

New Book Chronicle

Marion Uckelmann

Early metals, mines and metalworking

Gold, copper, tin, silver, lead and iron have for a long time been used to craft objects such as tools, ornaments and weapons, with earliest evidence for smelted copper from around the end of the sixth millennium BC. These metal objects have been at the heart of many studies, especially at the beginning of the formal archaeological discipline, when they were understood as expressions both of ancient technology and art. They were essential to the proposal of the Three Age system of the Stone-Bronze-Iron Ages and the (still ongoing!) debates of a distinct Copper Age. The twentieth century saw the rapid development and application of scientific analyses, which dramatically expanded the possibilities of what metal objects as well as metal production and economy can reveal about past societies. In the twenty-first century, the application of new laboratory techniques, use-wear analyses, advanced excavation methods and the exploration of theoretical frameworks continue to change our perceptions and knowledge of metals.

The volumes presented in this New Book Chronicle are four excellent examples of how to study metals, mines and metalworkers. The use of copper in Ancient Egypt is explored through the iconographical and written sources as well as through the copper objects and production sites; a later Bronze Age copper mine at Derrycarhoon, Ireland, is excavated and its connections to the wider region evaluated; the analyses of the transformation in large-scale metal production that leaded-bronze enabled in Bronze Age China; and an international compilation of studies on metalworkers and their tools, producing and working copper, tin-bronze, iron and gold throughout the Bronze and Iron Ages.

Even though metal studies are sometimes perceived as a more traditional research field, the examples show that such studies, including material and typological analyses, are both innovative and highly relevant in creating new understandings of the past.

MARTIN ODLER. 2023. Copper in Ancient Egypt: before, during and after the Pyramid Age (c. 4000–1600 BC) (Culture and History of the Ancient Near East 132). Leiden: Brill; 978-90-04-52408-8 hardback €199.



The scholarship surrounding metallurgy and metalwork in Ancient Egypt has been consistently overshadowed by the richness and details of the contemporary texts and the spectacular scale and complexity of the archaeological sites and artefacts. Martin Odler notes ruefully that one consequence is that even Egyptologists often remain unaware of the potential insights to be gained by analysing the metal artefacts excavated in tombs and settlements. This situation is further compounded by the relative rarity of metalwork in many periods, leading to the widespread but incorrect assumption that everything has been lost or recycled. There is also the added difficulty of obtaining permissions for sampling those metal objects that have been recovered.

Despite these challenges, Odler delivers a densely packed, hefty tome that covers Ancient Egypt and Nubia from the earliest evidence of metals at *c*. 4000 BC in the pre-dynastic farming communities settling along the Nile, through to the emergence of the Egyptian state and dynasties to around *c*. 1600 BC. While chronologically and culturally labelled as 'Bronze Age', the monograph demonstrates that bronze (an alloy of copper and tin) was actually very rare. A more accurate term might be the potentially less appealing 'Arsenic Age' given the far more widespread use of arsenical copper alloys which not only hardened the copper for more effective tools and weapons but could also alter the colour of the metal. Where and how the volatile and poisonous arsenic is added to the copper remains a mystery. The current evidence sees copper ores being processed near the known mining sites in the Eastern Desert and the Sinai peninsula; while in the Nile valley, arsenical copper metals were being melted, with arsenic clearly being added elsewhere.

The aims and scope of the book are detailed in the Introduction. The second chapter provides a clear articulation and justification of the *chaîne opératoire* approach which structures the research and delivers an illuminating overview and evaluation of the different categories of evidence encompassed. The next chapter on the ancient Egyptian words for copper and metalworkers provides an invaluable guide. It highlights, for example, that for a century the hieroglyph for "copper" was misinterpreted by scholars as meaning "crucible" and consequently misunderstood as meaning "metalworker".

In the absence of copper ores near the agricultural and settlement areas in the Nile valley, copper had to be obtained either through trading or mining expeditions to the geologically rich Eastern Desert of Egypt and Nubia, or from even further afield in the Sinai Peninsula or the Wadi Arabah in modern Israel/Jordan and beyond. There is now convincing evidence for the exploitation of copper in the Eastern Desert during the pre-Dynastic period as well as the establishment of Egyptian mining camps at sites such as Wadi Dara during the Early Dynastic period where the copper ore was processed and smelted in wind-powered furnaces. The extent to which the Egyptians could directly control copper extraction and distribution or whether they had to trade with local intermediaries remains a key area of debate across the different periods.

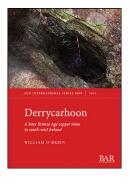
The storage and administration of the increasingly large quantities of copper ore and copper metal in the form of ingots arriving into the ancient Egyptian state would have been a major undertaking—yet it is one that was apparently rarely documented. This has led scholars to ignore copper in favour of discussing gold and silver that are far more frequently mentioned. The author, however, argues convincingly that copper artefact types were produced to specific weights, with the weight of the copper artefact or ingot being what was measured and valued by the ancient Egyptian administrators in charge of storage and redistribution.

