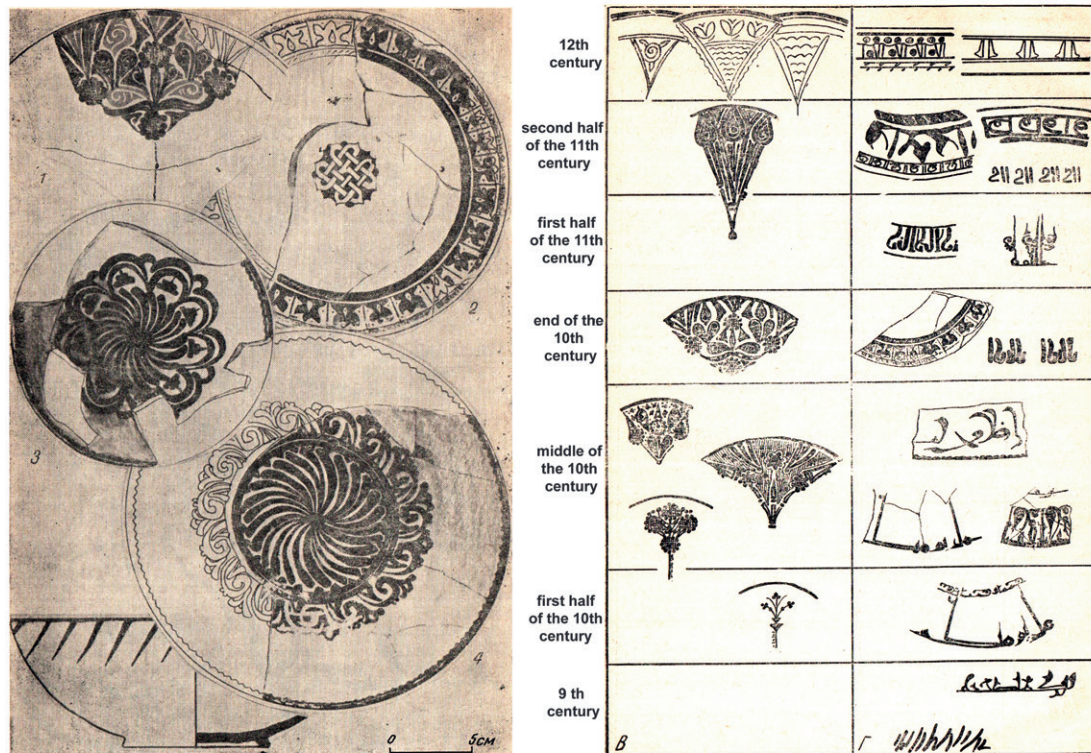


Fig. 13: Early samples of glazed ceramics of Binket-Tashkent with the evolution of vortex rosettes, motives of bouquets, and stylised epigraphy (after BRUSENKO 1986: Table 47).

observed from the early 11th century – are certainly associated with the general processes of the “silver crisis” that engulfed Central Asia during this period (MIRZAAHMEDOV 2013: 357; IL’ASOVA/MIRZAAHMEDOV/ADYLOV 2000: 238–239).

Along with the presented materials, we isolated a modest number of small fragments of corollas in the complex, on two of which only dotted circular ornamentation is visible on the side (a small dish and a cup, Fig. 12:1–2); and on the remaining fragmentary samples the ornamentation may not be present at all (Fig. 12:3–6). These products to some extent confirm and, most likely, indicate the abovementioned economic difficulties and the appearance of types of dishes with a limited amount of ornamentation or even without it.

At the same time, the first two samples of products with dotted border ornamentation on the rim, imitating a simplified version of the wavy décor on our objects, are precursors of a widespread feature over two centuries on ceramics of the Chagataid period (second half of the 13th to the first half of the 14th century CE) (MIRZAAHMEDOV ET AL. 2017: Fig. 7:2). Finally, the last four fragments of the rims of dishes with white glaze and without ornamentation can be attributed to the first imitations of white and white-grey Chinese porcelain, samples of which were found in Afrasiab layers (Samarkand) of the

middle of the 10th and 12th century (ŠIŠKINA 1979: Table LXXIX).

3 Conclusion

In general, the closed complex from the Vardanzeh citadel, presented in this article, contributes to the disclosure of artistic canons of an innovative trend in the development of the design style of glazed ceramics brightly reflecting the emergence of its new phase in the late 10th to the first half of the 11th century CE, which genetically ascends to the Binket-Tashkent school (BRUSENKO 1986: Tables 37 and 47; IL’ASOVA ET AL. 2016).

The materials obtained from the ancient settlements of Vardanzeh (Bukhara), Afrasiab (Samarkand), and Binket-Tashkent allow us to review the general direction of the genetic processes of the development of the style of various schools of glazed ceramics in famous urban centres of Central Asia in the period under consideration.

As a result of comparing the earliest artistic style features of glazed dishes, which then spread throughout the neighbouring regional ceramic centre, one can definitely consider the Binket-Tashkent ceramic school to be the leading style trend in the ceramic market of Maverannakhr in the late 10th to mid-11th century CE (Fig. 13).

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The Cultural Traditions of Urban Planning in Samarkand during the Epoch of Timur¹

Azim Malikov

Abstract: The paper is devoted to the analysis of various cultural traditions that have been reflected in the urban planning of Samarkand during the era of Timur (1336–1405 CE). The analysis of the city plan and religious and memorial structures, using archaeology, epigraphy, and comparative research with other regions of Central Asia, led to the conclusion that the Timur-era urban planning culture initially had local roots, which were later enriched with some of the cultural traditions of those countries (Iran, the Golden Horde, Khwarezm) that were invaded by Timur. In my view, the creation of new urban structures and buildings of the Timur era in Samarkand can be divided chronologically into two groups. The first group was built in the first fifteen years of Timur's reign from 1370 to 1385 CE. In these monuments, the traditions of local architecture were strong, and were enriched with elements of the Kashka Darya, Bukhara, and Khwarezmian masters. The second group of Samarkand monuments was built from 1386 to the end of the reign of Timur. It includes the main masterpieces of Samarkand architecture, which were built with the participation of masters from different countries: the regions of Iran, the Golden Horde, Khwarezm, Northern India, etc.

Keywords: Urban structure, Khwarezm, Iran, urban culture, architecture, legitimization.

Резюме: Статья посвящена анализу различных культурных традиций, нашедших отражение в градостроительстве Самарканда в эпоху Тимура (1336–1405). Анализ городского плана, религиозных и мемориальных построек с использованием данных археологии, эпиграфики и сравнительных исследований с другими регионами Средней Азии привел к выводу о том, что культура городского планирования времен Тимура изначально имела местные корни и позднее обогатилась за счет культурных традиций некоторых из тех стран (Иран, Золотая Орда, Хорезм), в которые вторгся Тимур. На наш взгляд, создание новых городских структур и памятников эпохи Тимура в Самарканде хронологически можно разделить на две группы. Первая группа была построена в первые пятнадцать лет правления Тимура с 1370 по 1385 год. В этих памятниках были сильны традиции местной архитектуры; они были обогащены отдельными элементами работы Кашкадарьинских, Бухарских и Хорезмийских мастеров. Вторая группа памятников Самарканда строилась с 1386 года до конца правления Тимура. В нее входят главные шедевры самаркандской архитектуры, которые были построены при участии мастеров из разных стран: различных регионов Ирана, Золотой Орды, Хорезма, Северной Индии и др.

Ключевые слова: Городская структура, Хорезм, Иран, городская культура, архитектура, легитимация.

1 Research on the topic of the article was carried out thanks to a grant from the European Regional Development Fund: Project "Sinophone Borderlands: Interaction at the Edges" (CZ.02.1.01/0.0/0.0/16_019/0000791).



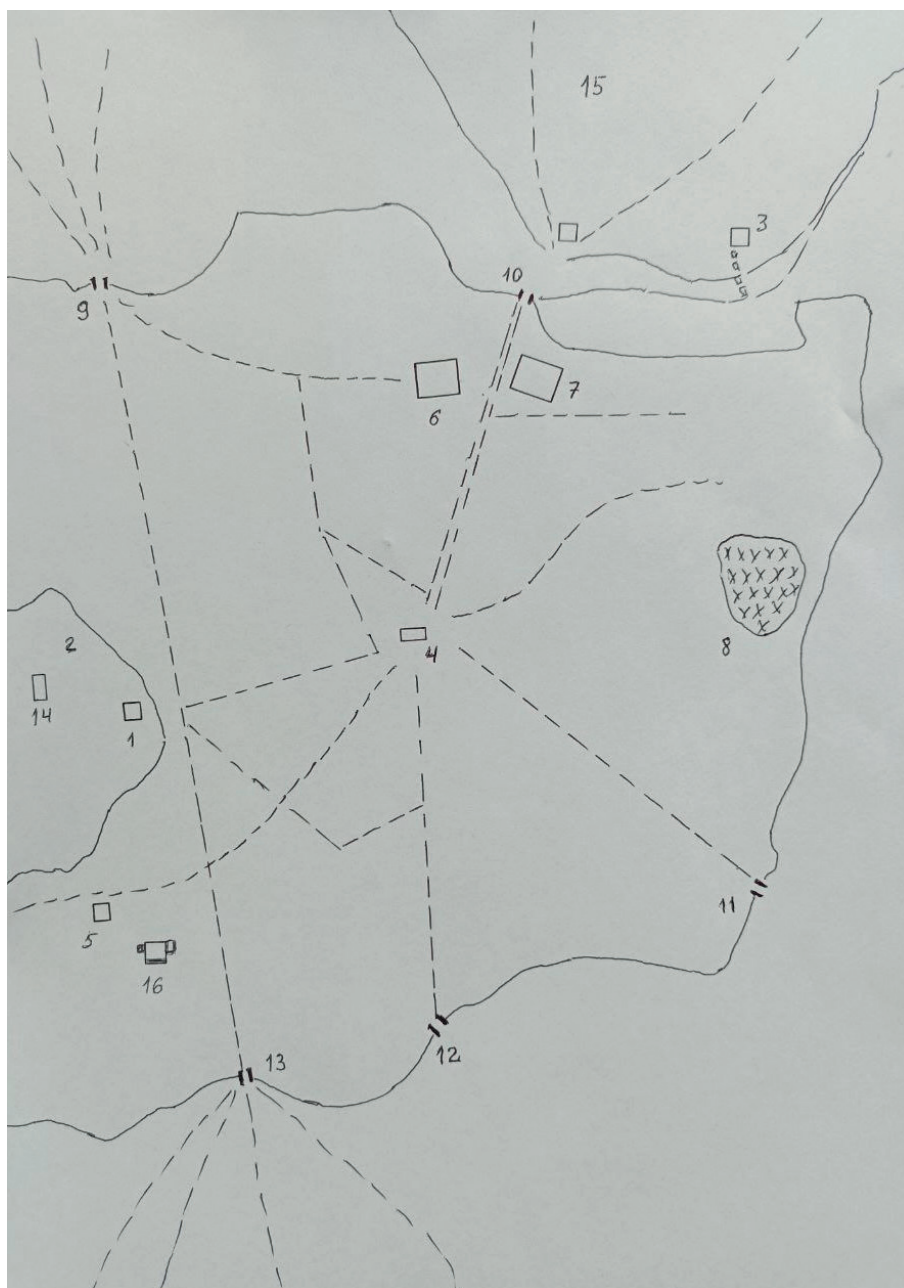


Fig. 1: Samarkand in Timur's epoch. **1** The Qutby Chahar Dahum (Nur ad-din Basir) mausoleum. – **2** The citadel of Timur. – **3** Shahi Zinda memorial complex. – **4** Friday Mosque. – **5** The Rukhabad mausoleum. – **6** Timur's Friday Mosque. – **7** Saray Malik khanym madrasah. – **8** Chokardiza cemetery. – **9** The gates of Shaykh-zade. – **10** The gates of Akhanin. – **11** The gates of Firuza. – **12** The gates of Suzangaron. – **13** The gates of Kariz-goh. – **14** Kuk Saray palace. – **15** Afrasiab cite. – **16** The Gur Emir mausoleum. The map was compiled based on materials by M. Masson.

Building a material space in the city is directly related to the process of attaching value to certain symbols and forming the image of the city (NAS/DE GIOSA 2011: 287). Some symbols are more significant than others and their central place in the city contributes to the formation of urban space and the creation of urban images (NAS/DE GIOSA 2011: 288).

Each city in Central Asia had its own specifics of urban structure, architectural monuments, and an image designed in the historical memory and writ-

ten sources. There were names given to Samarkand: "Garden of Saints", "Paradise of the Earth" (KANDIYA 1905: 256). As historians of Samarkand noted, "...by the charm and purity of the air, the spring in Samarkand represented a sample obtained from paradise. Therefore, Samarkand was called a heavenly city" (VÂTKIN 1899: 160). Samarkand was known as an ancient city and as an Islamic holy city where Islamic saints were buried, among whom the cousin of the Prophet Muhammad, Qusam ibn Abbas, stood out.

Timur, who came to power in Maverannakhr in 1370 CE, chose Samarkand as his capital. One of Timur's main problems was the legitimacy of his power, since he did not belong to the ruling house of the Genghisids. Timur's political activity can be divided into two stages: the first when he achieved power and maintained it (1370–1385 CE); the second stage of Timur's career (1386–1405 CE) included his great campaigns aimed at the invasion of the territories of Iran, the Caucasus, northern India, etc. (MANZ 1989: 66–71).

Timur's cultural activity during the second half of the 14th to the early 15th century played a vital role in the state's effort to establish internal and external symbols of authority and legitimacy. To understand Timur's legitimation policy, Manz's findings are valuable – according to which, being the heir to both Islamic and Turkic-Mongolian traditions of governance, Timur put forward a separate set of requirements using different levels of symbolism and often addressing different audiences. The ideas of dynastic legitimacy were expressed in different ways (MANZ 1988: 121). According to V. Barthold, for Timur, religion was an instrument for achieving political goals (BARTOLD 1964: 46). Timur often used Islamic symbols to express Islamic tradition (MANZ 1988: 117). As Lenz notes, legitimisation was carried out through architectural patronage (LENTZ 1996: 33).

Since the end of the 19th century, the history of Timur-era Samarkand has attracted the attention of orientalists, historians, and archaeologists. Great contributions to the study of the historical topography of Samarkand were made by V. Barthold, V. Vyatkin, M. Masson, I. Sukharev, and A.Y. Yakubovskiy, among others. V. Barthold (1869–1930) supposed that, in the Timur era, architects should have been guided by the artistic plans of the monarch during the construction of the buildings (BARTOLD 1963: 160). At the same time, from the general nature of their style, he recognised that the buildings erected in this era in Samarkand are monuments of Persian architecture (BARTOLD 1964: 61). Barthold did not develop the question of the local architectural heritage of the Chaghatayid era.

Soviet researchers talked about the collective co-operation of Central Asian masters with masters from foreign countries, including Iran (MASSON 1950; PUGAČENKOVA/REMPEL' 1965). A great contribution to the study of the historical topography of Samarkand of the Timur era was made by Soviet archaeologists: Ya.G. Gulyamov, Yu. Buryakov, U. Alimov, E. Buryakova, and T. Lebedeva (BURÁKOVA/BURÁKOV 1973). For many years, N. Nemtseva conducted archaeological research on the territory of the Shahi Zinda memorial complex. Studies on the architecture of Samarkand of Timur's era were also carried out by G.A. Pugachenkova, L.I. Rempel, and L. Mankovskaya. Soviet researchers were limited

by the Soviet ideology. This was evident in their ignoring the role of Islam, Sufism, and Turko-Mongolian heritage. Experts in epigraphy, who read inscriptions on monumental buildings in Samarkand and gravestones, made a significant contribution to the understanding of the ideology of the Timur era (ŠIŠKIN 1969; MAREFAT 1991; BABADJANOV ET AL. 2015).

Barthold's approach to the study of the culture of the Timur era dominates a number of publications, including modern studies. A group of researchers proposed to deepen the history of Timurid architecture until 1360 CE, believing that the art of the successors of Ilkhanid Iran was largely "proto-Timurid" (GOLOMBEK/WILBER 1988: XVIII); this approach is used in a fundamental publication on the history of the Shahi Zinda memorial complex (MAREFAT 1991). The research of modern scholars of the Timurid culture of Samarkand was carried out based on written sources, the preserved architecture of Samarkand, and comparative analyses with Iranian, Afghan, and Indian materials. The use of architecture in the era of Timur and Timurids can be considered as an imitation of the model of Ilkhanid monuments in Tabriz and Sultaniya (GOLOMBEK/WILBER 1988: 60). Modern researchers frequently fail to take into account the local architectural schools of the Central Asian oases (Samarkand, Kashka Darya, Khwarezm, Bukhara) of the Chaghatayid era (BLAIR/BLOOM 1995; HILLENBRAND 1999). According to B. Manz, in the organisation of his capital, Timur repeated the more recent style of the later Mongolian khans, and the buildings of Samarkand were designed to imitate Ilkhanid monuments (MANZ 1988: 119).

The architectural heritage of the Chaghatayid era, including the mausoleum of Shahi Zinda, was analysed by researchers including M. Masson, G. Pugachenkova, B. Zasytkin, N. Nemtseva, and O'Kane (O'KANE 2004). An analysis of the historical and cultural context against which changes in the Chaghatay Ulus took place – the Islamisation of the Turkic-Mongolian elite – was reflected in a number of publications (MANZ 1989; BIRAN 2002).

Among the reasons for the patronisation of architectural structures by the political, military, and religious elite were a number of political, social, economic, and religious factors. The monarch's messages were also transmitted through various elements of the building: its scale, the use of materials, its decoration, and inscriptions (GOLOMBEK/WILBER 1988: 60). In my view, it is also necessary to take into account the variability of his ideological policy at various stages of his reign and its influence on the construction of mausoleums, mosques, and shrines in Samarkand.

In order to understand the urban planning in Samarkand during the Timur era, a number of factors must be taken into account: to what extent were the city or its individual complexes planned by Timur;

for which architectural structures were large state funds allocated; on what canons were the architectural monuments of Samarkand built; and what innovations were there? The study of Timur-era Samarkand is also important for understanding the creation of those symbols that were significant for the Timurid era and had influence in subsequent centuries. Particular attention is paid to the impact of different cultural traditions on urban planning in Samarkand. Timur and his political entourage initiated the construction of symbolic buildings to legitimise and demonstrate their power. Which architectural complexes were created in Samarkand in the first decade of Timur's reign; what changed in the urban planning in the following decades? The paper will be devoted to the analysis of various cultural traditions that have been reflected in the urban planning of Samarkand during the era of Timur.

In my view, the study of the history of Samarkand of the Timur era requires interdisciplinary research, in which archaeological research is of great importance in combination with the written sources and epigraphic research. To understand the cultural traditions in the urban planning of Samarkand, especially at the beginning of the reign of Timur, it is necessary to take into account the interaction of the settled and nomadic populations, Islamic culture, and the culture of the Islamising Turkic-Mongolian tribes. Previous studies have been dominated by historical, archaeological, and art-historical approaches. I have expanded my approach in the study of the urban planning of Samarkand by including materials on the legitimisation of Timur and the heritage of the Chaghatayid era.

In studying the history and the archaeology of Samarkand, I was helped greatly by the observations of the earthworks in Samarkand, especially in the former citadel of Timur between 1987 and 2010. In my study, I used materials from the scientific archives of M. Masson in the Central State Archive of the Republic of Uzbekistan. I was greatly assisted in understanding the unclear aspects of Samarkand history and archaeology by my supervisor Yu. Buryakov (1934–2015). In the late 1960s–1980s, he participated in the excavations of various objects in the territory of Samarkand.

In the 11th to early 13th century CE, Samarkand consisted of three main parts: the citadel, *shahristan*, and *rabad*. The planning of the main streets of Samarkand's *shahristan* led in the direction of the southern gate, where they crossed. There was a large shopping centre in the city and the shrine of Qusam ibn Abbas was nearby. It is believed that in the southern *rabad* of Samarkand, five streets converged in the Registan area, where the Chorsu trading dome was located (BELENICKIJ/BENTOVIČ/BOLŠAKOV 1973: 221). In my opinion, such a street layout was created a little later. After the campaigns of Genghis Khan (1220 CE), the *shahristan* was

abandoned and life moved to the southern *rabad* – the most populated part of the city, where the new Friday Mosque (*masjid-i jami'*) of Samarkand was built (MALIKOV 2017a: 264) (Fig. 1: 4).

The Karakhanid and Chaghatayid architectural heritage remains undervalued in the study of the Timurid heritage in Samarkand. The Mongol takeover of Samarkand led to the destruction of the citadel, the Friday Mosque and other monuments of Samarkand. Due to the destruction of irrigation facilities, the northern part of the city was abandoned (the ruins of the Afrasiab site are now located here) (Fig. 1: 15).

The era of Chaghatayids had its own features, which were evident in the interactions between nomadic and settled cultures, and the Islamisation of nomadic or semi-nomadic populations. Chronologically, the Chaghatay period covers the period from the second half of the 13th to the middle of the 14th century CE.

The tradition of building Islamic shrines/mausoleums in Samarkand begins in the era of the Karakhanids, from the middle of the 11th century. Apparently, by the beginning of the 13th century, at least three significant memorial and cult centres had been formed in Samarkand: one in the northern part of the city with a centre in the cathedral mosque, to which the Karakhanid mausoleum adjoined; the second in the south, at the burial place of the cousin of the Prophet Muhammad, Qusam ibn Abbas, around which representatives of the secular and religious elite began to be buried from the 11th century. The third centre was the Chokardiza cemetery, to the south of the grave of Qusam ibn Abbas, where famous Islamic theologians were traditionally buried (MALIKOV 2017a: 252) (Fig. 1: 8). The Mongol invasion led to the destruction of many historical monuments in Samarkand – only the Qusam ibn Abbas complex survived.

For the oases of Maverannakhr, the reign of the Chaghatayids is characterised by the Islamisation and Turkisation of the Turkic-Mongolian nomads. At the same time, the sedentarisation of some groups of nomads was taking place. Under the descendant of the Genghis Khan, Tarmashirin (1326–1334 CE), a step was taken towards rapprochement with the local population: Islam was proclaimed the official religion (BIRAN 2002: 742–752). The process of Islamisation of the Turkic-Mongolian clans was accompanied by an increase in the influence of Sufism and an increase in the number of Islamic shrines. Islamic shrines were built in Bukhara: the mausoleum of the Chaghatay Buyankuli Khan (1358 CE), the mausoleum of Boboi Poraduz, the mausoleum of the Mogolistan Khan Toghluk Timur in Almalyk, and the mausoleum of Muhammad Bosharo (1342–1343 CE) in the district of Pendjikent (ZASYPKIN 1948: 72), among others. The Toghluk Timur mausoleum was built by the ruler's wife, Tini Kara Buka Khatun,

who was one of the notable women patrons of architecture (O'KANE 2004: 277–287).

The Mongolian influence on Eurasian urbanism was significant and multifaceted. Biran supposes that a pattern of multiple capitals (Karshi and Almalyk) was characteristic of the period of Chaghatayid Kebek Khan (BIRAN 2013: 271). Researchers identify monuments from 1300 to the 1380s as one of the stages of the development of the architecture of Central Asia (PUGAČENKOVA/REMPPEL' 1965: 248). The artistic culture of the "Mongolian period" was Central Asian, in which the evolution of construction practices and aesthetic views had a local basis (REMPPEL' 1961: 257).

In the era of the Chaghatayids in Kashka Darya, palaces and mausoleums were built, and mausoleums and mosques were erected in Bukhara and Samarkand. On the order of the Chaghatayid Kebek Khan (1318–1326 CE), a palace was built in the vicinity of Karshi (BARTOL'D 1963: 263). Another Chaghatayid, Kazan Khan (1334–1347 CE), built the Zanjir Saray palace from bricks near the Kashka Darya River in 1334–1340 CE; yurts and tents were placed around it. The Chaghatayid residences in Karshi, Zanjir Saray, had a square shape with four gates and, according to researchers, they are associated with the traditions of the eastern part of the Mongol Empire (RAIMKULOV/SULTONOVA 2005: 216–220). The construction of the Zanjir Saray and Karshi meant the strengthening of ties between the Turko-Mongols and the settled population of Maverannakhr, starting from the 1320s (BIRAN 2013: 273, 278–279). Architectural décor of the Chaghatayids era, in the form of majolica tiles, was discovered during the excavations of Shahr-i Sabz (USMANOVA 1996: 98).

The conversion to Islam of the Chaghatay and their entourage increased the role of the Muslim clergy. One of them is Khwaja Ahmad, whose mausoleum from the 1340s is in the northern part of the complex Shahi Zinda (NEMCEVA 2019: 159) (Fig. 1: 3). One of the inscriptions on the mausoleum distinguishes it from the other mausoleums of the Shahi Zinda complex through the praise given to the ancestors of the deceased. It is known that among nomads the veneration of dead ancestors was a persistent tradition. A cathedral mosque was built on the Registan Square in Samarkand, where the participants of the Sarbadar uprising took refuge in 1365 CE (NATANZI 2011). From 1334 to 1335 CE, the mausoleum of Qusam ibn Abbas was renovated, and the mausoleum of Khwaja Ahmad was erected (NEMCEVA/Švab 1979: 57–58). The construction work was probably begun under the Chaghatayid ruler Tarmashirin Khan (1326–1334 CE). The architect of the mausoleum of Khwaja Ahmad was Fakhri Ali (BULATOV 1988: 145), apparently a Samarkandian. According to M. Masson, the mausoleum of Qusam ibn Abbas, the mausoleum of Khwaja

Ahmad, and three more mausoleums in the Shahi Zinda complex belong to the Central Asian architectural school (MASSON 1950: 50). As Nemtseva notes, domes in the tomb of Qusam appeared in the era of the Chaghatayids (possibly in 1334/1335 CE) (NEMCEVA 2019: 151). Under the Chaghatayids, a new style and image of the Shahi Zinda ensemble began to be formed (NEMCEVA 2019: 154). According to Zasytkin, the general composition and some details of the mausoleum of Khwaja Ahmad in the Shahi Zinda complex are similar to the Karakhanid mausoleum in Uzgend (1186 CE) (ZASYPKIN 1948: 79–80; REMPPEL' 1961: 270–272).

The tradition of veneration of the Shahi Zinda shrine was preserved during the reign of Emir Kazagan (1346–1358 CE), one of whose sons was buried at the memorial complex of Qusam ibn Abbas in 1357 CE (ŠIŠKIN 1970: 43). The tradition of Chaghatayid architecture covers a wide area (POMASKIN 1972: 8). The process of Islamisation also affected the Turkic-Mongolian elites of Khwarezm. Even before the middle of the 14th century, a mausoleum was built in Khwarezm for a representative of the Golden Horde elite, Turabek Khanym, which reflected a new architectural style direction (BULATOV 1988: 135). The tent style unites the Kyanizak Khatun mausoleum (POMASKIN 1972: 30), Turabek-khatun, and the later Timurid mausoleum Chashmai Ayub in Bukhara and also Dorussiodat in Shahr-i Sabz, built by Khwarezmian masters (BULATOV 1988: 137).

1 Cultural traditions in the urban development of Samarkand in 1370–1385 CE

Many researchers consider the development of the urban structure and architecture of Samarkand as an inextricable, single process over the 35 years of Timur's reign (GOLOMBEK/WILBER 1988; MAREFAT 1992: 33–37). In my view, the buildings of the Timur era in Samarkand can be divided chronologically into two groups. The first group was built in the first fifteen years of Timur's reign, from 1370 to 1385 CE. These are the citadel of the city, defensive walls, the mausoleums of Rukhabad, Nur ad-din Basir, some mausoleums in the Shahi Zinda memorial complex, the first garden, and palace complexes. In these monuments, the traditions of local architecture were strong; and these were enriched with elements of the Khwarezmian masters, whom Timur took out of Khwarezm in 1379–1388 CE. The second group of Samarkand monuments was built from 1386 CE to the end of the reign of Timur. It includes the main masterpieces of Samarkand architecture, which were built with the participation of masters from different countries: the regions of Iran,

Khwarezm, the Golden Horde, the Ottoman Empire, Syria, and India, among others.

In the Muslim society of the Timur era, the local elite initially acted as customers of innovation in Samarkand, and Timur was forced to reckon with their interests, since in the first decade of his rule he had to face different political forces in the struggle for power. Moreover, at the end of his reign, the omnipotent Timur changed the urban structure of Samarkand in an authoritarian way. For example, he built a new *masjid-i jami'* (Friday Mosque) of the city.

Unlike the Chaghatayids, Timur understood the importance of the city for legitimisation (BIRAN 2013: 279). Nevertheless, it is important to note that Timur often stayed at the Chaghatayid palace, Zanjir Saray, near Karshi. Obviously, a visit to this palace had not only practical, but also symbolic, political significance for Timur. Archaeological and architectural materials, as well as historical sources, indicate a significant change in the structure of Samarkand of the era of Timur and the Timurids, compared to the 10th to 12th century CE (BURÁKOV 1969: 28). According to Yu. Buryakov, in the Timur era, the layout of Samarkand was chaotic, although it is possible to distinguish certain planning centres to which the city highways were tied. Under Timur, an attempt was made to partially redevelop the city (BURÁKOV 1969: 27–28). According to other researchers, in the structure of Samarkand, one can reveal the presence of a plan that extends from the north to the south (PETRUCCIOLI 2008: 496). The plan of Karakhanid-era Samarkand during the Timur period underwent deep transformations. In the 14th century, due to the opening of new streets, the city obtained a radial structure centred around the Registan (**Fig. 1: 4**). This structure dominated until 1404 CE, since the main *masjid-i jami'* of Samarkand was located in the Registan Square, and in 1404 CE Timur ordered the construction of a new trading axis, which reached the new *masjid-i jami'* (now known as Bibi Khanym) (PETRUCCIOLI 2008: 491–497) (**Fig. 1: 6**).

In 1371–1372 CE, Samarkand was surrounded by a capital wall, which was about seven kilometres long and had six gates (JAZDI 2008: 350). Researchers believe that the defensive wall drawn by Timur passed along the foundation of the old wall belonging to the outer city of the 11th to 12th century (BURÁKOVA/BURÁKOV 1973: 220; LEBEDEVA 2001: 202). On the northern wall (to the north-west) were the gates of Shaykh-zade (**Fig. 1: 9**); on the same wall (to the north-east) stood the gates of Akhanin (iron), near the *mazar* of Qusam ibn Abbas (**Fig. 1: 10**). In the east were the gates of Firuza (**Fig. 1: 11**). On the western wall (in the south-west corner) there were the Chaar-su gates, near which there was one of the city bazaars. In the south were the gates of Suzangaron and Kariz-goh (YAKUBOVSKIY 1925: 150) (**Fig. 1: 12, 13**). The main highways of the city

stretched from the gates, converging in the central junction near the Registan Square, where at the beginning of the 15th century Timur Tuman-aka's wife built a *tim* (multi-floor market) (PUGAČENKOVA/REMPEL' 1965: 55).

The remains of Samarkand's defensive wall and the base of one of the towers were discovered near the Shahi Zinda memorial complex during mining projects. It was found that the base of the tower was made of stone from Chupanatian shale on which walls of bricks were erected (HASANOV/AHMEDOV 2009: 257). In the sources, this part of the wall was called "*shutur gardon*" (translated from the Persian "camel neck"), as it resembled a camel's neck. The image of the defensive wall of Samarkand is placed on a miniature, which shows that the top of the walls was serrated (PUGAČENKOVA/REMPEL' 1965: 256).

To revive the city, it was necessary to restore one of its three constituent parts: the citadel, a symbol of state power, which had already been done in 1370 CE (JAZDI 2008: 70). The place chosen for it was near the central square of the city and the *masjid-i jami'*, next to which the trading centre of Samarkand was probably located. The most successful place was recognised as the territory to the west of the *masjid-i jami'* of the city, on the right side of the Novadon archway. Here in the 9th to 12th century, there was a trading and craft suburb of the city (*rabad*), behind which there were separate houses with land (BURÁKOVA 1990: 65).

There were two gates in the citadel. In the eastern wall of the citadel were the gates connecting its quarters with the rest of the city (YAKUBOVSKIY 1925: 150). Clavijo reports the following about the citadel of Timur in Samarkand: "The lord kept his treasure in that castle, and no man entered it except the magistrate and his officers. In this castle the lord had as many as a thousand captives, who were skillful workmen" (DE CLAVIJO 2010: 172). The monumental buildings of the citadel included the palaces of Kuk Saray and Bustan Saray, the mausoleum of Nur ad-din Basir, and craft workshops in the western part of the citadel. The Kuk Saray palace consisted of four floors, which is rare in the practice of Central Asian construction (PUGAČENKOVA/REMPEL' 1965: 261).

Little remains of the citadel in the western part of the town. It contained the usual administrative buildings, the treasury, the armoury, and the Kuk Saray palace (**Fig. 1: 2, 14**). Despite the partial archaeological studies of Timur's citadel conducted by the archaeologists M. Masson, V. Vyatkin, Y. Buryakov, E. Buryakova, and T. Lebedeva, an accurate historical topographic map of the architectural structures located in the citadel has still not been drawn up. Archaeological excavations were carried out from time to time in connection with the earthworks in the territory of the citadel. These studies were often conducted too late, when the excavators had already managed to destroy a large proportion

of the archaeological layers as well as the remains of architectural structures. The analysis of the material was largely based on the late citadel maps dating from the second half of the 19th century. Archaeological excavations will be carried out in the future, which will allow at least a partial presentation of the stages of its development. It should be noted that the fortification of the citadel was probably improved during the 35-year reign of Timur. Unfortunately, the destruction of the citadel in the 1880s, and fragmented and clearly incomplete fast-paced studies of the Timur fortress, did not reveal the stages of the construction work. Therefore, it is impossible to make a comparative analysis and find analogies to it in other countries of the Muslim East.

According to my observations, there were many different monumental architectural structures in the territory of the citadel of Timur, which were decorated with *mayolics* (glazed tiles). These buildings were not mentioned in written sources and had already been destroyed by the end of the 19th century. The observations outside the north-western part of the citadel show that there were no architectural structures there – that is, the citadel was built on the north-western outskirts of the city. The placement of the new citadel of Samarkand was similar to the tradition in some other cities of Muslim countries, where in very urbanised areas, such as Merv, Herat, Ray, Aleppo, Damascus, and Cairo, the citadels were located on the outskirts of the adjacent urban settlement (HOLOD 2012: 134). In the era of the Karakhanids in Samarkand, there was a palace of rulers inside the citadel of the city. The total area of the Samarkand citadel exceeded the pre-Mongol citadel of Samarkand by 34 hectares and even the citadels of Bukhara and Khiva of the late Middle Ages (MALIKOV 2017b). It can be assumed that the citadel of Samarkand was initially laid out similarly to the citadel of the Zanjir Saray of 16 hectares, where most of the space was not occupied by buildings, but by temporary tents (RAIMKULOV/SULTANOVA 2005). According to my observations of earthworks in different parts of the former citadel of Timur, it was not densely populated. Observations of the north-western part of the citadel show that there were no architectural structures there.

Sufi networks and sheikhs played a particular role in the state of Timur. Sufi sheikhs, who were popular among the people, had many followers who built architectural monuments to perpetuate the names and teachings of their mentors. In the 1370s, near the Timur fortress, a mausoleum was built for the Sufi sheikh of the Order of Kubraviy, Burhan ad-din Sagardzhi, and later it was called “Rukhabad” (the abode of the soul) (Fig. 1: 5). Sheikh Burhan ad-din Sagardzhi (a native of the village of Sagardzh, near Samarkand) was a student of two Kubraviya sheikhs, Isfaraini and Simnani (DEWEESE 1988: 52). According to Japanese researchers, in the first half

of the 14th century, Burkhan ad-din Sagardzhi visited Khanbalik (Beijing), and he probably founded khanakahs (a building designed specifically for gatherings of the Sufis) in Karakorum in 1342 CE (YAJIMA 2012: 230–231). Returning to his homeland, he died and was buried in Samarkand.

Compositionally, Rukhabad is certainly connected with the old, pre-Mongolian tradition of centric solitary tombs (PUGAČENKOVA/REMPEL’ 1965: 273). In the architecture of the Kashka Darya shrines in Fudina and Kasbi, one can observe its common features with the Rukhabad mausoleum in Samarkand, which is manifested in the complete or partial absence of external décor, architectural development of walls, and in some cases also the absence of front entrance portals (NEMCEVA 2019: 95).

The descendant of the Sufi sheikh Burhan ad-din Sagardzhi, Abu Said, was one of the spiritual mentors of Amir Temur. It was on his advice that Amir Temur built a large mausoleum at his citadel for a follower of the Sufi sect of Sukhravardiya, Nur ad-din Basir (died in 1249 CE) (BARTOL’D 1964: 434). This building is known as Qutby Chahar Dahum shrine. The significance of Sheikh Nur ad-din Basir is noticeable in that even the influential Kubraviyan sheikh from Bukhara, Sayf ad-din Bakharzi, visited the saint annually in Samarkand (ALGAR 1997: 110). Unlike the Rukhabad mausoleum, the Qutby Chahar Duhum mausoleum belongs to a new architectural style (PUGAČENKOVA/REMPEL’ 1965: 273) (Fig. 1: 1). From a religious perspective, two shrines symbolised two Sufi *tariqats*: Sukhravardiya and Kubraviya. Kandia emphasises Timur’s veneration of the graves of two sheikhs in Samarkand, Nur ad-din Basir and Burhan ad-din Sagardzhi (KANDIYA 1905: 258).

The Timurid Samarkand was divided into *hisar* – the urban core surrounded by a fortress wall and the suburban zone, which included districts (*bulyuks*), micro-districts (*mahallas*), and surrounding districts (*tumans*) (PUGAČENKOVA 1976: 10). The *hisar* was concentrated around government buildings, a *masjid-i jami’*, markets, handicraft workshops, and residential buildings. There citadel (*qala*) was here – the administrative centre. In the suburban zone there were necropolises, trade and craft streets, parks, palaces, and religious buildings (PUGAČENKOVA 1976: 10–11).

An important role in the formation of the city’s appearance was played by architectural monumental complexes for secular and cult purposes, and the construction of palace and park architecture. Bazaars occupied a significant place in the layout of the city, in the centre and at the crossings of the urban highways of the western and south-western parts of the city (BURÁKOV 1969: 27–28.).

There is evidence of the existence of three types of funerary structures in Samarkand in the 14th century and of the great mixing of the population in anthropological terms, even before the campaigns

of Timur (KRAŠENINNIKOVA/PIDAEV 1981: 140). In Samarkand, the population was ethnically mixed and during the Timur and Timurid era there were no ethnically separate quarters in the city.

It was not only Timur himself who acted in the role of the customer, but also members of his family, representatives of authorities, and the clergy. Women in the era of Timur and the Timurids maintained many of their social functions. According to researchers, the Turko-Mongolian nomad cultural tradition gave more space for the social and political activity of women compared to the Islamic customs of settled residents (SZUPPE 2003: 141). Women of the Timur family, participating in the organisation and sponsorship of construction in Samarkand, continued the traditions of some Chaghatayid families. For example, the construction of the Saray Malik (Bibi Khanym) *madrasah* and some mausoleums in the Shahi Zinda complex are associated with the name of Timur's wives and sisters. To the east of Timur's *masjid-i jami'*, his older wife, Saray Malik Khanym, built a vast *madrasah* that also included a mausoleum for her mother (Fig. 1: 7). Saray Malik Khanym (1341–1406 CE) was the daughter of a descendant of Genghis Khan – Kazan Khan, the ruler of the Chaghatay Ulus (1342–1346 CE). The mausoleum of Saray Malik Khanym was included in the huge *madrasah*.

Out of the many Islamic saints of Samarkand, Qusam ibn Abbas was considered to be the “patron” of the city; he was, according to legend, buried in the shrine of Shahi Zinda, which had been upgraded since the era of the Karakhanids and the Chaghatayids. Shahi Zinda differs from other shrines in its planned layout, which is aimed at emphasising the importance of the Qusam shrine. Researchers noticed that burials of Timurid women prevail in Shahi Zinda (MAREFAT 1991: 260), while Timur's male descendants and relatives were buried in his homeland in Kesh (Shahr-i Sabz) until 1404 CE.

Researchers believe that the mausoleums of Khwaja Ahmad and Shadi Mulk Aka of the Shahi Zinda complex were built by Samarkandians (BULATOV 1969: 25). In the mausoleum of Sayf ad-din Boharzi (1339 CE), the tiles of carved terracotta are similar in type to the lining of the early mausoleums of Shahi Zinda. (PUGAČENKOVA/REMPEL' 1965: 251–252).

Masters from Kashka Darya contributed to the construction of Samarkand monuments, where in the first half of the 14th century a local tradition of architecture had already been formed (REMPEL' 1961: 261). The master of one of the mausoleums of the Shahi Zinda complex was Ali Nasafi (that is, a native of Karshi) (NEMCEVA 2019: 13).

In the second half of the 14th century, the improvement of Samarkand was manifested in the stone lining of the streets, the growth in the number of monumental buildings made of bricks, and also the hidden drainage system along the streets

(BURÂKOVA/BURÂKOV 1973: 220). The sources preserved the names of some of Samarkand's streets: Takachiyon (horseshoes), Naqqashon (artists), Suzangaron, and Puli Gatifar, among others (ČEHOVIČ 1974: 29, 81).

The political governing system created by Timur was also reflected in the urban planning in Samarkand. Timur was not a descendant of Genghis Khan, and therefore had no right to rule the country on his own behalf. Officially, he ruled on behalf of the puppet Genghisid khans. In the Timur era, a special quarter for puppet khans appeared in Samarkand. According to Mirza Muhammad Khaydar: “As was established by Amir Timur, one of the khans was exalted in the khanate and placed in the city in a certain place surrounded by walls... that place in Samarkand is called “Hayat-i Khan” – “Khan's court”. This place occupies a large area [with several quarters], and each quarter has its own name. Among them is the Hauz-i bustan-i khan – the “Reservoir of the Khan's Garden”, which belongs to the very famous places of Samarkand... at the time of Amir Timur in that quarter lived Suyurgatmish Khan (a descendant of Genghis Khan)” (HAJDAR 1996: 98–99). The existence of such a quarter was associated with the peculiarities of the political system of the state of Timur and is not found in other cities of the Muslim East.

The cultural traditions of Khwarezm had a considerable impact on the development of Samarkand architecture and urban planning. In 1379 CE, Timur took the masters from Khwarezm to Samarkand, Bukhara, and Kesh (PUGAČENKOVA 1950: 64). The mausoleum of Shirin Bek Aka (1385 CE) in the complex of Shahi Zinda reflects a new direction in Samarkand architecture, which arose under the influence of Khwarezmian architects (BULATOV 1988: 160). In the designs of the graves of the Samarkand cemetery of Chokardiza, a tradition similar to the Khwarezmian of the 13th–14th century was revealed (BERDIMURADOV/ISAMIDDINOV 2015: 153).

During the Amir Temur's era, the palace and park art of Maverannakhr reached its apogee. In the vicinity of the capital, starting in 1377 CE, the construction of twelve palace and park complexes was carried out (JAZDI 2008: 88). Gardening art in Central Asia existed in the era of the Karakhanids and Khwarezmshahs (AN-NARŠAHĪ 2011: 39; ALIMOV 1984). However, before Timur, the large-scale construction of garden and park complexes in Samarkand was unknown. Garden and park complexes determined the unique appearance of Samarkand in the era of Timur and the Timurids. Discussions have arisen about how the design of gardens and pavilions was affected by cultural traditions (O'KANE 1993: 249). Moynihan used the term “paradise garden” and linked the origins of the Timurid gardens to the concept of paradise (MOYNIHAN 1978). According to G. Pugachenkova, the custom of the free

placing of elegant marquees and tents in the Timur gardens apparently went back to the semi-nomadic tradition (PUGAČENKOVA 1951: 160). The researchers concluded that due to the nomadic lifestyle of the Timurids, the gardens functioned as residences and camps (GOLOMBEK 1995: 137–147; BIRAN 2013: 279). The construction of gardens outside the city wall is also interpreted as evidence of Timur's "nomadic taste" and his "ability to recreate the nomadic environment" (O'KANE 1993: 253–256). This was combined with a complex ceremony aimed at demonstrating imperial prestige (O'KANE 1993: 253). These movements were aimed not only at providing diversity, but also at organising receptions with numerous officials and ambassadors, as well as at ensuring security in the conditions of the densely populated Samarkand.

In 1377 CE, Timur married Tuman Aka and at her request he set up a garden with a pavilion called Baghi-Bihisht ("the garden of paradise" in Persian). Baghi-Bihisht was one of the early gardens of Timur. The name of this garden is sometimes found as Baghi-Jannat, i.e. "the garden of paradise" (ALIMOV 1974: 10). It is important to distinguish the early and later gardens and palaces of Timur in Samarkand, since in the first decade of his reign Timur definitely had fewer resources and fewer masters from different countries. Apparently, the first palaces of Timur followed the patterns of the local heritage. Unfortunately, archaeologists did not find the remains of the Baghi-Bihisht palace.

2 Cultural traditions in the urban development of Samarkand in 1386–1405 CE

Timur wanted his capital to be unique and different from other capitals; however, he used the previous cultural traditions of Samarkand, Maverannakhr, as well as of the conquered countries: mainly Iran and Khwarezm. In an effort to single out Samarkand on a global scale, he named the villages surrounding it after major cities in Iran and Syria; for example, Dimishk, Shiraz, and Sultaniya. In 1386 CE, on the order of Timur, the most experienced masters in all arts and sciences were sent from Tabriz to Samarkand. In 1388 CE, he sent craftsmen from Shiraz; according to written sources, artisans from Fars and Iraq left to live in Samarkand in 1393 CE (GOLOMBEK/WILBER 1988: 36).

Art historians emphasise that under the rule of Timur, a syncretic architectural style was created that was different from the previous ones. According to the leading art historians, in the era of Timur a kind of "imperial Timurid style" in architecture was developed in Maverannakhr, and was manifested in the huge size of monuments, and in the peculiarities

of their design and decoration (GOLOMBEK/WILBER 1988: 187). Rempel highlights that a new style of architectural structures began to be formed in the 1380s (REMPEL' 1961: 264).

It is important to try to understand the motives of the customers of the construction of certain architectural complexes. I argue that political factors played a major role in shaping Timur's urban construction ideas in Samarkand; namely, Timur's desire to legitimise his power not only through legal and political instruments, but also through cultural policy and construction. Timur's monuments are symbols of the great ruler, as is evidenced by a proverb quoted on one of his buildings: "If you doubt our power, look at our buildings!" (PUGAČENKOVA/REMPEL' 1965: 242). The architectural monuments of the Timur era reflect Timur's desire to express the different ways of legitimising his domination. The pre-Mongol ideas of Turan had a certain influence on Timur. As a flexible politician, with knowledge of the history of the Middle East, Timur also claimed ownership over the Iranian heritage. It is no accident that in a conversation with the scientist Ibn Khaldun, Timur emphasised that his mother's genus belonged to the descendants of Manuchehr, the legendary Persian king and hero of the poem "Shahname" (MANZ 1988: 116). It is not coincidental that the names Turan and Iran are mentioned on the walls of Timur's palace of Ak-Saray in Shahr-i Sabz (BABADŽANOV ET AL. 2011: 153).

In the 14th to 15th century CE in Samarkand, two terms continued to be used to denote the city quarter: *mahalla* and *ku* (SUHAREVA 1965: 103). In the Timur era, broad alleys – the so-called *hiyabans* – with a clear system of axial construction were laid in the suburbs of Samarkand for the first time. For example, there was a Kucha-i Hiyaban in Samarkand, an avenue planted around with poplars, stretching several kilometres from the garden of Timur Baghi-Buldi to the gates of Firuza (PUGAČENKOVA 1951: 145).

If we believe Ibn Khaldun and Ibn Arabshah, Timur had knowledge in the field of history. Apparently, the historical knowledge had an influence on Timur's search for some symbolic historical parallels, which he selectively followed or used for his own purposes. Apparently, this historical or mythical idea was one of the reasons for choosing the place of the main celebrations of Timur in the Samarkand area of Kan-i gil. Kan-i gil was located on the north-eastern slope of the Afrasiab settlement, along the Obi-Rahmat archway. Apparently, this area was previously a traditional place for various festivities of Samarkandians before the middle of the 13th century. According to sources, a grandson of Genghis Khan, Hulagu Khan, arrived in Samarkand in 1255 CE with his army, on his way to Baghdad. A 40-day feast was arranged in the Samarkand area of Kan-i gil (RAŠID AD-DIN 1946: 25). Timur decided to

continue the tradition of the celebration in the already symbolic Kan-i gil. In the spring of 1371/1372 CE, he held a large kurultai – a congress in the Kani-gil area, where state laws, tax procedures, military incentives, etc. were outlined (NATANZI 2011: 113). In September 1404 CE, Timur organised wedding celebrations of his grandchildren in Kani-gil with the participation of all segments of the population: the court circle, the guard, merchants, and artisans (PUGAČENKOVA 1951: 146–147).

Bagh-i Dilkusho can be considered as an example of the late gardens of Timur; it was laid for the wife of Timur, Tukel Khanym, in the autumn of 1397 CE and completed in the spring of 1399 CE. It had a square shape with sides measuring 750 m. A palace with three arches was built inside the garden (JAZDI 2008: 214, 251). Bagh-i Dilkusho was located 5 km to the east of Samarkand. The palace building, measuring 74 m × 40 m, was rectangular and was decorated with marble slabs and painted ganch décor. The remains of three fountains were found in the garden (ALIMOV 1974: 12–31). Fragments of lining tiles were also found here – glazed bricks of dark blue, light blue, and white, a stone mosaic of dark green glaze, and majolica with plant and geometric ornaments with traces of gilding, as well as a slab of grey marble (SUHAREV 2016: 50–51). In the summer of 1404 CE, Timur stayed here, organised grand celebrations, and received the Castilian ambassador, de Clavijo.

Another example, Bagh-i Shamal garden, was founded in March 1397 CE – probably in the western part of the city, where the remains of tiled cladding of the 14th to 15th century were found. According to historians, masters from Fars, Baghdad, and Shiraz participated in the construction of the four-tier building. The walls of Timur's palaces had a lining with an epigraphic ornament. During the excavations, mosaic panels with separate statements from the Quran and verse *rubaiyats* were found (ALIMOV 1984). The names of Timur gardens, such as Bagh-i Dilkusho, Bagh-i Jahannumo, and Bagh-i Eram, find direct parallels in the names of Shiraz gardens. It is suggested that Amir Temur, who visited Shiraz, was fascinated by the beauty of its parks and ordered the foundation of similar ones in Samarkand (EMRANI/JEYHANI 2004: 94). However, the abovementioned Samarkand garden-park complexes were not a simple copy of Shiraz, but were different from them (YALDA 2004: 112).

It should be noted that in Samarkand during the Karakhanid era, one of the palaces was decorated with wall paintings with the image of the ruler and hunting scenes (KAREV 2005). It is possible that there had been other palaces. It is difficult to tell how much they influenced the painting of the Timur era.

The capital of the Ilkhanids, Sultaniya, undoubtedly attracted the attention of Timur. To demon-

strate the prestige of Samarkand, Timur called one of the villages in the vicinity of the city “Sultaniya”. Blair believes that Timur used the Sultaniya mosque as a model for the *masjid-i jami'*, which he built in Samarkand in the early 15th century (Fig. 1: 6). The mosque of Timur, like the Ilkhanid Oljeitu mosque, was located opposite the *madrasah* of his beloved wife and shared many of its architectural features (BLAIR 1986: 146). Timur's mosque was designed to symbolise his conquest of the world (BLAIR/BLOOM 1995: 40). While building new architectural complexes, the choice of their place of construction is an important factor. In addition, the role of the patron's personality, his ideas, and the values of the era in the construction of the building are of great interest (GOLOMBEK/WILBER 1988: 53). The Bibi Khanym Mosque in Samarkand could have been conceived by Timur as a marker between the old and the new city (PETRUCCIOLI 2008: 504). Timur's genealogy, recorded at the entrance to the *masjid-i jami'* in Samarkand, emphasises his kinship with the Genghisid family (GOLOMBEK/WILBER 1988: 60). The choice of the place for the construction of the mosque was not accidental; during excavations, the remains of the previous architectural structures of the Karakhanid era were discovered (LEBEDEVA 2004: 90). In my view, the construction of *madrasas* by the descendant of Genghis Khan, Saray Malik Khanym, and her mother's mausoleum opposite the Timur *masjid-i jami'*, symbolised the combination of two trends: the veneration of Islam and its educational institutions; and the legitimisation of Timur through the demonstration of his kinship with the Genghisids, who practiced Islam and sponsored the construction of Islamic religious and educational institutions.

The mausoleum of the successor of Timur, Muhammad Sultan (1376–1403 CE), Gur-i Mir, has some similarities with the tomb of the Ilkhanid Uljeitu in Sultaniya (BLAIR 2014: 152). The mausoleum of Gur-i Mir was part of an architectural complex that included the *madrasah* and *khanaka* of the grandson of Timur and the failed successor, Muhammad Sultan (Fig. 1: 16). The architect of the mausoleum was Muhammad ibn Mahmud Isfahani (BARTOL'D 1964: 435–436). At the beginning of the 15th century, somewhere near this complex, the palace and the bazaar of Muhammad Sultan were located, but their location has not yet been archaeologically established (PUGAČENKOVA/REMPEL' 1965: 269). The choice of this place for the construction of an Islamic religious, educational, Sufi, and memorial complex was not accidental, since the Rukhabad shrine described above was located not far away. After the burial in the mausoleum of Timur, it became one of the main architectural and cultural symbols of Samarkand.

Timur and the local elite did not forget the other symbolic Islamic memorial places of Samarkand.

At the end of the 14th century, in Chokardiza, the famous Samarkand cemetery of prominent theologians, hadith scholars, and Islamic jurists, some upgrading construction projects were carried out using four-colour carved terracotta (BERDIMURADOV/ISAMIDDINOV 2015: 151) (Fig. 1: 8).

In order to affirm the dynastic legitimacy through its inclusion into the Iranian history, both the legendary and the real, the Ilkhanids used verses from the *Shahname* in their visual culture (BLAIR 1993: 244). The synthesis of the Far Eastern ideals introduced by the Mongols with Iranian traditions had already begun in painting at the beginning of the 14th century (GOLOMBEK/WILBER 1988: 34). Certain elements of the Chinese culture could penetrate the art of Samarkand through the contacts with the Persian culture of Iran (BLAIR/BLOOM 1995: 23). Persian Sufi poetry decorated many of the metal products of the Timurids (HILLENBRAND 1999: 220). Verses from the poem "Gulistan" by the Persian poet Saadi were especially popular in the state of Chaghatayids and the Empire of Timur (the mausoleums of Shirin Bek Aka in the memorial complex of Shahi Zinda, the mausoleum of Khwaja Ahmad Yassavi in Turkistan) (BLAIR/BLOOM 1995: 55; MAREFAT 1991: 128; BABADŽANOV 1999). The cultural values of the Timu-

rid era were not exclusively Persian. At court they spoke the Chaghatay language, and the poetry was written in it (HILLENBRAND 1999: 214).

Timur, due to the lack of legitimacy, used various means and tools for legitimisation, including urban planning in his capital, Samarkand. Timur combined settled and nomadic traditions in his urban planning policy. Often, Turkic-Mongolian traditions were expressed through the cultural symbols of the settled population and the Islamic culture. In the first decade of Timur's reign, most attention was paid to the construction of Islamic shrines and the defensive wall of the city, as well as the fortress. Initially, the fortress was based in a vast area and was apparently associated with the Turkic-Mongolian nomadic tradition, manifested in the placement of tents inside the fortress. The architectural structures of the first decade of Timur's reign had origins in the local culture, enriched by the traditions of Khwarezm, Bukhara, and Kashka Darya. Timur's great military campaigns, which began in 1386 CE, allowed him to attract huge material and human resources from Iran, India, and the Golden Horde to upgrade Samarkand. It was during this period that some architectural structures of Samarkand were characterised by their huge size and luxurious scenery.

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Archaeological Survey and First Preliminary Results of the Site of Shahr-i Gholghola (Afghanistan)

The Bamiyan Valley as a Centre of Trade and Cultural Exchange

Julio Bendezu-Sarmiento

Abstract: Enclosed within the Hindu Kush Mountains, the Bamiyan Valleys are visually marked by a natural promontory rising at approximately 2,800 m and occupied by the Medieval fortress city of Shahr-i Gholghola, which lies a few hundred metres south of the modern city. This site, together with the two famous Buddha statues (destroyed by the Taliban in 2001) and many other sites, is today part of the “Cultural Landscape and Archaeological Remains of the Bamiyan Valley” in Afghanistan, listed by UNESCO as “World Heritage in Danger”. The results of the survey presented here are part of a larger study of the architectural remains of the Shahr-i Gholghola site, carried out to better understand the status and use of this site.

Keywords: Afghanistan, Bamiyan Valley, Shahr-i Gholghola, Islamic period, Ghaznavids and Ghurid dynasties.

Резюме: Долины Бамиана, замкнутые в горах Гиндукуша, визуально выделяются естественным выступом, возвышающимся примерно на 2800 м. На нем находится средневековый город-крепость Шахр-и-Голгола, расположенный в нескольких сотнях метров к югу от современного города. Этот памятник, вместе с двумя знаменитыми статуями Будды (разрушенными талибами в 2001 году) и многими другими объектами, сегодня является частью «Культурного ландшафта и археологических остатков долины Бамиан» в Афганистане, включенного ЮНЕСКО в список «Всемирного наследия под угрозой». Результаты исследования, представленные здесь, являются частью более крупного исследования архитектурных остатков памятника Шахр-и-Голгола, проведенного для лучшего понимания статуса и использования этого объекта.

Ключевые слова: Афганистан, Бамианская долина, Шахр-и-Голгола, исламский период, династии Газневидов и Гуридов.





Fig. 1: The Bamiyan region in central Afghanistan. 1 – Location of the Shahr-i Gholghola site in the Bamiyan Valley; 2 – The Shahr-i Gholghola site.

1 The Bamiyan Valley in history: an important trade route

The region of Bamiyan, about 230 km north-west of Kabul, Afghanistan (Fig. 1), was one of the major Buddhist centres from the 1st/2nd century CE until Islam entered the area in the 9th century. It is unlikely that it will ever be possible to write a sustained and indisputable history of the Bamiyan region in the broadest sense of the word.¹ The mention of Bamiyan in history is late and comes from Chinese literary sources at the beginning of the 7th century.² Later sources are plentiful – Sanskrit, Armenian, Old Persian, Pahlavi, Byzantine, Persian, Arabic, etc. –

but mention the central regions of Afghanistan only marginally. It should not be forgotten that Bamiyan, unlike Balkh, Ghazni, Firouzkoḥ, and even Kabul or Kapisa, was never at the centre or origin of a powerful kingdom. For instance, the influence or control of Hephthalites (5th to early 6th century CE) in Bamiyan is still very obscure. It is evident, however, that from the 6th to 7th century CE, under the strong influence of the Western Turks, Bamiyan, which had gained importance as a strategic point on the east-west trade route, flourished as a Buddhist centre.³

Ravaged in 871 CE during the conquest of the region by Yaʿkūb ben Layth, the founder of the Saffarid dynasty (867–1003 CE),⁴ the Bamiyan region then saw its Buddhist populations convert very gradual-

1 The dating of the beginning of occupation of the Bamiyan Valley is still an open question. However, placing it around the first quarter of the Common Era (1st to 4th century CE) is not incompatible with the dating of better-known sites in the region, such as the cave temples of Surkh Kotal and Takht-e Rostam, which are ascribed to a period between the 3rd and 5th century CE (SCHLUMBERGER/LE BERRE/FUSSMAN 1983; MIZUNO 1962).

2 In any case, Buddhism had by this time already established itself as the dominant religion, as evidenced by the passage of the monk Hiuan-Tsang (Xuanzang) to Bamiyan in 632 CE. The first description of Bamiyan and the Buddhas is thanks to him.

3 In 650 CE, the Western Turks pledged allegiance to the Tang Emperor of China (HARMATTA 1996). Buddhism was also widespread among them: for instance, one can mention the western Türk Kaghan, T'ung Yabghu, who was converted, as well as several other minor Türk rulers in the region, who also showed respect for and devotion to Buddhism (MU SHUN-YING/WANG YAO 1996).

4 Passing through Balkh, he reached Bamiyan, which he ravaged, setting fire to the Buddhist temples, then Kabul, from where he drove out the Turki Shahis, who controlled the present Afghan provinces of Kapisa, Kabul, Laghman, and no doubt Nangarhār and the former land of Arachosia (Kandahar).

ly to Islam.⁵ Bamiyan, like the whole of Hazaristan, then came under the domination of the Ghaznavids (10th to 12th century CE), then of the Ghurids (end of the 12th and beginning of the 13th century CE).⁶ It was under the latter dynasty that, in 1221 CE, the city was besieged and destroyed by Genghis Khan's Mongol troops. After the conquest of the fortress at Shahr-i Bamiyan, they vandalised the Buddhist sites and left. Shahr-i Bamiyan became known as Shahr-i Gholghola and was abandoned – a point that shall be developed further in this paper. The population dwindled and Bamiyan swiftly sank into obscurity. Although Arabic geographers sometimes mentioned the name of Bamiyan, its real situation and status is shrouded in mystery during several periods of Islamic history.⁷ With the arrival of Islamic culture, it is clear that the centre of the ancient city shifted from the north-west of the valley towards the south-east, and towards the plain surrounding Shahr-i Bamiyan.

This short history shows that this region remained an important route for trade over the centuries, as well as for the passage of armies. Its importance is associated with its position at the heart of the network of routes that made up the Silk Road, stretching between China and the Mediterranean. Strategically situated in a central location for travelers from north to south and east to west, Bamiyan was a meeting place for many ancient cultures.

An extraordinary variety of merchandise was traded, probably changing hands between merchants several times along the way: gold and other metals, precious and semi-precious stones; rare natural products. From this period onwards, the region became highly developed and thrived during the Islamic period. For this reason, the approaches to the Bamiyan Valley were well protected during the early Islamic period. None of the early Islamic sites, however, have been excavated in recent years due to the presence of mines, although over 7,000 mines have been cleared from the Bamiyan area and it is now safe for archaeologists to return there (LOBELL 2010). A few sites have been partially demined, such as Shahr-i Gholghola. These facts underlie the scientific interest of the work presented in the present paper. However, with the latest events at the end of 2021 and the takeover of the country by the Taliban, nothing is certain anymore at the beginning of 2022.

5 It was not until the period of rule of the Ghaznavids that the indigenous non-Muslim dynasty of Bamiyan finally collapsed.

6 Under the Ghurids, Bamiyan was probably for almost a century (1155–1212 CE) the capital of a great kingdom extending as far north as the Amu Darya.

7 For more historical details on this devastating period for the region, see LITVINSKY ET AL. 1996.

2 Shahr-i Gholghola: from legend to reality

The fortified citadel of Shahr-i Gholghola covers an area of 400 m × 400 m (16 ha). It is located (67°50'21.73" E, 34°49'07.48" N) on a natural hill in the centre of the Bamiyan Valley, where it joins the Kakrak Valley overlooking the main cliff to the north-west. As indicated, the site of Shahr-i Gholghola is traditionally considered to be the Islamic capital of the territories of Bamiyan (Fig. 1:1). It is assumed that the city dates to the Islamic Ghurid or Ghaznavid period (11th to 12th century CE). It is a town in the centre of the Bamiyan Valley sitting atop a natural hill rising to more than 2,600 m in altitude. The city is strongly fortified and is surrounded by several large stone masonry and mudbrick walls. Nowadays, the city has an oval-shaped ground plan and stands on a hill approximately 150 m above the average ground level of Bamiyan Valley (Fig. 1:2).

In both history and legend, when the Mongols arrived in Bamiyan in 1221 CE, they first attacked Shahr-i Zohak and Shathagai; the favourite grandson of Genghis Khan (Matikan, son of Djaghatai) is said to have been killed during this attack. Genghis Khan gave the order that every living creature should be killed and that no prisoners should be taken, not even children. The *Tarikh-i-Jehan Goshai* informs us that “the Mongol army was in all the greater haste to conquer the city: when it had been taken, Genghis Khan ordered that every living being, both man and beast, be killed, that not a single prisoner be taken, and that, down to the child in his mother's womb, no one be left alive, so that following these events no creature might live in this place or build anything there, and that the place be given the name of Mao-Baligh, which means ‘bad city’”. And the chronicler adds: “In our time, there are no living beings there...”

V.V. Barthold (BATHOLD 1929) thinks that Genghis Khan's massacre was inspired by the shamanistic belief that those killed would serve his grandson in the afterlife. Of course, this is history mixed with legend; many other tales are known through Arabic texts. Nevertheless, it is almost certain that the Bamiyan Valley was destroyed by Genghis Khan. As for the genesis of the toponym Shahr-i Gholghola, instead of the ancient name Shahr-i Bamiyan, both the name and the legend seem to be modern because Ch. Masson (MASSON 1848) does not mention them in his publication. Likewise for W. Moorcroft, who in 1841 ascribed the building of Shahr-i Gholghola to Jalal al-Din Khwarazmshah, but he does not seem to have heard of any legends about the fall of Shahr-i Gholghola.⁸ Obviously, both the site's new name and

8 During the 19th century, Europeans such as W. Moorcroft (MOORCROFT 1841), A. Burnes (BURNES 1834), and Ch. Masson (MASSON 1848) visited Bamiyan and learned of

the legend already existed in the 19th century, but apparently independently from each other.⁹ Finally, it was only in the 20th century that the legend was transcribed and then published by R. Hackin and A. Khohzad (HACKIN/KHOHZAD 1953).¹⁰

The history of the site remains unclear even today. It should be noted that in Western works of scholarship, the city is variously referred to as the Silent City, the Screaming City, or the Cursed City. These terms, though apparently contradictory, all refer to the single incident of its destruction. One may think of the city as noisy with screams during the final massacre, as silent in its aftermath, or as cursed by the vow of the Mongol chief. In fact, the Mongols themselves called the city “Mao Balegh” (BAKER/ALLCHIN 1991). However, some elements of known truth stand out in the legend, such as the existence of a sacked and destroyed city in the his-

the existence of the colossal sculptures doubtless suspecting their Buddhist origin. Later, in 1885, M.G. Talbot, W. Simpson, and P.J. Maitland arrived in Bamiyan and surveyed the two colossal Buddhas, and Caves B, D, and E. Their investigation had been inspired by Xuan Zang’s writings. In November 1886, a summary of their findings was published in the *Illustrated London News*.

9 For instance, E. Jacquet (JACQUET 1837: 411) describes the site, but says nothing about the legend: “*Une montagne détachée au milieu de la vallée, tout entière percée de grottes et creusée comme en forme de ruche, nous rappelle naturellement les troglodytes des historiens d’Alexandre; elle est connue sous le nom de ville de Ghoulghoula, et renferme des enfilades de cavernes qui s’étendent dans toutes les directions, c’est dit-on, l’ouvrage d’un ancien roi nommé Djoulal*”.

W. Griffith (GRIFFITH 1847: 403) says: “*Halted at Bamean till the 6th, and inspected Ghoolghoula or Bheiran, which present extensive ruins: those of the city are almost destroyed; but those of the citadel are more perfect, and situated on a mound 300 feet high, which still stands with steep banks or fortifications, apparently of Kafir origin, generally kucha, with bases formed of boulders... Nothing seems to be known about the history of the place, except that it was built by Julal, to whom the Mahomedans fix Ud-deen. Quails are abundant in the fields about Bamean; it is a curious thing that in many of these fields oats far preponderate over other [crops]*”.

10 In November 1922, after an initial survey, A. Foucher wrote to E. Senart, Chairman of the *Société Asiatique de Paris*, emphasising the importance of the sites at Bamiyan. This single letter opened a new page in Bamiyan’s history (*Journal Asiatique*, April–June 1923). Foucher recorded the legend during his visit to Bamiyan in October 1922 and transcribed it succinctly: “*Le lamentable aspect de ces ruines s’accorde visiblement avec les récits des historiens. Ceux-ci nous content que Chengiz-Khan, rendu furieux par la mort d’un de ses petits-fils, tué devant Bamyán, voulut offrir ses à mânes, en guise de sacrifice funèbre, la totale destruction de la ville et l’extermination complète de ses habitants, y compris les chiens et les chats. Ce que nous a laissé cette exécution impitoyable porte encore le nom – plus banalisé que nous n’avions d’abord pensé – de Shahr-é-Gholghoula ou “Ville des Sanglots”*” (FOUCHER 1942: Vol. 1, 135).

tory of Jalal al-Din and Lala Khatun, or the Mongol name, Mao Balegh: “Cursed City”. What remains certain is that, following the Mongol invasion, this region seems to have lost its ascendancy; and later, as early as the 15th century, marine transport began to replace the caravan trade, which thoroughly consummated the demise of the old city of Bamiyan.¹¹

3 Archaeological background

The first known scientific works at the site are those of the French Archaeological Delegation in Afghanistan (DAFA: *Délégation archéologique française en Afghanistan*), with the publications of J. Hackin and J. Carl (HACKIN/CARL 1933), A. Godard (GODARD 1949), and J.-C. Gardin (GARDIN 1957); we can date the occupation of the site during the 12th century, at the time when the control over Afghanistan passed from the Ghaznavids to the Ghurid dynasty. J. Hackin and J. Carl (HACKIN/CARL 1933) indicate that they discovered, in “a survey in the southern part of the site”, more or less complete sherds and ceramics of the Islamic period “like those collected by A. Foucher”, but also “Persian and Arab manuscripts”, which were never published. The existence of rare and rich archaeological materials at this site, with exceptional discoveries made by farmers, is well known. Farmers used the archaeological ground for cultivation, as reported by J. Hackin (1932). Recent geological studies show that limestone (like at Shahr-i Gholghoula) was used here as fertiliser because it increases the soil’s pH value. This practice seems to have persisted until recently.

A. Godard (GODARD 1949) published some plans of houses and one mosque from Shahr-i Gholghoula, and J.-C. Gardin (GARDIN 1957) published the pottery. J.-C. Gardin found for the first time that this pottery showed some analogies with the material from northern Iran. More anecdotally, according to the old Museum guide from 1974 (from Nancy Dupree), a wooden door exhibited in the National Museum in Kabul, 1.2 m high, was from Shahr-i Gholghoula. An inscription in knotted Kufic, “*Al-mulk lillah*” (“sovereignty [belongs] to God”), suggests that the door may have come from the mosque (DUPREE ET AL. 1974).¹²

11 For more details on the history of research and other ancient quotations and descriptions of the Bamiyan Valley, see MARTINI/PAOLINI 2014.

12 Several mosques were described in the reports of the first visit of the DAFA’s archaeologists, including a “large” one on the south-western part of the site. In a letter from A. Godard to A. Foucher (handwritten documents, Bamiyan, 28 September 1923), the author even speaks of burials of the city’s Muslim elite (FENET 2010: letter no. 125). A large mosque has been restored by the ICOMOS team under the supervision of B. Praxenthaler.

Due to its strategic location, the Shahr-i Gholghola site was heavily exploited for nearly 20 years (1980–2000) – by several groups of fighters during the civil war, and by the Taliban, and gun positions were set up at the top of the hill. Not too long ago, elderly people used to say that this site was occupied by a garrison at the beginning of the 20th century, during the reign of Habibullah Khan, but they no longer seemed to be on site at the time of A. Godard's visit to Bamiyan during the autumn of 1923. He tells us in a handwritten letter dated 28 September, referring to the south-western part of the site, that “*Toute une pouillerie s'y est installée abattant, construisant, rendant le plan presque illisible*” (FENET 2010: 323).

This is why it was necessary to set up systematic demining, which was undertaken in 2008–2009 in the archaeological areas (*infra*). In 2008, after the first demining campaign at the site, the preliminary report on the pottery and chronology of Shahr-i Gholghola was published for the DAFA and UNESCO by A. Marguier and N. Engel, on the basis of the material collected (MARGUIER 2012). Later on, from August to September 2010, the RHTW Aachen Centre for Documentation and Conservation prepared architectural plans and a photo catalogue of the building structures located to the south-west (Damage Assessment, UNESCO/RWTH). The report provides a catalogue with detailed pictures of the damage and a brief descriptions of the objects found (KHAZAD 2010).

In 2012, ICONEM, UNESCO, and the DAFA prepared a photogrammetric survey of several sites of the valley including, obviously, Shahr-i Gholghola. This is the first general map where one can begin to understand the plan and organisation of the architectural units. However, until now, the site has remained largely unexcavated and covered with erosion debris (UBELMANN 2013). Our survey work was carried out partly on the basis of these images (*infra*).

The decision to set up planned archaeological research was essential. Indeed, during the exploratory visit made at the site in August 2013, we found some evidence of archaeological layers 40–50 cm under the foundation of the walls, in the areas where ICOMOS had removed the debris of ruins. In some places where these layers are visible, some older structures are preserved and are different from the restored architecture.

After 2013, several campaigns (DAFA, Afghan Institute of Archaeology, and UNESCO) were set up, including topographic investigations and archaeological excavations in the western part. Initially, this was in anticipation of restoration work to be carried out by ICOMOS and subsequently, it was motivated by scientific interest – because we can only restore what we understand (MAASS 2016; PRAXENTHALER 2016a; 2017). Given the large size of

Shahr-i Gholghola, it is clear that archaeological and scientific knowledge of this site largely remains to be discovered. So far, we have conducted only a “micro-search” of part of it. Surveys and archaeological excavations were undertaken in 2014 in five areas of the western part of the city. These interventions led to a better understanding of the organisation of this quarter – centred around a main street on a terrace – which has warehouse buildings around it, with a large residential complex looming above. This ensemble is divided into several groups of rooms centred around small courtyards. Each courtyard has four *îwâns* (an architectural element that consists of a vaulted room closed on three sides, and open on the fourth side). A wall, 2 m thick and largely destroyed, connected several towers and protected the entire quarter.

As part of its focus on the heritage of the Bamiyan Valley, UNESCO requested the expertise of the DAFA for conducting surveys and excavations prior to the restoration work undertaken by the German team of ICOMOS at Shahr-i Gholghola. This work aims to prepare and guide future restoration, as well as allow better understanding of this site in relation to the history of the valley.¹³

4 Archaeological survey and topographical study of the site (2017–2018)

Nowadays, archaeologically speaking, the Shahr-i Gholghola site remains very well preserved, with walls apparently of very high elevation and even two-storey areas collapsed on top of each other. While this may be an advantage, it is not entirely obvious for a non-expert to grasp. Indeed, attempts were made by M. Jansen (Aachen RWTH University) to understand the architecture and stratigraphy through fieldwork conducted by a topographer, and by Y. Ubelmann (ICONEM), and with the use of photogrammetry (also over a short time). In both cases, only small parts of the architecture (still preserved in elevation) were understood, and more global interpretations of this exceptional site were lacking. There were two main problems with the results of these two initial projects commissioned by UNESCO: they simultaneously showed walls and raised structures that were both in place and collapsed; and these were drawn regardless of whether the first storey was still preserved or gone (with re-

13 A series of archaeological excavations were subsequently carried out, as was research on archaeological material discovered during the ICOMOS restoration work and our own fieldwork in 2017 and 2018. This article will not deal with the results of these excavations and will not include studies of this archaeological material, which will be published at greater length in a later publication.

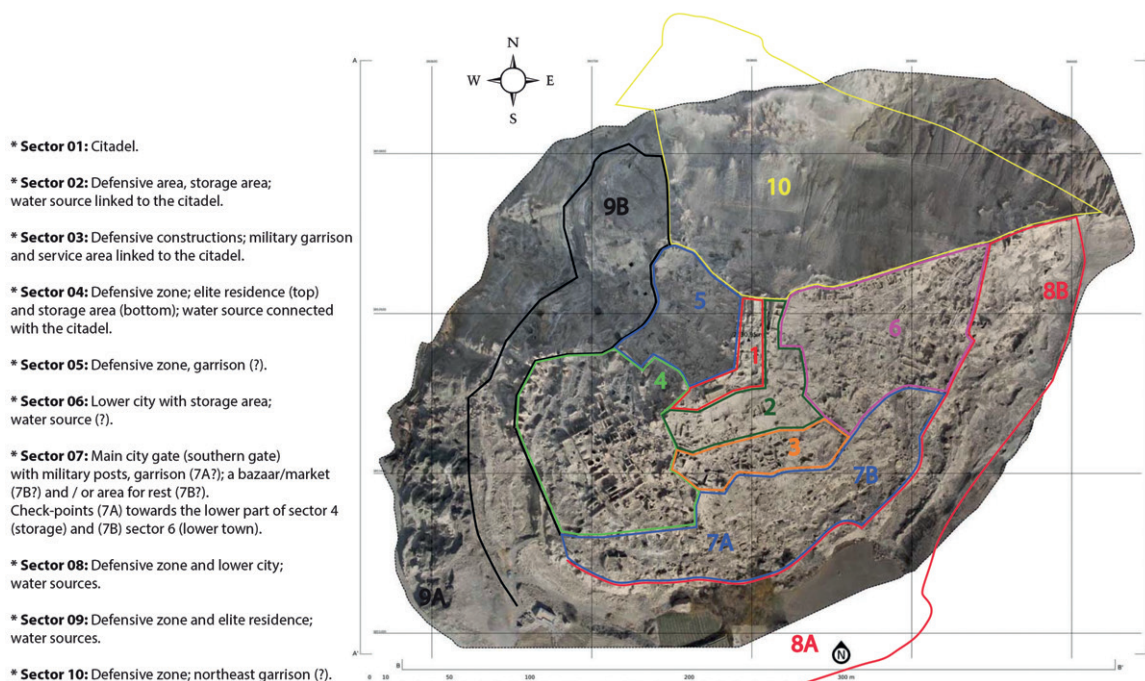


Fig. 2: The various analysed areas of the site.

mains just consisting of a ground floor). All of this resulted in a distortion in the functional understanding of site occupation, both contemporary and in its diachronic sequence. The drawings were made in the laboratory without any direct verification in the field. This is how fallen walls were depicted as raised in the drawing, together with walls that were still in their original position. These indications show how essential it was to resume the work of recording and understanding the site by carrying out very detailed fieldwork.

Between 2014 and 2015, our first interventions in the area previously restored by B. Praxenthaler (ICOMOS-Germany), on the south-western part of the site, provided the opportunity to understand the complexity of urban planning and highlighted the need to look closely at the different connections, wall by wall. The survey was at first guided by archaeological intuition, and then little by little, by locating and following the walls of the defensive ramparts and the axes of ancient roads (large alleys, corridors, and large streets). This intuitive approach allowed the pinpointing of the best-preserved structures, which were of great assistance for our structural understanding of early occupation, and also allowed us to take notes on the architecture's general state. Three major stages of work could thus begin. The first, a preliminary survey, involved walking across the site many times in order to analyse, understand, and interpret what we saw.¹⁴ Next,

our initial rough results were checked and corrected by a second (or third, or fourth...) passage over the site, where we were more careful and thorough in verifying and understanding what we had first noted, or even by cleaning out certain architectural structures that had nearly disappeared. During this second stage, every structure that could serve as an important element in the area's general comprehension was used as a geographical benchmark for visual analysis towards the top and the bottom of the hill, as well as on the four cardinal points. This process allowed us to distinguish other structural and/or stratigraphical connections for the site's architectural understanding. During the third major stage, we worked on the topographical directional survey of the rampart walls and the precise location of circular or quadrangular towers.

During the past 40 years, due to its strategic location, the site of Shahr-i Gholghola was heavily mined by several groups of fighters, and gun battlements were established on the top of the hill. As mentioned, during 2008 to 2009 a clearance was made over a large surface of the historical area (445,916 m², with 21,700 m² secured through surveying) where 14 anti-personnel mines were destroyed and 7,107 explosive pieces of ordnance (ERW) were located and removed (KHAKZAD 2010). This was obviously not insignificant in our thinking and planning for the work remaining to be done on the ground. Many of

14 In our excitement and enthusiasm for new discoveries, we clearly took some risks: a number of us crossed more

than once through a site that was still potentially full of mines.

