Debate



[Re]Integrating a dispersed agenda: advancing archaeological research in Central Eurasia

Lynne M. Rouse^{1,2}, Paula N. Doumani Dupuy^{3,*}, Aida Abdykanova⁴, Elizabeth Baker Brite⁵, Taylor R. Hermes⁶, Fiona Kidd⁷, Elise Luneau², Bryan K. Miller^{8,9}, Miljana Radivojević¹⁰, Svetlana Shnaider^{11,12}, Kubatbek Tabaldyev¹³, Alicia Ventresca-Miller^{9,12,14}, Sobhua Wright¹⁵

Amid resurgent geopolitical fissures and in the aftermath of the Covid-19 pandemic, there is a growing awareness in the sector of the need for, and concern about, national and international collaboration in archaeological projects. This article reflects on present-day challenges for international collaboration in central Eurasian archaeology and furthers a much-needed discussion about (re)integrating local narratives with inter-regional trends in future research. Responsible and practical proposals for bridging collaborator differences in institutional or publishing obligations, language capacities and access to resources are discussed.

Keywords: Central Eurasia, post-Soviet archaeology, language, archaeological narrative, collaboration, scholarly dialogue

Introduction

In September 2022, a group of multi-generational scholars convened at the 28th Annual European Association of Archaeologists (EAA) Meeting in Budapest, Hungary, to contribute to an open-dialogue session titled [Re] Integrating a Dispersed Agenda: Advancing

Received: 16 May 2023; Revised: 18 December 2023; Accepted: 12 March 2024

© The Author(s), 2024. Published by Cambridge University Press on behalf of Antiquity Publications Ltd. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike licence (https://creativecommons.org/licenses/by-nc-sa/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the same Creative Commons licence is included and the original work is properly cited. The written permission of Cambridge University Press must be obtained for commercial re-use.

¹ Department of Anthropology, Washington University in St Louis, USA

² Eurasia Department, German Archaeological Institute, Berlin, Germany

³ Sociology and Anthropology Department, Nazarbayev University, Astana, Kazakhstan

⁴ Anthropology Program, American University of Central Asia, Bishkek, Kyrgyzstan

⁵ John Martinson Honors College, Purdue University, West Lafayette, USA

⁶ Department of Archaeogenetics, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

⁷ Department of Art and Art History, New York University Abu Dhabi, UAE

⁸ Department of History of Art, University of Michigan, Ann Arbor, USA

⁹ Museum of Anthropological Archaeology, University of Michigan, Ann Arbor, USA

¹⁰ Institute of Archaeology, University College London, UK

¹¹ Institute of Archaeology and Ethnography of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia

¹² Department of Archaeology, Max Planck Institute for Geoanthropology, Jena, Germany

¹³ Department of Archaeology, Kyrgyz-Turkish Manas University, Bishkek, Kyrgyzstan

¹⁴ Department of Anthropology, University of Michigan, Ann Arbor, USA

¹⁵ Department of Archaeology, University of Aberdeen, UK

^{*} Author for correspondence ■ paula.dupuy@nu.edu.kz

Archaeological Research in Central Eurasia. This session was motivated by lapses in access to fieldwork and funding related to the Covid-19 pandemic and resulting lost opportunities for professional networking and stagnation in overall research development. Equally prominent was the recognition that such setbacks arrived during a pivotal time for archaeology in central Eurasia (Figure 1), as new balances are being calibrated between the deeply rooted archaeological methodologies and epistemologies of the region and the growing application of highly specialised laboratory analyses, often driven by researchers not familiar with this part of the world. The primary objectives of the session were to reunite regional specialists and to identify common goals around which future research could be aligned. The discussion presented here is based on the live EAA session and ongoing conversations regarding the numerous geopolitical crises that have since impacted archaeological work. We recognise that there are still many other voices that can contribute to the themes presented here. Our article follows in the wake of several scholars and trends that, especially since the 1990s, have advocated for more ethical, inclusive and collaborative archaeological research in central Eurasia (e.g. Gubaev et al. 1998; Chang & Grigoriev 1999; Hanks 2010; Honeychurch 2010; Frachetti 2011).

