DAST



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THE NEWSLETTER OF THE PREHISTORIC SOCIETY

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THE MOON, THE BONFIRE AND THE BEAKER? ANALYSING WHITE INLAY FROM BEAKER POTTERY IN ABERDEENSHIRE

The Beaker pottery of Aberdeenshire stands out, quietly but clearly. Placed within the unassuming protection of 'flat' short-cists on gravel slopes and knolls, many have been discovered and excavated over the last two centuries. This has resulted in a well-contextualised sample of Beakers in the collections of the University of Aberdeen and National Museums Scotland, which has been studied by a notable series of scholars, from Margaret Crichton Mitchell to Ian Shepherd, resulting in a fine body of specialist/site reports and syntheses. Building on these foundations, the recent Leverhulme Trustfunded Beakers and Bodies Project based in Marischal Museum, University of Aberdeen, has included archival research, osteological analysis, a critical appraisal of existing dates, evaluation of burial assemblages, 40 new radiocarbon dates and stable isotope analyses and the investigation of white infill within incised and comb-impressed decoration. This surface finish is particularly striking in contrast to reddish/buff burnished, undecorated zones.

Of the 54 Beakers examined under stereo microscope, 31 (57%) had clear evidence of white paste, while a further 5 (9%) were probable and a minimum of 7 (13%) were possible cases, making this a more common feature of Beakers than previously considered. Initial scanning electron microscope (SEM) analysis indicated the presence of calcium and phosphorus, while further analysis of



Beaker from Borrowstone, cist 2, Kingswells, City of Aberdeen (ABDUA 15640)

four Beakers using Raman spectroscopy has indicated that this was in the form of calcium hydroxyapatite - the major inorganic constituent of bone. The paste therefore appears to have comprised ground-down cremated bone, applied along with an as yet unidentified fixing agent. Sampling and analysis is, however, continuing, including ensuring that none of the elements identified are the result of

The copy date for PAST 66 is 1 October 2010. Contributions to Joanna Brück, School of Archaeology, Newman Building, University College Dublin, Belfield, Dublin 4, Ireland. Email: joanna.bruck@ucd.ie Contributions on disc or as e-mail attachments are preferred (either word 6 or rtf files) but hardcopy is also accepted. Illustrations can be sent as drawings, slides, prints, tif or jpeg files. The book reviews editor is Dr Mike Allen, Wessex Archaeology, Portway House, Old Sarum Park, Salisbury, Wilts, SP4 6EB. Email: aea.escargots@gmail.com Queries over subscriptions and membership should go to the Society administrator Tessa Machling at the London address above.

taphonomic processes or old conservation work. While it is not currently possible to determine whether the bone was from an animal or human source, its presence in the funerary context appears to indicate a symbolic significance.

The presence of calcium phosphate on several Scottish Beakers was noted by D. L. Clarke in 'Beaker Pottery of Great Britain and Ireland', who interpreted it as crushed burnt bone. Other work on Beakers, such as that by Mary Davis in Britain and C. P. Odriozola and V. M. Hurtado Pérez in Spain, has also shown the presence of bone in a number of instances. Clarke also identified the use of crushed chalk as white inlay on English Beakers, noting that an unknown number may have lost their alkaline white inlay through taphonomic processes. The large number of Aberdeenshire Beakers with white inlay may simply be due to the protection offered by stone cists. However, both the use of 'flat', well-sealed short-cists and the use and survival of bone inlay may be manifestations of a particular, regional, attitude to the treatment and containment of bodies.

A consideration of the dates from ten skeletons associated with Aberdeenshire Beakers with white inlay shows a range from 3865±40 BP (2470-2205 cal BC at 95.4 % probability; GrA-29077) from Borrowstone, cist 1, to 3647±29 BP (2135-1935 cal BC at 95.4 % probability; OxA-V-2243-44) from Persley Quarry. It therefore seems probable that white inlay was a feature throughout most of the Beaker period in Aberdeenshire. Indeed, a wide variety of typological forms are represented among the sampled vessels with evidence of white inlay. In Clarke's scheme, vessels from Northern British/North Rhine to Final Northern are present; in Shepherd/Lanting and van der Waals's scheme, Steps 3 to 6 are represented; and in Needham's scheme, 'S'-Profile, Short-Necked and other regional variations of the Short-Necked type, are all present. The absence of white inlay from All-Over-Corded/Step 1-2/Low-Carinated vessels partly reflects the low number of these vessels discovered, but it may also be noted that the style of decoration employed on these pots is not as conducive to the application of an inlay.

It is therefore possible that the sharp-edged incision and toothed comb-impression of other types may be directly related to the application of white inlay, such that it was an intrinsic feature of the appearance and symbolism of much comb-impressed Beaker pottery. The white fill was possibly applied by the comb in a 'tattooing' fashion, although this awaits further analysis and experimental work.

The findings fit well with Julian Thomas's argument that Beakers focused attention on, and guided meaning of, the identity of the dead body. Ann Woodward has noted a possible connection between



Beaker sherd from Tavelty Farm, Kintore (ABDUA 14261)

comb (impressions), bodily adornment and changing concepts of personhood during the Beaker period, while Ian and Alexandra Shepherd have noted that the apparent male: female dichotomy in the body posture of Aberdeenshire's Beaker inhumations extends to the typology of Beakers. The presence of bone fill perhaps marked the Beaker as an idealised and ancestrally verified representation of personhood and genealogy to be considered in connection with the particular, named identity of the dead.

It has been suggested by Richard Bradley that white and red may have had a cosmological significance communities who constructed Aberdeenshire's broadly contemporary recumbent stone circles. The observation of the 'milky' moon, acts involving fire and the deposition of quartz have long been recognised as characteristics of these monuments. Quartz is also known from Beaker burials, featuring in significant quantities within the cist cemetery at Borrowstone, near Aberdeen. At Forglen House in Buchan, quartz-like pebbles and three Beakers were laid out in adherence to the typical arrangement of recumbent stone circles: with a rectangular 'pavement' (c.1.8m by 0.91m) in the location usually preserved for the south-western setting of a large recumbent stone and a line of quartz tracing the north-east/south-west alignment that forms such a major structuring principle of these stone circles.

