

Menhirs of the Munda tribe, Sundergarh, Odisha, India. The Munda erected menhirs as memorial markers to deceased individuals, symbolising their status in the community. For more details, see Mendaly in the August Project Gallery: http://antiquity.ac.uk/antplus/projgall.



Excavation of a circular structure at the multi-period site of Nahal Efe in the Negev Desert, Israel. Constructed from flat limestone slabs, the building was interpreted as a single phase dwelling, and was dated by charcoal to the Middle Pre-Pottery Neolithic (second half of the tenth century BC). For more details, see Borrell et al. in the August Project Gallery: http://antiquity.ac.uk/antplus/projgall.

EDITORIAL

Travelling back in time, should that ever become possible, would surely be an irresistible prospect for archaeologists. Which of us would not be intrigued to see what Bronze Age societies were really like, how the Rapa Nui statues were raised, or (more prosaically) whether our proposed reconstructions of sites and buildings bear any relationship to reality? For the present time, such forays remain an exercise of the imagination. But can it ever be right to give that exercise physical form through reconstruction? The temptation has sometimes proved too powerful to resist, but rather than reaching back to an authentic original, the result is often to fix them in a new, more recent past. One has only to think of the Palace of Minos at Knossos. Excavated by Sir Arthur Evans, it was heavily reconstructed in the first decades of the twentieth century, incorporating an unavoidable echo of the Art Deco style then currently in vogue. The results are evocative, but hardly authentic. How many tourists climbing the Grand Staircase realise that the coloured columns supporting the upper floors are concrete replacements for vanished timber originals, their shape and colour extrapolated from fragmentary frescoes? It is very much a product of its time, and while more impressive than a pile of ruins, potentially very misleading.

There may be more justification when we are faced with a recently destroyed monument or building that has been minutely recorded. Here, the archaeological imagination has much less scope to mislead. The devastating news in May 2015 that forces of the so-called Islamic State had captured Palmyra sent new shock waves through the archaeological community, all too aware (after Nimrud and Hatra) of what was likely to follow. And follow it did, with the destruction of the temples of Bel and Baal Shamin, the Arch of Triumph, and several of the tower tombs in the dramatic Valley of the Tombs to the west of the ancient city. It was with a mixture of relief and foreboding that we learned in March this year that IS had been expelled. In the event, although iconic elements of the ancient city had been lost, the damage was less extensive than had been feared. Almost immediately, plans began to be made to rebuild what had been destroyed. For Maamoun Abdel-Karim, Director-General of Antiquities and Museums, "The message of the Syrian people is that we cannot leave the two temples in ruins. We are determined to bring Palmyra back to life".

In contrast to Knossos, of course, the intention would be to restore the lost monuments to their pre-conflict state, rather than to their original condition. At first sight, that sounds very reasonable. The proposal, however, has led to predictable controversy. Archaeological sites are not static entities, preserved in aspic from some pre-modern past, but are active components of the modern world. Should we be seeking to erase the memory of recent events by turning back the clock, and restoring what has been lost? Can that ever be done?

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As Cathy Gere remarks, "Concrete Knossos may be the most eccentric archaeological reconstruction ever to achieve scholarly acceptance." Gere, C. 2009. Knossos and the prophets of modernism. Chicago (IL): University of Chicago Press, p. 5.



Figure 1. The replica arch from the Temple of Bel at Palmyra, standing in Trafalgar Square, London (image courtesy of the Institute of Digital Archaeology).

What we shall have, surely, is merely a rebuild, using a mixture of ancient and modern materials.

Alternatively we can apply digital technology to create exact, detailed replicas. The Institute for Digital Archaeology at Oxford has done just that, using existing photographic records to construct a detailed copy of the arch that stands at the entrance to the enclosure of the recently destroyed Temple of Bel. This is part of a wider initiative, with UNESCO support, to distribute cameras to volunteer photographers in troubled areas of North Africa and the Middle East so as to create a photogrammetric record of important ancient buildings. That can never be a substitute for the real thing, but it is better than nothing. In a sense, it is equivalent to developer-funded archaeology, salvaging information before it is irretrievably lost, although without (we hope) attracting the misnomer of 'preservation by record'. And (we hope again) in most cases it will not prove to be needed.