The identification and organisation of metalworkers is explored through their references in ancient texts as well as the diverse evidence for metalworkers' tombs. This reveals that their identities range from aspiring specialist members of the literary elite to those at the lower end of the social pyramid. Metalworkers also had their own deity—*Sokar*, one of the falcon gods. The famous Old Kingdom tomb depictions of ancient Egyptian craft workshops provide vivid scenes of metalworking that are reproduced in many textbooks. Yet, the more recent (ongoing) excavation of metallurgical workshop sites and the archaeometallurgical analyses of furnaces, crucibles and ingots deliver more detailed knowledge of the *chaîne opératoire*, metal provenance and economy. The copper objects that were

made and have been recovered were overwhelmingly craft tools (e.g. chisels, axes, adzes and saws), cosmetic equipment (e.g. mirrors and razors), jewellery (e.g. needles) and ritual equipment (e.g. vessels) with relatively few weapons. A key distinction is between objects that were made for conspicuous display and consumption (e.g. involving several metals and precious stones) and those that were designed with a more practical intention and audience. There is such a wealth of detail and scholarship packed into these chapters that they cannot be summarised in this short review. In placing ancient Egyptian copper into an Eastern Mediterranean context, Odler shows that, despite traditional assumptions, Egypt did have metallurgical connections before the Second Intermediate Period (c. 1630-1539 BC). It was neither peripheral nor less metallurgically developed at this time but had its own distinct tradition. It was also the first in the region to establish a weighing system for metals—copper and precious metals, especially gold. In the concluding chapter, the author provides a new chronological narrative of copper in Ancient Egypt and Nubia from its origins, seeking to change the frequently flawed perceptions and address the many fragmentary understandings. It is refreshingly honest about the gaps in knowledge and provides a clear perspective on suggested future work.

This is a spectacularly thorough and monumental single volume work of scholarship. The publication spans over 800 pages, there are 310 figures highlighting artefacts, sites and texts with further tables available online, a comprehensive bibliography and no less than 16 indexes covering topics from deities, priests and rituals to Egyptian and Coptic words and phrases. If there were previously any doubts as to the widespread presence or relevance of copper in Ancient Egypt and Nubia, they have now been thoroughly dispelled.

WILLIAM O'BRIEN. 2022. Derrycarhoon. A later Bronze Age copper mine in south-west Ireland (British Archaeological Reports International Series 3069). Oxford: BAR; 978-1-4073-5925-0 paperback £54.



South-west Ireland has an extraordinarily rich and old mining history, with the well-known Beaker mining site at Ross Island and the Early Bronze Age mine at Mount Gabriel, both of which were excavated and published by the author. Just 8km northeast of the latter is the small mine of Derrycarhoon, the first known mine of the later Bronze Age (c. 1300–1000 BC) in Ireland. In this volume, William O'Brien delivers an in-depth addition to his previous work on prehistoric copper mining and details the finds of the 'Derrycarhoon Mine Project', from the University College Cork. The well-organised, very accessible and well-illustrated book begins with an Introduction that sets the scene

for prehistoric mining and the aims of the project. The next chapter details the discovery of Derrycarhoon in the nineteenth century and the debate on its age which can be laid to rest thanks to this study, that proved its existence in the later Bronze Age (see Chapter 5). The following chapters outline the geological and geophysical surveys to determine the

mining landscape in which the mine is embedded and the recent archaeological excavations in 2010–11 and 2018. These excavations encompassed four trenches revealing features of the mine, with a 2.75m-long rock-cut trench that was 4m deep in places, mine spoils and implements such as stone hammers and antler picks as well as organic material used for dating and cores for pollen analyses.

The palaeoecology is discussed by Kevin Kearney and the results of the botanical samples reveal a picture of the environment of the mine and the changes it might have brought. To find answers to "who were the Derrycarhoon miners?" (p.103), an extensive archaeological survey of the wider area is undertaken which highlights the context of mine, settlements, burials, rock art, stone circles and other monuments in the region. Settlement evidence near the mine is scarce, though a few *fulachtaí fia* (burnt mounds or cooking sites) and enclosed settlements are known, but none are close. Interestingly, the mine is contemporary with around a dozen stone circles complexes, rows and boulder burials associated with belief and religious sites and has eight further similar sites, undated but within 10km radius. This highlights a possible connection between the two as they were most likely built by the same people and the monuments can be counted as a proxy for undiscovered settlements.

Chapter 8 focuses on the mine and reflects on the processes from 'Mine to metal', from Bronze Age prospectors to technology and organisation of the mine, along with which tools were used and how and for the ore beneficiation and the subsequent metal production, though the latter is not evidenced in Derrycarhoon. Moulds and cast bronze objects in the wider area are compiled and studied to explore where the metal from the mine was used and circulated. Lead isotope and trace element analyses help to verify the origin of the copper in the alloys; however, when nine palstaves and socketed axes from the region were analysed, surprisingly none of any objects analysed elsewhere match the 'fingerprint' of the copper from the Derrycarhoon mine. At that time, the Middle to Late Bronze Age, most of the copper was imported into Ireland from the continent, but these analyses show that we are missing smaller mines that were being exploited at the same time.

The excellent concluding chapter delivers the meaning of the mine in a much wider setting, spatial and temporal, and illuminates the connections between metal economy, upcoming hillforts, trade and changes in society. It embeds Derrycarhoon in its cultural landscape and simultaneously presents an overview of socioeconomic changes and life in the Middle to Late Bronze Age in Ireland and beyond.

This volume is a rare and beautiful example of how to investigate and record an ancient mining site from all possible angles using a multidisciplinary approach and, furthermore, how to provide a contextualised interpretation of a mine and the surrounding landscape. It also leaves one with food for thought about what might still be missing from the archaeological record unearthed so far.

LIMIN HUAN. 2023. *How leaded bronze transformed China, 2000–1000 BCE* (Archaeology of East Asia, vol. 10) (British Archaeological Reports, International Series 3147). Oxford: BAR; 978-1-4073-1524-9 paperback £56.