Unfortunately, the chronology of recumbent stone circles remains relatively fluid, with possible dates covering the Later Neolithic and Early Bronze Age. It therefore remains to be established whether the cosmological principles that appear to be shared between recumbent stone circles and Beakers were the result of a unified worldview or whether the pre-existing symbolic repertoire developed at these monuments may help to explain the widespread adoption of Beaker practices in Aberdeenshire during the mid/later third millennium BC.

These regional considerations, compelling as they are, should be tempered with wider considerations: the Beakers of north-east Scotland are not alone in presenting a white inlay of ground-down bone. A similar surface finish, consisting of calcium carbonate, has been identified upon Beakers from Continental Europe. White inlay on the Beaker pottery of Aberdeenshire may therefore reflect the fusion of pre-existing or independently developed regional readings of more distant and unifying dimensions and ideas conveyed by the Beaker 'network'. These issues and others will be considered in the publication of the project's wider findings in due course.

Neil Curtis, Marischal Museum, University of Aberdeen

Dr Ljiljana Popovic, School of Natural & Computing Sciences, University of Aberdeen Neil Wilkin, Research Assistant, Beakers and Bodies Project, and PhD student, University of Birmingham Margot Wright, Marischal Museum, University of Aberdeen

Acknowledgments

The Beakers and Bodies Project was funded by the Leverhulme Trust (grant F/00 152/S). Grateful thanks are also due to Dr Jan Skakle of the School of Natural & Computing Sciences, University of Aberdeen, for the use of analytical equipment and facilities.

A UNIQUE IRON AGE GOLD HOARD FOUND NEAR STIRLING

A remarkable hoard of Iron Age gold torcs was found near Stirling in central Scotland in late September 2009 by David Booth - on his first outing with a metal-detector! The find includes some exceptional and unique pieces, and expands our view of the use of gold in the Iron Age.

The hoard consists of four torcs. Two are ribbon torcs - fine, twisted ribbons of gold with hooked ends. One has knobbed terminals, a common form; the other has more unusual disc terminals. There has been an extended debate over the type's dating. For a long time they were thought to be Bronze Age, but Richard Warner has argued that most are Iron Age, on the basis of associations and metal composition. He differentiates between a less common loosely-twisted Bronze Age type and the more common tightly-twisted Iron Age one. The Stirling examples provide emphatic support for this Iron Age date; their small diameter suggests they were for women or youths, or were intended as arm ornaments.

The third torc in the hoard is fragmentary. Two joining pieces make up half of an annular tubular torc of sheet gold. It is decorated with three rows of complex repoussé high-relief 'mushrooms', resembling a row of vertebrae, with decorative detail chased in. Similarities to La Tène "Plastic Style"



The excavated circular structure © Trustees of the National Museums of Scotland.



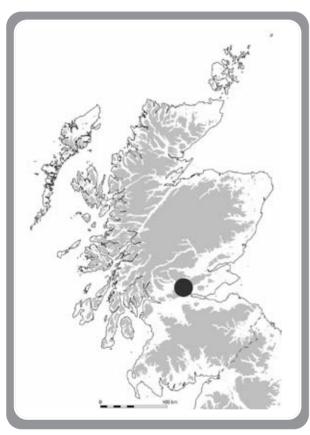
The hoard © Trustees of the National Museums of Scotland.

suggest a third century BC date. This type of torc is well known from south-west France, and our find must be an import from that area. It is the first such torc known from Britain - although when she saw a picture of it, Mary Cahill of the National Museum of Ireland uncovered a group of similar fragments from the museum's safe, where they had long been considered ethnographic! The exact provenance of the Irish find is unknown.

The fourth torc is the most unusual. It is a hybrid of Iron Age forms and Mediterranean craft skills. The penannular shape with loop terminals is a common Iron Age type; the rope-like hoop, made from eight braided pairs of gold wires, is a technique seen at Snettisham and elsewhere. However, the decoration

of the terminals is unparalleled. A disc was set into the loops, with gold wire and granules soldered to it; further twisted gold wires were soldered either side of the terminals, which are linked by a fine chain. These are skills typical of the Mediterranean world, not the temperate Iron Age. Was this a special commission, sent as a diplomatic gift from the Mediterranean world to a recipient in 'barbarian Europe', as has been suggested for the Winchester hoard? Or is this evidence for Mediterranean-trained craft-workers north of the Alps? This is a key area for research, but there is other evidence for mobile craft-workers, for instance in the Greek inscriptions found on the torc of Mailly-le-Camp (France). Unfortunately, there was no associated material to provide a scientific date for the hoard, but the parallels suggest a date bracket of perhaps 300-50 BC.

The finder reported the discovery very promptly, and thanks to the support of the landowner, it was possible to excavate extensively around the findspot. The exact location is being kept confidential, but it lies on a terrace in a boggy area. Excavations showed that the hoard sat within an isolated circular timber building, with a continuous groove for the wall and a narrow outer drainage gully. Apart from a central cooking pit and nearby posthole, there were no other internal features, and there was a complete dearth of finds - even of charcoal or burnt bone, except in the central pit. We would normally call this a roundhouse, but the isolated, damp location and the presence of the hoard within suggest other options a shrine, perhaps? Of course, building and gold may not be contemporary - the spatial association is tantalising but could be misleading, and radiocarbon dates will help to assess this.



Location map

The find is remarkable in many ways - in confirming the date of ribbon torcs, in showing evidence of European connections, in raising the question of links to the Mediterranean world long before the rise of Rome. It is also a valuable reminder that there is more to Iron Age gold in Britain than Snettisham-style torcs. With the addition of ribbon torcs to our Iron Age corpus, gold becomes much less geographically restricted: Snettisham-style torcs can be seen as one of several regional versions of gold ornaments.

Fraser Hunter, Dept of Archaeology, National Museums Scotland

THE BRONZE AGE OF THE THAMES VALLEY: NEW RESEARCH, NEW THOUGHTS, NEW AGENDAS

Society of Antiquaries, Burlington House, London, 6th February 2010

This one-day conference organised by the Prehistoric Society built on the success of last year's Neolithic of the Thames Valley meeting. The speakers provided valuable updates on recent research and developerled investigations. A diverse range of papers was presented on themes that included settlements, field systems, burials, and the thorny issue of votive deposition.

Gill Hey looked at the changing landscape of the Upper Thames Valley, and contrasted the relatively elusive domestic evidence of the Early Bronze Age with the extensive cleared and settled landscapes of the Late Bronze Age. She suggested that over time, people invested more in settlements than in funerary monuments, and intensive agriculture could be correlated with increased competition, surplus, and status acquisition.