The replica arch of the Temple of Bel was unveiled in London in April (Figure 1). Preparations began 12 months ago, when it was already too late to get safely and easily into Palmyra, and so the team had to rely on existing photographs. Standard photogrammetric software was inadequate to create a 3D model of sufficiently high quality, and special processing was employed to bring it up to engineering standard. The digital dataset was



Figure 2. The reconstructed mound at Newgrange, faced with white quartzite cobbles and dark grey granite.

then used to program computerised drills in an Italian quarry to cut blocks of Egyptian marble and construct a replica, exact in all respects save size. The original stood 15 metres high; the new version (more correctly described as a scale model) only 6 metres. It stood for three days in Trafalgar Square, attracting attention from media and politicians; it is now showing again in Oxford (July/August); and next month (September) will travel to New York.

The pros and cons will continue to be debated. Could the money have been put to better use? Does it distract us from more pernicious forces that are destroying archaeological sites in the region, such as agriculture and urban sprawl? Surely, however, the Palmyra replica has merit as a symbolic act, challenging the cultural nihilism of extremists? It is also an impressive demonstration of what can now be achieved with modern technology, although we must never let the message be lost that a replica is no substitute for the original.

The hazard of reconstruction was brought vividly to mind again during a recent visit to Newgrange in Ireland. The story here is well known. The fourth-millennium BC passage grave, surviving as a grassy eroded mound, was excavated from 1962 to 1975, then reconstructed on the basis of the materials found on and around it. Especially distinctive was a spread of white quartzite cobbles in front of the entrance, extending several metres to either side, and including small blocks of contrasting dark grey granite. When the excavations had ended, the fateful decision was taken to reconstruct this side of the mound as a near-vertical white wall, fixing the quartzite speckled with granite to a concrete backing. The result is striking, not to say shocking, in its brilliance, especially on a sunny morning (Figure 2).



Figure 3. Oweynagat, 'the cave of the cats': a stone-built souterrain leading to a natural limestone cave, Rathcroghan, Ireland.

Whether it is accurate is open to question (see comments by Cooney (2006²) and Eriksen (2006³)), although the majority opinion appears firmly against. It certainly makes for a dramatic visitor experience, although the more subtle presentation of Knowth (a second major passage tomb in the same complex) is more comfortable for archaeologists: a group of grassy mounds, essentially a consolidation of the remains rather than a leap into the murky waters of imagined prehistoric appearances.

Conversion and continuity

Seventy miles west of Newgrange stands another large mound, Rathcroghan, one of the four royal centres of pre-Christian Ireland. It was here, according to legend, that the kings of Connaught were initiated, and archaeology has revealed a series of timber buildings, enclosures and processional ways⁴. This was a highly significant location, and the landscape all about is peppered with raths and ringforts, and smaller burial mounds. That may be reflected in the ancient name 'Crúachain', meaning 'place of the burial mounds'. The density of sites—more than 60 in an area of 9 square kilometres—shows just how much can survive, even in Western Europe, where pasture rather than arable farming has been the norm.

At the foot of the slope below the main mound of Rathcroghan is an opening beneath a hedgerow, capped by a stone slab (Figure 3). A stone-built souterrain leads back to a natural

Cooney, G. 2006. Newgrange—a view from the platform. Antiquity 80: 697–708. http://dx.doi.org/ 10.1017/S0003598X0009414X

Eriksen, P. 2006. The rolling stones of Newgrange. Antiquity 80: 709–10. http://dx.doi.org/ 10.1017/S0003598X00094151

⁴ Waddell, J. 2014. Archaeology and Celtic myth. Dublin: Four Courts.

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limestone cave, extending under the road and into the adjoining field. This is Oweynagat, the 'cave of the cats'; an innocent sounding name for an innocent looking place. But early Irish legend holds that from this opening issued a herd of magic pigs (no less!) that laid waste the surrounding countryside. This narrow cave is also associated with three-headed monsters and the war goddess Morrigan; not for nothing did a ninth-century writer dub it 'Ireland's gate to Hell'. Oweynagat is one of those places where prehistoric archaeology and pre-Christian beliefs come into tantalisingly close proximity, although you would hardly suspect its sinister significance from a casual visit today.

Caves are often places of spiritual encounter, and a case study by Jago Cooper and his colleagues in this issue of *Antiquity* (pp. 1054–71) forms a Caribbean counterpoint to Oweynagat. The island of Mona was one of the first to be visited by Columbus (on his second voyage in 1494), and the indigenous Amona were soon overwhelmed by Europeans and their African slaves. Some 30 cave systems were already frequented by the Amona before European contact. This much is shown by cave walls decorated with geometric motifs and with representations of therianthropomorphs and ancestral beings. At Cave 18, however, the pre-Contact motifs were later joined by Latin and Spanish names and phrases, and Christian symbols. Some were made by the Spanish, others probably by converted indigenous people from either Mona or the adjacent Caribbean islands. The proximity of the older and newer images leaves no doubt that the two are to be viewed together, and that we have here an overt appropriation of an earlier sacred space by the emissaries of the new religion.