Lead is understudied and, arguably, unloved within scholarship of early metals. It is too soft to make effective tools or weapons and lacks the colour or lustre to be strikingly ornamental. Lead is invariably only the focus of attention when present in tiny quantities in copper, gold, silver or tin during debates over the provenancing of metal artefacts to ores through the lead isotope analysis. It is rare to find a publication that places early lead metal and lead alloying at its core. Yet, as Limin Huan's work highlights, the distinct and widespread metal tradition that emerged in Bronze Age China of making highly elaborate ritual vessels in an alloy of lead, copper and tin (a leaded bronze), places lead centre stage.

The monograph is clearly written in an accessible style and well-illustrated throughout. It includes a wide range of maps, figures, tables and illustrations that highlight geologies, sites, technologies and object types. The appendices provide useful tables of data on early metal sites and artefact analyses in China. The Introduction covers the origins of lead metallurgy in Southwest Asia and the transmission of metal artefacts and metallurgical expertise by Bronze Age Steppe communities into East Asia. It guides the reader through the geology of modern China, crucially highlighting the widespread presence of accessible lead ores in northern China, in contrast to the relatively scarce sources of tin.

The second chapter reviews the properties of leaded bronzes. The addition of lead as an alloy to the widely used bronze metal comprising copper and tin occurs to varying degrees in Bronze Age Europe and Asia. Leaded bronzes typically have a lower melting point and take longer to solidify, which is an advantage for a metalsmith in casting metal objects. The addition of lead can also improve the lustre of the object's surface, make it heavier, reduce corrosion and even make food and drink prepared in it taste different. As lead, however, can also significantly reduce the hardness and tensile strength, it is rarely an appealing alloy for making effective tools and weapons.

The chapter 'East wind, west wind' looks in detail at the much debated early metal objects and metallurgy of the Steppe frontiers which were fundamental to the later adoption and innovation of metals in the Central Plains of China. The author draws on a wide range of scholarly sources in different languages to reconstruct the choices that shaped bronze, gold and lead metallurgy. This reveals the use of lead alloying, likely for colour, in communities of the northern Bohai rim (the regions around the Bohai Sea in Northeast China) in contrast to those in the Hexi corridor (a traversable passage from the Steppes into West China) who seemingly avoided using lead, potentially due to its effect on hardness. The apparent reluctance of communities in the Ordos plateau, in between the two former areas, to use leaded bronze—despite the rich deposits of copper and lead in the Yin mountains nearby—demonstrates that while the addition of lead was certainly known and feasible for metallurgists of the Steppe frontier, it was relatively rarely practised.

As the subsequent chapters show, this is in stark contrast to the Bronze Age communities of the lowland flat area and floodplains of the Central Plains who, during the first half of the

second millennium BC started to produce 'ritual' bronzes at sites such as Erlitou. This category mainly comprises food and drinking vessels but also symbolic weapons, musical instruments and later on chariot and horse fittings. All of which were used in ancestor cults, ceremonial feasts and funerals. Such objects had been-and continued to be-made in ceramic, stone and wood. These ritual bronzes were crafted in elaborate forms using bronze poured into complex and multi-section ceramic moulds, starting a tradition that continued in Zhengzhou, Panlongcheng and beyond, long after the demise of Erlitou around 1550 BC. In contrast to the Steppe frontier metallurgists, those in the Central Plains were keen to improve the castability of their bronzes and did not have ready access to tin-but they could far more easily obtain lead. The rapid growth and development of ritual bronzes is due to their increasing demand by the elites and thus their production in the major palatial centres. Lead made the ritual bronzes more affordable so that there was a far greater number of elite users than if they had made bronze using only copper and tin. The use of ritual bronzes spread across and beyond the Central Plains in the later second millennium BC. The emergence of new palatial centres increased the need for and production of ritual leaded bronze, as at the famous site of Anyang, the last capital of the Shang dynasty. Here, by studying the burials, there is a clear division in status between the highest-ranking individuals buried with lowleaded ritual bronzes to accompany them in the afterlife while lower elites had leaded bronzes. The sheer scale, complexity and number of ritual bronzes is staggering in one tomb alone that of Lady FuHao, a general, priestess and consort of King Wuding, being buried with more than 400 objects weighing over 1600kg made of high tin/low lead bronze. The vast Simuwu ding—a ritual cooking vessel that is 133cm high and weighs 833kg—is a testament to the spectacular metallurgical tradition of leaded bronze.

This engaging, thorough and thought-provoking study provides clear descriptions and explanations throughout and delivers a comprehensive introduction to leaded bronze metallurgy and Bronze Age China.

LINDA BOUTOILLE & REBECCA PEAKE (ed.). 2023. Metalworkers and their tools: symbolism, function, and technology in the Bronze and Iron Ages. Oxford: Archaeopress; 978-1-80327-624-3 paperback £38 OpenAccess doi.org/10.10.32028/9781803276243.



This volume is the outcome of the 'Metools' conference in Belfast in 2016 and brings together 22 authors who contribute 12 chapters on various topics about metalworkers and their tools through the Metal Ages. Most contributions are based on extensive studies and present summaries of the main results. Eight chapters are in English and four in French, all have abstracts in both languages.

The first chapter by Barbara Armbruster delivers an excellent introduction to the theme and is extremely useful for a wide readership. Armbruster delivers a brief overview, based on her substantial research undertaken in the field, on the development of the tools and the workshop of a gold smith—or fine metalworker—across

time from the Copper Age to the end of the Iron Age (third millennium BC to late first century BC) with a focus on Western and Northern Europe. The interdisciplinary framework applied here illuminates these processes in a holistic way and the chapter follows the emergence and development of different types of tools, such as anvil, hammer and punch, made from stone, bronze, antler and wood. Metalworking tools have changed much less over time than other artefacts such as ornaments and weapons.