Iane Sidell and Ion Cotton queried votive deposition in the context of the finds from the river Thames. Drawing upon modern analogies, they argued that objects and people could end up in the river for a variety of non-votive reasons (accident, loss, confiscation, theft, etc.). Jane also drew attention to the inherent biases in the finds database from the Thames, where successful recovery is dependent upon hand dredging, and the advance of mechanised dredging has inevitably resulted in data loss. A revised understanding of the context of the Thames skulls and weapons was also called for. Recent detailed studies of palaeochannels have helped map the changing course of the river through time, and suggest that some metalwork and human remains were deposited originally in dry locations. behaviour of the River Thames also altered over time: Jane proposed that it might be no coincidence that a change from river regression to transgression after 1500 BC is matched by an increase in fluvial metal deposition.

Richard Bradley and Rick Shulting continued the theme of river deposition and presented the results from a recent programme of AMS dating on several Thames skulls. Skulls with evidence of blunt (rather than sharp or sword) trauma injuries were selected to identify whether any predated the Bronze Age chronology often ascribed to them. Two interesting deductions were reached. Firstly, similar numbers of male and female skulls exhibited blunt trauma

injuries. Secondly, most of the skulls were of later Bronze Age or Iron Age date. Rick concluded that many of these injuries were not the result of 'heroic' face-to-face combat but rather related to raiding, revenge and surprise attacks. He contended that the deposition of skulls with evidence of trauma in the river might indicate that the Thames acted as a contested boundary or border zone during this time.

Tim Allen discussed the recent excavations of two Late Bronze Age hilltop enclosures (Little Wittenham in Oxfordshire and Taplow in Buckinghamshire). He reasoned that these settlements were not as strategically or prominently positioned in the landscape as the Early Iron Age hillforts that succeeded them in these locations. He drew possible links between the significant concentrations of metalwork found in the Kingston and Taplow areas and these hilltop sites.

Peter Boyer summarised the recent excavations by Pre-Construct Archaeology of a multi-period site in west London, focussing on the important discovery of a Bronze Age cremation cemetery. This comprised mainly inverted urned cremations that were clustered around a small penannular ditched monument. The radiocarbon dates suggest that this cemetery continued in use throughout an extensive period of time, perhaps as long as 500 years and straddling both the Middle and Late Bronze Ages.

John Lewis spoke about the extensive Bronze Age landscape uncovered by Framework Archaeology in advance of the construction of Heathrow's Terminal 5. Through comparison with other recently excavated Bronze Age sites in the wider region, he highlighted the variety of field system layouts. He argued that this diversity reflected the distinct functions the fields fulfilled and the ways in which different communities responded to building formalised landscapes, a topic also recently addressed by Dave Yates. Bayesian modelling of the impressive suite of radiocarbon dates obtained from the field system ditches indicates that this vast bounded landscape was created over a remarkably short period of time.

Damien Goodburn provided a useful synthesis of excavated wooden structures (trackways, platforms and causeways) found along the Thames, many of which remain poorly known or unpublished. He demonstrated how woodworking debris provides valuable clues regarding construction techniques, and yet it is often overlooked or thrown away in excavations. Matt Brudenell undertook a detailed investigation of the changing nature of the pottery assemblages from the Mucking ringworks. He discussed how charting variations in sherd size, weight and decoration through the ditch sequences alludes to the dynamic ways in which ringworks

were used and perceived over time. Matt offered an enlightening approach to understanding the long and complex narratives of these sites.

Many of the papers stimulated useful wider debate. It was noteworthy that metalwork did not feature greatly in the papers, highlighting the fact that bronze deposition tends to occur in contexts removed from the domestic, agro-pastoral and even funerary landscapes under discussion. The conference closed with a plenary session to discuss research agendas, and to introduce new ways of structuring Bronze Age research in light of all these interesting discoveries and developments. The event provided a useful arena to reflect on the impressive quantity and quality of data recently uncovered and the new approaches being undertaken to further our interpretations of the Bronze Age in the Thames Valley and more widely.

Catriona Gibson Centre for Advanced Welsh and Celtic Studies, University of Wales

PHIL DEAN: IN MEMORIAM

Phil's recent and tragically early death marks the loss of an exceptional contributor to portraying and understanding the past. His illustrations demonstrate that he was not only equipped with exceptional skill but with a perception that brought new life to the remnants of prehistory. Those will endure on the printed page in monographs such as the Greenwell Catalogue to papers in many journals. innovation - although it is perhaps invidious to single out just one - was a new way of portraying the intricacy and feel of early goldwork, previously just illustrated flat in drawings or photographs, such as the Bush Barrow gold and the Rillaton Cup (where, by the way, he was the first to note internal decoration not spotted in a hundred and fifty years of study). That skill and perception was also invaluable in the field where often he saw far more than those of us doggedly recording the excavation process.

The Society owes him a particular debt. He transformed a basic suggestion into the triple-spiral logo, instantly recognisable and capable of use in any medium, a task that was done in his own time and for free.

He was an unassuming and very good friend.

Ian Kinnes

ADDENDA TO OUR '1935' EDITION OF PAST

Postscript to the Hurlers

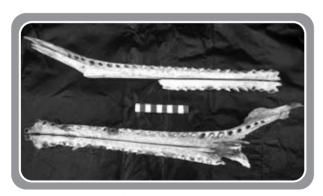
Readers may be interested to know how the restoration of the Hurlers progressed after the initial work, reported on in our anniversary edition of PAST, took place in 1935. Radford was appointed Director of the British School in Rome in October 1936. The restoration of the Hurlers was restarted in 1938 when Radford returned and again, with Croft Andrew's assistance, worked on the northern circle. This was only partially achieved and the intended restoration of the southern circle never took place. The site remains in a largely unchanged condition today since the 1930s restoration programme. Two short notes on the project appeared in PPS in 1935 and 1938 but the work was never fully published. Radford was president of the Prehistoric Society from 1954-58. The Hurlers is one of Cornwall's most famous and most easily accessible and much visited prehistoric monuments. A re-assessment of the unpublished excavations archive has recently been carried out by Historic Environment Cornwall Council on behalf of the Cornwall Heritage Trust and the Caradon Hill Area Heritage Project. For more details contact jnowakowski@cornwall.gov.uk.