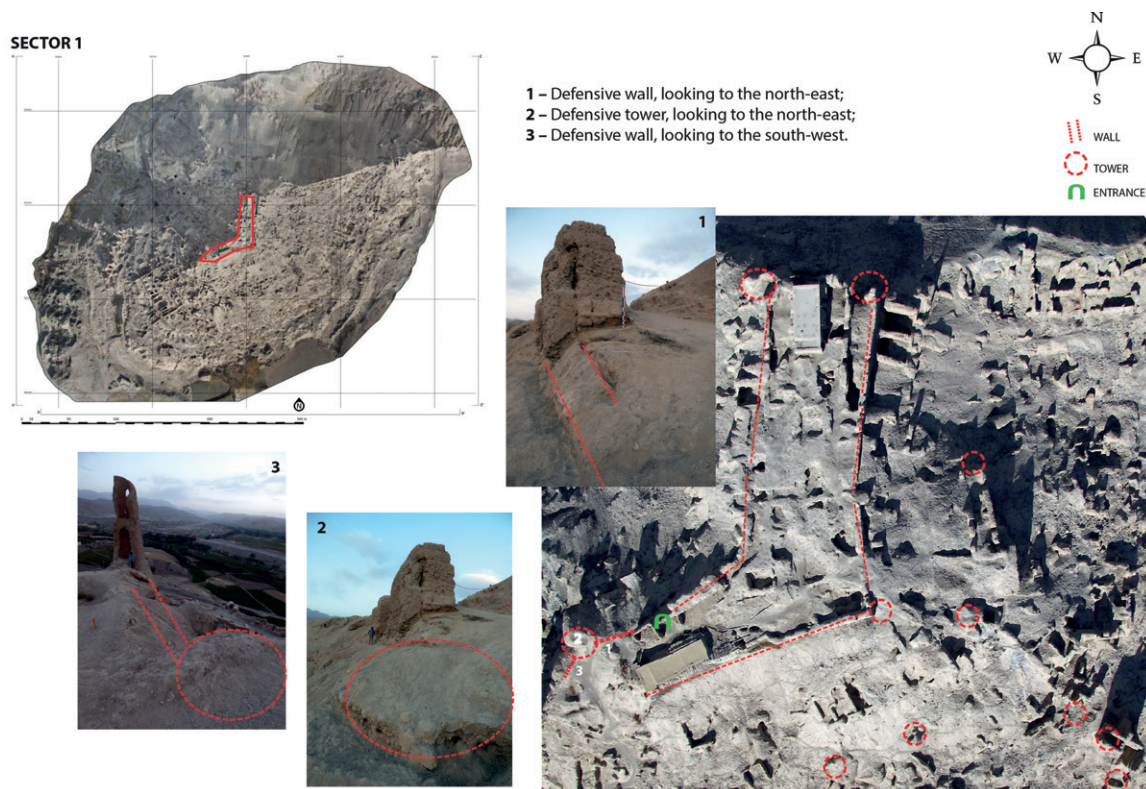


Fig. 3: Sector 1.

the areas covered by this project are currently insecure.

5 Survey: preliminary results

After initial fieldwork in 2013, we were able to gain a better understanding of the site's general planning and the method of construction on the city's terrace. The site is divided into multiple quarters separated from each other by ramparts. It consists of a succession of terraces, under which cellars were dug, presumably to serve as warehouses, cisterns, or even dwellings. Various types of building were built on the terraces, adapting to the topography, sometimes held by retaining walls or built directly on large *in situ* rocks. In this way, urban developments adapted to important differences in elevation, as well as to the frequent occurrence of landslides.

From the top of the site, on the so-called "citadel", we studied the urban topography, using as our main reference the traces of ramparts still in place. The starting historical hypothesis was to suggest that we were not looking at the evolution over time of an extended city, but rather the founding of a city structured as a stronghold, made up of ramparts and built in one go. For several weeks in the field,¹⁵

¹⁵ These results were not merely the work of a few weeks: they required many visits to the site by DAFA staff, begin-

we applied a fieldwork survey method based on subdivision into sectors to better identify well-separated and grouped housing areas. During this work, we tried to follow the open paths currently being used by local visitors. We know that the extension of occupation is of course horizontal and follows the hill's topography. Our working hypothesis is that the construction of the settlement was primarily based on the establishment of the fortification.

Within an area of more than 180,000 m² (= 18 ha), a total of 10 sectors were identified. The survey was carried out together with local staff from Bamiyan University, as well as the local office of the Ministry of Information and Culture. The division of these sectors can be seen on the map (Fig. 2). The survey was carried out with handheld GPS devices and traditional drawing techniques. A training component was included, and local staff actively contributed to this exercise.

* **Sector 1 (Fig. 3):** The citadel, at the top of the site, is a rectangular fortified area (L-shaped) with a minimum of two floors and a floor area of almost 2,500 m². The citadel was in use until recently, particularly during the Civil War and the Taliban period. Remnants from this period, especially combat devices such as bastion walls made of sandbags, had to be removed in order to better understand the citadel's

ning in 2013.

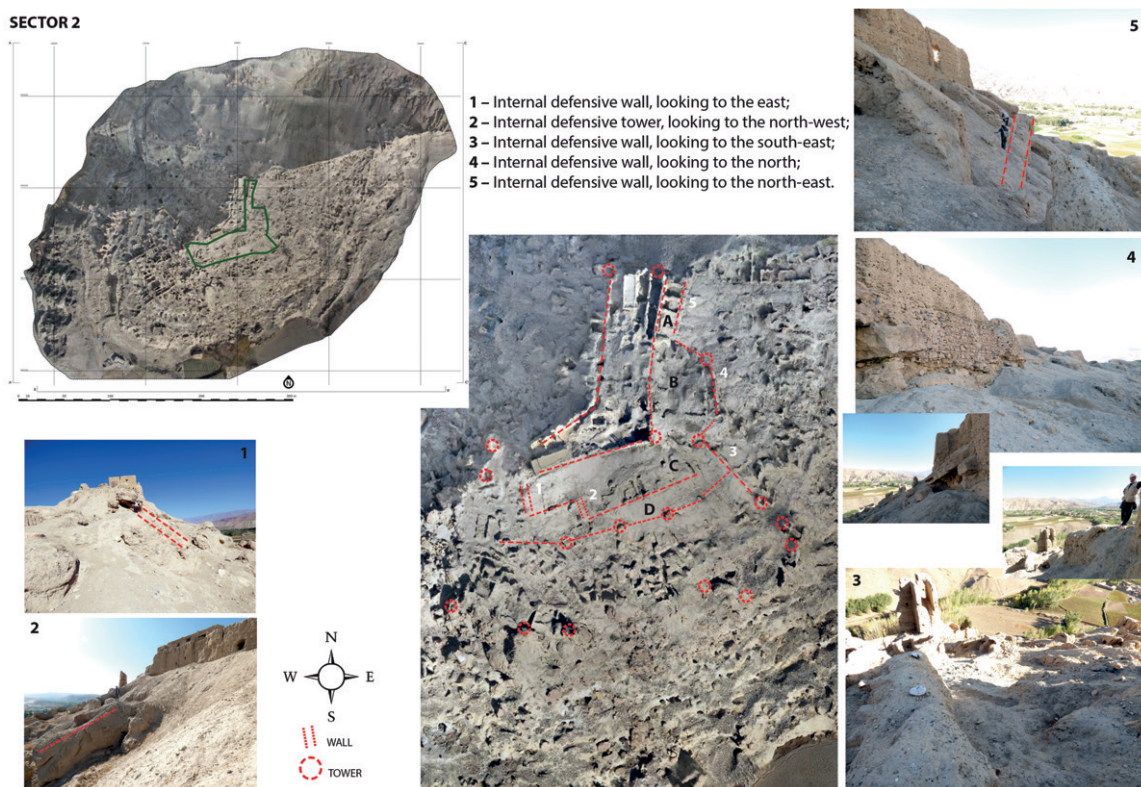


Fig. 4: Sector 2.

layout, and to then be able to excavate and draw the internal part. Excavation on this part of the site remains complicated. Defensive walls and towers, as well as the main access door, were rediscovered.

* **Sector 2 (Fig. 4):** Almost 3,500 m², used as a zone for domestic occupation, in the citadel's southern and eastern buttresses, probably linked the citadel and sheltering the guards and/or the domestic workers of the local aristocracy living between Sectors 1 and 4. To the north-east, there are at least four juxtaposed rectangular rooms, preserved up to quite a good height, which seem to be joined by a corridor (Fig. 4:1). These rooms would have been used for storage in the event of a siege (A). To the south-east of these dwelling quarters, there is a residential complex (at least six large rooms) with a passageway for guards on the outer east side (B). To the south, a massive and high brick terrace (C) was apparently meant to fortify access to a well and passage (through a vaulted hallway) towards the lowest terrace in Sector 2. This terrace (D) is made of brick and stone and has at least three guard towers on the south side. This entire sector was well protected by an outer wall, as well as by at least five towers that are still extant (Fig. 4:1, 3-4).

* **Sector 3 (Fig. 5):** Almost 3,000 m² in area, downhill from Sector 2; it is a complex of single-storey and two-storey buildings (Fig. 5:2), corridors (Fig. 5:1),

and defensive towers, of which at least eight are extant (Fig. 5:4-5). This complex contains one of the main gates, large and well-guarded, providing access to the area beyond Sector 3, towards Sector 1 (the citadel) and perhaps Sector 4 (an aristocratic residential area).

* **Sector 4: (Figs. 6A-B):** Almost 10,000 m² in area; it is a zone at the edge of a western cliff, fortified. It consists mainly of a storage area, a water reservoir (cistern), and especially an aristocratic residential area. Inside these ramparts, it is easy to make out a long street, which runs north-west to south-east (light yellow in Fig. 6A) and is built on a first terrace. On either side of the street, there are numerous large buildings with rectangular rooms in a fairly good state of preservation. These appear to be warehouses. On the second terrace, situated immediately above the warehouses, we find a first residential complex, with the same layout as seen in a number of other complexes. This monument is centred on a small courtyard with four *eyvân* (or *îwân*), which are rooms closed on three sides and entirely open on the fourth, looking onto the courtyard. This cruciform grouping is surrounded on the north-west and south-east sides by two "annexes", each made up of a long corridor and various rooms. Access to this first storey is through a stairway (also in yellow in Fig. 6A) leading to the street, and another stairway leading to the warehouse at the northern ex-

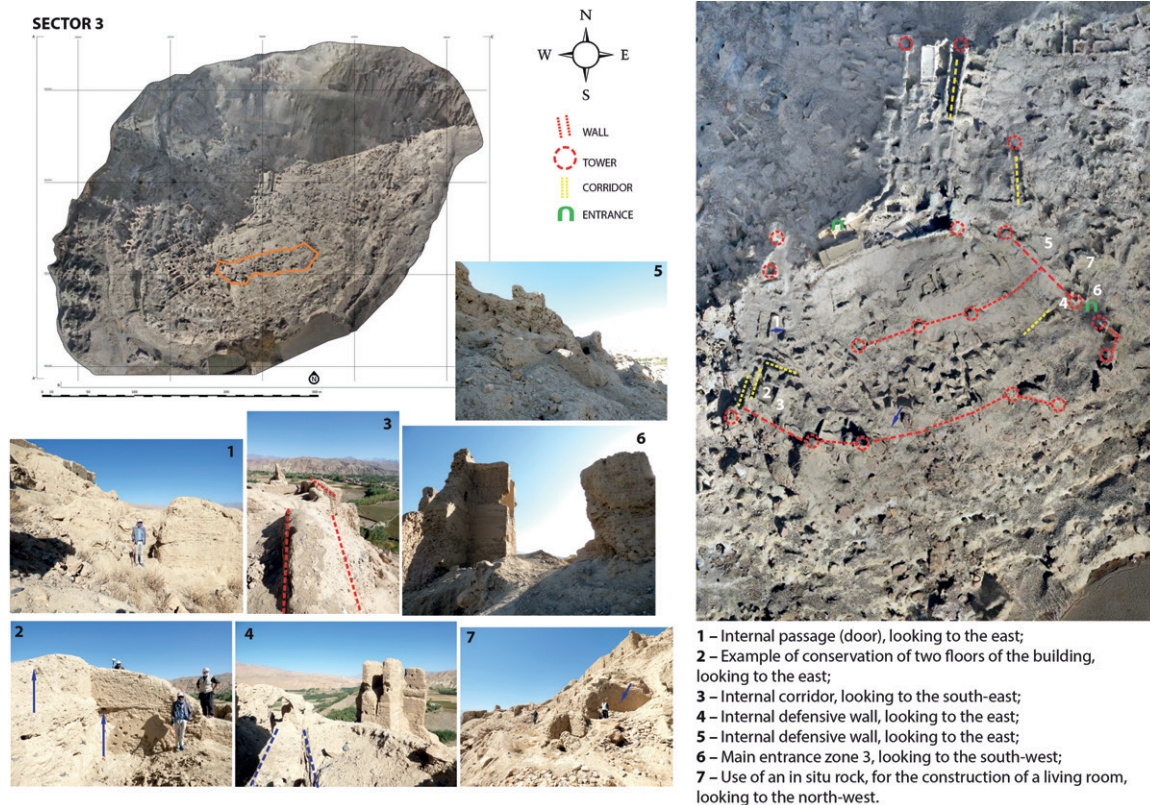


Fig. 5: Sector 3.

tremity. On the third terrace, immediately above the first complex, there are two other complexes built according to the same symmetrical type of floorplan with four *eyvân*. They are in a more advanced state of degradation than the first one, however, because of landslides in particular.¹⁶

This evidently corresponds to an elite neighbourhood, for several reasons:

- It has several fortified entrances (at least three discovered so far), each probably corresponding to at least three levels of powerful fortification and closed off near the summit (citadel);
- This is the only sector known until now with a passage leading directly to the citadel, the point with the highest security on the site (Fig. 6B:8–9);
- It has better water reserves (at least three cisterns) and buildings for storing food;
- It has a complex of large, well-equipped, and very solid caves, some connected by (secret?) underground passages;
- A “washroom” and toilets were discovered in the dwelling rooms adjacent to the main *îwân* (on the second terrace);
- Stuccos with decorative elements were also discovered between the large buildings of the

lower terrace (zone G19–20, or site no. 6 from our work in 2016). This certainly seems to indicate the presence of a group of nicely decorated buildings (for administrative purposes? A mosque?) One should also note the presence of fragments of beautiful blue and green tiles;

- Incidentally, this is the best location on the hill of Shahr-i Gholghola for a commanding view of the Bamiyan Valley.

The part of this sector most to the north-west seems to have been more or less destroyed. There are crevasses all around, including some very large ones, and architectural constructions outside the ramparts and towers are rare and are now above ancient ground level (Fig. 6A:6). There are no specific archive photographs of this zone prior to the intervention of the mine-clearing experts, but we believe that three main factors are responsible for this area’s destruction: natural causes apparently led to the collapse of several large caves (Fig. 6A:3–4); further damage was due to looting and the re-use of the land for farming; finally, mine removal efforts in recent years have proved to be particularly damaging.

* **Sector 5 (Figs. 7A–B):** Almost 4,500 m² in area; a fortified area with long walkways opening onto small quadrangular dwellings (Fig. 7B:6). It is quite particular in its organisation and may correspond to military quarters facing the opening of the val-

16 One is most likely dealing here with one of the “houses” surveyed by A. Godard in the 1940s.

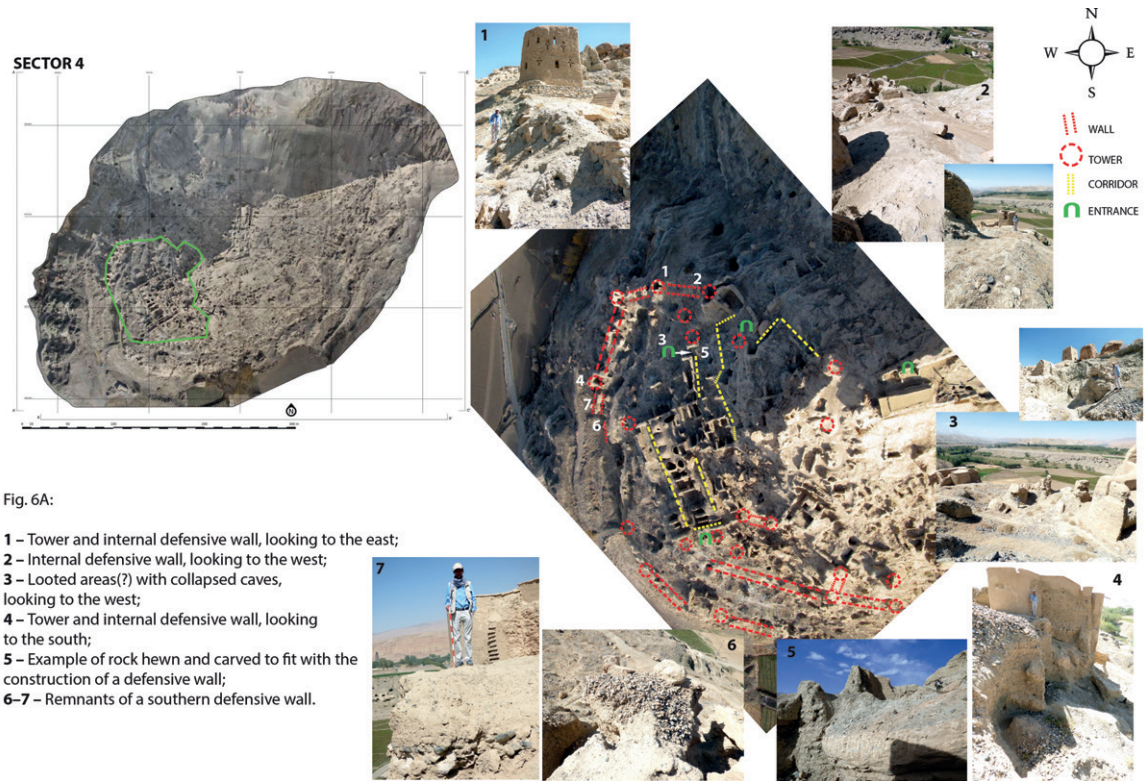


Fig. 6A:

- 1 – Tower and internal defensive wall, looking to the east;
- 2 – Internal defensive wall, looking to the west;
- 3 – Looted areas(?) with collapsed caves, looking to the west;
- 4 – Tower and internal defensive wall, looking to the south;
- 5 – Example of rock hewn and carved to fit with the construction of a defensive wall;
- 6-7 – Remnants of a southern defensive wall.

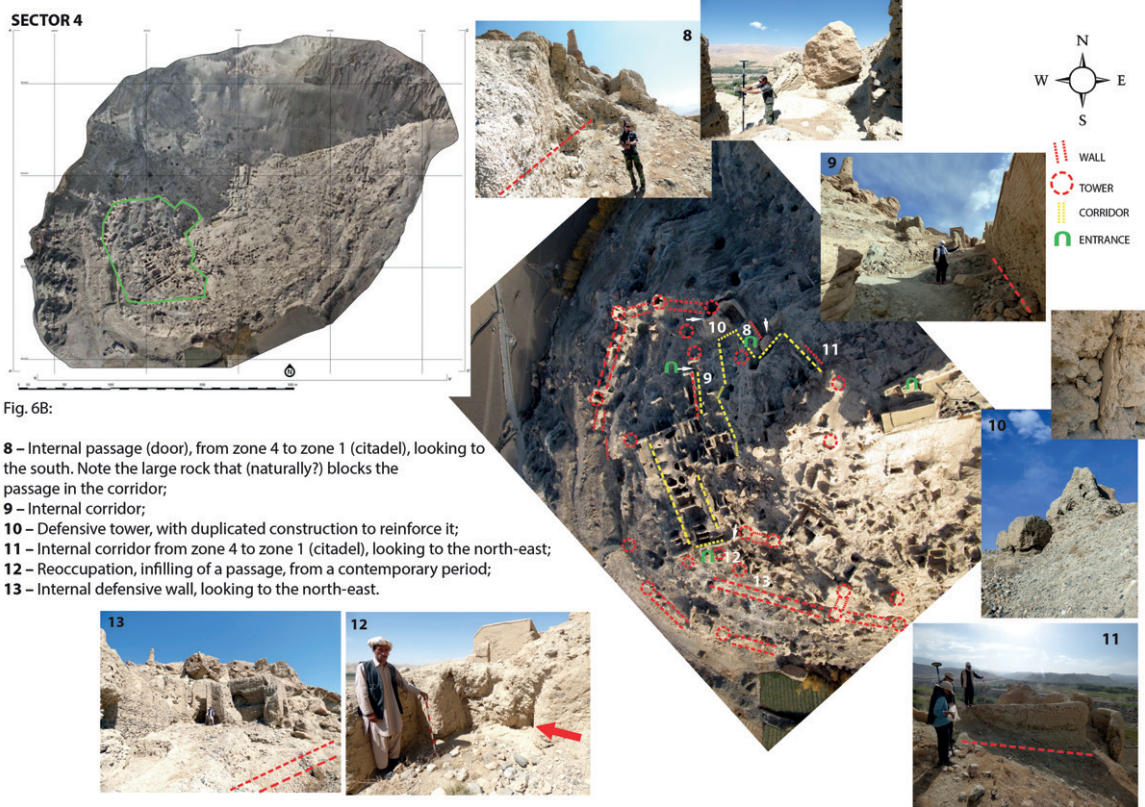


Fig. 6B:

- 8 – Internal passage (door), from zone 4 to zone 1 (citadel), looking to the south. Note the large rock that (naturally?) blocks the passage in the corridor;
- 9 – Internal corridor;
- 10 – Defensive tower, with duplicated construction to reinforce it;
- 11 – Internal corridor from zone 4 to zone 1 (citadel), looking to the north-east;
- 12 – Reoccupation, infilling of a passage, from a contemporary period;
- 13 – Internal defensive wall, looking to the north-east.

Fig. 6A–B: Sector 4.

SECTOR 5

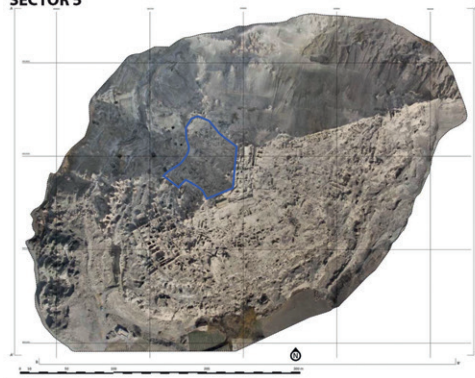
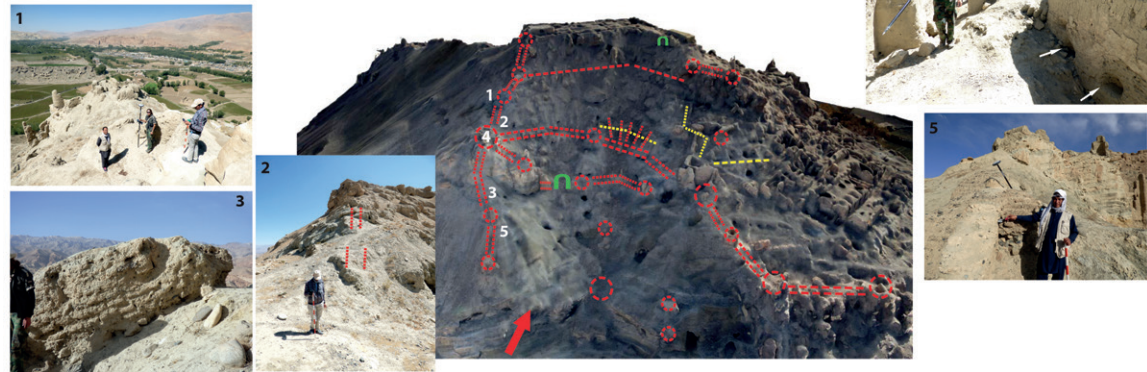


Fig. 7A:

- 1 – Internal defensive wall, looking to the north-west (Bamiyan Valley), with towers and casemate;
- 2 – The same internal defensive wall, looking to the citadel (south-east);
- 3 – Remnants of the fortification wall, looking to the north;
- 4 – Inside the casemate; note the wooden post holes of a collapsed roof;
- 5 – Remnants of the fortification wall, looking to the north.



SECTOR 5

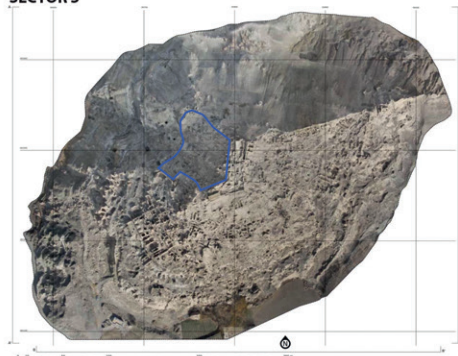


Fig. 7B:

- 6 – Corridor crossing a set of small open rooms, looking to the south;
- 7 – The main entrance to this zone, with a tower and casemate at the top, looking towards the Bamiyan Valley;
- 8 – Internal defensive wall (in connection with the citadel) and towers, looking to the north-east;
- 9 – Main entrance, internal towers and walls, looking to the north-east;
- 10 – Collapsed cave, looking to the south-west;
- 11 – Traces of a collapsed tower, looking to the south-west.

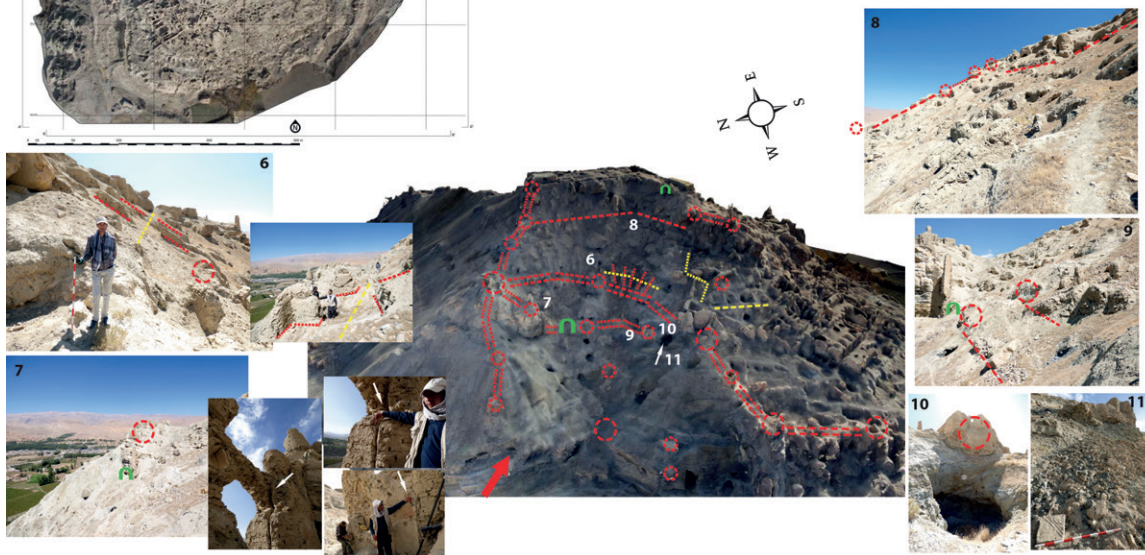
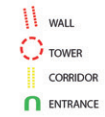


Fig. 7A–B: Sector 5.

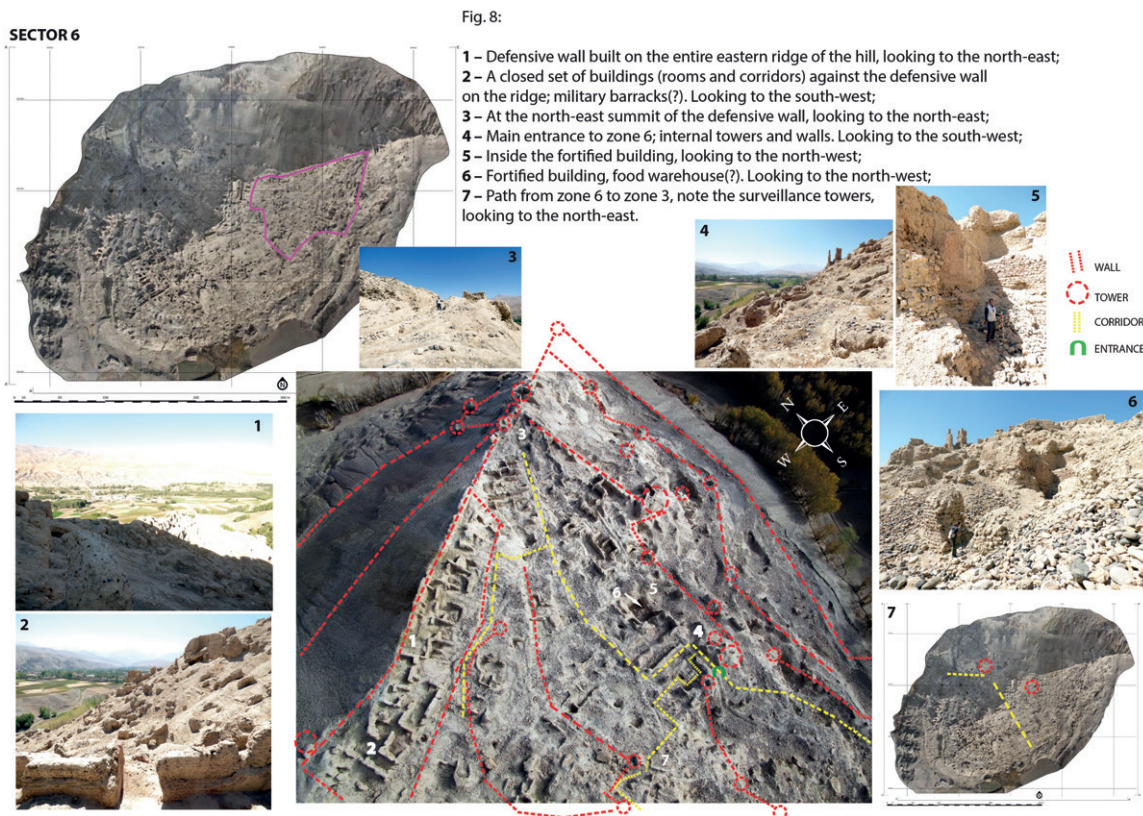


Fig. 8: Sector 6.

ley. This sector is very poorly preserved; it is where explosives were detonated in 2009. It possesses an impressive entrance, preserved quite high, built on a cliff whose access is very difficult (Fig. 7B:7) unless one enters it, from a certain level of the topography, from Sector 10 (*infra*). This door is flanked by a massive quadrangular tower with multiple floors (Fig. 7A:1, 4). The entire area is built on a fairly steep slope. The few existing walls are parallel to one other, and oriented north-south.

* **Sector 6 (Fig. 8):** Almost 8,800 m² in area, this is the old lower town with at least two main axes. Several food storage areas are located there (Fig. 8:5, 6). The natural topography does not permit housing and residential construction everywhere – for example, in the northern part of the site. Behind housing, which was the elite’s last line of defence, with dwellings, palaces, and domestic quarters for guards in the best topographical locations (the entire north ridge (Fig. 8:2), the lower town has its own concentric protective walls and fortified tower system. There is an entry door guarded by two towers. This sector’s central zone was intensely pillaged, with very little archaeological material apparent on the ground nowadays, and with clearly visible traces of holes from looting and illicit digging.

* **Sector 7 (Figs. 9A–B):** An area of almost 11,000 m², consisting of a long walk along the southern cliff (which has almost disappeared) connected to Sectors 4 and 6, and especially an occupation aligned from east to west, in caves dug into the hill, linked by a sort of walkway. The westernmost part of this sector can be compared with “military” Sector 5; this terrain is very difficult to access because it is steep with architecture that is very flimsily built, but very heavily fortified, and which seems to be organised along a corridor oriented south-west to north-east (Fig. 9A1:5; 9A2:12; 9B1:1, 2, 4). Worthy of note here is that, just as in Sector 4, a large number of caves at the same geological level have collapsed (perhaps because of a natural weakness in the rock) (Fig. 9A1:1). A system of aligned caves, accessed through a corridor running along the southern defensive rampart, can be interpreted as a path around the battlements, connected to barracks in the caves where soldiers could sleep or store food and weapons (Fig. 9A2: 8, 9, 10, 11). There is also a mosque still standing in this sector (partially restored).

In any case, the sector provides access to the lower terrace (storage area) in Sector 4 by means of a gate, guarded and protected by two towers.

It is in the easternmost part of this sector that one finds one of the first entryways to the site (Fig. 9B1:3). This is followed by a long and wide entrance corridor where a cart could circulate;

SECTOR 7A

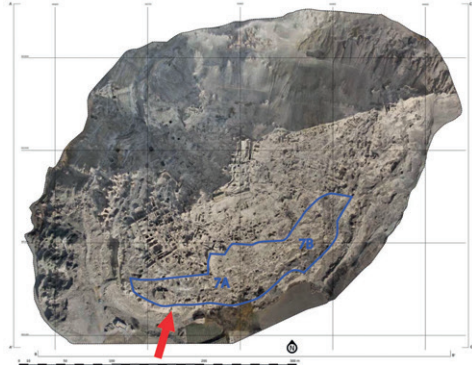
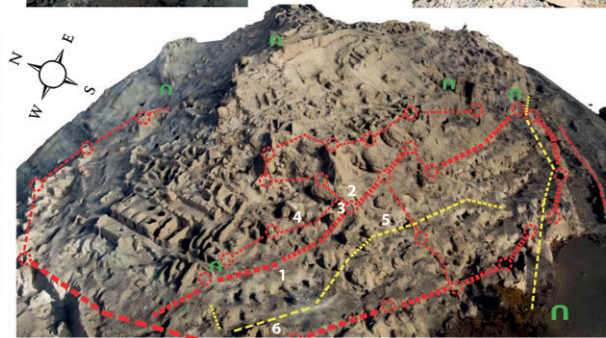


Fig. 9A.1:

- 1 - View of several caves, now largely collapsed. Photograph looking north;
- 2-3 - Partial conservation of a tower (2) and a defensive wall (3) connected to it. Photo (2) facing west, photo (3) facing east;
- 4 - Internal defensive wall, looking west;
- 5 - Corridor to the mosque and the main entrance to zone 4. View looking east;
- 6 - Construction of the mosque over a cave from an older period;
- 7 - The remnants of a tower at the external side of the mosque. View looking north-east.



- WALL
- TOWER
- CORRIDOR
- U ENTRANCE



SECTOR 7A

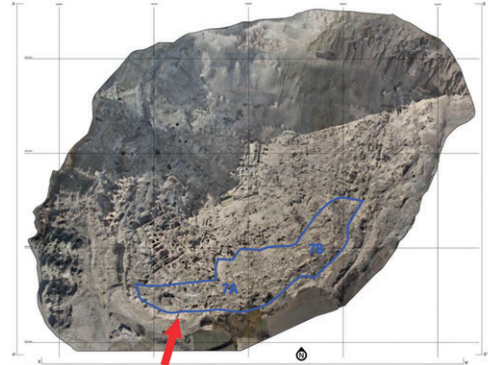


Fig. 9A.2:

- 8 - The very damaged remains of the boundary wall of the site's the southern part. Photo facing west;
- 9 - One of the caves destroyed by collapse along a corridor against the defensive enclosure south of the site. View to the south;
- 10 - A tower and poorly preserved traces of the defensive wall enclosure of the southern part of the site. View to the east;
- 11 - Poorly preserved traces of the defensive wall enclosure of the site's southern part. View to the east;
- 12 - The main corridor in zone 7, shown here abutting a defensive tower that is almost completely destroyed. View to the east.



- WALL
- TOWER
- CORRIDOR
- U ENTRANCE

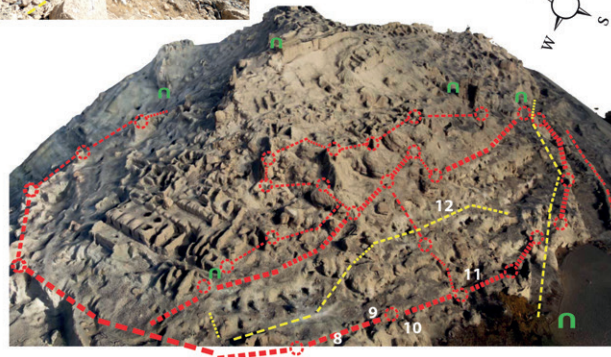


Fig. 9A.1-2: Sector 7A.

SECTOR 7B

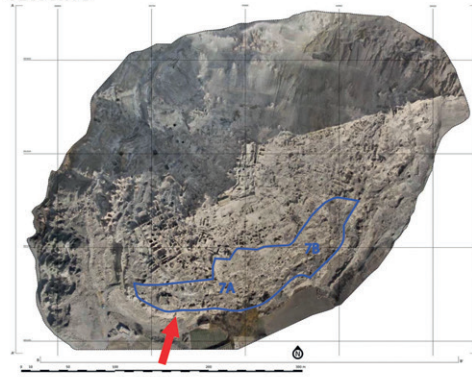
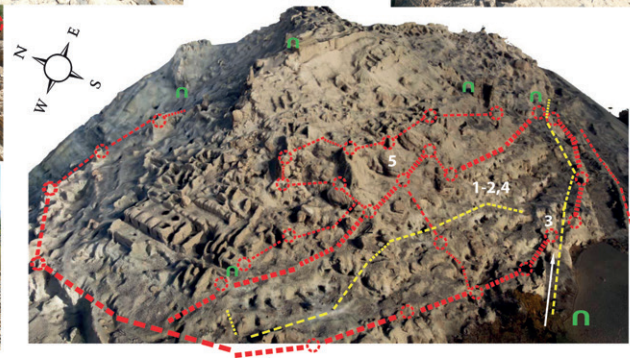
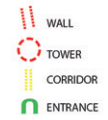


Fig. 9B.1:

1-2 – A group of collapsed caves. Photograph facing east (1) and west (2). See also (2) the construction of walls in front of the entrances to the caves;
 3 – Restored tower in front of the site's main entrance. View looking south-west;
 4 – Main part of zone 7, esplanade in front of the entrance to the lower town; this may be the bazaar/market (?). Photograph looking to the south-east;
 5 – Tower between zones 3 and 7, with traces of domestic constructions that have almost disappeared archaeologically. View to the north.



SECTOR 7B

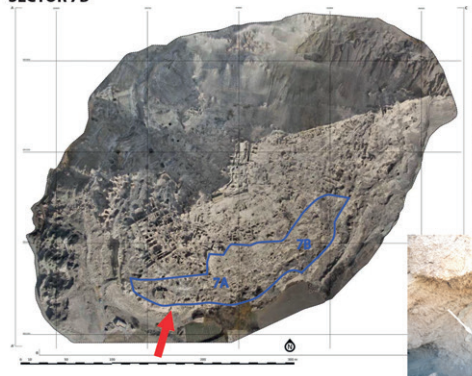


Fig. 9B.2:

6 – Esplanade in front of the entrance to the lower town. There are more than 20 caves, more or less well preserved. View to the north;
 7 – Defensive wall of the rampart closing the esplanade in its southern part. View to the north-east;
 8-10 – Example of very good state of preservation of some of the caves. Painting and traces of occupation such as a hearth (9) are still visible;
 One cave still contains a drinking trough(?) cut into the rock, for watering animals (10);
 11-12 – Entrance to the lower town of the site (zone 6). Photographs facing the entrance, view to the north-east (11), and from inside, view to the west (12).

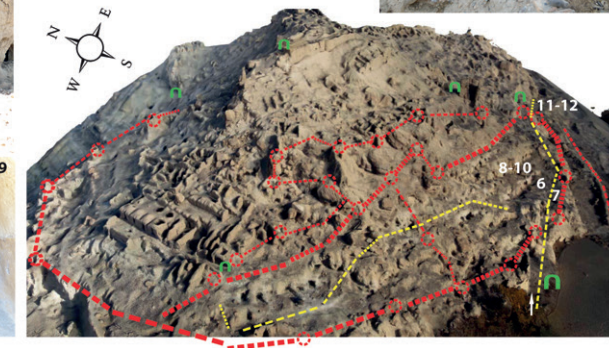


Fig. 9B.1-2: Sector 7B.

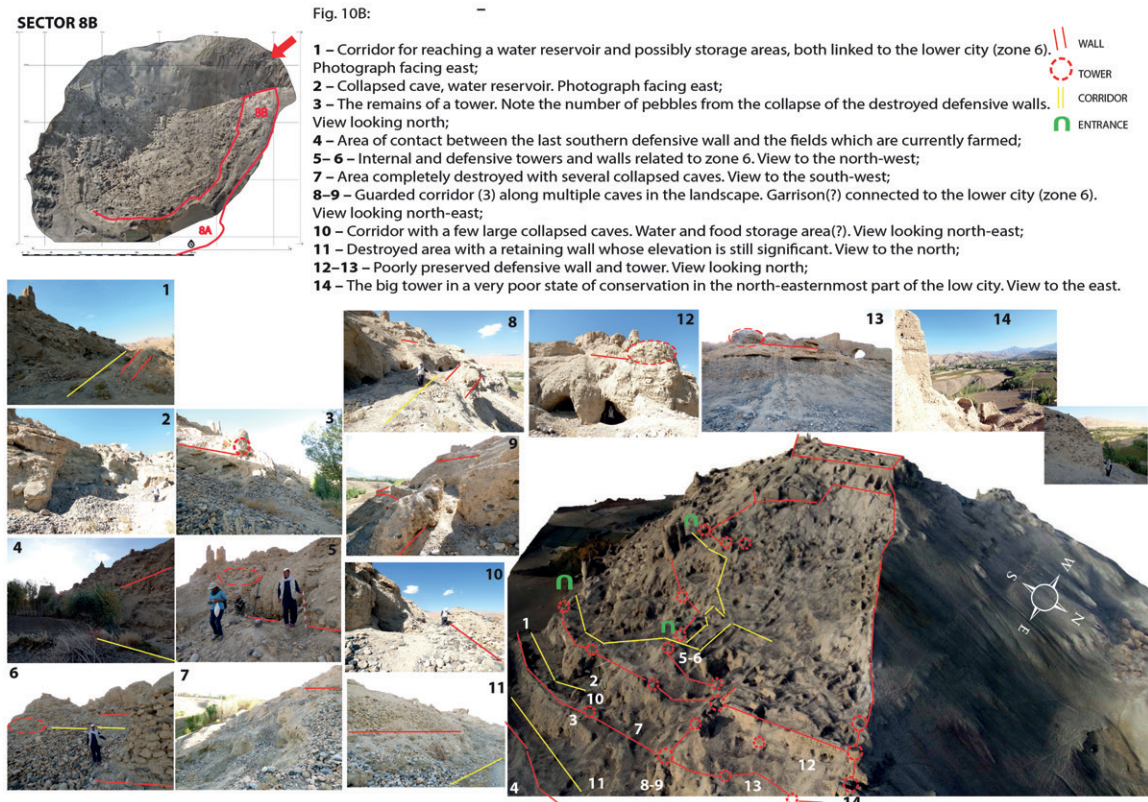
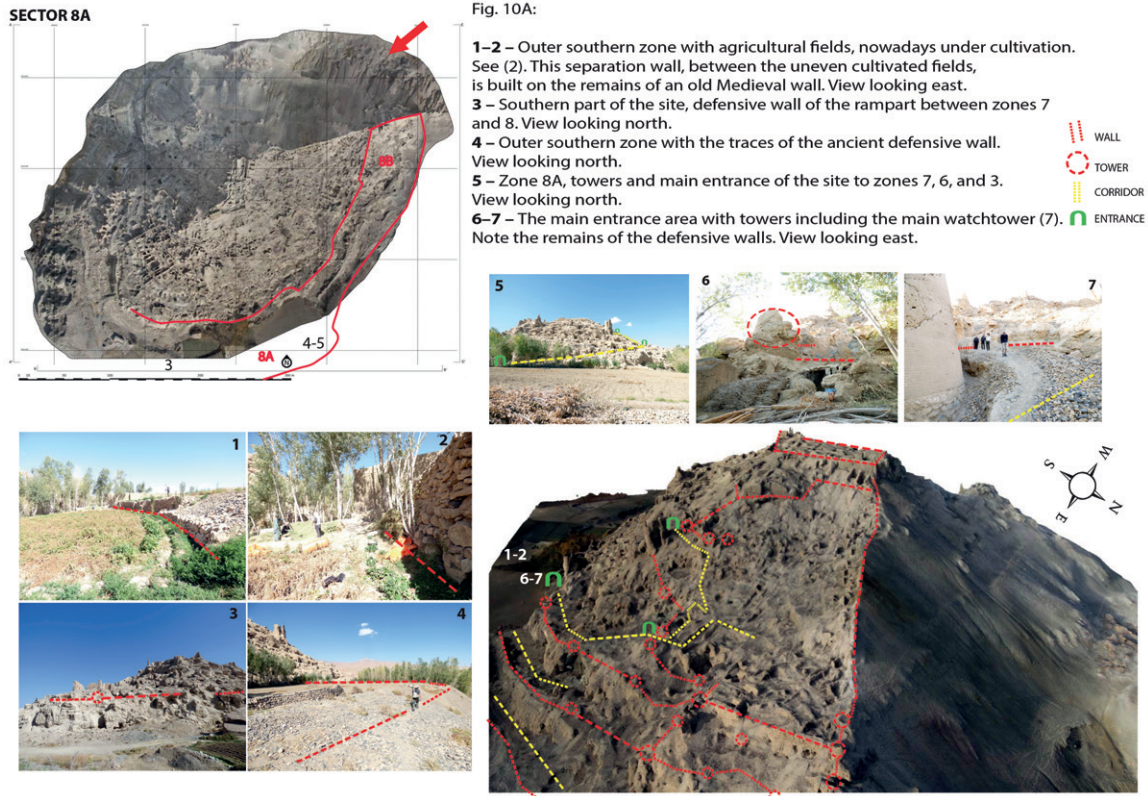


Fig. 10A-B: Sector 8A-B.

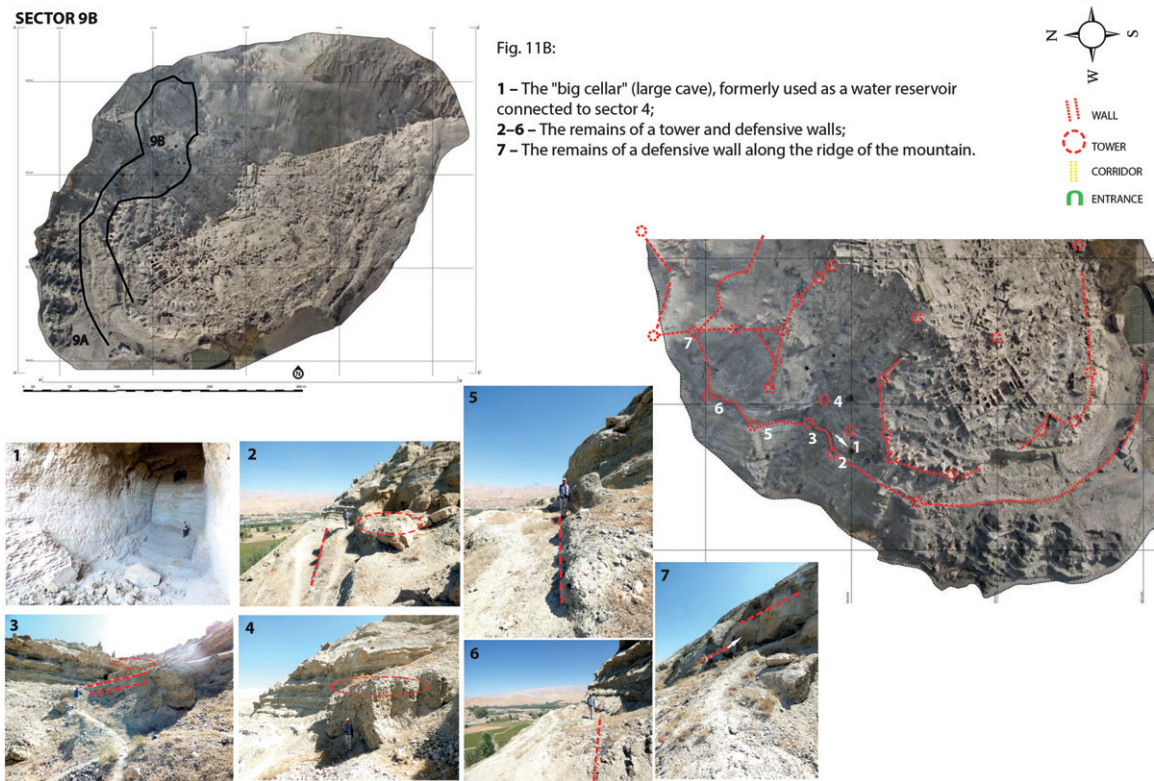
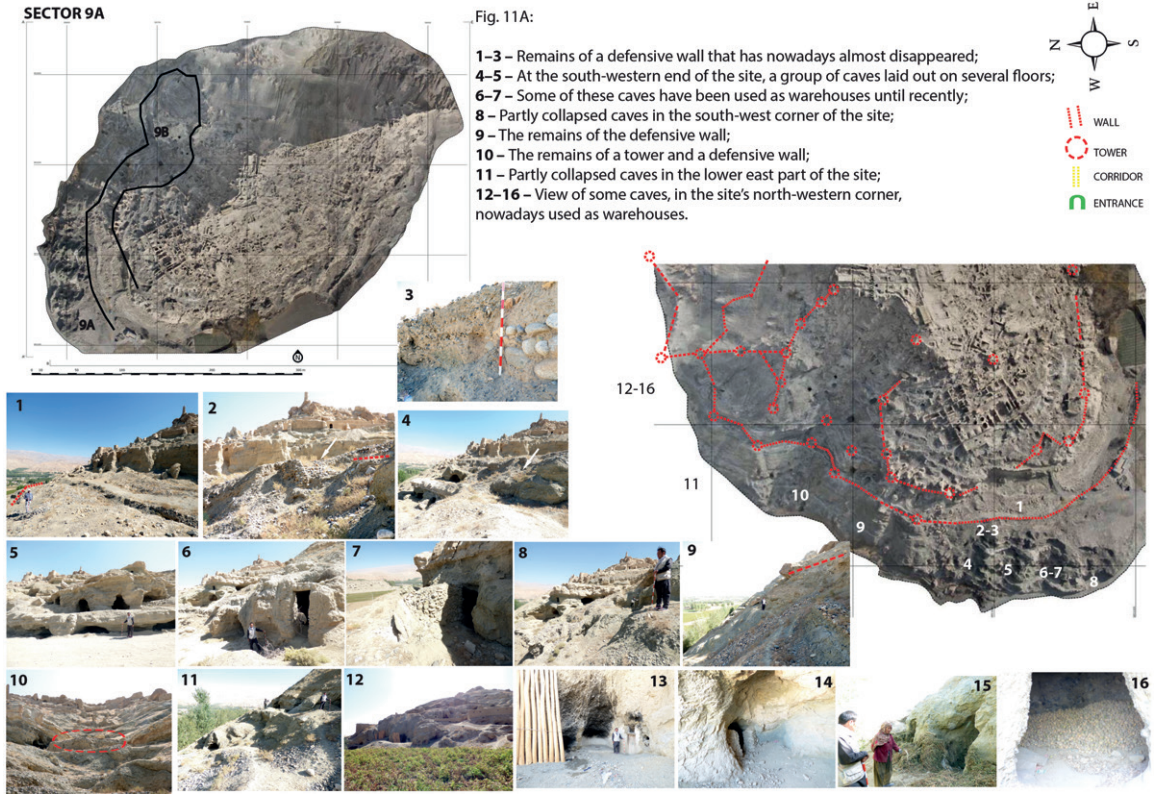


Fig. 11A–B: Sector 9A–B.

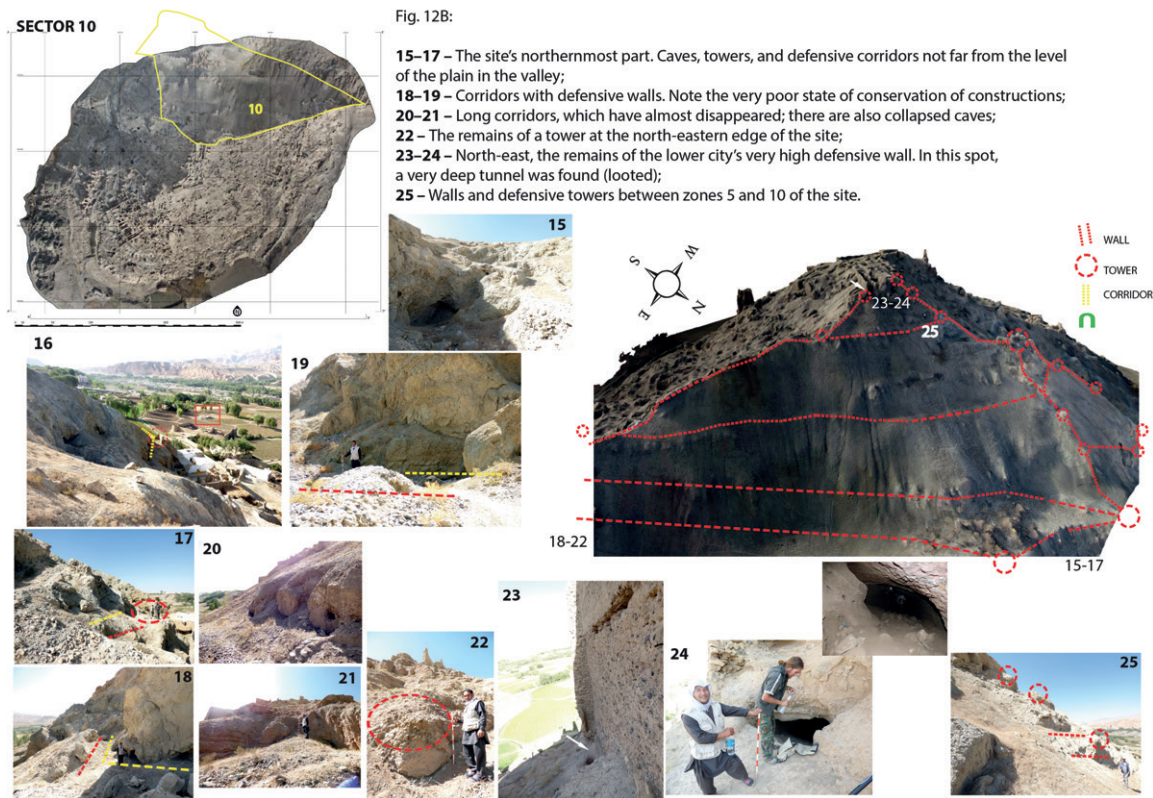
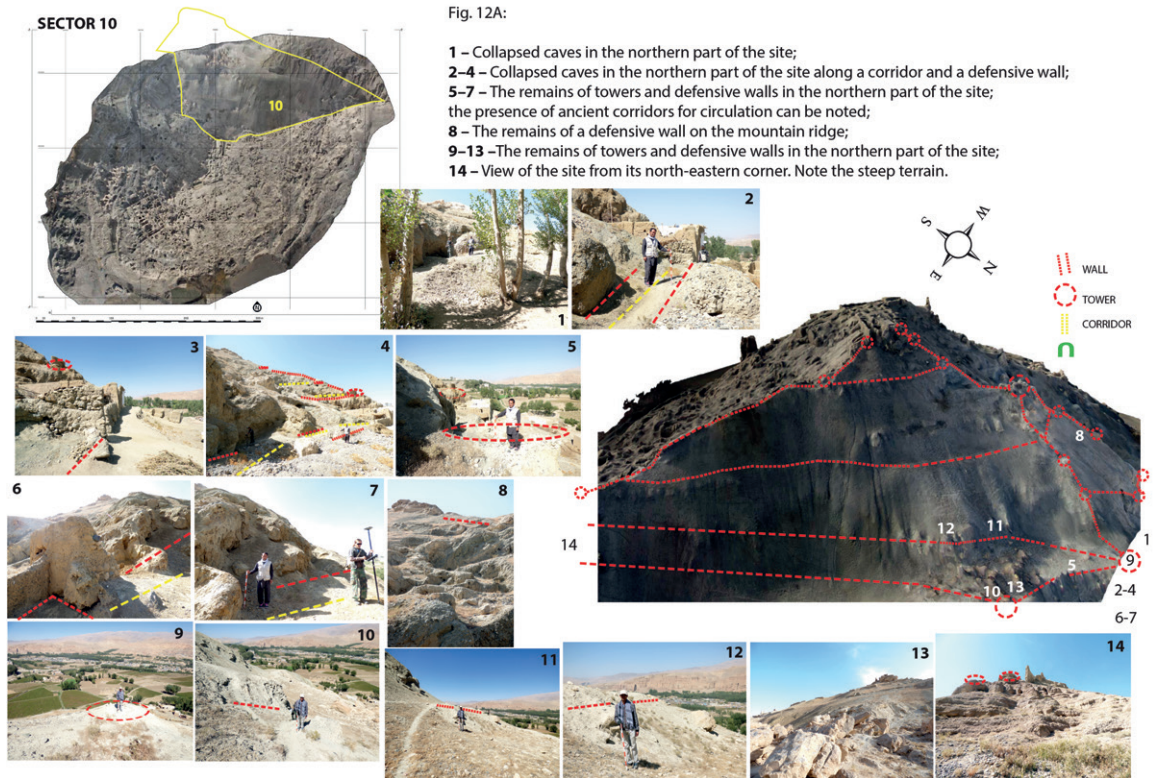


Fig. 12A-B: Sector 10.

the corridor is oriented north-east to south-west, bordered on its southern side by a defensive rampart. This path leads to the lower city in Sector 6 (Fig. 9B2:11, 12). This main point of access is guarded by two towers, one of them quite impressive (Fig. 9B1:3) and recently restored. The tower, which had been looted, contains a well. The second tower at this entrance still faces the first one, but is in a poor state of conservation. In front of the entrance to Sector 6, there is an esplanade (Fig. 9B2:6, 7) that faces a group of very well constructed caves on several floors, connected to one another by corridors (Fig. 9B2:6, 7, 8). Some of them, with a bipartite or tripartite floorplan including a cooking or heating area, are very well preserved, including wall decoration and paint (Fig. 9B2:9). This area was interpreted as a collective space, a sort of open-air market (bazaar) and/or caravanserai located at the entrance to the lower city. In any case, there was a drinking trough carved in the friable stone in one of these caves. This element shows that animals (perhaps horses?) were also kept in this area.

* **Sector 8 (Figs. 10A–B):** This sector covers at least four hectares and is still poorly defined because it extends beyond the archaeological site's known southern border. In this area, one is dealing with fields now used for agriculture (Fig. 10A:1, 2, 4), and there is at least one (or perhaps several) currently occupied family homes in the southernmost part of this sector (Fig. 10A:5, 6, 7). The topography and the ancient traces of the ramparts have been put to new use (Fig. 10A:1, 2, 4). It is here, in this part of Sector 8, that we have located the main entrance to the city of Shahr-i Gholghola (Fig. 10A:5, 7). Further to the north-east, in the central part of this sector, the team followed two large terraces, separated by defensive ramparts and several aligned towers. The upper part seems to provide access to large, aligned caves, for the most part collapsed (Fig. 10B:2, 7), which were assimilated to cisterns or storage areas (Fig. 10B:1, 2). The lowest part of the terrace, which is topographically aligned to present-day cultivated fields (Fig. 10B:4), also contains collapsed caves too badly damaged to be studied. The sector's north-easternmost part (Fig. 10B:12, 13, 14) appears to be the natural defensive ridge of the Shahr-i Gholghola hill. As in Sector 7, this last section contains a system of caves along a guarded corridor, built along the defensive rampart to the south (Fig. 10B:8, 9, 10). This suggests that we are dealing with another military sector, with a garrison and storage for food and weapons.

* **Sector 9:** This sector has an area of at least 50,000 m², mostly consisting of steep, rocky terrain (Figs. 11A–B). It is through this southernmost part that tourists enter the site today, and it seems to have been especially ravaged by cultivation of the

soil above the archaeological strata (Fig. 11A:1, 2). The zone is very damaged and difficult to access, but one can still make out the traces of a rampart that has almost completely disappeared (Fig. 11A:2, 3). Downhill from this point, the group of aligned, well-preserved caves seems to be interconnected via a number of corridors on several floors (Fig. 11A:4–7). Some of these caves are still occupied today (Fig. 11A:6, 7). Could this be a militarised zone, as Sectors 7 and 8? This is difficult to ascertain, based on the current state of preservation of this part of the site. As regards defensive structures, the whole of the westernmost part of this sector only contains ramparts and towers (Fig. 11B) – and these are poorly preserved. The three largest cisterns on the site are found in this sector (Fig. 11B:1). They are connected by an underground corridor in Sector 4. Towards the north-west edge, there is a high concentration of caves, very close to the current plain. Some of these are used today as cellars (for storing potatoes, for kitchen or toilet space), or used as dwellings built against the hill (Fig. 11A:12–16).

* **Sector 10:** This area is on very steep ground (Figs. 12A–B) and contains at least five parallel ramparts, oriented east-west, which indicate the defensive potential of this site on the Bamiyan Valley side. In the northernmost part, the last two ramparts (also the largest and lowest) are associated with groupings of caves, and especially with large defensive corridors closed off by the ramparts and towers (Fig. 12A). There is a small village built close against this part of the hill, and some of the homes there have re-used pieces of the ancient architectural features and materials.

The state of conservation of the (central) upper ramparts of the towers is very poor, and the pathways, hardly used, partly follow the traces of the ancient sentry walks (Fig. 12A). One topographical level, joined to the penultimate rampart towards the outermost edge (to the north), contains rather flat areas where defensive walls, towers, corridors, and collapsed caves are still visible (Fig. 12B). This is the only geographical area in this part of the site capable of harbouring architectural constructions. In June 2004, the remains of a stupa were discovered north-west of the fort of Shahr-i Gholghola. This is the second one to be discovered in the Bamiyan Valley (the first was built in front of the East Giant Buddha. In addition, there is a rectangular terrace measuring approximately 100 m × 70 m (7,000 m²): this is presumed to be all that is left of a Buddhist temple, and its association with the stupa was also indicated.

Facing the valley, the great Buddhas, and the decorated caves, there are unusual caves in a hollow U-shaped grouping in the hillside, facing a large stupa excavated in 2004 by K. Yamauchi's Japanese team (Fig. 12B:16; YAMAUCHI 2007; WATANABE/

IWAI 2013). It is likely that Shahr-i Gholghola was also inhabited when Buddhism flourished in the Bamiyan Valley. Moreover, the discovery indicates that Buddhist remains may extend over a larger part of the valley than previously thought. We think that this peculiar complex of caves (together with, perhaps, other caves?) may date from the Buddhist period. One must not forget that the great recumbent Buddha may also have been located against the lower northern cliff of Shahr-i Gholghola.¹⁷

Finally, these different fortifications did not prevent the construction of high supporting walls and ramparts at the summit of this sector to protect both the citadel (Sector 1) and the lower city (Fig. 12B). Sector 10 seems to be connected to the military area in Sector 5 and, if this is confirmed, we will have to look for a second main “northern” entrance directly from the valley.

6 Absolutes dates and some interpretations regarding Medieval occupation at the site

Relative dating based on ceramic material from the site and on the most recent studies in Central Asia yielded a typology covering a chronological period from the 12th to the early 13th century (GARDIN 1957; MARGUIER 2012; SASAKI/SASAKI/NOGAMI 2008). Pre-Islamic ceramics exist, but are rare in and around the Shahr-i Gholghola site. Eight absolute dates (from bones and charcoal) from the domestic settlement zones (Sector 4) match the ceramic material from the end of the occupation period, dated 1220 CE at the latest¹⁸ – right until Ghengis Khan’s invasion of the valley in 1221 CE. This seems to confirm that the site was abandoned around that date. Our earliest occupation dates for the site go back to the 11th century (1018 CE). During the ICOMOS work program (2015) a number of samples from this sector were also dated (PRAXENTHALER 2016b). The results were identical, with only one being slightly earlier, from 944 CE (sample, HP_G 04).

After this first large phase of survey work, one can say that the extension of occupation is obviously horizontal and follows the hill’s topography. Some strata are natural, but others are anthropic. The occupation is also vertical, with the oldest constructions on the upper parts of the hill. The natural

topography there did not permit the installation of structures and dwellings everywhere. This was the case for the northern part of the site, where our exploration team found mainly defensive architectural structures. Residences and palaces for the elite, housing for their servants, and the royal guards’ quarters are all located in the best areas (Sectors 1, 2, 3, 4). The lower city included its own protection wall and system of towers.

The first fieldwork survey at the site allowed better identification of the ramparts that were still standing, and the start of the technical study of their construction. Built on a solid base of stones, earth, and branches, between 1.5 m and 3 m thick, these ramparts could also have been surmounted by rectangular bricks (28 × 29 × 8 cm). Every 20–30 m along these defensive walls were round towers at least 5 m in diameter. Although some of the ramparts and towers are still visible from a distance, most of them are identifiable only on site and after some surface cleaning of the soil. The topographic reconstruction of the defensive system, metre by metre, has revealed a complex network of ramparts on at least six successive levels and the existence of more than 90 towers. The entire northern area of the promontory, which was thought to be defended naturally by its steep topography, has ramparts built on it, as well as undoubtedly towers that are no longer visible or preserved. Nowadays this may sound like a huge number. It is obviously regrettable that we do not have a detailed description or a topographical map made by the first visitors to this site in the 19th century, or by the first French archaeologists in the 1920s/1930s. Only a few photographs from the 1930s remain, including those in the publications of A. Godard (GODARD ET AL. 1928) and J. Hackin/J. Carl (HACKIN/CARL 1933). Yet these few photographs are sufficient to demonstrate that there were indeed other towers that have since collapsed. One can see that some sectors were better preserved than others; some photographs show buildings that have since disappeared; other areas were visibly in better condition when the pictures were taken and one can see remnants of ramparts (Sectors 4 and 5) now gone. Likewise, a photograph by Frederick Gardner (1879–1944) from 10 July 1936 shows the southern defensive wall in Sector 7A when it was still standing, whereas today no noteworthy trace of it exists.

It is within this system that all of the 10 sectors described above were laid out. Our denomination of these areas as “sectors” does not at all imply that they were autonomous, hermetic zones; relationships existed between the sectors through secure passageways, whether guarded or not, as we have attempted to demonstrate systematically here. Only more extensive studies and future archaeological research on the ground will perhaps reveal more conclusively the multiple relationships between the site

17 In 632 CE, the Chinese pilgrim Hiuan-Tsang (Xuanzang) referred to a city of ten monasteries with more than 1,000 monks and indicated the presence of “a reclining statue of Buddha entering nirvana more than 1,000 feet long”.

18 References of the ARTEMIS laboratory, UMS 2572, Lyon (France): Lyon-13745(SacA48665), Lyon-13746(SacA48666), Lyon-13747(SacA48667).

and its surroundings, and with the rest of the Medieval city in particular. It may also expose the different internal relationships (stratigraphic, chronological, socio-economic, and political) between the different sectors, which perhaps did not always function as a whole, or even at the same time or in the same way.

Shahr-i Gholghola is the best-preserved site from the Islamic period in the Bamiyan Valley. Z. Tarzi also made other discoveries in the surrounding area, in particular during the excavation of the royal city near the great Buddhas. At this location, material from the Samanid, Ghaznavid (10th to 12th century CE), and Ghurid (12th to 13th century CE) periods is indeed present (TARZI 2013). However, the place where the Medieval city contemporaneous with Shahr-i Gholghola seems to have grown and prospered is on the promontories around the site. On this matter, A. Godard provided useful information after surveying in the Bamiyan region in 1923. This text, quoted by Z. Tarzi, describes the ruins of the Muslim capital found in the hamlets of Tepe Almas and Sarâssiâb, built on a plateau bordered on three sides by the valleys of Foladi, Maiyan, and Kakrak. This information is very helpful because these ruins are currently hidden under modern towns or have been turned into ploughed and cultivated fields. Using this information, Z. Tarzi carried out excavations in 2005–2007 to the west of Shahr-i Gholghola, along the present-day road that connects the airport to the centre of the valley, at the hamlet of Tepe Almas (Tarzi 2005). A number of graves were discovered there, in a large necropolis dated to the Ghurid period. Finally, a photograph published by N. Hatch Dupree (DUPREE HATCH 1967: 61) shows a still standing door in a sizeable Medieval building facing the site of Shahr-i Gholghola.

7 General conclusion

The political environment and the security situation in Afghanistan today weigh heavily on the archaeological activities of all local or foreign field missions in the country. Excavation campaigns involving large groups of people with a long-term presence in the field cannot be reduced and replaced by short-term expeditions involving a small number of people with

a strong background in bibliographical studies and the analysis of maps and aerial photographs. This directly brings up the constraints of the funding that this type of work would require. With a current geopolitical state of affairs that precludes any optimistic speculations of a return to normality, it is difficult to foresee the positions that the Afghan government will take in the near and more distant future, though the attitudes of local communities in the regions where the DAFA has worked suggest that there is a broad degree of adherence to such projects, transcending the political spectrum represented in these areas. Even though the risk of voluntary destruction of archaeological objects or sites has decreased markedly thanks to the growing awareness of the local population, there is, unfortunately, no guarantee against the return of former iconoclast tendencies and the destruction of heritage sites. The programme at Shahr-i Gholghola is part of this historical context and can be explained by the strong interest that the political history of the Bamiyan region at the end of the pre-Islamic and Islamic period presents for archaeologists, historians, and art historians alike. Located on the main road linking the north and south of the Hindu Kush, the kingdom of Bamiyan, from the middle of the 6th century CE onwards, was undoubtedly a strategic location of primary importance.

Acknowledgements: The author would like to thank all institutions that made it possible to carry out survey and excavation work on this site. First of all, to UNESCO and through them the Italian Cooperation in Afghanistan. Thanks must also be given to the Afghan Institute of Archaeology for its crucial administrative assistance; likewise, the Department of Historical Monuments and the Faculty of Archaeology of Bamiyan University played a major part in helping the team with its work. The author would especially like to thank the DAFA team; in particular, Thomas Lorain (scientific secretary of the DAFA between 2014 and 2017) for archaeological discussions in the field, and Jean-Baptiste Caverne (the team's topographer), who was able to record landmarks in the whole citadel (essentially the location of the towers and the visible enclosure walls).

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Azerbaijan

Archaeological Evidence of the Presence of the Khazars in the Territory of Azerbaijan in the 7th to 10th Century CE

Farda Asadov

Abstract: For a long time, from the mid-7th to mid-10th century CE, a powerful state of Khazars competed with Byzantium and the Arab Caliphate for control of trade routes in Central Eurasia. The Khazar state strongly influenced the political and economic processes in the neighbouring states of the South Caucasus, Central Asia, and Eastern Europe. Arab written sources left substantial evidence regarding the military presence of the Khazars in Caucasian Albania by the time the Arabs appeared in the South Caucasus. After the Arab conquest, the migration and settling of the Khazar population in the territory of contemporary Azerbaijan continued as a deliberate policy of the Arab Caliphate aimed at establishing trade partnership with Khazars on the Silk Road. The article discusses the archaeological evidence of the presence of the Khazars in the territory of the modern Azerbaijan Republic in the first three centuries after the Arab conquest. For the first time, attention is drawn to the similarity of some archaeological artefacts found at the excavations in the ancient city of Gabala in the north of Azerbaijan and in the central part of the country with findings of the Saltovo-Mayatsk archaeological culture in Eastern Europe, which is traditionally attributed to the archaeological heritage of the Khazar Khaganate. Data from written sources and archaeological finds in the territory of Azerbaijan testify to the importance of the Khazar population and the Khazar state in the ethnic, political, and religious processes in the territory of modern Azerbaijan in the early Middle Ages.

Keywords: Khazars, Arabs, Azerbaijan, Silk Road, Islamisation of Azerbaijan, Saltovo-Mayatsk culture.

Резюме: Мощное государство хазар в течение длительного времени с середины VII в. до середины X в. н. э. соперничало с Византией и Арабским халифатом за контроль над торговыми путями в Центральной Евразии. Хазарское государство оказало большое влияние на политические и экономические процессы в соседних государствах Южного Кавказа, Центральной Азии и Восточной Европы. В арабских письменных источниках сохранилось немало свидетельств военного присутствия хазар в Кавказской Албании к тому времени, когда арабы появились на Южном Кавказе. После арабского завоевания расселение хазарского населения на территории современного Азербайджана стало частью политики Арабского халифата, направленной на торговое партнерство с хазарами на Великом шелковом пути. В статье рассматриваются археологические свидетельства присутствия хазар на территории современной Азербайджанской Республики в первые три столетия после арабского завоевания. Впервые обращено внимание на сходство некоторых археологических артефактов, найденных при раскопках древнего города Габала на севере Азербайджана и в центральной части страны, с находками салтово-маяцкой археологической культуры в Восточной Европе, которая традиционно отождествляется с археологическим наследием Хазарского каганата. Данные письменных источников и археологических находок на территории Азербайджана свидетельствуют о важной роли хазарского населения и хазарского государства в этнических, политических и религиозных процессах на территории современного Азербайджана в раннем средневековье.

Ключевые слова: хазары, арабы, Азербайджан, Шелковый путь, исламизация Азербайджана, салтово-маяцкая культура.



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DOI: 10.13173/9783447118804.445

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Fig. 1: Khazaria and the South Caucasus in the 9th century CE (RUTISHAUSER/ASADOV 2022).

1 The Khazar state in the Caucasus

The emergence of the Khazars in the Caucasus – where they came from and when – still remains a disputable issue of Khazar studies. The time of the establishment of their state (Fig. 1) is presumably dated to the aftermath of the well-known military campaign of the Byzantine emperor, Heraclius, against Iran (626–628 CE), in which the West Turkic Khaganate was the closest ally to the emperor. The Khazars at that time were already located in the north of the Greater Caucasus Mountain Ridge and were under the rule of the Khaganate. Apparently, they formed the basic detachment of the Turkic army (DUNLOP 1954: 4–5; GUMILEV 1993: 193). Soon after, as a result of the military pressure of Tang China and internal strife, the West Turkic Khaganate disintegrated. A representative of the dominant Ashina dynasty (MINORSKY 1937: 162), which ruled in the western lands, Black Sea, and Caucasian possessions of the Khaganate, had the opportunity to create his own independent state – and that state was Khazaria (ARTAMONOV 1962: 171). The debates about the origin of the ethnic group and the name “Khazars” is still ongoing. They were considered

both Ugrians and Iranians who underwent Turkicisation (ARTAMONOV 1962: 114–115; NOVOSEL’CEV 1990: 82–84), but nevertheless the prevailing viewpoint claims their Turkic origin.¹ At the peak of its power, the Khazar Empire controlled vast territories from the Aral Sea in the east to the Dnieper River basin in the west (Fig. 1). Its borders embraced the Black Sea and Caspian steppes, the Caucasus, and the middle and lower reaches of the Volga River (ROMAŠOV 2001: 219; GOLDEN 2007a: 7).

2 Khazars in Azerbaijani historiography

Since the collapse of the USSR, the interest of national historiographies of the former USSR countries in the history of the Khazars has greatly increased due to a need to revise the conceptual provisions of historical science, dictated previously by the interests of Soviet ideology and national politics.

¹ GOLDEN 1980: 21; NOVOSEL’CEV 1990: 84–85. A.P. Novosel’cev considered the Khazars a people of Ugrian origin, but noted that the prevailing opinion was about their Turkic roots.

Azerbaijani historians were mainly interested in the issue of the participation of the Khazar Turks in the ethnic processes of Caucasian Albania, which was considered the first state formation in the territory of the modern Azerbaijan Republic.² The population of Caucasian Albania was a mixture of various Caucasian and Indo-Iranian tribes consolidated under the realm of Albanian kings presumably after the disintegration of the Alexander the Great's empire. Starting from 2nd century CE, our written sources report about waves of Turkic nomadic migrations into the Caucasus and their penetration to the western Caspian littoral lands. The presence of the Khazars among other Turkic populations in the territory of Caucasian Albania on the eve of the Arab conquests was regularly noted as an indicator of the spread of the Turkic language and the Turkic-speaking ethnic groups in the South Caucasus before the massive Turkic migrations of the Muslim era (BUNIĀTOV 1965: 180–181; AŞURBEJLI 1983: 22, 55–56; SUMBATZADE 1990: 82, 85; KASUMOVA 1993: 4; GEJBULLAEV 2001, v. 1: 139, 390; ISMAILOV 2010: 36–37; ALIEV [ED.] 1995: 103; AHUNDOVA/GUSEJNZADE 2012: 61).

Early Arab historians of the 9th century, al-Yakubi (d. 898 CE) and al-Balazuri (d. 892 CE), reported the continued dominance of the Khazars in the South Caucasus. According to al-Balazuri, the Khazars often raided the lowlands across the Caucasus Range before the reign of Kavad I (r. 488–496 CE; 499–531 CE) and reached the city of Dinavar in the west of modern Iran. Our source reports that Arran (modern Azerbaijan) and Jurzan (modern Georgia) belonged to the Khazars. Kavad conquered these lands from the Khazars, began to erect defensive walls, and built the city of Gabala (**Fig. 1**), or al-Khazar (AL-BELADSORI 1866: 194; BALADHURI/HITTI/MURGOTTEN 1968: 306; AL-AĤBĀRĪ 1939: 145–146). A.E. Krymski, on the basis of this report by al-Balazuri, believed that Gabala was the centre of the Khazar administration in the South Caucasus (BUNIĀTOV 1961: 25).

3 The era of Khazar domination in the Caucasus

The campaign of Marwan b. Muhammad³ against the Khazars in 737 CE is usually considered a turning point in the confrontation between the Arabs and the Khazars. The Arabs managed to penetrate deep into the territory of the Khazars, inflicted a crush-

2 ISMAILOV 2010: 25. If we consider the history of Azerbaijan, taking the northern and southern parts together, then the Manna (Mannea) state in the lands adjacent to Lake Urmia (9th to 10th century BCE) should be considered the first state in the territory of Azerbaijan (ALIEV [ED.] 1995: 54–57).

3 The last Umayyad caliph (744–750 CE).

ing defeat on the Khazar troops, and even forced the khagan to convert to Islam (AL-KŪFĪ 1991: v. 3, 254–255). However, almost all researchers considered the khagan's practice of Islam to be formal and short-term, and to have immediately lost its significance after the departure of the Arab army (GOLDEN 1992: 236; GOLDEN 2007b: 137; DUNLOP 1954: 222, 224, 226). Nevertheless, after this event, clashes between Arabs and Khazars subsided and partnerships were established between long-standing rivals to secure trade operations along the Silk Road.

Arab administration encouraged and facilitated the settlement of the Khazars in the cities of Azerbaijan south of the borderland city, Derbent (**Fig. 1**). In one of the earliest raids deep into the territory of the Khazars (722–723 CE), the Arab military commander al-Jarrah b. Abdallah al-Hakami made peace with the Khazar city of Bazgu⁴ and moved a part of its population to "Rustak Gabala".⁵ D. Dunlop definitely considers this a suburb of the city of Gabala and recalls that Gabala has been inhabited by the Khazars since ancient times (DUNLOP 1954: 64). On the timeline, the next evidence of the settlement of Khazars in Azerbaijan is the report of al-Balazuri concerning the circumstances of the abovementioned campaign of Marwan b. Muhammad (737 CE). Marwan and the khagan agreed that the spread of Islamic faith would be facilitated in Khazaria. Additionally, some of the Khazars who apparently converted to Islam were taken by Marwan and settled between Shabran and the Samur River (**Fig. 1**) (AL-BELADSORI 1866: 208).

Al-Balazuri, our reliable source on the early history of the Caliphate, reports that the Abbasid military commander Bugha al-Kabir restored the ruined city of Shamkur⁶ in the north-west of Azerbaijan in the Hijri year 240 (854 CE) and settled there "... the Khazars, who fled under his protection for their commitment to Islam" (AL-BELADSORI 1866: 203).

4 Difficult issues of Khazar archaeology

Since written sources indicate a rather significant penetration and settlement of the Khazars in the territory of Azerbaijan, it is reasonable to make a comparative study of the archaeological picture of Azer-

4 This spelling of the place name is found in the publication text of al-Kufi that was used in our research. Ibn al-Athir refers to a variant of *Yargu*. Perhaps *Targu* would be a better spelling to connect the term with the *Tarki* settlement (**Fig. 1**) nearby contemporary Makhachkala (see DUNLOP 1954: 64, fn. 32).

