



Dr Mark Holley, underwater archaeologist for the Grand Traverse Bay Underwater Preserve in Michigan, USA, surveys one of several sunken boats off Haserot Beach on the Old Mission Peninsula. Photograph taken on 31 July 2007 by Chris Doyal, using a Nikon D200 in an Aquatica housing and a Tokina 10-17mm lens set to 15mm. Exposure 1/40 @ f10. Photograph submitted by Chris Doyal, Chris Doyal Photography (email: rcdoyal@sbcglobal.net).



Top: the 'Maid of Harlech' – Lockheed P-38F 'Lightning' American WWII fighter plane at Harlech Beach, North Wales. The aircraft crash-landed on 27 September 1942 after engine failure, was covered by shifting sands and forgotten before changing erosion patterns uncovered the wreck in 2007. Photograph taken using Kite Aerial Photography (KAP) using an Olympus Stylus 770 SW mounted on a lightweight, battery-powered, rotating platform suspended by a harness from the string of an ordinary kite. Photograph submitted by Ric Gillespie, TIGHAR (email: tigharic@mac.com). Bottom: Pre-Columbian raised fields (c. AD 1000) in western French Guiana. Thousands of raised fields have recently been found along the French Guiana coast during ULM aerial surveys. These abandoned fields indicate a high population density in this area during the Pre-Columbian period. Photograph submitted by Stéphane Rostain, CNRS/University of Panthéon-Sorbonne (email: stephen.rostain@mae.u-paris10.fr).

EDITORIAL

☞ Life is made up of small stories and big histories, and none of us knows which of these makes more sense in the end: the grand narrative with its swooping destinies – or the private dramas and their unresolvable consequences. In archaeology the most essential property of the grand narrative is its chronological framework – today provided mainly by radiocarbon and its isotopic cousins. This year we published a new framework for prehistoric society in south-east Asia (March), and for metallurgy in Eurasia (December). We travelled through 35 000 years in central India (June) and dated the first pottery in Africa (December). For me these are landmark articles from the class of 2009, which you can see lined up for inspection on the next page.

But there were personal stories too, some reminding us that archaeology is every bit as powerful a way of contemplating the human condition as poetry or music. I'm thinking of Eung Tae's tomb of course (March), but those who like the purer forms of artefact biography will love the ornamental trousers from Sampula in China (December). Starting life as a wall hanging in a Bactrian palace, they were abducted by nomads and ended their days in a massacre by the Xiongnu. These are trousers with attitude, trousers that survived everything life threw at them, to finally emerge tattered but unbowed from a tomb in the Tarim basin.

Putting new life into old trousers is only one of archaeology's many talents. On a hilltop in South Africa (September), we were dancing to music in a decorated rock arena, inspired by early twentieth-century life in the Kalahari. And when ethnographic analogies run dry, we can reproduce scenes through experiment: this year we made stone cleavers in an Acheulean quarry (September), compared the killing properties of stone- *versus* wood-tipped arrows (September) and tested some bronze shields to near destruction (December). Our authors evoked dinner parties at Çatalhöyük where hosts flaunted their aurochs (September), and enlarged the ritual landscape at Stonehenge, which is growing annually in the mind, from a quirky temple to a Neolithic mecca (March).

And it's worth mentioning again the achievements of molecular methodology: the sequence of Viking life obtained from the DNA in a thin core of soil at 'The Farm beneath the Sand' in Greenland; and elsewhere the work of stable isotopes, deducing the provenance of ivory in copper age Portugal, of freshwater fish in Aristophanes' Greece, glass in Islamic Syria, and the diet of medieval bishops at Whithorn. Micromorphology, microstratigraphy and molecular assemblages are joining the tool kit of the ordinary archaeological explorer – or should be.

☞ Needless to say we could not let 2009 pass without offering a tribute to Charles Darwin, author of *On the origin of species by means of natural selection* and progenitor of the primacy of evolution as the driver of history. As Chris Evans showed us in June, Darwin studied the earthworm and told archaeologists something about site formation, and even did a dig or two himself (assisted by his family). But some readers may consider that we avoided the key issue: what is the role of evolution in archaeological thinking today? Is it discredited in the post-modern age? Evolution was certainly applied to artefacts – and to societies – in the nineteenth century, but in a way that implied not so much 'the survival of

the fittest' as 'the arrival of the British': a vision of progress towards civilisation led by empire – a human trajectory heading towards afternoon tea at a cricket match near Cambridge.