Aiming to incorporate as diverse a representation of central Eurasian archaeology as possible, an open invitation to the 2022 EAA session was extended to scholars studying prehistoric to early historic periods within the region and who had expertise in a particular research methodology, geographical zone or intellectual approach. Ultimately, scholars with

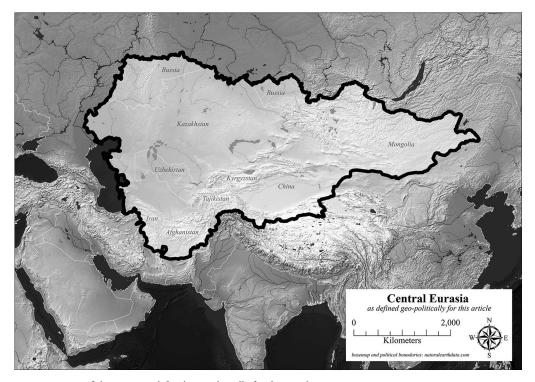


Figure 1. Map of the region as defined geo-politically for this article.

© The Author(s), 2024. Published by Cambridge University Press on behalf of Antiquity Publications Ltd

professional representation in/from Germany, Kazakhstan, Kyrgyzstan, Mongolia, Russia, Turkmenistan, the United Arab Emirates, the United Kingdom, the United States of America and Uzbekistan participated (Rouse & Doumani Dupuy 2022). Many of the local central Eurasian scholars were unable to join in person, highlighting some of the impediments to engaging in widely cast nets of collaboration that we discuss in this article.

During the session, a number of problems and challenges within our archaeological community were raised. We outline these thematically below and propose ways to address them based on our collective expertise and experience in the region. Our aim is to encourage important conversations for those already steeped in central Eurasian archaeology, as well as for the next generation of scholars hoping to navigate a career in an informed, inclusive and equitable way.

Thinking through archaeology: historiography, theory, knowledge and approach

While rooted in the physical remains of the past, archaeology happens in the present and responds to evolving disciplinary theory. Central Eurasian archaeology today is distinct because it draws from two theoretical traditions that developed separately throughout the twentieth century (Kohl 2007; Klejn 2012). It incorporates narratives born in the USSR, when iterations of Marxist historical materialism dominated the development of archaeological paradigms, and Anglo-American and European archaeology, which navigated processualist and post-processualist approaches influenced by broader trends in Western scientific and humanistic traditions. Theoretical trends that portend significant changes for central Eurasian archaeology include posthumanism, post-colonialism and post-Sovietism, which all invite new avenues for research (Koplatadze 2019; Franklin 2023). However, some of these terms have lingering political connotations that can create tension between colleagues of different nationalities and backgrounds. Within our collaborations we can collectively build the future course of the discipline through connecting archaeological theory and practice across broad international networks of diverse histories.

Contemporary archaeology in central Eurasia continues to develop methodologically and theoretically while simultaneously wrestling with practical and epistemological issues left by the dissolution of the USSR (Dolukhanov 2010; Gorshenina *et al.* 2019; see also discussion arising from the "Margulan Readings" Annual International Scientific and Practical Conference, 12–13 April 2022, Almaty, Kazakhstan and IICAS Vol. 29 "Masters" and "Natives" Book Discussion Forum 2020). Archaeological institutions in the former Soviet sphere face challenges including securing funding for research projects and professional training support, inconsistent legal claims between institutions, a breakdown in systems of cultural heritage protection and avenues for research dissemination. Alongside the chronically underfunded local institutions, the disintegration of the Soviet Union and its structures meant that fewer professional archaeologists were trained during the 1990s and early 2000s. The limited availability of Soviet publications in academic libraries outside the former USSR has rendered several generations of scholarship harder to access, resulting in the ideas and achievements of earlier generations being overlooked on the worldwide stage.

© The Author(s), 2024. Published by Cambridge University Press on behalf of Antiquity Publications Ltd

Related to this, language continues to guide and impact the literature we access, the ideas we are exposed to, and the conversations we have and with whom. The political fractures at the end of the twentieth century, compounded with the more recent emergence of English as the *lingua franca* for academia, have contributed to a loss of general knowledge of Russian-language archaeological literature for many outside of central Eurasia. Language barriers are complicated by the post-Soviet resurgence of national languages for scientific and administrative purposes (Gorshenina *et al.* 2019). Failure to engage with this language complexity promotes a silencing of scientific works and relegates central Eurasian scholars to a stratum of archaeological research that is itself approached as partial and outdated.

