The situation in the Middle Neolithic changed significantly. The decoration on the vessels found in settlements across the eastern half of Macedonia is very similar, so that identical ornaments can be seen inside some of the houses in this area.

Regarding the painted decoration on the Early Neolithic vessels from Macedonia, a wide range of white motifs were employed, creating unique and rarely repeated compositions. These usually consisted of zig-zag lines, star-like ribbons, triangles, dots and so-called vegetal motifs. Some researchers consider that the choice of motifs relates to the function of the vessels, indicating for example pots in which herbal remedies were prepared or which were used during particular ceremonies in dwellings or settlements. Exceptionally important are the local styles these motifs create which indicate that, across the wider area of Macedonia, several local communities were established, using decoration as an element of mutual visual identification. Although there appear to have been one or more waves of demographic expansion in the earliest phases of the Neolithic, in its later stages it can be seen that distinct regional traditions emerge which are reflected in differences in material culture. Hence, there are remarkable differences between Early Neolithic decoration in the Skopje region (northern Macedonia), the Ovce Pole region (eastern Macedonia) and in Pologonia (southwest Macedonia).

The petroglyphs of Tamgaly, Kazakhstan

As a result of the interest shown in the article on the ‘deer stones’ of Mongolia, published in PAST 54, I offer some information on a fascinating rock art site in Kazakhstan that is also the site of an excavated ‘deer stone’.

Rock art exists throughout the varied landscape of Kazakhstan, certain concentrations of known sites extending into neighbouring countries. The petroglyphs have a wide date range from the late third millennium BC to the recent past, but each period has its own style. Such is the international interest in the central Asian sites that a number of collaborative teams of local and foreign archaeologists have been working concertedly in recent years to document and protect them. The initiatives include participants from France, Germany, Norway, Poland and the USA, as well as Britain, as Ken Lymer has previously reported in PAST (Nos 9 and 23). Arguably the most significant sites are in the eastern and southern parts of the country, but it is Tamgaly, a complex with more than 3000 individual petroglyphs, which I wish to describe.

Tamgaly is an isolated valley in the dry steppe and desert landscape that embraces the low foothills of the southeastern Chu-Ili Mountains, themselves an extension of the Northern Tien Shans range. It is situated about two and a half hours’ drive west of Almaty, the country’s capital. Extensive rock art was discovered here by chance in 1937 by A. A. Popov, a photographer from an archaeological team working under the direction of A. G. Máximova who published the following year by Máximova, used the study of a site in neighbouring Kyzylzstan (Saimaly-Tash) to attribute the artwork to a number of different periods. Subsequently, more detailed recording has been undertaken, while excavations at cemeteries in the area have discovered petroglyphs within graves, which help to date the different styles represented on the open rock faces.
Tectonic movement has caused localised uplift and splitting of the sandstone bedrock, and the exposed rock faces bear a dark patina. Indeed, the continuing tectonic movement combined with the sharply continental climate has led to the shattering of many of the decorated faces. Consequently, since the early 1990s, considerable effort has been put both into multi-disciplinary studies of the site’s context under the supervision of Dr Alexei Rogozhinsky and, most importantly, its conservation. The results of this research include the largest sequence of radiocarbon dates seen in the country and a palynological record that spans the Bronze Age to Late Medieval periods. Since 1999, further research has concentrated on the location of associated settlements, while safeguards have been put in place to protect the complex. Support from UNESCO and Norway encouraged the Government of Kazakhstan to issue a special decree which declared the area a state historical, cultural and natural reserve, and in 2005 Tamgaly became only the second site in the country to be inscribed on the World Heritage list.

The archaeological complex contains about a hundred different sites, ranging in age from the fourteenth century BC to the twentieth century AD. These sites include not only settlements, quarries and ritual places, but also cemeteries with burial cists and mounds (kurgans), as well as the open air petroglyphs. Some of the Middle Bronze Age cists contain decoration that is stylistically the same as the earliest open air images, while a stone-built enclosure (Karakuduk II) contained a ‘deer stone’ of the fifth to fourth centuries BC. The open air petroglyphs themselves have been recorded in nearly 50 different locations, and are now attributed to six different periods, the earliest of which belongs to the Middle Bronze Age. It is to this period that the most spectacular of the images belong. They include many examples of extraordinary pecked figures up to one metre in height that appear to depict human forms with large disc-shaped heads surrounded by halos of spots and rays - the so-called ‘sun desmes’ (similar anthropomorphic figures, some of earlier date, have been recorded elsewhere in Kazakhstan and have been referred to as ‘the images of the disguised’). However, there are also figures with masks, weapons and bows. One panel (Surface 118, Group IV) appears to show a hierarchy of god-like figures, dancing warriors and a woman giving birth, then onlookers or worshippers. However, other panels include images of a wide range of wild animals, some of which are now extinct. Most commonly, the scenes appear to represent the hunting of horses and aurochs. Images in this particular style are widely distributed throughout the Tamgaly valley. They are not superimposed on each other but are themselves often covered by symbols in later styles. Late Bronze Age compositions also contain anthropomorphic figures but these are smaller and more schematic. Some of them continue the hunting theme but include pastoral scenes as well, in common with other sites in Western Mongolia and Western TianShan. However, Early Iron Age images are the most frequent petroglyphs found in the complex and are attributed to several different groups of people, reflecting the shifting military and political situation of the time. The main theme is the chase of wild deer and goats by natural predators but scenes may also include ridden horses, series of camels and individualistic symbols. Later medieval scenes include warriors, sometimes in combat, the figures usually engraved with a sharp tool. One unique image includes an elephant and rider.

The Tamgaly complex is remote and vulnerable. Nonetheless, the Government of Kazakhstan has taken a number of important steps to safeguard the site, including the re-routing of a road that passed through the valley, and the provision of basic visitor facilities. When we parked our car in the area set aside for vehicles, not a soul could be seen for miles around. Yet, within a few minutes, two young men dressed in combat fatigues emerged to enquire why we were there. Having established our archaeological interests, they led us along a waymarked trail to several of the most impressive decorated panels. Before long, two mounted custodians passed by but stopped politely to check our behaviour and to sell us a most welcome introductory leaflet. The Government of Kazakhstan should be commended for establishing the custodial care of the site, and Alexei Rogozhinsky is to be thanked for his energetic research and management of the Tamgaly complex.
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reveal the dryland settlement area of the site. The 2004/5 excavations included two wetland test-pits; however these only revealed occasional fragments of bone, of the sort found elsewhere around Lake Flixton, rather than the more spectacular remains discovered by Clark.

In 2006, more extensive fieldwork was undertaken on the dryland/wetland margins. Two larger trenches, measuring 3x11m and 3x8m respectively, were excavated to the east of the 1980s excavations. The most eastly of these revealed a rather sparse scatter of lithic material and some possible planks of worked wood (presently being analysed by Maisie Taylor). More significant evidence was recovered from the second trench (trench 22), just 12m to the east of the trench excavated in the 1980s where the timber platform was encountered. Though no evidence of the platform itself was found, trench 22 yielded several of the distinctive woodchips produced as a by-product of Mesolithic woodworking. The trench also yielded two clusters of worked antler. The first of these was in a particularly poor state of preservation; however the second cluster, more towards the lakeward end of the trench, was slightly better preserved and displays use of the groove and splinter technique which was employed to produce blanks to make worked bone.