Birgit Schorer also details an aspect of gold working: embossed ornaments on early Celtic objects of the Early Iron Age in Southwest Germany. The origins of ornaments are traced, and viewing the objects with ornaments in close detail reveals that they were mostly made by individual tools, likely made of organic material. Descriptions of experimental work using antler as the material for ornament punches deliver a convincing argument.

Two chapters by E. Giovanna Fregni investigate the minimal toolsets of metalworking smiths and the connection between metalworking tools in hoards, both centred on Late Bronze Age Britain. In looking at the toolset of a smith's workshop, Fregni introduces the *chaîne opératoire* of metal working to highlight the different specialised tools needed, then compares these to the archaeological record. Some tools are fairly obvious, such as hammers, anvils and chisels, but others might often not be interpreted as metalworking tools such as rivet sets or snaps. Other important non-metal parts such as bellows or blowpipes are rarely discovered due to being made of organic materials. The contribution on hoards and tools, especially hammers, picks up the long-standing discussion of how to interpret hoards containing scrap and tools, where some researchers see them as so-called founders' hoards—with a smith's tools and scrap as a stock of material placed for safekeeping— and others see them as sacrifices or ritual depositions. Fregni uses case studies to investigate the connection between the tools and other pieces in the hoards as well as the possible special function of the metal smith in the community.

In another chapter, Bianka Nessel asks similar questions for a wider region of the Carpathian Basin, Central Europe and Scandinavia, but with a somewhat different outcome. Nessel builds upon her extensive previous studies and inspects the functionality of the tools and the social and symbolic meaning through tools in hoard and grave finds across the Bronze Age. Only three per cent of the artefacts in hoards are tools and they are mostly complete. Only 21 hoards can be interpreted as workshop hoards. Casting equipment and smiths' tools are almost never found together, not in hoards or graves. According to the few finds of tools in graves and hoards, metal workers seem not to have had a (visible) special part in their communities but were well integrated.

Thibault Le Cozanet and Gérard Bataille follow up some of these thoughts and study the increase and decrease in ritual use and changing role of metalworking tools and half-products during the phases of the Iron Age in France. Tools are still rare components, but especially in Hallstatt D the half-products (e.g. the large hoards with Amorican axes) dominate, in contrast to La Tène D where the tools are more common. The authors link these to wider changes from the use of copper-alloys to iron and broader societal changes.

Workshops of metal workers have rarely been identified in the archaeological record. Sylvie Cousseran-Néré and colleagues present preliminary results of the excavation of the settlement site 'Rue du Bouquet' in Montélimar, France, where such a workshop emerged. A building with two rooms and a possible courtyard area yielded, among other finds, large

amounts of charcoal, copper-alloy objects and casting debris, stone tools for hammering and planishing as well as few fired-clay remains, which can be dated to the Late Bronze Age. The authors detail the finds and develop a *chaîne opératoire* for metalworking highlighting the tasks that have taken place at the site: casting, plastic deformation, polishing and finishing.

Alessandro Armigliato aims to solve some of the difficulties in identifying casting sites in the archaeological record through experimental work. The chapter describes experiments in building and using a clay casting pit, and then analyses the structure and remains one year after and delivers important results for future excavations; even after only one year, the casting pit was hardly visible.

Scott Ingram and Dirk Brandherm search for ways to identify stone tools and their use in early mining sites in Southeast Spain. Their method combines experimental work with stones crushing chalk, these wear traces are then captured through 3D scanning and morphometric analyses. This reveals a differential pattern of wear between natural abrasion and anthropogenic-caused damage of stones which is applied to sample stones from early mining sites and delivers a reference catalogue of wear marks for future studies.

The first recorded evidence for the use of stone tools in context with metalworking on Corsica at the prehistoric site of Cuciurpula is introduced by Linda Boutille and Kewin Peche-Quilichini. The authors explain this unusual site and the development of the stone tools and deliver proof that stone tools were part of the metalworking tool set well into the Iron Age.

The Iron Age smithy of Weyersheim in Alsace, France, is the topic of Michler Matthieu and colleagues' chapter. Next to an abundance of iron slag (over 130kg), 16 granite anvils were found and these are at the centre of this investigation and reveal, together with the slag evidence, details on the work processes in the smithy, such as raw material purification, cold and hot working to produce objects or sheet metal.

In the final chapter, Andreas Svensson looks north to the later Iron Age in southern Sweden and proposes the concept of open-air workshops using multiple metals and how to trace them.

The spread of different topics delivers many interesting aspects of metalworking and is clearly explained by the many experienced scholars. I highly recommend this book and hope it finds a wide use for anyone interested in tracing metalworkers of the Bronze and Iron Ages. Highlighting the use of stone tools is very welcome and needed, as their importance has long been overlooked.

Books received

This list includes all books received between 1 January 2024 and 29 February 2024. Those featuring at the beginning of New Book Chronicle, however, have not been duplicated in this list. The listing of a book here does not preclude its subsequent review in *Antiquity*.