To access the robust scholarly community of central Eurasia, Russian and English remain foundational linguistic requirements. As distance from the Soviet Union era grows, national languages including Uzbek, Tajik, Kyrgyz, Turkmen and Kazakh are increasingly used in archaeological practice. For scholars and students looking to work in the region, a basic knowledge of such languages is essential rather than desirable. Certainly, this linguistic complexity is somewhat alleviated by online translation programs, but these do remove a level of engagement. Digitisation projects in local institutions are a critical step toward alleviating problems of literature accessibility, but they are unlikely to replace on-the-ground library and archival research in the near future. International joint projects require scholars to work across multiple languages and bodies of literature. Such intensity of collaboration lays a foundation to engage with diverse audiences and fulfil responsibilities to scholarly communities beyond the home base.

Within our research and publications, the terms we use carry implications that deserve consideration (Gorshenina *et al.* 2019; Grigoriev 2021). Terms have an important impact on how we structure our thinking, which can inadvertently overwrite other perspectives. Some terms provide chronological and historical shorthands, such as 'Andronovo' or 'Achaemenid', that are broadly intelligible for our language peers, but carry sub-texts that may be misconstrued in translation. The continued use of general terminology similarly divides historical and archaeological perspectives on the past. Moreover, blanket terms such as nomads, civilization and Silk Roads diminish the spectrum of varied lifestyles in central Eurasia's past and present (Frachetti 2008; Chang 2018; Rouse *et al.* 2022a; Franklin 2023). Within the intellectual circles of central Eurasian archaeology, a key place to initiate change is in the lecture hall with the aim to unpack standard narratives and build new epistemologies situated in diverse regional discourses.

Practising archaeology: fieldwork, methods, analyses and data integration

There are many directions in which international researchers can collaborate to promote a more integrated outlook for central Eurasian archaeology. The long-standing methodological traditions in central Eurasian archaeology have focused primarily on sub-regional survey and excavations targeting individual site histories. Building on the long history of research in Eurasia, these valuable regional and/or long-term syntheses can be effectively combined with increasingly dense and varied data to create resilient and detailed local narratives that also

illuminate broader inter-regional processes (Wright et al. 2019; Ventresca-Miller et al. 2020; Doumani Dupuy et al. 2021; Hermes et al. 2021; Osipova et al. 2021; Rouse et al. 2022b).

The linkage of local and macro-regional narratives is an important goal of (re)integrating central Eurasian archaeology. We are now able to energise new and existing research and to use these detailed composite data to evaluate macro-scale narratives and reshape them with additional nuance. Increasing collaboration and communication supports flexibility in research design that encompasses contemporary and historical objectives. The primacy of macro-narratives is giving way to a new responsive agenda where large-scale narratives (e.g. Chernykh 1992) are being re-evaluated against emerging local histories (Calgaro et al. 2023; Voyakin & Usmanova 2023; also compare Anthony 2007; Anthony et al. 2016). We are now at a point where our collective archaeology can benefit from comprehensive data integration. As more types of organic and inorganic datasets become part of standard archaeological practice, there is increasing scope for combined analyses that address, explore and strengthen local and grand narratives (Kuzmina 1985; cf. Narasimhan et al. 2019; see also Amartuvshin & Honeychurch 2010; cf. Jeong et al. 2018). Large, combined sampling efforts in bioarchaeological and biomolecular research play critical roles in revitalising old questions about human/animal/plant mobility, ethnogenesis and historical trajectories born in Soviet scholarship (Svyatko et al. 2015; Shishlina et al. 2020; Motuzaite Matuzeviciute et al. 2022; Ventresca-Miller et al. 2020).