The Chester Amphitheatre Project and were jointly funded by Chester City Council and English Heritage.

The Middle Iron Age
On removal of the pre-Roman soil horizon, the natural subsoil was exposed. This varied across the site, but was generally glacial clay till rarely more than 0.5m thick that overlay the weathered surface of the underlying sandstone bedrock. Plough scarring could be seen to have penetrated the surface to a depth of 0.6m. In some places, features midway between the shallow scars were consistent with the use of a simple ard-type implement. This evidence supported the suggestion that the pre-Roman soil was in fact a caprock cultivation soil. At the eastern edge of the site, a large post setting was identified cut into the top of the natural subsoil when a small area of the pre-Roman cultivation soil was removed. When they were excavated, it was established that they were each 0.9m in diameter, 0.6m deep and that one post-hole had the other. The earlier post-holes represented two or three layers of identifiable post-pipe suggesting a timber with a diameter of 0.5m; wood charcoal from the base of this post-pipe produced a standard radiometric date of 390 to 180 Cal BC (Wk19120).

A much larger area of the pre-Roman cultivation soil was removed during 2006 and a further two pairs of large post-holes were identified; in each case, one post-hole had been succeeded by another. It became clear that the post-holes represented a four-post structure, the fourth corner of which had been removed by a substantial medieval cress-pit. Furthermore, the occurrence of the post-holes in pairs indicated that the first four-post structure had been dismantled and then replaced with a second similar structure with slightly different alignment and dimensions. The earlier structure was fairly square in plan measuring 3.5m by 3.5m, and in all three instances the packing stones and post-pipes remained intact demonstrating that all of the timbers

THE PRE-ROMAN ARCHAEOLOGY OF CHESTER’S ROMAN AMPHITHEATRE
Between 2004 and 2006, excavations at the Roman amphitheatre, Little St John Street, Chester (SJ 4085 6614), were carried out under the direction of Dan Garner (Chester City Council Archaeology Service) and Tony Wilmott (English Heritage). Three trenches (designated A, B and C) on the northern half of the amphitheatre were excavated as part of The Chester Amphitheatre Project and were jointly funded by Chester City Council and English Heritage.

During previous excavations on the site in the 1960s, a pre-Roman soil horizon was identified over large areas of the northern seating bank or cavea. This deposit was labelled as ‘original ground surface’ and was generally treated as a natural sub-soil. This soil horizon was exposed over a fairly large area in trench A during the first season of excavation in 2006 and demonstrated that the pre-Roman activity was more complex than had originally been anticipated. Three phases of activity could be discerned in the archaeological record and these are described in greater detail below. The evidence is ground breaking in the context of archaeology in the city of Chester; previous archaeological investigations have only been able to establish evidence for pre-Roman cultivation of indeterminate date. It is now possible to demonstrate that the site at Chester was settled and farmed several centuries before the arrival of the Roman military and the establishment of the legionary fortress.

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2005 revealed a continuous spread of lithic material and Cambridge in order to gather as much material as Star Carr. 192 barbed antler points have been found in excavations at Star Carr, but only one further example has been found in 30 years of excavations around Lake Flixton. The same is true for beads and antler frontlets: none of these objects have been found elsewhere, in comparison to large numbers at Star Carr. This pattern has led several archaeologists to suggest independently that there was an important ritual element to the activities undertaken at Star Carr and that people were depositing objects made from animal remains into the shallow waters at the lake. It is significant that the only other sites where antler frontlets have been recovered (three sites in Germany) also display similar patterning in the deposition of combinations of frontlets, beads and barbed points, often into shallow water. Analogies can perhaps be made with a number of contemporary hunter-gatherer groups who believe that animals should be treated with respect in order that they continue to give themselves up to the hunter and this respectful treatment often encompasses the careful disposal of animal bones in particular areas.

Given these uncertainties surrounding the site, it was decided to undertake new excavations at Star Carr. It was already apparent that the excellent preservation conditions that had made the site so famous were deteriorating. A project was therefore established between the Universities of Manchester, York, UCL, and Cambridge in order to gather as much information from the site before the organic material finally decayed. The project commenced with fieldwalking and small-scale test-pitting in 2004. This work revealed that the spread of Mesolithic material continued even further to the east than the 1980s fieldwork suggested. Further test-pitting in 2005 revealed a continuous spread of lithic material along the spine of the peninsula to the east of the site. It is hoped that further work on this area may reveal the dryland settlement area of the site. The 2004/5 excavations included two wetland test-pits; however these only revealed occasional fragments of bone, of the sort found elsewhere around Lake Flixton, rather than the more spectacular remains discovered by Clark.

In 2006, more extensive fieldwork was undertaken on the dryland/wetland margins. Two larger trenches, measuring 3x11m and 3x8m respectively, were excavated to the east of the 1980s excavations. The most easterly of these revealed a rather sparse scatter of lithic material and some possible planks of worked wood (presently being analysed by Massie Taylor). More significant evidence was recovered from the second trench (trench 22), just 12m to the east of the trench excavated in the 1980s where the timber platform was encountered. Though no evidence of the platform itself was found, trench 22 yielded several of the distinctive woodchips produced as a by-product of Mesolithic woodworking. The trench also yielded two clusters of worked antler. The first of these was in a particularly poor state of preservation; however the second cluster, more towards the lakeward end of the trench, was slightly better preserved and displays use of the groove and splinter technique which was previously employed to produce blanks to make barbed points. These antler clusters have yielded dates towards the end of the 10th millennium uncal BP, making them the latest known artefacts from Star Carr. Taken with earlier dates on barbed points and antler debris from Clark’s trenches, this indicates that barbed points were produced throughout the long history of the occupation of the site and strengthens the association of Star Carr with rare artefacts made from animal remains. Overall it appears there is a reduction in the diversity of objects made from animal remains as one moves east - from the huge variety in Clark’s trench, to a single barbed point and evidence of antler working in the 1950s trench, to evidence from antler working alone in the westernmost 2006 trench. It thus appears that we are closer to understanding the extent and distribution of unusual objects at the site.

THE PRE-ROMAN ARCHAEOLOGY OF CHESTER’S ROMAN AMPHITHEATRE

Between 2004 and 2006, excavations at the Roman amphitheatre, Little St John Street, Chester (SJ 4058 6614), were carried out under the direction of Dan Garner (Chester City Council Archaeology Service) and Tony Wilmott (English Heritage). Three trenches (designated A, B and C) on the northern half of the amphitheatre were excavated as part of The Chester Amphitheatre Project and were jointly funded by Chester City Council and English Heritage.

