



*Frontispiece 1. Aerial view of the excavation of a Buddhist temple in the city of Barikot in the Swat valley, Pakistan. Investigations of the temple complex during late 2021 have revealed several major phases of activity. The most recent phase, including a characteristic stupa, dates to the first few centuries AD. In turn, this stands on an earlier structure dated to the reign of the Indo-Greek King Menander I in the mid-second century BC. The latest excavations have revealed still-earlier remains, preliminarily dated to the fourth and third centuries BC, coinciding with the siege of Barikot by Alexander the Great in 327 BC. The complex provides insight into the early spread of Buddhism into the Gandhara region (© Missione archeologica italiana in Pakistan ISMEO/Università Ca' Foscari, Venice).*



*Frontispiece 2. A pottery sherd with ink drawings, one of more than 18 000 ostraca from ancient Athribis, Egypt. Located 40km north of Cairo, Athribis is the focus of long-term excavations by the University of Tübingen in cooperation with the Egyptian Ministry of Tourism and Antiquities. The ostraca were recovered from one of the city's sanctuaries. Around 80 per cent are inscribed in Demotic, the administrative script of the Ptolemaic and Roman periods; others are Greek, Hieratic, hieroglyphic, Coptic and Arabic. Some feature pictorial representations, including humans, gods and animals. Ostraca with maths and grammar exercises may be connected with schooling; the figures on the sherd featured here may be a child's drawing (photograph © Athribis-Projekt Tübingen).*



# EDITORIAL

## Matter over mind

☞ Patients attending Sigmund Freud's Vienna consulting room were confronted not only by their own pasts, but also by the ancient past. While seated on the psychoanalyst's couch, Freud's patients were surrounded by objects from his personal collection of antiquities: figurines, pottery, papyri, marble sculpture and painted plaster. Such was his fascination with these ancient objects that Freud's collection eventually grew to more than 2000 pieces, mainly of Egyptian, Greek and Roman provenance. Fittingly, although there is no evidence that he personally requested it, following his death in 1939, his ashes were interred in a fourth-century BC South Italian red-figure krater (Figure 1). Freud's interest in antiquity went beyond the aesthetic; famously, he used the practice of archaeology as a metaphor for psychoanalysis—a digging down through layers of memories to reveal insights into the patient's past.<sup>1</sup> This characterisation of archaeology as a means of uncovering hidden truths does not align well with current scholarly understandings of the discipline. Perhaps, however, his compulsion to collect—a habit formed during a period of near-legendary archaeological work at sites such as Knossos, Troy and the Valley of the Kings—might tell us something about the relationship between the human mind and the materiality of the past?

Surprisingly, for a man intent on self-analysis, Freud wrote little about his motivations for collecting these objects or his thoughts about their significance. Instead, others have sought to 'excavate' his motives, suggesting attempts to materialise his theories of mind or, through the surrogacy of other Mediterranean cultures, to self-fashion a connection to his Jewish ancestry.<sup>2</sup> Several exhibitions have explored Freud and Freudian ideas through his collection of antiquities; the latest is currently on show at the Freud Museum in London (12 February to 26 June 2022). 'Freud and China' focuses on the lesser-known Chinese objects he acquired, exploring Freud's relationship with China and Chinese culture, as well as China's reception of Freudian theories. From terracotta figurines to jade bowls, none of these objects is particularly special or important in its own right. As with most collections brought together in the early twentieth century, few of the objects are of known provenance; rather ironically, their acquisition on the art market has stripped them of the individual backstories and memories that Freud believed were core to understanding the human self. If these objects can tell us little about ancient China, perhaps they can instead raise questions about why and how people collect objects and how humans interact with

<sup>1</sup> LARSEN, S.F. 1987. Remembering and the archaeology metaphor. *Metaphor and Symbol* 2: 187–99. [https://doi.org/10.1207/s15327868ms0203\\_2](https://doi.org/10.1207/s15327868ms0203_2)

BOWDLER, S. 1996. Freud and archaeology. *Anthropological Forum* 7: 419–38. <https://doi.org/10.1080/00664677.1996.9967466>

<sup>2</sup> SCULLY, S. 1997. Freud's antiquities: a view from the couch. *Arion* 5: 222–33.

BURKE, J. 2007. The Shrine of the Dream Collector, in J. Burke (ed.) *Sigmund Freud's collection: an archaeology of the mind*: 4–8. Melbourne: Monash University Museum of Art.



Figure 1. Sigmund's Freud's burial urn—a South Italian red-figure krater, c. fourth century BC (courtesy of Rose Boyd; photograph © Bouke de Vries).


material culture both physically—Freud, for example, was known to handle some of his collection of objects whilst talking to patients—and psychologically.