These new lab-based insights allow us to not only revisit long-standing archaeological narratives, but also to reconfigure our methods and practices and how these inform future archaeology. Revisiting central Eurasian material cultural typologies, many of which have roots in the twentieth century (Klejn 1982), considerably expands our purview on the relationships between cultural, socioeconomic and ecological conditions. Many existing typologies were initially built on data with low spatial and temporal resolution to serve continental and imperial macro-narratives (e.g. Kuzmina 1985). We are at a moment when those typologies can be—and are being—critically re-examined at local scales, both for how they are constructed by archaeologists and what they represent about past societies (e.g. Shnaider *et al.* 2020; Luneau *et al.* 2022). Dismantling standing typologies through collaborative research efforts centres foundational research in the regions where it takes place and grounds the ongoing dialogue between diverse central Eurasian scholars in high-resolution data.

Building archaeology for the future: collaboration, capacity, inclusivity and scholarly responsibility

The steady increase in the number of international collaborative projects in central Eurasia over the past 30 years reflects the growing recognition of the region's importance worldwide. True collaboration in such projects addresses the obligations of all parties to support one another and the next generation of scholars and their institutions. Ideally, these collaborations foster intellectual partnerships that acknowledge historical differences in research environments and the teaching and learning traditions of all project members. This inclusivity encompasses taking the time to practise open research, reciprocal involvement in research design and funding, mutual access to sites and data, sharing the logistical and administrative load, finding compromise in goals and agendas and weighing various interpretations.

Scholars can moreover seize or even create additional opportunities for joint seminars, local workshops and student training through field schools or in laboratories. These steps toward capacity building as well as mutual adherence to ethical obligations promote successful and equitable collaborations.

The expanding community of central Eurasian archaeologists brings with it greater institutional, academic and geographic representation, but also the challenges of including a range of voices and of meeting the expectations of distinct academic systems. Beyond research design and analysis, collaborators can assist one another in disseminating the results of their joint research in multiple languages and venues—everything from regional journals and conference proceedings to international scientific journals. Publication in the latter is increasingly used as a measurement for academic 'productivity' within the American academic system, as well as in Kazakhstan, Kyrgyzstan and Uzbekistan, yet publishing in international scientific journals is sometimes detrimental to publishing efforts at the local level. Scholars carry the responsibility to publish in venues accessible to the heritage community invested in that place and/or following a particular scientific press tradition (e.g. Odsuren et al. 2020; Doumani Dupuy et al. 2023). Without attention to these responsibilities, the demands on both sides to produce certain 'recognised' forms of academic output in their home country can perpetuate divisions among researchers.

Venues of collaboration and (re)integrating central Eurasian archaeology extend beyond fieldwork and joint publication to include forward-looking funding requests. Actively facilitating the growth of researchers and knowledge transfer, such as through PhD or scientific exchange programs, represent a crucial part of efforts to form lasting connections and to help correct scholarly imbalances. Storage for project materials, study rooms and library access, joint conferences and the costs of contributing to online-accessible databases are features that can also be built into funding applications. In designing collaborative research, access to open-source software, particularly data-sharing infrastructure, that is adapted to the expertise and network hardware of all participants is also a vital consideration.

One practical consideration is that future conferences should continue to be organised in hybrid formats to involve as many voices as possible. Although hybrid meetings present their own challenges (e.g. time differences, internet connections) for central Eurasian colleagues they can alleviate issues of travel costs and visa restrictions. We recommend that, as a minimum standard, regularly organised meetings should have an online participation option and a concomitant reduction in conference fees. Ideally, smaller workshops in central Eurasia should be advertised and open to hybrid participation as well (e.g. Heritage Alliance of the New Silk Roads Conference 3–4 November 2023, Nazarbayev University, Astana, Kazakhstan; Steppe Sisters and Humboldtians Early Career Conference, 5–7 September 2022, Tashkent, Uzbekistan; Mongolian Archaeology: Current Research and Innovative Approaches, 25–26 November 2022, National University of Mongolia, Ulaanbaatar). Our experience at the EAA brought these points into sharp focus, where technology, institutional affiliations and ability to travel created imbalances of representation. As is the case with other ideas presented here, open dialogue among central Eurasian archaeologists is key to re-integrating dispersed research agendas beyond any particular project or collaboration.