During previous excavations on the site in the 1960s, a pre-Roman soil horizon was identified over large areas of the northern seating bank or cauva. This deposit was labelled as ‘original ground surface’ and was generally treated as a natural sub-soil. This soil horizon was exposed over a fairly large area in trench A during the first season of excavation in 2006 and demonstrated that the pre-Roman activity was more complicated than had originally been anticipated. Three phases of activity could be discerned in the archaeological record and these are described in greater detail below. The evidence is ground breaking in the context of archaeology in the city of Chester; previous archaeological investigations have only been able to establish evidence for pre-Roman cultivation of indeterminate date. It is now possible to demonstrate that the site at Chester was settled and farmed several centuries before the arrival of the Roman military and the establishment of the legionary fortress.

The Middle Iron Age

On removal of the pre-Roman soil horizon, the natural subsoil was exposed. This varied across the site, but was generally glacial clay till rarely more than 0.5m thick that overlay the weathered surface of the underlying sandstone bedrock. Plough scars could be seen to have penetrated the surface indicating more recent natural subsoil cultivation. The shallow scars were consistent with the use of a simple ard-type implement. This evidence supported the suggestion that the pre-Roman soil was in fact a pre-agricultural soil. At the east end of large post settings was identified cut into the top of the natural subsoil when a small area of the pre-Roman cultivation soil was removed. When they were excavated, it was established that they were each 0.9m in diameter, 0.6m deep and that one post-hole had cut the other. The earlier post-holes had an identifiable post-pipe suggesting a timber with a diameter of 0.5m; wood charcoal from the base of this post-pipe produced a standard radiometric date of 390 to 180 Cal BC (WL19120).

A much larger area of the pre-Roman cultivation soil was removed during 2006 and a further two pairs of large post-holes were identified; in each case, one post-hole had been succeeded by another. It became clear that the post-holes represented a four-post structure, the fourth corner of which had been removed by a substantial medieval cress-pit. Furthermore, the occurrence of the post-holes in pairs indicated that the first four-post structure had been dismantled and then replaced with a second similar structure with slightly different alignment and dimensions. The earlier structure was fairly square in plan measuring 3.5m by 3.5m, and in all three instances the packing stones and post-pipes remained intact demonstrating that all of the timbers...
had been between 0.45 and 0.5m in diameter. One of these earlier post-holes had a broken saddle quernstone amongst its packing material and as mentioned above the structure was probably dismantled about 390 to 180 Cal BC (Wk19120). The second four-post structure was roughly square in plan with dimensions of 3m by 4m; the post-holes were of a similar size to that of the earlier structure but in all three instances the post-pipes did not survive.

To the south of the four-post buildings, two segments of a circular gully were also found to be cut into the natural subsoil. The southern extent of these gullies had been removed by the construction of the amphitheatre arena during the 1st century AD, but enough survived to suggest a circular enclosure with a diameter of about 10m. This had been tentatively interpreted as the remains of a roundhouse. Within the surviving interior of this enclosure was a single post-hole that was filled with charred cereal grains that still await identification and analysis. A single sherd of Cheshire stony VCP (briquetage associated with the pre-Roman Cheshire salt trade) was recovered from one section of the gully and this represents the entire artefact assemblage for this phase of the excavation.

The Late Iron Age

During the excavation of the pre-Roman cultivation soil the varying excavation conditions led the excavation team to identify slight changes in what had originally been assumed to be a single deposit. In some instances, these changes might not have been real; however, what is certain is that all of these soils overlay the earlier Iron Age structural features described above and also sealed a multitude of linear

scarring marks in the surface of the natural subsoil that are thought to have been created by cultivation using an ard. It was generally impossible to discern whether the ard-marks post-dated or pre-dated the Iron Age structural features, but the presence of the overlying cultivation soils would argue for the former. Approximately 25% of the cultivation soil was set aside for wet sieving down to 4mm mesh with the aim of recovering cultural material. Generally speaking, this was only served to recover fairly abundant amounts of heat-fractured stone and occasional pieces of worked flint - the latter clearly being residual. Artefacts were generally limited to stone objects (hearth fractured stone, flint-work, sharpening stones and a fragment of quern stone), but some small fragments of ceramic (possibly Cheshire stony VCP) were also recovered along with a corroded iron object that awaits analysis for identification. It is conceivable that the artefacts recovered from the cultivation soils actually relate to occupation of the earlier structures described above.

The upper surface of the pre-Roman cultivation soil was found to contain undulations in several areas of the excavation and it became clear that these anomalies represented the remains of buried earthworks that pre-dated the construction of the amphitheatre. This was most clearly demonstrated in the area between the back of the Nemeceum and the amphitheatre’s outer wall, where a series of ridges and furrows were recorded. Roughly six parallel furrows were identified in this area running on an east-west alignment, and spaced at c.1m intervals. The best preserved examples of this earthwork were uncovered after the removal of the Roman seating bank deposits immediately adjacent to the inner face of the amphitheatre’s outer wall, which are associated with the earliest phase of amphitheatre construction. Further to the north, this ridge and furrow earthwork could be seen to have survived in a slightly more truncated state. The overall impression is that this system of earthworks represents part of a Late Iron Age cultivation technique that is often referred to as ‘cord-rib’ (when it has been found further north beneath Roman forts on Hadrian’s Wall).

The Late Iron Age/Roman interface

In an area between the two outer walls of the later Roman amphitheatre, a series of five small post-holes were identified cut into the pre-Roman cultivation soil. These post-holes formed a clear northeast to southwest alignment that did not respect the line of the amphitheatre wall. No artefactual evidence was recovered from these post-holes and their dating remains debatable. They are unlikely to represent timber scaffolding related to the construction of the amphitheatre wall as they were removed prior to the excavation of the wall’s foundation trench and they do not continue further to the north-east. It is therefore more likely that they form one side of either an ephemeral timber structure or part of a fence-line possibly for a small stock enclosure.

To the south-west of the post-hole alignment, there was a slight depression in the surface of the pre-Roman cultivation soil, which may have once served to form a muddy hollow that had clearly been churned up by the passage of traffic. This was mainly indicated by the presence of a mixture of human footprints and animal tracks that overlay one another. The sequence appeared to suggest that the earliest imprints were human footprints in a mixture of sizes from possible children/small female feet to average-sized male footprints. On two examples, there was a suggestion that these pedestrians had been wearing footwear and in one instance it was possible to suggest that the imprint of hobnails was visible. The human footprints were overlain by a series of three narrow wheel ruts that were probably formed by a small cart. Finally, there was a series of animal tracks (some of which were possibly hoof prints from cattle) that could clearly be seen to have post-dated both the human footprints and the wheel ruts. These footprints and tracks were sealed beneath a thick layer of fairly sterile red sandstone brash that was thought to have functioned as a make-up/levelling layer immediately prior to the beginning of the construction of the amphitheatre. They would probably not have been preserved in the archaeological record if they had been left exposed for any length of time and this implies that the footprints and tracks formed only weeks or days before the construction of the amphitheatre was begun!

For more information visit www.chesteramphitheatre.co.uk.