5 AL-KŪFĪ 1991: Vol. 3, 219. The text reads "rustak Gyl-a". Gabala spelling differs from the spelling of the word in the text by a single additional dot under the second consonant. Error in the arrangement of diacritical dots is a common occurrence in the copying of manuscripts.

6 Contemporary city and regional centre, Shamkur (**Fig. 1**), in Azerbaijan.

baijan with the variable sets of the Saltovo-Mayatsk culture (SMC), identified by Russian archaeologists in the first half of the 20th century as the material culture of the population of the Khazar Khaganate. Unfortunately, no studies have been conducted into this topic.

Catacomb burials are among the cultural features of the SMC, and they are the most indicative of the forest-steppe variant, but found also in the Donskoy steppe, the Crimean, and Dagestan (**Fig. 1**) variants of the SMC (PLETNEVA 1999: 13, 21). Generally in the South Caucasus and in Azerbaijan, catacomb graves begin to appear from the 1st to 3rd century CE. It is known that catacomb burials are not a stable ethnic trait, but can be simultaneously present in several interacting ethnic groups. In Azerbaijan, catacomb people interacted with the local population and the traditions of Caucasian Albania, which was reflected in the hallmarks of Azerbaijani burials (GOŠGARLY 2012: 116–120).

At the same time, from the early Middle Ages an intensive infiltration, most likely of the ancient Bulgarian Turkic elements, occurred within the archaeological zone of the catacomb people – the one of the Alans. Oghur-Bulgarian tribes and Alans formed an ethno-political environment, in which the consolidation of the Khazar political union took place as a result of their interaction with the core grouping ruled by the Ashina Khaganal clan.

We are far from connecting the appearance of the Khazars in Azerbaijan with the spread of catacomb burials. However, one should pay attention to the opinion of Z.M. Buniyatov, who considered the spread of catacomb graves in Gabala, Gusar, and Mingachevir districts and their similarity to the burials of the Khazar city of Sarkel (**Fig. 1**) to be evidence of the Khazars living in the entire zone of these cities of Azerbaijan, where a number of villages called “Khazari” were indicated (BUNIĀTOV 1965: 41, fn. 100).

5 Evidence of the Khazar material culture in Azerbaijan

Among the recently published finds of the new Gabala expedition there is a flat clay medallion, worn by females, depicting a six-pointed star, which the authors of the publication date to the 9th to 10th century and consider a sign of the Jewish identity of its owner (ZEYNALOVA/HAJIEVA/NABIYEVA 2011: 121).

Exactly the same star with the same circle in the middle was depicted on the back of a mirror made of an alloy of bronze and silver, found in the female burial site of the Verkhne-Saltovskiy (**Fig. 1**) cemetery. However, it should be noted that several such

mirrors were found and published, but only one of them had a six-pointed star. Five-pointed stars, eight-pointed stars, and other concentric patterns served as an ornament on other mirrors (ARTAMONOV 1962: 296; PLETNEVA 1999: 272, Fig. 23). The style and quality of the ornamentation on the back of the SMC mirrors served as dating indicators of burial grounds (AKSENOV 2016: 21). The ornament of concentric relief circles on the mirrors comes from the ancient Bulgarian environment of the north-eastern Black Sea region and Western Caucasia (VINNIKOV/PETRUHIN 2016: 397).

The connection of six-pointed stars on bronze mirrors with the Jewish tradition was recognised by experts as unreasonable, since at the time these findings are dated, the Star of David (Magen David) had not yet started being a symbol of Judaism. The ornament of a five- and six-pointed star has a steppe origin and is characteristic of belt sets of the 10th century, discovered both in Russia and in Hungary (PETRUHIN/FLEROV 2010: 154).

Thus, the connection of the six-pointed star ornament on the medallion from Gabala with the Khazars based on its interpretation as a Jewish symbol is unconvincing. At the same time, its relation to the traditional ornament of the steppe peoples and artefacts from the Khazar fortifications, also mistakenly associated with Judaism, is obvious. Meanwhile, the image of the triangular menorah found on bricks and blocks of the Khazar period during the Shabran excavations in north-eastern Azerbaijan is a different matter. The Judaic attribution of the latter artefacts is beyond doubt, although the finders and researchers attribute these things to Jewish immigrants from Iran, but not to Khazar Jews (USTA 2009; BEKKER 2000). However, scholars of Khazar Studies drew attention to these finds and compared them with similar Jewish symbols of the later Avar cemetery in Chelarevo on the Danube River in Serbia (PETRUHIN/FLEROV 2010: 151). Therefore, there is reason to associate these images with the presence and activity of nomadic people of Jewish creed settled in Shabran.

A curious piece of material culture referring to the settling of the Khazars in Azerbaijan can be seen in the Khazar-Jewish motifs of the ornamentation of ceramic dishes found in the excavations of another ancient Azerbaijani city, Shamkur, where Khazar families were resettled in the middle of the 9th century, as mentioned above (**Fig. 2**). The figure clearly shows that the hexagram is composed of triangles superimposed on each other in accordance with Jewish symbols. However, it clearly has not a ritual but a decorative purpose. In the centre of the hexagram, there are concentric horseshoe-shaped circles according with the style of ornaments of Saltovo-Mayak ceramics (DOSTIEV 2017: 646). In the same Shamkur, narrow-necked jugs of medium size were found decorated with ribbed, fluted orna-



Fig. 2: Ceramic plate engobe painted and covered with green glaze (Dostiev 2017: 646).

mentation, which was very popular in the ceramics of medieval Albania and was widespread in those regions of Albania where a strong Khazar influence was indicated (DOSTIEV 2017: 648).

An Azerbaijani archaeological expedition of the Soviet Academy of Sciences, which conducted excavations in the Mil steppe (1956–1960) (Fig. 1), unearthed a large mound in the Uch Tepe tract with a rich burial of a noble nomad warrior dating back to the 7th century (IESSEN 1965: 180–181). The discovered equipment – a sword, a knife, an inscribed ring, a belt set, as well as the results of anthropological research of a well-preserved skull – allowed the excavators to conclude that the burial belonged to a young Caucasian man with mild signs of Mongol ethnicity. The head of the expedition, A.A. Iessen, believed that this was the burial of a Khazar warrior, who ended up there as part of a detachment that supported the Byzantine troops during the campaign of the emperor Heraclius against the Persians (626–628 CE) (KUŠNAREVA/ĀKOBSON 1966: 13). According to anthropological and archaeological characteristics, the burial is apparently related to the so-called ancient Bulgarian steppe variant of the Salt-Maytsk burials found in Ukraine, in the Don and Volga region (KIRIČENKO 2005) (Fig. 1).

6 Conclusion: the importance of the Khazars in the ethno-political and religious configuration of Medieval Azerbaijan

The Khazars, who had converted to Islam, settled in large groups in the territory of Azerbaijan, and thus contributed to the further Turkisation and Islamisation of the population of Azerbaijan. These conclusions, and the penetration and settling of the Khazars in Azerbaijan, create a basis for some assertions about the Khazar period in the history of Azerbaijan, which began in the second half of the 6th century, when the Turkic nomads organised by the Khazar rulers intensively penetrated the territory of Albania. For a long time, perhaps with some interruptions, they controlled the northern part of the country until the end of the 8th century. They fought the Arabs, but eventually reached peace with them. This was followed by Arab-Khazar co-operation in world trade with China and the regions inhabited by Slavs, Ugrians, Scandinavians, and other northern peoples interested in commodity exchange for high-quality silver Muslim dirhams. This era was of great importance for the formation of the ethno-political environment in Azerbaijan, and for the growth and prosperity of cities and regions involved in profitable world trade. The end of this period was marked by a breach of stability inside the Khazar state, the struggle of competitors for new trade routes, and the fall of the Khaganate. In the Eurasian steppes gravitating to the Muslim world, the Khazars' experience,

this time under the Islamic banner, was emulated by the Karakhanid Turks in Central Asia and by the Seljuk Turks, who probably for some time in the middle of the 10th century existed in the political orbit of the Khazar Kaganate.⁷

The archaeological evidence referred to in this article can be considered as material remnants attributed to traditions of the Saltovo-Mayatsk culture, predominantly affiliated to the Khazar Khaganate. Such an assumption is in line with the evidence found in our written sources and can serve as an archaeological justification of the involvement of

some northern parts of the territory of contemporary Azerbaijan into the political process and state building of the Khazar tribal confederation in northern Caspian and Caucasian lands in the 6th to 7th century CE. This hypothesis, however, needs further elaboration of the already available archaeological artefacts to be firmly justified, as well as the continuation of the excavations in prospective areas of the settlement of the Khazars at later stages of the Khazar realm, especially along trade tracks traversing the territory of Azerbaijan.

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Archaeological Representations of Caspian Trade Routes in North-eastern Azerbaijan

Shahin Mustafayev

Abstract: In ancient times and the Middle Ages, the Caspian Sea played a key role in the history of tribes and peoples inhabiting the surrounding regions. Overland and maritime routes along the sea have contributed to the development of trade relations between different peoples in this region of Eurasia. Active trade ties around the Caspian Sea have left traces on the archaeological map of contemporary Azerbaijan, located in the South Caucasus and occupying the south-western coast of the Caspian Sea. This article is about the system of multi-level military fortifications, the so-called “Long Walls”, which were erected during the Sasanid Empire to protect the agricultural regions of this realm from the penetration of nomadic tribes from the Volga and North Caucasian steppes, as well as some settlements that played the role of trade and handicraft centres during periods of active trade links along the western coast of the Caspian Sea. The article provides information on these archaeological sites in the territory of Azerbaijan.

Keywords: Caspian Sea, trade route, Caucasus, Azerbaijan, Shirvan, Shabran.

Резюме: В древние времена и средние века Каспийское море играло ключевую роль в истории племен и народов, населявших окружающие его регионы. Водные пути и сухопутные маршруты вдоль моря способствовали развитию торговых отношений между различными народами в этом регионе Евразии. Активные торговые связи между народами, населявшими побережье Каспийского моря, оставили след и на археологической карте современного Азербайджана, расположенного в Южном Кавказе и занимающего юго-западное побережье Каспийского моря. Речь идет в первую очередь о системе многоуровневых военных и фортификационных сооружений – так называемых “длинных стенах”, – которые были возведены в эпоху Сасанидской империи в целях защиты сельскохозяйственных регионов страны от проникновения кочевых племен из поволжских и северокавказских степей, а также о некоторых городищах, игравших роль торговых и ремесленных центров в периоды активных торговых связей между югом и севером вдоль западного побережья Каспийского моря. В статье приводятся сведения о состоянии данных археологических памятников на территории Азербайджана.

Ключевые слова: Каспийское море, торговый путь, Кавказ, Азербайджан, Shirvan, Shabran.



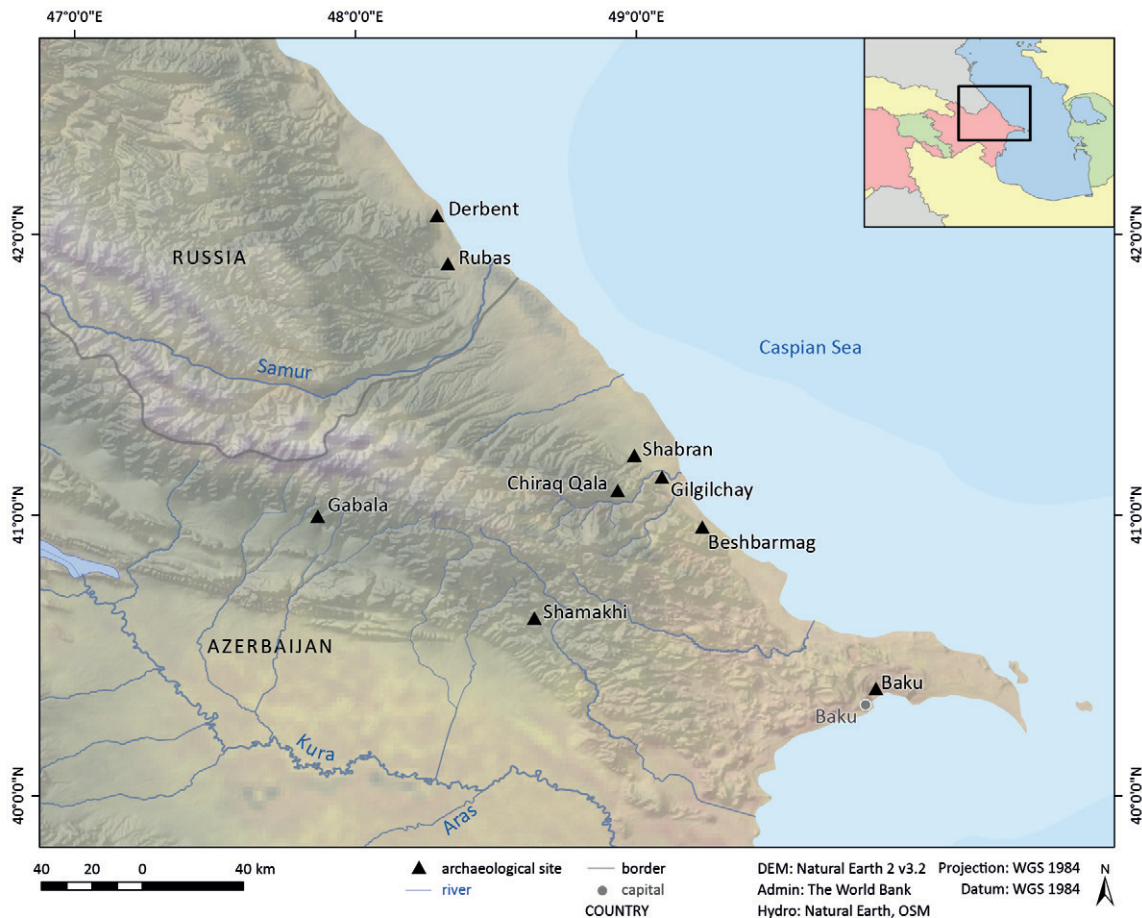


Fig. 1: Archaeological sites on the Caspian trade route (RUTISHAUSER/MUSTAFAYEV 2022).

1 Introduction

It is hard to overestimate the role of the Caspian Sea for the history not only of the peoples inhabiting its coastal area, but also of the entirety of Central Eurasia. Being the largest inland body of water on Earth, the Caspian Sea in different historical eras accumulated the most important overland and maritime trade routes that connected the south with the north, and the east with the west. It is a geopolitical centre around which many significant ethno-political events happened, both in antiquity and the Middle Ages, and around which events continue to happen in the present day.

The campaigns of Alexander the Great in Asia and the subsequent spread of Hellenism contributed to the globalisation of world trade in ancient times. It is precisely in this era that we see a keen interest in the exploration of both the geography and cartography of the Caspian Sea, and its potential for the development of trade between the west and the east. In particular, we know about the expedition of Patroclus, carried out about half a century after the death of Alexander the Great on behalf of Seleucus I

Nicator, in order to explore the coast of the Caspian Sea and the possibilities of developing maritime trade routes. This was the first ever attempt to scientifically study the Caspian Sea. Patroclus wrote a work in which he described his journey in detail, although his work failed to survive. However, it was used by some ancient authors (TREVER 1959: 57).

We owe thanks to Strabo for the most valuable information about the ancient trade routes along the western coast of the Caspian Sea. In particular, he writes about the ancient route running from south to north along the western coast of the Caspian Sea – the so-called “Aorses’ route”. Strabo reports on the nomadic people of the Sarmatian circle, the Aorses (“Aorsi”), who owned most of the north-western coast of the Caspian Sea and carried out caravan trade, being able to “import on camels the Indian and Babylonian merchandise, receiving it in their turn from the Armenians and the Medes, and also, owing to their wealth, could wear golden ornaments” (STRABO/JONES 1961: *Geography*: XI, 5, 8).

This information has provoked lively discussions in the academic community. However, we can confidently state that at the turn of the Common Era,

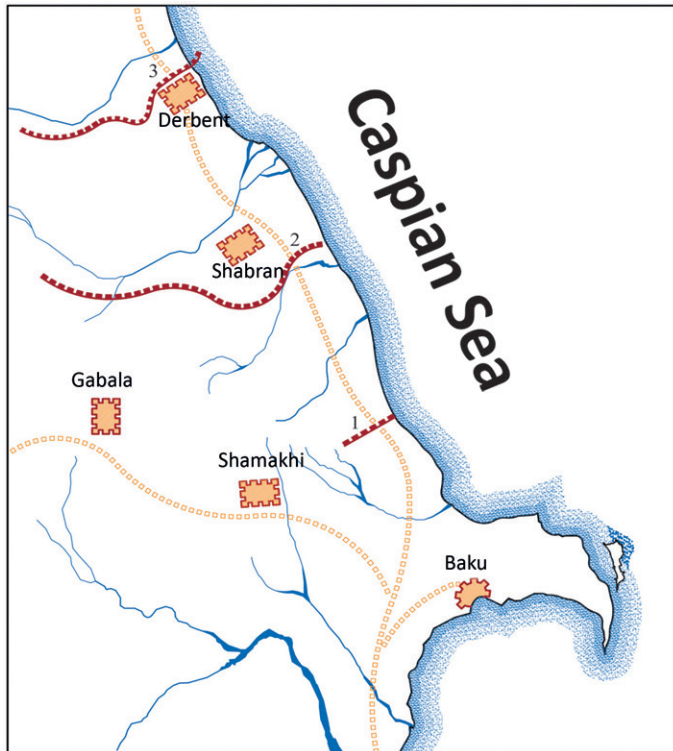


Fig. 2: Map of military fortifications on the Caspian trade route. Red lines indicate the walls of 1) Beshbarmag, 2) Gilgilchay, and 3) Derbent. Orange lines indicate modern roads (after MUSTAFAYEV 2020: 115; no scale).

there was an international south-north trade route, the “Caspia Via”, which passed through the Derbent Pass and the territory of Caucasian Albania, or modern northern Azerbaijan and south Dagestan. On this caravan route, goods from India and the Middle East were delivered to the North Caucasus (GADŽIEV 2009: 27–32).

Thus, the Caspian trade route has an ancient history and it actively functioned in certain historical periods, providing commerce between the Middle East, the Caucasus, the Volga region, and north-eastern Europe. In particular, a peculiar peak of activity of this route occurs during the 8th to 10th century CE. This was the heyday of the Arab Caliphate in the Middle East and the Khazar Khaganate in the North Caucasus, Volga, and Black Sea steppes. The geopolitical rivalry between the Caliphate, the Byzantine Empire, and the Khazars on the one hand, and the blocking of the Silk Road’s main routes along the east-west line on the other, led to the gradual formation of a political and commercial alliance between the Arabs and the Khazars, who were vitally interested in developing trade relations between themselves. The Khazars ensured the entry into the markets of the Middle East of commodities from the northern countries, generously paid by the Arab silver dirhams, which were so valuable among the peoples of the north who did not have their own coinage (MUSTAFAYEV 2020: 124–125).

Another surge in the commercial activity of the Caspian route was observed during the Mongol Empire in the 13th–14th century CE. The establishment of the Mongolian states in the Middle East and

Eurasia, the Ilkhanid Empire, and the Golden Horde stimulated active trade and economic relations between the south and the north across the Caspian and the Volga River (MUSTAFAYEV 2018: 26). This is evidenced by both written sources and archaeological finds in many ancient settlements of the Volga region (VALEEYEV 2012: 210–234).

The so-called Volga-Caspian route did not lose its significance in the following centuries, either. In particular, during the period of the Ottoman-Safavid rivalry in 16th–17th century CE, the rulers of the Safavid State were seeking an opportunity to market their main products in the west: silk, bypassing the territory of the Ottoman Empire. Overland and waterways along the Caspian Sea and Volga served as reliable routes in this regard. It is not by chance that in the second half of the 16th century the main expansion of the Ottoman Empire to the east was directed precisely to the Caspian region with the aim of controlling these trade routes. However, in the early 17th century, during the rule of Shah Abbas I (1588–1629), the Safavids established reliable contacts with Russia, and silk from the territory of Shirvan and Gilan was widely transported to the north along the Caspian and Volga routes (MATTHEE 1994: 744–750). We also see unprecedented activity of European trade companies – especially English and German, which had expressed interest in participating in the commerce along the Volga-Caspian route.

Intense international trade along the western coast of the Caspian Sea had to leave traces on the archaeological map of the region, including the



Fig. 3: Ruins of the fortress on Beshbarmak Mount (photo by the author, 2019).

territory of Azerbaijan. In the ancient period, the eastern part of the territory of modern northern Azerbaijan was occupied by the state of Caucasian Albania. Later on, after the establishment of the Arab Caliphate and the spread of Islam, this part of Azerbaijan became known as Shirvan. The existence of the Shirvan state lasted more than 600 years and the material evidence of this, as well as the functioning of the Caspian trade route, is concentrated primarily in archaeological sites.

2 Military fortifications

An important historical monument of the Caspian littoral in Azerbaijan is a network of military fortifications. The early Middle Ages witnessed a series of long and grueling wars between the Sasanid and Byzantine Empires for control of the international trade routes of the Silk Road. The main aspiration of the Sasanid Empire, where a broad silk production was established, was to prevent direct contacts of Byzantium with China and intermediary states in Asia, as well as to establish its own control over all trade channels for supplying silk from China. Another headache of the Sasanians was the formation of a powerful Turkic (or Hunno-Bulgarian) massif in the Volga and Caspian steppes, some waves of which

often penetrated through the pass between the Caucasus Mountains and the Caspian Sea to the territory of Albania and Atropatena.

The Sasanid rulers saw a way out of this in the construction of the so-called “Long Walls”, or grandiose military fortifications on the northern borders of the empire. Thus, they hoped to protect themselves from the penetration of warlike Turkic nomads from the North Caucasus and control the northern trade routes. For this purpose, in the 5th–6th century CE in the north of Albania four lines of military constructions were erected successively: Beshbarmag, Gilgilchay, Derbent, and Rubas fortifications (GMYRÂ 2018: 120). The remains of them have been preserved in Azerbaijan and South Dagestan today (**Fig. 1** and **Fig. 2**).

According to Arab and Armenian written sources, the Beshbarmag fortifications were erected during the reign of the Sasanid king Yazdegerd II (438–457 CE) in the 5th century (MAMEDOV 1993: 98). Their remains are located 87 km from Baku. A Flemish Franciscan missionary, William of Rubruck, who saw them in the 13th century, considered them to be the constructions of Alexander the Great, erected to keep “wild tribes of shepherds from the desert from attacking cultivated lands and cities” (WILLIAM OF RUBRUCK 1900: 263).



Fig. 4: Chirag Qala Fortress (photo by the author, 2019).

According to the researchers, “the first line of fortifications was at the cliff of Beshbarmag (Five Fingers)”, where the mountains approach the sea at a distance of 1.75 km. The ruins of a fortress built of stone have been preserved at the cliff. The defensive structure itself “consisted of two parallel walls built of adobe and mud bricks, and was drawn from Mount Beshbarmag to the Caspian Sea. The height of the shafts ranges from 0.7 m to 1.8 m, the width is up to 8 m. The distance between the remaining walls is 240 metres” (MUSTAFAJEV 2020: 108–109) (Fig. 3).

The stronghold of these defensive structures was the fortress on Beshbarmag Mount. A German traveller, Engelbert Kaempfer, who visited it in 1683, wrote that this mountain was a ledge of the Caucasian ridge facing the sea – on the one hand, it was extremely high; and on the other, extremely close to the sea. For this reason, “the ancient tribe of Medes”, using natural amenities, strengthened this place; namely, two walls were drawn from the bottom of the ridge to the shore, with an interval of three hundred steps, so that it was possible to place a whole town there or even give the inhabitants of the country refuge in the event of war (ALIYEV 2014: 23).

The Armenian historian, Elishe, and after him the Albanian chronicler, Moses Kalankatuatsi, noted the capture and destruction of the Sasanid fortress – located at the so-called “the pass of the Huns” (or “the Gate of the Honk”, according to Moses Kalankatuat-

si) – during the anti-Persian uprising in the South Caucasus in the year 450 CE. According to Elishe, “Many of the Albanian nobles and general peasantry for the sake of God’s name had scattered and spread out among the fortresses of the Caucasus Mountains; when they saw the success of the enterprise which God had effected through the Armenian army, they too assembled and joined their forces. Together and in concert they shared in the heroic task. Then they marched against the pass of the Huns, which Persians were holding in force. They captured and destroyed the fortifications, slaughtered the troops quartered inside, and made over the pass to Vahan, who was from the royal family of Albania” (ELISHE/THOMSON 1982: 129).¹ Based on the data of the Armenian historian, this fortress bordering with the Huns was built during the reign of Yazdegerd II. By

¹ See also the passage from the chronicle by Moses Kalankatuatsi: “Many of the Albanian nobles and peasants, who for the sake of God’s name had been scattered and driven into the mountain strongholds of the Caucasus, saw the great victory won by the Armenian army and came and joined them, mixed with the soldiers and allied themselves to their struggle. Then they set off to the Gate of the Honk which the Persians hold by the force, captured and destroyed the fortress, annihilated the soldiers stationed inside, and entrusted the Gate to a certain Vardan who was of the family of Albanian kings” (MOVSĒS DASXURANCI/DOWSETT 1961: 68).



Fig. 5: Ruins of tower (Chiraq Qala Fortress) (photo by the author, 2019).

the beginning of the anti-Persian uprising in 450 CE, this fortress was already functioning, and just before the period of its capture by the united detachments of the South Caucasian peoples, it remained the only fortification undisturbed by rebels in the region which the Persian troops continued to possess (GMYRÂ 2018: 124). Most likely, this passage is about the Beshbarmag fortifications (MAMEDOV 1993: 97–98).

Unfortunately, no systematic and serious archaeological excavations were carried out at the Beshbarmag fortifications. However, there is no doubt that within the Long Walls there were residential buildings and a military camp.

The second defensive line on the Caspian trade route were the Gilgilchay fortifications laid by the Sasanid king Kavād I (488–531 CE) after the destruction of the Beshbarmag military walls, at a distance of 23 km north of them. The Gilgilchay defensive fortifications are the longest military construction in the entire Caucasus. In addition to the long mountain walls, the system of this grandiose structure included separate fortresses, towers, aqueducts,

ponds, artificial ditches, fortified settlements, and other structures. In the flat part between the Caspian Sea and the spurs of the Caucasus Mountains, the remains of the Gilgilchay wall, built of adobe bricks, are still preserved (Fig. 4).

Of the mountain fortresses that are part of the Gilgilchay defensive system, the Chiraq Qala fortress (“Candle Tower” or “Candle Fortress”) was better preserved than others. It was the main stronghold of the Gilgilchay fortification. Chiraq Qala is built on the top of a steep cliff. The walls of the fortress are fortified with 17 semicircular towers, which have an average size of 6–8 m². The walls and towers are made of rough stones; only on the facing of the main tower were burnt bricks used (Fig. 5).

As to the debatable issue of the sequence of the construction of fortifications on the western coast of the Caspian Sea carried out by the Sasanid rulers, many researchers are inclined towards the following conclusion. Although the topographic landmarks of these fortifications are not clearly marked, the logic of the information presented by written sources indicates the gradual subjugation of the Caspian



Fig. 6: Medieval Shabran (photo by the author, 2019).

region by the Sasanid Empire in a south to north direction over approximately 120 years (from the beginning of Kavad I's reign to the end of the rule of Khosrow I Anushirvan) and, taking into account the activities of Yazdegerd II, for 140 years. Moreover, the earliest protective structures were erected at the southern end of the Caspian passage; the latest at its northern end, i.e. in the area of contemporary Derbent (GMYRÂ 2018: 129).

3 Medieval Shabran

The next most important archaeological site, located in the north-east of Azerbaijan on the Caspian trade route, is the Medieval settlement of Shabran (Fig. 2). The Azerbaijani historian of the first half of the 19th century, A. Bakikhanov, who was well acquainted with the history of Shirvan and Dagestan and who devoted his research to this topic under the title 'Gulistan-i Iram', reported that the ruins of the town of Shabran were located on the right bank of the Shabbranchay River (BAKIKHANOV 1991: 12). The first archaeological studies carried out in the 20th century, in the Soviet era, confirmed the location of this Medieval town in a flat zone on the banks of this river near the village of Shahnazarli in the Devechi

region of Azerbaijan. The site is spread over an area of more than 40 hectares.

Written sources give rather contradictory information about the time of the foundation of Shabran. For instance, some Medieval Arab and Persian historians and geographers, such as Ibn Khordadbeh, al-Idrisi, Yaqut Hamavi, Hamdallah Qazvini, and others, report the founding of the town by the Sasanid king Khosrow I Anushirvan (531–579 CE). In particular, according to Ibn Khordadbeh, this king built the towns of Shabran, Karkara, and Derbent, as well as 360 citadels, along the trade route on the western coast of the Caspian Sea (DOSTIYEV 2001: 35).

Intensive archaeological excavations, carried out in Shabran since 1979, confirmed the information of written sources about the presence there of intense urban life primarily from the early Middle Ages. The majority of researchers, based on the data of written sources and, especially, on the results of archaeological studies, believe that the city arose in the 5th–6th century CE during the Sasanid period. According to K.V. Trever, its location on an active trade route that went from the capital of Albania Barda to the north along the western coast of the Caspian Sea, and connected the South Caucasus and Western Asia with the North Caucasus, contributed to the fact that Shabran turned into a significant city in this zone in



Fig. 7: Glazed monochrome pitcher, 11th century (DOSTIYEV 1989: 194).

the Middle Ages (TREVER 1959: 185; MUSTAFAYEV 2020: 92) (Fig. 6).

Shabran became one of the most significant urban centres of Shirvan in the 8th to 16th century CE. In the mid-13th century, William of Rubruck visited Shabran (Samaron) on the way from Derbent to Shamakhi, where, according to him, many Jews lived (WILLIAM OF RUBRUCK 1900: 263). Shabran was famous for its madder, which, according to Abd ar-Rashid al-Bakūvī, was exported to other countries (AL-BĀKŪWĪ 1971: 95; AŞURBEJLI 1983: 285). However, the city was already in decline by the 16th century and became even more desolate in the following century. In the early 17th century, the Russian merchant, Fedot Kotov, found the city almost destroyed: only a wall, a stone tower, and several stone houses remained of it (KOTOV 1958: 69).

In the 11th century CE, Mahmud Kashgari wrote about the origin of the name of the city on behalf of the Turkic tribe of the Savirs (Saviran), who inhabited the North Caucasus as part of the Hunno-Bulgarian tribes in the Pre-Islamic era and actually penetrated the territory of northern Azerbaijan through the Derbent Pass more than once and settled on these lands. Indeed, a number of ethno-toponyms of north-eastern Azerbaijan testify to the traces of a long presence in this region of a number of Turkic tribes and peoples, including the Savirs. Thus, in the middle of the 6th century, the Savirs, in alliance with the Sasanids, participated in military operations

against the Byzantine Empire. However, in 552 CE, some of them invaded from the north through the Derbent passage into the territory of Albania with conquest goals. The Sasanid army managed to stop this invasion, and the numerous captured masses of the Savirs were settled along the Shabran-Absheron-Mugan line. After a while, the Avars, who defeated the Savirs, also invaded the territory of modern Azerbaijan, and some of them settled in the Shabran region. We also have the reports of some Arab historians, in particular al-Balazuri, about the settlement in 737 CE of approximately 40,000 Khazars in the area between the Samur River and Shabran. Thus, according to some modern researchers, the information of Mahmud Kashgari about the origin of the name of the town of Shabran from the Turkic ethno-toponym 'Savir' (Saviran) is close to the truth, since the population of this zone during the eve of the Arab conquest consisted mainly of representatives of this Turkic people (DOSTIYEV 2001: 218–219; FERZELIBEYLI 2001: 33; ABBASOVA 2002: 11–12).

The first archaeological research of Shabran was carried out in the 1930s. Intensive excavations and a deeper study of the settlement began in 1979. The thickness of the cultural layer reaches ca. 5 m in the central part of the settlement, and ca. 3 m on its outskirts. As a result of excavations, the remains of well-preserved city walls erected from large cobblestones and burnt bricks, inner-city buildings, cobblestone streets, foundations and walls of public and residential buildings, craft workshops, blacksmith shops, pottery wheels, bread baking ovens, and remains of water supply ceramic pipes for the drainage system were revealed. Excavations of the cultural layer provided archaeologists with many samples of gold and silver products, metal and glass products, and refined glazed ceramics (Fig. 7).

Of particular interest are ceramic products. Pottery was one of the most developed types of craft in Shabran. Fragments of a potter's wheel in Shabran were discovered for the first time in 1939 by E.A. Pakhomov. This potter's wheel was partially destroyed during the construction of a main water pipeline to Baku in this area. According to E.A. Pakhomov's rather detailed description, a large number of archaeological materials, such as tripods, fragments of deformed glazed ceramic products, etc. were found around this potter's wheel. Its surface was covered with spread glaze, which indicates the production of mainly glazed ceramics in this workshop (LEVIATOV 1946: 84–87) (Fig. 8).

The second potter's wheel was discovered in Shabran during archaeological excavations in 1981 in a cultural layer dating back to the 11th to 12th century CE. The remains of the circle make it possible to determine its elliptical shape: 1.4 m long and 1.1 m wide. Various objects used in pottery production, as well as much production waste, were also found near this circle (Govušov 1985: 150) (Fig. 9).



Fig. 8



Fig. 9

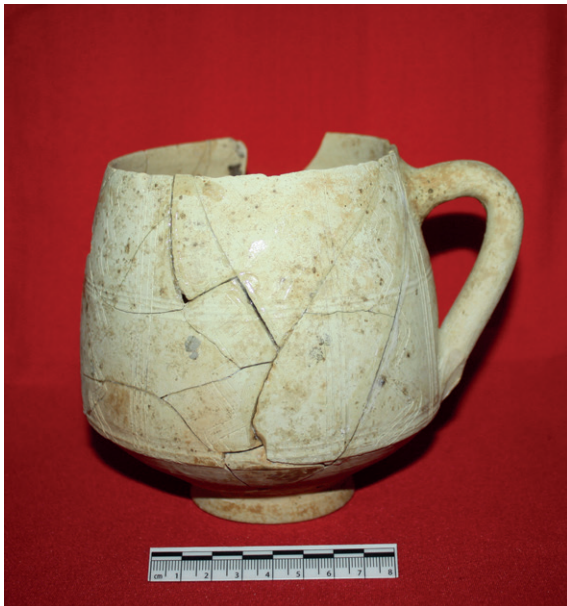


Fig. 10



Fig. 11

Fig. 8: Glazed dish, 14th to 15th century.

Fig. 9: Faience bowl of the Safavid period (16th to 17th century).

Fig. 10: Unglazed ceramic mug.

Fig. 11: Lower half of a yellow clay jug. Jugs with stamped ornaments are very characteristic of the Seljuk era, although in Shabran they were also produced in the 13th to early 15th century (DOSTIYEV 1996: 95).

(Figs. 8–11: photos by Shabran Archaeological Expedition of the Institute of Archaeology and Ethnography of the National Academy of Sciences of Azerbaijan).

Among the ceramic products discovered during archaeological excavations in Shabran and belonging to different stages of the Middle Ages, there is a significant amount of tableware, as well as household jugs, bowls, spherocones, lamps, candlesticks, earthenware, bricks, and other items (ABBASOVA 2002: 106). Generally, the famous Shirvan ceramics prevail among them. These are glazed ceramics with floral and geometric ornaments of different colours. However, there are also ceramics from the Seljuk period, which have many similarities with counterparts from Central Asia. Some samples also bear a clear resemblance to Ottoman ceramics and date back to the 16th century, when northern Azerbaijan became a part of the Ottoman Empire for several decades. There are interesting samples of porcelain dishes that came to Shabran through trade routes, presumably during the Mongol period. However, some of them are products of local craftsmen who imitated samples of Chinese celadon.

Archaeological studies also testify to the development of glass making in Shabran. This was also facilitated by the availability of a raw material base, i.e. appropriate sand quality in the area. During the excavations, a significant number of glass products were found in the form of fragments of decanters, alembics, cones, glass beads, etc. However, archaeologists have not yet managed to find a glass-making workshop, though a significant amount among the lifting material of defective and deformed fragments, which were also a product of the manufacturing process, is indirect evidence of their local origin. To this should be added a product with an inscription in Arabic "*Amala Shaburan*", which means "made in Shabran" (GEŪŠEV 1985: 12; DOSTIYEV 2001: 175).

The results of archaeological research make it possible to state the presence of developed metalworking in Shabran in the Middle Ages. In particular, a 12th-century CE melting furnace was discovered here. The furnace had a rectangular shape and consisted of one large and two small chambers. Its bottom was lined with river cobblestones, while the walls were made of burnt refractory bricks measuring 25 cm × 25 cm × 5 cm. Unfortunately, most of the furnace was destroyed, but the remaining part testifies to its original structure. Metal billets weighing from 1–2 kg to 5 kg were also found around the furnace. Similar blanks were found in the same excavation site in a cultural layer dating back to a later period: the 14th to 15th century. In the course of many years of archaeological study in Shabran, archae-

ologists also found numerous metal tools (sickles, hoes, and others), various types of weapons (mainly knives and arrowheads), various copper products, jewellery, etc. (DOSTIYEV 2001: 128–144).

As a result of the latest archaeological excavations conducted in 2018, a large number of coins were discovered in Shabran, mainly belonging to the state of the Shirvanshahs. However, there are a number of coins of the 12th to early 13th century from the period of Azerbaijani Atabeks, as well as silver coins of the Timurids of the late 14th to early 15th century.

Shabran, located at the mouth of the Shabranchay River on the Caspian coast, also served as a seaport in the Middle Ages. It is noteworthy that the samples of Shirvan ceramics of the 14th to 15th century are found in large numbers on the eastern coast of the Caspian Sea, in particular in Kazakhstan, on the Mangyshlak Peninsula, in the settlement of Ketikka-la, as well as in the other settlements (MUSTAFAJEV 2020: 261). All this provides an opportunity for new studies of trade relations between Azerbaijan and Central Asia along the water routes through the Caspian Sea in the late Middle Ages.

4 Conclusion

It can be concluded that the intensity of trade links along the western coast of the Caspian Sea between the Middle Eastern world and the North Caucasus and the Volga region in different periods of history had a profound impact on the history of the north-eastern part of Azerbaijan. These processes can be clearly traced on the archaeological map of the region. In recent years, Azerbaijan has intensified activities to study and strengthen the safeguarding of historical and archaeological monuments located on the so-called Caspian trade route. These monuments are also considered as potential sites to be nominated by Azerbaijan under the Transboundary Silk Road Serial Nomination to the UNESCO World Heritage List.

Acknowledgments: The author expresses his gratitude to Dr. Safar Ashurov, the head of the Shabran Archaeological Expedition of the Institute of Archaeology and Ethnography of the National Academy of Sciences of Azerbaijan, for permission to publish the images in **Figs. 8–11**.

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Kazakhstan and Kyrgyzstan

New Information on the Ak-Beshim Site (Chui Valley, Northern Kyrgyzstan)

Bakyt E. Amanbaeva

Abstract: In the article, the author reveals some issues related to the emergence and development of settlements with “long walls” in the Chui Valley, and also presents information on new archaeological studies of one of its most significant monuments: the Ak-Beshim Valley settlement, which represents the ruins of the Medieval city of Suyab.

Keywords: Chui Valley, fortified settlements with long walls, research.

Резюме: в статье автор затрагивает некоторые вопросы, связанные с появлением и развитием городищ с «длинными стенами» в Чуйской долине, а также представляет данные о новых археологических исследованиях одного из самых значимых памятников долины — городища Ак-Бешим, представляющего собой руины средневекового города Суяб.

Ключевые слова: Чуйская долина, городища с длинными стенами, исследования.

The origins of sedentary agricultural culture in Jety-suu, which is usually attributed to the Chui Valley, go back to the late Sako-Wusun environment. There is archaeological evidence of the presence of a number of fixed settlements both in its Kyrgyz and Kazakh areas (ZUEV 1984: 147; ВАЙРАКОВ 2012: 135–155). As for the process of formation, development, and functioning of urban culture, which took place within the framework of the political and administrative system of the early Turkic state formations, some related issues are still being discussed in the research environment. Some experts assumed that the catalyst for this process in the Chui-Talas interfluvium was the influence coming from the more urbanised regions of Central Asia, primarily Sogd. Whereas some researchers, i.e. V.V. Barthold; A.N. Bernštam, explained it at the level of the migration model, others preferred the point of view about the formation of the Sogdian cultural complex, which became the model for a fairly large territory of the Chui Valley region in the early Middle Ages, drawing attention to the importance and prevalence of the components of the Turkic cultural complex (Materials of archeology research (MIA); ВАЙРАКОВ 1986: 92–98). There are also indications of the tangible presence of Chach (ancient Tashkent oasis), as well as some phenomena of material and spiritual culture that relate to Bactria-Tokharistan, Ferghana, the Syrdarya regions, East Turkestan, and China, etc. (AMANBAEVA 1993: 23–24; GORACHEVA 2010). According to archaeology, in the early Middle Ages (6th–8th century), a whole series of settlements appeared in the Chui Valley. Some of them, consisting of the citadel and *shahristan*, grew into large cities in the 9th–11th century, the districts of which are

surrounded by one or two rings, the so-called “long walls”, measuring from 5–8 to 15 km (or even more) at the perimeter (the inner rings of the walls could have a diameter from 5 to 8 km, and the outer ones up to 15 km and even more). It is assumed that they were the police and administrative boundaries of the cities. Such settlements, located throughout the valley at some distance from the Kyrgyz ridge and from each other, are localised on the edge of the first upland fringe of the Chu River and along its major tributaries, that is, in places suitable for agriculture. Previous researchers identified and described more than 20 similar settlements, which were located 15–20 km from each other (KOŽEMÄKO 1959; GORACHEVA 2010: 34–49).

The most thoroughly studied are the monuments of the eastern part of the valley, located on the Jety-suu-South Kazakhstan section of the Silk Road, representing the ruins of famous Medieval historical cities, including the Ak-Beshim settlement, identified with Suyab (the Turkic name of the city is Ordu), located 10 km south-west of the modern city of Tokmok. The main part of it, Shahristan-1, with an area of 35 ha, has a site of quadrangular shape; in its centre, a sub-square section is clearly distinguished rising above the rest. It is believed that it provided the origins of the development of the Medieval city. In the south-western corner of Shahristan-1 stands a citadel surrounded by a small courtyard. On the eastern side, Shahristan-1 is adjacent to Shahristan-2, with an area of 60 ha, having a pentagonal shape, in the southern part of which there was a fortification measuring 200 × 300 m. The urban area, within a radius of 1.5 km from the *shahristan*, was surrounded by long walls from



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DOI: 10.13173/9783447118804.467



Fig. 1: Ak-Beshim settlement. Shakhristan-1, excavation-13. Main street, view from the south-east (photo by B.E. Amanbaeva, 2019).

three sides; at the fourth (eastern) side, there was a deep natural ravine; a section of the second outer wall is also recorded in the south-west. Suyab was the capital of the state formations of the Western Turks, Turgesh, and Karluks. Information about it is available in both Chinese and from other sources. In particular, the pilgrim Xuanzang, who visited it in 629 CE, writes that the city was 6–7 li (the traditional Chinese measure of length in the Tang era was 525 m) in circumference, and that farmers and merchants were equally divided there (ZUEV 1960: 90). In the 8th century, the garrison of Tang China was located here (648–719 CE). Suyab was also associated with the Tibetans during their short stay in the Tian Shan (680–709 CE). In the middle of the 10th century, after moving the capital centre of the Karakhanids to the territory of the Burana settlement (historical Balasagun), located 6 km south-east of Ak-Beshim, life continued here during the 11th to early 12th century CE.

As a result of research conducted in the last century in different parts of the settlement, the following monuments were discovered: the citadel; two *shahristsans*; Buddhist and Christian temples in the district (M.E. Masson, A.N. Bernštam, L.R. Kyzlasov, P.N. Kozhemyako, L.P. Zyablin, G.L. Semenov, and other experts worked at various times at Ak-Beshim); a burial complex attributed to the Zoroastrians and later to the Manichaeans; and castle and palace buildings, etc. The topography of the

settlement was also clarified. In 2006–2008, a Kyrgyz-Japanese expedition led by L.M. Vedutova and Sh. Kurimoto worked in the central *shahristan* (in the south-eastern and northern parts), as a result of which the structures of residential and industrial purposes dated to the Karakhanid period were discovered (VEDUTOVA/KURIMOTO 2014: 120–146). The latest research is conducted by Kyrgyz and Japanese archaeologists: in 2011–2013 with colleagues from the National Institute for the Preservation of Cultural Property (Tokyo), and from 2015–2019 with experts from the University of Teiko (Tokyo). The new excavation site was laid in the central part of Shahristan-1, at the intersection of two elongated depressions that were clearly visible on aerial photographs. One of them, with a length of 600 m, stretches from east to west; the second, with a length of 500 m, extends from the northern gate to the southern one. They intersect at right angles almost in the centre of the main *shahristan*. The choice of this site was dictated by the fact that in 2011, during a preliminary study of the micro-topography of the settlement, it was suggested that the depressions were formed on the site of the main streets of the Medieval city.

However, the study of the actual territory of the Chui cities, including Ak-Beshim, has so far been reduced to focused excavations of individual objects only, the materials of which did not give an idea of the urban layout and the nature of residential development. A



Fig. 2: Ak-Beshim settlement. Shakhristan-1, excavation-13. Main street, view from the south. Three levels of road surface (photo by B.E. Amanbaeva, 2019).



Fig. 3: Ak-Beshim settlement. Shakhristan-1, excavation-13. Main street, view from the south. The second level of the road surface (photo by B.E. Amanbaeva, 2018).



Fig. 4: Ak-Beshim settlement. Shakhristan-2, excavation-15. Accumulation of roof tiles, view from the north (photo by K. Yamauchi, 2018).

systematic opening of the proposed central streets could provide this kind of information. As a result, in the centre of Shahrستان-1, excavation pit number 13 was initiated, in the upper horizon of which, at a depth of 1.1–1.2 m, a section of the main street with a width of 7–7.5 m was revealed. It extended through the settlement of the south gate to the north, the surface of which was covered with small stones and debris (crushed stone and slag). Small alleys branched off from it to the east and west. Along the main highway there were houses with mud walls of considerable thickness (0.8–1.0 m). The obtained material gave the basis for dating this horizon to the Karakhanid period (AMANBAEVA ET AL. 2017: 31). In the 2015–2016 seasons the work was continued in the western part of the excavation, where the underlying structures were discovered which, according to architectural and planning solutions, match the overlying ones. In particular, along the main street within excavation pit number 13, three oblong blocks with a fixed width of approximately 6 m were opened, each of which had a main room adjacent to the street. After the expansion of the excavation in 2018–2019, the length of the excavation was 30 m (Fig. 1); special control sweeps carried out in the southern sector revealed three more shingle coverings of the street (Fig. 2, Fig. 3), which had significantly narrowed (to 2.5 m). And in the north-western part of the excavation, a section with a crushed stone surface, 2–4 m wide, 12 m long, perpendicular to the main highway, was revealed. It

may be the remains of another city street. The totality of the material indicates a preliminary date range of the 9th–11th century.

The research also covers the territory of Shahrستان-2. The excavation work was preceded by a full-scale and geophysical survey of this part of the settlement, called the “Khitān quarter” by Bernštān (BERNŠTAM 1950). In the season of 2017, excavation pit number 15 was initiated, on the upper horizon of which a concentration of grey-clay tiles was found on an area of 25 × 2 m, probably the remains of the collapsed roof of the building (Fig. 4). In 2018, in the process of dismantling the accumulation of excavated material in the northern section, at a depth of 60 cm, a structure consisting of two paths laid out of pellet stones of various sizes and colours was cleaned. One of them, oriented along the north-south line, has a length of 3.55 m and a width of 65 cm; along its entire length, an ornament in the shape of a flower is laid out (Fig. 5). Perpendicular to this path, along the west-east line, another one is laid out, 3.5 m long and 1.1 m wide. A geophysical survey of the adjacent space indicates that the same sections of ornamentation were preserved to the east and west of the excavation. Presumably, the found structure may be a component of a garden and park ensemble of the Tang era (AMANBAEVA ET AL. 2017).

The third object of our research is located outside of Shahrستان, on the site where the so-called “Second Buddhist Temple” was excavated by L.P. Zyablin in



Fig. 5: Ak-Beshim settlement. Shakhristan-2, excavation-15. Part of the path of multicoloured stones, view from the north (photo by K. Yamauchi, 2018).

1955–1958. As a result of the analysis of the aerial photograph of 1967 and the subsequent geophysical survey of the site on which this temple was located, its location was clarified: to the east of the southern gate of Shahrستان-1, and not to the west, as previously thought. It was also discovered to be not a single structure, but a part of an extensive complex with outer walls 140–150 m long. The excavated temple occupied only the south-western corner, and the remains of the building located next to it were preserved, so we initiated excavation site 18 here in 2019. It is possible that the hill located to the east from the described constructions is also related to this complex. We hope that our assumptions will be confirmed in the coming field seasons.

A geophysical survey was also conducted on the northern section of excavation site 8, located in the south-eastern sector of Shahrستان-1, on the ruins of the largest Christian complex in the region, which

has not yet been fully opened. As a result, we obtained data that clarify the layout of this structure. This season, we intend to continue work on this facility.

To summarise, the research conducted in the last two decades – namely, excavations of a complex of Christian churches in Shahrستان-1; of a prestigious complex in the citadel (SEMENOV ET AL. 2002); and of a residential complex at the same *shahrستان* (VEDUTOVA/KURIMOTO 2014: 120–150); as well as our work on excavation 13 – give reason to doubt the correctness of the thesis put forward by L.R. Kyzlasov on the termination of life at Ak-Beshim in the 10th century CE (KYZLASOV 1959). Suyab-Ak-Beshim, having ceased to be the capital, functioned as an ordinary city for the entire Karakhanid period. Thus, the general dating of the settlement can be suggested within the framework of the 6th–12th century.

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Hearth Pedestals of the Medieval Chuy Valley as Ethno-cultural and Chronological Indicators (of the Genesis of the Medieval Cities of the Chuy Valley)

Valerii A. Kolchenko

Abstract: The complex of artefacts, first obtained during archaeological research of the Chuy (Џu) Valley in the middle of the 20th century, was named “Sogdian”. It was dated to the 5th to 8th century CE and was associated with the lower layers of Medieval fortifications and their foundations. These “Sogdian” artefacts included hearth pedestals. In the author’s modern research on the settlements of Novopokrovskoe-2 and Ken-Bulun, hearth pedestals were found in the upper and middle building horizons, which date to the 9th to early 12th century. They are absent in the lower layers. Therefore, they are not connected with the formation of the settlements. A review of excavations at the settlements of Sogd – the ancient settlements of Panjikent and Paikend – shows the absence of similar hearth pedestals. Sogdian pedestals are simpler in form and lack ornamentation. This means that the hearth pedestals of the Chuy Valley are not Sogdian. But more comparable hearth pedestals are found in ancient and Medieval cultures of the middle and lower reaches of the Syr Darya.

Keywords: Kyrgyzstan, Chuy Valley, “Sogdian” culture, the Middle Ages.

Резюме: Комплекс артефактов, обнаруженных при археологических исследованиях Чуйской долины в середине XX века, получил название “согдийский”. Он был датирован V–VIII веками и связан с нижними слоями средневековых городищ и с их основанием. В число этих “согдийских” артефактов входили очажные подставки. В ходе исследований начала XXI века, предпринятых автором на городищах Новопокровское-2 и Кен-Булун, очажные подставки были найдены в верхнем и среднем строительных горизонтах, которые датируются IX – началом XII веков. Они отсутствуют в нижних слоях, а значит, не связаны с основанием поселений. Обзор раскопок на памятниках Согда – городищах Пенджикент и Пайкенд – выявил отсутствие аналогичных очажных подставок. Согдийские подставки имеют более простую форму, на них отсутствует орнаментация. Это означает, что очажные подставки из Чуйской долины не следует считать согдийскими. Более близкие параллели к этим очажным подставкам имеются в древних и средневековых культурах среднего и нижнего течения Сыр-Дарьи.

Ключевые слова: Кыргызстан, Чуйская долина, “согдийская” культура, средневековье.



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DOI: 10.13173/9783447118804.473

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The historical and cultural past of the territory of modern Kyrgyzstan is largely determined by its geographic location in Central Asia. Lying between East Turkestan and the middle course of the Syr Darya, this territory was a contact zone between the nomadic steppe (and mountains) and traditional agricultural regions. This is most clearly manifested in the Chuy (Ču) Valley¹ (see **Fig. 2 on page 504**), which is an eternal crossroads. At this crossroads in the Middle Ages, there was a certain autochthonous population, nomadic Turks, farmers and traders of the “Sogdian world”, and carriers of the imperial traditions of China. Separate cultural impulses from Tibet, India, Iran, the Volga region, and Byzantium also reached this territory. One of the routes of the Great Silk Road passed through it. All of the above determined the formation of a culture in the Middle Ages in the Chuy Valley that absorbed elements of different cultural worlds.

Until the Middle Ages, the Chuy Valley was perceived as a peripheral part of the “former Usun lands”, where nomads lived and there was no settled life.² By the 7th century CE, it becomes almost simultaneously the territory of the political centre of the Western Turkic Kaganate on the one hand and, on the other hand, a network of cities and settlements is rapidly forming in it. Which of them is primary? – this question has not yet been resolved. However, it was at this time the Chuy Valley acquired the appearance of a region with a dominant sedentary/urban culture. It is reflected in written and archaeological sources.

Among the written sources, the most important is the information of Xuanzang. While heading to India, he travelled through the Chuy Valley in 629 CE in a western direction, and when returning to China, he wrote a description of his journey, including crossing the Chuy Valley (SÛAN'-CZAN 2012). His students, including those who accompanied him on the journey, later compiled a biography of Xuanzang, in which his stay in the Chuy Valley is described in more detail. The biography was subsequently translated into the Uyghur language in the 10th century (TUGUSHEVA 1991). From these writings it is known that the headquarters of the Western Turks, the city of Suyab, was then located in the Chuy Valley, and to the west of it there were about a dozen other

cities. The area from Suyab to the “Iron Gates” and “the country of Kie-chong-na” was called by Xuanzang “the lands of Sou-li” (understood not as a certain state, but as an ethno-cultural region of Sogd) (SÛAN'-CZAN 2012: 40). This, together with other evidence from written sources, generated the hypothesis of the “Sogdian colonisation” of the region and, accordingly, the establishment of cities and settlements by the Sogdians. This hypothesis was put forward by V.V. Bartold and most clearly formulated by A.N. Bernštam in 1940 (BERNŠTAM 1940).³

The archaeological sources demonstrate that a “fortified settlements” category of archaeological monuments (the ruins of ancient cities with pronounced fortifications) appeared in the Chuy Valley in the early Middle Ages – in previous eras they did not exist. However, the date of the emergence of the fortified settlements, as well as the reasons for their emergence, remain largely hypothetical since the lower layers have been studied extremely insufficiently. In this article, we do not consider the entire set of arguments about the origin of the Chuy Valley fortified settlements, but only analyse data on one category of finds from a small group of so-called “Sogdian” artefacts.

A.N. Bernštam was the first to use the archaeological materials of his excavations to link a number of vivid and original finds with the culture of the “Sogdians” of the Chuy Valley, substantiating the hypothesis of Sogdian colonisation (BERNŠTAM 1940; 1950). According to Bernštam, the material culture objects left by the Sogdian settlers included certain types of ceramic vessels, ossuaries, hemispherical ornamented lids, incense burners, and zoomorphic pedestal figures (= hearth pedestals) (**Fig. 1**). In his publications, he combined hearth pedestals together with incense burners and hemispherical ornamented lids into a complex of “attributes” of the “Shamanistic-Zoroastrian cult” and dated it to the 5th to 7th (8th) century CE (BERNŠTAM 1950: 110, 115–119). Therefore, A.N. Bernštam connected this cult with the Sogdians and thus with the foundation of fortifications. Note that the “Sogdian” artefacts were obtained by Bernštam during archaeological supervision of the construction of the Great Chuy Canal (GCC), mainly at the Sokuluk settlement,⁴ and the ossuaries during the exploration of the Krasnaya Rechka settlement and near the Ak-Beshim settlement.⁵ The basis for Bernštam to unite the artefacts into a single complex of the “Shamanistic-Zoroastrian cult” was that “they all retained traces of soot and were made using the same technique”, were “made of clay with a large admixture of grit, and sometimes fireclay, [...] rough hand-made”, and they had

1 The Chuy Valley is located in the north of Kyrgyzstan and the south of Kazakhstan, along the middle course of the Chu River. Its length is 250 km. The valley floor lies at an altitude of 500–1,300 m above sea level. From the south, the valley is bounded by the ridge of the Kyrgyz Ala-Too, from the north-east by the Chu-Ili Mountains, and in the west and north-west it gradually passes into the Moyun-Kum Desert. Therefore, the eastern part of the valley is closed and narrow: up to 10–12 km; the western part is open and wide: up to 90–100 km.

2 Archaeologically identified 2–3 settlements of the first half of the 1st millennium CE do not fundamentally change the situation.

3 Concerning the evolution of the approaches of modern researchers to this process, see KOLČENKO 2003.

4 20 km west of Bishkek.

5 32 km and 60 km east of Bishkek, respectively.

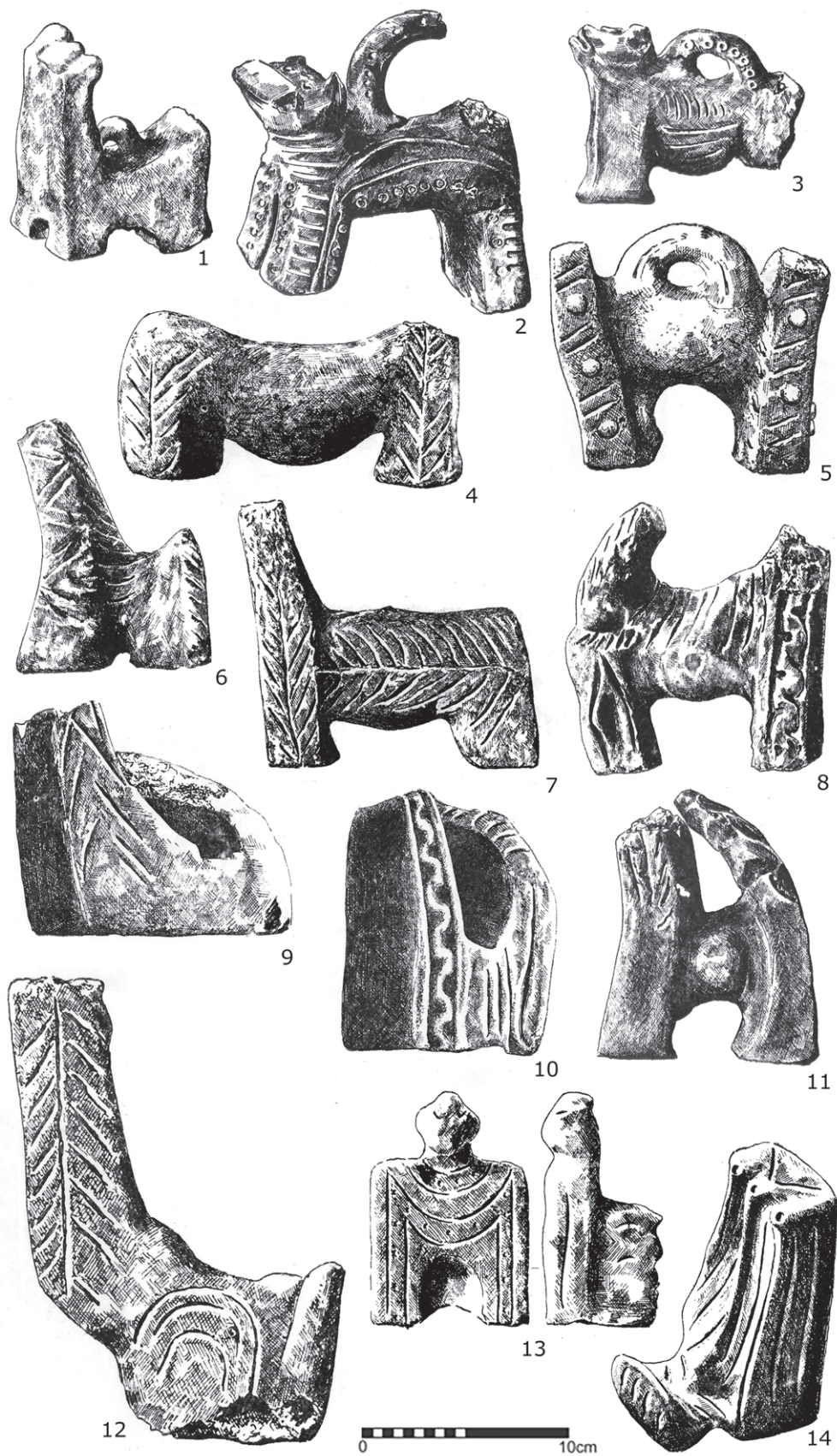


Fig. 1: Hearth pedestals found on the route of the Great Chuy Canal (after BERNŠTAM 1950: Tables 53–55).



Fig. 2: Hearth pedestals. Medieval settlement Novopokrovskoe-2, Excavation-1, building horizon A.
1-2 – room 30; 3 – room 27; 4 – Pit-16-5; 5 – room 10a; 6 – Pit-14-1 (photo and table by V. Kolchenko/© NPAE).



Fig. 3: Hearth pedestals. Medieval settlement Novopokrovskoe-2, Excavation-2, building horizon B.
1 – room 28; 3–5 – on the paving of the street (photo and table by V. Kolchenko/© NPAAE).

a “common ornamentation” (BERNŠTAM 1950: 115). That means the selection of this complex is based on typological methods. And what is known about the stratigraphic basis for the identification of this complex?

During the construction of the GCC in 1941, archaeological supervision of the earthworks was carried out. The entire route of the canal was divided into ten sections. The Sokuluk settlement is located on site no. 6; its length is about 10 km. Archaeological supervision at this site was carried out by three people; only one was an archaeologist: S.S. Sorokin. Such conditions did not contribute to the accuracy of fixing the context and stratigraphy of detecting artefacts, which was noted by the researchers themselves in the report (BERNŠTAM 1950: 95). The report on site no. 6 of the GCC construction says that the bulk of the “Sogdian” artefacts originate from the third or fourth metre of the eight-metre cultural layer. In the understanding that the original researchers such as Sorokin formulated in 1941, this is the layer of the “Karluk time”, i.e. the mid-8th to 10th century CE; Turgesh coins were found in it. Separate finds of hearth pedestals discovered already in the second metre were attributed to the Karakhanid (or Qarakhanid) time, i.e. the 11th to 12th century (BERNŠTAM 1950: 93–97). In a later section of the same book, A.N. Bernštam attributes these artefacts to the 5th to 6th century (BERNŠTAM 1950: 110, 115–119, 145–146).

Note that the artefacts, which we call “hearth pedestals”, are called “zoomorphic figures-pedestals” and “pedestals” by Bernštam in publications (BERNŠTAM 1950: 115). P.N. Kozhemyako, in his monograph on the Medieval urbanisation of the Chuy Valley, as well as in publications on the results of excavations in 1961–1963 at the Krasnaya Rechka settlement, called similar wares “stands for a spit or for vessels when cooking in open hearths” (KOŽEMĀKO 1959: 33, Table 8:8–10; KOŽEMĀKO 1989: 48). However, for analogues in adjacent territories, he uses the term “hearth pedestals” (KOŽEMĀKO 1959: 33). The Kyrgyz archaeologist L.M. Vedutova calls them “stands for boilers” or simply “stands” (VEDUTOVA 1996: 144, 149–151).

What were the Medieval hearth pedestals of the Chuy Valley like? Bernštam gave drawings of 17 wares and the sizes of some of them.⁶ They are

6 18 × 6 cm with a preserved height of 17 cm; 10 × 4 cm with a preserved height of 8 cm; 15 × 7 cm with a height of 15 cm; 9 × 9 cm with a preserved height of 12 cm; 5.5 × 7 cm with a height of 11 cm; 20 × 8 cm with a height of 11 cm; 19 × 7 cm with a height of 11.5 cm; length 13–14 cm with a height of 20 cm; length 9.5 cm with a height of 15 cm (BERNŠTAM 1950: 115–117, Tables 53–55). In the summary table (Fig. 1), we did not include three pedestals (Table 55:2–3, 6) made according to a different scheme: a truncated pyramidal column, square in cross section, on a wider flat base, with a

made according to the following scheme: a massive base – a “body” on two pairs of marked “legs”; and on one side a high jamb – a “neck” (sometimes with the designation of the head) (Fig. 1). Although the report says that “the statuettes are sometimes found in groups...” (without specifying the number and other context), there are no identical ones among them. Note that the overwhelming majority of them were found in fragments (in the published tables, some are shown already in a restored state). From this it was assumed that the scrapping of items had a ritual character (VEDUTOVA 1996: 151). However, individual stands were found intact; Bernštam wrote that those items were perhaps not used (BERNŠTAM 1950: 115–116).

During our excavations in 2004 to 2019 at the settlement Novopokrovskoe-2⁷ (KOLCHENKO/ROTT 2019), a significant series of fragmented hearth coasters was also obtained, which Bernštam considered “Sogdian”. Stratigraphically, these findings come from the first and second building horizons (horizons A and B, respectively) (Fig. 2 and Fig. 3); they are absent in the underlying strata (horizons C and D). Until we have a complete statistical analysis of all materials, we will refrain from making statements about their predominance in one or another horizon; in both cases, it is a statistically stable category of horizon artefacts. Some of these artefacts (Fig. 2) were found in rooms located directly under the sod layer; for example, in rooms 29 and 30 uncovered in 2017 at Excavation 1. Karakhanid coins were found in neighbouring rooms at the same level (ROTT/KOŠEVAR 2007); they are reliably dated to the 11th century CE. Many hearth pedestals were found on the upper stone paving of the street at Raskop/Excavation-2 (Fig. 3:2–5), stratigraphically related to the second construction horizon. Turgesh coins were found in horizon B, which means that it cannot be earlier than the 8th century. Considering the underlying building horizon C, which also has Turgesh coins, it seems that building horizon B with its numerous reconstructions dates to the 9th to early 10th century. In general, our stratigraphic data allow us to date the considered category of artefacts – hearth pedestals – from the 9th to 11th century. Note that there were open hearths on the floors in the rooms where the hearth stands were found. The hearths were located in the middle of the room (for example, rooms 29 and 30 at Excavation 1) or in the middle near one of the walls (room 30/35 of Excavation 2, which remained partially outside the excavation site).

bracket-shaped handle on one of the faces. A drawing of another item is given in the book, among the finds at the Kysmychi settlement (BERNŠTAM 1950: Table 17:5).

7 The research was carried out with grant support from the Society for the Exploration of EurAsia (Switzerland) together with the German archaeologist Philip Rott.



Fig. 4: Hearth pedestals. Medieval settlement Ken-Bulun. Trench 2019 (photo and table by V. Kolchenko).

Another series of hearth pedestals was found in 2019–2020 when artefacts were removed from the soil of a road trench near the central ruins of the Ken-Bulun settlement⁸ (Fig. 4). A significant proportion of the hearth pedestals from this settlement have a peculiarity in their construction: they rest on three supports – “legs”, two at the front and one at the rear; the body is shorter; and the “neck” is more elongated and powerful at the base (practically occupying the entire body). Clearing the sides of this trench revealed two stratigraphically distinct building horizons. A preliminary analysis of the entire set of finds allows them to be dated from the 10th to 11th century until the 12th to early 13th century CE. Earlier artefacts were not recorded at the Ken-Bulun site.

The idea that the hearth stands belonged to the Sogdians was suggested by A.N. Bernštam. The attribution was made without reference to archaeological parallels from the territory of Sogd. The researcher based the proposed ethno-cultural attribution not only, and not so much, on the data of archaeological excavations in Sogd, but more on the basis of “Sogdian traditions” in the technique and decoration of products of “modern masters” – Tajiks (BERNŠTAM 1941). It could not be otherwise – stationary excavations of settlements in Sogdia, including Panjikent, Afrasiab, Varakhsha (also Varasha or Varahsha), and others, were carried out later. In the same period, i.e. the early 1940s, only V. Grigor’ev excavated Tall-i Barzu (GRIGOR’EV 1940). However, the subsequent study of Sogd showed the erroneous opinion of Bernštam: there are few hearth pedestals in Sogdia, and there is no such type as in the Chuy Valley at all. The reports on the research of the settlements of Panjikent and Paikend from the end of the 20th century to the present do not contain convincing analogues. Probably the closest functionally are the artefacts termed by the researchers “*shashlychniysy*” (kebab maker). However, the published samples are simpler in design – pyramidal or conical monolithic items; their sizes date from the 6th to the mid-8th century CE (OMEL’ČENKO ET AL. 2011: 18–19, 28–29, Fig. 81, 98:1; SEMENOV 2016: 21, Fig. 159:1; MARŠAK/RASPOPOVA 2005: 29–30, Fig. 56:14). According to these data, it turns out that such pedestals are not mass products from the time of Sogd; they are typologically quite different from the pedestals of the Chuy Valley and lack decoration.

Hearth pedestals were found at the archaeological sites of the Tashkent oasis (Medieval Chach/Shash) and South Kazakhstan, which are closer to the Chuy Valley than Sogd – however, these pedestals are of an original type. The first of them were obtained by the excavations of V.V. Grigor’ev in the

mid-1930s (GRIGOR’EV 1935). Then, in the 1960s, they were found at a number of sites in the flood zone of the Chardara (Shardara) reservoir (MAKSI-MOVA ET AL. 1968). Later information about these hearth pedestals was included in a book on ceramics of the Middle Syr Darya (LEVINA 1971). At the end of the 20th century, a new series of pedestals was obtained at the sites of Egar and Kuruk Tapa, and a workshop for their manufacture was even partially excavated (BOGOMOLOV/ALIMOV 1996); they are attributed to the Kangju (or *Kaunchi*) culture assemblages 2 and 3, dated in those studies from the 4th to the 8th century CE. Kangju pedestals are described as “pedestals for cauldrons and a spit in the form of rough images of bull’s heads with two protrusions-horns” and “[...] on a flat platform [...] with a triangular heart-shaped base” (LEVINA 1971: 185; BOGOMOLOV/ALIMOV 1996: 163). Their dimensions are 15.5–18 × 13.2–16.5 cm with a height of up to 12–14 cm (BOGOMOLOV/ALIMOV 1996: 162). Note that, on the one hand, it is not customary to call the carriers of the Kangju culture Sogdians; and on the other hand, the hearth pedestals themselves, although zoomorphic, are typologically far from the Chuy counterparts in form.

In the monograph by L.M. Levin regarding an earlier time (ca. 3rd to 7th century CE), hearth stands are indicated in the monuments of the Dzhetyasar culture of the Middle and Lower Syr Darya, but there they are of a different type: squat, elongated, with prototypes of rams on both sides on high “necks” – jambs (LEVINA 1971; BOLELOV 1993). In modern studies of this region, pedestals of the same type have been found during excavations of Jankent and a number of other so-called “bolotnaya settlements” (swamp settlements) in the layers of the 9th to 10th century. (ZILIVINSKAÂ 2019; DARMENOV/TAZHEKEYEV 2018). They are large: 48 × 12 cm with a height of up to 40 cm (ZILIVINSKAÂ 2019: 92–93). During the excavations, it was possible to record that here they were included in a single complex with a floor hearth. Moreover, such a complex with a hearth includes only one stand. People from the Dzhetyasar culture and inhabitants of “bolotnaya settlements” are also not considered to be Sogdians; the latter are considered Oguzes, and Jankent was their capital. We are not aware of the presence of a similar category of artefacts for the oases of East Turkestan.

The functional purpose of the artefacts we are discussing remains debatable and not entirely clear. The composition of their moulding mass with a large number of inclusions of various weakening agents, as well as strong smokiness and even burntness of most products, leaves no doubt about their close contact with fire and regular multiple thermal expansions. A.N. Bernštam proposed his own reconstruction of a functional purpose: “These ‘statuette pedestals’ were placed with the front side to a lamp or other container of fire [...] and the edges of the

8 The settlement of Ken-Bulun is located 33 km east of the settlement Novopokrovskoe-2, between the settlements of Krasnaya Rechka and Ak-Beshim.

lid rested on them. Thus, the covers, lamps, figurines constitute a single complex” of “cult attributes of Semirechye Zoroastrianism” (BERNŠTAM 1950: 115). Later, researchers of the Medieval settlements of the Chuy Valley, without expressing a direct rejection of Bernštam’s idea, considered their everyday character as pedestals for vessels for cooking on open hearths, which was reflected in the above names and definitions (KOŽEMĀKO 1959: 33, Table 8:8–10; KOŽEMĀKO 1989: 48; VEDUTOVA 1996: 151). However, in addition to a domestic purpose, L.M. Vedutova believes it is possible to consider these pedestals as cultic ones used in calendar “restoration rituals” because of their ornamentation (VEDUTOVA 1996: 151).

In the 20th century, researchers of adjacent territories did not specifically focus on the functionality of the artefacts; based on the names given, they rather believed their everyday purpose.⁹ However, the hearth pedestals excavated in the 21st century from Jankent and other settlements of the Syr Darya are mainly considered to be an obligatory part of the cult hearth-altars (SMAGULOV 2004). Based on the hearth pedestals found in situ in the structure of floor hearths, their function was proposed and reasonably justified: the pedestal was, as it were, a partition between the hearth zone (with stops for boilers or other vessels), in which the fire was directly burning, and the collection and disposal zone ash. At the same time, the very “hearth pedestals” from the bolotnaya settlements, as the researchers note, could not by their design serve as supports for vessels (ZILIVINSKAĀ 2019: 94–96) – they had a certain cult function.

However, it is difficult to fully interpolate such a conclusion regarding hearth pedestals in other regions of Asia, including the Chuy Valley, in light of their different scale and different spatial relationships. Structurally, Chuy pedestals can be used as a jamb (base) for vessels for cooking, if you use them (depending on the size of the vessels) in two or three pieces. However, the excavations have not located two or three pedestals in one place. Yet their use as partitions between the fire zone and the ash zone, as recorded in the excavations of Yankent and a number of other so-called “swamp settlements” (ZILIVINSKAĀ 2019; DARMENOV/TAZHEKEYEV 2018), seems unlikely. Additionally, the centres themselves, similar in shape to those of Jankent, were not recorded in the Chuy Valley. The excavated Chuy floor hearths, when it was possible to clearly fix their structure, were more compact and square (KOLCHENKO/ROTT 2019: Fig. 8), but much more often only a spot of calcination was recorded on the clay coating of the floors. At the same time, giv-

ing zoomorphic forms and additional décor to the overwhelming majority of the pedestals in the Chuy Valley suggests that such a décor of the pedestals is associated not so much with aesthetic requests as that it (the décor) performs a certain ideological function, possibly of a protective nature. This means that Chuy (and Kaunchi) hearth pedestals combined everyday and cult functions. However, for the hearth pedestals (“*shashlychniysy*”) of Panjikent and Paikend, we believe that, due to their laconicism and simplicity, the cult component is absent and they have only everyday functions.

Returning to the questions of the hearth pedestals of the Chuy Valley as chronological and ethno-cultural markers, which featured in the title of the article, we came to the following conclusions:

1. In the first publications, A.N. Bernštam dated them to the 5th to 8th century CE and described them as stratigraphically found in the lower layer of settlements – but this is wrong. Our 2004–2019 data for the Novopokrovskoe-2 settlement (as well as the finds at Ken-Bulun) confirm the data of the report on archaeological surveillance along the route of the GCC structure: hearth pedestals are found in the middle and upper layers, but are absent in the lower ones; they must date from the 9th to 11th century; they are not associated with the population that founded the cities of the Chuy Valley.
2. In the archaeological materials of the Sogdian settlements of Panjikent and Paikend, hearth pedestals (“*shashlychniysy*”) are relatively rare finds, which seem to have an exclusively utilitarian purpose; pedestals typologically close to Chuy pedestals were not found in Sogd. Therefore, Bernštam made a mistake with the ethno-cultural attribution of the hearth pedestals of the Chuy Valley.
3. The hearth pedestals of the Chuy Valley, while maintaining their typological territorial originality, have in our opinion functional and semantic parallels in the hearth pedestals of the Tashkent oasis (Kangju culture) and, with a change in functionality, in the hearth altar-pedestals of the late Dzhetyasar and bolotnaya settlements. Based on the style and motifs of the décor, their genesis should be sought in the monuments of the Lower Syr Darya like Jankent.

This means that the emergence of the Novopokrovskoe-2 settlement, like other Medieval towns in the Chuy Valley, cannot be associated only with the Sogdians. This process was more complicated, and the carriers of the cultures of the Middle and Lower Syr Darya took part in it.

⁹ For a brief summary of the researchers of the Syrdarya settlements regarding the pedestals, see ZILIVINSKAĀ 2019: 94–95.

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Ili Valley Settlement

Trade along the Northern Silk Route

Charles A. Stewart and Steven T. Gilbert

Abstract: Currently archaeologists are excavating the city of Usharal-*Ilibalyk*, which flourished between the eighth and fourteenth century, near the modern border between China and Kazakhstan. The Medieval site of Ilibalyk was an important nexus along the northern route spanning between the Zhetysu-Semirechye and Xinjiang regions. Discoveries at the site, so far, include a sophisticated bath complex in its citadel and a Christian cemetery containing gravestones with Syro-Turkic inscriptions. Artefacts within the cemetery, such as coral and cowrie shells, indicate that Ilibalyk was part of a long-distance trade network. The overwhelming evidence of Christianity indicates the area was open to the free exchange and expression of religious ideas. As such, the excavations of Usharal-*Ilibalyk* have opened a new window for us to glimpse the manifestation of a previously unknown residential culture along the Ili River, and this has transformed our understanding of Medieval Central Asia.

Keywords: Kazakhstan, archaeology, Semirechye (Zhetysu), burial, cemetery, Christianity, Silk Road, Xinjiang, coral, cross, Chagatai Khanate.

Резюме: В настоящее время археологи проводят раскопки древнего города Илибальк (совр. городище Ушарал недалеко от современной границы между Китаем и Казахстаном), расцвет которого пришелся на VIII–XIV века. Средневековое поселение Илибальк было важным звеном северного пути, проходящего между регионами Жетісу (Семиречье) и Синьцзян. На данный момент в ходе раскопок на городище обнаружены сложный банный комплекс в городской цитадели и христианское кладбище с сиро-тюркскими надгробными надписями. Находки, происходящие из раскопок кладбища, такие как кораллы и раковины каури, указывают на то, что Илибальк был частью междугородней торговой сети. Неопровержимые свидетельства христианского вероисповедания указывают на то, что этот регион был открыт для свободного обмена религиозными идеями. Таким образом, раскопки Ушарал-Илибалька открывают для нас возможность изучения ранее неизвестной цивилизации, расположившейся вдоль реки Или, меняя наше представление о средневековой Центральной Азии.

Ключевые слова: Казахстан, археология, Семиречье, захоронение, кладбище, христианство, Великий шёлковый путь, Синьцзян, коралл, крест, Чагатайский улус.





Fig. 1: Map illustrating the Ili and Chuy Ču River Valley settlements and Medieval sites mentioned in this paper. The red line demarcates the westernmost extent of the historical Zhetysu-Semirechye region; the magenta line indicates the westernmost extent of the modern Xinjiang region (C.A. Stewart).

According to Medieval sources, there was a city called “Ilibalyk” in Central Asia. Around the year 1500 CE it disappeared from the historical record and its exact location was forgotten. Since 2016 a team of international archaeologists have excavated a Medieval settlement near the village of Usharal, Kazakhstan, which lies 30 km south-west from Medieval Almalyk, the capital of the Chagatai Khanate.¹ All the evidence indicates that the archaeological ruins upon which Usharal was built are, in fact, *Ilibalyk*. For the sake of convenience, we will henceforth refer to the site as Usharal-*Ilibalyk*; as such, the

first name refers to the modern town and the second name refers to the archaeological site.