The connections between the human mind, materiality and collecting are explored in an article in the current issue. Dementia, a condition that impairs cognitive functions, including language, thinking and memory, affects millions of people around the world. A number of archaeological projects and studies have explored how personal possessions or historical objects can be used as a form of therapy, for example by prompting memories.<sup>3</sup> Here,

<sup>3</sup> DARVILL, T., V. HEASLIP & K. BARRASS. 2018. Heritage and well-being: therapeutic places past and present, in K. Galvin (ed.) *The Routledge handbook of well-being*. 112–23. Oxford: Routledge. <https://doi.org/10.4324/9781315724966-12>

however, Nyree Finlay seeks to move beyond archaeology *for* people with dementia to advance an archaeology *of* dementia, contributing to a better understanding of the role of material culture in the lives of people living with the condition. The study focuses on a collection of mostly non-archaeological lithic material gathered by a woman living with dementia towards the end of her life. Finlay argues that the curation of this ‘dementia assemblage’ must be understood in the context of the woman’s earlier life and her engagement with material culture as an artist, and, especially, as an avocational archaeologist. The latter had involved the systematic collection, analysis and curation of prehistoric lithic artefacts; as dementia took hold, however, her attention shifted from authenticity and methodical recording to sensory encounters. As the condition progressed, the tactile and pareidolic qualities of stone took precedence over provenance and classification. Rather than understanding this shift as a deterioration of mental capacity, Finlay argues that it represents a creative transformation of earlier interests and practices mediated through the material world. In this case, archaeological collection practices were transformed into a source of comfort. Here, then, objects are not mementos that prompt specific memories, but rather are to be understood as part of ongoing and evolving connections between the mind and material culture, cognition and sensorial encounter.

## China rising

 The purpose and value of archaeology in the contemporary world has been a recurrent theme of recent issues of *Antiquity*. Last year, for example, we featured a debate section on the relevance of archaeology, as well as articles on ways in which archaeologists can contribute to awareness and policy around plastic waste.<sup>4</sup> In the first issue of 2022, the editorial looked at archaeology’s potential contribution to global Sustainable Development Goals,<sup>5</sup> and Finlay’s study of dementia, above, could be considered to contribute to SDG3 Good Health and Well-being. A common thread in these contributions is that archaeology has much to offer, but that this value is not always recognised by politicians, policy-makers or the wider public; moreover, it is taken as a given that correcting this situation will need to be achieved within the context of diminishing financial resources, as governments redirect spending towards new post-pandemic priorities. In East Asia, however, the recent publication of China’s latest five-year (2021–2025) plan for cultural heritage protection suggests a rather different situation.

Speaking at a recent news conference, Li Qun, the director of the National Cultural Heritage Administration, explained that the fourteenth five-year plan for cultural heritage is, for the first time, “a national-level plan, which reflects the country’s great emphasis on the field”.<sup>6</sup> Specific announcements included compulsory archaeological investigation in advance of

<sup>4</sup> MYTUM, H. & J. MEEK. 2021. The Iron Age in the Plastic Age: Anthropocene signatures at Castell Henllys. *Antiquity* 95: 198–214. <https://doi.org/10.15184/aqy.2020.237>

SCHOFIELD, J., E. PRAET, K.A. TOWNSEND & J. VINCE. 2021. ‘COVID waste’ and social media as method: an archaeology of personal protective equipment and its contribution to policy. *Antiquity* 95: 435–49. <https://doi.org/10.15184/aqy.2021.18>

<sup>5</sup> CONINGHAM, R.A.E. & R.E. WITCHER. 2022. Editorial. *Antiquity* 96: 1–14. <https://doi.org/10.15184/aqy.2022.2>

<sup>6</sup> [http://en.qsttheory.cn/2021-11/05/c\\_678964.htm](http://en.qsttheory.cn/2021-11/05/c_678964.htm)

major urban developments to ensure that the “protection of relics will always be the priority”. Li also announced the intention to commence 80–100 new research excavations annually over the next five years, in addition to the hundreds of rescue excavations undertaken each year. With as few as 1800 registered archaeologists in China licensed to direct such projects, the plan also makes provision by 2025 for the training of an additional 4000 archaeologists and a 25 per cent increase in the number of lab-based researchers to expand capacity for analysis, including dating and DNA. Were such targets only half met, they would still represent an astonishing growth in the numbers of professional archaeologists in China and in the value placed on their research. The new five-year plan therefore reinforces a marked contrast in the fortunes of archaeology in China compared to the current situation in many other countries. But while it is no secret that the Chinese government has sought in recent years to promote China’s past for both domestic and international audiences, many of the challenges Chinese archaeologists face are the same as those elsewhere in the world—such as the effects of climate change.