Dan Garner, Senior Archaeologist, Chester City Council

THE SALCOMBE FIND – SOME COMMENTS FROM READERS

Dear Editor,

The article on Salcombe in April PAST (‘Mediterranean bronze found in English waters’; see also British Archaeology, November/December 2006) states that the enigmatic strumento is ‘the first secure object of Mediterranean origin and Bronze Age date to be found in north-west Europe’. We await full publication of the Salcombe context, but this sweeping statement writes out of prehistory at least one other secure find.

Still on the south coast of England, it is not clear whether the shaft-hole axe found at Southbourne in Dorset is from a context significantly less secure than Salcombe. This axe was recovered just below the low water mark on the beach. It is sometimes referred to as F一名 Hengisbury Head, though found a little to the west; of Sicilian origin, it is somewhat later in date than the strumento. But elsewhere in north-west Europe we do have an undoubted secure Mediterranean object, broadly contemporary with Salcombe. This is a razor in the hoard from Ommerschans in the Netherlands, also known for its..

Nicholas Thomas

THE 2007 EUROPA LECTURE

The 2007 Europa Lecture took place on May 23 and was given by Professor Lars Larson of the University of Lund, in Sweden. Introducing Professor Larson, the President referred to the wide range of his interests and the extraordinary number of his publications. It is good to know that the text of his lecture will be added to the list and will appear in our Proceedings.

The lecture was on ‘Ritual buildings in prehistoric Scandinavia’ and covered an enormous range of different projects, some of them conducted by Professor Larson himself. It began with his Mesolithic cemetery at Skeatholm and ended with an extraordinary temple dating from the first millennium AD at Uppåkra just outside Lund where he is excavating at the moment. The lecture even featured a gold ring found a week earlier.

The lecture covered an enormous period of time from the Mesolithic period to the Viking Age and drew on many revealing examples: the specialised buildings associated with Mesolithic graves in Scandinavia; the first earthen long barrows to be found in southern Sweden; the timber and stone ‘cult houses’ of the Neolithic and Bronze Age; and the
To the south of the four-post buildings, two segments of a circular gully were also found to be cut into the natural subsoil. The southern extent of these gullies had been removed by the construction of the amphitheatre arena during the 1st century AD, but enough survived to suggest a circular enclosure with a diameter of about 10m. This has been tentatively interpreted as the remains of a roundhouse. Within the surviving interior of this enclosure was a single post-hole that was filled with charred cereal grains that still await identification and analysis. A single sherd of Cheshire stony VCP (briquetage associated with the pre-Roman Cheshire salt trade) was recovered from one section of the gully and this represents the entire artefact assemblage for this phase of the excavation.

The Late Iron Age

During the excavation of the pre-Roman cultivation soil the post-holes were observed to vary in condition. In some instances, these changes might not have been real; however, what is certain is that all of these soils overlay the earlier Iron Age structural features described above and also sealed a multitude of linear scars marking in the surface of the natural subsoil that are thought to have been created by cultivation using an ard. It was generally impossible to discern whether the ard-marks post-dated or pre-dated the Iron Age structural features, but the presence of the overlying cultivation soils would argue for the former. Approximately 25% of the cultivation soil was set aside for wet sieving down to 4mm mesh with the aim of recovering cultural material. Generally speaking, this only served to recover fairly abundant amounts of heat-fractured stone and occasional pieces of worked flint - the latter clearly being residual. Artefacts were generally limited to stone objects (heat fractured stone, flint-work, sharpening stones and a fragment of quern stone), but some small fragments of ceramic (possibly Cheshire stony VCP) were also recovered along with a corroded iron object that awaits analysis for identification. It is conceivable that the artefacts recovered from the cultivation soils actually relates to the occupation of the earlier structures described above.

The upper surface of the pre-Roman cultivation soil was found to contain undulations in several areas of the excavation and it became clear that these anomalies represented the remains of buried earthworks that pre-dated the construction of the amphitheatre. This was most clearly demonstrated in the area between the back of the Nemeceum and the amphitheatre’s outer wall, where a series of ridges and furrows were recorded. Roughly six parallel furrows were identified in this area running on an east-west alignment, and spaced at c.1m intervals. The best preserved examples of this earthwork were uncovered after the removal of the Roman seating bank deposits immediately adjacent to the inner face of the amphitheatre’s outer wall, which are associated with the earliest phase of amphitheatre construction. Further to the north, this ridge and furrow earthwork could be seen to have survived in a slightly more truncated state. The overall impression is that this system of earthworks represents part of a Late Iron Age cultivation technique that is often referred to as ‘cord-rig’ (when it has been found further north beneath Roman forts on Hadrian’s Wall).

The Late Iron Age/Roman interface

In an area between the two outer walls of the later Roman amphitheatre, a series of five small post-holes were identified cut into the pre-Roman cultivation soil. These post-holes formed a clear northeast to southwest alignment that did not respect the line of the amphitheatre wall. No artefactual evidence was recovered from these post-holes and their dating remains debatable. They are unlikely to represent timber scaffolding related to the construction of the amphitheatre wall as they were removed prior to the excavation of the wall’s foundation trench and they do not continue further to the north-east. It is therefore more likely that they form one side of either an ephemeral timber structure or part of a fence-line possibly for a small stock enclosure.

To the south-west of the post-hole alignment, there was a slight depression in the surface of the pre-Roman cultivation soil, which may have once supported a thick layer of fairly sterile red sandstone brash that was thought to have functioned as a make-up layer or levelling layer immediately prior to the beginning of the construction of the amphitheatre. They would probably not have been preserved in the archaeological record if they had been left exposed for any length of time and this implies that the footprints and tracks formed only weeks or days before the construction of the amphitheatre was begun!

For more information visit www.chesteramphitheatre.co.uk.

Dan Garner, Senior Archaeologist, Chester City Council

THE SALCOMBE FIND – SOME COMMENTS FROM READERS

Dear Editor,

The article on Salcombe in April PAST (‘Mediterranean bronze found in English waters’; see also British Archaeology, November/December 2006) states that the enigmatic strumento is ‘the first secure object of Mediterranean origin and Bronze Age date to be found in north-west Europe’. We await full publication of the Salcombe context, but this sweeping statement written out of prehistory at least one other secure find.

Still on the south coast of England, it is not clear whether the shaft-hole axe found at Southbourne in Dorset is from a context significantly less secure than Salcombe. This axe was recovered just below the low water mark on the beach. It is sometimes referred to as the Hengistbury Head, though found a little to the west of Sicilian origin, it is somewhat later in date than the strumento. But elsewhere in north-west Europe we do have an undisputed secure Mediterranean object, broadly contemporary with Salcombe. This is a razor in the hoard from Oommerschans in the Netherlands, also known for its outsize blade in the form of a dirk similar to the example from Oxborough, Norfolk, currently on display in the British Museum. The Oommerschans razor also belongs to a type that occurs in Sicily.

Brendan O’Connor

Dear Dr Brück,

How on earth can Italian colleagues have assembled such a collection of words (meaning, roughly, instrument with a socket like a cannon) to describe the Bronze Age thing recovered recently off the Devon coast? Surely it is clear what it is and it should be described accordingly: a potato peeler or subcioppatoare.