Jacky Nowakowski

The fate of the Maiden Castle alligator

I'd like to update the report on Maiden Castle: the birthday alligator, buried in one of the ditches following its sacrifice, was re-excavated during Niall Sharples' excavations of 1985-6. In the course of sample selection for the Dating Causewayed Enclosures project, I ascertained that it is preserved in the collections of the Natural History Museum, in their Wandsworth store, complete with iron or steel reinforcements. Whatever indignities the already taxidermised defunct reptile may have suffered in the later parts of the birthday celebrations must wait to be defined by techniques still beyond us.

Frances Healy



The jaws of the alligator post-excavation (courtesy of Niall Sharples)

DEREK SIMPSON ARCHIVE

On his untimely death in 2005, Derek Simpson left a number of unpublished excavation archives from his work in Scotland, England and Ireland. His Scottish backlog was being cleared by his colleagues and research students at Queen's University Belfast with funding from Historic Scotland and indeed his most famous excavation, the Beaker settlement at Northton, Harris, was published posthumously. There were no plans to reduce his English backlog, however, and it was felt that this material was in danger of being forgotten and indeed dispersed. Much of the artefactual material languished in the basement of QUB but a substantial amount of the original paper archive, prompted by reorganisation within QUB, had been transferred to his garage sometime after Derek's death. This material in particular was suffering from damp in this somewhat 'archivaly unstable' environment and at the request of Derek's widow, Nancy Simpson, I paid a visit to QUB and Hillsborough to determine what was there.

In discussions with English Heritage, it was decided it would be desirable to rescue his English archives before they became even more depleted and dispersed and to deposit the archives with the relevant curator. Thanks to a grant from English Heritage, these archives were brought back to Bradford University, sorted, scanned and catalogued. This note is to raise awareness within the prehistoric community to what was found:

- Launder's Lane, Rainham, Essex: ring-ditch with Neolithic ceramics. A number of excavation plans and sections were transferred to MoLAS for incorporation into their East London Gravels project.
- King's Newnham, Warwickshire: ring-ditch. Excavation plans and photographs plus flints, ceramics and a cremation deposit were transferred to Warwickshire Museums Service.
- Borrough Hill, Leicestershire: hillfort. Excavation plans and ceramics were transferred to University of Leicester Archaeological Services.
- Irton Moor and Seamer Moor, Yorkshire: round barrows. The archives have been retained at Bradford with a view to writing these sites up via student projects. Digital copies of the archive have been sent to the NMR.

Alex Gibson Archaeological, Geographical & Environmental Sciences University of Bradford.

MEETINGS PROGRAMME 2010-2011

The programme for next year's lectures and meetings is coming together. However, details for a number of events have yet to be finalised - these will be posted

Sat 4-Sun 5 Sept 2010

Weekend study tour Venue: Avebury/Cambridge

See enclosed booking form

Wed 20 Oct 2010 6pm 75th Anniversary Event Venue: Society of Antiquaries, Burlington House, Piccadilly, London

See enclosed booking form

Thurs 28 Oct 2010 5pm

75th Anniversary Lecture Venue: Shore Lecture Theatre, 14 Abercromby Square, University of Liverpool

Fri 29-Sun 31 Oct 2010 Weekend conference Venue: Manchester

Mon 10 Jan 2011 6pm

Venue: Cambridge

on our website, together with contact information and booking forms as applicable, as soon as they become available. Booking forms will also be included in upcoming editions of *PAST*. If you would like to be kept updated by email please contact Tessa Machling on prehistoric@ucl.ac.uk (see front page).

75th Anniversary Tour: Avebury to Norwich 'Thunder Run'

A tour to commemorate the 'great *coup d'état*' of 1935 by Clark, Hawkes, Phillips, etc., that transformed the Prehistoric Society of East Anglia into the Prehistoric Society. Stuart Piggott famously said of reaching the critical meeting in Norwich: 'I drove from Avebury (rather fast, in Keiller's MG Midget) to cast my vote in favour'. Travelling rather more sedately and staying overnight in Cambridge, this event will retrace Piggott's journey and stop off at selected prehistoric sites *en route* to reflect on 75 years of research.

The 'Champion Debate'

with Prof. Clive Gamble (Royal Holloway, University of London) and Prof. Tim Champion (Southampton University). To celebrate the 75th anniversary of the Society, our distinguished speakers will debate, in a not wholly serious fashion, the relative merits of the Stone Ages versus the Metal Ages. Followed by a wine reception (admission £5 including refreshments).

'A History of the Prehistoric Society 1935-2010' by Dr. Rachel Pope (Liverpool University) A special lecture reflecting on the origins and history of the Prehistoric Society in its anniversary year (admission free to members).

The Present and Future of British Prehistoric Pottery: Finds, Methods, Interpretations Joint Prehistoric Society/Prehistoric Ceramics Research Group

Over the last decade, a wide range of important excavations, new finds, new analyses, new techniques and interpretations have changed our understanding of prehistoric British pottery. In some regions of Britain, a comparative lack of finds has now been replaced by an abundance of information which still awaits broader synthesis. The conference will reassess ceramic studies from the Neolithic through to the Iron Age and discuss future research directions. For further information see the Prehistoric Ceramics Research Group website (http://www.pcrg.org.uk)

'Time and the River - Environmental Change, Monumentality and Prehistoric Land-use at Needingworth Quarry, Over' by Christopher Evans, FSA (Executive Director, Cambridge Archaeological Unit)

Joint Prehistoric Society/Cambridge Antiquarian Society

Sat 26 Feb 2011

Day conference Venue: London

Booking form to come in November *PAST*

Fri 9-Sun 11 Apr 2011 6th student study tour Venue: Oxford

Booking form to come in November *PAST*

29 Apr-1 May 2011 TBC Weekend conference Venue: Dublin

Booking form to come in November *PAST*

Sat 14 May 2011 Day conference and Europa

Lecture Venue: Durham

Booking form to come in November *PAST*

June 2011 (tbc)

UK study tour Venue: Cornwall

Booking form to come in November PAST

In the planning stages:

Lectures:

 Joint lectures with the Society of Antiquaries of Scotland, the Devon Archaeological Society, the Norfolk and Norwich Archaeological Society, and the Sussex Archaeological Society

Conferences:

- Launching the English Heritage Research Strategy for Prehistory
- Rethinking the Late Iron Age

Study Tours:

- Monmouth and the Gwent Levels
- Dillington weekend

The Iron Age in the Thames Valley

Following on from two very successful meetings on the Neolithic and Bronze Age, this day conference will explore the landscape of the Thames Valley in the Iron Age, based on the results of recent major programmes of fieldwork and analysis.