1 Geography

Of the hundreds of known Medieval settlements in Central Asia, Usharal-*Ilibalyk* stands out because of its significant geographical location: it lies near the western border of modern Xinjiang, China (which is almost politically impossible to research in terms of archaeology today); *and* because of its strategic placement during the Middle Ages – that is, in the heart of the Chagatai Khanate. As such, research here has potential to shed much light on the Zhetysu-Semirechye region as well as Xinjiang (Fig. 1).

Based on our ground surveys, the archaeological site covers 5 km² and, theoretically, could have supported a large population (Fig. 2). The area lies on a north ridge of the Ili River Valley and was shaped by streams that run through this region. In antiquity, the Ili River was much wider and had a broader flood plain, which meant that Ilibalyk was slightly closer (24.5 km) to the river than it is today; its *shahristan* (fortified administrative centre) was situated on

¹ These excavations are directed by Dr Dmitry Voyakin of Archaeological Expertise, LLC (Almaty, Kazakhstan) and the Margulan Institute of Archaeology of the Republic of Kazakhstan and are funded by a grant from the Swiss Society for the Exploration of EurAsia. International participation comes predominantly from the Tandy Institute for Archaeology (Ft. Worth, Texas, USA), but has now shifted to the Lanier Center for Archaeology, Lipscomb University (Nashville, Tennessee, USA) under the auspices of Dr Steven Ortiz and Dr Thomas Davis. The main field directors are Mr Denis Sorokin and Dr Steven Gilbert. The epigraphy research was carried out by Dr Mark Dickens. Additional funding was provided by the Friends of Archaeology (FOA) Society in Houston, Texas.

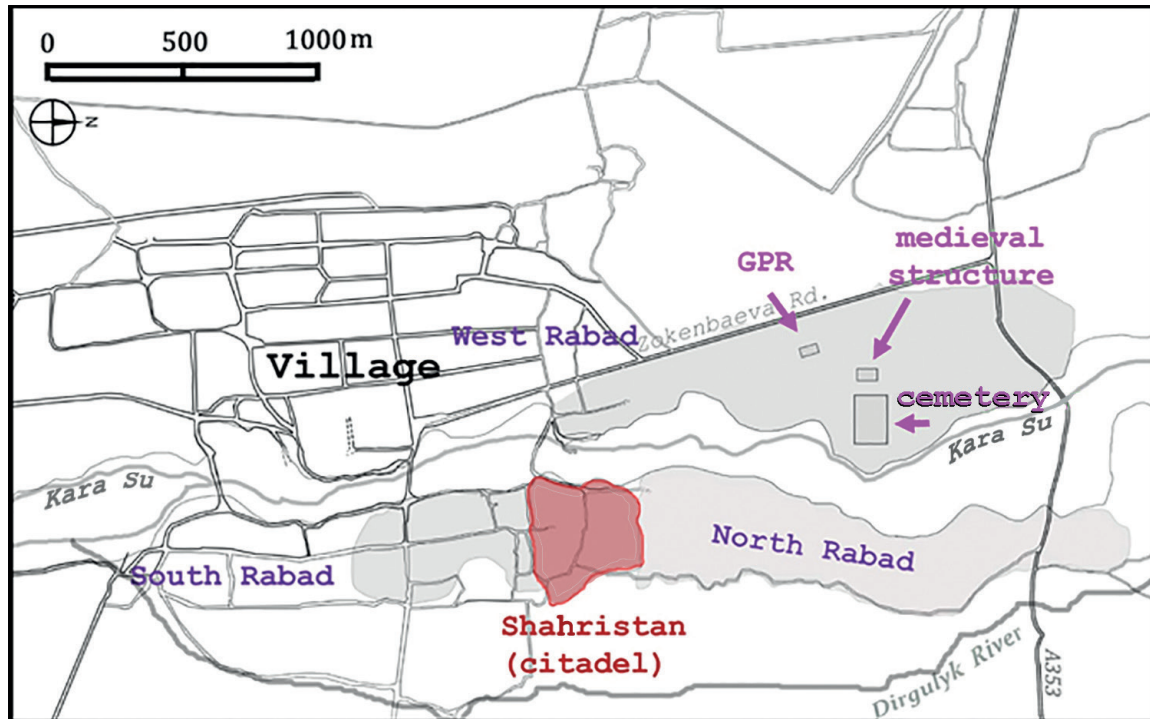


Fig. 2: Plan illustrating the archaeological areas of Usharal-Ilibalyk (C.A. Stewart).

a tall spur, protected from potential flood waters. Within the citadel we uncovered part of a palace, which had a Roman-style hypocaust (heating) system with different rooms for bathing (hamman) (i.e. frigidarium, tepidarium, and caldarium), its latest phase dated to the mid-13th century, according to coins found in the context of its floor. Water seems to have been diverted here from the nearby river through an aqueduct.

Today, China siphons much water from the Ili River for agricultural irrigation, rendering the river much smaller than it would have been in the Middle Ages. The wide Ili Valley would have been prime land for nomads with their herds as well as suitable for farming in the plains around the city by residents. Currently, a creek called the Kara-Su ("Black River") flows through Usharal-Ilibalyk, while a slightly larger stream, the Dirgulyk, demarcates its eastern extent; both streams join with the larger Usek River to the south of the village, and this eventually flows into Lake Usekskoye; in turn, this lake had an outlet flowing into the Ili River during the Middle Ages. These rivers have a robust current throughout the summer, fed by plentiful rainfall and mountain springs. Moreover, all along these streams are substantial forests.

The Ili River is one of the "seven rivers" that form the region known as the *Zhetysu* (in Turkic, and *Semirechye* in Russian) from which those names derive. Due south is the Indus Valley region; its name originally derived from the Sanskrit "*Sapta Sindhavah*" also translated as the land of "Seven Riv-

ers". The fact that these regions are connected both geographically and culturally indicates that these names – *Zhetysu* and *Indus* – are hardly coincidental. As such, the Ili belongs to a vital network of fresh water sources (along with the Chuy [Ču], Charyn, Naryn, Yarkand, and Indus Rivers), which rendered possible travel and trade across Central Asia. To the east, there were the Gobi and Taklamakan Deserts, and to the west, there was the Karakum, Registan, and Pakistan (i.e. Thar, Katpana, Bhakkar, etc.) Deserts. The northern *Zhetysu* region and southern Indus Valley should be considered large oases that were essential for the formation of culture and civilisation in this area.

Natural river networks attracted settlement. These river communities were then connected by artificial roads. Thus, Usharal-Ilibalyk lies on an important highway along the Ili River; and, for the sake of our research, we call this road the "Middle North Route" (MNR). Historical sources from a variety of languages mention the chief cities and towns in the region; by charting these sites on a map we can "connect the dots" and trace the Medieval routes alongside or underneath modern roads. The MNR had two branches. One path ran south of the Tian Shan Mountains and – travelling east to west – this branch linked Karakorum, Beshbalyk, Kocho, Turfan (Bulayk), Kara-shahr, Kucha, Askus, Barsghan, Suyab, Navekat, Aktobe, Talas, Sayram, and Otrar. The second branch ran north of the mountains, linking Beshbalyk, Urumchi, Ghulja, Almalyk, Ilibalyk, Taldar, Suyab, and Navekat. These two routes were

clearly interconnected through mountain passes, allowing traffic back and forth. As Albert le Coq described:

“...The whole of this district round Kara-shahr and Korla is, from a geographical and political point of view, both interesting and important...here we find the one and only convenient approach to the land through the valleys of several rivers in the neighbourhood of Ili, where plentiful water abounds in the mountain streams on all sides, and where a rich vegetation makes life possible for wandering tribes...this district [functioned] as their entrance and exit gate...to get into the Ili Valley” (ALBERT LE COQ 1928: 145–146).

In other words, the northern cities of the Tarim Basin depended on trade with the settlements of the Ili Valley just beyond the Tian Shan Mountains. Note that the MNR network should be seen as distinct from, but inextricably connected with, the Middle-South Route (MSR) that ran from (east to west): Dunhuang, Cherchen, Khotan, Kashgar, then on to Fergana, Kokand, Tashkent, Samarkand, and Bukhara.

The Ili River and the Tian Shan Mountains were essential in the formation of a unified cultural region consisting of the Zhetysu and Xinjiang, though they are divided today by artificial political borders. The Ili River system, including the Kunes (China) and Tekes (Kyrgyzstan) Rivers, stretches over 2,000 km from the Eren Habirga foothills to Lake Balkhash; the surrounding valleys cover 145,000 km². Our working hypothesis is that the mountains were not barriers to travel and trade, but rather contributed in three ways. First, mountains produced freshwater rivers that formed fertile valleys, allowing commercial agriculture and husbandry to develop; and, in turn, this led to the establishment of settlements. Second, mountains were additional sources of food and raw materials (wild game, herbs, nuts, lumber, stone, gems, ore, clay, and minerals) and these formed the basis of production and technology – energy (fuel), smithing, crafting, ceramics, architecture, and artworks. Third, mountains were places of religious worship, where diverse people assembled and feasted, creating sacred spaces; these eventually formed wider pilgrimage networks coinciding with trade routes. It is worth repeating that the Tian Shan belongs to the Alpid Belt, which stretches from east Asia to west Europe – from the Himalayas to the Pyrenees – along which Indo-European languages and culture were disseminated, along with religious doctrines.

Mountain forests were considered sacred by the followers of the prehistoric Scythian, Mongol, and Turkic tribesmen. Eventually, rituals and beliefs developed into what are classified by anthropologists as Tengrism, shamanism, and “sky worship” (ROUX

1984: 112–123; RÓNA-TAS 1987: 33–45). In both Uyghur and Turkic mythology, the forests of Ötügen (near the Orkhon River in Mongolia) were the birthplace of their tribes; so like many other cultures, the “Sacred Tree” is a common motif in their artworks and folklore (MACKERRAS 1990: 322). One tribe that lived on the Ili River – the Choros (also affiliated with the Oirats) – claimed to have sprung from a Sacred Tree; similar stories are found as far west as Hungary (in the form of the *Világfa*) and Bulgaria (as *Svetovno Dürvo*), and these are analogous to, or perhaps derived from, the Kipchaks and Cuman Turkic folklore – note that the modern Kazakh language is closely affiliated to these linguistic groups.²

The Aulie-Agash (meaning “Holy Tree” in Kazakh) Forest lies 12 km directly due north of Usharal-*Ilibalyk* and has preserved pre-Islamic religious connotations over the centuries. Today, modern pilgrims of various faiths pray underneath a large tree in the centre of that forest. Likewise, 288 km directly south of Usharal is the Shenmuyuan Forest (“Numinous Wood”) near Aksu (China); this has been visited by pilgrims since the Middle Ages, as testified by its monumental cemetery. Moreover, standing among the sacred trees are several domed mausolea and a well-preserved Medieval “lecture hall” (which may have served as either a mosque, Manichean school, or a Christian church). As such, these sacred forests preserve primordial myths that are parallel to the Yggdrasil (World Tree) in Nordic mythology and analogous to the two cosmic trees of the Garden of Eden mentioned in the book of Genesis – hence why these Central Asian forests continue to serve as pilgrimage sites to Muslims and Christians today. According to Medieval tradition, the Garden of Eden was located somewhere in Central Asia, and when Adam was banished eastward (Genesis 3:24) he settled in Sri Lanka where the magnificent mountain Sri Pada rises, bearing his footprints, hence its more familiar name “Adam’s Peak” (in English).³

Two other global pilgrimage sites are known in Central Asia, which are relevant in this context. We mention these here because they illustrate the deep antiquity and lasting religious practices throughout

2 BOLDYREVA 2014: 62–70. The concept of the Sacred Tree (*baiterek*) carries over into modern Kazakh thought as a main indicator of cultural identity tangibly represented by the Baiterek Tower in the Kazakhstan capital of Nur-Sultan (formerly Astana).

3 Identification of “Adam’s footprint” was first attested by al-Kashgari, marked on his map within *Diwān Lughāt al-Turk* dated to 1074 CE (CAFEROĞLU 1938: 30). Perhaps the Muslims were following an earlier tradition, since Christians were mentioned in Sri Lanka as early as the sixth century; and note that “Adam’s footprint” was later confirmed by Marco Polo in around 1260 CE (YULE/CORDIER 1903.1: 220; 2: 316). Among the locals living in the region today, those footprints are also identified as Buddha’s or Shiva’s, depending on their religious affiliation.

the northern Zhetysu and southern Indus interfluvies. First, in 1993, Chinese archaeologists discovered a large circular temple complex within Tian Shan's foothills (340 km south-east of Usharal), near Korla, within the Bayanbulak Grassland Park. They dated the earliest phase to the Bronze Age (ca. 1000 BCE); they also associated this complex with "sky worship" concepts found in pre-Buddhist and Tengrist religion and, as such, it continued to be visited during the Middle Ages (GIBBENS 2017). Second, a major Hindu and Buddhist site is located at Mount Kailash, 1,180 km due south of the Shenmuyuan Forest, and has attracted pilgrims for over two thousand years. Both of these sites transcend modern political borders and historical periods, indicating that people came through Central Asia for reasons beyond trade and political conquest. Local customs and beliefs shaped the identities of the tribes who moved in and out of the Ili Valley, and even with the spread of global religions, such as Buddhism and Islam, each region would develop idiosyncratic beliefs and practices, while sharing the same religious spaces.

2 History

Ilibalyk is a compound term derived from the Turkic proper name for the Ili River (*ili* means "hook"), and the word *balyk*, which means "city". The earliest record for the river "Ili" is found in the Chinese *Jiù Tángshū* (mid-10th century) and it was also described in early Turkic-Arabic sources, like Mahmud al-Kashgari's *Dīwān Lughāt al-Turk*, dated to 1074 CE, where he also depicted it on his world map – however, neither source mentions the city (BRETSCHNEIDER 1888.2: 18, fn. 21; DANKOFF/KELLY 1982.1: 70). *Ilibalyk* is a generic epithet that could be applied to any settlement within the wide Ili Valley; in other words, there were many towns that could have been called "Ilibalyk" over the centuries. Another problem is that different languages called the river by slightly different names – *Ili* (or *Yili*) (Chinese), *Ila* or *Ailah* (Persian), *Il* (Mongolian), and *Ilan* (Armenian) – and these were then transliterated into Latin and Cyrillic script in different ways by early Western scholars.

The earliest mention of a particular city called *Ilibalyk* comes from the 13th-century Armenian chronicler Kirakos of Gandzak. In his *History of Armenia*, he described the journey of Hetum I, the king of Armenian Cilicia, to the court of the Mongol emperor Möngke Khan, presumably at Karakorum during the years 1254–1255 CE (BOYLE 1964: 175–89; БАЙРАКОВ/PETROV 2015: 80–87). While the text has been fully studied, one relevant passage regarding the king's return trip deserves reconsideration here:

"They entered Turkastan; and thence [they proceeded] to Ergoporug, and Dingabalex, and Pulad; and having passed the Sutkol or Milk-Sea, they came to Alualex and Ilanbalex. And having crossed the river which is called Ilansu and passed over a branch of the Toros mountains they arrived in Talas..." (BOYLE 1964: 182–183).

We have identified these sites with better-known historical appellations and their modern names, forming this interpretation:

They entered Turkestan; and thence they proceeded to Iki-Oguz⁴ (modern Ulan Usu, China), and Ching-Balyk (modern Jinghe, China), and Pulad (modern Bortala, China); and having passed the Sut-koln or Milk-Sea (modern Lake Sayram, China), they came to Almalyk (Khorgas, modern Huoerguosi-shi, China) and Ilibalyk (modern Usharal, Kazakhstan). And having crossed the river which is called the Ili and passed over a branch of the Alexander Range (known also as the Kyr-gyz Alatau) mountains they arrived in Taraz (Kazakhstan)...

With these sites plotted on a map, we can trace the highway that King Hetum traversed as provided in the accompanying illustration (Fig. 3).

Kirakos' description accurately recorded place-names in sequence with the itinerary and, thus, surveyed the "Middle North Route" (MNR) as described above. As Hetum travelled from his capital at Sis (modern Kozan, Turkey) to Karakorum (Mongolia), the cities and geological features were listed from the west to the east, and likewise his return journey, as quoted above, progressed from the east to the west. Given that sequence, *Ilibalyk* was located west of Almalyk, somewhere along the Ili River, and was significant enough for Kirakos to mention it among the major cities that Hetum's entourage visited. Historians could easily dismiss this toponym as a generic description rather than a proper name, since the foreign Armenians could have misunderstood the local language; however, there exists a Medieval Chinese map that verifies Kirakos' report.

The *King Shi Ta Tien* map, now located in the Russian State Library at Moscow, was drafted in the year 1331 CE (BRETSCHNEIDER 1888.2: 1–5). Its eastern section, comprising the "dominions of Duwa Temür", included the city "I-li-ba-li" (i.e. *Ilibalyk*) south-west of Almalyk and north-east of *Ye-yün-ch'i* (a site that has not been located). If Emil Bretschneider was correct in identifying *Ye-yün-ch'i* with the river *Yi-yün* mentioned in the *Si Shi Ki* (written in

⁴ This cannot be the same town of Eki-Ögüz, mentioned by al-Kashgari, which he described as "a frontier town... between two rivers: the Ili and Yawinç"; DANKOFF/KELLY 1982: 42; apparently, there were several sites with this name belonging to the Ögüz tribe.



Fig. 3: Route of the return journey of King Hetum I: 1 – Perpalex (P'u-lei/Mu-lei, modern Mori); 2 – Peshpalex (Beshbalyk); 3 – Arhlex (Yarligh; mod. Po-lang); 4 – Kulluk (Chu-liu, mod. Foukang); 5 – Enkax (Inzaghart, mod. Changshanzicun); 6 – Chanpalex (Janbaliq/Chang, mod. Changji); 7 – Xutapay (mod. Hutubi); 8 – Ankipalex (Yangbalyk, mod. Manas); 9 – Ekopruk (Irguzgkath, mod. Ulan Usu); 10 – Dinkapalex (Chingbalyk, mod. Jinghe); 11 – Pulat (Bolat, mod. Bortala); 12 – Alualex (Almalyk); 13 – Ilanpalex (Usharal-Ilibalyk); 14 – Dalas (Taraz). Other major cities, but not mentioned by Kirakos: A – Fergana; B – Pishkek; C – Navekat; D – Balasagun; E – Suyab; G – Talgar; H – Barsghan; I – Equus; J – Askui; K – Qayaliq; L – Ghulja (Kulja); M – Turfan; O – Kocho (C.A. Stewart).

1259 CE), then this area was to the east of the city of Taraz (or the Talas River) in modern Kazakhstan (BRETSCHNEIDER 1888.1: 129, 2: 44). Regardless, *Ilibalyk* was positioned on the *King Shi Ta Tien* map in the Zhetysu area of Kazakhstan, exactly at the location as described by Kirakos. This Chinese map positioned – in a diagrammatic manner – the major cities within the divisions between the three reigning Mongol khans using Persian designations: Abu Said ruled in Persia (the Ilkhanate), Uzbeg in Kipchak territory (Golden Horde), and Duwa-Temür in Turkestan (Chagatai Khanate). Spatial relationships between each city were specified and, therefore, the cartographers were cognisant of the cardinal directions. The Chinese labels closely follow Persian pronunciation, which suggests that the cartographers were translating Mongol and/or Ilkhanate texts.

These two documents – Kirakos' *History of Armenia* and the *King Shi Ta Tien* – provide detailed information that can hardly be coincidental. Although they were written at the extreme ends of Asia, within distinct cultures and separated by 80 years, they both pinpointed a city west of Almalyk on the Ili River by the same name; to most scholars this was compelling enough evidence to assume that an important city flourished somewhere in eastern Kazakhstan during the 13th century. For example, Dr Alkey Margulan believed he identified *Ilibalyk* on the north flank of the Ili Valley within the Kapchagay gorge, at the village of Baschi (near modern Kalinino); however, subsequent archaeological excavations revealed that this small settlement was abandoned by the 12th century and, therefore, could not be the site mentioned by Kirakos or the Chinese map (MARGULAN 1950: 58–59). These findings prompted Professor Karl Baipakov to search for alternative possibilities. Based on a few Medieval artefacts being sent from villagers near the Chinese border to the museums in Almaty, he theorised that “Ilibalyk should be located between Koktal and Panfilov [Zharkent], where the remains of a Medieval fort of Usharal stands”; however, up until the 2016 expedition, no archaeological excavation had been attempted to confirm Baipakov's hypothesis (BAIPAKOV 1986: 37).

3 Archaeology: the cemetery

Excavations at Usharal-*Ilibalyk* commenced in 2016 following the discovery, two years prior, of a large, metre-long gravestone initially attributed to the Church of the East (Nestorian).⁵ The stone, which

5 We prefer to use the term “Church of the East” rather than “Nestorian”; in fact, at the moment our team of archaeologists cannot be sure which Christian denomination settled in this area: either “Jacobite”, “Nestorian”, or Syriac-speaking Melkites. It is possible that many different sects lived here, belonging to different liturgical-lan-

guage traditions, including Greek, Armenian, Latin, and Syriac, which is supported by the historical literature.

6 For details on the archaeological investigations, see the preliminary reports as found at the Society for the Exploration of EurAsia website: http://www.exploration-eur-asia.com/inhalt_english/frameset_projekt_aC.html. For a thorough examination on the epigraphy and iconography of the gravestones (*kayraks*), please consult the publications that are being prepared: DICKENS/GILBERT forthcoming; STEWART/GILBERT forthcoming.

contained a cross inscription on its face as well as on the dorsal side of the stone, contained an epitaph written in the Old Turkic language utilising Syriac script commemorating “Petros, the priest” and also mentioned his father, “Tegin” and his grandfather, “Baršabbā Quča”. This provided the first clue that a significant community of Turkic-speaking and Syriac-writing Christians resided at *Ilibalyk* from the 12th through the 14th century.⁶

Excavations also revealed a significant cemetery north-east of the walls of Usharal-*Ilibalyk* (Fig. 4). A total of 34 *kayraks* (gravestones) and an additional four fired-brick grave markers were unearthed. The cemetery and human remains found here have provided the largest Medieval Christian cemetery found in Central Asia to date, potentially measuring a total of 4,200 m²; and, if our excavated area is extrapolated accordingly, the cemetery may contain up to, or over, 500 graves (Figs. 5 and 6). By analogy, previous excavations in the Chuy (Ču) River Valley (within modern Kyrgyzstan) revealed four Christian cemeteries discovered at the end of the 19th century and, together, these totalled over 600 graves (KOLČENKO 2018: 48–103). Additionally, *kayraks* were found at Almalyk, the Chagatai Mongol capital that lies 53 km to the east of *Ilibalyk*; unfortunately, the location of Almalyk's cemetery is no longer known. The early excavations of the Kyrgyzstan graves were conducted when the science of archaeology was still in its infancy and, so, the data gleaned was neither systematic nor complete. Nevertheless, the Russian Imperial archaeologists and government officials of the Zhetysu-Semirechye Oblast did provide the first archaeological information about Christianity, which thrived in the region between the 11th and 14th century, if not earlier.

The recent expeditions at Usharal-*Ilibalyk* have revealed significant new data, which sheds much light on those earlier Kyrgyzstan excavations and what may lie underneath Almalyk, China. For example, Usharal-*Ilibalyk* has yielded radiocarbon for samples for absolute dating; this has provided us with clear chronological parameters for the cemetery, which flourished between the mid-13th and the mid-14th century. Likewise, we have extracted DNA samples from the graves; these are still being analysed but, obviously, their results will have the potential to contribute to our knowledge about ethnicity and migration patterns, as well as wider social



Fig. 4: Drone photograph of northern section of Ilibalyk Christian cemetery (Field IV, Area C, Units 7b-d) prior to excavation in 2019. View from the north. For scale, please compare with Fig. 6 (photo by D. Sorokin).



Fig. 5: Two graves from Christian cemetery at Ilibalyk (Field IV, Area C, Unit 5, loc. 26, 34) demonstrating west-to-east orientation and heads raised to face the east (photo by L. Flowers, 2018).

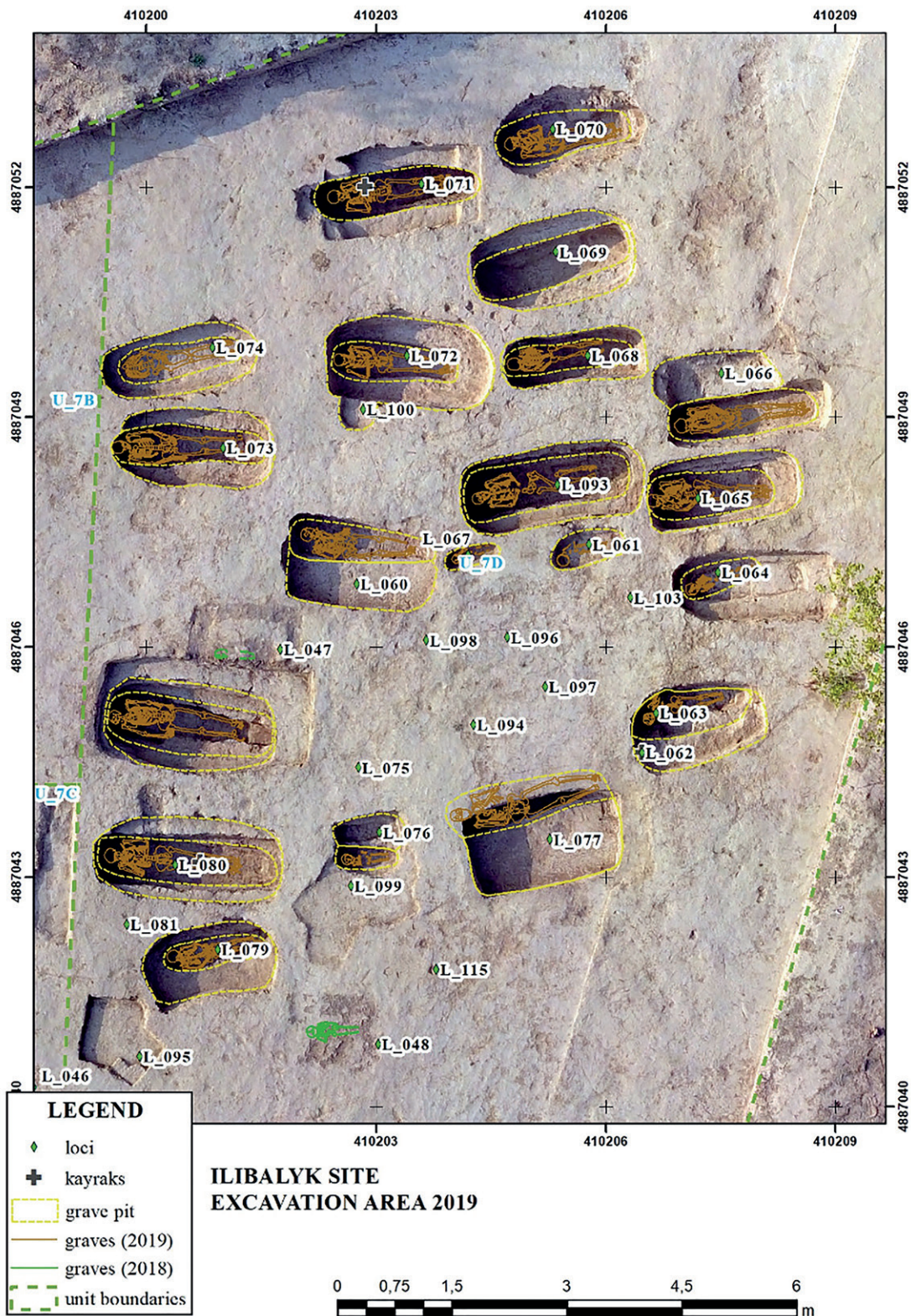


Fig. 6: Drone photograph with skeletal drawings superimposed. Ilibalyk Christian cemetery during 2019 excavations (Field IV, Area C, Unit 7d). Note that image conforms to cardinal compass points (i.e. top border is north, right border is east), thus the graves indicate west-to-east burial orientation. Drawings in green represent graves excavated in the previous season (2018) at shallower depths. Photogrammetry by D. Sorokin (Archaeological Expertise, LLC).

and cultural networks. At the moment, we can report that standard archaeological analysis has added immensely to our knowledge. For instance, the graves at Usharal-*Ilibalyk* exhibit homogenous interment practices. By 2019, we had excavated and analysed the remains found in 78 graves; 50 of those were juveniles, with at least 33 being under the age of five. All the bodies, whether child or adult, were laid supine and had a west-to-east orientation (with the head at the western end of the grave). In addition, the head was often raised to face the east by means of an earthen “pillow” (perhaps a mudbrick). Compared to adults, children were usually buried at shallower levels by an average of 40 cm and placed in a simple pit grave; their hands were often positioned so that they crossed at the waist as if they were originally clasped. Of special note is that still-born infants, where the remains were substantial, were buried utilising the same practices, indicating equivalent respect for foetuses. Most of the adult burials contained no grave goods, with only occasional exceptions of personal items such as jewellery. Children’s tombs had a higher percentage of such items, particularly micro-sized glass paste beads around the neck and wrist, which may have served an apotropaic purpose. Hand and head placement of adults often varied considerably from those of the children and infants, but only two exceptions had hands straight at their sides. The presence of ash pits near some graves with accompanying coarseware pottery suggests that meals were consumed at the graveside, presumably during funerals. One curious aspect of many of the burials involved the placement of one or two small river stones either in the hands or at the elbows of the deceased.

The Usharal-*Ilibalyk* burials appear to be similar to those excavated in Kyrgyzstan 130 years ago, as mentioned above. They have these similarities: the use of *kayraks* and bricks (as grave markers); west-to-east orientation; depth (children were buried at shallower depths than adults); and a lack of personal grave goods in the majority of burials. Of course, these parallels between the Ili and Chuy (Ču) Valley burials are not surprising, since both regions are within the historical Zhetysu-Semirechye region and the funerary contexts belong to similar adherents, or so it seems, of Syriac- and Turkic-speaking Christianity (KOL’ČENKO 2018: 48–103).

With that said, these burial practices have earlier roots, as documented at archaeological sites throughout the Near East and around the eastern Mediterranean (FOX/TRITSAROLI 2019: 109–110; SWEETMAN 2019: 520; HAAS 2014: 125–126). Christian cemeteries dating between the 4th and 8th century have these same general characteristics: west-to-east orientation; head raised to face the east (which is interpreted as the visage of the deceased poised in anticipation of the return of Christ “as the sun rises in the east”); the small amount of grave

goods; and evidence of funerary meals. The continuity of burial practice across both time and vast geographical spaces demonstrates a shared confession of faith and ritual practice (despite the various sectarian divisions within Christianity over the centuries) as well as the impact that religion had on public ceremonies, including the Medieval cultures found along the trade routes of Eurasia.

4 Archaeology: gravestones’ epigraphy and iconography

So far, four gravestones found at Usharal-*Ilibalyk* contained written inscriptions in Syriac script. Three inscriptions utilised the Old Turkic language, while one is in Eastern Syriac language. Several bear depictions of the cross; these range from crudely chiselled reliefs to more carefully rendered iconography (Figs. 7 and 8). Both the cross typology and the epigraphy reveal that there was a deliberate transfer of religious beliefs and symbolism from Syriac-speaking peoples to the Turkic-speaking populations. This shared worldview and artistic tradition connected Central Asian Christians to the historical past and the global Christian community that originated in the Levant.

Global connections are testified by the gravestones. While the majority of *kayraks* found in modern Kyrgyzstan were inscribed in Syriac, a few were also written in Old Turkic, implying that the Christian community was composed of an indigenous population. It is clear that Syriac was a known written language, since the Bible and other religious texts were copied throughout Central Asia, based on surviving manuscripts found in the Christian monastery at Bulayk (near Turfan, China) written on locally produced paper (BROCK 2011: 420–421; HUNTER/COAKLEY 2017; BORBONE 2006: 4–8). Syriac was the liturgical language spoken in church and during ceremonies. The Syriac inscriptions on the *kayraks*, however, are replete with spelling errors, which may lead to the interpretation that many of the Church of the East’s adherents were not native speakers or had rudimentary knowledge of Syriac (DICKENS 2009: 13–49; ŽUMAGULOV 2014). With that said, grammatical errors are common in Medieval inscriptions, including Arabic, Byzantine Greek, and Latin; therefore, we cannot draw conclusions about the literacy level of the community. It seems obvious that enough people could read Syriac script or else they would not have bothered inscribing the *kayraks*.

At Usharal-*Ilibalyk*, 10% of the *kayraks* found contain written inscriptions and of those, 75% are in the Old Turkic language rendered in the Syriac script. *Kayraks* found at nearby Almalyk also had a higher number of Turkic-language epitaphs (DICKENS 2009: 21). We assume that the easternmost



Fig. 7: *Yoshmid Kayrak* with Old Turkic inscription in Syriac script with True Cross iconography (Field IV, Area C; photo by D. Voyakin, 2017).

areas of Zhetysu-Semirechye consisted of mostly Turko-Mongolian nomadic and semi-nomadic tribal groups, such as the Keraites and Naiman, and according to historical sources these tribes were identified as Christians (BAUMER 2016a: 63–64, 328, fn. 56; 2016b: 197–209). Of all the cultural material so far uncovered at Ilibalyk, the gravestones have provided the only indications of the residents' culture and religious affiliation. In Central Asia, the cross was the most conspicuous and enduring symbol of the Christian faith. Obviously, the founder of Christianity, according to tradition, died on a Roman cross, an uncommon but well-attested form of execution in the 1st century. While a symbol of shame on the one hand, Christians eventually embraced it as a symbol of victory on the other hand because they believed that Jesus' crucifixion served as atonement for humanity's sins, confirmed by his bodily resurrection three days later (DAUVILLIERS 1956: 11–17). The aforementioned gravestones, as well as a small number of potsherds both in the Ilibalyk cemetery and within the *shahristan*, contained cross decorations. Analysis of these crosses led us to conclude that there were many types of crosses employed by these Eastern Christians; such observations can be applied also to the *kayraks* and cross pendants

found in Kyrgyzstan, Uzbekistan, and China.⁷ In other words, there is no such thing as one type of "Nestorian Cross" as mentioned in earlier publications concerning the archaeology of Central Asia.

The 34 gravestones at Usharal-Ilibalyk exhibit eight different types of crosses. These forms can be categorised based on standard typologies of Medieval heraldry, such as the *croix patté* (an equilateral cross with flared arms), *croix fourchée* (a cross with arms terminating with a two or three-pronged fork), and *croix de procession* (a cross with a narrow tang extending from its base, alluding to the processional cross used during the liturgy). Among these, another type of cross was rather conspicuous, known as the *croix calvaire* (Calvary Cross), which was a representation of the True Cross Reliquary that was housed at the Holy Sepulchre in Jerusalem; this type is characterised by a cross either on a raised platform or on three steps, and with a circle at the intersection of the cross arms. Eight of the *kayraks*, including the three with written inscriptions as well as the largest one, are incised with the *croix calvaire* motif.

⁷ Dr C. Zhumagulov identified 49 different cross variations within the Kyrgyzstan corpus; while differences between each type are quite subtle, it does illustrate that there was not a single "Nestorian cross", but that many forms were used (ZHUMAGULOV 2014: 26).



Fig. 8: *Shirin Kayrak* with Syriac inscription and True Cross iconography (Field IV, Area C); stone dimensions: 24 × 17 × 4.5 cm (photo by D Voyakin, 2016).

The True Cross Reliquary was well known by all adherents of Medieval Christianity, regardless of their language or creedal affiliation. According to tradition, the Empress Helena, the mother of Constantine the Great, visited Jerusalem in 326 CE and discovered a wooden cross within an abandoned cistern near the hill of Golgotha (called *Calvaria* in Latin), which was the site of Jesus' crucifixion (BORGHAMMAR 1991: 54–55). Fragments of this wooden cross were eventually inserted into a circular compartment at the intersection where the arms met within a cross-shaped reliquary. The reliquary could be seen by pilgrims who visited the Holy Sepulchre,

which was connected to the area believed to be the site of Christ's burial and resurrection. True Cross imagery appears to have been particularly significant for the Church of the East as it appears not only on gravestones, but also in other artistic expressions throughout Syria, Armenia, Georgia, Central Asia, and China (TAYLOR 2019: 373–374; MARANCI 2019: 459; BORBONE 2006: 4–8). In fact, the story of Helena's visit to Jerusalem was among the 1,200 manuscript fragments found by the archaeological investigations at the turn of the 20th century at the site of Bulayk, China, located approximately 900 km east of Ilibalyk (HOPKIRK 1980: 130; HUNTER/COAK-

LEY 2017: 48–50). It is possible that Helena's story may have been communicated to the Christians at Ilibalyk during their assemblies and liturgical ceremonies from available texts from monasteries, like Bulayk. The True Cross motif is just one example of global cultural diffusion, demonstrated linguistically and artistically among our finds at Usharal-Ilibalyk.

Inscriptions on the four *kayraks* found so far at Ilibalyk further confirm the site's connections to the broader world of Medieval Christendom. Currently, a publication is being prepared that will provide a thorough examination and translations of the inscriptions as performed by the Syriac and Turkic-language specialist Dr Mark Dickens; so, what is written here should be considered a synopsis (DICKENS/GILBERT forthcoming). As mentioned above, the first gravestone uncovered at Ilibalyk recorded a priest named Petros; thus, we have dubbed this stone the *Petros Kayrak*. This name certainly commemorated Christ's closest friend and disciple, the Apostle Peter, referred to in Greek (the language of the New Testament) as *Petros*. By naming a local individual *Petros*, the Turkic-speaking community was reinforcing its cultural identity with historical Christianity. Interestingly, the stone also names the deceased Petros' father, Tegiz or Tiles, a variant of *Tileš* (the uncertainty is due to erosion on the stone), which is a Turkic name meaning "wished for"; it also mentions his grandfather, Baršabbā Quča. Although the name *Petros* is Greek in origin, the community's Turkic connections are further confirmed in the inscription by stating that Petros died in "the year of the monkey". Unlike many of the gravestones from Kyrgyzstan, which also include the Seleucid date together with the 12-year Turkic animal cycle, the *Petros Kayrak* and the other inscribed gravestones at Ilibalyk do not reference the Seleucid calendar. Note that the *Petros Kayrak* is the largest Christian gravestone that has been discovered so far in Central Asia and is the only one that names three generations.

The dual name of *Baršabbā Quča* is found not only on Petros' gravestone. Two years after the first *kayrak* was discovered, another gravestone was found bearing the name *Baršabbā Quča*, which commemorated a dual grave, together with one "Yoshmid the Priest", whose name is probably a Sogdian derivative for the word "Sunday" (Fig. 7).⁸ *Baršabbā*, a Syriac/Aramaic name meaning "son of the Sabbath", is likely a namesake for *Mar Baršabbā*, a saint of Persian origin who is credited with bringing

8 It should be noted that on Baršabbā's own gravestone (which we designated the *Yoshmid Kayrak*), the engraver appears to have dropped the "a" in the second name; thus it reads *Baršabbā Quč*, with the second moniker having the meaning of "strength". Since it is unlikely that this rare dual name would be found within the Christian community of Ilibalyk, our assumption is that this designates the same person. This information was generously provided by Dr Mark Dickens.

Christianity to the city of Merv (modern Turkmenistan) in the year 362 CE and, according to tradition, brought the faith as far as Herat (Afghanistan) (BAUMER 2016: 72, 178; HUNTER/COAKLEY 2017: 1, 32–39). Note that the story of *Baršabbā* would have been known among Christians of Zhetysu-Semirechye as evidenced by the documents found, once again, at Bulayk (China), where a Sogdian copy of the *Life of Baršabbā* was among its 900 manuscripts (JOHNSON 2018: 213). The namesake's second name, *Quča*, meaning "ram", is definitively Turkic. *Baršabbā* is also found inscribed on the *kayraks* discovered in Kyrgyzstan, including the dual-name form of *Baršabbā Mumin* (ŽUMAGULOV 2014: 27). At Ilibalyk, Baršabbā Quča was likely a man of particularly high status within the community, since he is commemorated on both his own gravestone as well as his grandson's.

At Usharal-Ilibalyk, there is only one gravestone, so far, that used the Syriac script to convey the Syriac language. This *kayrak* is translated as "This is the grave of Shirin the Believer" (Fig. 8). The epithet "the Believer" was a common form of identifying a devout layperson and is found throughout the Kyrgyzstan corpus of gravestones, and is still common in the Assyrian Christian community today. The name *Shirin* is of Persian origin and was later adopted in Turkic languages, conveying the notion of *sweet* or *juice*. With that said, this name (like *Petros* and *Baršabbā*) may have honoured a historical person. There are three saints in the Syriac tradition with this name, but the most famous of these was Shirin – the Christian wife of the Persian Shah Khosrow II (590–628 CE) – who had significant influence in dealing with ecclesiastical matters within the Sasanid Persian Empire (BROCK/HARVEY 1998: 64–73). For instance, Shirin sponsored the construction of a church that was specifically built for housing the True Cross Reliquary that the Sasanids had captured following their conquest of Jerusalem in 614 CE. Fifteen years later, the Reliquary emerged as a significant concession that the Persians returned (to the Byzantines) after Emperor Heraclius had defeated Khosrow. Heraclius and his son, Constantine IV, commemorated the return of the Reliquary by issuing a gold *solidus* coin in the year 630 CE that featured an image of the *croix calvaire* type, further associating the cross as a symbol of military victory.⁹ These Byzantine coins and their imitations have been found as far east as Mongolia (STARK 2018: 350–354).

The Usharal-Ilibalyk inscription conveys the phrase "Shirin the Believer". This is interesting be-

9 W. Baum has written the most thorough account of the history of Shirin and how her story eventually evolved into the myth of the love triangle within the Sasanian court (BAUM 2004: 30–59, 115). For a summary of Khosrow's strategy towards the Church of the East, see HAUSER 2019: 435.

cause the Islamic historian Al-Tabari (10th century) used this same phrase when describing Queen Shirin. Al-Tabari's account deserves repeating here. He described how the last Sasanid Persian emperor, Yazdegerd III, had fled east following the Arab conquest of Persia in the year 651 CE. Eventually, the emperor arrived in the city of Merv (Turkmenistan) and there he was ignobly murdered by a common miller who coveted his royal belt of gold. Finally, the emperor's body was retrieved from the river by Christians; and Eliya, Metropolitan of Merv, provided him a burial out of deep compassion. During the eulogy, Eliya stated that this emperor was given a Christian burial, even if he was an infidel, because they remembered that Yazdegerd's grandmother – "Shirin the Believer" – was a devout Christian (Al-Ṭabarī, transl. Humphries 1990: 89). Thus, it appears that, some seven centuries after she lived, Shirin was a name still celebrated and commemorated among Christians in Central Asia, including those who lived at Ilibalyk.¹⁰

The fourth inscribed *kayrak* at Usharal-Ilibalyk is also significant. Unfortunately, it was damaged so that only half of its inscription has been found; most likely an industrial-sized Soviet plough had cut it and distributed its fragments across the field. What can be discerned is that the inscription is in Old Turkic and may possibly refer to a person named "Mar Ḥenanišo". According to Dr Mark Dickens, *Mar* is a title of respect meaning "lord" or "saint", referencing connections to Syriac Christianity; likewise, the name *Ḥenan-Išo* can be translated as "the mercy of Jesus". This name, too, was common in the Church of the East, and so the deceased at Ilibalyk may have been named thus to commemorate one of either two famous leaders of Persia with this name: Patriarch Ḥenanišo I (685–700 CE) or II (773–780 CE) which, ultimately, point to Christ (BAUMER 2016b: 330).

The iconography and epigraphy of the Ilibalyk *kayraks* demonstrate how members of the local Medieval population had adopted the beliefs and practices common to the global Christian community. Church tradition and ceremony, as communicated through its liturgical documents and orally through stories and sermons, contributed to the diffusion of the Christian faith. By tracing the transmission of both Turkic and Syriac language through inscribed and cross-decorated artefacts, we can better understand how ideas and customs had travelled along

the Silk Road.¹¹ Obviously, the first missionaries and subsequent clergy were educating their converts to read and write; however, the exact levels of their literacy cannot be determined at this point. Clergy, at least, were expected to be fluent in Syriac in order to officiate at the worship services and ceremonies. So far, the archaeology of Central Asia has confirmed the historical accounts that described the wide dissemination of Christianity throughout the Zhetysu-Semirechye region.¹² Besides contributing to general historical and linguistic information, the archaeologists at Usharal-Ilibalyk specifically have been able to examine *kayrak* epitaphs alongside individual graves; thus, this research goes beyond mere hypothetical models towards the study of actual persons. There were real individuals who lived at Medieval Ilibalyk named Petros, Baršabbā Kucha, Shirin, and Ḥenanišo; these people belonged to a thriving Christian community and testified, by their epitaphs, to the conveyance of Biblical ideas and ecclesiastical practices spanning across vast expanses of geography and time.

5 Archaeology: imported goods

Usharal-Ilibalyk was located on one of the major Medieval highways and the material culture uncovered therein reflects this reality. These artefacts bear witness to regional and global commerce and trade. For example, many coins have been unearthed; one may have been minted as far east as Guangdong, China, and another as far west as Deinket, Uzbekistan. Also, several objects consisted of materials originating in distant oceans; this is quite remarkable since Usharal is near the "Eurasian Pole of Inaccessibility" in Xinjiang, which is *the* most distant point of land from any ocean on earth. One particular grave contained jewellery that bears symbolism connected to other sites along the Middle Route of the Silk Road.

Regarding the coins, in 2014 a team of archaeologist led by Dr Dimitry Voyakin performed a preliminary survey of Usharal and its first numismatic study. At that time, they were able to identify the walls of the Medieval *shahristan* and, surrounding it, there were amounts of Medieval ceramic sherds and other pre-modern artefacts lying on the surface of the ground, indicating that these areas were large *rabads* (residential, commercial, and workspaces).

10 Three *kayraks* from Kyrgyzstan also are inscribed with the name "Shirin". One has a recorded provenance from the cemetery at Kara-Jigach near modern Bishkek. Another *kayrak* has a date (1339 CE) and uses the formula "Shirin the Believer", demonstrating a knowledge of Queen Shirin in the first half of the 14th century in Central Asia; ŽUMAGULOV 2014: 101–102, 399–400, 446–447.

11 According to P. Borbone, "It is apparent that when they were converted to a particular religion Turkic speaking peoples or social groups tended to adopt the alphabet that was typical of that religion not only for their theological, exegetic and liturgical texts but also for their literary ones" (BORBONE 2005: 18).

12 For the most recent publications regarding the archaeology of Medieval Christianity in Central Asia, consult BAUMER 2016b and VOYAKIN 2018 and forthcoming.



Fig. 9: Bracelet found in grave L-089 (Field IV, Area C, Unit 7b) with semi-precious stones and ocean coral (photo by D. Sorokin, 2019).

During their research, villagers provided three hoards and individual coins totalling 175 in number. As a collection, these coins formed a random sampling, providing an approximate age of the site.

The numismatic analysis was subsequently published, and we summarise their results here (PETROV ET AL. 2014: 61–76). The first hoard consisted of eight coins from the years 1258 to 1261 CE; the second, seven examples dated from 1271 to 1300 CE; and the third hoard had 36 coins dating from 1318 to 1335 CE. Together with the surface coins, there emerged four chronological and geographical categories: 1.6% of the coins were issued during the Northern Song Dynasty (1023–1106 CE) from China; 9.4% were minted by the Karakhanid Empire (1052–1170 CE); 76% were from the unified Mongol Empire (1232–1268 CE); and 13% were from the Chagatai Khanate (1276–1341 CE). Among these, the earliest coin was issued by Emperor Shengzong of the Liao Dynasty dating between

the years 1023 and 1032 CE; the next oldest was minted at Deinket (near Tashkent, Uzbekistan) in 444 AH/1052–1053 CE under Kahn Muhammad bin Yusuph. As the authors of the study observed, most coins (53%) were minted at Almalyk; the earliest of these dates to 636 AH/1238 CE and the latest to 742 AH/1341 CE. Subsequent excavations have unearthed similar coins in stratigraphic contexts that have confirmed this preliminary numismatic study concerning the chronology; in general, these coins testify to Ilibalyk's connection to both regional and global trade centres.

There are several examples of artefacts that came from coastal areas. For instance, our excavations have revealed coral used in jewellery located at two distinct contexts of the Medieval city. The first context is the cemetery, where a female was buried wearing bracelets on each arm formed by beads consisting of crystals, orange-coloured jade, and



Fig. 10: Cowrie shell and mother-of-pearl bead found in child's grave at Ilibalyk Christian cemetery (Field IV, Area C, Unit 7d, loc. 48; photo by S.T. Gilbert, 2018).



Fig. 11: Jewellery found in grave L-089 (Field IV, Area C, Unit 7b) with examples of the almond-leaf rosette imagery. Dimensions of both silver bracelets are about 5 × 7 cm and the silver ring at the lower left side has a diameter of about 2 cm (photo by D. Sorokin, 2019).

pale pink coral (Fig. 9).¹³ In the second location, a large coral necklace was hidden along with silver bracelets and dozens of pearls (which may also have originated in an ocean) and was found in an interior niche of the fortification wall of the *shahristan*. These coral pieces were likely harvested from the Indian Ocean and traded northward along the Indus Valley. Coral was considered highly valuable, utilised for both its aesthetics properties as well as its cultural symbolism and apotropaic functions across different religious traditions (MORADI 2016: 125–142). These coral artefacts provide evidence of

long-distance trade along the northern branch of the Silk Road (MNR), specifically during the Mongol era; obviously, Ilibalyk's citizens must have participated in this trade, thus demonstrating a level of wealth in its ruling class and, apparently, some of these were Christians.

In addition to coral, three cowrie shells (also probably from the Indian Ocean or, alternatively, the Persian Gulf) have been found in the cemetery (Fig. 10) (BIN 2011: 1–25). One shell was found placed in the thoracic area of a very small child or infant and apparently worn as a pendant around the neck. Cowries were a common item in Medieval Central Asia used both as jewellery as well as currency.

13 This grave is located in Field IV, Unit 7b, Locus 89, and was excavated in 2019.



Fig. 12: Diagram illustrating the concept of the rosette as a reversible image: **a** – Four-petal rosette; **b** – Bolnisi-type cross (C.A. Stewart).

Again, such items demonstrate long-distance trade connections.

Ceramic artefacts are quite extensive at the Ilibalyk site. Sherds litter the entire area of the Medieval area and modern village – in particular, the areas of daily habitation such as the *shahristan* and western *rabad*. Pottery fragments have also been found to a lesser extent in the region of the cemetery, with more in the topsoil as opposed to the locations within the graves themselves. As graves were excavated beginning in 2018, finds of ash pits, animal bone, and coarseware sherds suggested that food was consumed during funerals. If so, this would be in keeping with early Christian tradition found in other archaeological contexts in western Asia as well as the current ethnographic practice among Syriac-speaking Christians of other regions in the present day. In addition, many of the Turkic Muslim peoples of Central Asia have a tradition of funerary meals.¹⁴

For eastern Kazakhstan and Xinjiang, ceramic typologies are not precise enough for us to pinpoint exact dating and workshops where finewares were produced. Nevertheless, certain general observations can be made concerning the period of manufacture and symbols decorating the sherds. As expected, coarseware of various types is common throughout the site, from storage vessels, cups, platters, and bowls. It is assumed that these were, most likely, manufactured somewhere on site, but we have no direct evidence. We suspect that along the Ili Valley, high-quality clay for ceramics production was available during the Middle Ages, just as it is today. In contrast, the fineware, which is also common on the Ilibalyk site, can be identified predominantly by beautiful examples of blue, green, and brown glazes, which can also be found throughout the region at sites from the same time period (11th to 14th century), such as Otrar, Taraz, and Ak-Bešim. Because these finewares conform to a wider Medie-

¹⁴ For examples of funerary meals in an early Christian context, see F. BISCONTI 2019: 214. At present, members of the Assyrian Church of the East continue to participate in funerary meals, as attested by Bishop Mar Awa Royel in an email to the author (S. Gilbert) on June 6 2019. Funerary meals today among modern Kazakhs and Uighurs emphasises the 3rd (for Uighurs), 7th, and 40th days as well as the first year following a person's death.

val aesthetic from the Levant to Xinjiang, we assume that they were imported into Ilibalyk.

A small sampling of pottery also included what appears to be porcelain. Such examples may provide evidence for links further east, specifically China, which should be expected given that this part of Kazakhstan was under Chinese control during various eras; however, the few porcelain fragments have all been gathered from the surface and, therefore, dating is difficult. In addition, in the *rabad* area, a type of cream-coloured glazed ware with green highlights and a type of *sgraffito* design (possibly to mimic Kufic or Arabic script) has similarities to 12th and 13th century fineware from the Levant in Mamluk domains (STERN 2005: 29). At the moment, all of these ceramics are still being analysed.

Once again, the cultural connections of at least some of the residents of the city can be seen in a small amount of cross iconography and designs found on specific sherds. Two examples are of stamp moulds impressed onto the clay prior to firing. Other examples include crude crosses scratched post-firing on coarseware jug fragments as well as on bricks found within the cemetery. A pre-fired swastika (sun symbol) was etched on a potsherd that once belonged to a juglet or bowl. While not exclusively a Christian symbol, it is common in Church of the East contexts and can be considered a version of the cross. These symbols – crosses and swastikas – have been used in Asia since prehistory; while their *forms* are “local”, their *meaning* became associated with the Medieval Christian community that belonged to a global religious network. Likewise, another symbol – the almond-rosette motif – was one of the most conspicuous ornaments found so far.

In the grave previously mentioned (with coral), the remains of a woman with several other pieces of jewellery were discovered, including two silver bangles, two silver rings, and one gold ring (Fig. 11). The silver bangles, which have been dubbed the *Ilibalyk Rosette Bracelets*, are decorated with the almond-rosette symbol, which was commonly used in churches along the eastern Mediterranean and the southern Caucasus. It is a “reversible image”, meaning that it can be seen as *both* a four-petal flower (or four-leaf plant) or, in the negative spaces, a flared-arm cross (Fig. 12). These are important because they conform to other artefacts found at other “Silk Road” sites that have Christian associations accord-

ing to historical sources. For example, the open bangle form and the use of the *mandelrosette* motif are known from three Turkic-Mongol sites (two Ongut and one Naiman) in northern China; they are also known from Ak-Bešim (Kyrgyzstan), and as far west as the Dnieper River Valley (Ukraine) (DELA-COUR 2005: 94; KAMYSHEV 2012: 91, 119, Fig. 39; RUDENKO 2015: 466–484). Rosettes at these sites indicate that local peoples – whether they spoke Turkic, Mongol, Uighur, or Chinese – were adopting designs developed in western Asia (that is, more common in Persian and Byzantine contexts) to decorate their traditional, local forms of jewellery (STEWART 2020). Another example was found in Bortala (Medieval Pulad, China), associated with the area occupied by the Naiman tribe; Bortala is located 200 km north-east of Usharal-*Ilibalyk* (MAIR 2010). Note that all of these examples from China contain matching pairs, presumably found in funerary contexts, though their excavations were either not recorded or remain unpublished; that is why the excavations at Usharal-*Ilibalyk* are so important – because they illustrate how archaeology in eastern Kazakhstan has potential for helping us understand Xinjiang. These rosette-decorated artefacts support the hypothesis that the “Middle North Route” (MNR) formed a unified settlement culture, which can be characterised as a coherent civilisation.

6 Conclusion

Since 2016, archaeologists have been investigating the Medieval city of Usharal-*Ilibalyk* located near the China-Kazakhstan border. While it was known from historical sources that a city called Ilibalyk once existed, its location was forgotten once the site had been abandoned after the 15th century. Recent radiocarbon dating of graves found in the Usharal cemetery has confirmed the numismatic and artefact analysis – that the ancient remains date between the 11th and 14th century, but the highest concentration of artefacts indicates that the site particularly flourished around the mid-13th century, when historical Ilibalyk reached prominence. Excavations have uncovered a sophisticated bath complex in its citadel and a Christian cemetery containing grave-stones with Syro-Turkic inscriptions. These findings, and other recently discovered sites, have prompted a reassessment of all Medieval monuments between the Syr Darya and Ili River Valleys. While the research is still ongoing, our preliminary analysis supports the hypothesis that Ilibalyk was an important trading centre on the “Middle North Route”, where agricultural goods, manufactured products, artistic concepts, and religious ideas were exchanged.

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The Hidden Oghuz

Some Remarks on the Archaeological Investigation of the Kesken-Kuyuk-Kala Site

Dmitriy Voyakin

Abstract: The Kesken-Kuyuk-Kala site (ancient Huvara), situated in southern Kazakhstan near the Lower Syr Darya River, was excavated during recent archaeological research conducted by Archaeological Expertise, Kazakhstan, under the sponsorship of the Swiss Society for the Exploration of Eurasia in Switzerland. This provided the opportunity to collect clear data related to the important, but still unknown, field of history and archaeology of the Oghuz or Oghuz-Kipchak culture.

The Oghuz and Turkmen tribes served as a core of the Oghuz and Seljuk state and played an important role in the history of Eurasia. They became an ethnic core of today's Turkmenistan, Azerbaijan, and Turkey.

Interesting and important artefacts were recovered during the complex archaeological investigations of ancient Huvara – one of the largest cities of the Oghuz tribes. Recent discoveries provide a strong basis for further interpretations and reconstructions of the different aspects of the Oghuz culture and life, and of the hidden pages of their early history.

Keywords: South Kazakhstan, Oghuz, Kesken-Kuyuk-Kala site, Medieval Huvara, marsh towns, Syr Darya.

Резюме: Комплексные археологические исследования городища Кескен Куюк кала, расположенного в Южном Казахстане в низовьях реки Сырдарья, проводились в рамках недавних археологических работ научно-исследовательской организации «Археологическая экспертиза» (Казахстан) при финансовой поддержке Общества по изучению Евразии (Швейцария). Многолетние работы позволили собрать важные материалы, связанные с таким значимым, но все еще недостаточно изученным сегментом истории и археологии, как огузская или огузско-кыпчакская культура.

Племена огузов и туркмен составляли ядро государства огузов и сельджуков и играли важнейшую роль в истории Евразии. Крайне велико их значение в формировании этнического состава таких современных народов, как турмены, азербайджанцы и турки.

Наиболее интересные и важные материалы были получены в ходе комплексных археологических исследований Хувары (городища Кескен Куюк кала) — одного из крупнейших городов, принадлежавших огузам. Недавние комплексные исследования обеспечили внушительный задел для последующих интерпретаций и реконструкций различных сторон культуры и быта огузских племен, а также сокрытых страниц их ранней истории.

Ключевые слова: Южный Казахстан, огузы, Кескен-Куюк кала, средневековая Хуvara, болотные города, Сырдарья.



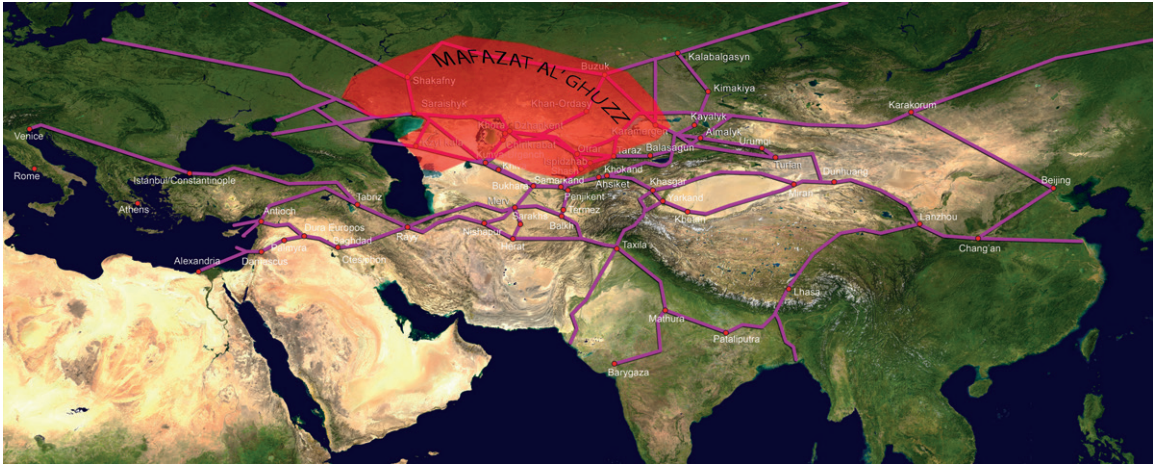


Fig. 1: Mafazat al' Guzz (Oghuz steppe) and Silk Road (© Dmitriy Voyakin).

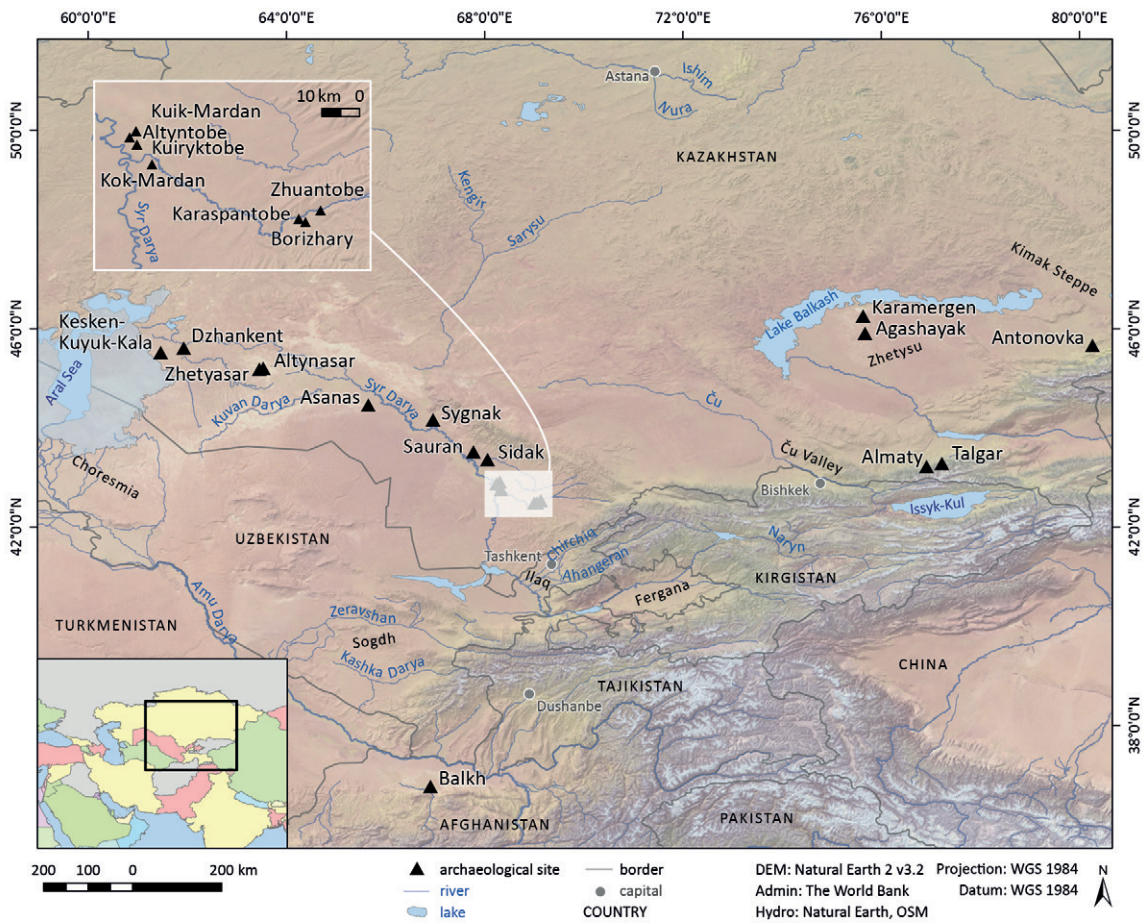


Fig. 2: Map with sites mentioned in the text (RUTISHAUSER/VOYAKIN 2022).

1 A brief overview of Oghuz historiography

The Medieval Oghuz presence in the modern territory of Kazakhstan spanned the 9th through 12th century CE. Those tribes eventually departed from today's modern Kazakhstan, heading to southern and western Central Asia (modern Iran, Afghanistan, Transcaucasia, and Anatolia), where they formed parts of the of Turkmen, Azeri, and Turkish peoples. Major groups of Oghuz origin also played a part in the formation of the Kazakhs, Uzbeks, Karakalpaks, Bashkir, and Tatars (AKIŠEV/BAJPAKOV/KUMEKOV 1996: 318–320).

From an archaeological perspective, the ruins of Yangikent (Dzhankent) (**Fig. 1**) – the Oghuz capital – have been especially well-known (MINORSKY 1982: 308). The site of Yangikent is located not far from Kazalinsk, in the Aral Sea region. This site has attracted the attention of explorers and excavations for quite some time. P.I. Lerkh examined the area in 1867. The artist Vereshagin conducted excavations in the following year. Members of the Turkestan Archeological coterie, V. Kallaur and V. Smirnof, also described the site (KALLAUR 2011). The interest aroused in the community at that time among the succeeding generations of Kazakhstan and Central Asia was so great that a well-known art historian of that time, V.V. Stasov, wrote in his review of the book by N. Simakov, *The Arts of Central Asia*, “Why couldn't the ancient city near Dzhankent be our Pompeii?” (AKIŠEV, K.A. ET AL. 1960: 10–11).

Even during the late 19th century, attempts were made to protect the site from destruction, of which V.V. Stasov wrote, “Military people who normally don't appreciate antiquities, are now interested in the ruins and reflecting on their importance for science. They detach guards to watch them and they seek to protect them... from any harm... Isn't that wonderful? Isn't that the most pleasant news we have?” (STASOV 1894: 192).

Many years later, during the middle of the 20th century, in 1945, S.P. Tolstov began to explore ancient Oghuz cities of the Aral Sea region. Tolstov was the leader of the Khoresm Archeological and Ethnographic Expedition of the Academy of Science of the USSR (TOLSTOV 1947: 55–102).

A new stage in exploring the Dzhankent site began in 2005 led by the efforts of archaeologists from the Margulan Institute of Archeology, under the Ministry of Education and Science of the Republic of Kazakhstan and Institute of Ethnography and Anthropology of the Academy of Science of the Russian Federation. This is quite appropriate, since during these past 60 years following the work of the Khoresm Archeological and Ethnographic Expedition, archaeologists have accumulated a vast array of material from excavations in Zhetyysu (also known

as Semirechye in south-eastern Kazakhstan). These sites include Talgar, Almaty, Antonovka, Agashayak, and Karamergen (**Fig. 1**). In the central Syr Darya region, the sites include Zhuan Tobe, Karaspantobe, Otrartobe, Kok-Mardan, Kuiryktobe, Altyntobe, Kuik-Mardan, Sidak, Sauran, and the Borizhary necropolis (**Fig. 1; Fig. 2**). In western Kazakhstan, the Aral Sea sites include the Zhetyasar monuments and Asanas (**Fig. 1**).

The dynamics of urbanisation in this region over the past two millennia have been examined; this ranges from the days of the Kangju to the days of the Kazakh Khanate, and includes the topography and development of sites explored, along with housing construction, handicrafts, and culture. Various issues concerning the ethnic composition of the populations during these periods have been raised (AKIŠEV/BAJPAKOV/ERZAKOVIČ 1972; AKIŠEV/BAJPAKOV/ERZAKOVIČ 1981; AKIŠEV/BAJPAKOV/ERZAKOVIČ 1987; BAJPAKOV 1986; BAJPAKOV 1998; BAJPAKOV/SMAGULOV/ERŽIGITOVA 2005; LEVINA 1971; LEVINA 1996; MAKSIMOVA ET AL. 1968; BURÁKOV 1982; SMAGULOV 2011; BAJPAKOV/VOÂKIN/UMARHODŽIEV 2010: 100–122). The collections of Kangar and Oghuz pottery have been identified (AKIŠEV/BAJPAKOV/ERZAKOVIČ 1972: 189–190; BAJPAKOV 1986: 58, 106, Figs. 12, 33; BAJPAKOV/ALDABERGENOV 2005: 115–117; BAJPAKOV/ERZAKOVIČ 1991: Figs. 58, 62–63). New materials and resources will assist in a return to the issue of the “Oghuz cities” and the so-called “Oghuz problem” raised by Sergei Agadžanov (AGADŽANOV 1969). Baipakov considers this issue of the “Oghuz towns” to be a part of the more global theme of the contrast between “the Town and the Steppe” (BAJPAKOV 2012: 12–25).

2 Geography and the Oghuz capitals

According to Yuri Bregel, the majority of the sedentary population of Central Asia was concentrated in five regions: the Zeravshan and the Kashka Darya River valleys, known as Soghd in pre-Islamic and early Islamic times; the Chorasmia area, which is located along the lower course of the Amu Darya River along with its delta; Fergana, which is the fertile basin in the middle course of the Syr Darya River; Chach, or Shash (modern Tashkent), together with Ilaq, located in the basin of the Chirchiq and the Angaran River, which are right (eastern) tributaries of the Syr Darya; and, finally, the area of Balkh, south of the Amu Darya River (**Fig. 1**). All the regions between the middle and upper course of the Amu Darya and the Syr Darya were known in Islamic times as “Mawar an-Nahr” (in simplified transcription, Mavarannahr) or literally “that which is beyond the River” (i.e. beyond the Amu). This corresponds to what classical authors referred to as “Transoxi-

ana" or "Transoxania" ("that which is beyond the Oxus"). The name Mavarannahr was used in Central Asia until as late as the early 20th century (BREGEL 2003: 2).

In contrast to the sedentary population, the steppe lands of Central Asia north of the Aral Sea and the Syr Darya became known to the Islamic geographers by the names of the nomadic peoples who were dominant in these vast steppes. Thus, beginning in the 8th century CE, the steppe region was called "Mafazat al' Ghuzz" ("the Steppe of the Ghuzz", i.e. Oghuz) and, beginning in the 11th century, it became "the Steppe of the Qipchaqs" ("Dasht-i Qipchaq" in Persian) (BREGEL 2003: 2).

Historical geographical data contained in al-Ishtakhrī's writing "Kitab Rudzhar" provide a means of determining the boundaries of the Oghuz territories of the 10th century. The Oghuz tribes inhabited the steppes of Kazakhstan from the southern Balkhash Region to the lower course of the Volga River (AGADŽANOV 1969). A rough outline of the Ghuz territory can be delineated between Khazar, Kimak, the Kharluk lands, the Bulgar, and the Islamic lands along the line extending from Jurjan (Gurgan), to Farab, to Ispijab (MINORSKY 1982: 312).

The Oghuz tribes did not comprise the majority of the population. They were most densely populated in the Aral Sea region, the northern Caspian Sea region, and the lower reaches of the Syr Darya. Individual groups of the Oghuz also inhabited Semirechye, where in the 10th century the Karluks and Kimeks prevailed among the local Turkic-speaking population. The Oghuz tribes who inhabited the southern Balkhash Region and the Ču (Fig. 1) riverbanks were autonomous and had their own leaders (BAJPAKOV 2007: 36).

The Islamic geographer Al-Idrisi described the cities of the Guzes: "The Guz's towns are many; they spread one after another to the north and to the east" (VOLIN/ROMASKEVIČ/ĀKUBOVSKIJ 1939: 311–312).

Yet, there is also other information stating that the Oghuz did not have cities at all. Thus, the book by the pseudonymous author "Hudud al-Alam" states: "The Guz's do not have one single town; however the people who have felt yurts, are very many" (VOLIN/ROMASKEVIČ/ĀKUBOVSKIJ 1939: 211; MINORSKY 1982: 312).

V.V. Bartold, trying to reconcile this conflicting information, believed that "Guz's towns" were founded not by the Oghuz themselves, who were nomads, but by other people groups, including Chorasmians. However, some nomadic Oghuz became sedentary (BARTOLD 1963b: 561), actually settling and inhabiting these towns.

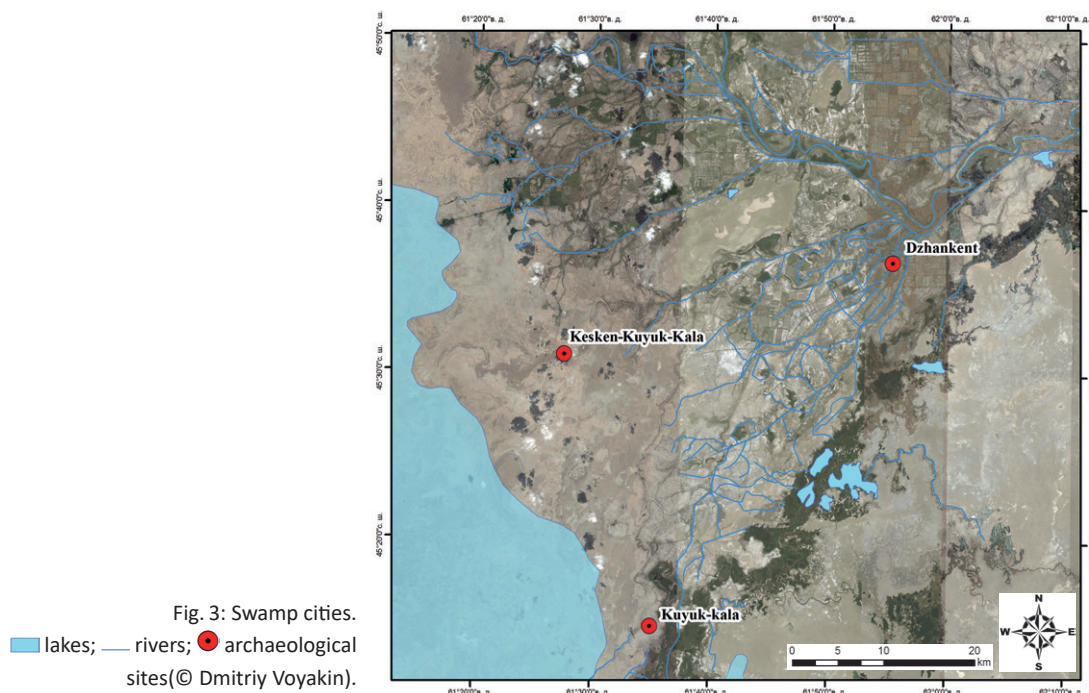
S.P. Tolstov was more specific on this issue, as he believed that the economic activity of the Aral region, including the Oghuz, was complex and, along with nomadism, they also developed agriculture,

which included sedentary and urban living. A number of scholars widely recognised this point of view; for example, "The cities of the Oghuz were established and developed long before the Oghuz and Turkmen actually came to these territories. One may only discuss the Oghuz period of their existence as the time when the Oghuz had political dominion over these territories and part of them became settled in towns. Habitation of the Oghuz population in the urban environment is documented by the presence of particular pottery which explorers consider to be specifically Oghuz" (BAJPAKOV 1986: 106, 121).

The Oghuz cities of Yangikent and Huvara (also known as Dzhuvvara or Hora) were situated in the lower reaches of the Syr Darya, not far from its mouth. In the *Kitab Rujar* (12th century CE), describing the country of the Oghuz, it talks about the Old and the New Guzia: "Between Hiyam and the Old Guzia," Idrisi writes, "[the distance] is four days run between the south and the west." Old Guzia is situated in the area that borders the western offshoots of the Tian Shan Mountains, the Ču River, the Syr Darya River, and Karatau Mountain range. Undoubtedly, the name of Old Guzia referred to the former "capital" of the Oghuz tribes. Obviously, it was one of the first residences of the Oghuz rulers. Idrisi also mentions New Guzia when describing the lower reaches of the Chach (Syr Darya) River. New Guzia was the political centre of the Oghuz state, where their "king" lived in winter. The city of Yangikent was called New Guzia, which was located in the lower reaches of the Syr Darya River. Other names of the city in Arabic and Persian sources were Yanikent, New City, al-Karyat of al-Khadis, Dikh-y Nau, and Sherkent. The origin of these names is most likely related to the Oghuz taking over political hegemony in the Syr Darya steppes. It was 10 days' travel from Yangikent to Khoresm, and 20 days' travel to Farab. Bread was brought down the Syr Darya from Mavarannakhr to Yangikent (AGADŽANOV 1969: 133).

In Medieval Arabic sources, one of the first references to Yangikent is found in the writings of Ibn Ruste – also known as Ibn Rustah. Describing the eastern shore of Lake Khoresm, he talks about a "king" of the new settlement. Ibn Haukal gives some interesting information about Yangikent. In his historical and geographical writings, he directly refers to the new settlement as a capital of the Oghuz state. He states that Yangikent was the largest community in the lower reaches of Syr Darya (BARTOLD 1963a: 235).

Two key factors played a role in the choice of New Guzia as a political centre of the Oghuz empire. First was the advantageous geographical location of Yangikent at the interface of the large agricultural oases of modern Kazakhstan and Central Asia. Second, New Guzia served as a corridor that connected the Oghuz steppes with Khoresm, Mavarannakhr, and Khorasan. Yangikent was located on an import-



ant caravan trail via the Kimak steppes to the valleys of Sarysu, Kengir, Ishim, and Nura (**Fig. 1**). The road connected the trade routes that led to Sygnak and onward toward the Southern Urals.

According to written sources, the city of Yangikent was taken over by a Mongolian column led by Dzhuchi in 1220 CE. Unlike Sygnak, Ashnas, and Barchkent, whose inhabitants resisted the Mongols and were destroyed, Yangikent submitted and thus avoided a massacre of its population (BARTOL'D 1963a: 483).

According to written sources, the city of Huvara (Dzhuvara or Hora) was located not far from Yangikent. While the locality of Yangikent is not in doubt, the problem of identifying Huvara (Dzhuvara, Hora) was unresolved for a long time. K.M. Baipakov placed it near the Khorkut-Ata mausoleum (BAJPAKOV 1986: 28). However, that opinion has changed. Now it is thought that the city corresponds to one of the "marsh town sites" of either Kesken-Kuyuk-Kala or Kuyuk-Kala – most likely, the former. These ruins of a large city with complicated topography and much excavated material allow for a chronological lifespan between the 1st and 11th century CE (LEVINA 1972: 76–89).

Additionally, the city of Havran was mentioned by Ammian Marcellin in the last quarter of 4th century CE, on the Lower Syr Darya, along with the cities of Aspabota and Spaga. This information is provided by a well-known Turkologist, Y.A. Zuev, and he connects this city with the Yuedzhi (ZUEV 1995: 42–43).

3 A general description of the Kesken-Kuyuk-Kala site and its topography

The so-called "Yangikent Group" (TOLSTOV 1947: 57) of ancient cities (Yangikent, Kesken-Kuyuk-Kala, Big Kuyuk-Kala, and Small Kuyuk-Kala) is located on a peninsula or, to be more precise, on an island that is enclosed by the Syr Darya to the north, by the Aral Sea in the west, and by a strip of swamps and flooded marshes in the east that are fed by the old Kuvan-Darya stream (**Fig. 1**). The island is covered with a diversity of distinct and, for the most part, overgrown dry creek beds that divide the island into multiple smaller islands (**Fig. 3**).

The ancient site of Kesken-Kuyuk-Kala is the largest of the so-called "marsh towns" (TOLSTOV 1947; TOLSTOV 1962) and is located on the southern bank of an ancient delta, which is currently dry and thickly overgrown.