Nicholas Thomas

THE 2007 EUROP A LECTURE

The 2007 Europa Lecture took place on May 23 and was given by Professor Lars Larson of the University of Lund, in Sweden. Introducing Professor Larson, the President referred to the wide range of his interests and the extraordinary number of his publications. It is good to know that the text of his lecture will be added to the list and will appear in our Proceedings.

The lecture was on ‘Ritual buildings in prehistoric Scandinavia’ and covered an enormous range of different projects, some of them conducted by Professor Larson himself. It began with his Mesolithic cemetery at Skåholmen and ended with an extraordinary temple dating from the first millennium AD at Ípikirka just outside Lund where he is excavating at the moment. The lecture even featured a gold ring found a week earlier.

The lecture covered a enormous period of time from the Mesolithic period to the Viking Age and drew on many revealing examples: the specialised buildings associated with Mesolithic graves in Scandinavia; the first earthen long bowars to be found in southern Sweden; the timber and stone ‘cult houses’ of the Neolithic and Bronze Age; and the...
May 17, 2008, and we are anticipating a great deal of different views, before culminating in Professor Larsson of the University of Oxford. Next year will be entitled ‘Britons in the Celtic world: the centrepiece of a day-conference on a related theme. We are confident that these new-style Europa day-meetings, taking place in regional locations as well as in the capital, will provide a fitting context for the presentation of our Society’s most prestigious prize.

PREHISTORIC SOCIETY MEETINGS AND EVENTS 2007-8

The programme for next year’s lectures and meetings is coming together. We have decided to make a few changes - more day conferences, fewer events in London, more collaborative lectures. Details of a number of events have yet to be finalised and all details will be posted on our website, together with contact details and booking forms as applicable, as soon as they become available. We are also planning some one-day field visits to ‘live’ projects but these may be organised at fairly short notice and will be very much on a first-come-first-served basis, so for all events do keep checking the website. Booking forms will be included in later editions of PAST.

Members, please note that the loss of our office in London also resulted in the loss of our phone number. If you do not have easy access to the website you can also contact Julie Gardiner about obtaining details of events (events inquiries only please) on 01222 343413 who will pass your inquiry to Texas. All meetings marked with * are free to members (£3 on the door for non-members). Just turn up on the day! All other meetings must be pre-booked via the contacts given. Please book early to avoid disappointment.

EUROPA 2008: A NEW LOCATION, A NEW FORMAT AND A MAJOR EVENT

The Society is delighted to announce that the 2008 Europa Prize will be awarded to Professor Sir Barry Cunliffe of the University of Oxford. Next year will also mark a significant break with tradition in that the accompanying Europa lecture, rather than being held in London on a Wednesday evening, will form the centrepiece of a day-conference on a related theme.

The first of our new annual Europa day-meetings will be entitled ‘Britons in the Celtic world: contrasting perspectives’. It will draw together archaeologists, geneticists and linguists, featuring two speakers from each discipline with rather different views, before culminating in Professor Cunliffe’s own lecture, entitled ‘A race apart? Insularity and connectivity’.

The meeting will be held in Oxford on Saturday, May 17, 2008, and we are anticipating a great deal of interest! Further details will be announced later. The Society’s AGM will also be held on this day, immediately before the presentation of the Europa prize at the start of Barry’s lecture.

Proposing the vote of thanks after an outstanding lecture, Richard Bradley commented, with a certain envy, on the Scandinavian definition of prehistory, which does not end at the Roman period but continues until AD 1000. Few prehistorians could carry out research over such a broad field, but Professor Larsson is one of them. The lecture was a perfect demonstration of his wide range of interests.

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2007

Thurs. 11th Oct. 7.30pm

Lecture: Aberdeen

Venue TBC

Forgotten sites and elusive images: prehistoric rock carvings of southern Scandinavia*, John Coles

Joint Prehistoric Society/Society of Antiquaries of Scotland

Wed. 24th Oct. 5pm

Lecture: London

Society of Antiquaries, Burlington House, Piccadilly

The seventh Sara Champion Memorial Lecture: ‘A crystal world from weeping stone: considering the relationships between Neolithic cave art and monument construction on Mendip’, Dr Jodie Lewis

Dec. TBC

Day conference: Venue TBC

Research Strategy for Prehistory

A day of papers to launch English Heritage’s Research Strategy for Prehistory Joint seminar Prehistoric Society/English Heritage

2008

Sat. 12th Jan.

Lecture: Norwich

Venue TBC

Title to follow, Speaker to follow

Joint Prehistoric Society/Norfolk & Norwich Archaeological Society

Jan. TBC

Lecture: Exeter

Venue TBC

Title to follow*, Speaker to follow

Joint Prehistoric Society/Devon Archaeological Society

Sat. 20th Feb.

Day conference: London

Society of Antiquaries, Burlington house, Piccadilly

‘The view from above, the view from below; surveying the prehistoric landscapes of England’

A review of how major large-scale aerial photographic mapping, ground survey and geophysical prospection is revolutionising our understanding of prehistoric landscapes.

Price: £30 inc tea & coffee

Sat. 9th Feb. 2pm

Lecture: Lewes

St Thomas a Becket church hall, Cliffe High St, Lewes

‘Visions of power and virtue: making the significant dead in Early Bronze Age Britain’, Dr Paul Garwood

Joint Prehistoric Society/Sussex Archaeological Society

Price: £2. Places must be booked in advance.

Cheques should made be payable to ‘Sussex Past’, and sent to Lorna Gartside, Sussex Archaeological Society, Barbican House, 169 High Street, Lewes BN7 1YE.

Fri. 18th Sun. 20th April

Conference: Bournemouth

Venue: Bournemouth University

‘The British Chalcolithic’

A major conference on the Neolithic-Bronze Age transition - not just Beakers!

Joint Prehistoric Society/Bournemouth University Archaeology & History Group

Sat. 17th May

Day conference and Europa Lecture: Oxford

Venue: TBC


NB There will be a fee for the conference (TBC) but the Europa Lecture will be free to members; £3 to non-members

Fri. 23rd-Sun. 25th May

Study Weekend: Venue: Dillington House, Ilminster, Somerset

Iron Age or Celtic Britain? Picking up on the theme of the Europa conference. Lectures on Friday and Saturday followed by a field trip on Sunday.