European prehistory

- Enrique Aragón-Núñez. 2023. Rochelongue shipwreck: maritime network and cultural interaction in West Languedoc, France during 7th—6th centuries B.C. (Cultural Studies in Maritime and Underwater Archaeology 5). (British Archaeological Reports International Series 3141). Oxford: BAR; 978-1-4073-6037-9 paperback £46.
- STEPHANIE AULSEBROOK, KATARZYNA ŻEBROWSKA & AGATA ULANOWSKA (ed.). 2024. Sympozjum Egejskie, vol. 4: papers in Aegean archaeology (Warsaw Studies in Archaeology 5). Turnhout: Brepols; 978-2-503-61037-5 paperback €80.
- MARCO ANTONIO BERNAL GÓMEZ. 2023. Neanderthal resilience in two hotspot zones of Iberia (Cantabrian and Betic regions) (British Archaeological Reports International Series 3158). Oxford: BAR; 978-1-4073-6029-4 paperback £92.
- SETH BERNARD. 2023. Historical culture in Iron Age Italy: archaeology, history, and the use of the past, 900–300 BCE. Oxford: Oxford University Press; 978-0-19-764746-2 hardback £54.
- PHILIP P. BETANCOURT, SUSAN C. FERRENCE & ALESSANDRA GIUMLIA-MAIR. 2023. The Cretan collection in the University of Pennsylvania Museum III: metal objects from Gournia (Prehistory Monographs 73). Bristol (CT): INSTAP; 978-1-931534-38-3 hardback \$95.
- Françoise Bostyn, Jacek Lech, Alan Saville & Dagmara H. Werra (ed.). 2023. *Prehistoric flint mines in Europe*. Oxford: Archaeopress; 978-1-80327-221-4 paperback £75.
- KEITH BOUGHEY. 2023. A tale of two collectors: the lithic collections of Geoffrey Taylor and David Heys (with particular reference to the county of Yorkshire). Oxford: Archaeopress; 978-1-80327-642-7 paperback £29.
- RICHARD BRADLEY. 2023. Monumental times: pasts, presents, and futures in the prehistoric construction projects of northern and western Europe. Oxford: Oxbow; 979-8-88857-038-8 paperback £39.95.
- Petra Goláňová (ed.). 2023. Oppidum as an urban landscape: a multidisciplinary approach to the study

- of space organisation at Bibracte (Bibracte 33). Glux-en-Glenne: Bibracte; 978-2-490601-14-1 paperback €45.
- OMAR LARENTIS. 2023. Rituali e riti funerari della Civiltà celtica di Golasecca (British Archaeological Reports International Series 3157). Oxford: BAR; 978-1-4073-5406-4 paperback £45.
- CLAUDE MALAGOLI. 2024. Les lampes en terre cuite du Centre-Est de la Gaule: production, circulation et acculturation (Monographies Instrumentum 77). Dremil-Lafage: Mergoil; 978-2-35518-136-8 paperback €56.87.
- MATTHIEU POUX & THOMAS CERISAY (ed.). 2023. L'oppidum fortifié de Corent: Néolithique Moyen, Bronze final, La Tène finale (Protohistoire Européenne 16). Dremil-Lafage: Mergoil; 978-2-35518-138-2 paperback €55.
- Leslie Preston Day & Maria A. Liston. 2023. Kavousi IV: the Early Iron Age cemeteries at Vronda. Bristol (CT): INSTAP; 978-1-931534-36-9 hardback \$150.
- SIMON RADCHENKO. 2023. Portable and parietal art of Kamyana Mohyla, Ukraine (Archaeology of Prehistoric Art, vol. 6). (British Archaeological Reports International Series 3143). Oxford: BAR; 978-1-4073-5385-2 paperback £60.
- TIFFANY TREADWAY. 2023. Iron Age wetland deposition: case studies from Wales and Scotland (Archaeology of Prehistoric Ireland and Britain, vol. 1). (British Archaeological Reports British Series 682). Oxford: BAR; 978-1-4073-1495-2 paperback £45.
- MATTHEW J. WALSH, SEAN O'NEILL & LASSE SØRENSEN (ed.). 2023. In the darkest of days: exploring human sacrifice and value in southern Scandinavian prehistory. Oxford: Oxbow; 978-1-78925-859-2 paperback £38.

Classical and Roman world

STEFAN ALTEKAMP. 2024. Karthago: archäologische Stadtbiographie. Berlin: De Gruyter; 978-3-11-133217-8 hardback £109.50.

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

- GEORGE AZZOPARDI. 2023. The Roman municipia of Malta and Gozo: the epigraphic evidence (Archaeopress Roman Archaeology 103). Oxford: Archaeopress; 978-1-80327-614-4 paperback £32.
- Lindsay Banfield. 2023. Making flour the German way in Roman Britain: distribution, use and deposition of imported lava quernstones and millstones (Archaeology of Roman Britain, vol. 10). (British Archaeological Reports British Series 681). Oxford: BAR; 978-1-4073-6081-2 paperback £60.
- JOSEPH COLEMAN CARTER & NORMA ORTÍZ GALINDO (ed.). 2023. The Chora of Metaponto 8, parts i and ii: the factory and kiln deposit at Pantanello (British Archaeological Reports International Series 3146). Oxford: BAR; 978-1-4073-6089-8 paperback £181.
- EMILY HANSCAM & JOHN KARAVAS (ed.). 2023. *The Roman lower Danube frontier: innovations in theory and practice*. Oxford: Archaeopress; 978-1-80327-662-5 paperback £32 ebook OpenAccess. http://doi.org/10.32028/9781803276625
- LAWRENCE KEPPIE. 2023. Slingers and sling bullets in the Roman civil wars of the late republic, 90-31 BC (Archaeopress Roman Archaeology 108). Oxford: Archaeopress; 978-1-80327-640-3 paperback £19.99.
- BARTOSZ KONTNY. 2024. The archaeology of war: studies on weapons of barbarian Europe in the

- Roman and migration period (Warsaw Studies in Archaeology 1). Turnhout: Brepols; 978-2-503-60737-5 paperback €115 ebook OpenAccess. http://doi.org/10.1484/M.WSA-EB.5.134697
- Francis M. Morris & Martin Biddle. 2023. *Venta Belgarum: prehistoric, Roman, and post-Roman Winchester* (Pre-Roman and Roman Winchester 1). Oxford: Archaeopress; 978-1-80327-680-9 hardback £240.
- Christian Niederhuber & Bert Smith. 2023.