Conclusion

Challenges of central Eurasian archaeology have transformed since the 1990s. We recognise three overarching themes of (re)integrating contemporary central Eurasian archaeology that will resonate with other scholars. The first concerns how disparate theoretical approaches are integrated through attention paid to our intellectual legacies and language use, as well as their influence on archaeological research agendas and the terms used. Second, and related, we encourage collaborative consideration of data collection and dissemination methods. Thinking through the theoretical and methodological underpinnings of data collection and categorisation should be part of the research design. Finally, we emphasise the importance of scholarly networking in the future of central Eurasian archaeology: hybrid and local conferences, training and workshops for colleagues of all ages and nationalities, open data sharing and co-publishing in multiple languages and academic venues.

Our call for more inclusive and open collaboration in central Eurasian archaeology certainly echoes approaches undertaken by colleagues in the 1990s (e.g. Gubaev et al. 1998) and even earlier (e.g. Adams et al. 1980; Bernard et al. 1990). Given resurgent geopolitical fissures, a rise in linguistic and academic nationalism and the generational turnover of scholarship since then, now is a crucial time to reiterate the importance of (re)integrating archaeological practice across Eurasia. Conflicts characterised by open violence continue in Ukraine, while institutional violence and repression carry on unabated in the Caucasus, Xinjiang, Kashmir, Iran and Afghanistan. Sadly, this is a non-exhaustive list and all such conflicts impact the study and safeguarding of heritage. The kinds of scholarly collaborations advocated for here are not a panacea for the simmering tensions of who controls Eurasia's past, present and future, but they counter such conflicts through explicit efforts to build open discussion, to reach common insights and, where possible, to offer direct support to fellow colleagues. Ours are not the only voices or perspectives, of course, and our aim here is to steer long-standing but ongoing conversations about the progress of collaborative, international, equitable research in central Eurasian archaeology.

Funding statement

Doumani Dupuy (conference travel): Nazarbayev University's Faculty Development Competitive Research Grants Program (FDCRG # 021220FD3751). Wright (conference travel): Arts and Humanities Research Council (AH/L011727/1).

References

Adams, R.McC., P.L. Kohl & C.C. Lamberg-Karlovsky. 1980.
Soviet-American Archaeological Symposia on the Near East and Central Asia. Current Anthropology 21: 266. https://doi.org/10.1086/202443

Amartuvshin, C. & W. Honeychurch. 2010.
Dündgovi Aimagt khiisen arkhyoologiin südalgaa: baga gazryn chuluu (Studia Archaeologica Insituti Archaeologici Academiae Scientarum

Mongolicae 27). Ulaanbaatar: Byembi San (in Mongolian).

Anthony, D.W. 2007. The horse, the wheel, and language: how Bronze-Age riders from the Eurasian Steppes shaped the modern world. Princeton: Princeton University Press.

Anthony, D.W., P.F. Kuznetsov, A.A. Khokhlov & D.R. Brown (ed.) 2016. A Bronze Age landscape in the Russian Steppes: the Samara Valley

© The Author(s), 2024. Published by Cambridge University Press on behalf of Antiquity Publications Ltd

- *Project.* Los Angeles: Cotsen Institute of Archaeology.
- Bernard, P., F. Grenet & M. Isamiddinov. 1990. Fouilles de la mission franco-soviétique à l'ancienne Samarkand (Afrasiab): première campagne, 1989. Comptes Rendus des Séances de l'Académie des Inscriptions et Belles-Lettres (CRAI) 134(2): 356–80.
- Calgaro, I., M. Radivojević, U. Veronesi & A.S. Yermolayeva. 2023. Copper smelting technology at 2nd millennium BC Taldysai (Kazakhstan) and its place in the wider Eurasian metalmaking framework. *Journal of Archaeological Science: Reports* 50.