For details please contact Wayne Bennett, Dillington House, Ilminster TA19 7DZ. Tel: 01460 52427; email: dillington@somerset.gov.uk

June TBC

British Study Tour: Venue: TBC

We are exploring possibilities, most likely for a trip to several of the Hebridean isles (subject to availability of suitable accommodation) - details to follow

Fri. 15th Sun. 17th Aug

Budget study weekend: Venue: Based in Bath

Prehistory of Mendip

Following the success of our day visit from Dillington and the Sara Champion lecture, we propose a ‘budget’ weekend based at Bath YHA exploring the prehistoric landscape of Mendip, led by Dr Jodie Lewis.
OCT.
Weekend study tour:
North Wales.
The 4th student tour
Wed.
29th Oct.
Lecture:
Venue: TBC
8th Sara Champion Memorial Lecture* TBC
NB may be outside London
Dec.
TBC
Conference: London
Venue: Geological Society, Burlington House, Piccadilly
Coastal erosion and prehistory
A major conference exploring the effects of global warming and coastal erosion on the prehistoric archaeology of the UK
Joint Prehistoric Society/Geological Society meeting, subject to agreement and confirmation
In the planning stages: budget study tour: Isle of Wight; field trip and lecture: Creswell Crags; field trip: Silbury Hill; day conference: recent developments in Palaeolithic archaeology, the impact of Aggregates Levy funding; day conference: cave archaeology - what's new?; day conference: environmental techniques: recent applications for interpreting archaeology; day conference: Prehistoric London reviewed; conference: archaeology & astronomy

**DATING A PEGGED, SOCKETED, LEAF-BLADE SPEARHEAD FROM LANCASHIRE: SOME IMPLICATIONS FOR THE REGION'S BRONZE AGE**

**Introduction**
Bronze weapons and tools are a defining characteristic of the Bronze Age period. Although much energy has been invested in their description and curation, from which relative typological chronologies have been constructed, we still know comparatively little about their precise absolute dating. The problem is that metal is not conducive to radiocarbon dating methods, which require organic material for analysis. A rare exception to this rule occurs where metalwork is found still attached to wooden shafts or handles. In those cases, it is possible to use the technique of Accelerator Mass Spectrometry (AMS) radiocarbon assay to determine dates for the wood, from which dates for the attached metalwork may be inferred. This paper reports on the results of an analysis of a wooden spearshaft found partially intact by metal detectorist, Mr Matt Hepworth. Thanks to his foresight, he had retained both bronze spear and wooden shaft, making possible their detailed study. The spear and its shaft were found at Priest Hutton, Carnforth, Lancashire (OS ref SD 5260 7450, c. 40m OD).

**Description of the spear and spear shaft**
The find is of a pegged, socketed, leaf-blade spearhead with single midrib. The spear measures 175mm long, 40mm wide (across the blade) and is 2.3mm thick. It is generally in good condition. There is slight wear and some damage to the blade edge. Such damage has been widely reported in bronze spears and is associated with use in the prehistoric period. It is likely that the tip to the spear, which is missing, was similarly lost during use. The artefact has a dark brown patina, with areas of green where corroded.

The spear came to light with a portion of the wooden shaft in situ. Prior to radio carbon assay, which is a destructive process, the shaft was drawn. What was most significant was that the shaft, although in a state of decay, still retained evidence of a hole drilled through it in order to accommodate the peg which would have secured it to the spear, thus confirming the link between the two artefacts. Analysis of the wooden shaft, undertaken by Dr Jennifer Miller of Glasgow University Archaeological Research Department, confirmed the author's initial interpretation that the shaft was made of Fraxinus sp. (ash).

AMS radiocarbon assay
Dating was undertaken by Dr Gordon Cook and Philip Naysmith of the Scottish University Environmental Research Council (SUERC) radiocarbon laboratory. The process required chemical pre-treatment of the shaft, which had been preserved by the finder in cooking oil, to remove all traces of contamination.

On typological grounds alone, the bronze spearhead dates to the Penard phase (Period 5) of the Bronze Age. This period equates to the Middle Bronze Age, 1300-1150 cal. BC. However, radiocarbon assay of the wooden shaft produced a date in the range 1080-890 cal. BC. This corresponds to the Wilburton/Blackmoor/Ewart Park phases (Period 6/7) and the transition from the Middle to the Late Bronze Age. The difference between the dates for the bronze spearhead, and that for its shaft, suggests that the spear was in circulation for a period of between 70 and 410 years before being deposited, perhaps as part of a ritual ceremony, at Priest Hutton. This length of use, although apparently long, corresponds to similar use-lives found in hoarded objects elsewhere in Lancashire.

Taking data from seven hoards for which the typology of the contents could be determined, it was possible to assess the age range of the contents (see graph). In the case of the Wimlarleigh hoard, found at Filling Moss, the oldest objects were also pegged, socketed, leaf-shaped spearheads, similar to the one found at Priest Hutton, and also dating to the Penard phase on typological grounds. The youngest objects in the hoard, for example the Yorkshire-type socketed axes, date to the Ewart Park phase of the Late Bronze Age (Period 7, 1000-800 cal. BC). Thus the oldest objects in the hoard were between 150-500 years old at the time they were deposited in the moss. Although the dating is approximate, it is clear that, even using the most conservative estimate of age, the oldest object must have passed through several generations before it was deposited. Similarly lengthy periods of circulation were found amongst objects deposited in hoards at Congleton, Bexton Castle and in the River Ribble.

Support for the hypothesis that objects circulated over long periods of time prior to deposition is provided by analysis of use-wear. Repeated resharpeming of the edges of objects has been noted elsewhere in the European Bronze Age. In Lancashire, a number of instances of reshaping can be identified in objects. Objects can also be modified: Bridgfords cites an example of a sword that ended up as a dagger. In the area surrounding Morecambe Bay, I have identified a Group II dirk from Acron Park phase (Period 5), the butt of which has been reworked into a broad tang and then drilled with a secondary hole for re-hafting. With each event, the artefact acquired additional meaning imbuing it with individual character, so that we can begin to think of these objects as having 'biographies'.

**Interpretation:** The consumption of metalwork during the Bronze Age
The deposition of the Priest Hutton spear in the Late Bronze Age came after a long period during which it,
The Priest Hutton spear. Type: pegged, socketed, leaf-shaped blade with single midrib. Note the missing tip and damage to the blade edge, possibly due to prehistoric use.

The surviving wooden spearshaft. The shaft is made of ash and was found inside the socket of the bronze spear. A hole had been drilled through the shaft, seen most clearly in the centre illustration, to accommodate the peg that would have passed through the hole in the spearhead to secure it to the shaft.

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Support for the hypothesis that objects circulated over long periods of time prior to deposition is provided by analysis of use-wear. Repeated resharpening of the edges of objects has been noted elsewhere in the European Bronze Age. In Lancashire, a number of instances of resharpening can be identified in objects. Objects can also be modified: Bridgford cites an example of a sword that ended up as a dagger. In the area surrounding Morecambe Bay, I have identified a Group II dirk of Acrum Park phase (Period 5), the butt of which has been reworked into a broad tang and then drilled with a secondary hole for re-hafting. With each event, the artefact acquired additional meaning imbuing it with individual character, so that we can begin to think of these objects as having ‘biographies’.