 Commodus: the public image of a Roman emperor.

 Wiesbaden: Reichert; 978-3-7520-0764-0
 hardback €69.
- Paul Roberts. 2024. Ancient Rome in fifty monuments. New York: Thames & Hudson; 978-0-500-02568-0 hardback \$39.95.
- KLAUS TAUSEND. 2023. Frühe Kulturen der Ägäis Band 2: das Zeitalter der homerischen Helden. Stuttgart: Kohlhammer; 978-3-17-040950-7 hardback €26.
- GOCHA R. TSETSKHLADZE & ŞAHIN YILDIRIM (ed.). 2023. *Tios/Tieion on the southern Black Sea in the broader context of Pontic archaeology*. Oxford: Archaeopress; 978-1-80327-620-5 paperback £55.
- Pedro Trapero Fernández & André Carneiro (ed.). 2023. GIS applications in Roman landscape and territory: methodologies and models in Hispania. (British Archaeological Reports International Series 3139). Oxford: BAR; 978-1-4073-5418-7 paperback £56.

Early medieval, medieval and post-medieval archaeology

- Martina Bernardi, Emeri Farinetti & Riccardo Santangeli Valenzani (ed.). 2024. Archeologia nei Monti Lucretili: nuove ricerche e prospettive di indagine in un paesaggio montano del Lazio (British Archaeological Reports International Series 3160). Oxford: BAR; 978-1-4073-6087-4 paperback £50.
- NICK COLLINS. 2023. The millennium maritime trade revolution, 700–1700: how Asia lost maritime supremacy. Barnsley: Pen and Sword; 978-1-3990-6012-7 hardback £28.
- Peter Davey. 2023. Rushen Abbey, Isle of Man: a hundred years of research and excavation.

 Oxford: Archaeopress; 978-1-80327-571-0 paperback £40.

- MARIJO GAUTHIER-BÉRUBÉ & ANNALIESE DEMPSEY (ed.). 2023. Agency and archaeology of the French maritime empire. New York & Oxford: Berghahn; 978-1-80539-229-3 hardback £99.
- Ben Jervis, Chris Briggs, Alice Forward, Tomasz Gromelski & Matthew Tompkins. 2023. *The material culture of English rural* households c. 1250–1600. Cardiff: Cardiff University Press; 978-1-911653-44-8 hardback £59.99 ebook OpenAccess. https://doi.org/10.18573/book10
- SVEN KALMRING. 2024. Towns and commerce in Viking-Age Scandinavia. Cambridge: Cambridge University Press; 978-1-009-29805-6 hardback £70.

- SARAH KERR. 2023. Late medieval lodging ranges: the architecture of identity, power and space.

 Martlesham: Boydell & Brewer;

 978-1-78327-757-5 hardback £60.
- JOHN SCHOFIELD & STEPHEN FREETH. 2023. London's waterfront and its world, 1666–1800. Oxford: Archaeopress; 978-1-80327-654-0 hardback £50 ebook OpenAccess. http://doi.org/10.32028/9781803276540
- TIM VAN TONGEREN. 2024. Buried in the borderlands: an artefact typology and chronology for the Netherlands in the early medieval period on the basis

- of funerary archaeology. Oxford: Archaeopress; 978-1-80327-573-4 hardback £100.
- MICHAELA ZAVADIL (ed.). 2024. Archäologie und Republik: Reflexionen zur Archäologie in Österreich in der ersten und zweiten Republik (Oriental and European Archaeology 28). Vienna: Verlag der Österreichischen Akademie der Wissenschaften; 978-3-7001-9316-6 hardback €180.
- DAVIDE ZORI. 2024. Age of wolf and wind: voyages through the Viking world. Oxford: Oxford University Press; 978-0-19-091606-0 hardback £25.99.

Africa and Egypt

- MARIAM F. AYAD (ed.). 2024. Coptic culture and community: daily lives, changing times. Cairo: The American University in Cairo Press; 978-1-64903-182-2 hardback £60.
- Caitlín Eilís Barrett & Jennifer Carrington (ed.). 2024. *Households in context: dwelling in Ptolemaic and Roman Egypt*. Ithaca (NY): Cornell University Press; 978-1-5017-7259-7 paperback \$36.95.
- ROSALIE DAVID & ROGER FORSHAW. 2023. Medicine and healing practices in Ancient Egypt. Liverpool: Liverpool University Press; 978-1-83764-429-2 hardback £88.
- Heike Heye. 2023. Die Gräber des Amenemhab und des Pehsucher Theben Nr. 85 und 88: die Dekoration der Innenräume (Archäologische Veröffentlichungen 138). Wiesbaden: Harrassowitz; 978-3-447-12041-8 hardback €158.
- Frank L. Holt. 2024. A mystery from the mummy-pits: the amazing journey of Ankh-Hap. Oxford: Oxford University Press; 978-0-19-769404-6 hardback £16.99.
- ACHIM Krekeler. 2023. Elephantine XXI Ausgrabungen in der Weststadt 1987–1992:

- Bauten und Stadtstruktur vom späten Neuen Reich bis in die Römerzeit (Archäologische Veröffentlichungen 101). Wiesbaden: Harrassowitz; 978-3-447-11997-9 hardback €148.
- Derek A. Welsby (ed.). 2023. Gematon: living and dying in a Kushite town on the Nile, volume I: excavations at Kawa, 1997–2018 (Sudan Archaeological Research Society Publication 27). Oxford: Archaeopress; 978-1-80327-676-2 hardback £95 ebook OpenAccess. http://doi.org/10.32028/9781803276762
- ISABELIA WELSBY SJÖSTRÖM. 2023. Gematon: living and dying in a Kushite town on the Nile, volume III: the pottery (Sudan Archaeological Research Society Publication 29). Oxford: Archaeopress; 978-1-80327-678-6 hardback £80 ebook OpenAccess. http://doi.org/10.32028/9781803276786
- David M. Witelson. 2023. Theatres of imagery: a performance theory approach to rock art research (African Archaeology, vol. 98). (British Archaeological Reports International Series 3149). Oxford: BAR; 978-1-4073-5619-8 paperback £61.