Kesken-Kuyuk-Kala was first discovered in 1946 by the expedition of Sergei Tolstov, who included this city with Dzhan Kent and Big Kuyuk-Kala within the culture of the so-called "marsh" or "swamp cities" (TOLSTOV 1947: 57–65). In 1958, second reconnaissance and field collection was implemented at the Kesken-Kuyuk-Kala site by Moscow biologist V.M. Smirin. Careful reconnaissance and first trial excavations (under the supervision of Bella Vajnberg) took place in 1963 (ANDRIANOV 1969: 207–208; LEVINA 1971: 77). A new stage of brief reconnaissance of the region's archaeological sites, including Kesken-Kuyuk-Kala, and archaeological exploration

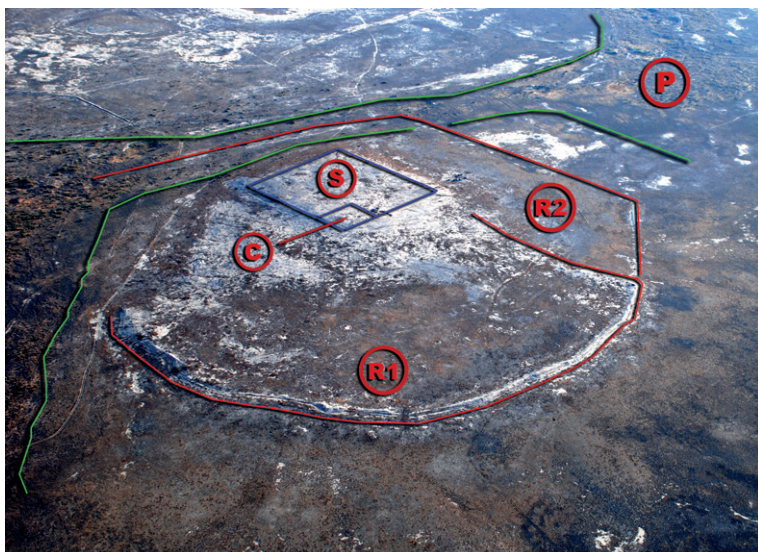


Fig. 4: Kesken-Kuyuk-Kala. Aerophoto. C – Citadel; S – *Shahristan*; R – *Rabad*; P – The riverbed (© Dmitriy Voyakin).

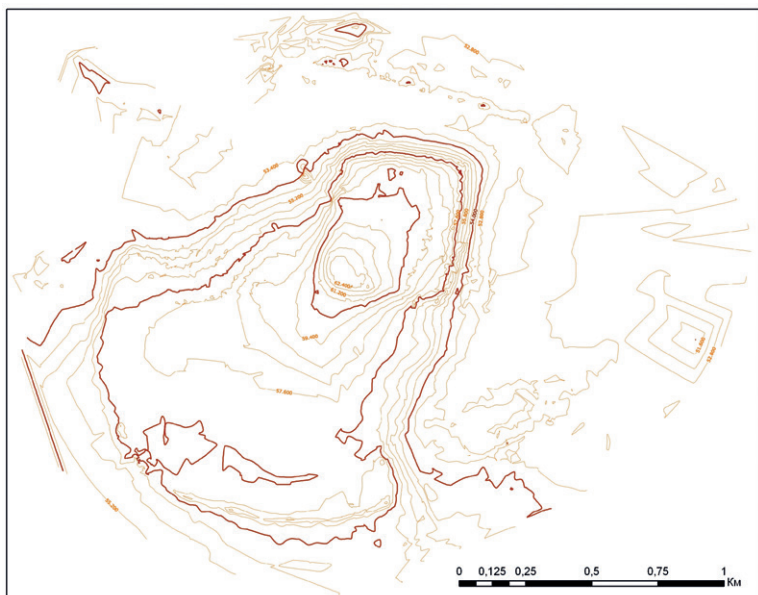


Fig. 5: Kesken-Kuyuk-Kala. Topography (© Dmitriy Voyakin).

of the Dzhan Kent site was begun in 2005 by archaeologists of the Institute of Archeology named after A.Kh. Margulan, under the Ministry of Education and Science of the Republic of Kazakhstan, Kyzylorda State University named after Korkyt Ata, and the Institute of Ethnography and Anthropology named after Mikluho-Maklay of the Academy of Science of the Russian Federation (KURMANKULOV ET AL. 2007: 4–6). Archaeological reconnaissance and excavation of the Kesken-Kuyuk-Kala site has been implemented by Archaeological Expertise LLC since 2006, with financial support from the Society for the Exploration of EurAsia, Switzerland.

Following the curve of the city's external walls, the site of the ancient town takes the form of an irregularly rounded outline (TOLSTOV 1947: 62, Fig. 8). The size of the site follows a north-south line measuring 840 m and a west-east line measuring 820 m, providing a total area of over 530,000 m².

The site is structurally divided into three main parts. There is a central part, which S.P. Tolstov calls a "citadel" (TOLSTOV 1947: 62), and two vast sections surrounded by a ring of irregularly shaped walls. A central mound of 230 m north to south by 210 m west to east is surrounded by the walls, which gives it a square outline. This area, which overlooks the surrounding country at a height of 5–10 m, can in turn be divided into two parts: the citadel itself, located in the south-west quarter of the central mound, and the *shahristan*, which surrounds the citadel from its northern and eastern sides (Fig. 4).

The citadel does not stand out as the main structural element of the site because it cannot be distinguished visually, either from the surface or through the aerial photography. Due to a detailed topographic survey and further graphimetric plotting, it becomes obvious that on the general surface of the central mound such a unit as the citadel can be

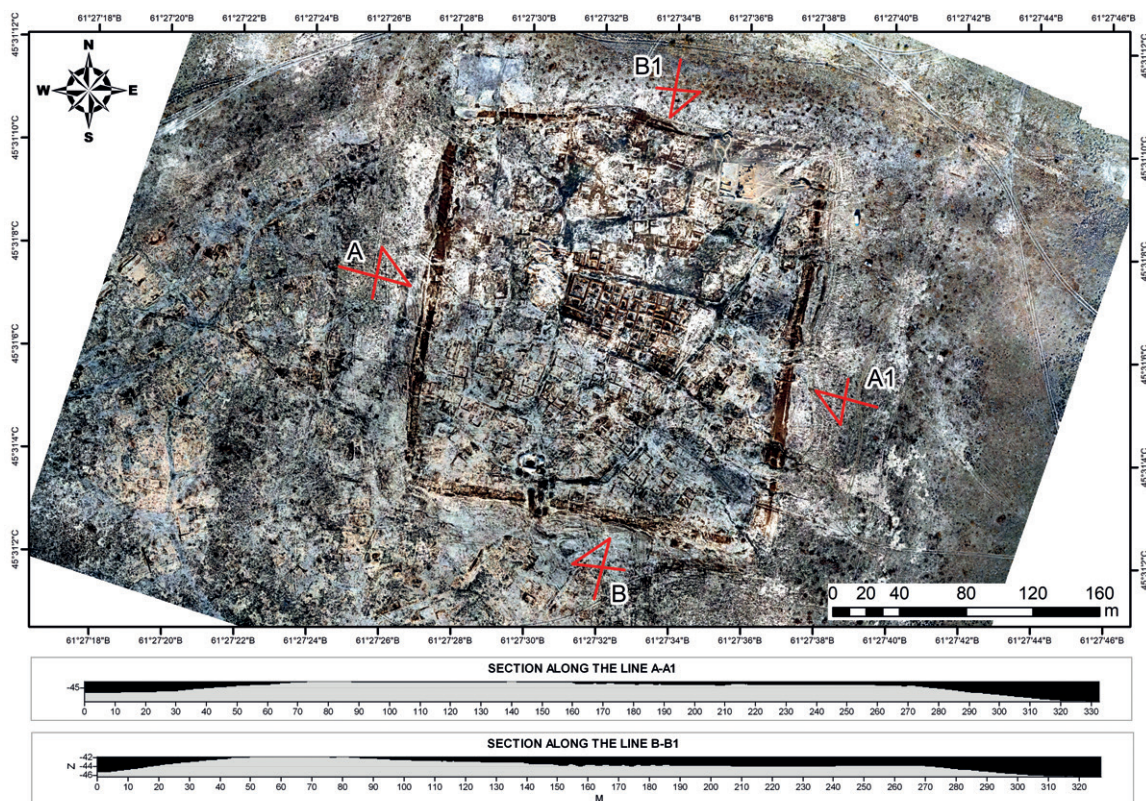


Fig. 6: Kesken-Kuyuk-Kala. *Shahristan* cross sections (© Dmitriy Voyakin).

determined after all. Severely dispersed and eroded citadel walls, along with the current insignificant height of these walls (approximately 1 m), have been hiding the citadel on the surface of the central mound. On a topographical model, the citadel reveals itself as a quadratic construction with dimensions of 55–60 × 55–60 m. Its height, as mentioned earlier, is ca. 1 m (Fig. 5). A modern geodesic trigger point station was set at the highest elevation in the south-west corner of the citadel.

The territory of the *shahristan*, located on the central mound, represents a surface that was levelled due to natural factors. At one time, the surface contained a clear construction plan, which can be easily distinguished by the lines of buildings, streets, and alleyway constructions. The most elevated part of the *shahristan* directly adjoins the citadel, whose absolute height at this point comes to 61.5 m. There is a significant degradation of the terrain, dropping to a point of 59–58 m as it moves along toward the external walls – see cross sections in Fig. 6.

The construction of the citadel and *shahristan* was compact. As previous research has noted, the citadel of the ancient site is entirely built up with easily distinguishable premises, yet with an irregular design. There is an encircling corridor, ca. 1.5 m wide (Tolstov 1947: 63–64), which proceeds along the perimeter of the peripheral part of the mound's central square. According to the architectural layout

of the central mound, which incorporates the citadel and *shahristan*, and based on aerial photographic evidence, one can see the division of the square in the central part of the city into approximately 15 sections (blocks). The south-western section includes the abovementioned citadel. Streets and alleys delineate these sections, which makes them distinct in both area and shape. On average, the area covered by one section is approximately 3,000–4,000 m² (see detailed description below). The central street actually crosses the centre of the site, dividing it into two major parts. The width of the street is 3–4 m to 5–5.5 m.

The main street runs parallel to the northern and southern walls of the central mound, but is off-centre in the northern direction, lying 135 m to the north from the southern wall and 90 m to the south from the northern wall. The beginning of this central street is traced to the centre of the western wall, where the main entrance to the territory of the *shahristan* was possibly located. However, based on the street's topology visible on an aero orthophoto mosaic there are two other possible entrances arranged in the north-western and north-eastern corners. Moreover, a rectangular platform of compact clay measuring 33.5 × 50 m is attached from the outside of the north-western corner of the outer wall; it provides indirect evidence that an additional fortification structure was located near to the main gate.

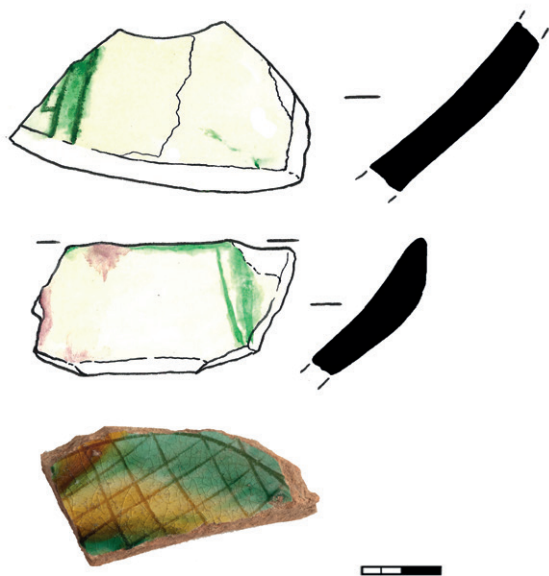


Fig. 7: Glazed pottery, 12th to 13th century CE. Upper level (drawings and photo © Dmitriy Voyakin).

In the eastern part of *shahristan*, not far from the eastern wall, the central street, in a T-shape, joins a street that follows a south-westerly to north-easterly line. There are at least two other streets diverging from the central street northward and southward. The same situation with sector divisions by streets can be traced in the northern and southern parts of the central mound – except for the south-west quarter, which is occupied by the citadel. The sections are compactly built up with structures that differ in floor space. Among these are some larger ones, which particularly stand out, containing a floor space of 300–400 m².

There is an ash occupation layer that appears on the surface of the site, which also abounds with various pottery, metal ware, and numerous animal bones. An abundance of osteological material marks this site as enormously different from other marsh towns (TOLSTOV 1947: 64). The *rabad* surrounds the central mound (citadel and *shahristan*) and is clearly outlined by an external defensive wall. It consists of two parts. The first is located toward the south by south-east, and eastward from the central mound. For research purposes, this part of the site is designated “*Rabad 1*”. *Rabad 1* has an irregular shape. The northern and north-western parts of this *rabad* are eroded from the waters of the ancient delta branch. The total floor space of *Rabad 1* equals 317,000 m². The territory of the *rabad*, which adjoins the central mound on the south and the west, is elevated by a general outlay of the ground from between 5–7 m (with an absolute altitude of 58.4 to 59 m). Its space is 90,000 m². A wall extending in a north-south line on the eastern side divides the territories of *Rabad 1* and *Rabad 2*.

“*Rabad 2*” occupies the territory located toward the eastern, north-eastern, and northern sections from the central mound. The straight lines of the external walls of *Rabad 2*, unlike the undulating walls of *Rabad 1*, form its square contour. The area of *Rabad 2* exceeds 150,000 m². It represents a flat surface without any significant traces of former development. Its elevation of 52.5 m indicates a significant degradation of the terrain in that section, even in comparison with the lowest mark of *Rabad 1*, which is 57 m above sea level. The northern part of *Rabad 2* is damaged by water erosion from creek waters and the wall in this section that extended along a west-east line has been partly preserved. However, despite this damage, outlines of towers are clearly delineated as they are visible on the surface in the form of mounds some 7–9 m in diameter and 1–1.5 m high. The distance between the towers is 20–25 m. It is possible that this part of the wall was constructed parallel to the delta of the creek, which would take into account its location, and at one time it rose above its waters, which created an additional obstacle for defensive purposes.

All the external walls of the site were apparently laid of mudbricks, which are well-traced in some places on the surface (brick size is 33 × 33 × ? cm). The walls were fortified with towers and can be traced along the wall; they are still 0.6–1.2 m high and are ca. 10–13 m in diameter. The towers can be discerned in the form of severely water eroded mounds. The average distance between the towers is 20 to 25 m, which was also noted for the northern wall of *Rabad 1*.

Apparently, during the 12th to 13th century CE, after the partial desolation of the city, there were pottery kilns arranged along some places on the walls; this is evident from distinctive holes and a concentration of ceramic ash and of green enamel pottery fragments (Fig. 7).

4 Chronology and stratigraphy

According to the data of the Khorasm Archeological and Ethnographic Expedition, the dating of these “marsh towns” may be defined chronologically as beginning from the middle of the 1st millennium BCE when the first settlements appeared on the sites of what became future cities. These settlements were forerunners from the Bronze Age and eventually resulted in a period of the more developed Middle Ages, which date to the 11th and 12th century CE (TOLSTOV 1947). Later, the range of dates from the Medieval period was clarified, based mostly on the numismatic findings and delineated as appearing at the end of the 7th and the beginning of the 8th century CE (LEVINA 1971: 78; VAJNBERG 1999: 293). According to the artefacts’ relative dating, conducted by Larisa Levina, the 8th to 9th century CE



Fig. 8: Surface finds. Uppermost denudated level. Metal (drawings © Dmitriy Voyakin).

are the most evident dates for the existence of Kesken-Kuyuk-Kala with probable partial overlapping in the 7th and 10th century CE (LEVINA 1971: 78).

There are two main areas that have provided the upper layers of the stratigraphic sequence. First is the excavation itself in the territory of the *shahristan* and second is the stratigraphic trench situated north-east of the citadel.

The first layer (the uppermost or current, modern surface) is a heavily disturbed cultural layer, which most probably belongs at the latest to the 11th century CE. Due to erosion (denudation process), this layer is saturated with numerous finds and bones (Fig. 8). The first scholars who investigated the site described the unusual presence of an enormous amount of animal bones, even in compar-

ison with neighbouring sites such as Dzhan Kent and Kuyuk-Kala (TOLSTOV 1947).

Several radiocarbon measurements were conducted on organic samples excavated from the site at Kesken-Kuyuk-Kala. One piece of charcoal excavated from mudbrick debris, which could possibly belong to the second building horizon, considered to be the period of destruction and abandonment, was dated to 1136 ± 35 BP, giving it a calendar date of 780–990 CE. A bone from the same layer, and above the floor in the room with four columns, belongs to the second well-preserved horizon (see below) dated to 1277 ± 44 BP, which corresponds to 660–870 CE, within a 2-sigma probability range.

Thus, the calendar dates of the second building horizon are between the 7th and the late 10th century CE. A 9th to 10th century CE dating appears to be

more appropriate based on the ceramic collection, which revealed rare, white glaze pottery sherds.

Based upon this information, the uppermost layer, or the first building horizon, could belong to the 11th century CE. In a recently published preliminary article, a dating of the 13th century was mentioned as the last chronological period of habitation (BAIPAKOV/VOYAKIN/ILIN 2012: 42). This information, however, is based only on some surface finds of green or greenish-yellow glazed pottery, which is traditionally associated with the 13th century and, therefore, could not be taken *a priori* as convincing evidence.

Later, three more samples, which were taken from the midden pits revealed during the excavation and which could belong to either the second building horizon or to the first one, shed light on the question of the latest habitation period. The first sample is a piece of wood (charcoal) with a radiocarbon age of 1239 ± 27 BP, which corresponds to a calendar date of 780–877 CE. The second sample is a fish bone that gave a radiocarbon age of 1386 ± 29 BP, which corresponds to the calendar date of 605–675 CE. The third sample is an animal bone dated 1123 ± 41 BP, corresponding to a calendar date of 799–995 CE. As is easily recognisable, the late 10th century CE is the uppermost chronological border shown by C14 analysis. This data confirms the abovementioned possible activities within the borders of Kesken-Kuyuk-Kala, with the 11th century CE being the latest possible date. The upper chronological limits are similar to those mentioned by L. Levina's work, in which she stated that the site existed during a period from the 1st century CE until the 11th century CE (LEVINA 1971: 76–89).

However, one clarification concerning the second sample, that of the fish bone, should be made since fish are often at a higher trophic level than terrestrial food. The early date of the 7th century CE could correspond to the so-called "reservoir effect", which may affect the results and which provides an earlier date than the actual one. The fish or fish consumers would on average be expected to exhibit older C14 ages than the samples due to this "reservoir effect" (MOTUZAITE ET AL. 2015: 28).

The third building horizon was investigated in some excavation areas. This horizon is the best-preserved one in comparison with the first and second horizons described above, and consequently could be dated to a time period earlier than the 8th or 9th century CE.

5 Archaeological investigation of the *shahristan* block of buildings

From the very beginning it should be mentioned that, as in many other Central Asian Medieval cities, the *shahristan* area had developed following compact planning (ANARBAEV 1981). Within the city walls there were no places for farmsteads. The characteristic of the Kesken-Kuyuk-Kala urban planning is therefore its dense building, not farmsteads as was supposed by some former scholars (TOLSTOV 1962; SUHAREVA 1958: 332). Main (or "magistral" – after ANARBAEV 1981: 61) and "block" streets (or lanes) divided the city *shahristan* into several blocks of buildings. There are approximately 15 blocks belonging to the uppermost horizon that could be marked out in an aerophoto (Fig. 9).

The first block (or citadel) covers an area of 3,550 m² and is located, as mentioned above, in the south-west corner of *shahristan*. The second block is to the north of the first one and has an area of 3,287 m². The fourth, fifth, and sixth blocks prolongate further north and occupy 1500, 665, and 789 m², respectively. Another block of buildings stretching along the western outer wall and covering an area of 3,751 m² separates it from blocks 2, 4, 5, and 6. Three large-sized blocks, numbered 8 (4,360 m²), 9 (3,718 m²), and 10 (4,000 m²), form the central part of the *shahristan*. Main streets sharply outline their boundaries. Block #11 is situated to the north of #10 and has an area of 987 m². Block #14 attaches to block #10 from the east, with an area of 1,667 m². The twelfth block of buildings seems to be incongruent to the third one; it marks a territory of ca. 1,000 m² and stretches along the northern outer wall. Block #7 is 3,440 m² and is situated near to the south-east corner of the *shahristan*. Further to the north, an area of 6,470 m² consists of several blocks which, due to some vague lines of streets and buildings, cannot be decoded clearly from an aero orthophoto.

There is only one case in which we could trace a room constructed in the outer western wall masonry. The size of the room is 3.3 × 4 m.

There are three main streets of 3–5 m in width: two of them are parallel, and linked the south and north parts of the city; and one connected the western and eastern parts. These streets differ from other inner streets by their sharper relief and bigger sizes. Other streets most probably could be interpreted as inner streets within the blocks. All of the streets are distinguished from other areas by their dark greyish colour, which is due to the usage of ash, pottery sherds, and other waste materials to prevent the deep mud that occurs each spring and autumn.

The block of buildings that was chosen for the investigation was situated in the central part of the

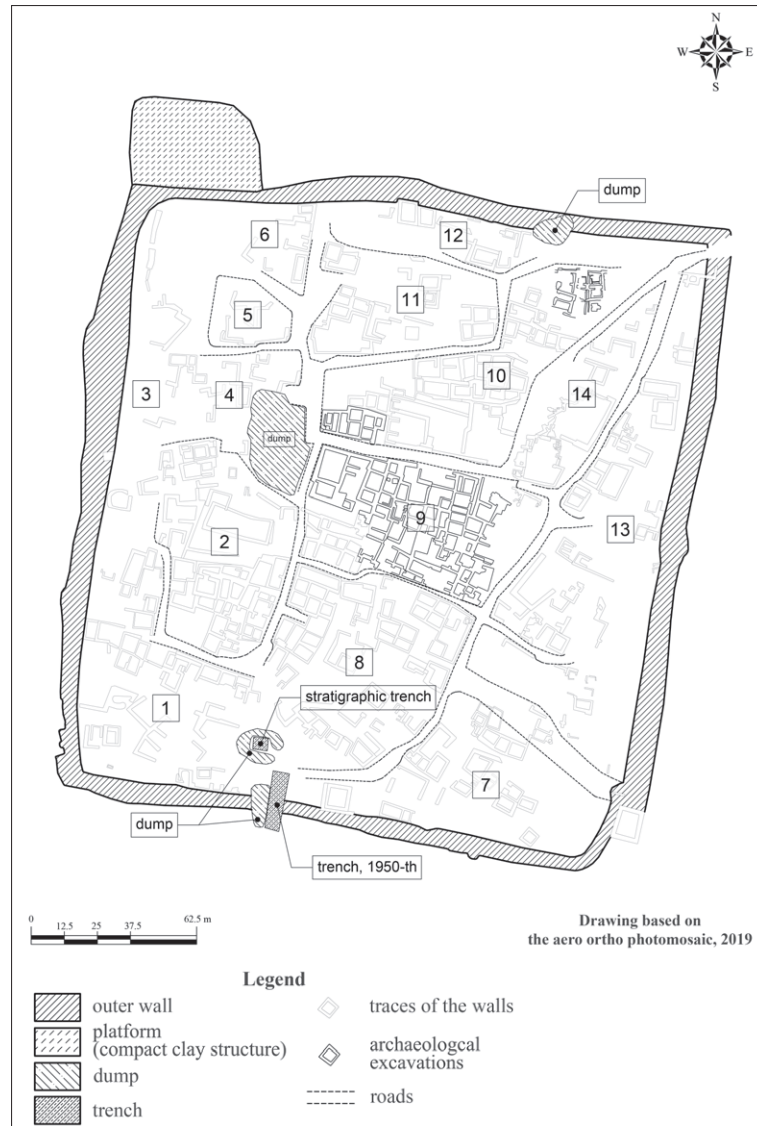


Fig. 9: *Shahrستان* of Kesken-Kuyuk-Kala. Drawing based on aero ortho photomosaic (© Dmitriy Voyakin).

shahrستان, surrounded by four streets that formed the shape of a scalene quadrangle (270 m east-west by 100 m north-south in the most western part, and 140 m north-south in the most eastern part; total area ca. 3,100 m²). Here it should be noted, briefly, that analogous blocks from Kuiryktobe (Fig. 1) in the Middle Syr Darya belong to the 11th to 12th century CE and, fully excavated, had an area of ca. 700–1,000 m² each (BAJPAKOV 2013: 173) – but, at the same time, the areas of blocks of buildings at Afrasiab (Samarkand) belonging the period from before the Arab invasion and the following centuries were planned as big combined areas measuring from 5,500 to 10,000 m² (ŠIŠKINA 1973: 156). The reason that the block of residential area chosen for further investigation is clearly visible on the aero-photo is the two so-called main *shahrستان* streets; one of them (eastern border) diagonally connects the south and east-north entrances and another

(southern border) links the east and west entrances. Two other streets, which delimited the block from the north and west, are not so distinct in surface relief.

Over the excavation period, a total of ca. 60 rooms of the block of buildings #9 were revealed (Fig. 10). The reason why the number is not clear is that some of the rooms' walls were either rebuilt or dismantled – and due to these actions it is almost impossible to define some of them. According to Baipakov, at least one temple and two houses could be distinguished in the block of buildings; at the same time, the author did not provide any explanation as to why such a division was made (BAJPAKOV 2013: 164–171).

Housing development, as already mentioned, is very dense without any divisions or markers to separate households or houses. Usually, the best markers are inner streets (lanes) and courtyards (BAJPAKOV 1990: 23), as well as passes or doors be-

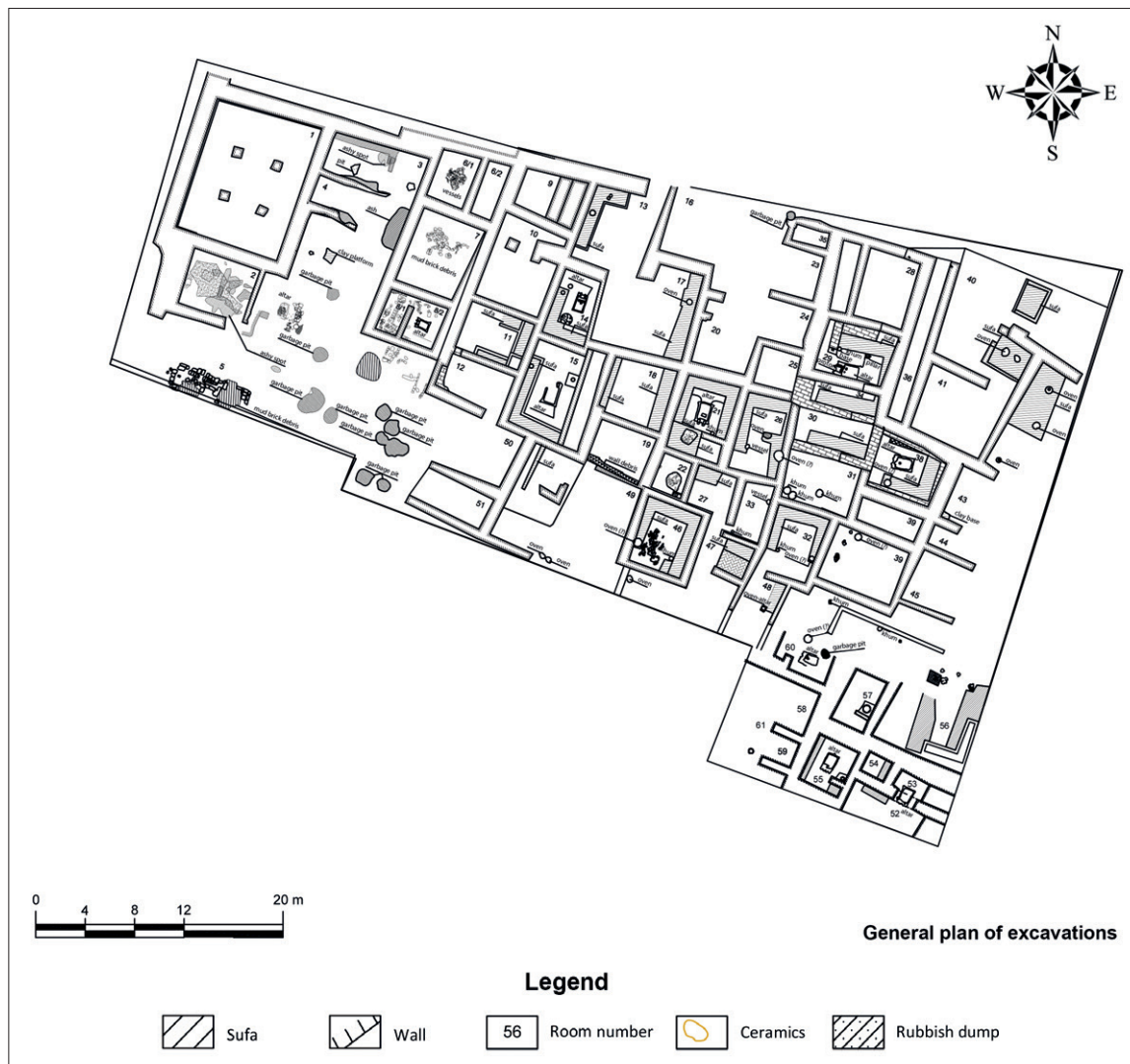


Fig. 10: *Shahristan* of Kesken-Kuyuk-Kala. Excavation plan (© Dmitriy Voyakin).

tween rooms; but in the case of Kesken-Kuyuk-Kala neither street nor courtyard and inner passes could be found in between separate households. However, altars and “main” or long walls that combine several rooms could give at a least general understanding of how many households could be marked out within an excavated block.

It is assumed that the ceiling of the complex was flat and rested on the wall, and that in large premises it was supported by adobe or wooden pillars. The entire ceiling was covered with a thatched roof, with its remains found on the floor. Walls were carefully plastered with clay plastering. In the majority of premises, the waterproof clay coating of floors has been preserved (see **Table 1**: Spectral analysis results).

Results showed that the brick (adobe) masonry and column foundation were made of material similar in composition. The soil samples belong to local loess. Floor plastering is differentiated from

the abovementioned materials by its chemical composition: it consists of high levels of heavy metals: vanadium, strontium, copper, and others (see **Table 1**). This fact indicates that heavier clays (palaeogene and neogene) were added to the local clays (soils). It could be also noted that the heavier clays possess higher water resistance characteristics.

In the centres of 10 rooms, altars were found – rectangular “sandal hearths” in the floor decorated with sheep head *protomai* (**Fig. 11**). In general, rooms with an altar are characterised by the presence of *sufas* (five rooms), and different vessels (four rooms); four altars were oriented west-east and six north-south.

There is still a lack of data for analysing the demographical situation (BURÁKOV 1982: 173). Based on the close analogy of the Kuiryktobe site, which was intensively excavated in the area of the *shahristan* that was five hectares (the same size as Kesken-Kuyuk-Kala) with a population density

#	Sample #	Title	Content of elements																											
			Cu	Pb	Zn	Ni	Co	V	Cr	Mo	Sn	Sb	As	Cd	Tl	Se	Ba	Sr	Au	Ag	Si	Al	Ca	Na	Mg	Ti	Mn	K	Fe	
			10 ⁻³	10 ⁻³	10 ⁻³	10 ⁻³	10 ⁻³	10 ⁻³	10 ⁻³	10 ⁻⁴	10 ⁻⁴	10 ⁻³	10 ⁻³	10 ⁻²	10 ⁻³	10 ⁻³	10 ⁻⁴	10 ⁻⁴	10 ⁻²	10 ⁻²	10 ⁻⁴	10 ⁻⁴	10 ⁻³	10 ⁻³	10 ⁻²	10 ⁻⁰	10 ⁻⁰	10 ⁻²	10 ⁻²	10 ⁻⁰
		Mean concentration in earth's crust	4,7	1,6	8,3	5,8	1,6	9,0	8,3	1,1	2,5	0,002	0,5	0,047	0,1	3,8	6,5	3,4	0,0047	0,07										
1	1a	Brick masonry	2	0,5	3	0,5	0,5	3	1,5	-	-	-	-	-	-	-	-	2	-	-	≥1	≤100	0,500	≥1	1	5	1,5	1	1	
2	2a	Trench 1	2,5	0,5	5	1	0,7	5	2	1	-	-	-	-	-	-	1	3,5	-	-	≥1	≥100	≥1	≥1	15	10	1	1	≥1	
3	3a	D1	3,5	0,5	3	2	1	7	7,5	1	-	-	-	-	-	-	1,5	3	-	-	≥1	≥100	≥1	≥1	30	10	1	1	≥1	

Table 1: Spectral analysis results based on soil samples of floor plastering, adobe masonry, and column foundation.

based on 1 hectare with 320–380 persons, the total number for all people who lived in the *shahristan* territory numbered ca. 2,000 (BAJPAKOV 2013: 178).

Scholars have underlined the similarity between the blocks of buildings of the Middle Syr Darya (Medieval towns of Otrar oasis, Karatobe) – the Otrar-Karatau archaeological culture, and the Lower Syr Darya – the Dzhetyasar archaeological culture, which are both rooted in the Syrdarya Kangui culture (BAJPAKOV 1994: 26–27; BAJPAKOV 2013: 178).

6 Coins and iconography

During the first reconnaissance and archaeological investigations, several coins of the Turgesh (8th century CE), Chinese – Tang (7th century CE), and Bukhar-Khudat and Samanid types (8th century CE) were collected at Kuyuk-Kesken-Kala (LEVINA 1971: 78; KURMANKULOV ET AL. 2007: 51).

The history of Chorasmia as well as its numismatic aspect were well investigated and reflected in the works of Sergei Tolstov (TOLSTOV 1938; TOLSTOV 1962) and Bella Vajnberg (VAJNBERG 1977). At the same time, there are evidently knowledge gaps in the investigation of the monetary circulation that existed between the well-known cultural centres of the Arab Caliphate, such as Mavarannahr, part of south Kazakhstan, and Chroesmia, and one of the most important outskirts of Mavarannahr, the Lower Syr Darya or Eastern Aral region (GONČAROV/NASTIČ 2013b: 80).

Sixteen silver coins collected from the surface show a new type of mint only recently found in the territory of “marsh (swamp) cities” (GONČAROV/NASTIČ 2013a; GONČAROV/NASTIČ 2013b).

These coins are designed like Afrigid drachms, but they differ in their Arabic letter legends on the reverse and avers sides. The avers side of the coin shows a man in profile turned to the right wearing a crown with big pearls on his head; he also wears earrings and a pearl necklace on his long back ribbons. Analyses and interpretation of the types of crowns was provided by Vajnberg, who interpreted some of them as a symbolic personification of the camel-god (VAJNBERG 1973). Expressive facial features are traced on each mint: a big nose and big eyes, and an easily recognisable moustache – but without a beard. The tradition of wearing a moustache was widespread among Turkic tribes in the 7th to 8th century CE (ÂCENKO 2013: 419). On the reverse side of the coin, a large riding horseman is depicted – named the “traditional Chorasmian rider” by Vajnberg (VAJNBERG 1977: 92). In his left outstretched arm, the rider is holding a long tool – this could be interpreted as a rod or whip (GONČAROV/NASTIČ 2013b: 82) or a standard (VAJNBERG 1973: 104, Fig. 1:25–30). On the right side of the horse, close to the rider’s right leg, a rectangular-shaped quiver



Fig. 11: Kesken-Kuyuk-Kala. Altar with *protome* in the form of a ram head in Room 29 (© Dmitriy Voyakin).

with arrows is strapped to the saddle(?). With his right arm, the rider holds pulled reins (**Fig. 12:1**).

The rider's suit is shown in good detail. Some data concerning suits of early Turks was collected and analysed by Sergei Yatsenko, who mentioned that Oghuz coins are a valuable source of information about the suits – although further scientific study of them is required (ÂCENKO 2013: 413). The crown seems remarkably similar to the one shown on the avers side of the coin. A slim-fitting caftan with tight sleeves and roundish collar is overlapped left to right and strapped tightly by a belt on the waist. Wearing a tightly belted suit was fashionable (ÂCENKO 2013: 421). As mentioned by Yatsenko, the small lapels visible on the Oghuz coins appeared in the 9th CE as a new suit detail (ÂCENKO 2013: 421); however, according to our observation, they could be traced only on one sample, published by Goncharov and Nastich (GONČAROV/NASTIČ 2013b: 83, Fig. 2), while other coins do not show such a feature. Another doubtful statement made by Yatsenko – that a massive *hryvna* (torque) instead of a necklace is another specific feature traceable on Oghuz suits of the 9th century (ÂCENKO 2013: 421) – seems to be based on an incorrect interpretation of the roundish or straight collar. Wide trousers feature excess material at the bottom (lower leg). The horseman depicted wears short boots(?) with oblong toes.

The horse harness is richly decorated. The richness of the horse harness is achieved by the depiction of numerous roundish pearls, which in reality were the bronze plate pendants attached to the leather straps. The bristling mane is shortly trimmed. One coin features two horse riders, but this double-minted picture seems to have been made inadvertently by double stamping (**Fig. 12:2**).

All the revealed types of coins with Arabic script and Kufic calligraphy (firstly mentioned as two types by Vajnberg (VAJNBURG 1977: 62)) could be divided into three main groups (GONČAROV/NASTIČ 2013b: 82–86). Here it needs to be mentioned that all of these coins originated from the sites situated

on the left bank of the Syr Darya River, closer to its delta, and they have not been found in any other territories of the Aral region (GONČAROV/NASTIČ 2013b: 90). The 16 Kesken-Kuyuk-Kala coins are very similar to the abovementioned groups, but they have still not been read by numismatists. All three groups of coins belong to the mint of Oghuz Yabgu and are unique types of coins that will open up a new area of Arabic-Oghuz numismatics (GONČAROV/NASTIČ 2013b: 90). The names, rulers' titles, and minting centres of Oghuz on the coins will provide a wide range of information for the further investigations and interpretations in the field of history and archaeology in the near future. Based on current research and published results, crucial points of the complicated questions regarding the Syr Darya region's history are already being elucidated (GONČAROV/NASTIČ 2013b: 89). The published coin types belong to the 9th century CE and indirectly indicate that the Oghuz state appeared during the first part of the 9th century (GONČAROV/NASTIČ 2013b: 88), and not at the end of 9th century CE as traditionally accepted by scholars who follow Agadžanov (AGADŽANOV 1969).

A prominent discovery was made during the reading of one of the coin's inscriptions: 1. "Jabuiya (or Yabgu) – the king of Ghuz" and 2. the toponym or the name of the city where the coin was minted – "H.r.v." or "Dzh.r.v." (Huvara or Dzhuvara) (GONČAROV/NASTIČ 2013b: 90). This information matches with Ibn Haukal, who wrote about the new settlement that is the capital of Ghuz and two cities nearby – Dzhend and Hora (or Huvara or Dzhuvara) (VOLIN/ROMASKEVIČ/ÂKUBOVSKIY 1939: 183); and it also matches with al-Idrisi's map (Tabula Rogeriana), which indirectly supports the assumption that Huvara is identical with modern Kesken-Kuyuk-Kala (BAJPAKOV/VOÂKIN 2007: 96).

It is very interesting to compare the suit of the riders minted in detail on the coins with the suit of a bronze plate man figurine found on the surface

of Kesken-Kuyuk-Kala. The bronze plate figurine is $2.2 \times 2.5 \times 0.2$ cm in size; it is in relief from the right side and concave from the back side. It was made by melting in a mould. The right side shows a small suit and anatomic details; the head is broken off. The figurine shows a man dressed in a tightly cut, slim, long (slightly below the knees) caftan or robe with tight sleeves. No lapels are visible. Two parallel lines in the torso's centre show the wrap of the robe (apparently the left side covered the right). The trousers are hardly discernable, but they are definitely not wide. The shoes are not long; they are depicted rather like short boots. The depicted man displays his genitalia by drawing apart the caftan's skirts in different directions, using two hands right under the waistband (Fig. 13).

Larisa Levina interprets stone, wood, and figurine-mouldings showing naked men on pottery as idols; based on the materials from excavations of the Dzhetyasar necropolis (Dzhetyasar oasis is the territory situated south of Baikonur, Lower Syr Darya River), the earliest of them dates to no later than the 4th century CE. When comparing them with bronze figurines belonging to a later period (7th century CE), Levina interprets them as evidence of a phallic cult (LEVINA 1971: 61–63, Fig. 14). The chronological average of the Dzhetyasar bronze anthropomorphic figures is quite wide according to Levina – from the first centuries BCE up to the 7th century CE (LEVINA/ČIŽOVA 1995: 187).

All Dzhetyasar metallic anthropomorphic plaques and buckles, as well as stucco anthropomorphic mouldings on pottery, feature only male figures. A most interesting fact is that all male metal phallic-type images were found in the burials of girls aged 4–7 years (premarital age). These buckles and plaques were sewed to the clothes (RAPOPORT/NERAZIK/LEVINA 2000: 176, Fig. 36, Ill. 34,1; LEVINA/ČIŽOVA 1995: 186–187). In the case of burial no. 5 of *kurgan* (burial mound) 44 of the Altynasar necropolis, two plaques were symmetrically sewed onto the forearms of a suit (LEVINA/ČIŽOVA 1995: 186). The main difference between the Dzhetyasar material and the Kesken-Kuyuk-Kala plaque is the primitive stylistic features of the former and realistic high detail of the latter. All the Dzhetyasar figurines were produced in the same technological way – by melting in moulds. Most of the figurines are depicted with a headdress, with a long face and thin nose and slanting eyes, or a wide roundish face with cheekbones and a prominent nose, or a wide face with a thin nose (LEVINA/ČIŽOVA 1995: 187).

A depiction of an idol (interpretation made by the author) in the form of a bronze anthropomorphic phallic-type plaque dated to the 7th–8th century CE was found in neighbouring Ustrushana (state bounded with Shah, Fergana, and Sogd), in the *khum* (storage vessel) burial in the Medieval town of Kultepa (GRICINA/MAMADŽANOVA/MUKIMOV 2013:



Fig. 12: 1 – Silver coin; 2 – Silver coin with double mint
(© Dmitriy Voyakin).

98, pic. 11; GRITSINA/MAMADJANOVA/MUKIMOV 2014: 98, Fig. 11).

A bronze plate figurine of a horseman, measuring $3.4 \times 3.6 \times 0.3$ cm and found at the Medieval Sidak site (Middle Syr Darya), is analogous in production method and style to the plaque just described (SMAGULOV 2014: 210, Fig. 5). The iconography of this bronze figurine is very similar to the horseman depicted on Oghuz coins. The date of the so-called “legendary hero” horseman image is the end of the 7th to the first quarter of the 8th century CE, according to Smagulov (SMAGULOV 2014: 216).

Metal figurines similar in terms of their iconography and, most probably, semantics were widespread in Central Asia, Caucasia, and Crimea (LEVINA/ČIŽOVA 1995: 189; LEVINA 1968).

7 Oghuz metallurgy: a brief introduction

Twelve metallic objects excavated from Kesken-Kuyuk-Kala were examined using an optical microscope and scanning electron microscope (SEM).¹ **Table 2** presents a brief summary of the alloy compositions and the methods of fabrication, which were inferred from their microstructures and the chemical analyses using an energy dispersive x-ray spectrometer (EDS) equipped in the SEM. The general appearances of the objects, their microstructures, and the spectra from the EDS analyses are presented below.

Table 2 shows that all except two objects, artefacts #3 and #8, were made of alloys based on copper (Cu). Artefact #3, made of almost pure lead (Pb), indicates that lead with an impurity level kept below the detection limit of the EDS was available at the time. Artefact #8, made of silver (Ag) with 5.6% Cu and 1.2% Zn, allows one to estimate the major

¹ The investigation was done by Prof. Jang-Sik Park, Hongik University, South Korea.



Fig. 13: Bronze figurine of naked man. Surface find (© Dmitriy Voyakin).

impurities and their amounts included in the silver commonly available.

Alloy elements found in the 10 copper-based objects include tin, zinc, lead, sulfur, and iron (Fe). It is apparent that sulfur and iron were not intended, but were added inadvertently. Tin, zinc, and lead then constitute the major alloy elements. If it is assumed that lead contents of 2% or less are too low to be counted as intended, the copper-based objects may be classified into four groups based on alloy compositions: 1) objects #10, 11, and 12 of non-alloyed copper; 2) objects #1, 4, and 9 of the Cu-Sn system; 3) object #5 of the Cu-Sn-Pb system; and 4) objects #2, 6, and 7 of the Cu-Zn system. It is important to note that the objects in the non-alloyed copper and the Cu-Zn groups were all forged to shape while those in the Cu-Sn and the Cu-Sn-Pb groups were shaped by casting.

The significance of the alloy compositions and the methods of fabrication applied in the 10 copper-based objects is better recognised when they are compared with those from other sites having different chronological or regional backgrounds. By contrast, Park and Voyakin, in their work on the copper-based objects from the Medieval site at Talgar in Semyrechye (which belonged to Qarluq tribal confederation), demonstrated that most of them were either cast from the Cu-Zn-Sn-Pb alloys or forged from the Cu-Zn alloys. They also examined a few bronze objects, but they were made from non-lead, high-tin bronze alloys followed by quenching at approximately 700°C (PARK/VOYAKIN 2009), indicating that they are of a completely different kind from those listed in **Table 2**.

The differences mentioned above evidently reflect the transitions in regional bronze or brass technologies accompanying the social and political changes, and may be a potential means to obtain valuable information about the past societies established in the region and their interactions with others. The copper-based metallurgy at the Qarluq site,

for example, is in contrast to that of the Oghuz sites based primarily on the casting of tin and the rare leaded bronze, as well as that of China based primarily on casting leaded bronze (BARNARD 1961).

A recently published article by Park and Voyakin (PARK/VOYAKIN 2021: 12–13) is devoted to the copper-based metal assemblage from Medieval Keskken-Kuyuk-Kala and its examination for chemical composition and microstructure. The authors came to the following conclusions: the analytical results revealed two different technological traditions implemented for alloy making based on either bronze or brass, with the composition data bearing a clear sign of technological transition in progress from a bronze-based to a brass-based alloy method. Recycled scrap bronze played an important role as a key material in both methods, while brass from the cementation process served as the base material for making brass-based alloys. The cementation brass was often used fresh without compositional modification. In most cases, however, it was treated in the re-melting process for the addition of either copper or recycled bronze. It is significant to note that bronze scraps commonly used in the two different alloy recipes led to the establishment of the two most influential alloy groups with and without the presence of zinc. This fact is a strong indication of the existence of two independent metalworking groups with asymmetric accessibility to cementation brass. The superiority of tin in nearly every aspect of making copper alloys, if available, would allow no other alloying elements or techniques to replace it. The cementation process for brass production is therefore understood as a means to make up for limited access to tin. As such, the implementation of the new cementation technique was considered a matter of choice depending on the ease with which tin was acquired.

The two metalworking groups mentioned above may then be regarded as portraying communities with uneven capacities to have access to tin and ce-

Artefact #	Usage	Composition in weight %					Method of fabrication
		Cu	Sn	Zn	Pb	Others	
1	Fragment	88.2	10.5			1.3 S	Cast
2	Fragment	85.8		14.2		Trace S	Forged
3	Weight for a net				100		Cast
4	Fragment	75.5	23.4		1.1		Cast
5	?	73.7	10.3		16.0	Trace S	Cast
6	?	92.1		7.3		0.6 S	Forged
7	?	92.5		6.7		0.8 S	Forged
8	?	5.6		1.2		95.2 Ag	Cast
9	?	81.6	15.7		1.7	0.8 S, 0.2 Fe	Cast
10	?	100					Forged
11	?	98.7				1.3 S	Forged
12	?	100					Cast and then forged

Table 2: Summary of the results from examining microstructures.

mentation brass. Those with sufficient tin must have had little motivation to accept the new brass-based technique as long as their demand was fulfilled through the use of tin and recycled scrap bronze. It is plausible, therefore, that societies at Medieval Kesken-Kuyuk-Kala consisted of multiple people groups with varying ethnic and historical backgrounds and lifestyles.

The conclusion drawn above echoes the account by TOLSTOV (1962) cited in CHRISTIAN 1998 regarding the Oghuz of steppe origin coming to dominate the Aral Sea area by incorporating indigenous populations such as the Kangars and the Pechenegs and other pastoralist groups migrating to the region. It is believed that some of the pastoralist groups had adapted to sedentary lifeways in order to take advantage of the natural environment provided by the Syr Darya River and the Aral Sea. On the other hand, the geographic location of Oghuz communities at the major junction of trade routes including the northern branches of Silk Roads perhaps allowed groups equipped with advanced mobility and military prowess to have better access to key commodities such as tin. The notable difference confirmed in alloy composition hints at the existence of differentiated complex societies consisting of multiple major population groups, whether mobile or sedentary, and their subgroups, each with an unequal right to strategic materials including tin. Those with limited access to tin were then willing to accept the new brass-based technology. In this case, groups accustomed to more sedentary lifeways would have been in a better position to embrace the additional cumbersome cementation process without much resistance, accelerating the bronze-to-brass technological transition. The establishment of a dual technological tradition based on bronze and brass

as observed in the metal objects under investigation is therefore understood as mirroring the dual social and political structure incorporating both mobile pastoralist and sedentary farming and fishing groups. It is intriguing to note such an important aspect of socio-political complexity reflected in the chemical composition of bronze and brass alloys.

8 Burial grounds: looting or rituals – cultures clash

During the aerophoto survey of 1963, the burial ground of Kesken-Kuyuk-Kala was discovered – a site situated to the south and south-east sides of the Medieval city (IGONIN 1968). The necropolis is located in the lower part of the flood land of the river, which curved in this part with a wide meander (1.7 km north-south) (**Fig. 14**). One burial was excavated in 1963. The obtained materials allowed the burial ground to be dated to the 7th–8th century CE (IGONIN 1968). The burial ground is marked to the south and west by natural borders (riverbed terraces); to the north and east no natural limits are observed. The burial ground area is just over ca. 1 × 1 km. A preliminary assessment based on results from field reconnaissance, geophysical survey, as well as new aerophotos and analysis of satellite survey estimates this Medieval burial ground to consist of at least 2,538 *kurgans* (burial mounds) in an area of 1.3 m². However, the geophysical survey (using ground penetrating radar) conducted over an area of 120 m² provided data that show some anomalies on the ground, similar to the shape of mound structures that are invisible from the surface. If the geophysics data is correct, the number of burial structures will increase. The diameter of the burial

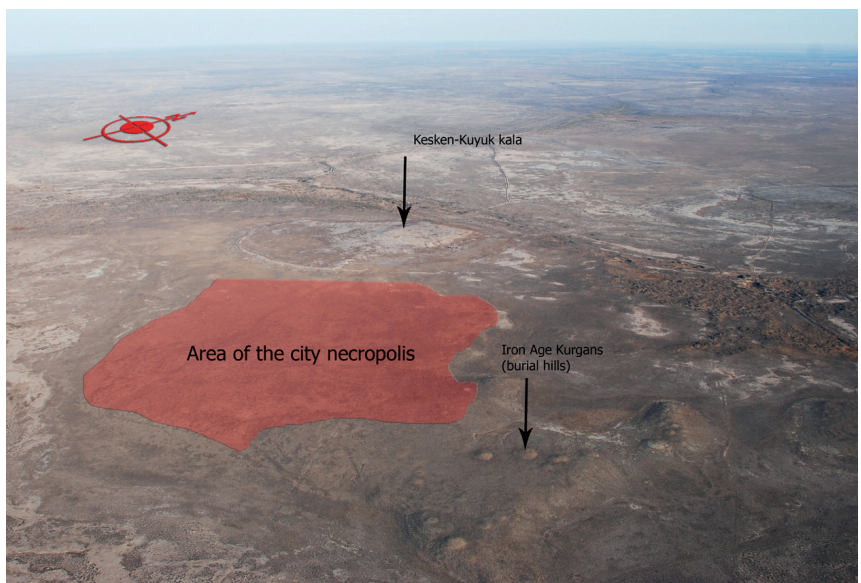
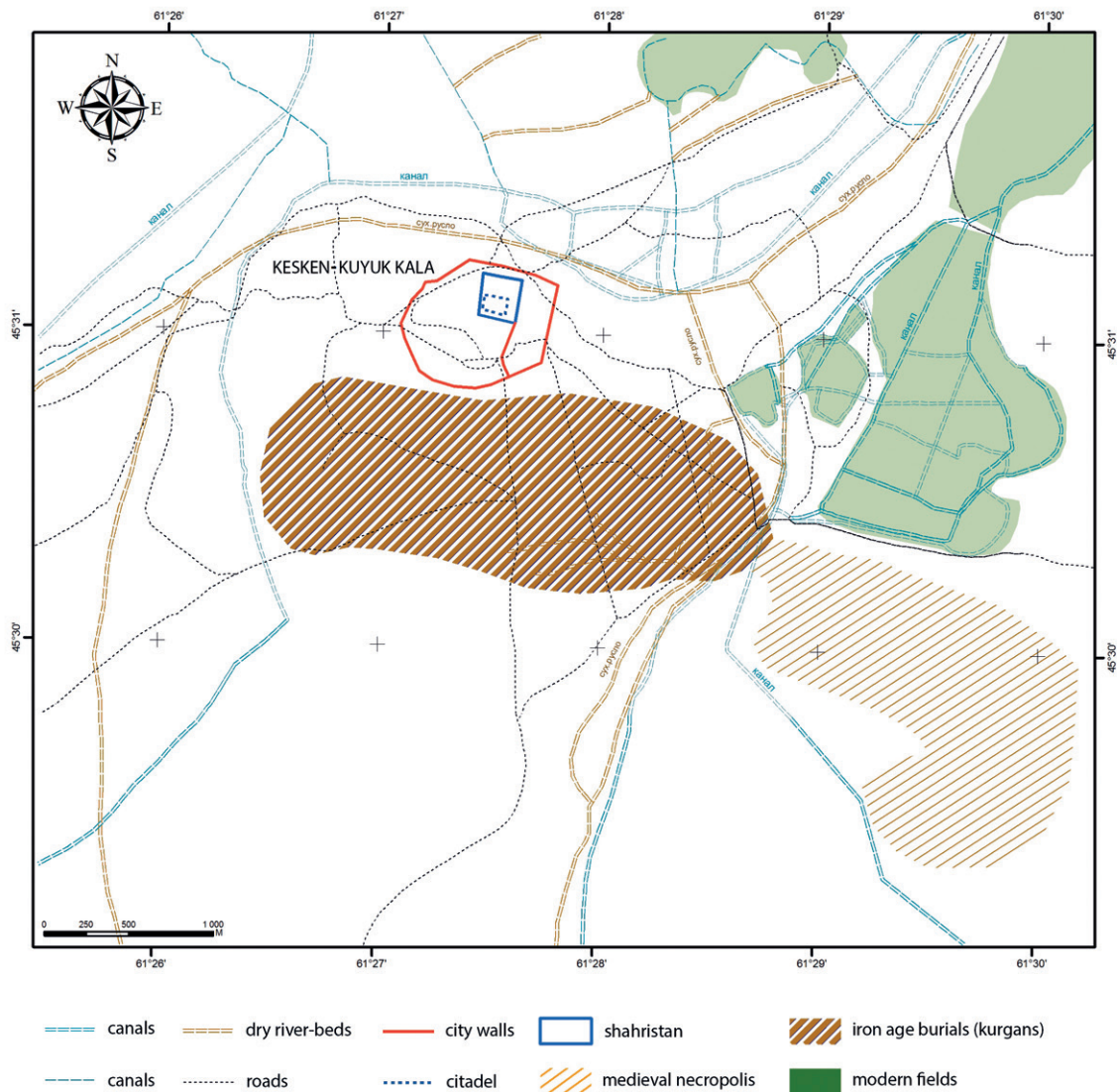


Fig. 14: Kesken-Kuyuk-Kala and surroundings. Map and aerophoto (© Dmitriy Voyakin).

mounds ranges from 5 to 15–18 m, and the height from 0 to 0.4 m. Burials without visually traceable mounds could be distinguished on the ground by dense vegetation around *kurgans* and the accumulation of small, white quartzite fragments on the mound (IGONIN 1968). Burial mounds are randomly located.

Further evidence of the synchronically existing necropolis and Medieval town is the ancient road revealed by scholars of the Khorezm expedition during the aero reconnaissance of 1963, which led toward Kesken-Kuyuk-Kala and passed through the burial ground skirting each mound on its way (IGONIN 1968: 266–267, Fig. 5).

Early Iron Age *kurgans* in the north, east, and south-east part of Kesken-Kuyuk-Kala are easily visible. Iron Age *kurgans* are located in groups; they are mostly elongated and in lines with no special orientation. Big *kurgans* (over 30 m in diameter) are arranged in a chain, while small *kurgans* are situated around without any systematic arrangement (Fig. 14).

A new stage of archaeological investigations at the Kesken burial ground started during the field season of 2007. Through analysing the new aero survey data, an accumulation of frequent small knolls was found in the east-northeast of the Kesken-Kuyuk-Kala site – which was marked out as a burial ground. These accumulations are compactly located on the top of the first riverbank terrace. An excavation 4 × 5 m in size was conducted in the location of one of the probable mounds, which had a diameter of 2 m and a height of 5–8 cm and which was oriented north-south. The excavation showed that the ground was yellowish loess with sand; below there was untouched ground – whitish, solid, loamy clay. An earthen grave pit was found after the removal of the first layer. The depth of the pit is 0.95 m from the level of the modern surface; its length is 2.2 m and its width 2 m. The tomb was elongated in an east-west direction. In the grave pit filling, at a depth of 45–60 cm, several fragments of bones were found in several places; they were in extremely bad condition mostly due to the aggressive soil salinity and their position close to the surface. At a distance of 60 cm from the east-southeast edge of the grave pit, traces of a sacrificial place were found. It was marked out by an ash spot with a diameter of 25 cm and several fragments of coarse pottery sherds that are very similar to the pottery from Kesken-Kuyuk-Kala.

Four small burial mounds belonging to the Kesken-Kuyuk-Kala necropolis, called Kesken 1, were archaeologically and geophysically investigated to obtain general information regarding the connection between town and graveyard (IL'IN/SOROKIN 2015). At the site, while viewing the surface at close range, some groups of mounds can be distinguished from one another. Within the group of 60–100

roundish form mounds, burial heaps are elongated in irregular chains in sets of over ten *kurgans*. The mound constructions are hardly recognisable and are 5–50 m apart from one another.

All excavated burials were looted. The time of looting is unclear, but it could be related to later periods – as one example, there is quite a large unfortified settlement from the 13th–14th century CE situated 2 km west of Kesken-Kuyuk-Kala. Collected materials parallel the conclusions made by former scientists and allow a synchronic picture to be drawn up of the existence of the four excavated burials, and thereupon all of the Kesken 1 necropolis with the Kesken-Kuyuk-Kala site.

A burial ground from the Early Iron Age, located 2 km to the south-east of Kesken-Kuyuk-Kala, became the subject of the expedition's interest. Archaeological excavation was conducted on a burial mound of the northern chain that was damaged by a road. The entire plan of the burial ground has not yet been established and only the survey of this northern chain has been executed.

Thus, explorations have concentrated on the “western” mound, as it is the largest, westernmost mound of the northern chain, which consists of four mounds in a sepulchral field that is notable for its size. The diameter of the mound is 40 m; its height is up to 1.5 m.

The top of the mound is flattened and there is an insignificant depression discernible in the centre; its diameter is 6–7 m and its depth is 0.1 m. The northern part of the mound has been destroyed by a road.

There was a loop-shaped pot handle, discovered at a depth of 20 cm from the modern surface level, defined as being of the same type as that found at Kesken-Kuyuk-Kala and therefore dated to Medieval times.

Later, when clearing the vertical slice, it was noted that it belongs to the first layer that follows the vegetation layer, that is, it is somewhat on the surface of layer 1 (possibly, the ancient surface of the mound). It differs from the top vegetation layer (humus), which is loose dark brown soil judging by its density, light-grey tincture, and numerous carbonate inclusions. Following the removal of this layer, poorly preserved fragments of pottery, metal (iron), fragments of a juvenile's skull, jaw, and clavicle bone, and bones (of sheep?) were discovered.

In the central part of the mound, after clearing the western axial section of the balk, layers and outlines of an oval pit were identified. Stratigraphy, together with the abovementioned finds, clearly shows the presence of a looting shaft.

Following the outlines of the looting shaft, 70 cm deeper, a layer of decayed reeds was traced out horizontally. At the bottom level of the looting shaft, along with the reeds, fragments of bones and fragments of ferrous material were found. The shaft depth from the mound's top is 2.05 m. It became ob-



Fig. 15: Gem intaglio. Surface find (photos by Andrey Zamakhin)

vious that robbers had dug down vertically through the mound and accessed the burial chamber, which was the ground pit.

There were skeleton parts all over the various levels and on the grave floor (bottom) level, which remained only partly undestroyed. In the south and south-western part of the burial chamber, fragments of an iron artefact, small pieces of gold foils in rectangular form (1.9 × 0.8 × 0.1 cm), and wooden pieces were found. Apparently, the foil pieces were parts of suit ornamentation.

In the south-western sector there is a burial chamber which, as it was mentioned above, is just a ground pit preserved in its oval shape with the dimensions 4.40 × 1.70 m and which elongates west-east with some inclination. The north-western part of the burial has been destroyed by a looting shaft.

In the process of a walkover survey at Kesken-Kuyuk-Kala, a surface find of great interest was found on the northern slope of the northern outer *shahristan* wall. This is a stamp-seal – a gem intaglio made of reddish-brownish agate with white veins (Fig. 15).

The form of the seal, according to the typology proposed by Borisov and Lukonin, belongs to type 1b (BORISOV/LUKONIN 1963: 70) – flattened hemisphere with round orifice. The gem was made with the cut and polish technique. There is deep three-dimensional carving in an incised style. The sizes of the gem are: flat oval surface diameter 1.6 × 1.2 cm; height 1.5 cm; width 2 cm; thickness 1.5 cm; hole diameter 0.5 cm. The hole going through the stone indicates that it was intended to be worn around the neck as a pendant, or it could have been used as a gold swivel finger-ring.

The gem is carved on its face with a beautiful bust of a young woman turned to the left in profile: her hair is braided in four plaits, possibly with a humble

diadem holding the hair; she has a roundish earring on her ear and a necklace – close in form to the diadem – on her neck.

There are great similarities with other gems belonging to the Sasanian epoch, dating to the 3rd–6th centuries CE. Similar are the gems engraved with a female profile known from Sasanian seals of the 3rd century CE – the so-called “depiction of queen Denak”, daughter of Papak, sister and wife of Ardeshir Papakan, the founder of the Sasanian dynasty (LUKONIN 1969: 67).

According to the reading and translation made by Aliy Kolesnikov and Vladimir Livshits (Saint Petersburg), the inscription is “bylpyk y wyhdyn” in Pehlevi (mid-Persian). The probable dating is the 4th–5th century CE.

Translation:

- 1) “Bilbig (daughter) Vehdin”;
- 2) “Bilbig faithful (literally, “practicing Zoroastrianism”)”. It may be that name should be read as “Byrpyk”.

There is another interpretation made by the Kazakh scholar Alisher Akishev (based on personal correspondence). He believes it could be a Parthian intaglio gem and that its inscription was made in Pahlavi or Zoroastrian Pehlevi. Translation: “Bibag (lady) Vohu Daena (Good Faith)”. Therefore, the image may be a personification of the Zoroastrian religion in the person of a beautiful, young, virgin girl, who meets the righteous soul of dead people in the Zoroastrian heaven. Her pigtails are plaited in the Zoroastrian style.

Akishev believes that there is a depiction of a hand and a cockerel above. This hand gesture is the



Fig. 16: Kesken-Kuyuk-Kala. Pottery and other artefacts under the floor in Room 6/1 (© Dmitriy Voyakin).

gesture of greeting-blessing in Zoroastrianism. The cockerel is depicted above the hand and symbolises the bird named “Paradarsh”, which foresees dawn – the symbol of the divinity (yazaty) Srosha (Kara), who judges the souls of the dead crossing the Chin-vad bridge.

This gem does not belong to the 4th–5th century CE, but to the beginning of the first millennium. The iconography is close to Hellenistic iconography. The transliteration “B-i-l-b-i-g-e” made by Livshits gives rise to doubt. However, if the inscription is Pahlavi and not Zoroastrian Pehlevi, but some other local dialect – for example Kanchaki (Kanguan) or Chorasmanian – then it could be read as “Farn-baga Vohu Daena” (“Good/Happy Lord”). Alternatively, it may be a male proper name because in the female name there should be the suffix “n” and Good Faith – the name of the goddess. If so, it should be a personal stamp. The translation “bigē” from “baga”, made by Livshits, is an evident modernisation – an attempt to link the gem to the Oghuz Turk’s “b-i-k-e” (lady) origin from Iranian “baga” (lord).

Different objects found during the investigations of Kesken-Kuyuk-Kala give an interesting picture of the relations of the local inhabitants to the ancestors of the same territory. The mentioned items – the gem, bow bone cover plate, and bone cheekpiece – were brought to the town from the looted burial grounds that were situated around; here it is important to note that two of them were found hidden with other ritual assets – ceramic burners and altar *protomai* – under the floor, in the “butros” or the pit (Fig. 16) in one of the excavated so-called “treasury rooms”. Moreover, amid the investigation of the big burial mound dated to the Iron Age, pottery sherds were found in the fillings of a shaft left during the looting by burial robbers; these are very similar to those

from Kesken-Kuyuk-Kala. All these facts testify to the looting of earlier sites by Oghuz or Oghuz-Kypchak tribes. However, the reasons of such actions could be ritual – for example: destruction by looting the graves to prevent any negative impact on the living in town from the dead who do not belong to their tribe; understanding any other cultural features as an enemy to be crushed down and wiped out of existence from the land which belongs to them; to bring as spiritual offerings ritual items from the graves to a worship place/temple (BAIPAKOV 2019: 422–423); or just utilitarian with the main aim of finding any profit by stealing valuables are still the subject of future investigations.

9 Economy (cattle breeding, agriculture, fishing, and hunting)

During aerial and ground investigations, no Medieval agricultural fields were identified. However, irrigation was evidently very well developed as it is easily recognisable at other sites and some features are recorded in close vicinity to the Kesken-Kuyuk-Kala site. For example, river channels and possibly man-made channels connected two old riverbeds in the southern part of the site.

An archaeological-topographical survey of Kesken-Kuyuk-Kala and an aero-visual reconnaissance of the irrigation systems were made by the Khoresm Archeological and Ethnographic Expedition in 1963 (ANDRIANOV 1969: 14).

The results of the survey showed a well-developed irrigation network based on delta channels near to the Kesken-Kuyuk-Kala site. Thus, to the

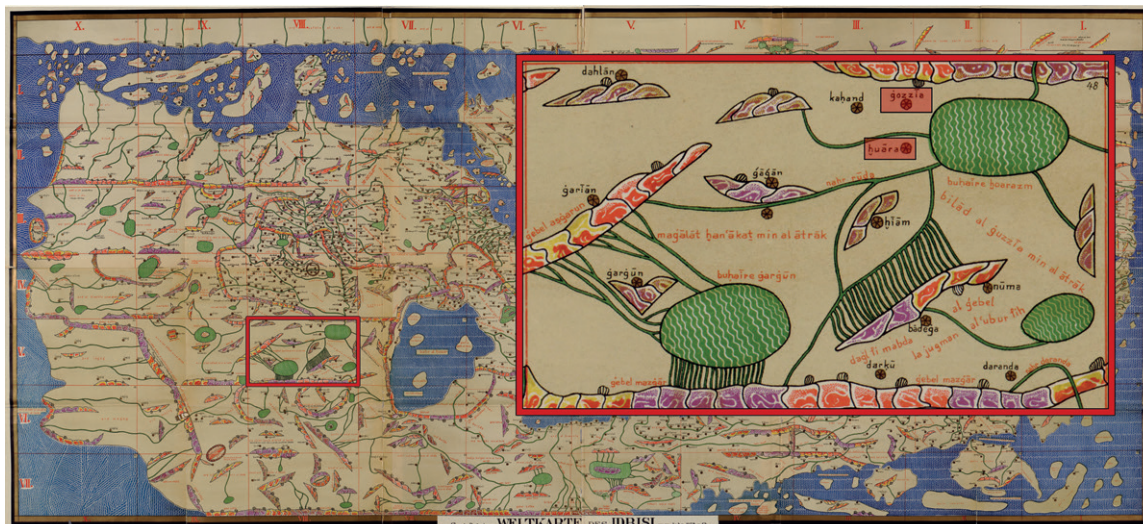


Fig. 17: Al-Idrisi map (*Tabula Rogeriana*) and magnification of the map area with two cities: Gozzia and Huara.

north of the site there were traces of the channels (*aryks* or irrigation ditches) in the form of dark lines of vegetation; the width is 1–2 m, and the preliminary dating based on collected pottery is the 8th–9th century CE (ANDRIANOV 1969: 208). Other channels were found on the banks of the riverbed. Most of the channels existed during the life of the Kesken-Kuyuk-Kala site; at the same time, some of the channels had a continued existence, even after the site was abandoned, as a water supply system for the Kesken-Kuyuk-Kala 2 site, which is dated to the 12th–13th century and is situated 2.2 km to the west of Kesken-Kuyuk-Kala (ANDRIANOV 1969: 208).

Several soil samples were collected under the supervision of Dr. Sergei Bashtannik during the excavation for further carpological (archaeobotanical) investigations using the flotation method or water separation of cultural deposits. This method is based on the differences in the specific weights of water, organic, and inorganic substances. Samples were doused with water and, following mineral sedimentation, were filtered by several sieves with varying cell diameters.

One sample came from the ashen layer found in a stratigraphic shaft belonging to the second or third building horizon. The size of the sample was four cubic decimeters or four litres. The sample consisted of wheat grain (*Triticumaestivum*), belonging to the cereal family (*Poaceae*), and several seeds ca. 2–3 mm in size, which were visually identifiable and probably belong to the legume family (*Fabaceae*). The second sample came from the “main” excavation in the *shahristan* area. The size of the sample was four cubic decimeters or four litres. The sample consisted of one seed of two-rowed glumaceous barley (*Hordeum vulgare* var. *distichum*).

Another sample, which had the consistency of a white-coloured powder, was taken from the ground near a storage vessel (commonly called a *khum*).

The results showed that this comprised traces of roughly-ground flour. The sample consisted of some clots with marks of millet ears.

The floating samples investigation allowed for the identification of the composition of agricultural plants with wide-ranging varieties of agricultural applications as well as the role of local plant resources. The results are consistent with other conclusions made on the basis of stable isotope analysis that suggest a diversity in food choices and the important role of cereals, especially millet, in Central Asia (MOTUZAITÉ ET AL. 2015: 30, 32).

Sergei Tolsov describes the economy of the Oghuz tribes of the Lower Syr Darya as a complex way of life including cattle breeding, agriculture, and fishing (TOLSTOV 1947). The presence of a great number of bones from domestic animals found on the site proves the existence of well-developed cattle-breeding practices including camels, goats, sheep, horses, and cows. The connection of the settlement to swampy marsh areas (hence the notion of “marsh towns”) and the numerous findings of fish scales and bones testify to the importance of fishing for the residents (BAIPAKOV/VOYAKIN/ILIN 2012: 41–42). The vast steppe region was also a fertile land for hunting. Bones of wild animals were among the frequent finds during the excavation process.

10 Conclusion

The three main Oghuz cities localised by written sources in the lower course of the Syr Darya River are Dzhend, Yangikent, and Hora (AGADŽANOV 1969: 76). While the locality of Dzhankent has been proven (TOLSTOV 1947), the exact location of Hora was as yet unknown. However, it seems clear that the city was situated near the mouth of the Syr Darya River (AGADŽANOV 1969: 76). The subsequent exca-

vations, the spatial analysis in comparison with the map of al-Idrisi (*Tabula Rogeriana*)², and the accompanying numismatic data undoubtedly identify Kesken-Kuyuk-Kala as the city of Hora (Huvara, Juvara) (Fig. 17).

The large area covered by this city – even larger than Yangikent – with its concentrated building ac-

tivity, public architectural structures, roads, fortifications, etc., demonstrates that it was a developed politico-economic and cultural entity, and most probably a significant urban centre of the Oghuz tribes. The material culture of the Kesken-Kuyuk-Kala site with all its peculiarities clearly portrays the unknown, yet bright and distinct, Oghuz culture.

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2 The Aral region with the upper stream of the Syr Darya and the three abovementioned cities belongs to the 5th climate zone and 8th section, according to *Tabula Rogeriana* (MILLER 1926).

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Xinjiang and Tuva

The Chemurchek (Qie'muerqieke) Cultural Phenomenon

As a Result of Western European Migration to Dzungaria and the Mongolian Altai (on Archaeological Data)

Alexey A. Kovalev

Abstract: This article is devoted to the problem of the origin of the Chemurchek (Qie'muerqieke) megalithic cultural phenomenon (ca. 2700–1800 BCE) – a complex of specific features that suddenly appear in the material culture of peoples on the western slopes of the Mongolian Altai and that distinguish it from all other known cultural evidence of the Chalcolithic and Early Bronze Age in Asia and eastern Europe. The Chemurchek architecture of burial constructions, tradition of collective burials in megalithic crypts, form and ornamentation of vessels, the stylistics of stone statue menhirs, paintings on slabs inside burial chambers, engraved slate plaques, and images of main deities reveal analogies with materials of the Middle-Late Neolithic of western Europe. As a whole, the complex of specific attributes that appeared in Dzhungaria from ca. 2700 BCE is very similar to Final Neolithic sites in southern France, Jura, and western Switzerland (ca. 3200–2600 BCE). The transfer of such a complex set of cultural traditions over such a far distance seems nevertheless impossible without the migration of ancient people, despite the fact that the first obtained data on the Chemurchek people genomes do not reveal their relation with the Neolithic populations of western Europe.

Keywords: Chemurchek (Qie'muerqieke) cultural phenomenon; Eurasian Early Bronze Age; Western European Neolithic; Ferrières culture; Chalain and Clairvaux lacustrine sites; Lüscherz type; megalithic graves; megalithic art; statue menhirs; Xinjiang; Mongolia; France; Spain; Switzerland.

Резюме: Статья посвящена проблеме происхождения т.н. чемурчекского культурного феномена (около 2700–1800 гг. до н.э.): комплекса специфических признаков, внезапно распространившихся по западным предгорьям Монгольского Алтая и резко отличающих материальную культуру этого региона от всех известных предшествующих культурных образований энеолита — раннего бронзового века Азии и Восточной Европы. Архитектура чемурчекских погребальных сооружений, традиция коллективных погребений в мегалитических склепах, росписи на стенах каменных гробниц, форма и орнаментация сосудов, гравированные сланцевые пластинки-«идолы» и изображения основных божеств находят аналогии в материалах среднего и позднего неолита Западной Европы: в целом комплекс специфических признаков материальной культуры, появившийся в Джунгарии около 2700 года до н.э., очень близок памятникам финального неолита Южной Франции, Юры и Западной Швейцарии (около 3200–2600 гг. до н.э.). Перенос набора этих признаков в комплексе на столь дальнее расстояние представляется все же невозможным без наличия миграции древнего населения, несмотря на то, что первые данные о чемурчекских геномах не выявляют их родство с неолитическими популяциями Западной Европы.

Ключевые слова: чемурчекский культурный феномен; ранний бронзовый век Евразии; неолит Западной Европы; культура Ферьер; свайные поселения Шале и Клерво; тип Люшерц; мегалитические гробницы; мегалитическое искусство; антропоморфные изваяния; Синьцзян; Монголия; Франция; Испания; Швейцария.



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DOI: 10.13173/9783447118804.531

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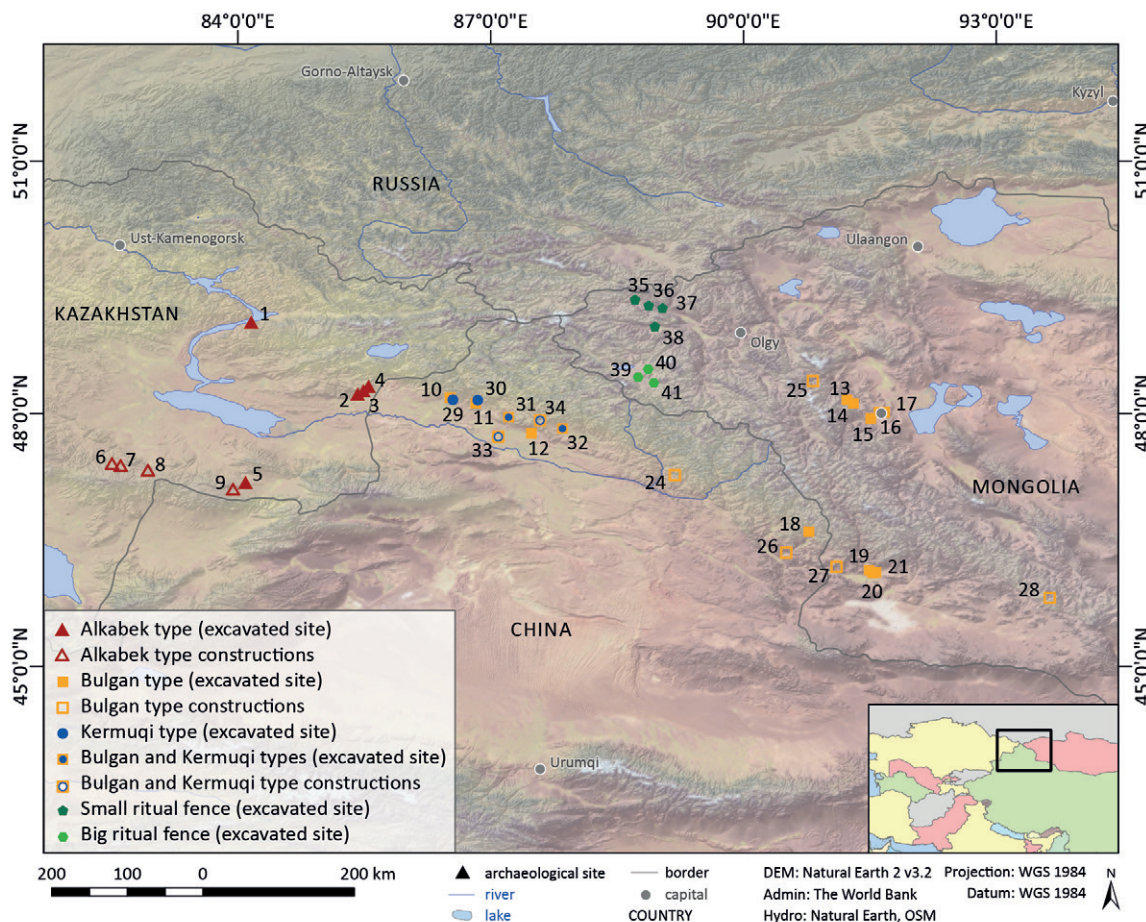


Fig. 1: Chemurchek funerary and ritual structures. Filled figures indicate excavated sites, and contour figures indicate unexcavated sites known only by explorations or photos (RUTISHAUSER/KOVALEV 2022).

Alkabek type: 1 – Kanai, 2 – Aina-Bulak, 3 – Kopa, 4 – Bulgartaboty, 5 – Zhanaaul, 6–9 – Alkabek type constructions; **Bulgan type:** 10 – Dongtalede, 11 – Kopar, 12 – “Highway 217”, 13 – Khuurai salaany am, 14 – Belen usny denzh, 15 – Ulaan khudag, Khalzan uzuur, 16 – Polygon, Shar sum, 17 – Bayan undur, 18 – Jiangbutasi, 19 – Kheviin am, 20 – Khukh uzuuriin dugui, Eregneg uul, Khadat ovoo, Buural kharyn ar, 21 – Yagshiin khuduu, 22–28 – Bulgan type constructions; **Kermuqi type:** 29 – Tuoganbai, 30 – Bolati; **Bulgan and Kermuqi type:** 31 – Alepabulake, 32 – Chemurchek (Qie’ muerqieke) township (Kaynar, Karatas, Kokshim), 33–34 – Bulgan and Kermuqi type constructions; **Ritual fences:** 35 – Khul uul, Khuurai gov’, 36 – Khundii gov’, 37 – Khar khoshuu, 38 – Takhilgat uzuur, 39 – Tasty bulag, 40 – Khar chuluut, 41 – Khulagash.

1 Introduction

Numerous burial places of the Chemurchek (Qie’ muerqieke) megalithic cultural phenomenon (entity) dated to ca. 2700–1800 BCE have been registered on the western and eastern sides of the Mongolian Altai in the present territories of China and Mongolia and the southern part of eastern Kazakhstan (see KOVALEV 2011; 2015a; YU JIANJUN 2015).