Interpretation: The consumption of metalwork during the Bronze Age
The deposition of the Priest Hutton spear in the Late Bronze Age came after a long period during which it,
just like the objects found in bronze hoards, must have passed through the hands of several owners. Insight into the social significance of these weapons can be gained from a reading of comparative ethnography which leads one to consider this behaviour in terms of ‘consumption’. Consumption of objects, including metalwork, can be one of the factors that emphasises similarities and differences within a community: just think of how we regard motor vehicles in our own society, and how we drive - a 4×4, a Rolls Royce or a third hand Ford - determines how we regard others, and how we are regarded by them. In the Bronze Age, ownership of certain bronze weapons and associated activities, such as deposition, could become social markers used in group affiliation. Deliberate deposition of particular objects suggests that they had specific meaning; this meaning came about during the life of the object. This implies that during its life an object is likely to undergo transformations of meaning. In order to become valuable, and earn the right to be ritually deposited, they should fulfil specific expectations. If they do not fulfil the expectations, and follow the life-path considered appropriate, they may lose their significance. This is something which has been recorded for several ethnographic case studies on the use of valuables elsewhere in the world.

In the case of metalwork, it is unclear whether objects began their lives as commodities, later transforming their status to that of valuables, or whether they existed from the beginning as valuables. Some even argue against the distinction. It is likely that bronze objects may have been both gifts and commodities with different spheres of exchange co-existing. As Mauss has shown, during gift exchange an object is to some extent seen as imbued with the presence of the former owner, hence the inalienability of the object. It becomes to an extent personified. Godelier has argued that in the case of bronze weapons and associated activities, such as deposition, could become social markers used in group affiliation. Deliberate deposition of particular objects suggests that they had specific meaning; this meaning came about during the life of the object. This implies that during its life an object is likely to undergo transformations of meaning. In order to become valuable, and earn the right to be ritually deposited, they should fulfil specific expectations. If they do not fulfil the expectations, and follow the life-path considered appropriate, they may lose their significance. This is something which has been recorded for several ethnographic case studies on the use of valuables elsewhere in the world.

The transactions themselves are hard to recognise archaeologically. One way that we may identify the existence of spheres of exchange is to examine objects in hoards. Valuables are likely to have passed through several hands and to have accumulated complex biographies before being deposited. They are therefore likely to have achieved considerable age and to bear the marks of circulation at the point of deposition.

Conclusion
This study highlights the importance of apparently insignificant fragments of wood. Without the foresight of the finder, the wooden shaft may well have been discarded and the detailed dating analysis rendered impossible. The insight offered by the analysis into the world of the prehistoric inhabitants of Lancashire is thought-provoking. It suggests that there is still much that can be learnt through detailed scientific analysis and the application of ethnographic case studies.

David A. Barrocasough MA PhD, Fellow, Wolfson College, Cambridge

CONFERENCE NEWS

9th Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology
Department of Archaeology, University of Reading, September 14-16, 2007

This year’s BABAO conference is open to both members and non-members: students, professionals and the public alike. Papers are invited for inclusion in three themed sessions as well as an ‘open’ session in which papers and posters on any topic can be presented. The titles of the themed sessions are:

- Ethical, Scientific and Cultural Issues in the Repatriation of Human Remains
- The Patter of Tiny Feet: the bioarchaeology of infants and children
- Mortuary Matters: the cultural aspects of death and disposal

Registration details, conference arrangements, session abstracts and guidelines for abstract submission are available at www.babao.org.uk. Abstracts for spoken or poster presentations should be sent by email to m.e.lewis@reading.ac.uk. The deadline for abstract submission is Wednesday 1st August. For any further enquiries please contact: Dr Mary Lewis (m.e.lewis@reading.ac.uk) at the Department of Archaeology, SHES, University of Reading, Whiteknights, PO Box 227, Reading RG1 2SA. Tel: 0118 8207, Fax: 0118 379 6718.

A SHOCKINGLY NEW PIT-ALIGNMENT ON THE TREN'T GRAVELS

PAST 54 brought news of a shockingly old pit-alignment in the Dee Valley of Aberdeenshire, created, it seems, in the 8th millennium BC or thereabouts, having previously been ascribed to the Early Neolithic (PAST 50). Well, contrasting, and equally startling news has lately come out of the Trent Valley in Nottinghamshire, where excavation ahead of gravel-extraction at Holme Pierrepont encountered unambiguous evidence for construction of a pit-alignment no earlier than the 18th century AD. Not only did some of its pits contain post-holes of that century (or possibly the early 19th - anyway residual, not intrusive) but, where the plan shows several of the oblong pits coalescing near the southern end of the alignment (at the edge of the gravel-terrace), these cut through a pair of earlier ditches that yielded glazed medieval sherds. Indeed, some would consider it distinctly conservative to dub this pit-alignment ‘post-medieval’ rather than ‘modern’.

At first sight, this revelation of a shockingly new pit-alignment in the Trent Valley may seem curious fare for readers of PAST, though it should be obvious enough that such very late dating carries serious implications for those prehistorians whose interests lie with landscape studies in the various corners of Britain where pit-alignments occur, often as cropmarks, undated other than through analogy and preconception. This will be particularly poignant for students of the final millennium BC, the supposed age of many a pit-alignment. And now, in light of the latest from the Dee Valley, it is perhaps also pertinent to those who study much earlier events. On the other hand, the relatively wide spacing of those pits in Scotland (about 5m can be inferred, as compared with an average of 1.5m at Holme Pierrepont) suggests that more than one phenomenon is masquerading under our ‘pit-alignment’ epithet.

A summary account of the multi-period results from this 5-hectare excavation at Holme Pierrepont has recently appeared in the county journal, Transactions of the Thoroton Society of Nottinghamshire vol. 110 (2006), pages 15-48.

Graeme Guilbert, Trent & Peak Archaeological Unit
just like the objects found in bronze hoards, must have passed through the hands of several owners. Insight into the social significance of these weapons can be gained from a reading of comparative ethnography which leads one to consider this behaviour in terms of ‘consumption’. Consumption of objects, including metalwork, can be one of the factors that emphasises similarities and differences within a community: just think of how we regard motor vehicles in our own society, and how what we drive - a 4x4, a Rolls Royce or a third hand Ford - determines how we regard others, and how we are regarded by them. In the Bronze Age, ownership of certain bronze weapons and associated activities, such as deposition, could become social markers used in group affiliation. Deliberate deposition of particular objects suggests that they had specific meaning; this meaning came about during the life of the object. This implies that during its life an object is likely to undergo transformations of meaning. In order to become valuable, and earn the right to be ritually deposited, they should fulfil specific expectations. If they do not fulfil the expectations, and follow the life-path considered appropriate, they may lose their significance. This is something which has been recorded for several ethnographic case studies on the use of valuables elsewhere in the world.

In the case of metalwork, it is unclear whether objects began their lives as commodities, later transforming their status to that of valuables, or whether they existed from the beginning as valuables. Some even argue against the distinction. It is likely that bronze objects may have been both gifts and commodities with different spheres of exchange co-existing. As Mauss has shown, during gift exchange an object is to some extent seen as imbued with the presence of the former owner, hence the inalienability of the object. It becomes to an extent personified. Godelier has argued that in the case of valuables perceived as very special, objects are not seen as signalling the presence of former owners, but of very special persons, and even ancestors or gods. The transactions themselves are hard to recognise archaeologically. One way that we may identify the existence of spheres of exchange is to examine objects in hoards. Valuables are likely to have passed through several hands and to have accumulated complex biographies before being deposited. They are therefore likely to have achieved considerable age and to bear the marks of circulation at the point of deposition.