In this issue, Yuqi Li *et al.* explore the potential effects of rising sea levels by the end of the century on China’s coastal archaeology. Over the past 30 years, sea levels have already risen along China’s coast at a rate higher than the global average (partly due to land subsidence). Modelling of future sea-level rise by 2100 predicts a figure somewhere between 1m and—catastrophically—5m. Using GIS to simulate different scenarios, the authors assess the potential impact of future inundation on China’s coastal heritage. At 1–2m, the impact on known archaeological sites initially appears rather modest, if unevenly distributed due to the hugely variable nature of the nation’s coastline. A more detailed follow-up analysis based on the most recent register of sites available for the Shanghai municipality, however, suggests the ‘modest’ impact of a 1–2m sea-level rise probably reflects the incomplete recording of archaeological sites for many parts of the Chinese coastline. Extrapolating from the low-lying Shanghai municipality to the entire Chinese coast is impossible, but the implications are clear—even at 1–2m by the end of the century, the threat from rising sea levels to China’s coastal archaeology is significant. Moving to the extreme end of current predictions—5m of sea-level rise within 80 years—it is hard to banish the thought that should such a scenario transpire, the submergence of ancient salt-working sites and shell middens may be the least of humanity’s problems. Yet, the critical point is that only by taking concerted collective action now can we hope to avert such a situation. By mapping coastal archaeology and highlighting its vulnerability to sea-level rise, and by researching the effects of marine inundation on earlier human societies,<sup>7</sup> archaeologists around the world can help to make the potential impact of climate change tangible and therefore amenable to political action. In completing and updating the national register of cultural relics,<sup>8</sup> the new generation of archaeologists mandated under China’s latest five-year plan might have a particularly important role to play in this and other global challenges.

<sup>7</sup> E.g. in the English Fenlands: EVANS, C. 2015. Wearing environment and making islands: Britain’s Bronze Age inland north sea. *Antiquity* 89: 1110–24. <https://doi.org/10.15184/aqy.2015.99>; and at Tianluoshan in China: ZHENG, Y., G. SUN & X. CHEN. 2012. Response of rice cultivation to fluctuating sea level during the Mid-Holocene. *Chinese Science Bulletin* 57: 370–78. <https://doi.org/10.1007/s11434-011-4786-3>

<sup>8</sup> [http://english.www.gov.cn/statecouncil/ministries/202111/04/content\\_WS61831940c6d0df57f98e47a2.html](http://english.www.gov.cn/statecouncil/ministries/202111/04/content_WS61831940c6d0df57f98e47a2.html)

## Telling time

As one of the world's most instantly recognisable monuments, Stonehenge has a habit of stealing the limelight. In the study of British prehistory, every avenue (and, indeed, the Avenue) tends, sooner or later, to lead back to Salisbury Plain. Currently on show at the British Museum, 'The World of Stonehenge' exhibition turns this situation on its head, using the magnetism of the monument to explore the wider cultural context in which Stonehenge emerged and evolved. Organised in association with the State Museum of Prehistory in Halle/Saale, the exhibition features more than 400 objects, the majority loaned from dozens of museums across Western Europe, with most of the exhibits never previously displayed in the UK. The objects vary in scale from stone axes through to a substantial part of Seahenge—the timber circle discovered off the Norfolk coast in 1998. Highlights include such well-known objects as the gold, cone-shaped 'hats' from Avanton and Schifferstadt, and the Nebra sky disc, as well as the recently discovered Burton Agnes drum, a decorated chalk cylinder displayed for the first time alongside the Folkton drums (Figure 2). The exhibition takes a long chronological arc, starting with the Mesolithic and moving through to the cusp of the Iron Age. Themes include changing social organisation and world-views, long-distance connections across northern Europe and beyond, migration, conflict and the emergence of solar ideologies. The exhibition appears to have captured the public imagination, with extensive coverage in the UK press and highly positive reviews. 'The World of Stonehenge' runs from 17 February to 17 July 2022 and we will feature a full review in the June issue.