In total, ca. 25 burial constructions have been excavated to date in the Chinese territory, mainly on an unprofessional level and with a lack of information about their architecture and burial goods (YU JIANJUN 2015; ALETAI DISTRICT CULTURAL RELICS OFFICE (ED.) 2016). In Kazakhstan and the Mongolian territory, joint Russian-Mongolian and Russian-Kazakh expeditions led by A. Kovalev, A. Tishkin, S. Grushin,

D. Erdenebaatar, Ch. Munkhbayar, and Z. Samashev undertook scientific excavations of 37 burial and six ritual constructions. Practical methods used during our excavations include detailed and successive cleaning of stone structures, and the drawing of plans and sections on a scale of 1:10 with separate recording of plans of different architectural horizons. This excavation methodology is compliant with Russian standards specially developed for the investigation of stone burial constructions as architectural monuments containing important information about ancient culture. Therefore, in the study of architectural features and funeral rites we shall rely on the results of Russian-Mongolian-Kazakh joint excavations. After a short review (KOVALEV/ERDENEBAATAR 2009), a full publication of burial structures and ritual fences in Mongolia and eastern



Fig. 2: Chemurchek (1, 2) and southern France (3–6) megalithic sepulchres for collective burials with surrounding façades overlapping one another. Façades indicated by numbers. 1 – Khukh uzuuriin dugui 1-1; 2 – Yagshiin khuduu 3 (KOVALEV/ĖRDĖNĖBAATAR 2014a); 3 – Dolmen de Saint-Eugène; 4 – Dolmen No. 17 de Laroque; 5 – Dolmen de l'Ubac; 6 – Dolmen des Aguals (GUILAINE J. ET AL. 1993; BEC DRELON ET AL. 2014; BEC DRELON 2015; LAGASQUIE ET AL. 2005).

Kazakhstan excavated before 2014 was undertaken in a two-volume collective book (KOVALEV, A.A. (ED.) 2014; 2015). In 2011–2012, a Mongolian-German expedition excavated two Chemurchek stone boxes in Mongolian Altai, too – the results of these excavations remain unpublished to date; only some photos were included in two albums (TURBAT 2016).

2 Types of burial constructions

2a The Alkabek type

Near the Kazakhstan-Xinjiang border, in the Alkabek River valley, we have excavated 10 burial constructions of the Alkabek type (Fig. 2 and Fig. 3) (east Kazakhstan region, Kurchum district: Aina-Bulak, Kopa, Bulgartaboty burial places). They look like rectangular enclosures made of stone slabs; an “entrance” marked with huge slabs is placed in the middle of the eastern side of the enclosure. A dry-stone corridor (passage) made of small, flat slabs leads to the burial pit. Dry masonry walls of these corridors surround the burial pit. In all barrows, without exception, burial pits are situated 2–5 m eastwards from the centre closer to the above mentioned “entrances”. One or two people were buried in each enclosure. At the barrow Kopa 1 (Fig. 1:3), a stone stele that had been worked up to look like a human body was erected by the eastern side of the fence. These structures were spread over not only the slopes of the Altai – my investigations in eastern Kazakhstan in past years showed that structures of this kind were also spread over the Tarbagatai Mountains (300 km to the west). C14 analysis and analogies in burial goods show that burial structures of Alkabek type belong to the 22nd to 18th century BCE (KOVALEV 2011: 4–6).

South of the Kazakhstan and Russian border, both in Xinjiang and the Mongolian territories, there are two other types of these burial constructions, as follows.

2b The Bulgan and Kermuqi types

The Bulgan type

The Bulgan type (Fig. 2:1, 2) barrows are widespread throughout the full territory of the Mongolian Altai in Xinjiang and Mongolia – they are huge stone boxes made of vertical slabs standing on the horizon or slightly imbedded, surrounded along the perimeter by ellipse or rectangular-shaped cairns and coverings of earth with stone façades overlapping one another like onion skins. All excavated and investigated Chemurchek barrows in the territory of modern Mongolia (Khovd aimag) belong to this type (excavated sites in Bulgan sum Yagshiin khu-duu, Kheviin am, Khukh uzuuriin dugui, Eregneg uul, Khadat ovoo, Buural kharyn ar, in Khovd sum

Khuurai salaany am, Belen usny denzh, in Buyant sum Ulaan Khudag, Khalzan uzuur, Poligon, Shar sum, and Bayan undur). In the Chinese Altai, as a minimum of 11 barrows of this kind were also excavated: seven in Chemurchek (Kermuqi) township in 1965; one in Dongtaledé 2; two in “Highway G217”; and several nearby Chaganguole village (all remain unpublished except one named Jiangbutasi 4, tomb 1) (Fig. 1:18). My investigations and some photos in Chinese publications show that a minimum of 30 more barrows of this kind are known in the Chinese Altai region (KOVALEV 2015a). It is the most common type of Chemurchek burial structure.

The Kermuqi type

The Kermuqi type structures were only found in Habahe, Buerjin, and Aletai counties – they are the same stone boxes as the Bulgan type, built in the middle of wide rectangular enclosures with a usually east-west oriented long axis. Ten kurgans of this type were excavated in Chemurchek (Kermuqi) township in 1965, three structures in Tuoganbai 2 (Fig. 1:29), one enclosure in Bolati 3 (Fig. 1:30), and some others were investigated in this area (KOVALEV 2015a). A very limited distribution area and analogies in construction indicate that this is a derived type, originating from the Bulgan type barrows.

Archaeological excavations show that most of Chemurchek Bulgan and Kermuqi type stone boxes served as crypts for multiple burials. Up to 12 skeletons could be buried in each box, one after another. Stone boxes were built from huge slabs set vertically, and some burial chambers have ochre paintings in the form of geometric patterns inside: concentric rhombs, chevrons, triangle festoons, grid, meanders, points, etc. Burial goods include pottery and stone vessels, stone discs, primitive stone rods made of elongated boulders, some lead and bronze earrings, and stone arrowheads.

Stone statues are erected at the eastern side of burial structures of both types. Today we know of more than 80 such statues (the most complete collection with good photos appears in KOVALEV 2012; see also WANG BO/QI XIAOSHAN 1996; 2010; XINJIANG WEIWUER 2011b), not only in the Mongolian Altai, but also on the northern side of the eastern Tian Shan, suggesting that Chemurchek burial constructions can also be found there.

More than 30 C14 dates obtained in Russian and Chinese laboratories from samples of bones, wood, and charcoal found in burial structures of Bulgan and Kermuqi types belong to a long period of time ranging from 2600 to 1800 BCE, but mainly from 2400 to 2100 BCE (see KOVALEV/ERDENEBAATAR 2009; KOVALEV (ED.) 2014; 2015; XINJIANG WENWU



Fig. 3: Chemurchek statue-menhirs.

1 – Kaynar 2 No. 2 (Kermuqi M2 1965 excavated barrow); 2 – Kuertix dairy farm, Fuyun county, Xinjiang; 3 – Nanzha, Mulei county, Xinjiang; 4 – Samute stone box barrow, Qinghe county, Xinjiang; 5 – Kaynar 1 No. 4, Altai county, Xinjiang; 6 – Karatas (Kalatasi) 3 No. 1; 7, 8 – Karatas 1 barrow, No. 1, 2, Altai county, Xinjiang (KOVALEV 2012).

2013a; KUMAR, V. ET AL. 2022).¹ Moreover, it must be noted that some Afanasievo culture vessels (egg-shaped pots, censers) were found in Bulgan and Kermuqi type stone boxes situated on the western slope of the Mongolian Altai (KOVALEV 1999; 2015a; LIN YUN 2008; KOVALEV/ERDENEBAATAR 2009). Afanasievo culture burial mounds in the Russian Altai belong to the 31st to 29th century BCE (POLIAKOV ET AL. 2019); in Xinjiang they appear a little bit later (KOVALEV 2019). Thus, the appearance of Chemurchek stone megalithic boxes with collective burials needs to be attributed to the 27th century BCE at the latest.

3 Ritual structures

Chemurchek ritual structures look like rectangular stone enclosures oriented mainly west-east with stelae on the eastern side; they had been discovered upstream of the Khovd River, among the snow mountains 100 km from the eponymous Chemurchek burial ground (KOVALEV/ËRDÈNÈBAATAR 2014b; KOVALEV/MUNHBAÂR 2015). All ritual enclosures were built during the early period of the Chemurchek phenomenon, not later than the second third of the 3rd millennium BCE.² I suggest that the northern part of the Mongolian Altai Mountains, situated high up, served as a ritual zone for the Chemurchek people (KOVALEV 2015b).

4 Definition of the “Chemurchek cultural phenomenon”

By the term “Chemurchek cultural phenomenon” I understand a complex of specific features that suddenly appear in the material culture of peoples on the western slopes of the Altai and that distinguish it from all other known cultural evidence of the Chalcolithic and Early Bronze Age in Asia and eastern Europe (KOVALEV 2005; 2012; KOVALEV/ERDENEBAATAR 2009). Not all of these features are represented in every mound, but they are spread over separate regions – resulting in the origin of peculiar types of burial constructions. The independent, but simultaneous, appearance of several original innovations of burial constructions in the same region seems quite impossible. We can suppose that at first there was one source of all these innovations (probably in southern France), but that later people with a common cultural background spread over the Altai and preserved separate and different combinations of features of the burial rite traditions.

5 Masonry passages of Alkabek type burial enclosures

Barrows excavated in the Alkabek River basin, as well as the previously excavated Kanai 9 (Fig. 1:1), look like rectangular enclosures made of stone slabs; an “entrance” marked with huge slabs is placed in the middle of the eastern side of the enclosure. A dry-stone corridor (passage) made of small, flat stones (up to seven layers) leads to the burial pit with some kind of wooden chamber. Dry masonry walls of these corridors surround the burial pit. In all enclosures, without exceptions, the burial pits are not situated in the centre, but are moved 2–5 m eastwards from the centre closer to the above mentioned “entrances”. This is a sign that the passage leading to the burial chamber was the main structural element and the chamber was conceived as a part of this passage. Huge stones were chosen to close this corridor on the edge of the enclosure. Nothing comparable was built in the Eurasian steppe belt in the 4th to 3rd millennia BCE. However if we consider that low corridors were derivatives of real entrances to burial chambers, we can find prototypes of the Alkabek burial structures in western Europe. There is one unique region where the dry masonry is a sign of megalithic monuments of the Later Neolithic variety. “Prehistoric chamber tombs with dry-stone side-walls” dated to the late 4th to the early 3rd millennium BCE are spread in the *départements* of Hérault, Gard, Ardèche, Bouches-du-Rhône, Vau-

1 Four radiocarbon dates recently obtained using Accelerator Mass Spectrometry (AMS) dating from human bones of three individuals from the Yagshiiin khuduu 1 barrow of Bulgan type show that the dates previously obtained from radiocarbon dating by Liquid Scintillation Counters (LSC) seem to be too late. GrM-12984: 3983±17, i.e. 2567(52.3%)2522; 2499(41.1%)2468 cal BCE (TAYLOR ET AL. 2019); UCIAMS-226530-PSUG-5433: 4050±25 BP, i.e. 2634(91.1%)2487 cal BCE; UCIAMS-226526-PSUG-5429: 3980±25 BP, i.e. 2571(53.3%)2513; 2504(42.1%)2464 cal BCE (WANG ET AL. 2020); OxA-36230 4114±29 BP, i.e. 2886(24.8%)2804; 2763(70.6%)2577 cal BCE (WILKIN ET AL. 2020). Combining these AMS dates points to 2574–2488 cal BCE (95.4%), not to 2290–1980 cal BCE as suggested by the previously published R_Combine LSC date for Yagshiiin khuduu 1 (KOVALEV (ED.) 2014: 395).

2 C14 dates of charcoal and newly obtained AMS dates of bones from small constructions belong to the 29th to 26th century BCE (KOVALEV/ERDENEBAATAR 2009; 2014b: 227–231; HOLLARD ET AL. 2014: 201; TAYLOR ET AL. 2019 (OxA-36230, GrM-12938); WANG ET AL. 2020 (PSUG-5466)). The C14 dates of the “giant” enclosure of Khulagash are: Le-11822: 3990±105 BP, i.e. 2900(95.4%)2200 cal BCE (human bones), Le-11821: 3990±25 BP, i.e. 2580(95.4%)2460 cal BCE (wood); and of the “giant” enclosure of Khar chuluut are: Le-11698: 4350±40 BP, i.e. 3040(86.6%)2890 cal BCE (charcoal), Le-11700: 3970±95 BP, i.e. 2900(95.4%)2200 cal BCE (wood).

cluse, and Alpes-Maritimes, and in Lot (dolmen de Souillac) (BODREUIL ET AL. 2006; GIRAULT 1986). A distinctive feature of these monuments is the use of dry masonry in building passages, which continue towards a dolmen, and sometimes in the erecting of the chamber itself. There are cases in which a chamber is almost united with a passage into a single whole, which appears to be the closest analogy to “Alkabek” type barrows.

6 Multiple cairns and coverings with façades of Bulgan type barrows (Fig. 2)

The huge stone boxes of Bulgan type barrows were reinforced from the outside (not covered) by surrounding stone cairns or soil coverings that overlapped one another and were supplied with “façades” of slabs or light boulders. Façades made of bright white quartzite were traced among them. Of the 23 barrows excavated by us in Mongolia, in 15 constructions a minimum of two overlapped cairns and coverings with façades were traced. Unfortunately, two kurgans were excavated by Ts. Turbat (a joint German-Mongolian project) without the cleaning of the different layers and façades of the coverings, but from the photographs it is clear that they each had two façades. In the Khukh uzuuriin dugui 1-1 barrow (Fig. 2:1), we traced one stone cairn inside and three overlapped soil coverings with stone façades; in Yagshiiin khuduu 1, 3 (Fig. 1: 21), Khevin am 1, 3 (Fig. 1: 29), and Khukh uzuuriin dugui 1-2 (Fig. 1: 20), there were three coverings in each (KOVALEV/ĖRDĖNĖBAATAR 2014a) (Figs. 1, 2:2). Photos of burial enclosures of the Kermuqi type excavated by Chinese archaeologists show that such soil coverings with stone façades were constructed outwards from stone boxes situated inside enclosures (XINJIANG WENWU KAOGU YANJIUSUO 2014). Since such original buildings were not built during and before this time east of the Alps, one has to look for the place of origin of this tradition in the region of the French Atlantic coast: Basse-Normandie, Bretagne, Pais-de-Loire, and Poitou-Charentes. Jean L'Helgouac'h compared this system of “façades” with an onion skin (L'HELGOUAC'H 1999). Such dry masonry façades, overlapping each other like the skin of an onion, and dating to the mid-5th to mid-4th millennium BCE, were revealed in the construction of the majority of passage graves (“les tombes à couloir”) of western France, where cairns remained undamaged (CASSEN (ED.) 2009; BOUIN/JOSSAUME 1998; CHANCEREL/KINNES 1998; DRON/SAN JUAN 1992: 36, Fig. 8; GERMOND ET AL. 1978; GIOT 1987; GOMEZ DE SOTO 1998; JOUSSAUME 1978; 1999; 2006; L'HELGOUAC'H 1976; 1998: 242–269, 311–330; L'HELGOUAC'H/LE ROUX 1986; L'HELGOUAC'H ET AL.

1989; L'HELGOUAC'H/LECORNEC 1976; L'HELGOUAC'H/POULAIN 1984; LAPORTE 2013; LECORNEC 1994; LE ROUX 1995: 38–47; LE ROUX ET AL. 2006; LE ROUX/LECERF 1977; 1980; MOHEN/SCARRE 2002; see figures in KOVALEV 2011). In most cases, burial structures of a later period – so-called “gallery graves” (“allées couvertes”) and “dolmens”, which belonged to even later times, had lost the “multiplicity” of “façades” that reduced to one cairn along the perimeter of a “gallery” or of a burial chamber. However, among them there were monuments with perimetral cairns that formed overlapping “façades” – those were the “gallery graves” of Brittany (Liscuis I, II; Ti-ar-Boudiged) (LE ROUX 1975: 514–518; 1977: 411–415; LE GOFFIC 1994: 138–147, Figs. 4–7) and also megalithic graves of southern France, dated from the end of 4th millennium BCE to the first third of the 3rd millennium BCE (LAPORTE ET AL. 2011: 312–314). The most representative “pseudo” gallery grave with perimetral soil coverings (having traditional façades) is the dolmen de Saint-Eugène in the Aude (Roussillon), which dates from the period slightly before 3000 BCE (for photos before its reconstruction, see GUILAINE ET AL. 1993; BEC DRELON 2015: Fig 92; for after its reconstruction, see GUILAINE 2006: Fig. 1; attribution and dating in GUILAINE 1998: 52–53, 57, 142; SAUZADE 2008: 345–346; LAPORTE ET AL. 2011: Fig. 15) (Fig. 2:3). Some dolmens in southern France possess an outer stone cairn with a “façade” made from dry masonry, which is surrounded by another perimetral cairn. These cairns did not cover the burial chamber, but surrounded it (LAGASQUIE ET AL. 1999) – such are the “dolmens à vestibule” and “dolmens du Quercy”, among others (CLOTTE 1977; BEYNEIX 2003: 116–117; SAUZADE 2008: 342–343); for example, the dolmen du Pech from Saint-Antonin-Noble-Val (Tarn-i-Garonne) (GUILAINE 1998: 46–47), the dolmen 2 de Fomarène-Nord in Montricoux, dolmen 3 de la Ferme du Frau from Cazals (Tarn-i-Garonne), dolmen du Rouzet in Laroque (Tarn), dolmen du Verdier in Carjac (Lot) (JOUSSAUME (ED.) 1990: 113–124), dolmen des Aguals (Gréalou-Montbrun, Lot) (LAGASQUIE ET AL. 2005) (Fig. 2:6), dolmen de Peyrecor 2 (Escout, Pyrénées-Atlantiques) (DUMONTIER ET AL. 1997), and dolmen de l'Ubac near Goult (Vaucluse) (BIZOT/SAUZADE 2015) (Fig. 2:5). J. Lecornec traced the origin of this architectural peculiarity in the traditions of building passage graves (JOUSSAUME (ED.) 1990: 113–124). During the last decade, Noisette Bec Drelon conducted detailed research into the construction of megaliths in southern France and traced overlapping multi-cairns with façades – particularly in the dolmen de la Caumette and dolmen de Laroque 17 (Fig. 2:4) (BEC DRELON ET AL. 2014, BEC DRELON 2015).



Fig. 4: Statue-menhirs of Languedoc: **1, 2** – Group B, sub-group of Montagnac (statue de Maison Aube, statue de Candelaire); **3** – Groupe C (Collorgues, statue 1 de l’Hypogée de Teste). Statue-menhirs of Lunigiana: **4** – Monciglioli 1; **5** – Romeo (D’ANNA 2002; JALLOT 2011; <https://www.statuestele.org>).

7 Statue-menhirs (Figs. 3, 4, 5:1–5)

Stone statues chiseled by the Chemurchek people (WANG BO/QI XIAOSHAN 1998; 2010; KOVALEV 2012) represent a unique phenomenon in the territory of the Asian steppes in the 3rd millennium BCE. No local sources of this tradition have been found. If we consider the statues of the Black Sea region, which date directly before the Chemurchek, we will see that their style differs greatly from the Chemurchek style, while the most similar statues can be found far to the west, in France.

As I have already mentioned, the specific features of Chemurchek statues are the following (Figs. 3; 5:1–5): the flattened face is marked by a protruding contour and a straight relief nose is usually connected with it. The eyes are marked by protruding circles or disks. A pectoral or a necklace, sometimes ornamented with a row of triangles, is modelled on the neck. Judging from the indicated pectoral muscles, the figures are portrayed as nude. In one case, the shoulder blades were depicted as two protruding contours that nearly met in the centre of the back. However, statue-menhirs of the Black Sea region are distinguished by shoulder blades modelled as triangles; they do not have a protruding contour around the face, and the eyes are marked by grooves (TELEGIN/MALLORY 1994). Additionally, they possess some more peculiarities not typical of Chemurchek statues.

Some statue-menhirs of different types from southern France are characterised by a protruding contour by the face perimeter, connected with a straight nose; the eyes are shown by protruding circles or disks, the shoulder-blades are marked by two curls, and a pectoral decorates a neck (D’ANNA 2002: 150–177; D’ANNA ET AL. 1996; JALLOT/D’ANNA 1990; JALLOT 1998; 2011: 105). Statue-menhirs

of group B, sub-group of Montagnac, with a protruding contour of the face, protruding eyes, and a pectoral, appear to be most similar to Chemurchek statues (Fig. 4:1, 2). L. Jallot now gives a broad date for this sub-group of 2800–2200 BCE, but a protruding contour of the face and protruding disc-eyes characterise some statue-menhirs belonging to his more ancient sub-groups such as Durance-Maurez, l’Agout, and Gardonenque-Uzege (JALLOT 2011: 102–105; LAPORTE ET AL. 2011: 317–318; MASSON MOUREY ET AL. 2020) (Fig. 4:3). Also, statues of Languedoc groups B and C found in context indicate that they began to be used in the Final Neolithic 2 period at the latest (GUTHERZ/JALLOT 1987; JALLET ET AL. 2019). Two carved menhirs were found in a classic Ferrières context in the Baumelle à Blandaz cave (Grand Causses), which “had remained closed during the last 5000 years” (GALANT ET AL. 2012). We can see the evolution of group B in the Lunigiana Chalcolithic statue-menhirs (Fig. 4:4, 5): on these statues, the protruding surface is carved around the face (or convex around the contour of the face) with a connected nose and convex eyes as on Chemurchek sculptures (AMBROSI 1992). The mentioned Lunigiana statues cannot be dated later than the middle of the 3rd millennium BCE because daggers of the Remedello type are depicted here (MORIN ET AL. 2005: 349–351; CASSINI/DE MARINIS 2009: 66–68).

8 Pectorals with rows of triangles, and rows of triangles as a motif (Fig. 5)

Some Chemurchek statue-menhirs have pectorals with a row of triangle festoons (Figs. 3:1, 5; 5:1–5).



Fig. 5: Pectorals with triangle festoons and rows of triangles in Chemurchek and western European Neolithic art. 1–5 – Chemurchek statue-menhirs: 1, 3 – Kaynar 1 No. 4, No. 2, Aletai county, Xinjiang; 2 – Kaynar 2 No. 2 (Kermuqi M2 1965 excavated barrow), Aletai county, Xinjiang; 4 – Chokpartas (Qiakepatasi), Buerqin county, Xinjiang; 5 – Akzhar (Wuqiubulake), Buerqin county, Xinjiang (KOVALEV 2012); 6 – Cemmo 10 (Valcamonica, Italy) (ARCA ET AL. 2008); 7 – Sejos cromlech (Cantabria, Spain); 8 – Passanant megalithic cist (Lérida, Spain) (BUENO RAMIREZ 1995); 9 – Dumas grotto (Var, France) (HAMEAU 2002); 10 – Stele 30, Saint-Martin-de-Corléans (Aosta, Italy) (photos from BELLEY ET AL. 1998); 11 – Copper treasure from Lüstringen, Osnabrück (Niedersachsen, Germany) (HASSMANN 2019); 12 – Burial goods from proto-Řivnáč culture, burial Velvarský hrob, Velvary (Středočeský kraj, Czech) (VÉLOVÁ 2014).

Copper pectorals with rows of scallops were found in the context of the second half of the 4th millennium BCE: in the territory of the Czech Republic, in the Velvarský hrob burial (VÉLOVÁ 2014); and in Germany, in buried treasure – the “Kupferhort von Osnabrück” (HASSMANN 2019) (Fig. 5:10, 11). Together with pectorals, a copper axe and ornaments were found belonging to well-dated Balkan-Carpathian Eneolithic cultures. Pectorals with

festoons, including several pectorals on one statue, and horizontal rows of festoons can be seen on statues from Petit-Chasseur (Sion, Valais) (FAVRE ET AL. 1986; CORBOUD 2009) and Saint-Martin-de-Corléans (Aosta, Valle d’Aosta) (PEDROTTI 1998; DEI DEL PIETRA 1998) (Fig. 5:10). In the neighbouring region, downstream along the Rhône, in the Dumas Grotto (*département* of Var, France) (HAMEAU 2002: 163), a unique depiction was found of an anthropomor-

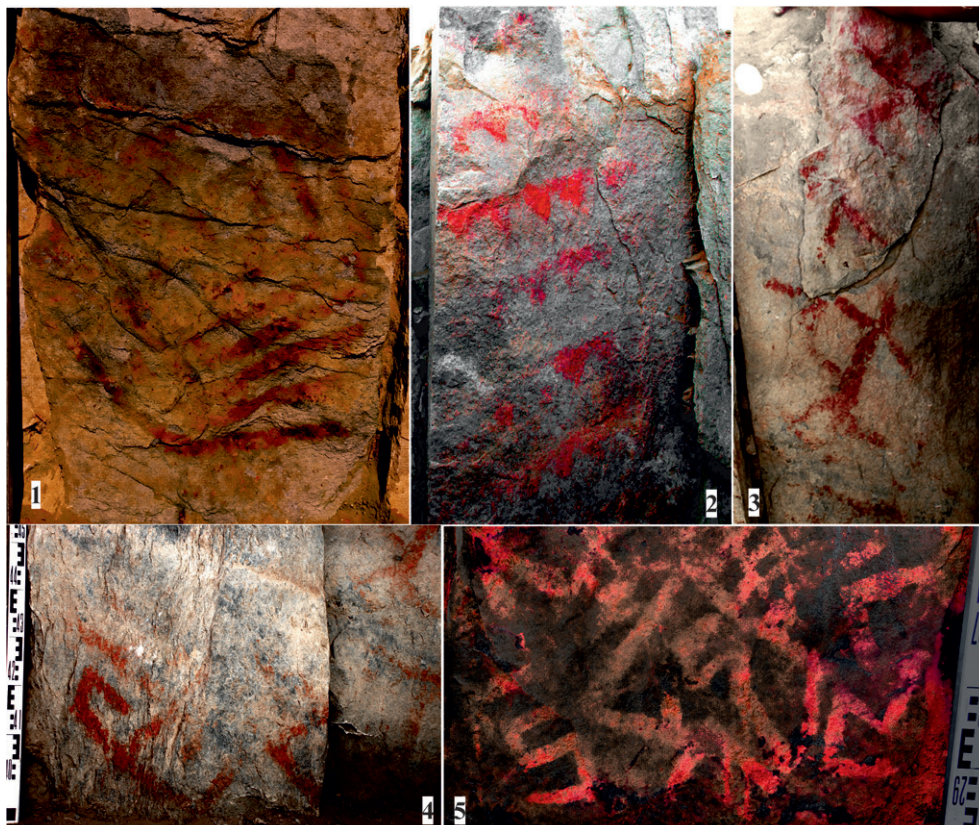


Fig. 6: Patterns of Chemurcek mural ochre paintings. **1, 5** – Belen usny denzh 1-3, Khovd sum, Khovd; **2–4** – Khukh uzuuriin dugui 1-1, Bulgan sum, Khovd (KOVALEV/ĖRDĖNĖBAATAR 2014a; GRUŠIN ET AL. 2015).

phic figure with a pectoral decorated with triangular festoons (**Fig. 5:9**). Several anthropomorphic depictions with necklaces of triangular festoons were found in Valcamonica (CASINI/FOSSATI 2013: 185) (**Fig. 5:6**). Spanish early Chalcolithic anthropomorphs bear a depiction of an arcuated figure with horizontal rows of festoons carved inside: stele Tabuyo del Monte (León); a stele in Sejos cromlech (Cantabria) (**Fig. 5:7**); stele de San Sebastian de Garabandal (Cantabria); and a stele from the Pasantan megalithic cist (Lérida) (**Fig. 5:8**) represents an anthropomorphic figure with a pectoral decorated with triangles, and triangles can also be found on the inner edge of the face outline (BUENO RAMIREZ 1995: 17, 20, 23). All of these anthropomorphic figures date to no later than the first half of the 3rd millennium BCE. Faces of the earliest statue-menhirs in Provence (second half of the 4th millennium BCE) are framed with rows of chevrons (D'ANNA/RENAULT 2004; MASSON MOUREY ET AL. 2020: 293–296).

Horizontal rows of triangular festoons comprise one of the main motifs in the decoration of Chemurcek tombs. We found such drawings on four stone slabs; one slab may contain up to eight rows (**Fig. 6:2**). Rows of triangular festoons are pictured on “parabolic figures” (deities?) and on slate plaques found in ritual structures (see below) (**Figs. 11:4; 12**). Further, rows of triangular fes-

toons are the main graphic motif of ornamentation on Chemurcek ceramic and stone vessels (**Fig. 8:1, 3–5, 8**). A row of festoons, often under horizontal lines, is depicted under the mouth of the vessel. In caves and rocky canopies of the Rhône basin, paintings were found in the form of rows of triangular festoons (HAMEAU 2002: Fig. 34) (**Fig. 7:4**). A row of triangular festoons coming down from a carved line under the mouth of a vessel is the main distinguishing feature of the Ferrières culture (GUTHERZ 1984), widespread in eastern Languedoc in the last third of the 3rd millennium BCE to the early 2nd millennium BCE (JALLOT 2011) and on some other vessels of the Final Neolithic period of France and of the Early Chalcolithic period of Iberia (**Fig. 9:1–5, 12**).

9 Geometric patterns in ochre mural paintings (**Figs. 6, 7**)

Geometric-shape paintings were discovered in burial chambers of barrows of Yagshiiin khuduu 1, 3, Khukh uzuuriin dugui, Belen Usny Denzh, Khurui Salaany Am 1 in Mongolia, and of those in Togonbay 2 M2, Bolati 3-2 M18, and Kopar in Xinjiang (**Figs. 1, 6**). The repertoire of these images is limited to rhombs and chevrons inscribed into one another, parallel multi-triangle festoons, a sloping net, a

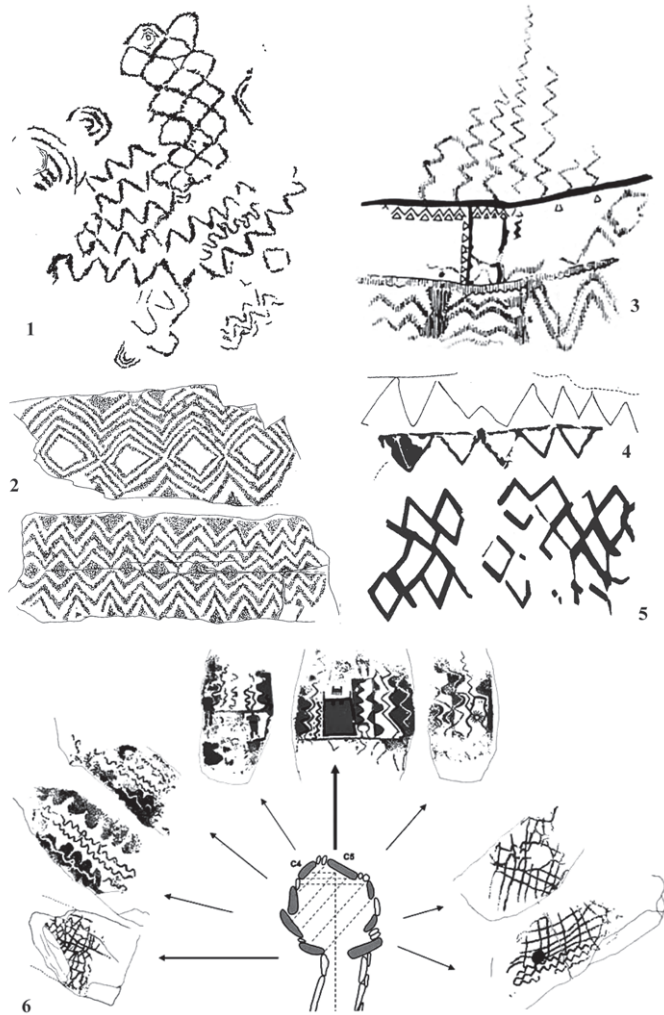


Fig. 7: Engravings (1, 2) and paintings of western European "megalithic art". 1 – Loughcrew, Cairn L (Ireland); 2 – Fourknocks passage grave (Ireland); 3 – Pedra Coberta passage grave (Spain); 4 – Grotto of Baume Ecrute (de Sarrazins) (Drôme, France); 5 – Abri d'Eson (Drôme, France); 6 – Dolmen of Antelas-Oliveira de Frades (Portugal) (HAMEAU 2002; TWHIG 1981; ROBIN 2009; JESUS-SANCHES 2009).

net with cells filled with roundish spots, meander-shaped and volute-shaped curves, and flat areas chaotically covered with broken lines. In caves and grottos of the middle Rhône basin, painted images of these patterns were found (HAMEAU 2002: Figs. 34, 36) (Fig. 7:4, 5). The general set of compositions of Chemurchek paintings is a particular reproduction of leading motifs of the decorative art of megalithic cultures of France, Spain, Ireland, and Switzerland. All of these motifs in the aggregate are distinguishing characteristics of the art of "Atlantic Megalithism" (SHEE TWHIG 1981; ROBIN 2009; JESUS-SANCHES 2009; CARRERA RAMIREZ 2011) (Fig. 7:1–3, 6).

10 Forms and ornamentation of vessels (Figs. 8–10)

Ceramic and stone vessels found in Chemurchek tombs (except for cases of pottery belonging to other cultures) for the most part differ markedly in their shape and ornament from contemporary and previous vessels of Eurasian traditions. At the same time, the same shapes and ornamentation are char-

acteristic of both ceramic and stone vessels (Figs. 8; 10:13–20). The vessels may have spheroid, bag-like, ellipsoid, and bomb-like shapes, or they may be can-like vessels with slightly convex walls smoothly bending up and down. The vessels do not have a pronounced neck; their walls are, as a rule, drawn upwards. Moreover, their widest part is always located lower than the middle. The most common motif is a horizontal line drawn under the neck with drawn triangles going down. The closest analogies to these shapes of vessels, as well as the ornamental compositions decorating them, are found in the southern France Final Neolithic sites of the Ferrières culture (BEECHING 1980: Pls. 15, 27–29, 72, 79; GUTHERZ 1984; JALLOT/GUTHERZ 2014), in the middle Rhône Valley (GALAN 1967; CHASTEL/VORUZ 1988: 101; FERRER-JOLY 1988: Pls. 94, 102, 103, 112; PERRIN/VORUZ 2013: Figs. 206, 207), in Final Neolithic sites in the Saône Valley (Bourgogne) (THÉVENOT 2005: Figs. 126, 127), in Brittany (Conguel type) (POLLES 1983; TINEVEZ 2004: 117–121), and Grand-Pressigny (VILES 2006: Figs. 4, 8–11) (Fig. 9:1–11). All the mentioned evidences dates back to the period before 2600 BCE and the spread of these is explained



Fig. 8: Chemurcek vessels (3, 5, 6 – clay, others – stone). 1, 7 – Khukh uzuuriin dugui 1-2, Bulgan sum, Khovd; 2 – 1965 Kermuqi (Qie'muerqieke) M7, Aletai county, Xinjiang; 3 – Bolate 3-2 M18 barrow, Buerqin county, Xinjiang; 4 – Sharsum 1, Khovd sum, Khovd; 5 – Qie'muerqieke township, Aletai county, Xinjiang; 6 – Ulaan khudag II-3, Khovd sum, Khovd; 8 – Khadat ovoo, Bulgan sum, Khovd (KOVALEV/ĖRDĖNĖBAATAR 2014a; TIŠKIN ET AL. 2015; KOVALEV 2015a).

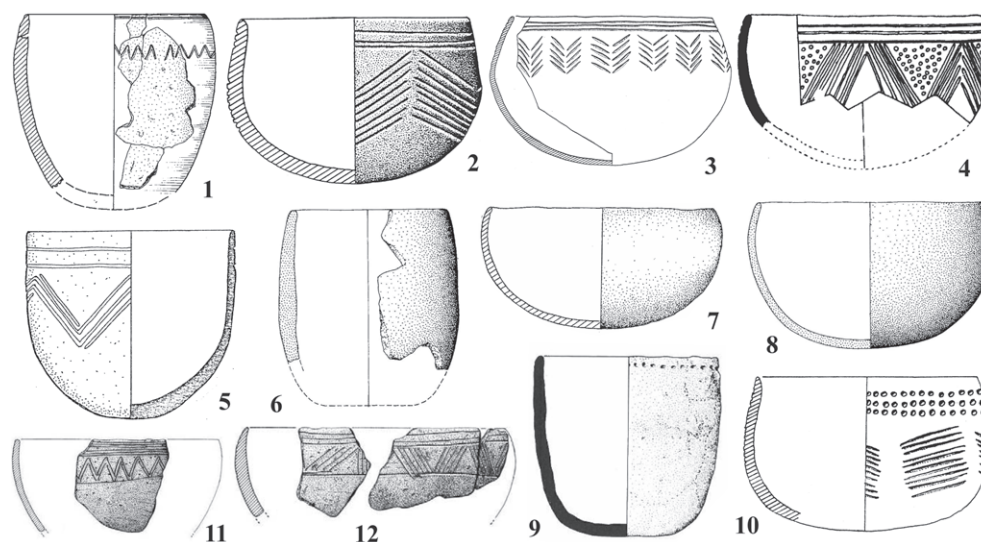


Fig. 9: Some analogies to Chemurcek vessels in the Final Neolithic of France (F) and Switzerland (CH), and the Early Chalcolithic of Portugal (P). 1 – Chamboud (Izère, F) (CHASTEL/VORUZ, 1988); 2–5, 10 – Ferrières culture (GUTHERZ 1984; BEECHING 1980); 6, 7 – Camp de Chassey, level 5 (Saône-et-Loire, F) (THÉVENOT 2005); 8 – Les Baigneurs (Charavines, Izère, F) (FERRER-JOLY 1988); 9 – Portalban II (CH) (STÖCKLI 2009); 11, 12 – Leceia (Lisbon, P) (CARDOSO 2007).

by cultural connections between regions (LAPORTE 2009: 711–715, 718–724). The same shapes of vessels ornamented by festoons were spread to the Iberian Peninsula in the first half of the 3rd millennium BCE, in the so-called “pre-campaniformes” Chalcolithic period (CARDOSO 2007) (Fig. 9:12). Ellipsoid vessels with a flattened bottom are especially similar to types of ceramics of the Saône basin, of French Jura (Clairvaux, Chalain), and neighbouring western Switzerland (Lüscherz type), which are thought to have developed under the influence of the Ferrières

culture people who migrated to the Alpine region in several stages between 3200 and 2800 BCE (GILIGNY 1995; PÉTREQUIN ET AL. 2003; STÖCKLI 2009; BURRI-WYSER 2011: Fig. 7, assemblages E8–E9) (Fig. 10:1–12). Thus, we have a vast territory of the Rhône and Saône basin in which there is a concentration of finds from the Final Neolithic period most similar to all forms of Chemurcek types of vessels. The earliest are the vessels of the Ferrières culture of the Final Neolithic 2A period (by L. JALLOT/S. GUTHERZ 2014) in the south; the last migration of

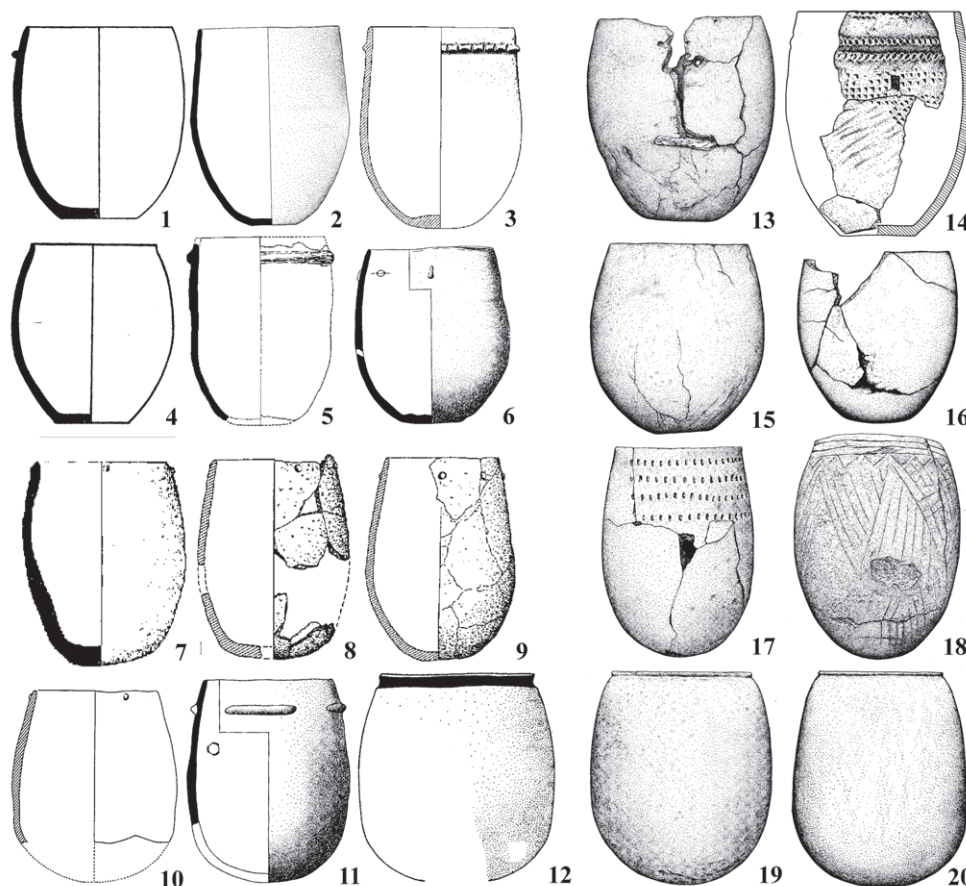


Fig. 10: **1–12** – Ceramic vessels of the Final Neolithic of eastern France and western Switzerland: **1, 4** – La Perte du-Cros (Saillac, Lot, F); **2, 10** – Portalban II (FR, CH); **3** – Saint-Blaise/Neuchâtel, Bains des Dames (CH); **5** – Yverdon, Avenue des Sports (CH); **6** – Chalain (Dép. Jura, F); **7** – Thielle-Wavre (CH); **8, 9** – Vinelz-Hafen (CH); **11, 12** – Clairvaux (Dép. Jura, F) (GALAN 1967; GILIGNY 1995; PÉTREQUIN ET AL. 2003; STÖCKLI 2009); **13–20** – Chemurcek vessels (**14–18** – Clay; **others** – Stone): **13, 15** – Khadat ovoo 1, Bulgan sum, Khovd; **14** – Yagshiin khuduu 3, Bulgan sum, Khovd; **16** – Ulaan khudag I-12, Khovd sum, Khovd; **17, 19, 20** – Kermuqi (Qie'muerqieke) 1965, M16, M7, Aletai county, Xinjiang; **18** – Bolate 3-2 M18 barrow, Buerqin county, Xinjiang (KOVALEV/ÉRDËNËBAATAR 2014a; KOVALEV 2015a; TIŠKIN ET AL. 2015).

the Ferrières population to the Jura occurred during the Final Neolithic 2B period, and the spread of similar ceramic forms along this path is recorded simultaneously. This dispersion – upstream along the rivers and into the mountains – dates back to 2900–2600 BCE, which is very close to the time when the Chemurcek sites appeared in the Altai.

11 Parabolic and rectangular figures with antennae (Fig. 11)

Pictures of anthropomorphic creatures with parabolic or rectangular “bodies” most often serve as the composition centre of pictures on the slabs of excavated Khar chuluut and Khulagash “giant” ritual enclosures (Fig. 11:1–10). The lower edge of the picture is always horizontal; the upper part of the figure’s contour can be made by two overlapping paraboles (“a double parabola”) – in this case, there

is a sub-triangular hollow in the upper part of the contour. There are drawings where the lower edge is absent and parabola sections are not connected on top, but have additional decorations. Often, there are “bonds” across the “body”. L-shaped legs often go down from the lower edge. On top of a figure, “antennae” often go up – these can be concave upwards, concave downwards, and straight with various types of end. Figures are usually included in compositions in groups of two; however, all of the pairs of figures we met were different. Many drawings of this type are recorded in Mongolian Altai rock art complexes. Parabolic anthropomorphs with “antennae” are depicted on Chemurcek statues Alepabulake III № 2 and Alepabulake I (Fig. 1:31), and on a slab from one of the Bolati 3 M18 (Fig. 1:30) stone boxes (Buerjin county, Xinjiang) (KOVALEV 2012: No. 34, 36; YU JIANJUN 2017). These parabolic and rectangular figures with antennae are analogous to those depicted on the earliest Brittany mega-

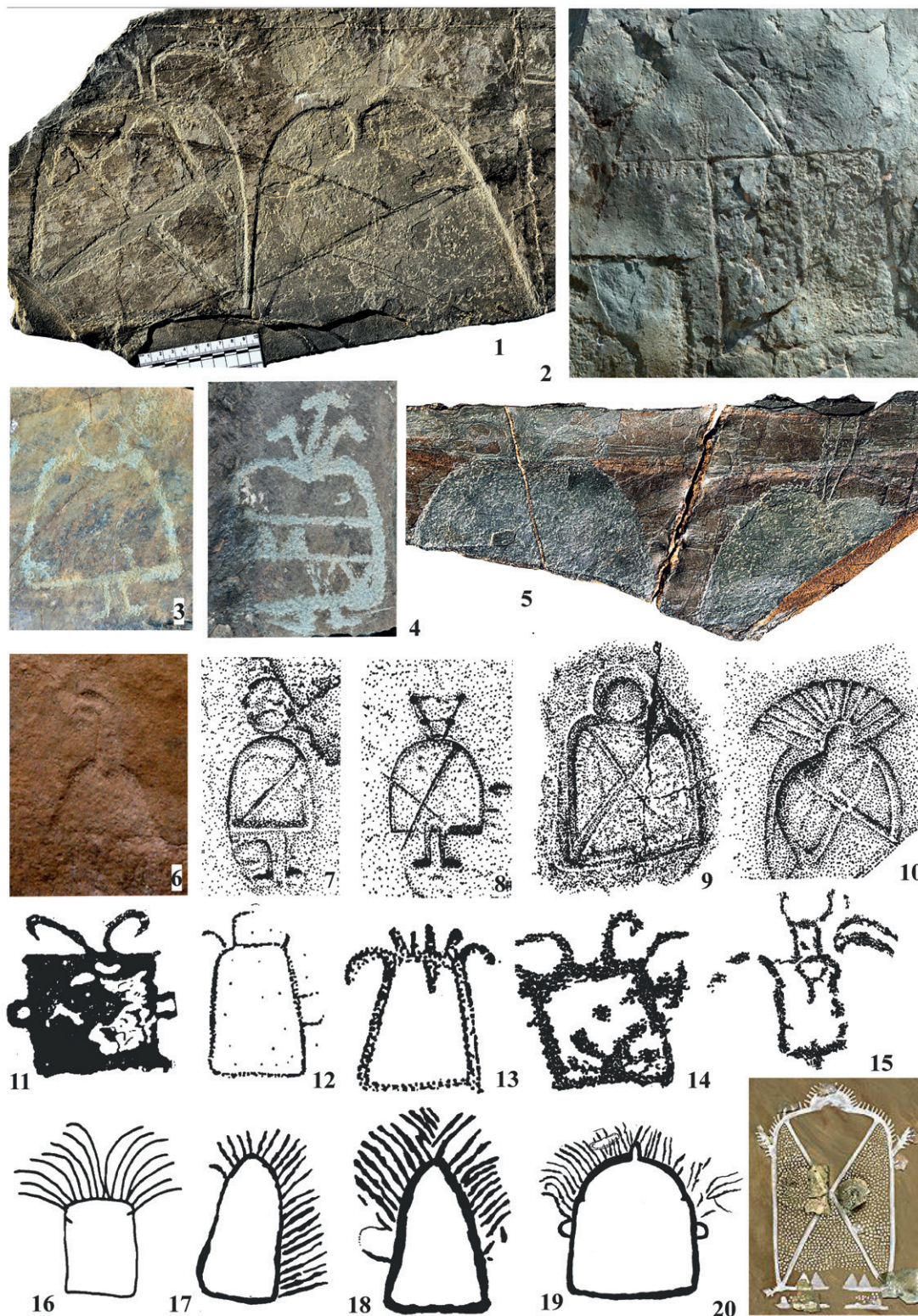


Fig. 11: Parabolic and rectangular creatures with antennae. 1–10 – Chemurchek phenomenon. 1, 3–5 – “Giant” ritual enclosure Khar chuluut 1, Ulaankhus sum, Bayan-Ulgii; 2 – “Giant” ritual enclosure Khulagash, Sagsai sum, Bayan-Ulgii; 6 – Bolate 3-2 M18 barrow, Buerqin county, Xinjiang; 7, 8 – Alepabulake III No. 2 statue-menhir; 9, 10 – Alepabulake I statue-menhir (KOVALEV 2012; 2015a and unpublished photos). 11–15 – Late and Final Neolithic of France and Italy. 11 – Dolmen du Berceau, Eure-et-Loir; 12, 13 – Pierre-aux-Fées (Reignier, Haute-Savoie) and menhir des Ublaies (Massay, Saône-et-Loire); 14 – Chenal, Aosta; 15 – La Barma, Valtournenche (ARCA ET AL. 2016). 16–19 – Early and Middle Neolithic passage graves in Brittany (SHEE TWOHIG 1981). 20 – Sipplingen B (Germany) (by SCHLICHTERLE 2016).

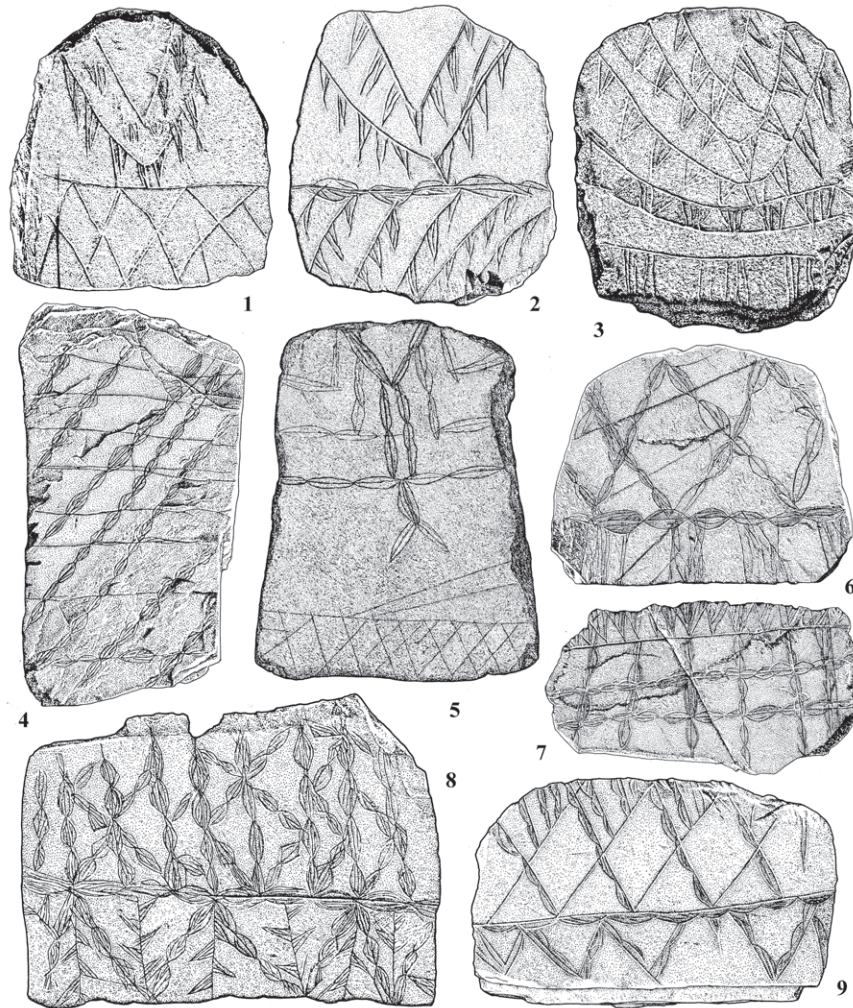


Fig. 12: Chemurchek slate plaques. 5 – “Giant” enclosure Khulagash, Sagsai sum, Bayan-Ulgii aimag; others – “Giant” enclosure Khar chuluut, Ulaankhus sum, Bayan-Ulgii aimag (by KOVALEV/MUNHBAAR 2015).

liths (Fig. 11:16–19), on Berseau dolmen, Burgundy menhirs, and Piedmont (Aosta) petroglyphs (SHEE TWHIG 1981; ARCA ET AL. 2016; CASSEN ET AL. 2018) (Fig. 11:11–15). The latest variants of the development of this type can be seen in Mont Bego (LUMLEY/ECASSOUX 2012: 234–249; HUET 2017: 108–111). One of earliest representations of this type of figure is in a wall-painting in one of the houses of the Sipplingen B site in Ludwigshafen, on Lake Überlingen (3857–3817 BCE) (SCHLICHTERLE 2016) (Fig. 11:20).

12 Slate plaques (idols) (Figs. 12, 13)

Near the northern wall of the Khar chuluut (Fig. 1:40) ritual enclosure, on the ancient horizon level, we found a “hoard” of 79 slate plaques (both fragmented and intact) with engraved pictures or without pictures (Fig. 12:1–4, 6–9). They were

placed horizontally and densely in five to six layers. The plaques are 1–3 mm thick and not more than 5 cm in width. The edges of all the plates had been finished to make them symmetrical, to round off the upper contour, or to reach a general trapeziform contour. A line or a band divides the figure into an upper and a lower part. Lines of foliate-shaped figures often form a grid. The grid can also be made of straight lines. Lines with triangular festoons hanging on them form two to four rows of “necklaces” in the upper part of the figure. In the lower part, the ornament is made either of vertical lines forming bands or of skew lines forming a zigzag or a grid. In spite of the general anthropomorphism, the face is not depicted. Similar rows of triangular festoons and strings of foliate-shaped figures decorate a stone slab standing nearby in the fence. We also discovered similar plaques inside a Khulagash ritual enclosure (Fig. 12:5). Pieces of megalithic art in western Europe from the first half of the 3rd millennium BCE can serve as analogues: engraved plaques from the

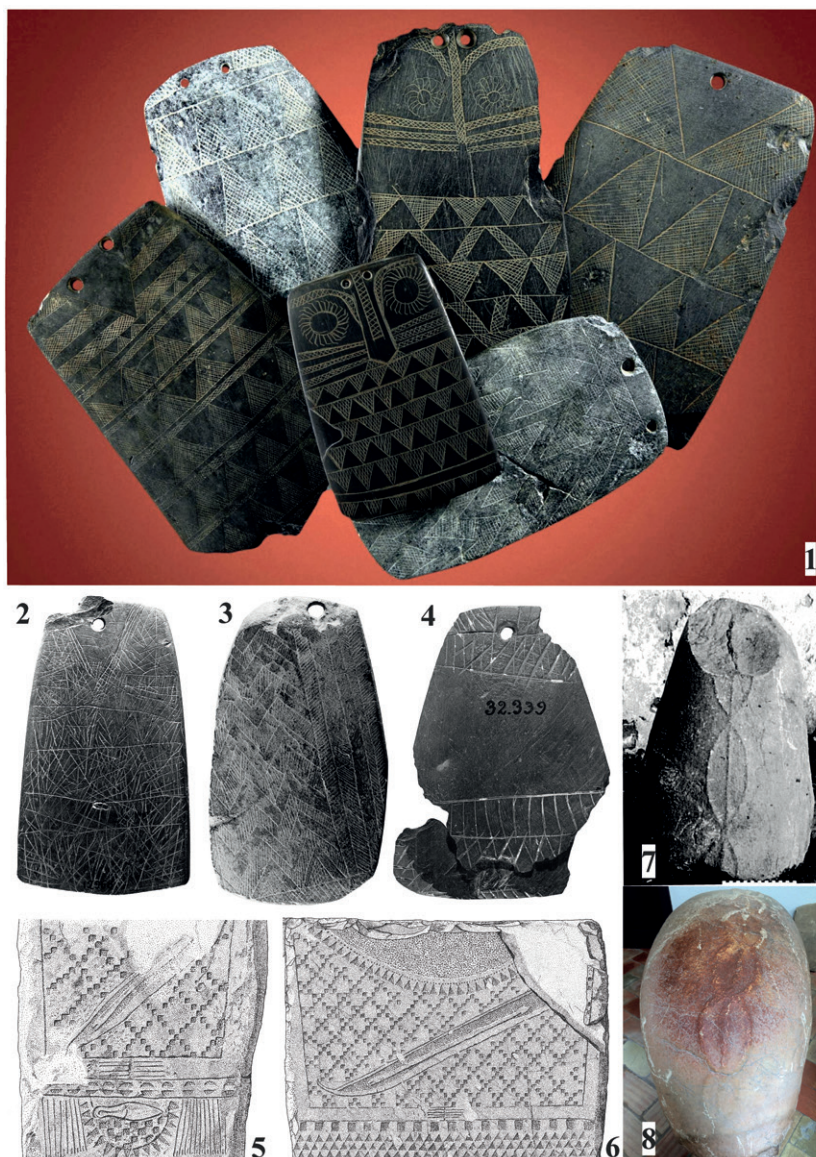


Fig. 13: West European plaque-idols (1–4) and statue-menhirs (5–8) of the early 3rd millennium BCE. 1 – Megalithic tombs of Huelva (Spain) (GARCÍA SANJUÁN ET AL. 2010); 2–4 – Megalithic tombs of Portugal (GONÇALVES 2003); 5, 6 – Petit-Chasseur (Sion, Valais) (CORBOUD/CURDY 2009); 7, 8 – Menhirs of Algarve, Portugal (menhir of Courela de Castanheiro, menhir of Vale da Lama) (VARELA GOMES: 1979).

south of the Iberian Peninsula, and the statue-menhirs of the Sion-Aosta type mentioned above. Engraved slate plaques from southern Iberia date back to the 31st to 27th century BCE (BUONAVENTURA 2011: 167–169). As a rule, they are of sub-trapeziform configuration (plates with a separate head contour appear in a later period); in the upper part (where the face should be) there is a sub-triangular sector without any ornament, outlined with slotted lines or belts; the lower part of a plate is separated with a belt or a horizontal line (BUENO RAMIREZ 1992; LILIOS 2008; GARCÍA SANJUÁN ET AL. 2010: 20–21 (Huelva)) (Fig. 13:1). The main compositional elements are rows of hatched triangles, parallel zigzags inscribed into one other, and hatched squares

arranged in a checkerboard pattern. As mentioned above, some Spanish anthropomorphs are decorated with similar rows of triangle festoons (Fig. 5:7–8). Some plaques are decorated with asymmetrical engraving, drawn with an oblique neck and lines (GONÇALVES 2003) (Fig. 13:2–4). There are also “garlands” composed of foliate-shaped figures carved on some southern Portugal menhirs (VARELA GOMES 1979: Figs. 148, 150; PINHO MONTEIRO/VARELA GOMES 1981: Figs. 34, 35) (Fig. 13:7, 8). On statue-menhirs of the Sion-Aosta type, we can see not just multiple necklace-like rows of “hanging” triangular festoons, but also parallel zigzags inscribed into one other, and a skew grid of diamonds

(CAVAZZINI (ED.) 1998; FAVRE ET AL. 1986; CORBOUD CURDY 2009: 47–105) (Figs. 5:10; 13:5, 6).

13 Conclusion

Taken together, the architecture of burial constructions, tradition of collective burials in crypts, form and ornamentation of vessels, the stylistics of stone statues, paintings on slabs inside burial chambers, slate plaques, and images of main deities reveal analogies with materials of the Middle to Late Neolithic of western Europe; as a whole, the complex of specific attributes that appeared in Dzhungaria from ca. 2700 BCE is very close to Final Neolithic sites in southern France, Jura, and western Switzerland (ca. 3200–2600 BCE) (KOVALEV 2011). The transfer of such a complex set of cultural traditions over such a far distance seems impossible without the migration of ancient people. Such a conclusion is inevitable, based on the accepted archaeological methodology for tracing migrations (template criterion) (see DEETZ 1968, RUIS ZAPATERO 1983). In this migration flow, some eastern Europeans were probably involved – as evidenced by the appearance of some Kemi-Oba culture ochre mural paintings (grid with points patterns) and finds of Repino type ceramic vessels with cord stamps in Chemurchek Kermuqi type barrows (KOVALEV 1999: 165–166;

KOVALEV 2015a). The figurative art of Chemurchek petroglyphs and the ritual enclosures (images of animals, “one-leg” and “bi-triangle” anthropomorphs, etc.) had their origin in Central Eurasian and Middle Eastern traditions (KOVALEV/MUNHBAÅR 2015).

At the time when this volume was already ready for publication, an article was published with the sequencing of 22 genomes from the Afanasievo and Chemurchek sites in Xinjiang (KUMAR, V. ET AL. 2022). The results of this study show a strong mixture of the Afanasievo and Chemurchek populations here, and the high level of steppe (Yamnaya) and BMAC ancestry in the Chemurchek genomes, and do not reveal a western European component that could indicate direct migration. Thus, the appearance in the Mongolian Altai of a complex of features of western European origin becomes all the more mysterious. It is unlikely that it could be a transmission in several stages because there is no archaeological evidence for this in eastern Europe. The complex process of migration could include various phases, including reverse movements and the adoption of the material culture and religion of the autochthonous population by some of the migrants. Further research will show at what stage and how the ideology of the Final Neolithic of western Europe was adopted by the population that brought it to the Mongolian Altai.

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The Kingdom of Kroraina

At the Crossroads of the Ancient World

Tomas Larsen Høisæter

Abstract: This article discusses the “problem of movement” along the Silk Roads exchange network of Late Antiquity, looking at how the many challenges of moving through Central and Inner Asia might have been overcome. In order to examine this problem in detail, the article presents a case study of the kingdom of Kroraina, known in Chinese as Shanshan (鄯善), in the 3rd and 4th century CE. After an introduction to the economy and trade of the kingdom, the article shows the challenges that faced envoys, monks, and merchants travelling across the harsh terrain of the region. It then shows how many of these “problems of movement” were in fact solved by the Krorainan kingdom, highlighting especially the important institution of the arivaga, a system of hereditary guides that escorted envoys from the western border of Kroraina to the neighbouring kingdom of Khotan. It concludes by suggesting that in order to truly understand how the Silk Roads exchange network might have worked in practice, more attention ought to be paid to the role of the polities of Central and Inner Asia.

Keywords: Silk Road, kingdom of Kroraina, Shanshan, arivaga, “problem of movement”.

Резюме: В данной статье обсуждается «проблема передвижения» по обменной сети Шелкового пути в поздней античности; рассматриваются способы преодоления многочисленных трудностей, связанных с передвижением по Центральной и Внутренней Азии. Эта проблема детально анализируется в статье на примере царства Крорайна (Лоулань), известного на китайском языке как Шаньшань (鄯善), в III–IV веках. После введения в экономику и торговлю царства в статье описываются трудности, с которыми сталкивались посланники, монахи и купцы, передвигавшиеся по суровой местности региона. Далее в статье показывается, что в действительности для многих из этих «проблем передвижения» в царстве Крорайна были найдены решения, причем особо подчеркивается роль системы аривага – института потомственных проводников, которые сопровождали посланников от западной границы царства Крорайна до соседнего царства Хотан. В заключение делается предположение, что для того, чтобы понять, как сеть обмена Шелкового пути могла функционировать на практике, необходимо уделить больше внимания изучению политики государств Центральной и Внутренней Азии.

Ключевые слова: Шелковый путь, царство Крорайна (Лоулань), Шаньшань, аривага, “проблема передвижения”.



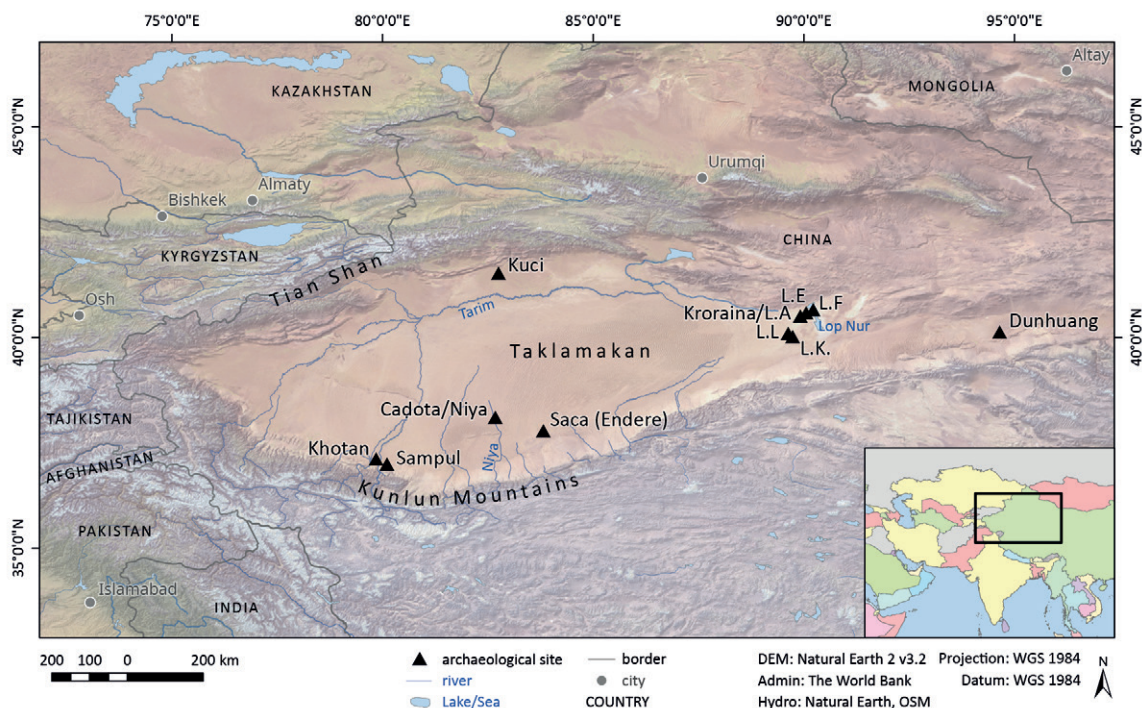


Fig. 1: Major sites in the kingdom of Kroraina (3rd to 4th century) and its principal neighbours (RUTISHAUSER/HØISÆTER 2022).

1 Cultures in contact – the Silk Roads and conceptions of ancient long-distance trade

Whenever discussing cultures in contact across Central and Inner Asia,¹ whether through economic exchange or through the transfer of ideas and innovations, the “Silk Roads” – as both an explanation and a perceived reality – are never far away. They are frequently invoked to explain the presence of various artefacts found archaeologically, they have become a fixture in discussions of pre-modern contact and globalisation, and perhaps most notably they feature heavily in titles of publications and projects relating to Central and Inner Asia. To give some examples, the archaeological finds of foreign luxuries in Central and Inner Asia are often explained in terms of the Silk Roads, whether the silk textiles found in the tombs of Shanpula (Sampul) near Khotan² (Fig. 1) or the incredibly rich finds from the treasure rooms of Begram.³ In a similar vein, control over the Silk Roads has been invoked to explain the rise of the Kushan dynasty,⁴ and Buddhism’s journey

from India to China is also usually framed in the context of the Silk Roads,⁵ among other uses of the term. Given its popularity, however, perhaps one ought to ask what invoking the Silk Roads really entails. What does it really mean when we say that something was carried to a place along the Silk Roads?

Formulated first in the late 19th century and popularised by Ferdinand von Richthofen and his student, Sven Hedin,⁶ the term “Silk Road(s)” has endured throughout the 20th century and has if anything become even more popular in recent years.⁷ Given the term’s long history and popularity, the Silk Roads have unsurprisingly been conceived of in different ways, yet it would be fair to say that most references to the Silk Roads refer to what we may term the traditional narrative of the Silk Roads: a “Silk Roads of Empires”. In this traditional narrative, the Silk Roads were “opened” at the end of the 2nd century BCE by the westwards journeys of the Han envoy, Zhang Qian (張騫), and the following advance of the Han empire into the Tarim Basin. After this “opening”, the Silk Roads stretched from China in the east to the Roman Empire in the west, supported by the “middlemen” of the Kushan and Parthian Empires. The Silk Roads are then often thought to have collapsed with the fall of many of these empires in the 2nd century CE, only to be revived and experience a “Golden Age” during the 6th to 9th century

1 I use these terms here broadly to refer to the many regions lying at the heart of the Asian continent, bound roughly by the Eurasian Steppes to the north, the Caspian Sea to the west, the mountain ranges of Hindu Kush, Karakorum, and the Himalaya to the south, and the Gobi Desert in the east.

2 WANG/XIAO 2001.

3 MEHENDALE 2011; L. ZHANG 2011: 12.

4 FALK 2014.

5 FOLTZ 2010.

6 MERTENS 2019.

7 ANDREA 2014; JACOBS 2020.

CE.⁸ The traditional narrative has naturally changed over time, and has been shaped and modified by various scholars. For example, one notable development has been the recognition of the role of the nomadic peoples of Central and Inner Asia, traditionally seen as a disruptive force; and the roles of the nomadic empires and nomadic elites have been especially emphasised in recent years.⁹ Many scholars have also come to criticise the traditional Silk Roads narrative from a number of different angles: for example, pointing out that lines of exchange should also be drawn between the north-south rather than simply east-west, or that the Silk Roads connections were significantly older than the 2nd century BCE.¹⁰

What is noteworthy, however, is that while the traditional narrative of the Silk Roads and its critics have had much to say about how the trade network came about, what areas it covered, and what drove its development, usually very little is said of how these Silk Roads might have functioned in practice, beyond the rather vague references to caravans and long-distance traders that often appear in the literature. This important deficit of the traditional Silk Roads narrative and concept was touched upon in Armin Selbitschka's thought-provoking article "*The Early Silk Road(s)*", in which he stresses the weakness of our current Silk Roads concept as an analytic and heuristic tool.¹¹ Instead of the traditional approach, Selbitschka argues for a "movement paradigm" within Silk Roads studies, where discussions should centre on questions related to movement, such as what exactly moved, how did it move, was the movement only one way, and many other related questions.¹² I would argue that Selbitschka has here hit upon a crucial point for furthering our understanding of contact and exchange across both Central and Inner Asia, as well as the wider Eurasia, whether or not one retains the appellation of the Silk Roads. Thus, instead of concerning ourselves with questions, such as when a Silk Road may have started – a question of definition more than anything – students of contact and exchange along the Silk Roads networks ought to focus our inquiries on "the movement", and thus practicalities, implicit in this contact and exchange.

This article will take this idea of movement as its starting point and will explore one facet of what might be called the "problem of movement"; that is to say, the question of how the people who connected the many cultures of Central and Inner Asia

actually moved. This is a pertinent question, as Central and Inner Asia is home to some of the most inhospitable and difficult terrain on earth, dominated by the tallest mountains on the globe as well as some of the largest continuous stretches of deserts. The accounts of historical travellers often highlight the dangers and difficulties of this terrain, with the Chinese pilgrim, Faxian (法顯), for example characterising the desert stretches beyond Dunhuang (Fig. 1) towards the kingdom of Shanshan (鄯善) as a place of evil demons and hot winds, a lifeless barren where one could find no mark beyond the bones of the dead.¹³ Movement across such terrain, whether for small groups of monks, caravans of traders, or large armies, would necessarily entail a huge logistical challenge and would require a certain infrastructure, such as ways of acquiring food and fodder, security along the routes and, perhaps most importantly, guides.

In order to look more closely at how this might have been achieved, this article will take as its case one of the kingdoms that Faxian travelled through, namely the kingdom of Kroraina (Fig. 1) – the kingdom known as Shanshan in Faxian's account.¹⁴ Kroraina was originally one of the many smaller polities of the Tarim Basin, with its territories near Lake Lop Nur, but by the 2nd century CE it had grown into one of the two dominant kingdoms in the southern Tarim Basin. Its territories stretched from the capital, Kroraina (L.A–B sites), by the Lop lake in the east, to the town of Caḍota (Niya site; Fig. 1),¹⁵ along the Niya River in the west. Inhabiting the thin line of highly fertile oases and river stretches between the Kunlun Mountains to the south and the Taklamakan Desert to the north, Kroraina was dominated by oases, a line of which stretched east-west along

8 For a recent and updated version of this "standard narrative", see BENJAMIN 2018.

9 An early example of this recognition of the role of nomadic people can be found in RASCHKE 1978. For recent examples, see BROSEDER 2015; HONEYCHURCH 2015.

10 CHRISTIAN 2000; SELBITSCHKA 2018.

11 SELBITSCHKA 2018.

12 SELBITSCHKA 2018: 11–18.

13 LEGGE 1886: 12–13.

14 The kingdom is known variously in the literature as Kroraina (from Prakrit *Krorayina*, used for its capital), Loulan (樓蘭) (an early Chinese name transcribing the same native word as Prakrit *Krorayina*), and the later Chinese designation, Shanshan (鄯善). However, Diego Loukota has convincingly shown that the local name for the kingdom was Greater Nuava (*Mahanuava*) in his recent article, LOUKOTA 2020. See also HØISÆTER 2020: 133–35. I have chosen to retain the common designation of Kroraina, as Loukota's discovery is not yet widely known in the scholarly community.

15 In the following, I will refer to the various oases and sites within the kingdom of Kroraina with their local names, as far as is known, with the name for the modern archaeological site in brackets afterward. Wherever possible, I will keep to sir Aurel Stein's system of designating sites and ruins as this is most accessible to the average reader, with the designations of the Sino-Japanese team used where necessary. Stein's system for designating ruins starts with the site initial, followed by a number according to the order of discovery. Thus N.2 would be the second ruin discovered at the Niya site. Rooms, where relevant, are designated with a Latin numeral after the ruin number; for example N.2.II.

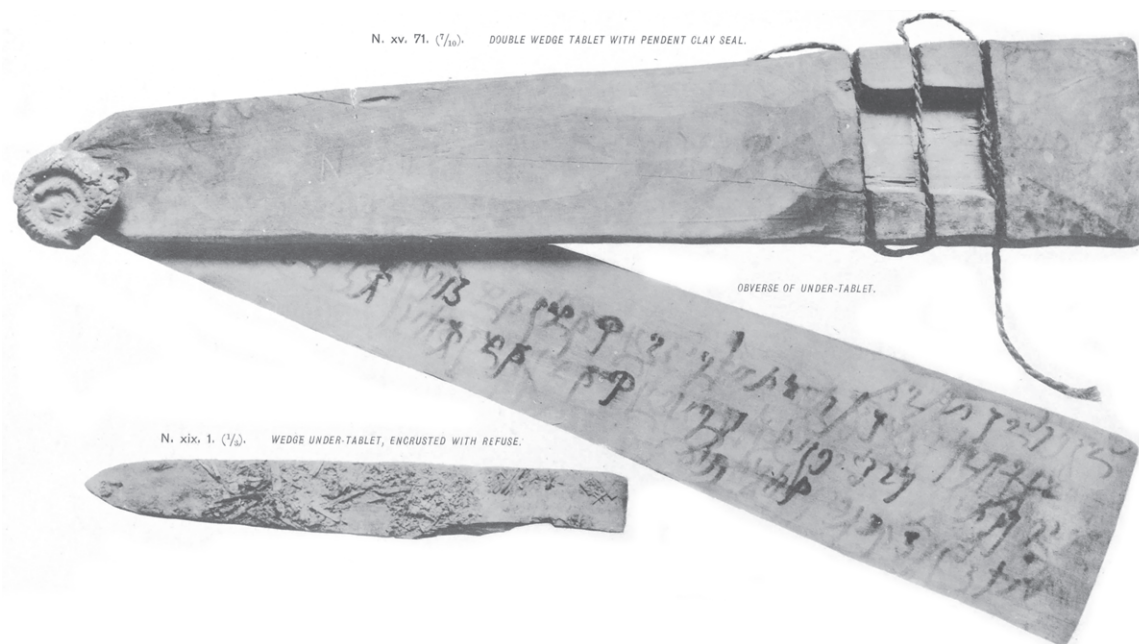


Fig. 2: A typical “wedge and seal” (*kilamudra*) Kharoṣṭhī document (N. xv. 71. = n.265) (STEIN 1907: plate 100).

the foot of the mountains. Abandoned rather suddenly sometime before the 7th century CE, following the collapse of the kingdom,¹⁶ many of the oases disappeared in the desert, leaving very well-preserved sites that have since been rediscovered and explored archaeologically. What makes the kingdom of Kroraina particularly interesting as a case are the large numbers of written documents uncovered there, primarily written in a local version of the Indian language Gāndhārī, using the Kharoṣṭhī script, as well as many documents in Chinese and a few examples of Sogdian and Kuchean (see Fig. 2). These documents, dating almost entirely to the 3rd and early 4th century CE, give insights into a broad range of topics, from the political and social organisation of the kingdom to its economic system and institutions, including some information about long-distance trade in the region.¹⁷

Drawing primarily on these documents, this article will explore the role of the kingdom of Kroraina in providing solutions to the “problem of movement” in the 3rd and 4th century CE, and I will focus upon institutions and infrastructure provided by the kingdom. Given the constraints of the article, I will first

provide an outline of the “problem of movement” in the ancient Tarim Basin and then proceed to give an overview of the various ways the Krorainan polity provided answers to these problems. I will focus in particular on the institution of the *arivaga*, the best-documented example of such local infrastructure. First, however, it is necessary to give a brief presentation of the nature of trade in the southern Tarim Basin during the 3rd and 4th century CE.

2 Trade in the southern Tarim Basin

Despite the common perception of a decline in contact and exchange across Eurasia from the 3rd to roughly the 6th century CE, the evidence from Kroraina and the wider southern Tarim Basin points to vivid economic activity. The Krorainan economy was based on a combination of agriculture, primarily producing cereals, but including a wide variety of fruits as well as wine, together with animal husbandry, rearing sheep, cattle, camels, and horses. It was upon this basis that royal taxes were levied and the Krorainan polity existed. Similarly, wealth in Kroraina was reckoned on the ownership of lands and animals and it was upon this basis the Krorainan elites held power. Based on this agricultural foundation, a flourishing economy existed as reflected in the many contracts and legal documents that have been found in the Krorainan sites; and this economy was structured by a number of legally enshrined institutions, foremost of which was the system of

16 The details surrounding the collapse of the Krorainan polity remains almost entirely unknown and a discussion of this topic falls beyond the purview of this paper. It is sufficient to note that the last datable documents from the major Krorainan sites date to the mid-4th century CE; and by the time the Chinese pilgrim, Xuanzang, visited the region in the mid-6th century CE, most of the major sites had been entirely abandoned.

17 For a detailed treatment of the kingdom of Kroraina, its socio-political landscape, and its economy, see HØISÆTER 2020.

written contracts itself.¹⁸ In the contracts, one sees a wide range of commodities exchanged, most importantly land, but also various animals, such as camels and horses, as well as textiles, cereals, wine, and also slaves. As can be traced in their contracts, certain individuals and families were very active in the local economy and through their commercial activities they managed to accumulate substantial wealth. Taking as an example the very well-documented case of the scribe, Ramšotsa,¹⁹ whose hidden family archive has been found in ruin N.24 (Fig. 3), we can see through his known contracts that he acquired large swaths of land for growing various crops, as well as two vineyards, an arbour, and three female slaves. As payment for these lands and slaves, as well as to settle legal disputes, he paid with a total of five camels, five horses, 30 sheep, carpets totalling 52 hands in length, two Khotanese rugs, as well as both grain and wine, presumably produced on his land.²⁰ Continued by Ramšotsa's son and his three grandchildren, this was commercial activity on a large scale. It appears to have made Ramšotsa and his family wealthy, despite the fact that they only served in peripheral roles in the royal administration. Yet as exemplified by the business of the Ramšotsa family, most commercial activity in the southern Tarim Basin was strictly local, with no apparent connections further away than neighbouring Khotan.²¹

Turning, on the other hand, to the residence of Ramšotsa and his family – ruin N.24 – a broader picture emerges. In and around ruin N.24 a variety of decorative beads were found, including a number of glass beads in various colours, similar to glass beads discovered across the Krorainan sites.²² Analysis of glass beads from the Niya site has been carried out by Lin et al. of the Sino-Japanese expedition, who have found that the glass beads closely parallel known types from West Asia as far away as Rhodes and Egypt; and, based on a mineral analysis, they suggest that the glass did indeed originate from West Asia.²³ The glass from N.24 was not part of this study, having been discovered by Sir Aurel Stein, but it seems likely that this too originated from somewhere in Western Asia. Even more remarkable, however, was the find by the Sino-Japanese expedition of no fewer than 31 beads made of coral at ruin N.24.²⁴ Being products of the ocean, these must have originated from some vastly distant sea and must thus



Fig. 3: Ruin N.24 after Stein's excavation, seen from the east (STEIN 1921: Fig. 59).

have been carried to Kroraina through human networks. These discoveries also find some parallels in the written documents from N.24, as document n.566 reports the theft of “seven strings of pearls, one mirror, a *lastuga* made of many coloured silk, and a *sudī* ear ornament”²⁵; many of these items likely originated from beyond Kroraina. Thus, the evidence from N.24 does suggest that Kroraina was part of regional and even interregional networks, a view that is proven further by archaeological and written sources from other parts of Caḍota (Niya site).