Rathcroghan and Oweynagat were abandoned when Christianity arrived in Ireland; on Mona there was continuity. In other cases, continuity with the past may be contested. In a recent paper, Francesco d'Errico and colleagues observed that technological innovations and specific artefact types, including symbolic items, found in Late Stone Age sites in southern Africa can be traced back to Border Cave some 40 000 years ago. This has sparked a lively debate (see this issue pp. 1072–89) with Justin Pargeter and colleagues on the relevance of these observations to the ethnogenesis of the San hunter-gatherer communities of the region. Ethnography is an excellent source of analogies and insights for archaeologists, and especially for those concerned with the prehistoric past, but speculation about specific connections, which d'Errico *et al.* are not suggesting here, would transport us rather rapidly into contentious territory and be more difficult to support. That is true even though some technologies continue to prove their usefulness over very long periods of time.

Antiquity Prizes 2016

As regular readers of *Antiquity* will know, every year we award a prize (the Antiquity Prize) for the best article to have appeared in the previous year, and a second prize (the Ben Cullen Prize) for the runner-up. Both articles are made freely available in perpetuity. The decision is made in two stages. First, members of the Editorial Advisory Board are invited to nominate articles to create a shortlist; then the Antiquity Trustees make the final selection, which is confirmed at their annual meeting in April.

The Antiquity Prize 2016 goes to Dan Lawrence and the late Tony Wilkinson for their article 'Hubs and upstarts: pathways to urbanism in the northern Fertile Crescent', which appeared in our April 2015 issue (pp. 328–44). The authors document the varying routes to

urbanism in south-west Asia, drawing on 40 years of fieldwork. Early urbanism in this region was a fragile and fluctuating phenomenon. Large sites grew quickly, but then collapsed and their populations dispersed. Older urban centres, growing more slowly, were more stable, and developed into the first true cities around 4500 years ago. The combination of boom towns and slow burners, of hubs and upstarts, shows how the path to city life, when people for the first time came together in communities numbering in the thousands, was a complex and irregular process.

The Ben Cullen Prize 2016 is awarded to Damian Evans and Roland Fletcher for one of the papers in the special section on Angkor in our December 2015 issue, 'The landscape of Angkor Wat redefined' (pp. 1402–19). This showed how the interior of this emblematic Cambodian temple was not the vast empty space we see today, but was filled by a grid pattern of roads, ponds and buildings, and that to the south of the temple there was an extensive garden area of raised fields. This discovery has been made possible by LiDAR, and demonstrates just what can now be achieved even in heavily wooded areas. There is a special appropriateness to the award, as Ben Cullen (in whose memory this prize was established) was a student of Roland Fletcher at the University of Sydney before his sudden and untimely death in 1995.

Print and online

11 These are rapidly changing times for archaeology and academic journals, and new technologies, new opportunities and new challenges are keeping us all on our toes. One piece of good news came from a recent survey of US academic librarians⁵, who reported that libraries continue to fulfil a vital role as purveyors of ebooks (and presumably online journals), even if their new accessions of traditional print copies have declined. Indeed, according to the survey, US academic libraries acquired over 250 million ebooks over the decade or so to 2012, equivalent to a quarter of their total holdings of printed volumes assembled over the previous four centuries. They are also seeing considerably greater footfall. The knowledge economy is evidently thriving, even while its form is shifting and adjusting to new technology. For now Antiquity continues to appear in both printed and digital formats. We are aware that most of our readers will consult the online version, but also that many (and not only older readers) take pleasure in handling a physical printed copy. If your library doesn't take the printed journal, do come and see it, and meet some of the Antiquity team, at one of our conference stands (EAA in Vilnius, Lithuania; WAC in Kyoto, Japan; or TAG in Southampton, UK; we will also be represented at EASAA in Cardiff, UK; and we always attend the annual SAA meeting in the USA in April). That said, the digital format affords much wider access, as well as opening up the potential for additional features. We are looking to develop those over the coming years.

Chris Scarre Durham, 1 August 2016

Barclay, D.A. Has the library outlived its usefulness in the age of the Internet? You'd be surprised. *The Conversation*, April 28, 2016. Available at: http://theconversation.com/has-the-library-outlived-its-usefulness-in-the-age-of-internet-youd-be-surprised-58198 (accessed 31 May 2016).

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