Looking at Landscapes: The Archaeology of the Cotswolds and Thames Valley

Led by Dr. Alex Lang

Starting with a welcome event on Friday night at the Institute of Archaeology, University of Oxford, the tour provides an opportunity to visit some of the more famous sites of both the Cotswolds (Saturday) and Thames Valley (Sunday), led by archaeologists who have excavated and researched these sites for many years (incl. Prof. Tim Darvill, George Lambrick and Dr Gill Hey). Highlights will include: The Rollright Stones, Crickley Hill, Stanton Harcourt and Wittenham Clumps/Dorchester.

Climate Change in Prehistory

Organised by Dr. Bob Johnston (Sheffield University), Dr Kevin Walsh (University of York) and Dr. Graeme Warren (University College Dublin).

Eurasian Interactions 4000-1500 BC

Including the Europa Lecture by Dr. Natalia Shishlina (Moscow): 'The Mysterious Bronze Age Steppe Nomads'.

(There will be a fee for the conference but the Europa Lecture will be free to members)

The Prehistory of West Penwith

Led by Jacky Nowakowski (Cornwall Council) With a number of distinguished guides, the tour will showcase a range of sites, from burial monuments to settlements, in their landscape contexts against the background of the West Penwith survey.

A FANTASTIC INTERNATIONAL BRONZE AGE LINE-UP IN DURHAM, 14 MAY 2011 – THE PREHISTORIC SOCIETY'S 2011 EUROPA CONFERENCE

The Prehistoric Society has decided to bestow its Europa Prize for 2011 on Dr. Natasha Shishlina for her outstanding contribution to Eurasian steppe nomad studies. The chosen theme of the 2011 Europa meeting will be 'Eurasian Interactions, 4000-1000 BC'; it will be held at Durham University on Saturday 14 May 2011. There will be six other internationally-

recognised speakers. Dr. Volker Heyd (Bristol) will set the third millennium context with his presentation on 'Late Neolithic-Early Bronze Age interactions in Eurasia'. This will be followed by a wide-ranging discussion by Professor Kristian Kristiansen (Gothenburg) on 'How Eurasia was incorporated into a Near Eastern world-system'. Professor Tony Wilkinson (Durham) will then present the results of his recent research on 'The ancient Near East as a dynamic system'. We then turn to 'The Mediterranean system in the Bronze Age', presented by Dr. Cyprian Broodbank (UCL). Next, Professor William O'Brien (Cork) will provide a challenging overview of 'Atlantic metals and interactions in the Chalcolithic and Early Bronze Age'. In the final conference paper, Dr. Timothy Taylor (Bradford) will provide a review of 'Eurasian interactions in the Iron Age' - the period which most archaeologists associate with the steppe nomadic way of life. The climax of the day meeting will be Dr. Shishlina's Europa lecture on 'The mysterious Bronze Age steppe nomads', in which she will present a new synthesis of her recent research demonstrating the far greater antiquity of the steppe nomadic way of life than was once thought.

All members and non-members are welcome: for booking and further information, please contact Dr. John Chapman (j.c.chapman@dur.ac.uk).

IMPORTANT: ARE YOU A STAR?

Please look closely at the top right hand corner of your copy of *PAST*. Do you have a coloured star? If so, then you are NOT up-to-date with your subscription for the current year. If you have not paid the FULL amount at one of the following rates, then your subscription will be invalid and you will not be sent *PPS* when it is published. Rates for 2010 are as follows: £35 Ordinary Members; £25 Retired with *PPS*; £17.50 Student; £12.50 Retired without *PPS*; and £50 for Institutional Members. Joint membership for any of the above (not including Institutional Membership) is £5.

If you are in any doubt about the status of your subscription, please contact our administrator Tessa Machling at the address below, or by email at prehistoric@ucl.ac.uk. Cheques should be made payable to 'The Prehistoric Society' and sent to: The Prehistoric Society, Institute of Archaeology, 31-34 Gordon Square, London, WC1H 0PY. Many thanks for your support!

THE ARCHAEOLOGY AND ENVIRONMENT OF PREHISTORIC ROCK CARVINGS ON BEN LAWERS

Prehistoric rock art presents a problem for archaeologists. It is easy to discover but very difficult to date. It is even more of a challenge to interpret it in its original context as it has rarely been investigated by excavation and pollen analysis.

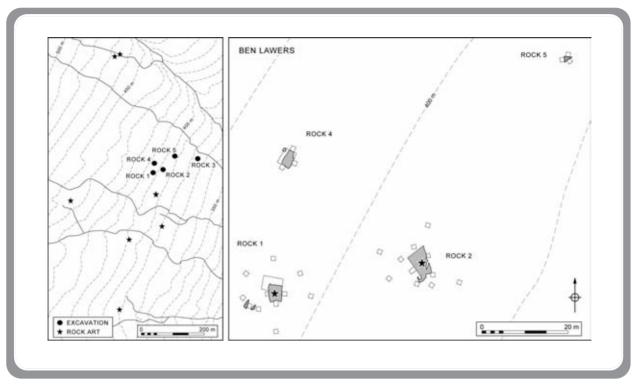
There have been some valuable developments in recent years, with targeted excavations in Northumberland and the west of Scotland, but the real breakthrough was the work of the late Blaze O'Connor in the Irish Republic where she showed that decorated outcrops could be associated with subsoil features and deposits of artefacts. Her work and that of Andy Jones and his team at Kilmartin inspired the project described here.

Their work was in landscapes with surviving earthworks or stone-built monuments. Was it so productive because those areas are unusual? It was necessary to extend fieldwork into a region in which such structures are absent. The Ben Lawers estate in the southern Highlands of Scotland is ideal for this purpose. It is managed by the National Trust of Scotland and has been surveyed by the Scottish Royal Commission. The local monuments - mainly cairns and stone circles - are on the low ground close to Loch Tay. Our work took place on the 400 metre contour well away from these sites.