Of course Darwin's evolution wasn't like that: its consequences were diversification not convergence, and so, applied to artefacts, would provide a mechanism for the way ideas spread and were adapted to different ecological niches, like plants. *Evolutionary Archaeology*, as it is being developed by Stephen Shennan and colleagues, wants us to see material culture as constructed and inherited in a similar way to genes¹. Each person has a dual inheritance, genetic and cultural, which can then be passed on by the same processes of loving and learning to new people in new places. This is explanatory in the same sense as evolution explains the diversity and distribution of species. It promises a chronological map of material continuity and contact, parallel to that of genetically linked populations – an exciting prospect, the grandest of grand narratives. Moreover, the project of constructing a giant evolutionary system has the great merit of putting the whole archaeology profession into useful work: every scrap of material in every small rescue excavation has an immediate part to play.

☞ One of Darwin's TV celebrants in 2009 was the much-loved broadcaster David Attenborough, and in the autumn of the year, at Cambridge, a large crowd turned out to celebrate *him*. His amusing anecdotes about the 1950s programme *Animal Vegetable and Mineral* produced the usual collective sigh for the brighter-than-life personalities of a sepia-tinted age. But Attenborough himself showed how much our perception of the human animals of the day is actually owed to technology. A lot of the fun and theatricality went out of archaeology programmes when they stopped going out live, and then again when the 16mm teams with their 'actuality' and 'pieces to camera' gave way to sequences constructed from 50 hours of random video footage. Archaeology still has plenty of personalities, but maybe modern TV is not so inclined to unleash them. It has plenty of good stories too, and David Collinson noted that the programmes of the 1950s and 60s could draw on those supplied by presenter Glyn Daniel in his capacity as editor of *Antiquity*. We now generate many more stories and they cover a great deal more of the planet. In truth, the past has never been so interesting and the media never so indifferent to what it is really telling us. When not put in the nursery to watch television, the public finds archaeology's agenda inspiring – the origins of human behaviour, the fate of states, the role of the sexes, the reason for religion, the biography of the environment. There is a hunger out there. All it needs is an imaginative producer, a sack of money and this journal in its back pocket.

☞ Autumn also brought a rich harvest from Africa, gathered in at two British meetings within a few days of each other – the sixth African Archaeology Research Day at Liverpool and the African Archaeology Group Meeting at Cambridge. Africans here joined forces with *Africanists* – i.e. archaeologists who study Africa while being based somewhere else. At Liverpool, there were papers on the environment in Kenya two million years ago, nut-cracking chimpanzees, site formation in the Haua Fteah sink hole, stone platform-builders in the Lower Omo Valley, early Islamic trans-Saharan trade and much more. African (and Africanist) archaeology is clearly buzzing.

¹ Recently, Stephen Shennan (ed.) *Pattern and process in cultural evolution* (University of California Press, 2009).

Tally for 2009. The full articles may be located by using the author name in brackets.

PLEISTOCENE

1. *Before 100K BP*: Lithics and fauna at Durunsulu in Anatolia, Turkey (Güleç); Acheulean cleavers at Isampur, India (Shipton).

2. *100 – 25 000 BP*: Gravettian game roasting at Pavlov VI, Czech Republic (Svoboda); Microlith sequence at Jwalapuram 9 rockshelter in southern India (Clarkson).

3. *25 000 – 10 000 BP (8000 BC)*: Decorated artefacts from El Mirón in Cantabria, Spain (Gonzalez Morales); The first pottery in Africa (Huysecom); Ochre and hides in a Natufian burial (Dubreuil); development of metallurgy in south-west Asia (Roberts).

HOLOCENE

4. *8000 – 5000 BC*: Settlement in the Sahara (Brooks); Pastoral enclosures in Jordan (Kennedy); Millet cultivation in the foothills of NE China (Liu); Grain storage and symbolism at Tel Tsaf in the Jordan Valley (Garfinkel); Domestic display of aurochs at Çatalhöyük, Turkey (Bogaard); *Bos taurus* in Anatolia (Arbuckle); Floor sequences at Mari, Greece (Karkanas); Cannibals in LBK Europe (Boulestin).

5. *5000 – 4000 BC*: Backed blades for making bone and wood tools in SE Australia (Robertson).

6. *4000 – 3000 BC*: Greater Cursus at Stonehenge built (Thomas); Ritual mound of dugong bones in the Gulf (Méry).

7. *3000 – 2000 BC*: Cremation burials at Stonehenge (Parker Pearson); Origins Xia, Shang and Zhou in Central Plain of China (Jing); Flint daggers for sacrifice in Scandinavia (Skak Nielsen); Mass burials at Kerma, Sudan (Judd); African ivory in Portugal (Schuhmacher); Pigs in woods in Britain (Hamilton).