Meanwhile, in the current issue, we feature an article by Timothy Darvill on time-reckoning at Stonehenge. Archaeologists have long recognised that the positioning and orientation of the monument's key components constituted some form of prehistoric calendar. There has been less agreement, however, regarding exactly how the monument was used to mark the passing seasons. Recent work on the phasing of Stonehenge has confirmed that the principal sarsen settings were conceived and constructed as a unified ensemble. Building on this observation, Darvill sets out his interpretation for a calendar based on a solar year of 365.25 days, starting and ending at the winter solstice. As is the nature of all things related to Stonehenge, not everyone will agree with this interpretation, but like all good hypotheses, it has the merit of prompting several new questions: for example, why was such a monumental calendar required and why was this need not felt elsewhere? Dazzled by artificial light, we tend to underestimate pre-modern society's familiarity with the night sky; prehistoric knowledge of astronomical cycles seems extraordinary only as a result of our own personal ignorance. Indeed, other, and earlier, monuments in Britain and Ireland with alignments on the night sky have been identified, suggesting a cosmological reflection of, or even time-reckoning, by lunar cycles amongst hunter-gatherers.<sup>9</sup> Hence, we should be surprised not by the sophistication of early astronomical knowledge but rather by the unusual decision at Stonehenge to monumentalise that knowledge on an unprecedented scale. Even if we accept Darvill's interpretation for *how* Stonehenge was used to mark time, we still need to explain *why* Stonehenge was built. Here, the wider context in which the monument developed becomes vital and—just like 'The World of Stonehenge' exhibition—Darvill looks to connections across north-west Europe and beyond for the spread of solar cosmologies during the third millennium

<sup>9</sup> E.g. GAFFNEY, V. *et al.* 2013. Time and place: a lun-solar 'time-reckoner' from 8<sup>th</sup> millennium BC Scotland. *Internet Archaeology* 34. <http://dx.doi.org/10.11141/ia.34.1>



*Figure 2. Gold lunula, 2400–2000 BC, from Blessington, County Wicklow, Ireland. The lunula is on display as part of 'The World of Stonehenge' exhibition at the British Museum. It is also one of more than 1000 gold objects from Bronze Age Britain and Ireland that are analysed by Raphael Hermann in an article in this issue for evidence of weight regulation (photograph © The Trustees of the British Museum).*

BC. Emergent social hierarchies and the need to regularise festivals may have been particularly important considerations.

## In this issue

Elsewhere in this issue, we feature articles ranging in time from Late Pleistocene cave occupation in Southeast Asia through to an assessment of the damage inflicted during the ISIS/Daesh occupation of Nineveh between 2014 and 2017. From North America, we hear about a collaborative project working with First Nations communities in British Columbia to explore the long-term human and environmental histories of offshore islands, and, from



the Chíncha Valley of South America we learn about post-mortem manipulation of human remains during the Late Horizon and Colonial periods, including the ‘threading’ of vertebrae onto canes. In addition to time-reckoning at Stonehenge (above), this issue also contains a second article which draws attention to the importance of astronomical observations in the past. The Phoenician island-city of Motya, just off the west coast of Sicily, has been a site of archaeological investigation for over a century. One feature that has attracted much attention is a large rectangular basin, long thought by analogy with Carthage to be a ‘kothon’ or military harbour. Building on the results of long-term excavations that have revealed a series of temples positioned around the basin and a huge circular enclosure wall, Lorenzo Nigro reinterprets the kothon as a sacred pool at the centre of a monumental religious complex. The orientations of various structures within the compound suggest their intentional alignment on specific celestial events, such as the point on the horizon at which Sirius rises at the autumn equinox. Moreover, the sacred pool—with a larger-than-life statue of Ba’al standing on a podium at its centre—is suggested to have served as a reflective surface for astronomical observations, allowing the precise measurement of constellations in the night sky. Known for their long-distance seafaring across the length of the Iron Age Mediterranean, Phoenician navigators placed particular importance on astronomical observations, associating deities with constellations, such as Ba’al/Orion. Far from a military complex built in imitation of Carthage, the Motya complex emerges in Nigro’s words as an “astronomical observatory”, distinguishing the island-city as a cosmopolitan Mediterranean hub in its own right.

By coincidence, one of the finds from the Motya complex also brings us back to where we started, with Freud and his collection of antiquities. Among the sculptural finds from Motya’s sacred pool is a rather battered statuette thought to represent Thoth, the Egyptian god of the moon and astronomy, manifested in the form of a baboon. Two and a half thousand years later, the same deity in the same guise—a seated baboon—could be found on Freud’s desk, sitting as the god of wisdom and intellect next to a bronze statuette of Athena.<sup>10</sup> Thoth, it seems, could speak across time. Indeed, the deity played multiple other roles in the Egyptian pantheon, also serving as the god of time-reckoning and writing, of science and the arts, and as one of the gods who helped to pass judgement on the dead. Perhaps there should be space for a statuette of Thoth on every archaeologist’s desk?

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Durham, 1 April 2022

<sup>10</sup> SCULLY, S. 1997. Freud’s antiquities: a view from the couch. *Arion* 5: 222–33.