Prehistoric carving on the surface of Rock 1

It employed a simple methodology. Two rings of metre-square test pits were excavated around the decorated rocks. One group of test pits followed the outer edges of the stone; in principle, the other was located five metres away, although the scheme had to be modified where there were streams or pools of standing water. That method would establish whether the carvings were associated with any artefacts and, if so, whether the distribution of finds



Left: the extent of the excavated areas. Other carved rocks are indicated by circular symbols. Right: outline plans of the test pits and other excavations. The carved surfaces are indicated by stars. Rock 4 is a large undecorated surface and Rock 5 is a 'natural' standing stone.

focussed on these panels. To complete the exercise a large uncarved rock was examined by the same method. We also followed that procedure at a 'natural' standing stone which had been moved by glacial action.

This method showed that the more ornate carvings (those on Rocks 1 and 2) were associated with deposits of broken and flaked quartz, the distributions of which focussed on the positions of the decorated surfaces. The simplest carving (Rock 3) had little material associated with it, and the same applies to the undecorated outcrop (Rock 4) and the 'standing stone' (Rock 5). Some of the worked quartz may have been deposited intentionally, whilst other fragments could have been a by-product of making the designs. The remaining finds were a flint flake found in a natural fissure on top of a decorated rock, two pieces of Arran pitchstone and a rounded quartzite pebble which probably originated on a storm beach.

At the foot of the largest decorated rock (Rock 1) was a discontinuous layer of cobbling containing a quantity of worked and broken quartz. It filled a number of shallow hollows and was located at the only point from which an observer could see the images on top of the stone - scattered cup marks and seven concentric rings. The cobbles also sealed a relict land surface. Pollen samples were taken above and below this structure.

The results were very striking. It had long been argued that complex rock carvings were located at



Excavation beside Rock 1, showing parts of the cobbled surface.

Rock 2 is visible in the background.

viewpoints, but nowhere was there any convincing evidence of the local environment - perhaps these features had been surrounded by trees. At the excavated site on Ben Lawers it is clear that the rock carving was situated in open grassland which was probably used as upland pasture. The local environment had been partially cleared of heathland some time before the designs were made. There was little sign of arboreal pollen apart from some hazel and birch growing in the valley floor and alder on the wetter soils. It seems as if the rock would have commanded an extensive vista along and across the loch just as it does today.

When we embarked on this project it was with the suspicion that nothing would be found. It seemed as though artefacts and structural evidence might be restricted to rock carvings associated with

monuments. Obviously that was wrong, but it was an error that we are happy to have made. The results of this small project raise the possibility that similar results can be obtained by fieldwork in other areas.

Acknowledgments

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Richard Bradley, Alex Brown and Aaron Watson

NEWSWARP ON THE WEB

WARP (the Wetland Archaeology Research Project) is an informal world-wide network of archaeologists and others engaged in wetland archaeology. Twenty-five years ago, we set up WARP to encourage contact and the exchange of information and ideas around the world. This led to the appearance of the newsletter, NewsWARP, along with conferences and other publications. However, from 2000, the newsletter was replaced by the *Journal of Wetland Archaeology*. Now, thanks to WARP's Pacific coordinators, Dale Croes and Akira Matsui, together with European co-ordinator, Francesco Menotti, we welcome the return of NewsWARP - on the web.

Have a look for yourselves at http://newswarp.info/ and send in your news, comments, photos, questions, book announcements, etc., in pdf format to Dale Croes at dcroes@spscc.ctu.edu - the more you contribute, the better NewsWARP will be. Please send a brief summary in English for contributions in other languages. We look forward to reading all your wetland news.

Bryony and John Coles

LITHIC SCATTERS SESSION, TAG 2009

The week before Christmas saw hundreds of archaeologists descend on a very snowy Durham University for the 31st meeting of the Theoretical Archaeology Group (TAG). The Prehistoric Society kindly sponsored a session on 'Dwelling, lithic scatters and landscape' organised by Vicki Cummings and myself. The session aimed to bring together a series of papers on recent and ongoing research on lithic scatters and landscape.

Archaeologists have long grappled with the potential and problems that lithic scatters present. From the Mesolithic to the Early Bronze Age, lithic scatters form arguably one of the most prolific traces of human activity available to archaeologists. But despite this potential, lithic scatters are difficult to deal with. By their very nature, they represent a fragment of just one component of prehistoric material culture, itself partial, mixed, disturbed and difficult to interpret. It is no coincidence, therefore, that many prehistoric landscape archaeologies have tended to focus on the more tangible evidence of monuments, with the more ephemeral evidence of lithic scatters slipping into the background.

On the face of it, the nine papers presented in the session were diverse in chronology, location and scale of research. However, what they shared was a confident approach to working with lithic scatters, accepting the difficulties inherent in working with them, but nevertheless seeing them as key data for understanding the inhabitation of prehistoric landscapes.

Nick Snashall's paper on Neolithic scatters in the Cotswolds illustrated this confident approach, first identifying many of the perceived problems with lithic scatters and then proposing ways - both theoretical and methodological - in which these problems may be circumvented. She argued that it is not necessarily scatters themselves but the questions that archaeologists ask of them that are the greatest limit to their interpretative potential. Elements of Ionathan Last's paper examined some of the curatorial implications of this change in perspective on lithic scatters from 'bad' to 'key' data. He examined how adequately lithic scatters as 'sites without structures' are dealt with by PPG16-driven commercial archaeology and also the implications of proposed heritage legislation for the designation and protection of lithic scatters.

Part and parcel of this confident approach to working with scatters is an acknowledgement that they represent much more than simply the presence/absence of human activity to be plotted on distribution maps; rather, they were inhabited, lived-in places. Ben Chan's work on the Stonehenge landscape inverted the relationship between monuments and scatters. His paper combined evidence from his re-evaluation of surface lithic assemblages from the Stonehenge Environs Project with evidence of in situ domestic structures from recent excavations at Durrington Walls. Emphasis is shifted away from the monuments themselves towards an understanding of the contexts and conditions under which people encountered and approached them. In a similar vein, but very different context, Hannah Cobb suggested that lithic scatters, rather than the more conspicuous and

monumental shell middens, are key to understanding the complicated interplay between people, things and places during the Mesolithic of the northern Irish Sea basin.