8. *2000 – 1000 BC*: Bronze Age cemeteries at Deneia in Cyprus (Webb); Chronological framework for Thailand (Higham); The twin girl in Tutankhamen's tomb (Hellier); Kivik revisited (Goldhahn); Rock art in Atacama Desert, Chile (Gallardo); Arrival of pigs in island south east Asia (Piper); Sheep and horses in Kazakhstan (Frachetti); Clubbing and stabbing in south-east Spain (Aranda-Jiménez); Royal purple at Qatna, Syria (James).

9. *1000 – 0 BC*: Xiongnu settlements at Egiin Gol in Mongolia (Wright); Signed sculpture in southern Spain (Chapa); Ornamental trousers from Xinjiang, China (Wagner); Freshwater fish in Greece (Vika); Ritual landscapes in Sweden (Löwenborg); Apulian red figure pottery in south Italy (Thorn).


10. *0 – 1000 AD*: Pottery and Islam in southern Spain (Lopez); Provenance of glass in Islamic Syria (Henderson); Monuments in Hadramawt (Arabia) (Bin 'Aqil); Horticulture in Northern Australia (Denham); Pre-Inca mining at Nasca, Peru (Eerkens); A coin of Domitian II (Abdy); Romans and Saxons in Oxfordshire (Hills).

11. *1000 – 2000 AD*: Wells and pastoralism in the Kalahari, southern Africa (Lindholm); Love letters in Eung Tae's tomb, Korea (Lee); Apache wickiups in the American Southwest (Seymour); A Mesoamerican worldview (Nielsen); Dirt DNA at 'The Farm beneath the Sand' in Norse Greenland (Hebsgaard); Thorium dating of corals from shrines on Hawai'i (McCoy); Music, dance and rock art in South Africa (Rifkin); Agricultural terraces in Philippines (Acabado); Geometric earthworks in Amazonia (Pärssinen); Fish-eating bishops at Whithorn, Scotland (Müldner).

And it needs to be. Africa is now one of the world's prime development targets, with an average growth rate of 14.84 per cent between 2000 and 2005. In a recent article brimming with good sense, Noemie Arazi lines up the good and the bad archaeology of recent hydroelectric schemes and draws attention to the mega-projects that are on the way: the West-African pipeline from Algeria to Nigeria, the Trans-Sahelian Highway between Dakar and N'Djamena, railways in west Africa and the Grand Inga Dam in the Democratic Republic of Congo. As usual the Atlantic nations play an equivocal role, importing the CRM concept while exploiting its weaknesses. Archaeological Impact Assessment is clearly essential for any retrieval of research from the jaws of destruction, but it is not mandatory in most African countries (South Africa, Botswana and Malawi are exceptions) and incredibly, is not included in programmes in Africa financed by the European Union. What kind of union protects its own heritage but not the subjects of its overseas investments?

Arazi's fine article is published this year in *Azania, Archaeological Research in Africa*². Although not a new publication (this was no. 44), it has a new look and a relaunch and it seems right to greet it and wish it well in its important mission. That mission, say editors Kevin Macdonald, Bertram Mapunda, Peter Mitchell and Peter Robertshaw, is to provide a forum for publishing papers on *all* aspects of Africa's archaeology, including the diaspora – the cultural traces of enslaved Africans overseas. Amongst many welcome features of this smart journal are the call for methodological studies, the inclusion of abstracts of recent doctorates and the invitation to submit (and publish) in French as well as English.

Readers who want to keep up with new work in Africa will not only want to read *Azania*, but to note the meetings of the Society of Africanist Archaeologists and next year's in particular – a pan-African Congress hosted jointly by the Institut Fondamental d'Afrique Noire and University Cheikh Anta Diop at Dakar in Senegal.³ This promises to be the event of the decade in what is arguably archaeology's most fruitful and vulnerable continent.

 Paul Ashbee, excavator of the Wilsford shaft and expert on barrows, has died at the age of 91. Paul was a much loved (and much mimicked figure) in the British archaeological community, a mine of quips and quiddities and abstruse findings, such as make archaeology a joy as well as quest. He was married to Richmal Disher, niece of Richmal Crompton and celebrated children's writer and they lived in an old rectory outside Norwich, whose shelves groaned with copies of the *Just William* saga in numerous languages. For those who don't know William (and it's never too late to start) he is a figure of fearless curiosity and irrepressible optimism, and while he gets into numerous scrapes, they are usually endearing and harmless, and his cunning author does nothing to denigrate the merits of his relentless logic of inquiry. What better patron saint for archaeology than William (and his amiable dog Jumble).

Martin Carver
York 1 December 2009

² Noemie Arazi, Cultural research management in Africa: challenges, dangers and opportunities, *Azania* 44.1 (2009), 95–106.

³ 1–7 November 2010. See <http://panaf-safa2010.ucad.sn/>. Contact panaf2010@ucad.sn