Western Asia

- ILARIA CALINI. 2024. Tell Masaikh/Kar-AssurnaSirpal: horizons céramiques dans les cultures de la vallée du Moyen Euphrate à l'Âge du Fer I–III (Études Mésopotamiennes Mesopotamian Studies 4). Oxford: Archaeopress; 978-1-80327-714-1 paperback £55.
- Arnulf Hausleiter (ed.). 2023. Material worlds: interdisciplinary approaches to contacts and exchange in the ancient Near East. Proceedings of the workshop held at the Institute for the Study of the Ancient World (ISAW), New York University 7th March 2016. Oxford: Archaeopress;

- 978-1-80327-648-9 paperback £30 ebook OpenAccess.
- http://doi.org/10.32028/9781803276489
- THOMAS E. LEVY, YORKE M. ROWAN & MARGIE M. BURTON (ed.). 2023. Shiqmim II: the phase II excavations at a Chalcolithic settlement center in the northern Negev desert, Israel (1987–1993) (British Archaeological Reports International Series 3144). Oxford: BAR; 978-1-4073-6059-1 paperback £63.
- Jodi Magness. 2024. Ancient Synagogues in Palestine: a re-evaluation nearly a century after Sukenik's Schweich lectures. Oxford: Oxford University Press; 978-0-19-726765-3 hardback £76.
- 2024. Jerusalem through the ages: from its beginnings to the Crusades. Oxford: Oxford University Press; 978-0-19-093780-5 hardback £30.99.
- JAN-WAALKE MEYER & ALEXANDER TAMM (ed.). 2024.
 Tell Chuera: Grabungen außerhalb der Siedlung und in Kharab Sayyar (Vorderasiatische Forschungen der Max Freiherr von Oppenheim

- Stiftung 28). Wiesbaden: Harrassowitz; 978-3-447-12086-9 hardback €89.
- JOHN NICHOLAS POSTGATE. 2024. City of culture 2600 BC: early Mesopotamian history and archaeology at Abu Salabikh. Oxford: Archaeopress; 978-1-80327-669-4 paperback £35 ebook OpenAccess. http://doi.org/10.32028/9781803276694
- Andrea Ricci. 2023. Settlement, mobility, and land use in the Birecik-Carchemish region (fifth—third millennium BCE) (Subartu 49). Turnhout: Brepols; 978-2-503-55508-9 paperback €90.
- Margreet L. Steiner, Eveline J. van der Steen, Noor Mulder-Hymans & Jeannette Boertien. 2023. A village from the Roman and Islamic periods in the eastern Jordan Valley: excavations at Tell Abu Sarbut 2012–2015 (British Archaeological Reports International Series 3155). Oxford: BAR; 978-1-4073-6105-5 paperback £46.
- TREVOR WATKINS. 2023. *Becoming Neolithic: the pivot of human history*. Abingdon: Routledge; 978-0-415-22152-8 paperback £35.99.

Central and Eastern Asia

BRYAN K. MILLER. 2023. Xiongnu: the world's first nomadic empire. Oxford: Oxford University Press; 978-0-19-008369-4 hardback £66.87.

Benjamin Mutin. 2024. Sarazm: a site along the proto-silk road at the intersection of the steppe and

oasis cultures: results from excavation VII (OXUS 1). Turnhout: Brepols; 978-2-503-60294-3 paperback €110.

South and Southeast Asia

CLARA BOULANGER. 2023. The exploitation of fishing resources and the maritime skills of early modern humans in island Southeast Asia (British Archaeological Reports International Series 3153). Oxford: BAR; 978-1-4073-5681-5 paperback £43.

Peter Stewart. 2023. Gandharan art and the Classical world: a short introduction. Oxford:

Archaeopress; 978-1-80327-694-6 paperback £19.99 ebook OpenAccess. http://doi.org/10.32028/9781803276946

Ashley Thompson (ed.). 2022. Early Theravadin Cambodia: perspectives from art and archaeology. Singapore: National University of Singapore Press; 978-981-325-149-6 hardback SGD 56.

Americas

Megan M. Bailey. 2024. Memory and power at l'hermitage plantation: heritage of a nervous landscape. Gainesville: University Press of Florida; 978-0-8130-6995-1 hardback \$85.

WILLIAM R. CARAHER. 2024. The archaeology of contemporary America. Gainesville: University Press of Florida; 978-0-8130-6996-8 hardback \$85.