Common to many of the papers in the session was an acknowledgement of the need to look beyond the minutiae of the contents of lithic scatters themselves, and to consider also how lithic scatters as dwelt-in locations are related to their immediate landscapes. Emma Philip's work on Late Mesolithic and Early Neolithic scatters in the Dee valley, Aberdeenshire, Emmett O'Keeffe's work on Mesolithic assemblages from Bardsey Island and the Llyn Peninsular, north Wales, and my own work on the Neolithic of the lower Exe valley, Devon, all explored ideas about the interplay between lithic scatters and landscape setting. My paper also discussed the benefits of situating the analysis of lithic scatters within other types of archaeological field work in order to tease out some of the lost topographic and monumental details in an intensively ploughed landscape.

Hugo Lamdin-Whymark discussed scatters of worked quartz found during the excavation of rock art sites near Kilmartin, Scotland. As a result of experimental work replicating some of the rock art he suggested these assemblages consist of fragmentary and used hammerstones, and as such are a bi-product of rock art production rather than being lithic debitage in the conventional sense. He also suggested that the creation of these pieces of rock art would have been a very visible and noisy process contributing to the prominence of these sites in the landscape.

Erick Robinson's paper critiqued approaches to Mesolithic scatters in the Low Countries which have focused on counts and distributions of microliths. He instead argued that a site or assemblage-based approach to scatters offers the potential for a much fuller understanding of the Mesolithic in this region.

For me, although initially slightly terrified of giving my first paper at TAG, the session was a good experience. It was inspiring to hear eight papers from other researchers who are also grappling with the complexities of interpreting lithic scatters and who aspire to doing more with them than simply reducing them to dots on maps. It was also comforting to realize that I am not alone in ploughing through box after box of small pointy stones.

Olaf Bayer, University of Central Lancashire

JOURNEYS TO THE UNDERWORLD: RITUAL TRANSFORMATIONS OF PERSONS, OBJECTS AND CAVES IN PREHISTORIC CENTRAL SARDINIA



Neolithic cave painting in Grutta I de Longu Fresu, Seulo (photo: G. Farci).

During an unexpected encounter at the European Association of Archaeologists conference in Malta in 2008, a Sardinian geologist, Giusi Gradoli, and a British scholar, Terry Meaden, showed me photographs of a newly discovered painted cave and another cave full of human bones. They convinced me to see the caves for myself at Seulo in central Sardinia. I visited some ten caves and rockshelters distributed along tributaries of the River Flumendosa, each containing rich later prehistoric ritual deposits. Back home, I designed a research programme promising to evaluate ideas about the ritual transformation of persons, objects and caves using a range of modern scientific techniques on this new and potentially high-quality archaeological The key research aims would be to dataset. establish: the diversity of natural caves and their human uses in the territory of Seulo; how some of these caves and their natural features were modified from natural spaces into sacred places; the character

and variety of rites of passage performed and experienced by people in these caves; and the degree to which these persons and the material dimensions of their cave rituals were connected to (or marginalized from) wider patterns of life. Permission for fieldwork was obtained from the Italian Ministry of Culture and, thanks to the benevolence of the Prehistoric Society, the British Academy and the Fondazione Banco di Sardegna, funding was secured for the work. This began in the summer of 2009 with help of a small multi-national team of specialists and volunteers.

Over the first year of the project, we have worked on three levels: a small-scale field survey of the Taccu di Ticci plateau around which many of the caves are situated; an extensive survey of caves within the surrounding catchment of the upper Riu Narbonionniga; and the excavation and sampling of four contrasting cave sites known to contain prehistoric deposits. Automated dataloggers were installed in all four caves to record temperature and relative humidity levels and laser scans were made of the interiors of these caves. The field-survey identified around 50 'sites', including a later prehistoric nurgahe and dolmen, and an extensive scatter of obsidian and ceramic artefacts suggestive of a later prehistoric hilltop settlement. In addition, 19 caves have been recorded through the cave survey while our cave excavations have been no less productive.

In Longu Fresu cave, three important ritual features were identified at the end of the small cave tunnel. The first was a small group of paintings, covered by flowstone (sampled for Uranium-series dating), placed to the side of a spring, and representing at least two schematic anthropomorphic figures; the second was a human skull, cemented to the cave wall by flowstone, and related bones deposited in niches and holes, radiocarbon dated to the Middle-Late Neolithic (*c.* 4250-4050 cal. BC); and the third was a semi-circular structure, formed by modified stalagmites and stone blocks, containing a greenstone axe-blade.

In the extensive is Janas cave system, some intensively burnt ritual deposits were excavated in two chambers located at the end of the entrance corridor. These contained large quantities of ashes, pottery sherds (some decorated in the distinctive style of the Ozieri culture), animal bones radiocarbon dated to the Final Neolithic (c. 3800-3650 cal. BC), obsidian artefacts and ornaments of shell and stone. A third chamber was excavated in the deep interior of the cave system with a shallower special deposit.

In the very small is Bittuleris cave, the mortuary deposits were found to have been completely disturbed since the 1930s. Nevertheless, we recovered substantial quantities of human bones radiocarbon dated to the Middle Bronze Age (c. 1750-1600 cal. BC), animal bones, pottery sherds, obsidian artefacts and bone, shell, ceramic and metal ornaments. Specialist study of the human remains by Jessica Beckett points to successive primary inhumations in this cave of adults and children, males and females, while DNA fragments have been assigned to mitochondrial hapolgroups T, H, J and K by the Australian Centre for Ancient DNA.



Human bones on the surface of Sa Forada de Gastea cave, Seulo (Photo: R. Skeates).

At the large Su Cannisoni rockshelter, excavation found that a pile of stones had been constructed under a spring and over a secondary burial deposit comprising a pair of adult human skulls radiocarbon dated to the Middle Bronze Age (c. 1550-1450 cal. BC) and an adjacent artificial semi-circle of stones containing a large group of disarticulated human bones, sheep/goat bones, pottery sherds and charcoal.

Having established the research potential of the Seulo caves, future work will involve larger-scale excavation and further scientific studies including obsidian and pottery characterisation, charcoal analysis, isotope analyses of human and animal bones and palaeo-climatic analysis of speleotherms. In this way, I hope that we will come closer to reaching the lives and deaths of the people who transformed these caves in the prehistoric past.