https://doi.org/10.1016/j.jasrep.2023.104043

- CHANG, C. 2018. Rethinking prehistoric Central Asia: shepherds, farmers, and nomads. London: Routledge.
- CHANG, C. & F.P. GRIGORIEV. 1999. A preliminary report of the 1994–1996 field seasons at Tuzusai, an Iron Age site (ca. 400 B.C.–100 A.D.) in southeastern Kazakhstan. *Eurasia Antiqua* 5: 391–410.
- CHERNYKH, E.N. 1992. Ancient metallurgy in the USSR: the early metal age. Cambridge: Cambridge University Press.
- DOLUKHANOV, P. 2010. Archaeology in colonial and postcolonial U.S.S.R., in J. Lydon & U.Z. Rizvi (ed.) *Handbook of postcolonial archaeology*: 113–21. Walnut Creek (CA): Left Coast.
- DOUMANI DUPUY, P.N., E. LUNEAU & L.M. ROUSE. 2021. Pluralising power: ceramics and social differentiation in Bronze Age central Eurasia. World Archaeology 53: 779–808. https://doi.org/10.1080/00438243.2021. 1993987
- Doumani Dupuy, P.N., Z.Kh. Tashmanbetova, G.K. Kiyasbek, V.K. Merts, R. Coil, A.S. Zhuniskhanov & Z. Samashev. 2023. Samoye drevneye zakhoroneniye cheloveka v Kazakhstane: po neoliticheskim nakhodkam poseleniya Koken. *Arkheologiya Kazakhstana* 21 (3): 164–86 (in Russian).
- Frachetti, M.D. 2008. *Pastoralist landscapes and social interaction in Bronze Age Eurasia*. Berkeley: University of California Press.
- 2011. Migration concepts in Central Eurasian archaeology. Annual Review of Anthropology 40: 195–212.
- Franklin, K. 2023. Archaeology of the Silk Road: challenges of scale and storytelling. *Journal of*

- Archaeological Research. https://doi.org/10.1007/s10814-023-09188-w
- GORSHENINA, S., P. BORNET, M.E. FUCHS & C. RAPIN (ed.) 2019. "Masters" and "Natives" digging the others' past. Berlin: De Gruyter.
- Grigoriev, S. 2021. Andronovo problem: studies of cultural genesis in the Eurasian Bronze Age. *Open Archaeology* 7: 3–36.
 - https://doi.org/10.1515/opar-2020-0123
- Gubaev, A., G. Koshelenko & M. Tosi. (ed.) 1998. The archaeological map of the Murghab Delta, preliminary reports 1990–95, reports and memoirs. Rome: Istituto Italiano per L'Africa e L'Oriente, Centro Scavi e Richerche Archeologiche.
- HANKS, B.K. 2010. Archaeology of the Eurasian Steppes and Mongolia. *Annual Review of Anthropology* 39: 469–86. https://doi.org/10.1146/annurev.anthro. 012809.105110
- HERMES, T.R., P.N. DOUMANI DUPUY, E.R. HENRY, M. MEYER, A.N. MAR'YASHEV & M.D. FRACHETTI. 2021. The multi-period settlement Dali in southeastern Kazakhstan: Bronze Age institutional dynamics along the Inner Asian Mountain Corridor. *Asian Perspectives* 60: 345–81. https://doi.org/10.1353/asi.2021.0004
- HONEYCHURCH, W. 2010. Pastoral nomadic voices: a Mongolian archaeology for the future. *World Archaeology* 42: 405–17. https://doi.org/10.1080/00438243.2010. 497389
- JEONG, C. et al. 2018. Bronze Age population dynamics and the rise of dairy pastoralism on the eastern Eurasian steppe. Proceedings of the National Academy of Sciences USA 115: E11248–55.
 - https://doi.org/10.1073/pnas.1813608115
- KLEJN, L.S. 1982. Archaeological typology (British Archaeological Reports International Series 153).Translated by P. Dole. Oxford: British Archaeological Reports.
- 2012. Soviet archaeology: trends, schools, and history.
 Oxford: Oxford University Press.
- KOHL, P.L. 2007. *The making of Bronze Age Eurasia*. Cambridge: Cambridge University Press.
- KOPLATADZE, T. 2019. Theorising Russian postcolonial studies. *Postcolonial Studies* 22: 469–89.
 - https://doi.org/10.1080/13688790.2019. 1690762