Perhaps the best evidence for this comes from the so-called “Southern Workshop Area” (南方工房址) at Caḍota (Niya site), discovered and surveyed by the Sino-Japanese expedition during 1996–1997. This “Southern Workshop” lies in a small depression south of the ruin cluster N.14, covering an area of roughly 400 m north-south and 500 m east-west. In the area were found four furnaces with the remains of charcoal and slag from metalworking, two kilns for firing pottery, a man-made pool, and three brick structures. Across the area were found a number of “crafted” artefacts including beads, metal objects, and pottery. Some of these “crafted goods”, such as a mirror, several arrowheads, and two knives, appear unfinished, underlining the site's role as a centre for production.²⁶ What makes the “Southern Workshop” so interesting, however, are the 22 individual pieces of coral, as well as four cowries, found in the easternmost of the brick buildings (see Fig. 4).

These too were in various stages of production, ranging from some coral pieces being completely raw and unworked, to some that had been polished into beads and carefully perforated for use in necklaces, armbands, or other items of jewellery.²⁷ The excavation report does not specify the species of coral and cowries involved, and as such it is difficult to say with certainty where they might have come from. Yet the corals, at least, must have originated

18 HØISÆTER 2020, Ch. 5.

19 Ramšotsa was also, for a short period, a royal *soḥamga* official. See documents n.580, 582, and 587.

20 Ramšotsa's contracts and legal documents include documents n.571, 574, 579–584, 586–587, 589–590, and 592.

21 HØISÆTER 2020: 185–89.

22 STEIN 1921: 256–257.

23 BUKKYO DAIGAKU (佛教大学アジア宗教文化情報研究所) 2007, 3: 101–145.

24 THE SINO-JAPANESE JOINT RESEARCH OF THE NIYA SITE (日中共同ニヤ遺跡学術調査隊) 1999: 346.

25 BURROW 1940: 112.

26 THE SINO-JAPANESE JOINT RESEARCH OF THE NIYA SITE (日中共同ニヤ遺跡学術調査隊) 1999: 91–99.

27 THE SINO-JAPANESE JOINT RESEARCH OF THE NIYA SITE (日中共同ニヤ遺跡学術調査隊) 1999: 96.



1. 93A10 (N13) 周辺、93A9 (N14) 南部作坊遺址采集珠類
93A10 (N13) 周辺・93A9 (N14) 南方工房址採集玉類



2. 93A10 (N13) 周辺、93A9 (N14) 南部作坊遺址采集珊瑚、貝製裝飾品
93A10 (N13) 周辺・93A9 (N14) 南方工房址採集サンゴ・貝製裝飾品

Fig. 4: Beads, corals, and cowries from the “Southern Workshop”

(THE SINO-JAPANESE JOINT RESEARCH OF THE NIYA SITE (日中共同ニヤ遺跡学術調査隊) 1999, Fig. 68; images used courtesy of the Academic Research Organization for Niya, Bukkyo University, Japan.)

from some distant ocean and they had, notably, been imported into Kroraina not as worked products, but as raw materials.²⁸ This last point is significant as it

28 The coral finds from the “Southern Workshop” are not an isolated case, as further coral ornaments were found in both ruin N.12 and the previously men-

tioned N.24, as well as surface finds incorporated into the “reconstructed” necklaces MF0027, MF0029, and MF0030, whose exact find spots were not recorded. See THE SINO-JAPANESE JOINT RESEARCH OF THE NIYA SITE (日中共同ニヤ遺跡学術調査隊) 1999: 346; BUKKYO DAIGAKU (佛教大学アジア宗教文化情報研究所) 2007: 74–75.

means that corals were not only being imported into Kroraina, but also arriving frequently enough that local craftsmen were skilled in using them and carried a supply of unworked material. This is important to keep in mind when considering who might have carried these corals to Kroraina – for unlike worked ornaments, which may have moved as gifts through elite connections, a supply of raw coral was almost certainly carried by merchants.

The connections that brought imported goods into Kroraina were many and the actors involved equally varied. Socio-political connections likely played a role; especially diplomatic gifts of the type described in document n.214, in which a horse was being sent to the king of Khotan. Additionally, from the Chinese documents found across Kroraina it is clear that the military of various Chinese dynasties also played a role. For example, in the wooden document n.102 of the Hedin Collection, found at Kroraina (L.A site), it is detailed that 20 rolls of coloured *ling*-silk (綾綵) had been sent from Dunhuang for the purpose of purchasing food for the Chinese soldiers stationed at Kroraina.²⁹ This food would presumably be purchased from the local authorities or even the local population, an act which would in turn bring high quality Chinese silk into the Krorainan economy. The armies of the Chinese dynasties were also paid salaries partly in silk, and many of the soldiers at Kroraina were described as Hu (胡) or Zhihu (支胡); that is, barbarians from the north-west, likely soldiers recruited locally in the Tarim Basin.³⁰ Yet, as shown by the case of the corals from ruin N.24 and the “Southern Workshop”, merchants played a significant role in bringing goods to Kroraina, too.

Merchants and commercially motivated exchange are in fact the best documented vectors for imported goods arriving in Kroraina, with both Chinese and local people from the Tarim Basin involved.³¹ Yet, even more notable, especially when considering the beads and corals that likely originated in the west, is the evidence for Sogdian merchants active in the south-eastern Tarim Basin. Sogdians are mentioned in the Kharoṣṭhī documents, appearing in both n.661 and n.665 from Saca (Endere site; **Fig. 1**), as well as in the Chinese document n.886 from the Stein Collection. A number of fragments of Sogdian documents have furthermore been found in Kroraina: six near the capital, Kroraina, at the various Lop sites,³² and one at Caḡota (Niya site).³³ Interestingly, both L.A.2.x.01 and L.M.2.ii.09 appear to be

letters, likely addressed to Sogdians residing in Kroraina, since there they ended up being thrown into rubbish heaps, suggesting that Sogdians resided in the kingdom. That many of these Sogdians were merchants, and that some of them did in fact conduct trade in Kroraina, is revealed by the so-called “Sogdian Ancient Letters”, specifically AL 6, found by Stein at Dunhuang.³⁴ In it, a man named Farnkhund (*prnxwnt*) reports that he had been sent out to Kroraina (*kr'wr'n*) in order to buy silk and camphor for an unnamed third person; although due to its fragmented state, the details following this are difficult to discern. Thus, although the letter is both fragmented and difficult to read, it shows quite clearly that merchants from as far away as Sogdia were active during the 3rd and 4th century CE in Kroraina.

3 The problem of movement through the Tarim Basin

These connections, evidenced by the imported goods found in Kroraina and the traces of some of the merchants who travelled along these connections, bring us back to the “problem of movement” raised in the introduction. For given that merchants like Farnkhund did travel across the territory of the kingdom of Kroraina, one ought to consider how these journeys were accomplished.

That merchants like Farnkhund faced a real “problem of movement” cannot be in doubt – something that a quick glance at a satellite image of the south-eastern Tarim Basin will reveal. Starting from Dunhuang, where the Sogdian Ancient Letters were found, towards the west, one would have to cross through the Lop Desert and take the route either north or south of Lake Lop Nur. This stretch through the desert would have been almost entirely without water or any signs of life, with nothing in sight but strangely shaped rocks, gravel, and sand, baking hot in summer and freezing cold in winter. It was, and still is, a trackless wasteland, which according to Faxian took 17 days to cross.³⁵ This appears to be a fairly accurate estimate, as it agrees well with the 19 days taken by Sir Marc Aurel Stein and his team to travel in the other direction.³⁶ Reaching the capital, Kroraina, one could continue going south-westwards via the oases of the kingdom, which lay along the rivers coming down from the mountains. Yet here too one would be faced with new swaths of wastelands at every stage, for between each river lay a stretch of desert, with the inhospitable Takla-

29 CONRADY 1920: 134–135.

30 See for example Stein’s Chinese documents n.763, 804, and 846 in CHAVANNES 1913.

31 For a detailed discussion, see HØISÆTER 2020, Ch. 8.

32 The documents in question are L.A.II.x.01 (Or:8212/1368), L.A.II.x.02 (Or: 8212/1368), L.A.IV.v.028 (Or: 8212/1365), L.A.VI.ii.0104 (Or:8212/102), L.M.II.ii.09 (Or: 8212/1823), and L.L.018 (Or: 8212/1735).

33 SIMS-WILLIAMS/BI 2018.

34 The document exists in transcription and a very partial translation by REICHEL 1931: 38–39. Nicholas Sims-Williams has, however, most graciously shared with me his forthcoming revised translation upon which I have based this discussion and for which I am deeply grateful.

35 LEGGE 1886: 12–13.

36 STEIN 1928: 290–342.



Fig. 5: A view of the desert landscape between Kroraina and Dunhuang (photography by the author).

makan to the north and the barren Kunlun Mountains to the south. While the climate in the region has deteriorated markedly since the heyday of the kingdom, as shown by the advance of the desert into previously habitable areas, these stretches would have been incredibly difficult even in better times and would have required substantial infrastructure. Animals for transportation were a necessity, and food and water for both men and their beasts had to be carried, as illustrated by document n.834, in which a group of people are said to have died on the way from Caḍota (Niya site) to Kuci (Kucha; **Fig. 1**) for lack of animals and provisions.³⁷ Furthermore, these routes were at times unsafe, menaced by bandit raids or neighbouring enemies, such as the much-maligned Supi often warned against in many documents.³⁸ Finally, and most crucially, one would need a trusted guide who knew the way, the places for resting and for water, and the customs of the local people.

These problems are repeatedly acknowledged by the Chinese written sources of the Han dynasty, but the same sources also point to a solution for these problems: namely the aid and infrastructure provided by local polities. In the *Hanshu's* section on the kingdom of Jibin (罽賓), for example, it is said of the Han envoys, “For asses, stock animals, and transported provisions, they depend on supplies from the various states to maintain themselves”, noting further that if the local polities did not pro-

vide supplies, the envoys would starve to death in the wastes.³⁹ In the passages relating to the kingdom of Kroraina, the importance of local polities as providers of infrastructure is further underlined, noting that the kingdom “was regularly responsible for sending out guides, conveying water, bearing provisions and escorting or meeting Han envoys”.⁴⁰ The Han officials and envoys were, in other words, aware of the logistical challenges of the region and solved them by relying upon the infrastructure provided by local polities like Kroraina, a fact underlined by the efforts undertaken to keep the Tarim kingdoms friendly and subservient.

Naturally, the *Hanshu*, having been written in the 1st century CE, only confirms this situation for the 1st century BCE and possibly the 1st century CE, but judging by the Krorainan documents it is evident that local solutions and infrastructure likewise remained crucial in the 3rd and 4th century CE. One example of this is the provisioning of envoys, as described in document n.686.⁴¹ The document, which takes the form of an oval-topped board, was found in ruin L.A.4 at the capital, Kroraina, and contains an account of a total of 15 cattle that had been sent away to various people and groups. One cow had been provided to each of three groups of Chinese people, at various locations, and notably one cow had also been given to the “messengers from Khotan” ([*kho*]dani dutanam). These animals had presumably been provided as food, either for the duration of the envoys’ stay in Kroraina, or more likely as

37 Z. ZHANG 2013.

38 For documents concerning the Supi, see n.86, 109, 119, 126, 133, 139, 183, 212, 272, 324, 351, 491, 515, 541, 578, 675, 681, and 722. For a summary, see HØISEÅTER 2020: 353–356.

39 HULSEWÉ 1979: 110.

40 HULSEWÉ 1979: 89.

41 BURROW 1940: 139–140.

provisions for their return journey, given that cattle had also been provided to the geographically dispersed groups of Chinese.

Many of the Krorainan documents also reveal the royal court's concern with maintaining control and security along the roads through the kingdom. As shown by documents n.423, n.548, and n.555, the roads were not always secure since the documents state that people were only to be sent to the court "at a time when the roads are secure".⁴² Similar concerns are expressed in document n.165, in which a royal official warns against the possibility of tax being plundered en route to the capital and instructs measures to be taken.⁴³ The royal court did, however, try to remedy this situation, primarily through the two offices of the *pirovala* (fort wardens) and the *s̄pašavam̄na* (watchmen). Both groups were concerned with maintaining security along the kingdom's roads, and the *s̄pašavam̄na* in particular are often associated with controlling movement around the oases and keeping watch for enemies, such as the Supi.⁴⁴ Both groups were also related to the maintenance of a number of forts, called *piro/pirova*, by means of which movement along the kingdom's roads could be controlled, as seen in documents n.310 and n.639.⁴⁵ These *piro/pirova* forts can likely be equated with some of the many forts found in the former territory of the kingdom of Kroraina, such as the southern fort at the Endere site or the forts L.E, L.F, L.K, and L.L in the Lop area, all of which lay strategically along the routes through the kingdom.⁴⁶

As these examples show, kingdoms like Kroraina did provide solutions to many of the "problems of movement", supplying provisions for envoys and striving to provide security within its territories. It must be stressed that the intentions behind these policies were likely not to support trade; rather, the royal court was interested primarily in facilitating the movement of its own agents and, crucially, the orderly collection of its taxes. Yet even if unintended, the infrastructure that the kingdom provided would naturally have been a boon for travellers. This would have been the case especially for the best attested form of infrastructure organised by the Krorainan kingdom – namely, the institution of the *arivaga*.

4 The Krorainan *arivaga*

Recalling the discussions of travel through the south-eastern Tarim Basin in the *Hanshu*, the kingdom of Kroraina was relied upon for provisions and escorts, both of which we have also seen reflected in the Krorainan documents above. Yet the *Hanshu* also mentions the Krorainans providing guides and these too are found in the Krorainan sources, in the form of the *arivaga*.⁴⁷

The term *arivaga*, translated by Burrow as "guide" based on the context,⁴⁸ appears in a total of 12 documents and is used as a title for named individuals.⁴⁹ In about half of these documents the *arivaga* appear in a variety of "ordinary" contexts, such as being mentioned in letters or standing as a witness in contracts and legal documents.⁵⁰ In five cases, however, the *arivaga* appear in "royal command"-type documents, which had been sent from the Krorainan court to local officials and all of which related to the journeys of various royal envoys to the neighbouring kingdom of Khotan – journeys that the *arivaga* were to accompany.⁵¹ The most informative of these five documents is n.135, a wedge-shaped document sent from the royal court to a local *šoṭham̄ga* official named Lýipeya, which reads as follows:

Cov-tablet. Obv.

To be given to the *šoṭham̄ga* Lýipeya.

Under-tablet. Obv. and Cov-tablet. Rev.

His majesty the king writes, he instructs the *šoṭham̄ga* Lýipeya as follows: Now the *cuyalayina* Phuṃaševa has had to go on a mission to Khotan. When this sealed wedge-tablet reaches you, straightaway this Apita must go on the mission, and the *cuyalayina* Phuṃaševa must go with him to Khotan. As regards the two express (*aṃtagi*) camels of *cuyalayina* Phuṃaševa, they must be given (him), (likewise) the one express (*aṃtagi*) camel of Apita must be given (him). Also a suitable man is to be given them as guide (*arivaḡa*), who will go in front of them. This guide must go on his own beast. Just as formerly you have provided fodder and water for envoys, so now they are to be given to these envoys.

42 BURROW 1940: 86, 108, 110.

43 BURROW 1940: 32.

44 For examples of the former, see documents n.71 and 471; for the latter, n.88 and 126.

45 BURROW 1940: 56–57, 133.

46 For a detailed discussion of the Krorainan forts and the polity's attempts at securing its roads, see HØISÆTER 2020: 422–438.

47 A detailed study of the laws regarding envoys and the *arivaga* system exists in Japanese by NAGASAWA 1996, Ch. 12.

48 BURROW 1937: 76–77.

49 See documents n.10, 22, 135, 244, 251, 253, 388, 438, 507, 557, 569, and 593.

50 See documents n.244, 507, 569, and 593.

51 See documents n.22, 135, 251, 253, and 388.

Under-tablet. Rev.

*Cuyalayina Phumāṣeva*⁵²

The document again highlights the system of provisioning that was in place for envoys travelling through the kingdom and stipulates that they were to be given animals. Additionally, it provides an insight into the role of the *arivaga*, who were to travel along with the envoys on their own animals and who were to “go in front of them” (*yasya anupurvena gaṃdavo siyati*). This phrase, also used of an *arivaga* travelling to Khotan in document n.388, would seem to indicate that the *arivaga* were to act as guides, leading the envoy and his attendants, the sense also adopted by Burrow for his translation.

The same phrase does, however, appear in one other Krorainan document, namely the “letter”-type document n.307.⁵³ In this letter, sent between an official at the royal court and the senior official at Caḍota, the former urges that the taxes should be collected and sent quickly under the supervision of the *yatma* and *ageta* officials. These officials were to make sure that no tax was missing, and they also “have to go in front” (*yeṣa anupurvena gaṃdavva siyati*). The *yatma* and *ageta* officials of document n.307 were, in other words, to supervise and escort the delivery of the tax, and it would therefore seem that the role of the *arivaga* might also have entailed offering a form of escort, possessing the skills and knowledge needed to negotiate with the communities along the way. That this at times might have been necessary is shown by examples including document n.471, in which some *sṣasavaṃna* (watchmen) were accused of having robbed a group of Khotanese fleeing to Kroraina.⁵⁴

The *arivaga*, then, were guides and escorts, who in the documents escorted royal envoys from the borders of the kingdom at the Niya River to Khotan in the west. They were, however, not men chosen by chance. Firstly, the fact that the *arivaga* were expected to bring their own animals suggests that they were men of some means, as horses and camels were expensive to both acquire and keep. That they were men from at least the middle rung of the local society is further underlined by their inclusion in witness lists amongst men termed *azade*, meaning “free” or possibly “noble”,⁵⁵ though exactly what this implied remains uncertain. More importantly, however, the role of *arivaga* was a hereditary duty regulated by Krorainan law. This is shown by two very interesting documents, n.10 and n.438, which contain complaints by individuals who claim to have been appointed unjustly as *arivaga*. Document

n.438, another “royal command”-type, is particularly interesting:

Wedge Cov.-tablet. Obv.

To be given to the cozbos Kranaya and Lýipeya.

Wedge Under-tablet. Obv.

His majesty the king writes, he instructs the cozbos Kranaya and Lýipeya as follows: Bhimaṣena informs us that he is not a hereditary *arivaḡa*. He does not know properly the Khotanese *mata*. You make [should probably be ‘made’] him an *arivaḡa*. He is not to be made an *arivaḡa*.

Wedge Under-tablet. Rev.

Bhimaṣena⁵⁶

The document highlights the hereditary nature of the institution, as Bhimaṣena informs in a more literal translation that “starting with father’s fathers (they) have not been *arivaga*” (*pitara pita uvadae na arivaḡa asti*).⁵⁷ In other words, the duties of an *arivaga* passed from father to son. This seems to have been related to the second interesting point raised by the document, namely that an *arivaga* had to possess certain knowledge to fulfil his duties. The exact translation of the term *mata* remains obscure, with no suggestion in either Burrow’s or Glass and Baum’s dictionaries.⁵⁸ Yet from what we know of the *arivaga*, the Khotanese *mata* must refer to knowledge of the route to Khotan, certainly including knowledge of the way, its stages, places to find water and so on, and perhaps also familiarity with the customs and language of the Khotanese.

Yet even though the Krorainan documents provide a wealth of information on the *arivaga*, many problems and uncertainties remain. For example, the Krorainan *arivaga* is only recorded for the stretch between Caḍota (Niya site) and Khotan, and therefore we cannot know for certain that a similar institution was in place for other stretches, such as between Kroraina (Lop sites) and Dunhuang – although this certainly seems likely. Another problem is that the Krorainan documents only record the *arivaga* escorting royal envoys, but never other travellers. This is perhaps not surprising given that the documents are largely the product of the local administration, but it still raises some uncertainties as to who could acquire their services. It does, how-

52 BURROW 1940: 24.

53 BURROW 1940: 55.

54 BURROW 1940: 92.

55 BURROW 1937: 73.

56 BURROW 1940: 90. Bhimasena appears to have been in regular conflict with the local officials over imposed duties, as he makes a similar complaint about other duties in document n.439.

57 RAPSON ET AL. 1929: 158.

58 BURROW 1937; BAUMS/GLASS, *mata*. (Checked June 2021).

ever, stand to reason that the *arivaga*, given their unique skills and knowledge, would also hire themselves out to others in a similar way to maritime pilots, though plying a sea of sand.

We have, then, in the Krorainan *arivaga* evidence of an organised institution of guides and escorts, appointed and organised by the Krorainan polity. These were to be suitable men, knowledgeable about the route westwards from the kingdom, who could be called upon to escort official envoys departing the kingdom. We have here, in other words, the guides and escorts mentioned in Chinese sources, and men who might have been able to escort the likes of the Sogdian Farnkhund on their way eastwards and westwards; an institution that likely played a central role in solving the “problem of movement” through the southern Tarim Basin.

5 Local institutions and local guides

This article has endeavoured to draw attention to the “problem of movement” along a part of the Silk Roads exchange network and to show how an important contribution to solving this problem came from the local polities, exemplified by the case of

the kingdom of Kroraina in the 3rd and 4th century CE. From this brief discussion, two facts should be clear. Firstly, the reality of the “problem of movement” cannot be doubted – a problem facing envoys, monks, and merchants alike. Secondly, much of the solution to this problem was provided by local polities, such as the kingdom of Kroraina. By providing infrastructure, such as measures to secure the roads, and organising institutions, such as the *arivaga* duty, the dangerous stretches between the kingdom’s oases and its neighbours could be successfully bridged, allowing travellers to traverse the southern Tarim Basin safely.

This study has looked at but a single case, yet I believe it has demonstrated that Selbitschka’s call for a greater focus on the “movement” along the Silk Roads – that is, the hows and whys of the network – is a fruitful one. If we aim to truly understand the many and complex connections that criss-crossed Central and Inner Asia since well into the prehistoric period, with the many forms of contact and exchange that these spawned, I believe that further studies of this kind are called for. For if the “Silk Roads” as an analytic and heuristic tool is to have any meaning, it is paramount to consider the practicalities of how they might have operated.

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Burials with Openwork Belt Plaques of the Xiongnu Period from Tuva

Marina E. Kilunovskaya and Pavel M. Leus

Abstract: This article describes openwork belt plaques of the Xiongnu period (2nd to 1st century BCE) from the burial grounds Ala-Tey1 and Terezin in Tuva, as well as the burials that they were discovered in. These plaques rendered in the animal and geometric style are outstanding examples of the decorative-applied art of Central Asian nomads of the Xiongnu era. During ongoing archaeological excavations conducted by the Tuvan Archaeological Expedition of the Institute of the History of Material Culture of the Russian Academy of Sciences, an extensive collection of such openwork plaques was gathered from the bottom and the banks of the Sayan-Shushenskoe water reservoir. It includes both unique examples of plaques and analogues to previous finds from neighbouring territories of Inner Asia. Tuva acts as a connecting point between the regions of Inner Asia that fell under the influence of Xiongnu and participated in the spread of their cultural and artistic traditions.

Keywords: Xiongnu, Tuva, openwork belt plaques, Ordos bronze, animal style.

Резюме: В статье описаны ажурные бронзовые поясные пряжки эпохи хунну (II–I вв. до н.э.) из могильников Ала-Тей1 и Терезин в Туве, а также погребения, в которых они были найдены. Эти пряжки, выполненные в зверином или геометрическом стиле, являются одним из ярчайших образцов декоративно-прикладного искусства центрально-азиатских кочевников эпохи хунну. В ходе продолжающихся археологических раскопок Тувинской археологической экспедиции ИИМК РАН на дне и по берегам Саяно-Шушенского водохранилища получена большая коллекция таких ажурных пряжек. Среди них представлены как абсолютно уникальные образцы пряжек, так и находящие аналогии на соседних территориях Внутренней Азии. Тува предстает своеобразным связующим звеном между регионами Внутренней Азии, оказавшимися в это время в сфере влияния хунну и распространения их культурных и художественных традиций.

Ключевые слова: хунну, Тува, ажурные поясные пряжки, ордосские бронзы, звериный стиль.



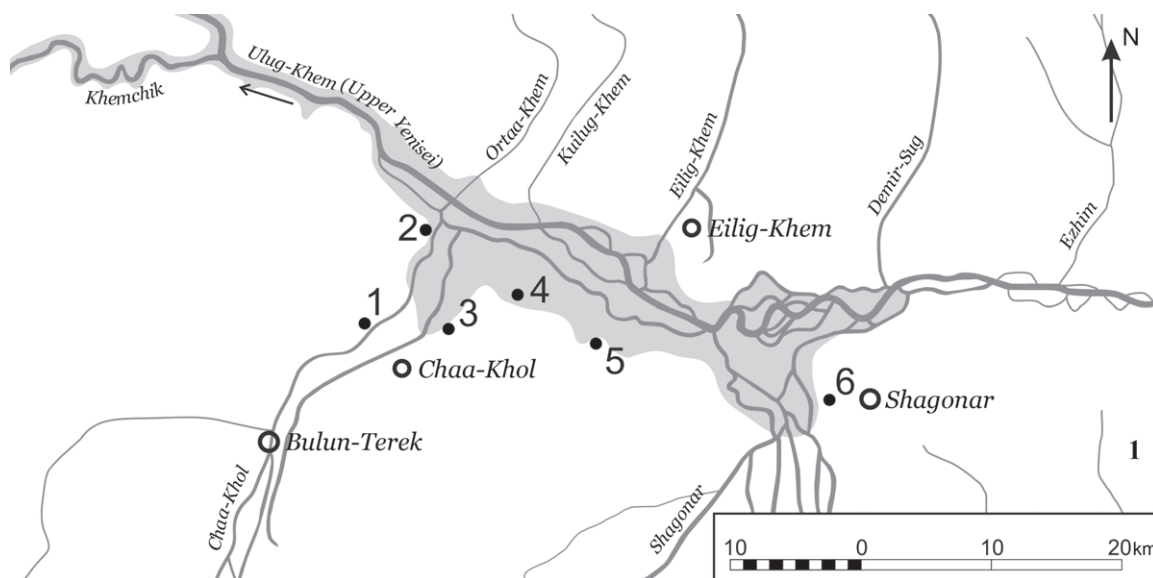


Fig. 1: Map of the Xiongnu period monuments in the western part of the Ulug-Khem Hollow with its burial grounds: 1 – Ajmyrlyg XXXI; 2 – Urbûn III; 3 – Terezin; 4 – Ala-Tey1; 5 – Argalykty I; 6 – Baj-Dag II.

Large openwork belt plaques in the animal or geometric style are one of the most outstanding examples of decorative-applied art from the Xiongnu era of Central Asia. The majority of them are made of bronze, but we also know of highly artistic exemplars made of gold with semiprecious stone encrustations. A significant number of such plaques are chance finds or come from archaeological looting in the territories of Siberia and Inner Asia. Findings from closed archaeological complexes are therefore highly important, especially from regions where no such objects have previously been sighted. One such region has, until recent times, been Tuva (Republic of Tyva, Russian Federation). During the past 10 years, in the course of ongoing archaeological excavations by the Tuvan Archaeological Expedition of the Institute of the History of Material Culture of the Russian Academy of Sciences, we have excavated a large number of openwork plaques of the Xiongnu period from the bottom and the banks of the Sayan-Shushenskoe water reservoir, from burial sites Ala-Tey1 and Terezin, which had been left undisturbed by ancient looters. Among them are entirely unique plaques, as well as plaques that have analogues from adjacent territories of Inner Asia. This article presents the preliminary catalogue of the plaques unearthed to date with the aim of introducing them to the research community before the full publication of the materials from as yet unfinished excavations is completed.

In the 2nd century BCE, the territory of Tuva was included in the Xiongnu state – the first nomadic empire in Eurasia. The beginning of these events can be related to the conquests of the Xiongnu led by Maodun (= Modu) Chanyu at the turn of the 3rd to 2nd century BCE, when the Xiongnu “conquered all

northern barbarians” (TASKIN 1968: 39). At that exact moment, the territory of Sayan-Altay presumably ended up under Xiongnu dominance. As a result of these events, new population groups entered Tuva. This is traceable in the archaeological evidence with the appearance of burial ritual practice and objects that have direct parallels in the Xiongnu culture. Monuments of the Scythian type, characteristic for this region, apparently disappear together with the population that abandons Tuva or steadily assimilates by integrating itself into the dominating alien culture. The Uûk-Saglyñ archaeological culture, with collective burials inside wooden frames and its material culture of the Scythian type, vanishes; it is replaced by an entirely different one: the Ulug-Khem culture (GRAČ 1971: 99; KILUNOVSKAĀ/LEUS 2018: 127), which differs in its object inventory and in its various types of individual burials, including those characteristic for Xiongnu.

In this period, large openwork bronze belt plaques, previously unknown for nomads in Tuva, start spreading. The question of their origin remains open, but we can agree with the hypothesis that some of them appeared on the borderlands with China inhabited by “northern barbarians” (WU 2003: 188). The style of the plaques could have been partially adopted from Chinese models or developed separately under a certain Chinese influence. It could also have occurred the other way around, when elements of the “steppe fashion” entered China. Some of the compositions could have been borrowed and subsequently reworked from objects in the Scythian animal style, which, in turn, has its roots in the art of Western Asia (MINĀEV 1995: 133–134). Moreover, a number of Scythian-Saka tribes could have been part of the Xiongnu confederation. Ini-



Fig. 2: Ala-Tey1 burial ground, south-east view (2019).



Fig. 3: Terezin burial ground, south view (2019).

tially, the production of plaques could have started in Chinese workshops supplying goods for bordering “barbarians”. We know of other cases of such a production of adornments for nomads (for example, through materials from Northern Black Sea regions, where Greek masters created works for Scythian nobles). Findings of ceramic forms for the casting of plaques in the “steppe styles” are known from Chinese borderlands in the late Warring States period (LINDUFF 2009: 92–93). After these objects reached the steppe people, local craftsmen started copying them and creating their own original design variations. The farther away from the Chinese border, the greater the increase in the number of the cast copies of plaques, mirrors, and other objects, while the quality of the replicas, made from non-originals, decreases. After access to the sources of such origi-

nal works was interrupted, the quality of the replicas apparently declined quickly, the works became simpler, and local masters sometimes even copied fragments of broken pieces, as the example of a Chinese mirror fragment from the Terezin burial ground demonstrates (HAVRIN, 2016: 105). Occasionally, we find insignificant fragments of plaque-plates that nevertheless decorated belt sets of the buried: such cases occurred at the Ala-Tey1 burial site in Tuva (burials AT1/23 and AT1/104¹) and in the Minusinsk Hollow (DÈVLET 1980: 20, 24).

1 Here and in the following pages the names of the monuments are given in abbreviation: AT1 = Ala-Tey1, T = Terezin; then the number of the object and the number of the burial are separated by the slash sign (/).



Fig. 4: Object complex of the Ulug-Khem culture.

1, 2 – earrings; 3–8 – beads; 9 – maral tooth pendant; 10 – foot-shaped pendant; 11–13 – cowry shell imitations; 14 – cowry shell; 15–17 – belt rings; 18–19 – *wu zhu* coins; 20, 21, 25 – bells; 22–23 – bronze buttons; 24, 34–35 – spoon-shaped clasps; 26 – six-rayed appliqué; 27–28 – appliqués with nine hemispheres; 29 – bimetall buckle; 30–32 – buckles; 33 – bow pulling device; 36–42 – arrowheads; 43 – plate from composite bow.



Fig. 5: Object complex of the Ulug-Khem culture.

1–3 – bronze belt appliques; 4 – belt buckle; 5–6 – bone belt plaques; 7–8 – bronze open-works belt rings; 9–15 – jet plaques and appliques; 16 – flame-shaped pendant; 17–21 – bronze mirrors.



Fig. 6: Object complex of the Ulug-Khem culture. Ceramic vessels.

What kind of additional function did such plaques carry for the nomads, aside from the practical one? It is hard to answer this question in a simple manner. We can surely assume that they did not just serve as beautiful utilitarian or decorative elements of a ceremonial belt set, but also as certain markers of the ethnicity, clan, or social status of their owners. The spread of bronze openwork belt plaques could have taken place in various ways: firstly, together with their owners as a result of Xiongnu conquests and the following resettlement of tribes; but also through trade relations, envoys with gifts, and so on. Finds of openwork plaques are known from the entire territory of the Xiongnu empire – they were found in northern China, Mongolia, Trans-Bajkal, Minusinsk Hollow, etc. For a long time only one such plaque, representing an animal fight scene, was known from the territory of Tuva, unearthed from an intrusive burial at the Urbûn burial site (SAVINOV 1969: 104–108). Yet there was no doubt that the path of the Xiongnu to the north, into the Minusinsk Hollow, passed through the territory of Tuva. In Central Tuva, on the Baj-Dag II burial site, large kurgans with “dromoi” and richly decorated wooden coffins inside deep pits were excavated, resembling elite Xiongnu burials in Mongolia and Trans-Bajkal (Noin-Ula, etc.) (MANDEL’ŠTAM/STAMBUL’NIK 1992: 197–198). However, many researchers date this burial after the elite Xiongnu graves mentioned above, to the early 1st century CE. Unfortunately, the

Baj-Dag II burial site was heavily looted in antiquity and only a few of its artefacts remained. Apart from a general overview, the excavation materials still have not been published (NIKOLAEV 2013: 260–262).

In the past years, during the course of the work conducted by the Tuvan Archaeological Expedition of the Institute of the History of Material Culture of the Russian Academy of Sciences, from the bottom and the banks of the Saâno-Šušenskoe reservoir (Fig. 1)² we have excavated – and continue studying – the ground burials of the Xiongnu period Ala-Tey1 (Fig. 2)³ and Terezin³ (Fig. 3) (LEUS 2008: 42–44; LEUS 2011: 515–536; LEUS/BEL’SKIJ 2016: 93–104; KILUNOVSKAÂ/LEUS 2017a: 72–75; KILUNOVSKAÂ/LEUS 2017b: 87–104). We detected 43 ground burials at the Terezin burial ground (some of them heavily or entirely destroyed by the reservoir) and 115 at Ala-Tey1. Here, we gathered a significant amount of material that confirmed the distinction of the separate Ulug-Khem archaeological culture that possessed all the main necessary features: a unified area of dissemination; and a specific burial ritual and objects of material culture differing from the preceding and subsequent cultures in the given region (KILUNOVSKAÂ/LEUS 2018: 125–152) (Figs. 4–6). At the

² All figures: © by the authors.

³ The excavation work is being conducted with the support of the Society for the Exploration of EurAsia (Switzerland) and the Russian Geographical Society.

same time, a certain cultural continuity is traceable: the buried are sometimes laid in a crouched position with their heads directed towards the western sector; stone plate-pillows are placed under the heads; and the burial inventory includes bone plaques and red clay vase-shaped vessels – all of these features are characteristic of the last phase of the Uûk-Saglyñ Culture within the Scythian period in Tuva. Direct parallels to the predominating stretched position of the buried, the narrow grave pits, wooden coffins, grey ware vase-shaped vessels with vertical polishing and a square stamp from the turning wheel at the bottom, bone bow strengtheners and arrow heads, iron shoe buckles, Chinese bronze mirrors, and other objects of decorative-applied arts, jewellery etc. can be found in Xiongnu sites from neighbouring regions. This allows us to speak about the multiculturalism of the population in Tuva in the 2nd to 1st century BCE, with an obvious prevalence of the Xiongnu tradition.

Among the objects in the grave inventory from the Ala-Tey1 and Terezin burial grounds, openwork belt plaques with zoomorphic and geometric ornaments stand out particularly. These were central decorative elements of a woman's belt set. To this day, including the fieldwork season 2021, more than 20 such plaques have been collected. With the exception of some pieces from the burials of Terezin destroyed by the reservoir, they were all found in situ on the belt zones of the buried bodies. These findings enable us to add the territory of Tuva to the centres of dissemination of works of this type. The metallographic analysis of some bronze objects from Terezin has shown that they were most likely made from local raw materials (HAVRIN 2016: 105–107). The excavations of the Ala-Tey1 and Terezin burial sites are ongoing, and the exact number of graves is as yet unknown. At this point we can present a short catalogue of the unearthed bronze openwork belt plaques, divided into two big groups, and provide characteristics of their discovery in the burials. This will allow us to introduce these new findings to the research community before the materials from the burial sites are fully published.

1 Rectangular plaques

1.1. Large belt plaque depicting a bull or yak whose face is shown *en face* and the body as if sprawled (AT1/23, skeleton no. 1) (Fig. 7:2). The entire composition is inserted into a rectangular frame with one rounded side with oval recesses along its edges. The bull has big crescent-shaped horns converging next to the round opening for fixing the plaque to the belt base. Between them are the bull's drop-shaped ears. The second pair of drop-shaped figures is placed underneath the horns. Along the body we see spread and variously turned limbs with elabo-

rate hooves. The plaque is quite massive and has a convex shape in profile, unlike many other plaque-plates, which are usually flat. The plaque was located on the belt zone of a woman (aged 40–45) who was buried in a large two-chamber stone cist covered with two layers of plates (Fig. 7:3). In addition, there was a bronze ring, an iron cord fixture, and fragments of a small iron plate on the belt. The deceased was lying stretched on her back, with her head directed to the northwest-west. In the second section of the cist was the burial of a young woman (Fig. 7:1).

No direct parallels to the bull plaque have been found so far, but similar works are known from Ordos (KOST 2011: Taf. 7,1–3; KOST 2014: Pl. 6). One plaque from the Dyrestuj burial site is stylistically close. It depicts a lynx attacking a goat; the faces of the animals are shown frontally, and their bodies are turned bilaterally (MINÁEV 2007: Table 118). Representations of goats in such a manner occasionally occur on their own, as a separate formative element (KOST 2011: Taf. 8,1–3).

1.2. Fragment of a plaque depicting a horse with bent legs (AT1/23, skeleton no. 2, AT1/104) (Fig. 7:4–5). In AT1/23 it was placed at the belt line of a young woman next to an unidentified fragment of another plaque (possibly with a latticed ornament). The burial was made inside a stone cist as described above (Fig. 7:1). Her belt was embroidered with glass, argillite, and stone beads as well as fish vertebra; to the side we found a rectangular appliqué of Siberian jet or torbanite and a maral tooth pendant. An analogous situation has been found inside the grave AT1/104, where a fragment of a bronze plaque showing a horse with bent legs (of a different type than in AT1/23) was located on the belt zone of an elderly woman (over 55 years old). Here too, we found a small appliqué fragment with a latticed ornament and a bronze ring.

A number of similar plaques with a single horse depiction with bent legs are known as chance finds from the territory of northern China. One exemplar originates from the Daodunzi burial site (KOST 2014: Pl. 7–8; WAGNER/BUTZ 2007: 2–3).

1.3. One rectangular plaque with a fight scene between two tigers and a serpentine dragon has been found in a destroyed woman's burial inside a stone cist at Terezin (T/12) (Fig. 9:1). One of the tigers bites the dragon under the neck, while the dragon, in turn, sinks his sharp teeth into the back of the tiger. The other tiger bites into the dragon's tail. The body of the dragon is intertwined with another creature, but it is impossible to identify it. Other bronze elements of the belt set were found in the same grave: several rings and six-rayed belt appliqués as well as an imitation of a cowry shell. A fragment of a Chi-



Fig. 7: Ala-Tey1, bur. 23.

- 1 – Burial of two women in a stone cist; 2 – Bronze plaque with bull in frontal view; 3 – Skeleton of an elderly woman; 4 – Decorations of a young woman's belt; 5 – Fragments of a bronze plaque showing a horse with bent legs.

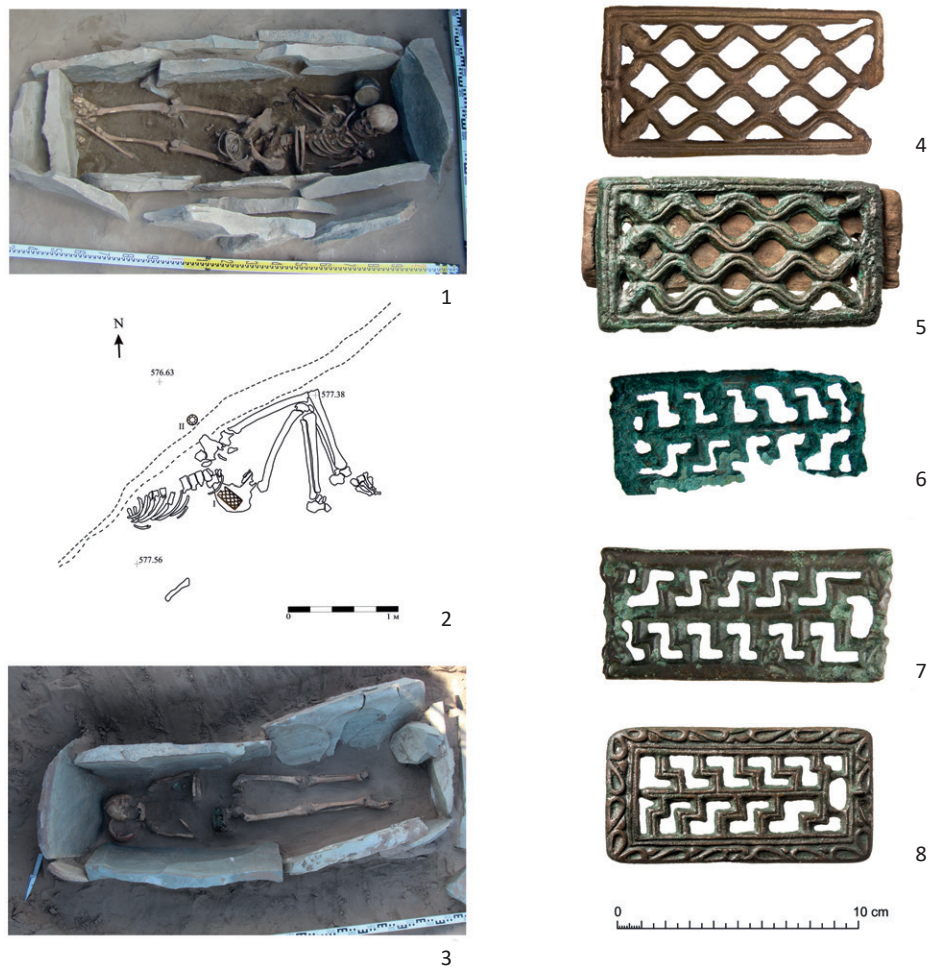


Fig. 8: 1 – Ala-Tey1, bur. 43, burial in stone cist; 2 – Terezin, bur. 1; 3 – Ala-Tey, bur. 2, burial in stone cist; 4, 5 – Bronze openwork plaques with four wriggling snakes (T/1 and AT 1/43); 6–8 – Bronze plaques with geometric ornament (6, 7 – T/5 and surface finds; 8 – AT1/2).

nese Western Han mirror with the *pai ju* (“hundred nipples”) ornament has also been found here.

These kinds of plaques are quite rare and consist of both chance finds and materials from burials:⁴

Bronze plaques: Two paired plaques from a woman’s burial in grave no. 100 at the Ivolga burial site (DAVYDOVA 1996: 51–52, Table 30); two from grave no. 5 at the Bulak burial ground in eastern Trans-Bajkal (KIRILLOV/KOVYČEV/KIRILLOV 2000: Fig. 63); one from grave no. 4 on the Osinsk island in the Bratskoe reservoir. In the same burial, two paired plaques with geometric ornaments and animals’ heads analogous to the the plaque from T/5 have been unearthed (SMOTROVA 1982: 106; SMOTROVA 1991: 140–141, Fig. 58).

4 M. Erdy’s article is dedicated to these plaques, but not all known findings are mentioned in it (ERDY 2003–2004: 48–52).

A pair of belt plaques has recently been discovered inside the burial of Kurgan 7 of the Salhityn burial ground in Mongolia. The belt itself was decorated with two rows of cowry shells as well as bronze and stone(?) rings. The burial inventory also included a Chinese bronze mirror with the “hundred nipples” ornament and, thus, offers a direct analogy to the burials of Ala-Tey1, though with some differences in the burial ritual (ÔLZIJBAÂR, OČIR/URTNASAN 2019: 25–26, Fig. 12).

One fragment of such a plaque from the collection of A.V. Adrianov is preserved at the State Hermitage in St. Petersburg (DËVLET 1980: Table 11). Several plaques are housed in private collections (BUNKER ET AL. 1997: 274–275, no. 242; BUNKER/WATT/ZHIXIN 2002: no. 105). The exact provenance of these objects is unknown; they are likely from southern Siberia, Mongolia or northern China.

Golden plaques: Two massive cast (not openwork) plaques of gold with turquoise, coral, and



Fig. 9: Bronze openwork plaque-plates.

1 – With fight scene between two tigers and a dragon (T/12); 2 – With two “grazing” yaks (AT1/111); 3 – With a pair of two-humped camels facing each other (AT1/21); 4, 5 – With dragon-like creatures (AT1/47).

amber encrustations have been discovered during excavations of a man’s grave inside Kurgan 1 (grave no. 2) on the Sidorovka burial ground in the Omsk Priirtysh’e region (MATUŠENKO/TATAUROVA 1997: 48, 72–73, Fig. 27; BUNKER/WATT/ZHIXIN 2002: Fig. 45).

Jade plaques: One openwork plate made of dark grey-green jade is kept in the collection of Sir Joseph Hotung in Great Britain (RAWSON ET AL. 1995: 311–312, no. 23, 1; BUNKER/WATT/ZHIXIN 2002: 134, no. 106). The origin of the piece is unidentified, but this type of jade is mined in northern Mongolia (LINDUFF 1997: 88).

1.4. Rectangular plaque representing four wriggling snakes. Two pieces have been found (T/1, AT1/43) (Fig. 8:4–5). Each pair of snakes merges their heads, which are shown from above with two eyes and nostrils each. A groove is going through the frame of the plaque.

T/1 – the plaque with a small peg has been found inside a partially destroyed burial of a woman on top of her pelvis bones (Fig. 8:4). Here, the buried was placed on her back with her legs bent to the right and her head directed towards the south-west (Fig. 8:2). Additionally, we found a large bronze openwork ring, which was also part of the belt set. The burial itself had no internal construction (most likely, it was a simple ground pit). Other such graves are known at Terezin and Ala-Tey.

AT1/43 – the plaque without a peg with a wooden base (Fig. 8:5) has been discovered on the right belt

side of a buried woman (aged 40–45). There were no other elements of the belt set, but an iron knife and an awl were placed nearby, while a jar-shaped vessel stood next to the head. The burial itself was made inside a massive cist of stone plates, the buried laid stretched on her back, the head towards the west (Fig. 8:1).

These kinds of plaques and fragments of such are known from monuments of the Tes Culture in the Minusinsk Hollow (DÈVLET 1980: 24, Table 13; 14) and in Xiongnu burials in Trans-Bajkal (DAVYDOVA/MINĀEV 2008: 98; HARINSKIJ/KOROSTYLEV 2011: 200). They also occur among the objects from hoards of the Minusinsk Hollow: the Iûssk (BORODOVSKIJ/LARIČEV 2013: 41, Fig. 26), Kosogol’sk (DÈVLET 1980: 15, Fig. 6:3–4), and Ujbat (KUNGUROVA/OBORIN 2013: 130, Fig. 7:1) hoards.

1.5. Plaque with a geometric ornament forming a stepped lattice, with six animal heads (possibly does) on the edges. We found two examples of this type at Terezin (the one from T/5 with a peg and one surface find without a peg); they could initially have been paired inside the same burial (Fig. 8:6–7). Parallels are known from the Minusinsk Hollow and its periphery. They consist of chance finds, including the objects from the Kosogol’sk hoard (DÈVLET 1980: Table 16–17, Fig. 6:34). Next to the remains of burial T/5 we also discovered small bronze appliqué with frontal depictions of bulls and yaks. Presumably, they were all part of a belt set from the same burial.



Fig. 10: Bronze plaques with two standing bulls/yaks.

1 – Ala-Tey1, bur. 11; 2 – Ala-Tey1, bur. 19; 3 – Terezin, bur. 13; 4 – Terezin, bur. 14; 5 – Ala-Tey1, bur. 48; 6, 7 – Ala-Tey1, bur. 101; 8 – Ala-Tey1, bur. 90; 9 – Ala-Tey1, bur. 64; 10 – Ala-Tey1, bur. 50.

1.6. Plaque with a geometric ornament forming a stepped lattice, enclosed by a wide frame with leaf-shaped recesses (Fig. 8:8), with a peg. It resembles the preceding one, but lacks the animal heads. The plaque was on the right side of the belt line of the buried woman (aged over 50 years), lying on her back inside a stone cist (AT1/2) (Fig. 8:3). The belt also consisted of the unearthed bronze ring and, probably, dozens of beads. On the left side of the deceased's chest we found the fragment of an original Chinese mirror of white bronze with zigzag and spiral ornaments. Mirrors with such an ornament date to the Warring States period in China, corresponding to the late Scythian period in Saâno-Altaj. Par-

allels to such plaques are known among the Ordos bronzes and from the Minusinsk Hollow (chance finds and the materials of the Tes burials) (DĖVLET 1980: 16–17, Fig. 1:5; KUZ'MIN 2011: 196). Three fragments of such plaques can be found in the Iûssk hoard (BORODOVSKIJ/LARIČEV 2013: 84, no. 32–34). There are versions with a wide frame decorated with leaf-shaped recesses, which in the initial examples were intended as mounts for coloured encrustations with turquoise, carnelian, etc. as well as simplified versions, possibly dated later, without this kind of frame. Interestingly, five small belt appliqués with the same ornament were found at Terezin in the burial T/31. These were parts of a belt set (the



Fig. 11: Burials with bronze plaques at Ala-Tey1 burial ground.
1 – Object 11; 2 – Object 48; 3 – Object 50; 4 – Object 19.

large central plaque depicted two horses biting each other).

1.7. Rectangular plaque with two standing bulls/yaks, 10 examples (T/13, T/14; AT1/11, AT1/19, AT1/48, AT1/50, AT1/64, AT1/90, AT1/101 – two pieces) (Fig. 10). They differ in sizes and were, probably, cast inside different moulds. All pieces possess a frame with rectangular recesses. The lowered faces of the animals are shown *en face*. The flared nostrils and the bulging eyes provide the figures with an aggressive expression (as if they were ready to fight). The tails, with a tassel on their ends, are folded onto the backs. The long, hanging hair is rendered in the form of drop-shaped figures.

T/13 – the plaque (no peg) was found among the plates of the stone cist destroyed by the reservoir waters (Fig. 10:3). Except for this object, no other findings were preserved here, which is frequently the case at Terezin when burials slipped or fell off the cliff onto the “beach” of the reservoir, and only

heavy metal objects remained among the stone plates after the waves washed away everything else.

T/14 – broken into two halves, the plaque (no peg) laid among the plates of the burial destroyed by the reservoir (Fig. 10:4). Additionally, we found a large openwork ring from a belt set. Judging by the shape of the stones, the burial was not conducted inside a stone cist, but a wooden construction lined with stone.

AT1/11 – the plaque (with a peg) (Fig. 10:1) was located on the left belt zone of a buried young woman (aged 25–30), stretched on her back inside a massive stone cist, her head towards the north-west (Fig. 11:1). Besides the plaque, the belt set included a large openwork ring, one iron ring and two bronze rings, and three six-rayed appliqués.

AT1/19 – the plaque (no peg) (Fig. 10:2) was discovered on the right belt zone of a woman (aged 40–45) buried inside a stone cist, positioned stretched on her back, with her head directed north-westwards (Fig. 11:4). The plaque was laid upside down.



Fig. 12: Burials with bronze plaques at Ala-Tey1 burial ground.

1 – Object 90; 2 – Object 101; 3 – Object 111.

Additional elements of the belt set were two square bronze plaques with a spiral ornament (of nine spirals/volutes), a bronze imitation of a cowry shell, and a bronze ring.

AT1/48 – the plaque (no peg) (Fig. 10:5) was found to the left of the pelvis of an elderly buried woman (older than 60 years), laid stretched on her back, her head towards the south-west (Fig. 11:2). The grave construction presumably consisted of a wooden coffin or frame (only insignificant traces of wood were preserved). Two long stone plates were placed at the heads and feet. Here, two bronze rings and possibly fragments of two small iron plates can be added to the belt set.

AT1/50 – the plaque (no peg) (Fig. 10:10) was lying on the right side of the belt of the buried young woman (aged 18–20), stretched on her back, head towards the southwest-west (Fig. 11:3). The grave might have been set into a wooden construction, of which only insignificant traces remained. A stone pillow was placed under the woman's head. In addition to the plaque, a large openwork bronze ring as well as four six-rayed appliqué and four simple

rings were parts of the belt (all these objects were found on the backside of the belt line).

AT1/64 – broken into two pieces, the plaque (no peg) (Fig. 10:9) was placed in the centre of the belt zone of the young woman (aged 20–25), who was buried in a stone cist in the stretched position on her back, with her head pointing to the north-east (Fig. 12:1). The plaque was turned upside down. No further parts of the belt set were found here.

AT1/90 – the plaque (no peg) (Fig. 10:8) was placed in the middle of the belt line of the woman (around 50 years of age) buried inside a coffin-like wooden construction with a stone lining (Fig. 13:1). She was lying stretched on her back, with her head towards the south-west. The plaque was found upside down. The belt set also included two bronze rings and one six-rayed appliqué. Presumably, it also included the two bronze imitations of cowry shells also found inside the grave, which were found displaced from the belt zone, one near the skull of the buried woman, the other near the skull of the horse lying at her feet. On the left side of the belt we also found a bronze mirror, which was unconventional for graves at Ala-Tey and Terezin (mirrors are usual-



Fig. 13: Burials with bronze plaques at Ala-Tey1 burial ground.

1 – Object 90; 2 – Object 47.

ly placed on the left or right side of the chest, sometimes near the skull of the deceased).

AT1/101 – two paired plaques (with and without peg) were located on the belt line of the buried woman (aged 20–25) (Fig. 10:6–7), stretched on her back inside a stone cist, head towards the northwest (Fig. 12:2). The right plaque was lying upside down. Apart from the paired plaques, the belt set consisted of two bell-shaped bronze pendants and a ring made of white limestone(?) as well as beads, with which the leather base of the belt was possibly embroidered. A bronze mirror was lying underneath the left plaque.

Plaques similar to this type are found mostly in the territory of the Minusinsk Hollow, from where more than 20 fragmented and intact plaques originate. The majority of these are chance finds, but there are also examples from excavated graves: one plaque, broken in the middle, from Kurgan 5 of the burial site near lake Utinka; and two small fragments from the burial site Razliv III and Kurgan 5 at Griškin Log I, respectively (DÈVLET 1980: 20–21, Table 1,6). Several intact plaques and fragments occur among the objects of the Iússk and Kosogol'sk hoards (BORODOVSKIJ/LARIČEV 2013: 82–83; DÈVLET 1980: 6, 5–8). One plaque was found in an Early Han period burial (2nd to 1st century BCE) in Manchuria (KOST 2014: 221, Pl. 17). A number of chance finds presumably originate from the territory of Inner Mongolia (BROSSEDER 2011: 419; RAWSON/BUNKER 1990: no. 222). In Trans-Bajkal, plaques of this type are yet unknown. Previously, the Minusinsk Hollow was considered to be the centre of distribution of such works, but now, after the series

of discoveries from the Terezin and Ala-Tey1 burial sites, we can assume that the tradition of their making – and possibly some of the objects themselves – arrived there from Tuva. Considering the number of plaques known to date, they can be regarded as mass products in this region with not only decorative and purely utilitarian functions: they were possibly also symbols of belonging to a specific population group.

1.8. One unique plaque with the depiction of two yaks originates from the burial AT1/111 (Fig. 9:2). It differs from the previous one and so far no analogies have been found. The animals are shown in profile, their elongated lowered faces almost touching each other at the noses, while the horn of one animal crosses the horn of the other. Tails with leaf-shaped tassels are folded on the backs. The hair below is depicted by two large drop-shaped figures. The frame with a peg is ornamented with two intertwining, wavy lines. The figures are made in the high-relief technique, with some parts revealing casting defects. The composition of two grazing animals facing each other is known from other plaques: for example, the camels from the Daodunzi burial (KOST 2014: Pl. 22,2–3) as well as the horses on a plaque from northern China (KOST 2014: Pl. 21,5), and three other plaques from Minusinsk Hollow (DÈVLET 1980: Table 7,20–22). Presumably, it is a common scene identical to the one with the paired yaks described above, but rendered in a different manner and with other animals.

The object AT1/111 was located almost on the ancient surface level (Fig. 12:3) and consisted of a burial inside a narrow wooden coffin, only insignif-



Fig. 14: Burials with bronze plaques with two biting Przewalski's horses.

1, 2, 6 – T/31; 3, 4, 5 – AT1/42.

icant traces of which were preserved. The buried elderly woman (aged over 55) was placed stretched on her back with her arms folded on her belly, with her head towards the west. On her belt embroidered with beads we found three six-rayed appliqué and two bronze rings, from which beaded threads were hanging. Next to it we found a simple framed bronze plaque with a peg, possibly belonging to a second belt.

1.9. Plaque depicting two two-humped camels (Bactrian or Haptagaj) standing face-to-face, picking leaves from a tree or bush with an intertwined stem growing between them (AT1/21) (Fig. 9:3). The plaque from AT1/21 was placed on the belt line of the buried woman (aged 35–45), who was lying stretched on her back, her head towards the north-west. It was broken in the middle, presumably in ancient times; its halves were joined with leather straps. The grave construction consisted of a stone

lining inside which, we assume, was a wooden coffin or frame that was not preserved. The belt set in this burial included a ring of white material (limestone?) and several bronze objects: two simple rings and one large openwork ring, and three six-rayed appliqué.

A number of chance finds of analogous plaques originate from northern China; one half of such a plaque was discovered during excavations at the Daodunzi burial site (DÈVLET 1980: Fig. 2:2; KOST 2014: Pl. 23). The composition depicting paired camels picking at a plant with an intertwined stem is known from several types of plaques. These can differ slightly in the ways the camels are represented, sometimes quite realistically; but they obviously show the same subject, either a mythological one or one that carried a commonly known meaning for nomads (KOST 2011: 144–146, Pls. 29–32). In the centre of the composition is a low tree or bush with a double intertwined stem. Its branches, with leaves

on their ends, diverge to the left and right in the upper part. They fill the background behind the camel figures, which are facing each other and picking at the leaves. Possibly, it refers to some low desert plant, a saxaul or a tamarix. The same composition also occurs with other figures, albeit less often: one plaque with dragon-like creatures from the Daodunzi burial site (KOST 2014: Pl. 31,4); one with horses (KOST 2014: Pl. 21,7); and one with unidentified animals (the quality of the publication does not allow for an exact identification) (KOST 2014: Pl. 38,2).

1.10. Two paired plaques (with and without peg) depicting two fantastic, dragon-like creatures with horns and goat faces moving in opposite directions, with their tails intertwined (AT1/47) (Fig. 9:4–5). The plaques were found on the belt zone of the buried young woman (aged 18–20), lying on her back, directed towards the south-west (Fig. 13:2). The burial was made inside a wide wooden frame-like construction with a stone lining. The right plaque was laid upside down. Aside from the plaques, the belt set consisted of seven six-rayed appliqués, three bronze rings, one bell-shaped pendant, and one ring of white limestone(?) Most of the six-rayed appliqués were turned upside down, because they were located on the backside. A number of discovered beads must have been used to embroider the leather base of the belt. Analogues are known, mostly from northern China and Inner Mongolia. The majority are chance finds. Two plaques were found at the Daodunzi burial site (KOST 2014: Pl. 32,3–4).

1.11. Plaques showing two Przewalski's horses biting each other (AT1/42, T/31) (Fig. 14:3 and 6). Both plaques are almost identical. The animal figures are rendered very naturalistically in high relief. The entire composition is strikingly dynamic. One horse bites the nape of the other, while the other bites its front leg in turn. The field between the animals' bodies and the plain rectangular frame is filled with drop-shaped grooves and crossing wavy lines, which enforces the effect of movement in the composition.

AT1/42 – the plaque (no peg) with a wooden lining (Fig. 14:3) was lying on the belt line of the buried woman (aged 35–40), who was placed stretched on her back, directed westwards (Fig. 14:4–5). The belt set here also included one six-rayed bronze appliqué.

T/31 – the plaque (with peg) with a wooden lining (Fig. 14:6) was the central element of a woman's belt (aged 35–40); she was buried inside a wooden frame-like construction with stone lining along the sides (Fig. 14:1–2). She was laid on her back with legs bent to the right, with her head towards the north-northeast. This grave stands out due to the richness of the belt set, which consists of five bronze rings that alternate with five appliqués, with a lat-

ticed ornament (identical to the ornament on bigger plaques described above), an openwork bell-shaped pendant, as well as numerous beads used for the embroidery of the belt base. The latticed plaques were turned upside down because they were placed on the backside of the belt zone. The belt itself was set quite high; higher than the usual placement of belts on other buried persons. At the level of the loins we found a large bone plaque-plate that was possibly part of a second or lower, purely utilitarian, belt that was worn underneath the outerwear, while the belt with bronze elements could have been the upper, decorative one.

Parallels are known from Minusinsk Hollow, Trans-Bajkal and China, but they mostly originate from chance finds or archaeological looting. There are no fewer than three types of this plaque that slightly differ in the details of the horses. Three pairs of such plaques were found in grave nos. 9, 10, and 102 at the Dyrestuj burial site; they belong to different types (DÈVLET 1980: 23; DAVYDOVA/MINÂEV 2008: 30, Fig. 20). Another plaque comes from burial no. 6 at the Daodunzi burial site (KOST 2011: Pl. 51). Ten plaques and their fragments are known from Minusinsk Hollow, but only one fragment has been found immediately inside a burial, in grave no. 25 of the Tepsej VII burial site (DÈVLET 1980: 22).

As mentioned above, large openwork plaques were practically unknown in Tuva previously. The exceptions are an example with a fight scene between a griffin and a tiger from the Urbûn III burial site and another extraordinary plaque housed at the National Museum of the Republic of Tyva. The plaque from the museum depicts the attack of a griffin or phoenix on a hoofed animal – a horse or yak; its upper part is not preserved (MONGUŠ 2017: 144–147; KILUNOVSKAÂ/LEUS 2018: 140, Fig. 11:8). The frame ornament of this plaque is unusual and uncharacteristic for Xiongnu period plaques, but it can probably be included among the objects under consideration.

Some of the plaque-plates had a preserved wooden lining or base in the form of a small tablet with skirting, slightly bigger in size than the plaque itself. The bronze plaque was placed inside that base and fixed with leather straps put through holes. Such a wooden base was also found on the plaque from Urbûn III as well as on plaque-plates from the Dyrestuj burial site in Trans-Bajkal (MINÂEV 2007: 34) and Salhityn in Mongolia (ÔLZIJBÂÂR/OČIR/URTNASAN 2019: 25–26, Fig. 12). Interestingly, with the exception of two cases (AT1/47, AT1/101), plate-plaques inside burials at Tuva are found as single pieces. On Trans-Bajkalian and Mongolian Xiongnu monuments they mostly occur in pairs. Single plaques are found with a peg, sometimes rather poorly worked, as well as without one, which can be related to the original model from which the copy was cast. Thus, the bronze openwork plate-plaques were hardly



Fig. 15: Bronze figural plaques.

1 – AT1/57; 2 – T/8; 3, 4 – AT1/97; 5 – AT1/59.

used to actually fasten the belt, but rather served as the central decorative element. They were fixed to the belt or to each other (if paired) with the help of leather straps or another similar method, without using the initial peg system. Possibly, this can be related to the quality of casting, when on secondary castings the peg was too poorly elaborated and ill-suited for its initial purpose. Almost all large bronze plaques still show traces of narrow leather straps that were used to fix them to a wooden base and the belt. Notably, we can observe that in both cases, when plaques were found in pairs at Ala-Tey1, one of them was turned upside down.

2 Figural plaques

Besides the rectangular openwork bronze plaques, belt sets sometimes include figural bronze plaques with a fixed peg. They occur in both male and female burials. Some of the most interesting exemplars are provided here:

2.1. Round belt plaque from the destroyed grave at Terezin (T/8), decorated with griffin head images (Fig. 15:2), 8.5 cm in diameter. There are nine holes inside the ring, formed by the four heads of eared griffins on long curved necks. Two more grif-

fin heads protrude outside the ring and flank the fixing spot of the belt. The ears of the griffins are leaf-shaped, their eyes are round, the beaks strongly bent down. The entire composition is based on principles of symmetry. No direct parallels have been found yet. In addition to the plaque, a bronze socketed three-bladed arrowhead has been found in the same complex, which hints at a male burial.

2.2. Plaque formed through the conjunction of two rings, a heart-shaped figure, and smooth curved lines (AT1/59) (Fig. 15:5). It can be compared with the plaque from Terezin described above. The plaque was found on the belt line of an elderly woman (aged over 60), who was buried in a wooden coffin lined with stones. She was lying stretched on her back, with her head directed to the west-northwest. The belt was decorated with beads as well as a six-rayed appliqué.

Both examples stylistically resemble the plaques with a U-shaped ledge from the Ivolga burial ground in Trans-Bajkal, which are shaped by a number of rings and semirings and ornamented with animal heads (DAVYDOVA 1996: Fig. 36:3-4; 72, 36; DAVYDOVA/MINÁEV 2008: 104).

2.3. Plaque in the shape of two ibex heads with merging horns forming the outer frame with a peg (AT1/57) (Fig. 15:1). It was found in a woman's burial inside a wooden coffin. The woman (aged 25–30) was positioned stretched on her back with her arms folded on her belly and her head directed westwards. On the belt preserved in situ we found remains of leather and a leather belt, a six-rayed bronze appliqué and a plaque with nine hemispheres, a bronze ring, through which a thin leather strap passed, a bronze imitation of a cowry shell, and two jade beads. In the grave we also found a cast copy of a Chinese mirror with the “hundred nipples” ornament dated to the Western Han period. An analogous plaque is known from the Sibirka burial ground in north-western Altaj (POLOS’MAK 1990: 104). A stylistically close example, with a less precise elaboration of details, was found inside the Ujbat hoard in Minusinsk Hollow (KUNGUROVA/OBORIN 2013: 130, Fig. 6:4).

An almost identical representation of ibexes has been found on two shoe buckles inside the burial of a man (AT1/97) (Fig. 15:3–4). The relatively small, round buckles for shoes are characteristic of most male burials at Ala-Tey1, but do not occur in female ones. They are located on the feet of the deceased and probably served to fix the tightening strap. It is the first find of bronze shoe buckles worked in the animal style.

Conclusion

Quite often figural plaques are decorated with elements of the preceding Scythian animal style: griffin heads; smooth S-shaped lines; protomes with heads of ibexes or Mongolian gazelles with converging horns. Stylistically, this exceeds the artistic style characteristic of the “Xiongnu” bronzes. The occurrence of such works in closed complexes of the Xiongnu period may testify to the preservation of certain cultural rudiments from the Scythian period in Tuva, which were possibly carried by the last representatives of the Scythian culture or their descendants.

Rectangular bronze openwork plates reflect the emergence of an entirely new artistic tradition. The animal pantheon is expanding with representations of yaks, serpentine dragons, and fantastic creatures with dragon-like bodies and ibex heads. They are rendered in several manners: animals are walking evenly or standing on all fours, as if grazing and picking at leaves; or, like the yaks and bulls, they stand in a tense pose, ready for a fight. The other manner shows intertwining bodies: the plane of the plate is filled with numerous figures in the form of commas, circles, and wavy lines, achieving an extra decorative

effect. The rectangular shape of the plate-plaques in situ might testify to a slightly different arrangement and width of the belt – particularly the female belt.

The presented collection of bronze openwork plaques from the Terezin and Ala-Tey1 burial grounds includes widely known as well as unique examples of ancient nomadic art, with analogous examples found on monuments of the Xiongnu era. Some plaques from Tuva match with examples found in the Minusinsk Hollow, others with the ones from Trans-Bajkal, Mongolia, or China which, in turn, are unknown in the Minusinsk Hollow. The territory of Tuva thus appears to be a connecting point between the regions of Inner Asia that existed in the sphere of Xiongnu influence and was within the spread of their cultural and artistic traditions. We can assume that these highly artistic works appear in Tuva for a relatively short period and immediately mark the era of changing cultural traditions and their active participants – the carriers of the Xiongnu material culture themselves, who were at the peak of their power in the period under consideration (KILUNOVSKAÂ/LEUS 2018: 149). The Xiongnu confederation consisted of various tribes, including non-nomads. Therefore, with the arrival of Xiongnu to Tuva, diverse tribes could have acted as migrants or military powers. Having a different burial ritual, these tribes possessed a shared material culture of the Xiongnu type. The concentration of known monuments of the Xiongnu era in the western part of the Ulug-Hem Hollow in central Tuva, near the entrance to the Saân canyon of the Enisej River, is not coincidental. At all times this location has possessed economic as well as military-strategic importance. Presumably, one of the moving roads of the Xiongnu to the Minusinsk Hollow started here.

The existence period of openwork belt plaques in Tuva can be limited to the 2nd to 1st century BCE, which is confirmed by the data of the AMS-dating (LEUS 2017: 183–184; KILUNOVSKAÂ/LEUS 2021: 79–91) and by some other categories of the burial inventory. The majority of the Chinese mirrors found at Ala-Tey and Terezin are exemplars characteristic for the Western Han dynasty (2nd to 1st century BCE), but also some earlier ones, dated to the Warring States period. Some late Scythian mirrors were found as well. Not a single mirror of the later Eastern Han period (1st to 2nd century CE) has been discovered so far. Chinese *wu zhu* coins were located in one grave only (AT1/29) and provide a *terminus post quem* of 118 BCE.

The excavations at the Ala-Tey and Terezin burial grounds are ongoing; we can therefore expect new, interesting finds that will answer and clarify questions of their dating and cultural attribution.

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The Earliest “Scythians” in Tuva and the World Beyond

Architectural Ideas and Interaction

Gino Caspari

Abstract: Based on the recently uncovered Early Iron Age funerary ritual architecture at Tunnug 1 and the largely synchronous burial mound Arzhan 1, a framework for analysing idea exchange in conjunction with architectural concepts in the archaeological record of the late prehistoric steppe is developed. In an attempt to bridge theoretical advancements in anthropological archaeology and the traditional culture history approach prevalent in Central Asian archaeology, the existing categories of material cultures are removed from the analysis. Three cases of architectural concepts present in the south Siberian Uyuk Valley are analysed considering close-range high-resolution material interrelatedness, mid-range regional interactions, and associative long-range links.

Keywords: Scythian, culture history, interaction, burial mound, khirigsuur, Arzhan 1.

Резюме: Статья посвящена возможностям анализа обмена идеями в связи с архитектурными концепциями, отраженными в погребальной архитектуре недавно обнаруженных археологических памятников периода раннего железного века Туннуг 1 и Аржан 1, относящихся к одному и тому же периоду. В попытке связать между собой теоретические достижения в антропологии и археологии и традиционный культурно-исторический подход, преобладающий в археологии Центральной Азии, настоящее исследование абстрагируется от существующих категорий анализа материальной культуры. Статья анализирует три примера архитектурных концепций, отраженных в археологическом материале южносибирской Долины Уюк, в свете местных взаимосвязанностей в материальной культуре, а также региональных и межрегиональных связей.

Ключевые слова: скифы, история культуры, взаимодействия, погребальный курган, хиригсуур, Аржан 1.



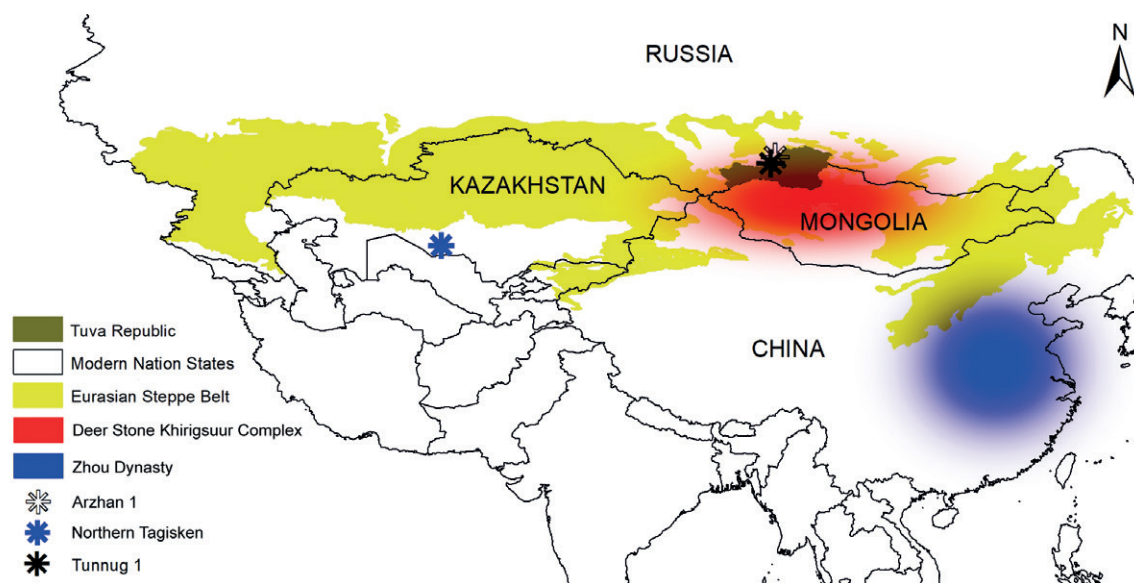


Fig. 1: Tunnug 1 in relation to the Eurasian steppe belt and the sites and cultural designations used for comparison in the text (map elaborated by the author).

1 Culture and contacts

The title of this conference volume focuses heavily on the nature of interaction between cultural units in Central Asia. It therefore seems paramount to define the used terms properly and hone the specificity of the employed concepts before we dive into concrete examples of social interaction in the past. Accounting for the incompleteness of the material record, the scarcity of written accounts, and the manifold biases of the data that we base our analyses of cultural interaction on, it is important not to fall prey to overgeneralised notions, but to carefully select and define the words describing interaction in order for others to be able to validate the presented ideas. More often than not, archaeologists use “cultural exchange” or “cross-cultural contacts” without properly defining the terms. Sometimes the mere perceived similarity of items found at spatially distinct localities are presented as the conclusion of studies without further exploring the “why?” and “how?” of the interaction. Similarly, “cross-cultural contacts” is often used as an all-encompassing term, describing a largely unspecified form of social interaction between geographically distinct cultural phenomena. The used terms often remain vague exactly because the current data does not allow for a more specific qualification of the nature of the exchanges and the reader of such a scholarly text is left with the somewhat unsatisfactory impression that there might have been some kind of connection between two entities without being able to pin down exactly what it was.

Despite the concept of archaeological culture often being portrayed as inherently theoretically flawed (ROBERTS/VANDER LINDEN 2011: 1; SHEN-

NAN 2000; HODDER 2012: 5–6; JONES 2010: 579; PREUCEL/MROZOWSKI 2010: 11–13), it continues to be used as an analytical category across Central Asian prehistory. It is in fact so deeply ingrained in archaeology that we have issues coming up with an alternative categorisation of archaeological data on a macro level. However, the heterogeneity of its application and the general lack of standards for defining an archaeological culture already hint at some of the immanent issues. Cultural categories of massive geographical extent, which are then divided into regional sub-cultures (because their definition is too broad to be furthering detailed scholarly discourse), co-exist with micro-cultures that often just encompass one individual site.

The Andronovo and “Scythian” cultural complexes, for example, belong to the former. These extremely broad cultural categories were both subdivided extensively. For the Andronovo, scholars now speak about a “family of cultures” (KORYAKOVA/EPIMAKHOV 2007: 123) distinguishing partially chronologically, partially geographically distinct sub-units like the Petrovka, Alakul, and Federovo variants (KUZ’MINA 2007; JIA ET AL. 2017). For the variations in material culture of highly mobile nomadic pastoralists of the Early Iron Age – the so-called peoples of the “Scythian World” (YABLONSKY 2000) generally seen to be stretching from the northern Black Sea region to Mongolia – largely geographically distinct sub-units that are all placed broadly within the 1st millennium BCE are differentiated. These sub-units include, among others, the Pazyryk culture in the Altai, the Tagar culture in the Minusinsk Basin, and the Saka in Kazakhstan. The overarching macro-cultures are stretched over thousands of kilometres and often encompass a highly variable material record. The

other extreme of the spectrum of archaeological cultures might well be the Chinese scholarly tradition in Xinjiang, which focuses more on differences than similarities, defining roughly a dozen archaeological cultures (wénhuà 文化) for Xinjiang in the Bronze Age alone (e.g. CHEN/HIEBERT 1995). Both macro- and micro-cultural complexes have their problematic sides, but it is their seemingly unconflicted coexistence that reveals the inconsistency of the concept of archaeological cultures in Central Asia.

Archaeological cultures are current approaches to shape and classify archaeological data, which is in turn influenced by academic discourse (often within nationally or at least linguistically separated research traditions). They are assumed to be relatively homogenous, but often are not. As categories they are prone to be affected by administrative and linguistic borders, ultimately creating confusion and misrepresentation rather than forming a useful analytical baseline. Archaeological cultures do not represent past entities and they have been shown to mask internal variation (BINFORD 1965). This critical approach towards archaeological cultures is widespread in the more anthropologically inclined traditions of archaeological research – mainly in the Anglo-American community of scholars. However, this discussion often remains ignored in what BINFORD called the “normative school” (1965). Most archaeological research in Central Asia, despite the pronounced criticism of a culture history, continues to use the established cultural categories as if they were real entities. Fiercely led debates over the sub-categorisations of predefined cultural phenomena into phases serve as an example of how important the concept of archaeological cultures as past units of social groups remains. The notion that “pots are not people” has still to find a firm grip across Central Asian archaeology (cf. CHRISTIAN 2011) and until then we will continue to see migration and diffusion being applied as broad explanatory models. KOSSINNA (1911) and CHILDE (2013) are still very much alive in Central Asian archaeology.

Against this backdrop of extensive critique and messy practical application of the concept of culture, it becomes difficult to understand what meaning the term “culture contacts” can retain. Or to phrase it as a rather pessimistic question: are “culture contacts” more than connections we discover between arbitrarily defined categories of material assemblages? Worse even: are “culture contacts” not the evidence that established cultural categories are flawed and fuzzy, and are we providing ourselves with a means of explaining away these inconvenient data by labeling them as connecting while simultaneously reinforcing existing categories?

The assumptions of the traditional culture history approach towards archaeology have been thoroughly challenged, deconstructed, overthrown – yet they persist. The connection between material cul-

ture and homogenous ethnic group identity is far from straightforward. Still, the use of terms in the form of “culture + people” e.g. Afanasiev people, Okunevo people, Xiaohe people, etc. is not uncommon (e.g. SOKOLOVA 2012; LI ET AL. 2015). Migration (sometimes in conjunction with “homelands” and migration routes) remains a popular go-to explanatory model. Perhaps one reason for the persistence of these concepts is the inherent practical value of material cultures as heuristic categories that allow an archaeologist in the field to classify recovered material remains, quickly obtaining a chronological and geographical framework of links. In the author’s opinion, material cultures as modern categories remain useful for answering questions on a large scale. Archaeological cultures seem to act as a sort of average of material phenomena, allowing an assessment of large-scale phenomena of change without having to argue based on all individual artefacts pertaining to a problem. Due to their widespread use and long tradition, they also aid academic discourse; but the manifold pitfalls associated with their problematic and often incoherent formation history call for specificity.