Robin Skeates, Durham University

A PECKED STONE FROM A NEOLITHIC SETTLEMENT SITE AT GREEN, ISLE OF EDAY, ORKNEY

The Orkney archipelago is deservedly renowned for the quantity and quality of its Neolithic archaeology and new discoveries continue to be made. One such discovery is a site at Green, a farm on the south coast of Eday, where a Neolithic stone building, part of a more extensive settlement, has been under investigation by BEVARS (British Excavation Volunteers & Archaeological Research Society) since 2007. In 2008, a stone with pecked motifs was found lying in what appears to be the entrance to the building.

The sandstone slab, which measures c. 0.57m x 0.32m, is broken and evidently formed part of a larger panel. The motifs which have survived intact comprise a triangle with a line leading from the acute angle to a roughly pecked circle and a complete so-called horned or spectacled spiral which has pecked dots within each of its spirals. There is further pecking between the spirals forming an irregular linear shape. There are other motifs present which have not fully survived due to the breaking of the stone in antiquity. Two of these appear to be variations of the horned spiral, and another is a single pecked curve similar in appearance to a bass clef.

Careful inspection of the panel has revealed a number of incised lines that probably predate the pecked motifs. Most of these barely detectable lines are clustered around and within the pecked triangle. The figures comprise parallel lines, triangles, traces of a lattice design and a line which can be followed along one side of the triangle which swings away and curves around its acute angle. The incised shapes do not appear to act as a pattern for the later motifs, but appear to have their own schema. They are so faint that they would not have been seen unless they operated as 'underdrawings' for painting as suggested by Bradley for the incised designs in tombs such as Maes Howe and in domestic contexts such as Skara Brae. Bradley's suggestion (supported by Childe's find of paint pots at Skara Brae) serves to emphasise the possibilities of a rich variety of decoration which may have been employed in both tombs and houses. It is possible that the incised lines are Neolithic graffiti, "the random scribblings that an idler leaning against the wall might perpetrate", as Childe put it. Alternatively, they may have had a specific purpose, caused by some other activity which is lost to us.

The mixture of curvilinear and angular motifs is fairly typical of Orcadian megalithic funereal art of the later Neolithic. However it is highly unusual to find both curvilinear and angular motifs together on the same stone in a domestic setting. Until recently, the figures on decorated stones from Neolithic settlement sites in Orkney have been exclusively linear or angular, typically the incised or pecked zigzags, lozenges, parallel lines, triangles, chevrons and 'grids' found on decorated stones from Skara Brae, Barnhouse, and Pool, Sanday. As Bradley and Shepherd suggest, these linear motifs, which also appear in Maes Howe type tombs, are rather similar to the incised designs on Grooved Ware pottery.



Curvilinear designs appear almost exclusively on pecked stones. As Shepherd points out, it may be that particular designs held particular meanings or associations or that certain motifs were particularly appropriate or even required for certain occasions or purposes. It is interesting to note that curvilinear designs also appear very rarely on Grooved Ware pottery in Orkney and there is only one example (a sherd from the earlier House 10 at Skara Brae) of curvilinear and angular shapes appearing together within the same design on pottery.

The horned spiral motifs on the Green stone may be compared with the pairs of so-called 'eye' motifs, conjoined arcs over small dots or cups, in the tomb of Papa Westray South. Other Neolithic objects which include eye-like motifs include the macehead from Knowth, Ireland, and the Folkton drums from Yorkshire which are decorated with conjoined concentric ring marks and eye motifs, together with Grooved Ware style lozenges and triangles.



Most of the parallels to the stone from Green share the horned spiral, described by Bradley as "the most distinctive motif on Orkney". The nearest comparison is the 'sun' stone, recovered from the nearby ruined cairn of Eday Manse, 3.5km to the north of Green. This had two rather more elaborate horned spirals than those on the Green stone. The Westray stone from Pierowall, a probable lintel from a Maes Howe-type tomb, has, amongst other motifs, two back-to-back horned spirals. The motifs from both Pierowall and Eday Manse also have single dots within each spiral. Two smaller stones from Pierowall also appear to have a similar arrangement of horned spirals. These are, however, like the stone from Green, more crudely finished than the Westray stone. The closest known parallel within Orkney for the triangle motif is probably the pecked triangle on a stone at the tomb of Holm of Papa Westray South which is similarly roughly executed. As already noted this tomb also had eye motifs.

The stone from Green was found lying flat on the ground, decorated side upwards, in thin, silty soil

thought to have derived from run-off which collected in the entrance, the lowest point of the building, after the roof had collapsed and the site had been abandoned. Three overlapping slabs, of which the decorated stone was uppermost, lay within the entrance, suggesting that it may have been deliberately placed there when the building went out of use. The lack of any wear on the stone and the freshness of the peck marks mean that it cannot have been used as a paving slab during the life of the building. A chevron-decorated, pecked stone from Pool similarly appears to have been deliberately selected for placing within the demolition deposits.

The Green stone may have been removed from another structure elsewhere on Eday to be reused in the settlement, and the combination of curvilinear and angular motifs suggests that it may originally have come from a tomb. It is possible that the connotations of death and burial were felt to be particularly apposite in marking the death of the building. If its origins were within a tomb, it is interesting to speculate where this may have been. There are many tombs in north and central Eday and the nearest, Eday Manse, is one possibility. Alternatively, Eday may originally have housed another tomb in the south of the island. The only hill of significant size on Eday which does not boast a tomb is Ward Hill, the summit of which is just 2km west of the settlement at Green. Perhaps another tomb may lie there, awaiting discovery.

The stone at Green, together with other recent discoveries, is beginning to provide a clearer picture of some aspects of the Orcadian Neolithic. For instance the much publicised figurine found at the Links of Noltland, Westray, which is liberally covered with incised Grooved Ware style patterning, also has a horned spiral with dots within the spirals apparently depicting eyes. The shape of the figurine is highly reminiscent of a polished stone axehead and indeed an axehead of almost identical size and shape has been recovered from the site at Green. A number of similar axeheads are known from other Orcadian sites.

Within the Grooved Ware tradition on Orkney, it is now becoming evident that similar motifs and decorations are appearing consistently across an ever broadening range of material contexts. It has long been apparent that Neolithic Orcadian society had a strong sense of self identity. However, there now appears to be a distinctive taste within the northern islands for at least one motif, the horned spiral, which is all but absent from the record elsewhere in Orkney. It is tentatively suggested here that this may be giving us an insight into more localised expressions of identity within the broader tradition.

Diana Coles, Mick Miles and Tina Walkling, British Excavation Volunteers & Archaeological Research Society