- NICOLAS DELSOL. 2024. Cattle in the Postcolumbian Americas: a zooarchaeological historical study. Gainesville: University Press of Florida; 978-0-8130-6998-2 hardback \$90.
- Christopher Heaney. 2023. Empires of the dead: Inca mummies and the Peruvian ancestors of American anthropology. New York: Oxford University Press; 978-0-19-754255-2 hardback £22.99.
- WAKA KUBOYAMA-HARAIKAWA. 2023. Celtiform pendants from pre-Columbian Costa Rica: production, distribution, and experimental replication (British Archaeological Reports International Series 3138). Oxford: BAR; 978-1-4073-1496-9 paperback £50.
- Jean-Paul Lacombe & Claude Chauchat. 2023. The Paiján people: burials and Paleoindian human remains from coastal Peru (British Archaeological Reports International Series 3158). Oxford: BAR; 978-1-4073-6121-5 paperback £35.
- ANDRÉS LAGUENS. 2024. Perspectivism in archaeology: insights into Indigenous theories of reality. Cambridge: Cambridge University Press; 978-1-009-39391-1 hardback £85.
- SETH MALLIOS, SARA L. GONZALEZ, MICHAEL GRONE, KATHLEEN L. HULL, PETER NELSON & STEPHEN

- W. SILLIMAN (ed.). 2024. Inclusion, transformation, and humility in North American archaeology: essays and other "great stuff" inspired by Kent G. Lightfoot. New York: Berghahn; 978-1-80539-252-1 hardback £110.
- Geiser Gerardo Martín Medina. 2023.

 Arqueología urbana en San Salvador Nextengo:
 excavación y análisis de materiales de un predio en
 Azcapotzalco, México (British Archaeological
 Reports International Series 3142). Oxford:
 BAR; 978-1-4073-6084-3 paperback £32.
- David Saunders & Megan E. O'Neil (ed.). 2024. *Picture worlds: storytelling on Greek, Moche, and Maya pottery.* Los Angeles (CA): Getty; 978-1-60606-905-9 paperback \$40.
- Camilla Townsend. 2024. The Aztec myths: a guide to the ancient stories and legends. New York: Thames & Hudson; 978-0-500-02553-6 hardback \$25.95.
- Nancy Marie White, Lynne P. Sullivan & Rochelle A. Marrinan (ed.). 2023. *Grit-tempered: early women archaeologists in the southeastern United States*. Gainesville: University of Florida Press; 978-0-8130-8046-8 paperback \$29.95.

Oceania

IAN J. McNiven & Bruno David (ed.). 2024. The Oxford handbook of the archaeology of Indigenous Australia and New Guinea. Oxford: Oxford University Press; 978-0-19-009561-1 hardback £142.50.

Theory, method and historiography

- Julien D'Huy, Frédérique Duquesnoy & Patrice Lajoye (ed.). 2023. Le gai sçavoir: mélanges en hommage à Jean- Loïc Le Quellec. Oxford: Archaeopress; 978-1-80327-541-3 paperback £95.
- THOMAS P. LEPPARD & SARAH C. MURRAY (ed.). 2023. *Violence and inequality: an archaeological history*. Denver: University Press of Colorado; 978-1-64642-496-2 hardback \$87.
- Donald H. Sanders. 2023. From photography to 3D models and beyond: visualizations in archaeology.

- Oxford: Archaeopress; 978-1-80327-618-2 paperback £36.
- HELEN WANG & ROBERT BRACEY (ed.). 2023. Look at the coins! Paper in honour of Joe Cribb on his 75th birthday. Oxford: Archaeopress; 978-1-80327-610-6 paperback £45.
- Thomas Wynn, Karenleigh Overmann & Frederick Coolidge (ed.). 2024. *The Oxford handbook of cognitive archaeology*. Oxford: Oxford University Press; 978-0-19-289595-0 hardback £180.

General

- Benjamin Collins & April Nowell (ed.). 2024. Culturing the body: past perspectives on identity and sociality. New York & Oxford: Berghahn; 978-1-80539-460-0 hardback £110.
- KAI FECHNER & CAROLE DEFLORENNE (ed.). 2023. Recontres Archéo-environnementales autour des structures anthropiques: France septentrionale et Belgique, de l'âge du Bronze à l'époque contemporaine (Archéologie du Paysage 6). Dremil-Lafage: Mergoil; 978-2-35518-140-5 paperback 652.13.
- MICHAEL L. GALATY & LORENC BEJKO (ed.). 2023. Archaeological investigations in a northern Albanian province: results of the Projekti Arkeologjik i Shkodrës (PASH). Volume one: survey and excavation results. Ann Arbor: University of Michigan Museum of Anthropological Archaeology; 978-1-951538-73-6 hardback \$85.
- 2023. Archaeological investigations in a northern Albanian province: results of the Projekti Arkeologjik i Shkodrës (PASH). Volume two: artifacts and

- artifact analysis. Ann Arbor: University of Michigan Museum of Anthropological Archaeology; 978-1-951538-69-9 hardback \$85.
- Tomasz Gralak. 2024. Archaeology of body and thought: from the Neolithic to the beginning of the Middle Ages. Oxford: Archaeopress; 978-1-80327-721-9 paperback £45.
- Peter Raulwing, Stefan Burmeister,
 Gail Brownrigg & Katheryn M. Linduff (ed.).
 2023. *Chariots in Antiquity: essays in honour of Joost Crouwel* (British Archaeological Reports International Series 3159). Oxford: BAR;
 978-1-4073-6117-8 paperback £98.
- Paul Edgar Bailey Thomas. 2023. The Silures: Celtic identity in Iron Age, Roman and Early Medieval Gwent, South Wales (British Archaeological Reports British Series 680). Oxford: BAR; 978-1-4073-1539-3 paperback £54.
- Assaf Yasur-Landau, Gil Gambash & Thomas E. Levy (ed.). 2024. *Mediterranean resilience:* collapse and adaptation in antique maritime societies. Sheffield: Equinox; 978-1-80050-369-4 hardback £90.