- Kuzmina, Y. 1985. Classification and periodisation of Andronovo cultural community sites. Information Bulletin of the International Association for the Study of the Cultures of Central Asia 9: 23–46.
- Luneau, E., V. Martinez Ferraras, A. Abdykanova, K. Tabaldiev & G. Motuzaite Matuzeviciute. 2022. Assessing variability in the Andronovo ceramic production of northern Kyrgyzstan in the light of social complexity, economy and mobility. *Eurasia Antiqua* 24: 25–55.
- MOTUZAITE MATUZEVICIUTE, G., E. ANANYEVSKAYA, J. SAKALAUSKAITE, O. SOLTOBAEV & K. TABALDIEV. 2022. The integration of millet into the diet of Central Asian populations in the third millennium BC. *Antiquity* 96: 560–74. https://doi.org/10.15184/aqy.2022.23
- NARASIMHAN, V.M. *et al.* 2019. The formation of human populations in South and Central Asia. *Science* 365.
 - https://doi.org/10.1126/science.aat7487
- Odsuren, D., L. Janz & D. Bukhchuluun. 2020. Goviin büs nutgiin Nyeolityn üyeiin aj akhui, soyolyn asuudald. *Arkhyoologiin Sudlal* 39(1): 13–25 (in Mongolian).
- OSIPOVA, E., G. DANUKALOVA, G. BRANCALEONI, M.T. KRAJCARZ, A. ABDYKANOVA & S. SHNAIDER. 2021. Palaeoenvironmental conditions of the Palaeolithic–Neolithic transition in the Fergana Valley (Central Asia) new data inferred from fossil molluscs in Obishir-V rockshelter (Kyrgyzstan). Quaternary International 605–606: 287–99.
 - https://doi.org/10.1016/j.quaint.2020.11.009
- ROUSE, L.M. & P. DOUMANI DUPUY. 2022. Conference abstracts book for the 28th Annual Meeting of the European Association of Archaeologists at Budapest, Hungary.
- Rouse, L.M., K. Tabaldiev & G. Motuzaite Matuzeviciute. 2022a. Exploring landscape archaeology and UAV-based survey in

- the Kochkor Valley, Kyrgyzstan. *Journal of Field Archaeology* 47: 32–53. https://doi.org/10.1080/00934690.2021. 1945744
- ROUSE, L.M., P.N. DOUMANI DUPUY & E. BAKER BRITE. 2022b. The Agro-pastoralism debate in Central Eurasia: arguments in favor of a nuanced perspective on socio-economy in archaeological context. *Journal of Anthropological Archaeology* 67. https://doi.org/10.1016/j.jaa.2022.101438
- SHISHLINA, N.I., O.V. ORFINSKAYA, P. HOMMEL, E.P. ZAZOVSKAYA, P.S. ANKUSHEVA & J. VAN DER PLICHT. 2020. Bronze Age wool textile of the northern Eurasia: new radiocarbon data. *Nanotechnologies in Russia* 15: 629–38. https://doi.org/10.1134/S1995078020050146
- Shnaider, S.V., K.A. Kolobova, T.G. Filimonova, W. Taylor & A.I. Krivoshapkin. 2020. New insights into the Epipaleolithic of western Central Asia: the Tutkaulian complex. *Quaternary International* 535: 139–54.
- https://doi.org/10.1016/j.quaint.2018.10.001

 Svyatko, S.V., I.V. Mertz & P.J. Reimer. 2015.

 Freshwater reservoir effect on redating of Eurasian Steppe cultures: first results for Eneolithic and Early Bronze Age northeast Kazakhstan.

 Radiocarbon 57: 625–44.

 https://doi.org/10.2458/azu_rc.57.18431
- VENTRESCA-MILLER, A.R. et al. 2020. Ecosystem engineering among ancient pastoralists in northern Central Asia. Frontiers in Earth Science 8. https://doi.org/10.3389/feart.2020.00168
- VOYAKIN, D.A. & E.R. USMANOVA. 2023.

 Gorno-metallurgicheskiy kompleks Bozshakol' 1.

 Almaty: MITSAI (Mezhdunarodnogo instituta tsentral'noaziatskikh issledovaniy) (in Russian).
- Wright, J., G. Ganbaatar, W. Honeychurch, B. Byambatseren & A. Rosen. 2019. The earliest Bronze Age culture of the south-eastern Gobi Desert, Mongolia. *Antiquity* 93: 393–411. https://doi.org/10.15184/aqy.2018.174