The more widespread use of radiometric dating in Central Asian archaeology has led in part to a decline in the importance of centre periphery models and diffusion as crutches to explain cultural change, but in many areas we are in desperate need of larger series of radiocarbon dates to continue this development. With ancient DNA analyses becoming more affordable, archaeologists, in collaboration with geneticists, have a method available to test the widely available migration hypotheses. In some cases, like the influx of genes from the steppe into Europe around 4,500 years ago (HAAK ET AL. 2015), ancient DNA indeed confirmed earlier archaeologically formed hypotheses concerning migration (GIMBUTAS 1965: 1974). However, in most other cases sample sizes remain very small and geographically dispersed, and the nature of movement of groups of people in relation to archaeologically defined cultures stays tenuous at best. Despite the theoretical advances that have been made, starting in the 1960s with the ideas provided by proponents of processual archaeology (cf. BINFORD 1962; FLANNERY 1972), many scholars in Central Asian archaeology – maybe enticed by the insights ancient DNA offers – are now dangerously close again to drawing big, bold arrows encompassing genes, languages, and material cultures on our maps. Others seem to have disregarded the past sixty years of theoretical development altogether and wholeheartedly embrace ancient DNA as yet another means to reinforce existing categories.

Exploring “culture contacts” between perceived clusters of late prehistoric material assemblages can, as implied by the title of this contribution, be accomplished meaningfully only when there is an

awareness of the theoretical traps associated with the used terms. In an article published in the *Journal of Field Archaeology*, the author and colleagues T. Sadykov and J. Blochin have elaborated upon the implications that the newly acquired data from the site of Tunnug 1 in Tuva Republic (**Fig. 1**) has for the earliest horizon of Scythian material culture (SADYKOV/CASPARI/BLOCHIN 2020). The possible architectural connections to Central Asia were formulated in a very careful way, but within a culture history framework, in order to find a common language and convey our ideas to a scholarly audience working within said framework. We stated that “crucial structural features of this important archaeological site are, in some regards, unique in the corresponding cultural and chronological horizon, and differ both from the previous cultural traditions in the area and the subsequent and well-researched classical burial complexes of the Early Iron Age” (SADYKOV/CASPARI/BLOCHIN 2020). This contribution will try to trace characteristics of the architecture of the Tunnug 1 and Arzhan 1 (**Fig. 1**) mounds and qualify them with regard to continuity or disruption looking at the Bronze Age Iron Age transition, as well as disentangle perceived connections concerning geographic and temporal scale.

2 Naming the people

Plenty has been said about the problematic ethnic connotations of the term “Scythian” and its largely unjustified application to a macro-cultural complex of highly nomadic pastoralists in the 1st millennium BCE (cf. CASPARI 2020a). A large number of ethnic terms from etic sources would have been available to attach to as broad a material culture assemblage as the one now associated with the “Scythian Triad”. The tradition of the term’s use in Russian and German archaeological research is strong however, and scholars are generally aware of the complexity of population dynamics within the Eurasian steppe belt – which is not reflected by the term.

The attempt to distinguish different sub-groups based on other etic mentions of nomadic pastoralists on the steppe has a long tradition as well. Persian sources identify a number of groups preceded by the relatively unspecific ethnic term “Saka” (P’IANKOV 1994: 37–46). The Saka material culture – today subsumed under the archaeological umbrella term “Scythian material culture” – was split into sub-groups by Persian authors. While Saka seems to have been attached to the pastoral nomadic way of life, the sub-group terms are created by adding heterogeneous descriptors: the Saka *beyond the sea* being qualified by a geographical distinction; the *haoma eating* Saka describing perhaps a distinctive behavioural trait of consuming a specific plant; and the Saka *with the pointy hats* making reference

to outer appearance and traditional clothing (PARZINGER 2004: 22). Herodotus of Halicarnassus (ca. 484–425 BCE) provides by far the richest and most detailed description of people on the steppes in the northern Black Sea region and beyond, shining light on political history, mythological origins, and local customs. There is no doubt that such an early ethnographic account is immensely helpful in gaining insights into the livelihoods, traditions, and maybe even identity of social groups that we otherwise have problems identifying in the archaeological record. However, these sources need to be treated with the appropriate care, especially considering that they are not emic. The ethnic terms used by Herodotus also represent different resolutions of detail perhaps associated with geographical distance from the Greek colonies on the coast of the northern Black Sea. The accounts of the Scythians proper are extremely detailed, distinguishing several sub-groups, and laying out a wealth of information on customs and livelihoods. The further the text ventures from the accessible world of its author, the more fantastic the descriptions get. Emic written sources, with the possible exception of the as of yet undeciphered Issyk bowl inscription (AKIŠEV 1978), only appear in the Eurasian steppes much later with the onset of the Turkic period in the 6th century CE. For the eastern steppes, etic descriptions of the pastoral nomadic communities come in at an even later point in time. The best known among them are Sima Qian’s (ca. 145–90 BCE) texts. These are infused with Sinocentric ideology (SHELACH 2016: 6) and while they are useful for understanding the power dynamics between early Imperial China and the regions beyond, the pre-Imperial developments of these relationships are vague at best. The descriptions of non-Chinese groups as pertaining to the early 1st millennium BCE are in fact so broad – often describing a form of “the other” rather than succinctly defined entities (DI COSMO 1999: 887) and “rich in cultural prejudices and political insinuations” (SHELACH 2016: 16) – that the attempt to associate them with archaeological assemblages merely creates an illusion of an answer. I therefore concur with Shelach’s “objection to naming the people” in the early Iron Age even though this disregards a long scholarly tradition (SHELACH 2016: 16). There is still information to be drawn from these texts, but using them to correlate vague groups with recently created clusters of archaeological material seems unproductive from both a practical and theoretical point of view.

The reason that the Uyük Valley or “Valley of the Kings” in southern Siberia has become associated with the earliest “Scythian” horizon lies in the broad definition of the “Scythian Triad” (YABLONSKY 2000) and “Scythian material culture”, which is seen to encompass animal style, weapons, and horse gear. The excavation of the monumental burial mound



Fig. 2: The construction of larch logs of Arzhan 1; the stone cover had been removed already (image in the public domain, created by M.P. Gryaznov, republished by BOKOVENKO 1997).

Arzhan 1 in Tuva Republic in the 1970s delivered one of the earliest material assemblages meeting this definition (GRJAZNOV 1984). This reversed the previously assumed “west to east migration” of “Scythian people” into an “east to west migration”, essentially retelling the story of a point-to-point population movement from southern Siberia to the northern Black Sea region over a distance of more than 4,000 km. Few, if any, archaeologists would have naïvely accepted this without acknowledging the immense amount of oversimplification in this explanation, but the rough explanatory concept persists in Central Asian archaeology without the details being sufficiently fleshed out. A transition to highly mobile nomadic pastoralism, steep social hierarchies, and the emergence of a number of specific archaeological material remains seem to merit the formation of the broad category “Scythian” to many scholars in Central Asian archaeology.

The architectural dimension of material remains in the early Iron Age steppe is largely left out as a cultural marker for the “Scythians”. Of course, in broad strokes burial mounds are similar across the Eurasian steppe belt, but they do not adhere succinctly to the chronological boundaries of the “Scythian world”. Surprisingly, ceramics also do not feature prominently in the definition of “Scythian

culture”, while the use of this widely found material in the definition of cultures is abundant for the Bronze Age. In the following, I will make an attempt to understand the funerary ritual architecture of the Tunnug 1 site with reference to other individual sites.

All too often, burial mounds are not treated as the architectural constructions that they represent. For a long time, the mounds themselves were not perceived as of particular archaeological interest and excavation methods reflected this lack of appreciation (NAGLER 2016). However, the scarcity of monumental funerary ritual constructions like Arzhan 1 and Tunnug 1 provides a rare opportunity to deepen our understanding of contacts, continuity, and disruption without making too many references to broad cultural definitions.

3 Proximity as familiarity

The Tunnug 1 project started with an on-the-ground survey in 2017 after the Uyuk Valley had been surveyed by means of high-resolution satellite imagery and a burial mound with promising radial features had been identified (CASPARI ET AL. 2018). Architectural features of burial mounds played a key role in



Fig. 3: The construction of larch logs underneath a partially removed clay layer and with intermittent, stone-filled compartments at Tunnug 1 (right side) and clay layer underneath the stones (left side) (© Tunnug 1 Project / T. Wallace).

the choice of research subject right from the start of the project. The hypothesis that these radial structures might conceal remains of a wooden construction similar to the one found under the stone mound of Arzhan 1 (Fig. 2) was confirmed early on. The 2019 excavation campaign revealed the wooden construction under two sectors in the eastern part of the mound (Fig. 3). Radiocarbon dates, later in combination with wiggle matching, situated the burial mound in the 9th century BCE (CASPARI ET AL. 2020a). Further geophysical and remote sensing research clarified the peripheral context of the monument, revealing a large number of stone circles around the main mound (Fig. 4, upper right), but no other large structures in the immediate vicinity that could be dated to the Early Iron Age (CASPARI ET AL. 2019; CASPARI ET AL. 2020b).

The Uyk Valley contains a large number of monumental burial mounds dating to the Early Iron Age (CASPARI 2020b), but very few are known that were actually built in the 9th century BCE and thus could be considered Bronze Age/Iron Age transitional sites (SADYKOV/CASPARI/BLOCHIN 2020). Tunnug 1 is only the second monumental burial mound, after Arzhan 1, dating to this period. I therefore want to quickly elaborate upon the immediate structural connection that these two monuments have with regard to individual features of their architecture.

For an in-depth description, the reader is referred to SADYKOV/CASPARI/BLOCHIN (2020).

Tunnug 1 is not a simple soil or stone mound like many of the other Early Iron Age sites of smaller scale (Figs. 3, 4). Like Arzhan 1, it consists of a complex arrangement of separable architectural features. So far only around 10% of the monumental burial mound has been fully excavated and therefore the data we have about the architecture remains incomplete. Nonetheless, with a near-complete centre-to-periphery profile (cf. CASPARI ET AL. 2020b), the general architectural layout is known. With the exception of clay used as a building material, Tunnug 1 is extremely similar to Arzhan 1. Both Arzhan 1 and Tunnug 1 feature a radial wood construction of larch logs and a stone cover, giving the monuments a platform-like appearance. Up until 2019, the radial wood construction excavated by Gryaznov and Manaj-ool (GRJAZNOV 1984) was often described as unique (HONEYCHURCH 2014: 173) and was reprinted in many publications on Scythian material culture (e.g. ČUGUNOV/PARZINGER/NAGLER 2010: 8; BENDREY ET AL. 2011; CUNLIFFE 2019: 101; BOKOVENKO 1997: 101; SADYKOV/CASPARI/BLOCHIN 2020: 8). It is therefore quite intricately tied to the emergence of Scythian material culture on the eastern Eurasian steppes, as it marks one of the first archaeological sites where the “Scythian Triad” appears. It is tempting to speak of a point of origin

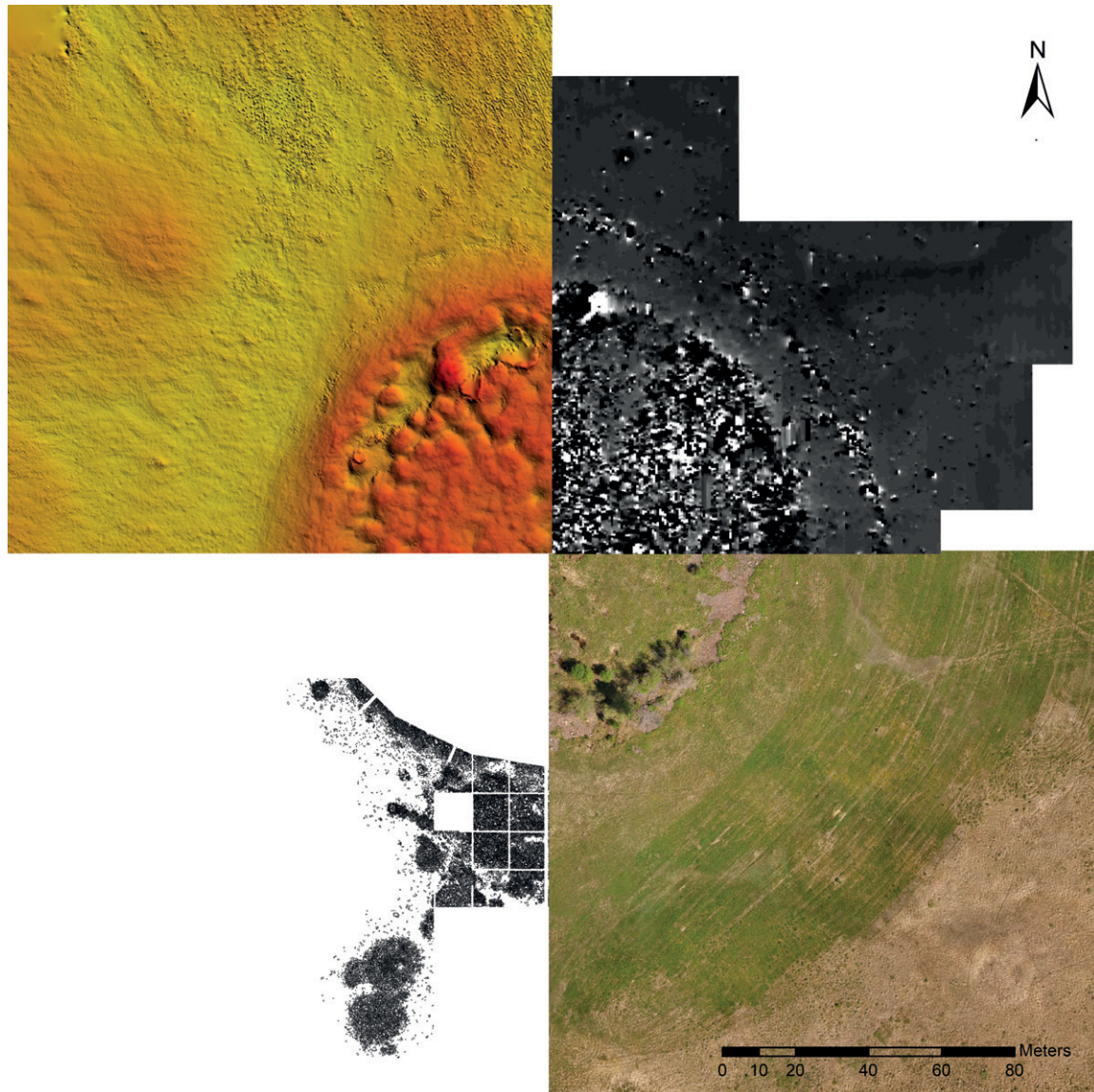


Fig. 4: The monumental Early Iron Age burial mound Tunnug 1.

Upper left: Digital terrain model derived from a drone survey in combination with photogrammetry. **Upper right:** Geomagnetic survey of the mound and its periphery (CASPARI ET AL. 2019) allowing the identification of a ring of stone rings surrounding the central mound. **Lower left:** Excavation plan of the partially excavated southern periphery (SADYKOV/CASPARI/BLOCHIN 2020). **Lower right:** Orthophotograph created from several drone pictures (CASPARI ET AL. 2018).

for the Scythian material culture, falling back into a pots-are-people terminology and oversimplifying the complex process leading to the make-up of material assemblages and their categorisation. Clearly, Scythian material culture was not “invented” with the construction of Arzhan 1. Earlier examples of horseback nomadic pastoralism exist, e.g. in Xinjiang (WAGNER ET AL. 2011), and the connections of Scythian animal style to forms of the Karasuk bronzes was already noticed by HANČAR (1952: 179) and later JETTMAR (1970). However, the landscape of the Uyuk Valley provides important early evidence for the economic transition to highly nomadic pastoralism and the connected changes in social structure

during the early 1st millennium BCE. It therefore helps to look first at what constitutes novelty at the local level within the landscape of the Uyuk Valley, in order to understand which aspects of Tunnug 1 and Arzhan 1 might have been transplanted as ideas into a new geographic context.

Little is known about the Bronze Age of the Uyuk Valley. Few ceramic sherds found in the periphery of Tunnug 1 indicate a human presence in the 2nd millennium BCE (SADYKOV/KASPARI/BLOCHIN 2019), but despite intensive archaeological research in the last decades, evidence for Bronze Age occupation of the landscape remains so scarce that VAN GEEL ET AL. (2004) speak of an “empty” Tuva”. The monumental

architecture, relatively widespread to the south with the Late Bronze Age Deer Stone Khirigsuur Complex (FITZHUGH 2009), is not present in the Uyk Valley. In the late 9th century BCE, a drastic change happens to the landscape of the Uyk Valley. In quick succession at least two large monuments are erected within the valley, each one closely resembling the other. The exact chronological relationship between Arzhan 1 and Tunnug 1 is not yet known, but both are placed in a narrow chronological band at the end of the 9th century BCE. Ongoing dendrochronological studies will clarify the relationship. The current evidence points to the construction of both monuments within one or two generations (ZAITSEVA ET AL. 2007; CASPARI ET AL. 2020a). Monumental architecture is novel in the narrow geographic frame of the Uyk Valley in the Early Iron Age.

Other than movable objects, architecture is by definition immobile. What can be transferred across geographic distances is merely the idea of a particular architectural concept. In its most basic form, the transfer of architectural concepts in a prehistoric world can take two forms, or a mixture of these: either a concept is communicated from person to person, or a person in possession of the concept changes their geographic location (the latter is not the same as migration). It is very well possible, given the close geographical (approximately 10 km) and chronological proximity (maximum 50 years) in addition to the strong structural correspondence, that some Early Iron Age individuals in the Uyk Valley witnessed or even participated in the construction of Tunnug 1 and Arzhan 1. With a higher chronological resolution based on dendrochronology, we might be able to deduce which is more likely: an intergenerational transfer of knowledge indicated by a successive construction, or a potentially competitive situation with a partially temporally overlapping construction period between Arzhan 1 and Tunnug 1.

The defining characteristic of both sites with regard to novelty is their monumentality. Smaller Late Bronze Age mounds in Tuva are often associated with the Mongun Taiga culture (ČUGUNOV 1994; KILUNOVSKAĀ 2018: 100), and a certain similarity regarding the general layout of the sites has been attested. Monumentality, however, is an implicitly new concept largely invisible within previous architectural structures in Tuva.

4 Monumentality as novelty

The term monumentality is used across archaeology, architecture, and art history and often acquires differing meanings depending on the context. It only makes sense with regard to a monument. I will adhere to a simple definition of monument as “an object that is generally large in size, that commem-

orates, or memorializes, that is historically significant, and that has longevity” (OSBORNE 2014: 3). The word’s Latin root *monere* – to remind – hints at an important meaning that is encompassed in the term, yet frequently disregarded, and that forms a significant part of the concept (OSBORNE 2014: 3). Monumentality is then the meaning that a defined social group associates with a monument. This meaning is fluid, dependent among other factors on the socio-economic and cultural context.

Both Arzhan 1 and Tunnug 1 are large structures with a diameter of over 100 m (CASPARI ET AL. 2018). They were large in comparison to any human-built structures that were in the Uyk Valley before their appearance and remain so today. Both sites served as burial markers memorialising or commemorating the person or persons interred in the central burial chambers. Tunnug 1 features a large ring of stone rings with a likely ritual function in its periphery (SADYKOV/CASPARI/BLOCHIN 2020), as well as an extended periphery to its south. Some structures postdate the main Early Iron Age mound by 1,500 years; most importantly, however, the southern periphery was used as a burial ground during the 2nd to 4th century CE (MILELLA ET AL. 2021; SADYKOV ET AL. 2021). The longevity of Arzhan 1 and Tunnug 1 as monuments in the landscape and places of interest with changing meaning is thus hardly debated. However, what then was the meaning of these monuments at the time of their construction and shortly thereafter for the group of people who built them?

The only comparable large stone structures in the further geographical vicinity predating Arzhan 1 and Tunnug 1 are Late Bronze Age *khirigsuurs*. A surge of new research coming out of Mongolia has helped in contextualising these structures more clearly in recent years (WRIGHT 2007; LITTLETON ET AL. 2012; TAYLOR 2017). A widespread interpretation that archaeologists offer upon the appearance of monumental architecture is the notion of social inequality and control of resources by an elite – and this was exactly the preferred interpretation at the beginning of the 20th century (cf. ALLARD/ERDENEBAATAR 2005; HOULE 2009). In the meantime, however, alternative ideas for the Late Bronze Age steppes have been suggested. WRIGHT (2012) argues for a function of *khirigsuur* monuments as social mechanisms with a communicative role in the landscape and without the implicit need for an elite as a catalyst for their construction. Another explanatory approach recently applied to Bronze and Iron Age monuments in Mongolia and Xinjiang is cost signalling theory (WRIGHT 2017; CASPARI 2020a), stating that “the building and modification of diverse types of stone monuments and the long-term development of monumental landscapes constituted costly signals that communicated information about the size and organization of communities and the depth and strength of the connections of

their elite lineages with the increasingly far-reaching social networks of this period” (WRIGHT 2017: 547). Radiocarbon dating is also creating an impact on this discussion, with a recent study finding that the construction of a large Late Bronze Age *khirigsuur* in Mongolia likely extended over a period of 50 years and might have been completed with the exclusive use of local resources and labour (ZAZZO ET AL. 2019). The time and effort it took to construct a monument is therefore crucial in assessing the social implications. Currently, large series of radiocarbon dates seem to support Wright’s idea (WRIGHT 2017), rather than a stratified society with a chiefly elite.

Other than the Late Bronze Age *khirigsuurs*, Arzhan 1 and Tunnug 1 feature a central burial chamber. This architectural focus on a deceased individual or individuals, in conjunction with a continued tradition seen in later richly equipped burials like Arzhan 2 (ČUGUNOV/PARZINGER/NAGLER 2010), suggests that these monuments might indeed have been constructed *for* someone. It is at this point that the monuments acquire a monumentality associated with inequality and control of resources by an elite. The monument itself then becomes a tangible expression of the distinction within a social group that is remembered through the expenditure of power in its creation.

TILLEY (2003) shows that this can happen conceptually through allocating resources to reinforcing boundaries and socially enacting difference. Tunnug 1 and Arzhan 1 can be considered among the first monuments on the eastern Eurasian steppes to reinforce group-internal social boundaries through actively demonstrating power distance and distinction. Further clarification of the time and resources necessary for the construction of the two monuments is necessary to go into the details of how this happened. Currently, every individual larch log of the wood construction of Tunnug 1 is being sampled for dendrochronology. This will allow for a future fine chronology of the construction of the monument (withholding problematic old wood effects).

Large stone structures had been built in the eastern steppes in the Late Bronze Age already, but the notion of size alone is not sufficient to infer a direct geographical transfer up north into Tuva. However, a number of structural features connect *khirigsuurs* and Arzhan 1/Tunnug 1. Stone rings in the periphery, as well as stone pavements adjacent to the main mound, are common features at Tunnug 1 as well as different *khirigsuur*-monuments (SADYKOV/CASPARI/BLOCHIN 2020). Moving beyond the immediate landscape of the Uyük Valley and having identified monumentality as a newly occurring characteristic in the architecture of Arzhan 1 and Tunnug 1, we can ask the question of whether it was indeed the transfer of an architectural idea or if it is per-

haps more likely that the concept emerged locally. It may appear that we are falling into a dichotomy of autochthonous versus allochthonous, but there is a wide range of possibilities between these two options that mirror the subtle, gradual influences that myths and stories of distant places and practices could have had on a social group. These forms of contact, which are less direct, are difficult to detect and conceptualise in the archaeological record, but can be very influential (HONEYCHURCH 2014: 28). If *khirigsuurs* were purely large stone monuments without any structural similarity to the earliest Iron Age monuments in the Uyük Valley, it would be imaginable that a rather indirect contact through the incremental transfer of stories from the south might have inspired the construction of Tunnug 1 and Arzhan 1 as monumental records of social inequality. The parallels in details of the architectural features, however, suggest connections of a more direct nature. Assessing temporal and geographical distance on top of the similarities in architectural structure gives additional insight. The latest *khirigsuurs* are dated to around 700 BCE by most sources (FITZHUGH 2009; SEITSONEN ET AL. 2014; TAYLOR ET AL. 2015), thus the practice of constructing these is showing considerable temporal overlap with Arzhan 1 and Tunnug 1, dating to the late 9th century BCE. At a distance of around only 250 km or less towards the south of the Uyük Valley, a large number of *khirigsuurs* are dotting the landscape. With horses for transport and a landscape towards the south of the Uyük Valley that consists of steppes and semi-deserts, *khirigsuurs* would have been reachable within a few days on horseback and were therefore well within the realm of individuals’ personal experience in the Uyük Valley. It appears likely that the idea of constructing large stone-covered monuments and peripheral ritual structures derived relatively directly from Late Bronze Age *khirigsuurs*. Their purpose, however, seems to have been adapted to local circumstances and transformed into a tool to delineate group-internal social differences, emphasising the power of an elite and their command over resources and labour. While ideas about structural elements of stone architecture were adopted, their meaning was locally socially embedded and changed substantially, thus shaping monumentality in the Early Iron Age Uyük Valley into something quite distinctive from the geographically adjacent architectural ritual practices.

5 Ambiguity in clay

The architecture of Arzhan 1 can be quite convincingly explained on a structural level through the elements of Late Bronze Age *khirigsuurs* and local Late Bronze Age stone architecture. It is not far-fetched to assume that circular outline, size, peripheral

structures like pavements and stone circles, ray-like features, etc. would have had an impact on the conceptualisation of this Early Iron Age monument. The same would go for Tunnug 1 if not for the extensive use of clay in its construction. Clay as a construction material indeed poses an interesting problem because its use in the architecture of Tunnug 1 is neither of minor importance, nor unsophisticated. The clay was used to form architectural elements like humps, walls, ramparts, and compartments that were then covered with a relatively thin layer of stones (SADYKOV/CASPARI/BLOCHIN 2020). The use of clay as a construction material for monumental architecture seems to be a novelty in the eastern Eurasian steppes, but it appears in a relatively developed form, shaped into bumps, ramparts, walls, and compartments at Tunnug 1. The problem is a lack of immediate comparative examples even on an inter-regional level.

The author and colleagues suggested a possible Central Asian connection (SADYKOV/CASPARI/BLOCHIN 2020), as previously scholars had indicated a potential contribution of architectural concepts employed at the mausoleums of northern Tagisken (Fig. 1) to the funerary ritual constructions of the Early Iron Age (ITINA/ÅBLONSKIJ 2001). This comparison with Tunnug 1 is of associative nature and in need of substantial support before it can be accepted (SADYKOV/CASPARI/BLOCHIN 2020). As with the other examples, I would first like to highlight the geographical and temporal distance that allows for a general assessment of the likelihood of a direct transfer of ideas of architectural nature.

The geographical distance between northern Tagisken and the Uyk Valley is indeed enormous – more than 2,300 km (as the crow flies) separate the sites – and even taking into account the transition to a highly mobile nomadic pastoralism at the time relying on the extensive use of horses, which undoubtedly broadened spheres of interaction. This becomes even more pronounced if we look at the chronological relationship between these sites. The traditional date for northern Tagisken is placed in the 1st millennium BCE and largely based upon one radiocarbon date for mausoleum 6. LE-309, which has a broad range of 2430±200 BP (HALL 1997). HALL (1997) calibrated the date to a 1σ range of 780–540 cal BC and a 2σ range of 950–450 cal BC. This would indicate a date later than the construction of Tunnug 1 for the 1σ range and make it rather futile to discuss a transfer of ideas from northern Tagisken to Tunnug 1. Past research has, however, clearly shown that chronological frames for sites have to be based on larger series of radiocarbon dates to be able to express statements on geographic links with any degree of certainty. I concur with BONORA (2018) that the absence of animal-style artefacts at northern Tagisken would be utterly surprising if we assume this radiocarbon date to be

correlated with the main period of usage of the site. The radiocarbon date for mausoleum 6 therefore has to be taken with a grain of salt. With the recently published IntCal20 calibration curve (REIMER ET AL. 2020), the 2σ range for the date shifts to 1010–41 cal BC, covering the entire 1st millennium BCE and allowing for a limited overlap with the construction date of Tunnug 1. A recent detailed study by BONORA (2018) shows a likely halt of anthropogenic activity at northern Tagisken after the 13th century BCE. This would leave a 400-year gap between northern Tagisken and Tunnug 1. Given its importance in Central Asian archaeology, it would be highly desirable to obtain a larger series of radiocarbon dates for northern Tagisken soon.

An additional problem is the nature of the novelty of clay as a construction material in the Uyk Valley. As the previous example of stone architecture demonstrates, the importance lies not in the general use of stone as a construction material, but in the arrangement of stone into distinctive architectural features. A major flaw in the associative comparison of Tunnug 1 and northern Tagisken is the use of mudbrick at the latter, whereas the former uses unstructured compressed clay without any discoverable brick-like structure. While the building material is similar, its use differs significantly. SADYKOV/CASPARI/BLOCHIN (2020) tried to bridge the large geographical and potential temporal distance to northern Tagisken with the geographically closer Late Bronze Age sites in eastern Kazakhstan, which show a clearer relationship with northern Tagisken – also due in part to the use of bricks in construction (MERC 2013). However, if we are indeed determined to look for mudbricks as a comparative material, why venture as far as the Aral Sea? Geographically closer and chronologically clearer examples from Xinjiang show a well-established tradition of mudbrick usage in both Bronze Age settlements and cemeteries like Xintala, Yanbulake, Yanghai, Wupu, and others (ZHANG ET AL. 2018). The concept of using clay in brick form for both domestic and funerary structures had clearly arrived in Xinjiang in the Bronze Age already and the knowledge of using it as a construction material was therefore available at a much closer distance than northern Tagisken. To assume such a far-flung connection across time and space when closer analogies are available seems to disregard Ockham's razor.

However, mudbrick constructions are, after all, not a great analogy and comparative frame for the respective architecture at Tunnug 1. The clay layer does not consist of mudbrick, but rather compressed, tamped clay. Otherwise known as rammed earth or hāngtǔ (夯土) in Mandarin Chinese, it is used “by Chinese archaeologists to describe both rammed earth mounds and earth rammed between formwork” (JAQUIN ET AL. 2008: 378). Rammed earth techniques were employed in China since the

Neolithic period and saw wide-ranging application for the construction of prestigious structures such as tombs, palaces, and temples (ZHANG ET AL. 2018). Admittedly, this analogy is equally distant as northern Tagisken, and speculative as a comparison. The pounded earth structures have a long tradition in China since the Neolithic; however, the intensifying contacts with its northern neighbours during the 1st millennium BCE could perhaps have had an indirect impact. Additional support could be seen in some early animal-style motifs, which indicate a similar trajectory from China towards the northern steppe. The coiled feline motif present in Arzhan 1 has already been regarded as a deduction of southern precursors of the Zhou Dynasty (JETTMAR 1979: 155). Interactive networks between Late Bronze Age communities in Mongolia and the Ordos region on the one hand, and the Shang and Zhou dynasties on the other, have been analysed and contacts in the form of down-the-line transfers of products and ideas are inherently likely as early as the late 3rd and early 2nd millennia BC (HONEYCHURCH 2014: 200–201). The author finds it not unimaginable that techniques for the construction of elite architecture may perhaps have found their way up north through interaction networks.

While the discussion concerning the clay architecture in Tunnug 1 will continue and a spotty archaeological record might not allow for a final answer anytime soon, it is certainly important to consider all available options in detail. After all, there is a chance for a local innovation given the wide availability of clay as a material in the Uyuk Valley. Experimentation and innovation in the wake of large construction projects, especially regarding creations reinforcing the status of an elite, are not very unlikely.

6 Conclusion

With the three examples of (possible) interaction presented here, I hope to have demonstrated how important it is to dive into the specifics of the archaeological record when analysing contacts based on material culture. None of the here presented cases demand migration as an explanation when they are considered in-depth and with regard to specific archaeological contacts. Moreover, different scales of interaction and different resolutions emerge. A lot of data exists for the close range, and the nature of interaction and transfer of ideas can be quite clearly outlined. The second case allows for traceable associations and interpretations based on a relatively small number of assumptions. The last case remains vague and undecided and will only allow for a clearer picture once new, additional data is introduced.

It is key for a meaningful analysis of past patterns of interaction to be aware of chronological and geographical distances, develop an understanding of the complexity of ideas one tries to trace, and be mindful of the resolution of data available. Otherwise, there is an inherent risk of creating confusion through oversimplification.

Acknowledgements: Many thanks go to my Russian colleagues T. Sadykov and J. Blochin for conducting the fieldwork at Tunnug 1 with me. I also would like to thank K. Chugunov for supporting us with advice and ideas. The Society for the Exploration of EurAsia partially financed the fieldwork. This article was written while the author was supported through a postdoc mobility grant from the Swiss National Science Foundation (P400PG_190982).

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Comprehensive Index of Toponyms

Illustrations are indicated by page numbers in *italics* or by *illus* where figures are scattered throughout the text. The letter n after a page number indicates that the reference will be found in a note.

- Achmayli (Uzbekistan) 181
Adan Basan (Turkmenistan) 42
Adji Kui (Turkmenistan)
 animal bones 108
 arrowheads 102
 ingot 53
 plant remains 106
 seals 36, 37, 42, 43
 staffs 19, 21
Afrasiab (Uzbekistan)
 abandonment 410
 bricks 253n39
 buildings 513
 Hellenistic period 243–244, 246
 Kangju period 251
 palace 345
 potter's wheel mechanism 335
 pottery 272, 398, 403, 405
Agalik-sai (Uzbekistan) 181
Aguais (France), dolmen 533, 537
Ai Khanum (Afghanistan) 215, 241, 246, 252
Aina-Bulak (Kazakhstan) 534
Ak-Beshim (Suyab/Ordu) (Kyrgyzstan)
 bangle 500
 excavations 467–471, 468, 469–470, 471
 pottery 499
Ak-Tanga (Tajikistan), pottery 139, 139
Ak-tepe (Uzbekistan)
 castle 257
 survey 239
 tamgas 381n8, 387, 388, 389
Akchi-Karasu (Kyrgyzstan), armour 174, 183
Akdepe (Turkmenistan)
 archaeological record 118, 118, 119, 128–129
 excavations 2006–10 124–128, 124, 125, 126, 127, 128
 pottery 121–124, 122, 123, 126–127, 127, 129
 research history 118–121, 120
Akdžar-tepe (Uzbekistan) 244
Aketala (China), sickles 142, 143
Akra (Pakistan) 147
Akrabat (Uzbekistan), castle 235, 236
Aktam (Uzbekistan) 179
Akzhar (China), statue-menhir 539
Ala-Tey1 (Russia), belt plaques 568, 569, 569, 572–573, 575, 584
 figural 583–584, 583
 rectangular (*illus*) 573–583
Albania 447, 448–449, 455, 456, 457, 459, 460
Alepubulake (China), statue-menhirs 543, 544
Almalyk (China) 487, 489, 492
Altyn-Depe (Turkmenistan)
 beads 159
 isotope analyses 160
 miniature column 23n29
 pottery 158
 sceptres/staffs 19, 21, 24n36, 25, 28, 29
 seals 38, 39, 159
 stone handbags 61, 62, 72, 73, 74, 75
Altynasar necropolis (Kazakhstan) 517
Altyntobe (Kazakhstan) 505
Amu Darya (Oxus)
 as border 240, 243
 crossing point 168, 226, 241
 pottery 124, 266
 satrapies 243
 see also Tillâ-Tepe
Anau (Turkmenistan) 119, 121
Anau North (Turkmenistan), stone handbags 60, 62, 76, 84, 85
Anbar (Iraq) 206
Andronovo cultural complex
 cultural interaction 91, 136, 137, 139–142, 147, 588
 descendants of 290–291
 isotope analyses 159
Anjirli-E (Iran), pottery 145
Anšan (Iran) 25
Antelas-Oliveira de Frades (Portugal) 541
Aosta (Italy)
 petroglyphs 545
 Saint-Martin-de-Corléans 539, 539
Aq Kupruk (Afghanistan), pottery 268, 269, 273
Araltobe (Kazakhstan) 183
Argan (Iran) 17
Arzhan 1 (Russia) 590–591, 591, 592, 593–596, 597
Arzhan 2 (Russia) 183, 217n29, 595
Asanas (Kazakhstan) 505
Ashin (Iran), stone artefacts 53, 82
Aspabota (Kazakhstan) 507
Atrek Valley (Iran) 144, 145, 146
Aulie-Agash Forest (Kazakhstan) 486
Ayaz Kala (Uzbekistan) 296
Azerbaijan
 Caspian trade routes in the north-east 454–456, 454
 fortifications 455, 456–459, 456, 457, 458
 Shabran 459–462, 459
 Khazars, evidence for presence of 445–450
Azov (Russia), deer finial 209–210, 210
Babashov (Bactria) 181



- Babish Mulla I (Kazakhstan) 296n27
- Bactra (Afghanistan)
- Alexander 240, 241
 - occupation 246
 - pottery 268, 273
 - satrap 243
 - trade routes 206, 235, 245, 251
- Bactria
- artistic culture 226, 227, 232
 - border 234, 240, 243, 245, 257
 - cultural interaction 142, 146, 147, 148
 - female divinities 300
 - figurines 159, 161
 - iconography of hand gestures 307, 309, 310, 311, 314
 - invaders 244
 - pottery 286
 - records 372–373
 - sceptres/staffs 18–21, 23
 - sealings 196, 197–198, 198–200
 - seals 22n25, 38–33, 40–41, 42, 43, 44, 45, 46
 - stone handbags 52, 53, 54, 60, 61–62, 71, 73, 76, 84
 - tamgas* 386
 - Vardāna, influences in re-foundation of 262–674
 - weapons 168, 171, 178–179, 181, 182, 184, 186–187
 - see also* Derbent (Uzbekistan); Karatepa; Tillā-Tepe
- Baghdad (Iraq) 416
- Baghin (Iran) 82
- Les Baigneurs (France), vessel 542
- Baj-Dag II (Russia) 572
- Bajram-Kazgan 2 (Uzbekistan), pottery 139–140, 139
- Balakot (Pakistan) 158, 159–160
- Balalyk-tepe (Uzbekistan) 253, 254
- Balikun (China), pottery 143
- Balkh (Afghanistan) 40, 422, 505, 506
- Baluchistan 56, 60, 62, 72, 77–78
- Bamiyan (Afghanistan) 206, 422–423, 422, 424, 440; *see also* Shahr-i Gholghola
- Baranovka-1 (Russia) 183
- Barda (Azerbaijan) 459
- La Barma (Italy), carving 544
- Baschi (Kazakhstan) 489
- Bashadar (Russia) 215
- Bashtepa (Uzbekistan) 269, 281, 282
- Baume Ecrute grotto (France) 541
- Baumelle à Blandaz (France) 538
- Bayan undur (Mongolia) 534
- Baysun oasis (Uzbekistan) 241
- Bazgu (Azerbaijan) 447
- Begash (Kazakhstan), pottery 140
- Begram (Afghanistan) 184, 556
- Belen usny denzh (Mongolia) 534, 540, 540
- Belibayli (Uzbekistan) 257
- Belokamenka (Russia) 183
- Berceau dolmen (France) 544, 545
- Beshbarmag (Azerbaijan) 456–458, 456
- Bestamak (Kazakhstan), isotope analyses 158, 159
- Bezeklik (China) 318–319
- Big Berel Mound (Kazakhstan) 184
- Bimaran (Afghanistan) 219
- Binket (Uzbekistan), pottery 398, 405, 405
- Bishkent (Tajikistan), weapons 179, 181, 182
- Biya-Nayman (Uzbekistan), ossuary 316, 317
- Bolati (China) 534, 540, 542, 543, 543, 544
- Borizhary (Kazakhstan) 505
- Brahui (Pakistan), sceptres/staffs 16
- Bukhara (Uzbekistan)
- architecture 409, 410–11, 413, 414, 417
 - citadel 346, 413
 - marriage 373n19
 - plan 273
 - pottery 281, 282, 284
 - ruling dynasty 187
 - trade 291
- Bukhara Emirate 235
- Bukhara oasis
- architecture 409
 - pottery
 - Bactrian influences 268, 269, 270, 271–272, 273–274
 - early Karakhanid glazed wares (*illus*) 394–405
 - MAFOUB project (*illus*) 277–86
 - refugees 246
 - trade 486
 - weapons (*illus*) 168–87
 - see also* Uch Kulakh; Varakhsha; Vardāna
- Bulak (Russia) 575
- Bulayk (China) 492, 494–495
- Bulgan sum Yagshiin khuduu (Mongolia) 534, 540, 542, 543
- Bulgartaboty (Kazakhstan) 534
- Burana (Kyrgyzstan) 468
- Burguljuk culture 140, 142, 144, 148
- Burkhan Tolgoi (Mongolia) 215
- Burly-kala (Uzbekistan) 220
- Buston (Uzbekistan) 160
- Buural kharyn ar (Mongolia) 534
- Buyant sum Ulaan Khudag (Mongolia) 534, 542, 543
- Buzghala-khana gorge (Uzbekistan) 236, 236, 255
- Çağota *see* Niya
- Camp de Chassey (France), vessel 542
- Carjac (France), dolmen du Verdier 537
- Caspian Sea
- fortifications 455, 456–9, 456, 457, 458
 - Shabran 459–62, 459
 - trade routes 454–6, 454, 462
- Caumette dolmen (France) 537
- Cazals (France), dolmen de la Ferme du Frau 537

- Chach
 architecture 301
 border 272
 capital 186
 griffin images 181
 hearth pedestals 480
 Oghuz 505
 pottery 286
tamgas 379, 384, 386, 387, 388–9, 390
see also Binket; Kanka; Tashkent
- Chaganguole (China) 534
- Chaklinga, pit houses 140
- Chakmakli Depe (Turkmenistan) 59–60, 62, 73
- Chalain (France), vessel 543
- Chamboud (France), vessel 542
- Changali (Uzbekistan) 147
- Chardara reservoir (Kyrgyzstan) 480
- Chelarevo (Serbia) 448
- Chenal (Italy), carving 544
- Chendyr valley (Turkmenistan) 144
- Chemurchek *see* Kermuqi
- Chile-depe (Turkmenistan) 144
- Chirakchi (Uzbekistan)
 cowries 147n6
 pottery 139, 139
- Chiraq Qala (Azerbaijan) 457, 458, 458
- Chokpartas (China), statue-menhir 539
- Chopantam (Turkmenistan) 106, 108, 109
- Chorasmia
 coins 515
 military architecture 263n6, 296, 298, 301
 Oghuz 505, 506, 523
 Oxus 197
 pottery 286, 386
 ruling dynasty 187
 trade routes 168, 206, 217, 219–220, 221, 292, 301
 weapons 179
see also Tok-Kala
- Chust (Uzbekistan)
 cowries 147n6
 cultural interaction 137, 139, 140–141, 142, 144, 148
- Clairvaux (France), vessel 543
- Čogā Zambīl (Iran) 17
- Courela de Castanheiro (Portugal), plaque 546
- Ču (Chu/Chui/Chuy) Valley (Kyrgyzstan)
 cemeteries 489, 492
 hearth pedestals 473–481, 475–477, 479
see also Ak-Beshim
- Cyropolis 257
- Dachi (Iran) 181, 183, 187, 218–219
- Dagestan (Russia) 239n15, 448, 455, 456, 459
- Dalverzin-tepe (Uzbekistan)
 architecture 246
 cowries 147n6
 dating 146
 figurines 296
 pottery 143
tamgas 386
- Daodunzi (Russia) 573, 580, 581–582
- Daraut-Kurgan (Kyrgyzstan) 252
- Darnaichi (Tajikistan) 155, 159, 161; *see also* Gelot-Darnaichi
- Dashly 1 (Afghanistan) 124, 158
- Dashly 3 (Afghanistan) 72, 99
- Dashly-tepe (Turkmenistan) 37, 40, 54n3
- Dasht-Kalpoush Valley (Iran) 145
- Dashti-Asht (Tajikistan) 139
- Dašli-16/17, 30 (Turkmenistan) 144
- Derbent (Russia) 447, 455, 456, 459, 460
- Derbent (Uzbekistan), Iron Gates Wall
 excavations (*illus*) 238–257
 geographical and geological setting 235–237, 236, 237, 238, 240
 location and research history 234, 235, 253
 Shurob-say gorge 238
- Dimishk (Uzbekistan) 415
- Dinavar (Iran) 447
- Dombraobod (Uzbekistan), *tamgas* 388
- Dongguan (China) 232
- Dongtaleda (China) 534
- Dumas Grotto (France), carving 539–540, 539
- Dunhuang (China) 561, 564
- Durmen (Uzbekistan) 345, 346
- Dyrestuj (Russia) 573, 582
- Dzhanbas-kala (Uzbekistan) 296n26
- Dzharkutan (Uzbekistan)
 dating 146
 isotope analyses 158, 158, 160
 layout 95
 mould 140
 pit-houses 140
 pottery 137, 138, 141–142, 141
 statuettes 159
- Dzhend (Kazakhstan) 524
- Dzhetyasar (Kazakhstan) 517
- Dzhuvara *see* Kesken-Kuyuk-Kala
- Dzungaria, Chemurchek cultural phenomenon 532–534, 532, 547
 Alkabek type masonry passages 536–537
 Bulgan type barrow façades 537
 burial construction types 534–536, 534
 defined 536
 geometric patterns in mural paintings 540–541, 540, 541
 parabolic/rectangular figures with antennae 543–545, 544
 pectorals 538–540, 539, 540, 541, 542, 544
 ritual structures 536
 slate plaques 545–547, 545, 546
 statue-menhirs 535, 538–540, 538, 539
 vessel forms and ornamentation 541–543, 542, 543
- Egar (Kyrgyzstan) 480

- Elam
 Bronze Age sceptres and staffs 16, 16, 28–30
 Bactrian thin poles 23, 25
 fist-sized sceptres and miniature columns 23–24, 27
 metal sceptres 16–17, 17
 pole names 24–28
 ring and rod ensembles 21–22, 26
 stone staffs 18
 wooden sceptres 17–18, 18
 influence 156, 159, 160
 seals 41, 42, 43
- Endere (China) 561, 563
- Eregneg uul (Mongolia) 534
- Erkurgan (Uzbekistan) 186
- d'Eson, abri (France), engraving 541
- Failaka Island (Kuwait) 158, 159
- Farkhor (Farchor) (Tajikistan) 61, 73, 77, 86, 156
- Fars (Iran) 415, 416
- Fayāz-tepe (Uzbekistan) 310
- Ferghana (Fergana) Valley (Uzbekistan; Kyrgyzstan)
 cultural interaction 137, 139, 140, 142, 144, 146–147, 148
 sedentary population 505
 stone handbags 63
 trade 486
see also Kayragach
- Filippovka (Russia)
 contacts 220
 gold-clad iron 183
 medallion 210–211, 211, 215
 stag finial 209–210, 209, 217
- Fourknocks passage grave (Ireland) 541
- France, final Neolithic 547
 figures 543–545
 geometric patterns 541, 541
 megalithic burials 533, 536–537
 statue-menhirs 538, 538, 540
 vessels 541–543, 542, 543
- Gabala (Azerbaijan) 447, 448
- Gandhara (Pakistan/Afghanistan) 179, 198, 206, 229, 231, 314
- Gardani Hissor (Tajikistan) 330, 346
- Garry-Kjariz 1 (Turkmenistan) 144
- Gava *see* Koktepe
- Gelot (Tajikistan)
 burial, isotope analyses 154, 155, 156–161
 location 155–156, 155
- Gelot-Darnichi 155, 156, 158
- Geoksyur (Turkmenistan) 122, 123
- Gilan (Iran) 455
- Gilgilchay (Azerbaijan) 456, 457, 458
- Ġiroft *see* Jiroft
- Godar-i Šah (Godar-i Shah) (Afghanistan)
 column 23n29
 staffs 21, 24, 27, 28
 stone handbags 53, 62, 70, 85
- Gol Mod (Mongolia) 183, 184, 215
- Gonur Depe (Turkmenistan)
 animal bones 108
 arrowheads 102
 beads 159
 figurines 44, 45
 inscription 16n5
 landscape context 94–95, 108
 plant remains 105, 106
 pottery 43, 124, 158
 sceptres/staffs (*illus*) 19, 20–21, 21–22, 28, 30
 seals 41
 stone handbags 70–71
- Gonur North (Turkmenistan)
 canal 92
 seals 36, 37, 38–39, 40, 41
 stone discs 62
- Gonur South (Turkmenistan)
 seals 38, 39, 41, 45
 spindle whorls 99
- Gorgan plain (Iran) 23n27, 121, 122, 123, 144, 160–161
- Gorgan Wall (Iran), isotope analyses 158, 158, 160–161
- Gorgippia (Russia) 183, 218
- Griškin Log I (Russia) 580
- Gusar (Azerbaijan) 448
- Gyaur-kala (Turkmenistan) 268
- Haft Tappeh (Iran), seal 22n21, 23
- Haladun (China) 142
- Halil Rud (Iran) 62–63, 80–81
- Harran Plain (Turkey) 160
- Havran (Kazakhstan) 507
- Hazaristan 423
- Herat (Afghanistan) 495
- Ĥināmān (Turkmenistan) 16–17
- Hisorak (Tajikistan) 330, 346
- Hora *see* Kesken-Kuyuk-Kala
- Huangtushan (China) 184
- Huelva (Spain), plaques 546, 546
- Huvara *see* Kesken-Kuyuk-Kala
- Hyrlydepe (Turkmenistan) 144
- Ilaq 505
- Ilek River 210, 220
- Ilgynly Depe (Turkmenistan) 60, 73–74, 76, 77
- Ili Valley (China) 142; *see also* Usharal-Ilibalyk
Ilibalyk see Usharal-Ilibalyk
- Ireland 541
- Isakovka (Russia)
 inscription 220
 weapon 180, 181
- Ishtikhan (Uzbekistan) 345
- Iskijkat (Uzbekistan) 277, 278, 281, 284, 285–286
- Ismailabad (Iran) 122

- Issyk (Kazakhstan)
 bowl inscription 590
 contacts 217
 headdress 211, 212, 217
 turquoise 217n29
 weapons 183
- Iússk (Russia) 576, 577, 580
- Ivolga (Russia) 575, 583
- Izet-Kuli (Turkmenistan) 146
- Jajarm-Esfarayen plain (Iran) 145
- Jakiper-tepe (Turkmenistan), seals 37, 39, 40, 42–43, 42
- Jakke-Parsan 2 (Uzbekistan), mould 140
- Jandavlattepa (Uzbekistan), pottery 268, 269, 273
- Jankent *see* Yangikent
- Jar-tepe (Tajikistan) 354
- Jayran-Tepe (Iran), pottery 145, 145
- Jiangbutasi (China) 534
- Jibin, kingdom of 562
- Jiroft (Iran)
 iconography 45
 sceptres 16, 17, 28
 stone handbags 58n11, 80, 84, 85
- Jirzankal (China), isotope analyses 158
- Kafir-kala (Uzbekistan)
 citadel 194, 195
 excavations 194–195, 195
 sealings (*illus*) 195–201
- Kakishtuvan (Uzbekistan) 277, 278, 285
- Kal-e Shur Valley (Iran) 145, 146
- Kala-i Zakhoki-Marón (Uzbekistan) 252
- Kalaly-Gyr (Turkmenistan), weapons 179, 184
- Kampyr-tepe (Uzbekistan) 251, 386
- Kanai (Kazakhstan) 536
- Kanju (Pakistan) 299n33
- Kanka (Uzbekistan) 186, 387, 388
- Kara-Depe (Turkmenistan) 60, 86, 87, 123
- Kara-Jigach (Kyrgyzstan) 496n10
- Karaspantobe (Kazakhstan) 505
- Karatas (Mongolia), statue-menhirs 535
- Karatepa (Uzbekistan), wall paintings (*illus*) 226–232, 266n10
- Karatobe (Kazakhstan) 515
- Karim Berdy (Tajikistan) 137, 156
- Karkara (Azerbaijan) 459
- Karnab (Uzbekistan) 147
- Karshi (Uzbekistan) 411
- Kashik (Uzbekistan), *shahrستان* 273
- Kashka Darya Valley
 architecture 409, 411, 413, 414, 417
 sedentary population 505
 trade 252
- Kavat Kala (Uzbekistan) 296
- Kaynar (China), statue-menhirs 535, 539
- Kayragach (Kyrgyzstan) 388, 389
- Kayrit (Uzbekistan)
 dating 146
 petroglyph 141, 142
 pottery 140
- Kelleli (Turkmenistan) 39
- Ken-Bulun (Kyrgyzstan), hearth pedestals 479, 480, 481
- Kerman (Kermān) (Iran) 45, 46, 82–83
- Kermuqi (Chermurchek; Qie'muerqieke) (China)
 barrows 534
 vessels 542, 543
- Kesken-Kuyuk-Kala (Huvara) (Kazakhstan) 524–525
 burial grounds 519–523, 520, 522, 523
 chronology and stratigraphy 510–512, 510, 511
 coins and iconography 515–517, 517, 518
 economy 523–524
 geography and Oghuz capitals 505–507
 historiography of Oghuz presence 504, 505
 Oghuz metallurgy 517–519
shahrستان block of buildings 512–515, 513, 514, 516
 site description 507–510, 507, 508, 509
- Ketikkala (Kazakhstan) 462
- Khadat ovoó (Mongolia) 534, 542, 543
- Khalchayan (Uzbekistan) 246
- Khalzan uzuur (Mongolia) 534
- Khapuz-depe (Turkmenistan), pottery 123
- Khar chuluut (Mongolia)
 carvings 543, 544
 dating 536n2
 plaques 545–546, 545
- Khazaria, kingdom of 446, 446, 447
- Kheviin am (Mongolia) 534, 537
- Khiva (Uzbekistan) 413
- Khojent (Tajikistan) 244n28
- Khokhlach (Russia), crown 211–212, 213
- Khorasan 90, 122, 506
- Khorezm (Khoresm) (Uzbekistan) 95, 506
- Khotan, kingdom of 486, 559, 561, 562, 563, 564
- Khovd sum Khuurai salaany am (Mongolia) 534
 mural painting 540
 vessels 542, 543
- Khukh uzuuriin dugui (Mongolia), barrows 533, 534, 537, 540, 540
- Khulagash (Mongolia)
 carving 543, 544
 dating 536n2
 plaques 545–546, 545
- Khurai Salaany am (Mongolia) 540
- Kobiakovo (Russia), headdress 212, 213
- Kojne-Kala (Turkmenistan) 144
- Kok-Mardan (Kazakhstan) 505
- Kok Tobe (Uzbekistan) 69
- Koktepe (Gava) (Uzbekistan)
 as capital 243, 244, 257
 cowries 147n6
 graves 206, 252
 pottery 140
- Kopa (Kazakhstan) 534

- Kopar (China) 540
 Kopet Dagh (Turkmenistan/Iran)
 agriculture 106
 cultural interaction 144, 145
 figurines 98, 102
 pottery 119, 121, 122, 123, 144
 seals 30, 40
 stone handbags 59
 Kordai (Korday) (Kazakhstan) 63, 74
 Korla (China) 487
 Kosika (Russia) 185, 187, 206, 218
 Kosogol'sk (Russia) 576, 580
 Krasnaya Rechka (Kyrgyzstan) 333, 474, 478
 Krasnorečensk (Russia) 319, 320
 Kroraina, kingdom of
 arivaga 563–565
 location 556
 movement problems 561–563, 562
 Silk Roads/trade 556–558, 565
 Tarim Basin trade 558–561, 559, 560
 Kucha *see* Kuci
 Kuchuk-tepa (Uzbekistan) 146
 Kuci (Kucha) (China) 562
 Kuduk (Tajikistan) 86, 156
 Kuertix farm (Mongolia), statue-menhir 535
 Kugait Tepa (Uzbekistan), *tamgas* 387, 388, 388
 Kuik-Mardan (Kazakhstan) 505
 Kuiryktobe (Kazakhstan) 505, 513, 514
 Kultepa (Kul tepa) (Uzbekistan)
 plaque 517
 shahristan 273
 Kum (Iran) 340
 Kurganzol (Uzbekistan) 238, 241
 Kurgon tepa (Uzbekistan), *shahristan* 273
 Kuruk Tepa (Kyrgyzstan) 480
 Kushan kingdom
 border 239, 245, 246–252, 248–250, 251, 257
 cultural interaction 171, 206
 iconography 314
 pottery 295, 300
 seals 196, 197, 198–199, 201
 tamgas 386
 trade 556
 wall paintings 226–232
 Kuyuk-Kala (Kazakhstan) 507
 Kuyumazar (Uzbekistan) 179
 Kyôngju (Korea) 220
 Kyreschata (Tajikistan) 257
 Kyzyl-kum (Uzbekistan) 219, 220
 Kyzylkyr (Uzbekistan) 281, 282, 286, 295, 296
 Kyzyltepa (Uzbekistan) 179
 Languedoc (France), statue-menhirs 538, 538
 Lapas (Uzbekistan) 147
 Laroque (France), dolmen 17 533, 537
 Lebedevsky (Russia) 187
 Leceia (Portugal), vessel 542
 Lisakovsk (Kazakhstan), isotope analyses 158, 159
 Lop Nur Lake 557, 561
 Loughcrew cairn (Ireland) 541
 Lukovka (Russia), silver plate 317, 317
 Lunigiana (Italy), statue-menhirs 538, 538
 Lut Desert (Iran), isotope analyses 158, 158, 160
 Lyavandak (Uzbekistan) 185
 L.A., L.B., L.E., L.F., L.K., L.L., forts and sites 557, 561–563
 Mahanuava 557n14
 Majiayuan (China) 185
 Maracanda (Uzbekistan) 244, 245
 Margiana
 Alexander 240, 241
 desert cities 90–92, 91, 109
 female divinity 300
 sceptres/staffs 16, 18–21, 22, 24, 27, 28, 29, 30
 seals 37, 38, 41, 43, 44, 45, 46, 47
 stone handbags 53, 60, 61, 62, 63, 70–71
 trade routes 168
 Mari (Syria) 159
 Mavarannakhr (Mavarannahr)
 coins 515
 name 505–506
 pottery 394, 395, 399, 405, 415
 Timor 409, 410, 414, 415
 Maydatepa (Uzbekistan) 138, 142, 144, 146
 mould 140
 Mehrgarh (Pakistan) 20, 21, 28
 Merv (Turkmenistan)
 Christianity 495
 citadel 413
 iconography 314–316, 316
 pottery 268, 314–316, 316
 trade routes 168, 206
 water system 109
 Mingachevir (Azerbaijan) 448
 Minusinsk Hollow (Russia)
 belt plaques 569, 572, 576, 577, 580, 582, 584
 Tagar culture 588
 Misrian plain (Turkmenistan) 144
 Mohendjo-daro (Pakistan) 79, 159
 Molalitepa (Uzbekistan) 146
 Molla-kurgan (Uzbekistan), ossuary 310, 312
 Mondjukli Depe (Turkmenistan) 59, 60, 62, 77
 Mont Bego (France) 545
 Montagnac (France), statue-menhirs 538, 538
 Montricoux (France), dolmen de Fouma-rène-Nord 537
 Mount Kailash (China) 487
 Mundigak (Afghanistan)
 pottery 124, 147
 stone handbags 53, 60, 61, 62, 72, 86
 Mundogi Poen (Tajikistan) 56n9, 75
 Murghab Region (S Turkmenistan)
 arrowheads 102
 desert cities 90–2, 90, 94, 108–109
 figurines 102

- pottery 104
 seals (*illus*) 35–47
 Mushiston (Tajikistan) 147
 Mys Strelka (Russia), silver plate 317, 317, 319
- Nad-i Ali (Afghanistan) 147
 Namazga Depe (Turkmenistan)
 chronology 119, 121
 cultural interaction 161
 pottery 139
 sceptres/staffs 20, 22, 23n27, 28
 stone handbags 53, 75, 84
- Nanzha (Mongolia), statue-menhir 535
 Naqš-e Rostam (Iran), rock relief 310, 310
 Nigār (Afghanistan) 201
 Nikolskoe (Russia) 181
 Nippur (Iraq) 82
 Nishapur (Iran) 219
 Niya (Çaḍota) (China)
 beads 559
 documents 561, 564
 excavations 559–561, 559, 560
 N.24 (site) 559, 559–561
 trade 562
 weapons 179
- Niyazbash (Uzbekistan) 387
 Noin-Ula (Mongolia) 181, 183, 184, 207
 Noviy (Russia) 185
 Novopokrovskoe-2 (Kyrgyzstan), hearth pedestals 476–477, 478, 481
- Obavija 262, 263, 274
 Ojakly (Turkmenistan) 104, 106, 108, 136
 Old Guzia 506
 Ordos (China) 185, 573, 577, 597
 Ordu *see* Ak-Beshim
 Orlat (Uzbekistan)
 plaque 299n33
 weapons 179, 184, 185, 186
- Osh (Kyrgyzstan)
 pottery 140–141, 141, 142
 stone handbag 86
- Osinsk (Russia) 575
 Osnabrück (Germany), Kupferhort von Osnabrück 539, 539
- Otrar (Kazakhstan) 499, 515
 Otrartobe (Kazakhstan) 505
 Oxus basin 244, 245–6, 251, 252, 255; *see also* Tillâ-Tepe
- Oxus civilisation
 BMAC 90
 pottery/cultural interaction 104, 136, 137–138, 138, 147, 148
 stone handbags 54, 61–62, 63
 temple *see* Takht-i Sangin
- Oxus River *see* Amu Darya
- Paikend (Uzbekistan)
 excavations
 discussion 186–187
 finds analogies and chronology 178–186, 180, 182, 184
 location and history 168–170, 168, 169, 170, 277
 modern excavations and finds 170–178, 171, 172–175, 177–178
 hearth pedestals 480, 481
 houses 370
 pottery
 Bactrian influences 268, 270, 271, 272, 273
 reflections on 279, 281, 282
 pre-Islamic 295
 revival 291
 stones from potter's wheel 335
 urban plan 274
- Palmyra (Syria) 82
 Panjikent (Tajikistan)
 arrowheads 337
 bricks 253n39
 buckles 333
 decline and revival 291, 344, 345–346, 347
 figurines 331, 333
 hearth pedestals 480, 481
 modular houses 346, 352–353, 352
 architecture 357–360, 358, 359
 division of rooms into households 366–370, 371
 excavations 353–357, 354, 355
 irregularities 370–373
 stratigraphy, coins and dating 360–366, 365, 366, 367–369
 palace 340
 sealing 201
 temple 354
 urban plan 274
 wall paintings
 compared 338
 hand gestures (*illus*) 306–309, 312–313, 319
 wood 330
- Parkhai II (Turkmenistan) 122, 123
 Parthia 187
 Passanant (Spain), cist 539, 540
 Pazyryk (Russia) 185, 207, 211, 215
 Pedra Coberta passage grave (Spain) 541
 Persepolis (Iran), silver vessel 24, 27, 28, 28
 La Perte du-Cros (France), vessel 543
 Petit-Chasseur (Switzerland)
 plaque 546
 statue-menhir 539
- Peyrecor dolmen (France) 537
 Pierre-aux-Fées (France) 544
 Pirak (Pakistan) 147
 Pokrovka (Russia) 210
 Poligon (Mongolia) 534
 Porogi (Russia) 183, 206, 218, 219
 Portalban (Switzerland), vessels 542, 543
 Portugal, plaques 546, 546

- Pütürge Mountains (Turkey) 160
- Qahqaha (Tajikistan), houses 370, 371, 372, 373
- Qal'e Rustam (Iran) 61, 75, 77
- Qarshovul Tapa (Uzbekistan), *tamgas* 378–379, 378
 compared 384–388, 388
 described (*illus*) 379–383
 interpreting 388–389
- Qie'muerqieke *see* Kermuqi
- Quetta (Pakistan)
 column 23n29
 stone handbags 62, 72
 stone staffs 19, 20, 21, 28
- Ramitan (Uzbekistan) 277, 278, 285
- Razdol'naya (Russia) 183
- Razliv III (Russia) 580
- Rhône basin (France) 540, 541, 542
- Romish (Uzbekistan) 279, 281, 282
- Romitan (Uzbekistan) 268
- Roshtqal'a (Tajikistan) 75
- Rubas (Azerbaijan) 456
- Saca (China) 561
- Šagym (Kyrgystan) 24n35
- Šahdād *see* Shahdad
- Saint-Antonin-Noble-Val (France), dolmen du Pech 537
- Saint-Blaise (Switzerland), vessel 543
- Saint-Eugène dolmen (France) 533, 537
- Salhityn (Mongolia) 575, 582
- Samangan Valley (Iran) 144
- Samarkand (Uzbekistan)
 Alexander/Greek power 243–244, 245, 257
 architecture 343, 345
 Kidarites 271, 272, 273
 landscape context 95
 pottery 343, 395, 398, 406
 ruling dynasty 187
tamga 364, 365
 trade routes 168, 235, 239, 241, 245, 255, 291, 486
 urban planning under Timor 408–411, 408
 cultural traditions 1370–1385 411–415
 cultural traditions 1386–1405 415–417
see also Afrasiab; Kafir-kala
- Samute (Mongolia), statue-menhir 535
- San Sebastian de Garabandal (Spain) 540
- Sangir-tepe (Uzbekistan) 146, 252n39
- Sanjar-Shah (Tajikistan)
 arrowhead 336, 337
 buckle 333, 333
 excavations
 Area V 329–333, 329, 330, 331
 Area VI 334–337, 334, 335, 336
 Areas VII–VIII (palace) 337–343, 337, 338, 339, 340, 343
 chronology 343–345, 344, 347
 location 7, 328, 329
 nature of settlement 346–347
 figurine 331–333, 333
 glass vessels 342, 342, 343
 houses 370
 kilns 335–337, 336, 346
 mirror 330, 332
 pin 198, 330–331, 332
 potter's wheel turning mechanism 335, 336
 pottery 329, 330, 340–343, 341, 346
 Round Tower 329, 343
 wall paintings 329, 338–340, 339, 343
- Saône basin (France) 542
- Sapalli/Sapallitepa (Uzbekistan) 40–41, 99, 159, 160
- Sar-i Pul (Afghanistan) 206
- Sarâssiâb (Afghanistan) 440
- Sarây-tepe (Uzbekistan), statuette 314, 315
- Sarazm (Tajikistan)
 cultural interaction 136
 ingot 53
 pottery 124
 stone handbags 60, 62, 74, 76, 85, 86, 87
- Sari Kupruk (Tajikistan) 69
- Saridzhar (Tajikistan) 137, 156, 158, 159
- Sarkel (Russia) 448
- Sary-Bulun (Kyrgyzstan) 144
- Sary-tepe (Uzbekistan), ossuary 319, 319, 320
- Sauran (Kazakhstan) 505
- Saymaly-Tash (Kyrgyzstan), petroglyphs 141, 141, 142
- Sejos (Spain), cromlech 539, 540
- Semirechye (Zhetysu) (Kazakhstan)
 Oghuz 505, 506
 stone handbags 63, 72, 77, 83, 85
 tethering stones 53
- Šerabad (Uzbekistan), pottery 268, 269, 273
- Serakhs oasis (Turkmenistan) 146
- Setalak (Uzbekistan) 268, 281, 282, 286
- Shabran (Azerbaijan)
 Jewish presence 448
 Medieval settlement 459–462, 459
 metal/glass working 462
 pottery 460–462, 460, 461
- Shah Tepe (Iran) 123
- Shahdad (Šahdād) (Iran) 16n5, 19, 24, 28, 63, 159, 160
 staff 24
- Shahi Tump (Pakistan) 56, 61, 80
- Shahr-i Gholghola (Shahr-i Bamiyan) (Afghanistan)
 archaeological background 424–425
 dating and interpretation 439–440
 history 423–424
 location 422, 423
 survey 2017–2018 (*illus*) 425–439
- Shahr-i Sokhta (Iran) 160, 161
 beads 159
 isotope analyses 160
 rosette motif 159

- seals 39, 159
 stone handbags 61, 63
 Shahr-i Sabz (Uzbekistan) 411, 415
 Shahrīstan (Afghanistan) 370
 Shamkur (Azerbaijan)
 pottery 448–449, 449
 restoration 447
 Shanpula (Sampul) (China) 556
 Shanshan, kingdom of 557
 Shar sum (Mongolia), vessel 534, 542
 Shaushukum Tobe (Kazakhstan), *tamgas* 384–
 385, 387, 388, 388, 389
 Sheberghan oasis (Afghanistan) 206
 Shenmuyuan Forest (China) 486
 Shilikty (Kazakhstan) 217n28
 Shiraz (Iran) 415, 416
 Shirvan (Azerbaijan)
 isotope analyses 158
 trade 455, 456, 459, 460, 462
 Shombuuziin-belchir (Mongolia) 183
 Shoqan-Armodlou Valley (Iran) 145
 Shuralisay (Uzbekistan) 381n8
 Shurob-Kurgan (Uzbekistan) 386
 Shurob-say gorge (Uzbekistan) 237, 237, 238, 257
 Sibirka (Russia) 584
 Sidak (Kazakhstan) 388, 389, 390, 505, 517
 Sidorovka (Russia) 220n40, 386, 576
 Siev (Tajikistan) 63n19
 Šimaški 22–23, 30
 Sippligen (Germany), wall painting 544, 545
 Sirkap-Taxila (Pakistan) 219
 Site 250 (Uzbekistan) 277, 278, 279
 Soch (Uzbekistan) 83
 Sogdiana
 border 234, 240, 243, 245, 257
 capital 257
 cultural interaction/influences 290–292
 Bactrian 262–263, 271–272, 273, 274
 nomadic 168–187
 Sine Sepulchro cultural community 139,
 142, 148
 excavations of MAFOuz (*illus*) 238–255
 figurines 296, 300
 hand gestures in Sogdian iconography (*il-
 lus*) 306–321
 hearth pedestals (*illus*) 474–481
 modular houses 352–373
 pottery (*illus*) 389, 394–405
 school of painting 300
 sealings 194–201
 trade 561, 565
 see also Kafir-kala; Panjikent; Sanjar-Shah; Uch
 Kulakh
 Sohr Damb (Pakistan) 56n10, 61, 78–79
 Sokuluk (Kyrgyzstan) 478
 Spaga (Kazakhstan) 507
 Spain 540, 541, 542, 546
 Sudzha (Russia) 183
 Sulayman-Too (Kyrgyzstan), petroglyphs 141, 141
 Sultaniya (Iran) 415, 416
 Sumbar I (Turkmenistan) 122
 Sumbar valley (Turkmenistan) 121, 122, 123, 144
 Sunuk tepa (Uzbekistan), *shahrīstan* 273
 Surkh Kotal (Afghanistan) 422n1
 Surkhan Darya Valley (Uzbekistan)
 Alexander 241
 architecture 246
 burials 156
 Chust culture 137, 138, 140, 141, 142
 isotope analyses 160
 Susa (Iran)
 beads 159
 half column 26
 seals 17, 17, 18, 30
 stele 18, 18, 26
 stone handbag 81
 tablet 25
 turquoise 219
 Suyab *see* Ak-Beshim
 Switzerland 541, 542, 543, 547
 Syr Darya Valley
 as border 245, 257
 griffin images 181
 hearth pedestals 480, 481
 Oghuz 505, 506–507, 515, 519, 524–525
 trade 186
 Tabriz (Iran) 415
 Tabuyo del Monte (Spain) 540
 Tagisken (Russia) 596, 597
 Taip 1 (Turkmenistan) 41
 Tajikistan, isotopic studies 153–166
 Takhiltyn Khotgor (Mongolia) 215
 Takhirbai (Turkmenistan)
 irrigation systems 92, 93
 seals 37
 Takhmač-tepe (Uzbekistan), figurine 318, 319,
 320
 Takht-e Rostam (Afghanistan) 422n1
 Takht-i Sangin (Tajikistan), Oxus temple
 armlets 218
 bothroi 171
 excavations 186
 location 168
 nomad image 184
 phaleras 185
 statuette 197
 weapons 179, 180, 181, 182
 Taksai-1 (Kazakhstan)
 headdress 208–209, 209, 210, 217
 turquoise 217n29
 Talgar (Kazakhstan) 518
 Tall-i Barzu (Kyrgyzstan) 194, 480
 Taluqan (Afghanistan) 76
 Tandyryul (Tajikistan) 87
 pottery 137, 138
 Tāq-e Bostān (Iran) 316
 Taraz (Kazakhstan) 319, 320, 499

- Tarim Basin
arivaga 563–565
 movement problems 561–563, 562
 trade 486, 556, 558–561, 559, 560, 565
- Tashguzor (Tajikistan) 75
- Tashkent (Uzbekistan)
 Burguljuk culture 140, 142, 146
 hearth pedestals 481, 490
 Kaunchi culture 292
 Ming-Uruk complex 389n22
 pottery 379n6, 381n8, 395, 398, 403, 405, 405
tamgas 386, 387, 388, 388, 390
see also Chach
- Tashkurgan (China) 139, 252
- Taxila (Pakistan) 179
- Tell Asmar (Iraq) 159
- Tepe Almas (Afghanistan) 440
- Tepe Aq-Mazar (Iran), gutter spout 145
- Tepe Chalow (Iran) 61, 72, 86, 87, 158
- Tepe Damghani (Iran) 158
- Tepe Hissar (Iran)
 pottery 123, 124
 sceptres/staffs 19, 23n27, 24n36, 24, 28
 stone handbags 53, 60, 61, 62, 63, 69, 70, 71, 72, 77, 87
- Tepe Rivi (Iran) 144
- Tepe Sialk (Iran)
 isotope analyses 158, 158, 160, 161
 stone handbag 60
- Tepe Taleb Khan (Iran), isotope analyses 158, 160
- Tepe Yahya (Iran)
 isotope analyses 158, 160
 stone handbags 61, 62, 74, 84
- Tepe Yam (Iran) 144
- Tepsej VII (Russia) 582
- Ter Kala Dheri (Pakistan) 147
- Terezin (Russia), belt plaques 568, 569, 569, 584
 figural 583, 583
 rectangular (*illus*) 572–573, 573–578, 580, 582
- Termez (Uzbekistan) 226–232
- Thielle-Wavre (Switzerland), vessel 543
- Tian Shan (China) 142
- Tillâ-Bulak (Tajikistan)
 burials 206
 isotope analyses 158, 158, 160
- Tillâ-Tepe (Tillya Tepe/Tillya-tepe) (Afghanistan)
 contacts and networks 216–221, 252
 dagger scabbard 218–219, 218
 excavations 206–207, 206
 flower designs 213–216, 214
 folding crown 207–216, 208, 220–221
 weapons 179, 180, 181, 183
- Tillya Tepe/Tillya-tepe *see* Tillâ-Tepe
- Toganbay (China) 540
- Togolok 1 (Turkmenistan)
 animal bones 106–108, 107, 108
 excavations 2018 96–99, 96, 97, 99, 102
 hydrological system 92–3, 93, 108–109
 landscape context 94–96, 94, 95, 108–109
 material culture 99–102, 100–101
 plant remains 104–106, 105
 pottery 102–104, 103
 rise and decline 108–109
 seals (*illus*) 37–38, 39–40, 41, 42, 44–47
 staff 20
- Togolok 6 (Turkmenistan) 36
- Togolok 21 (Turkmenistan) 41
- Tok-Kala (Uzbekistan), houses 370, 371, 372, 373
- Tokharistan
 art culture 196, 226
 border 246, 251, 257
 figurines 296
 trade routes 168
- Topaz Gala Tepe (Iran) 146
- Tsaraam (Russia), nomad image 184, 184
- Tuekta (Russia), pendant 215, 215
- Tujabuguz (Uzbekistan), pit-houses 140
- Tulkhar (Tajikistan) 179, 181, 184, 185
- Tunnug I (Russia)
 location 588
 Scythian culture 590, 591, 592–595, 592, 593, 596–597
- Tureng Tepe (Iran) 123, 144, 161
- Tutub (Tell Khafajah) (Iraq) 45
- Tuva (Russia)
 belt plaques 568–573, 571, 584
 figural 583–584, 583
 rectangular (*illus*) 573–583
- Scythians
 clay construction 595–597
 culture and contacts 588–590, 597
 monumentality as novelty 594–595
 naming 590–591
 proximity as familiarity 591–594
see also Ala-Tey1, Arzhan, Terezin
- L'Ubac (France), dolmen 533, 537
- Ublaies (France), menhir 544
- Uch Kulakh (Uzbekistan)
 archaeological site 292–296, 293, 294
 castle 292–293, 294, 296–297, 297
 chronology and cultural interaction 300–301
 eastern area 299–300, 300, 301
 figurines 295–296, 296, 300–301
 location and context 290–292, 290, 291, 294
 pottery 295, 295, 297, 300
 wall paintings 299–300, 300, 301, 301
 western area 298–299, 298
- Uch Tepe (Azerbaijan) 449
- Ujbat (Russia) 576, 584
- Ulug Depe (Turkmenistan)
 dating 146
 isotope analyses 158, 158, 160
 stone handbags 56n8, 73–74, 76, 85, 87
- Ulug-Khem Hollow (Russia)
 burials grounds 568, 584
 material culture 570–572, 572–573

- Upper Khabur (Syria), isotope analyses 158, 160
 Upper Tigris (Iraq) 160
 Ur (Iraq)
 isotope analyses 158, 160
 stone handbag 85
 Urbûn (Russia) 572, 582
 Usharal-*Ilibalyk* (Kazakhstan)
 cemetery excavations 489–492, 490–491
 discovery 484, 500
 gravestones 492–496, 493, 494
 history 487–489, 488
 imported goods 496–500, 497, 498, 499
 location and setting 484–487, 484, 485
 Usman Tapa (Uzbekistan) 387
 Ust-Labinskaia (Russia), crown 212, 213
 Ustyurt Plateau 220
 Uyuk Valley (Russia) 590, 591, 592, 593–595, 596–597
 Uzboy (Turkmenistan) 240
 Uzgend (Kyrgyzstan) 411
 Uzundara (Uzbekistan) 239, 239n14, 241, 243, 245, 246, 251

 Vakhsh culture, cultural interaction/pottery 137–138, 138, 147, 148, 156
 Valcamonica (Italy), carvings 539, 540
 Vale da Lama menhir (Portugal), plaque 546
 Varakhsha (Uzbekistan)
 figurines 296, 319
 open sites 292
 palace 340
 pottery 295
 trade routes 291
 Vardāna (Vardanzeh) (Uzbekistan) 262–263, 262
 building phases 263–266, 264, 265, 273
 citadel 395
 history 394
 plan 394
 pottery
 glazed (*illus*) 395–405
 pre-Islamic 265–272, 266, 267, 273
 re-foundation, political context 272–274
 Velvarký hrob (Czech Rep), burial goods 539, 539
 Verkhne-Saltovsky (Russia) 448
 Verkhnepogromnoe (Russia) 183

 Vinelz-Hafen (Switzerland), vessel 543

 Wupu (China) 596

 Xinjiang (China)
 Chermurchek cultural phenomomen (*illus*) 534, 536, 540, 543, 547
 cultural interaction 142–144, 143, 147, 148, 156
 Kroraina, kingdom of 556–565
 trade routes 484, 484, 496, 499, 500
 Xintala (China), pottery 142, 143
 Xiongnu (China) 179, 181, 183, 184–185

 Yagshiin khuduu 1 (Mongolia) 536n1, 537, 540
 Yagshiin khuduu 3 (Mongolia) 533, 537, 543
 Yakh-Su Valley (Tajikistan) 155–156
 Yanbulake (China) 142, 596
 Yanghai (China) 596
 Yangikent (Dzhankent; Jankent) (Kazakhstan)
 hearth pedestals 480, 481
 Oghuz 505, 506–507, 507–508, 524
 Yangirabat (Uzbekistan) 244
 Yassy-depe (Turkmenistan) 119
 Yaz-depe (Turkmenistan) 104, 146, 147n6
 Yumalak-tepe (Uzbekistan) 317
 Yverdon (Switzerland), vessel 543

 Zaamin (Uzbekistan) 319
 Zadiyan (Uzbekistan) 251
 Zanjir Saray (Uzbekistan) 411, 412, 413
 Zartepa (Uzbekistan) 268, 271
 Zeravshan Valley
 early Islamic period 327–347
 Oghuz 505
 stone handbags 60n16
 tin deposits 147
 weapons 179
 see also Sanjar-Shah
 Zhetyasar (Kazakhstan) 505
 Zhetyasu *see* Semirechye
 Zhuan Tobe (Kazakhstan), *tamgas* 387–388, 388, 390, 505
 Zhutovo (Russia) 183
 Zintala (China) 596
 Zubovsky (Russia) 181

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