Conclusion
This study highlights the importance of apparently insignificant fragments of wood. Without the foresight of the finder, the wooden shaft may well have been discarded and the detailed dating analysis rendered impossible. The insight offered by the analysis into the world of the prehistoric inhabitants of Lancashire is thought-provoking. It suggests that there is still much that can be learnt through detailed scientific analysis and the application of ethnographic case studies.

David A. Barrocaughlough MA PhD, Fellow, Wolfson College, Cambridge

CONFERENCE NEWS
9th Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology
Department of Archaeology, University of Reading, September 14-16, 2007

This year’s BABAO conference is open to both members and non-members: students, professionals and the public alike. Papers are invited for inclusion in three themed sessions as well as an ‘open’ session in which papers and posters on any topic can be presented. The titles of the themed sessions are:

- Ethical, Scientific and Cultural Issues in the Repatriation of Human Remains
- The Pattern of Tiny Feet: the bioarchaeology of infants and children
- Mortuary Matters: the cultural aspects of death and disposal

Registration details, conference arrangements, session abstracts and guidelines for abstract submission are available at www.babao.org.uk. Abstracts for spoken or poster presentations should be sent by email to m.e.lewis@reading.ac.uk. The deadline for abstract submission is Wednesday 1st August. For any further enquires please contact: Dr Mary Lewis (m.e.lewis@reading.ac.uk) at the Department of Archaeology, SHES, University of Reading, Whiteknights, PO Box 227, Reading RG1 2SA. Tel: 0118 8272, Fax: 0118 379 6718.

A SHOCKINGLY NEW PIT-ALIGNMENT ON THE TRENT GRAVELS

PAST 54 brought news of a shockingly old pit-alignment in the Dee Valley of Aberdeenshire, created, it seems, in the 8th millennium BC or thereabouts, having previously been ascribed to the Early Neolithic (PAST 50). Well, contrasting, and equally startling news has lately come out of the Trent Valley in Nottinghamshire, where excavation ahead of gravel-extraction at Holme Pierrepont encountered unambiguous evidence for construction of a pit-alignment no earlier than the 18th century AD - yes, AD. Not only did some of its pits contain postholes of that century (or possibly the early 19th - anyway residual, not intrusive) but, where the plan shows several of the oblong pits coalescing near the southern end of the alignment (at the edge of the gravel-terrace), these cut through a pair of earlier ditches that yielded glazed medieval sherds. Indeed, some would consider it distinctly conservative to dub this pit-alignment ‘post-medieval’ rather than ‘modern’.

At first sight, this revelation of a shockingly new pit-alignment in the Trent Valley may seem curious fare for readers of PAST, though it should be obvious enough that such very late dating carries serious implications for those prehistorians whose interests lie with landscape studies in the various corners of Britain where pit-alignments occur, often as cropmarks, undated other than through analogy and preconception. This will be particularly poignant for students of the final millennium BC, the supposed age of many a pit-alignment. And now, in light of the latest from the Dee Valley, it is perhaps also pertinent to those who study much earlier events. On the other hand, the relatively wide spacing of those pits in Scotland (about 5m can be inferred, as compared with an average of 1.5m at Holme Pierrepont) suggests that more than one phenomenon is masquerading under our ‘pit-alignment’ epithet.

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Graeme Guilbert, Trent & Peak Archaeological Unit

AN INKA ADMINISTRATIVE SITE IN THE ANCASH HIGHLANDS, NORTH-CENTRAL ANDES

During extensive survey and trial trenching in the Cordillera Negra of the north-central Ancash highlands of Peru, we discovered an important Late Horizon (AD 1480-1532) Inka administrative site. The site, known locally as Intiaurin, is located in the Chacaltayco Valley. This highland region is ecologically categorised as a tundra/sub-Alpine (3500-5100m) zone of steep vertical gradients, small highland plains and short narrow ravines fed by fast, seasonally active, high-energy water streams. Historically, this region fell under the sway of the
The Inka Empire during the late fifteenth century AD, becoming part of the Huaylas province.

The site of Intiurán was probably an administrative site created to consolidate imperial control across an important transit zone linking the central Andes with the Santa Valley to the east. Until now, this region of the northern and central Andes has very few verifiable Inka sites and no recognised administrative centres along the whole of the Cordillera Negra. The nearest known Inka administrative site is along the coast, this being Chiquitoy Viejo located in the northern Chica Valley at a distance of over 130km. Towards the west, in the Santa Valley, apart from another possible small Inka administrative site in the lower southern half of the valley at Pueblo Viejo, there are again few indications of imperial Inka installations. Given that it is very probable that a later Inka road existed linking the coast to the highlands, it is conceivable that the newly discovered site of Intiurán was the main conduit for this route suggesting an important thoroughfare here across this coastal cordillera.

Intiurán's identification as an Inka administrative centre is undisputed. The site is located at the transitional agriculture-herding boundary set at 3900 to 4100m and is divided into two discrete areas, one to the east and the other to the west. At the centre of each of these areas were two well defined kallanka (administrative buildings), facing in each instance an open area or plaza. While the western kallanka faced an area of agricultural or herd animals, that included a large natural rock that might have acted as an ushnu (ritual platform or dais) situated in the centre of the plaza, the eastern kallanka was built opposite a series of low rectangular-shaped walls. Without further study it is impossible to define the function of these rectangular spaces, although they could conceivably be corrals used to amass animals either as part of ritual, annual shearing, transport or tribute.

Intiurán was also the site of convergence of two clearly defined roads, one coming up from the coast and another heading north-west in the direction of the adjacent northern valley of Jimbe. Although the coastal road skirted the lower kallanka, it met the other road at the upper plaza. Both roads were clearly marked and had well defined stone steps and a kerb; both of these are well known Inka architectural road-building features.

The coastal road was serviced by two chaquicuas (Inka runner way-stations) located at the middle of the site between the upper and lower plazas. The lack of identifiable colcas (storage houses) suggests either that storage was located in individual houses or, as befits an agro-pastoral economy, storage was conducted ‘on the hoof’ (in the Andes this would actually be ‘on the pad’ in consideration of camelid anatomy). The low rectangular enclosures, or possible corrals, associated with the upper plaza and kallanka would seem to suggest the latter type of storage. A series of small (c.1m x 1m), roughly rectangular enclosures located between the two main areas of the site and running parallel to the Rico River might also be the remains of stone-lined terraced pools used for the production of chuño (freeze dried potatoes used as food). A series of rectangular, oval- and round-shaped buildings in Intiurán indicated both an initial local and subsequent Inka occupation of the site.

The ceramic material recovered was particularly crucial in providing an important relative chronology for the dating of Intiurán supporting the interpretation of the radiocarbon date collected from the excavation. Trial-trenching at Intiurán uncovered two fragments of Akillpo-style ceramics; this places the site within the context of the local indigenous Late Intermediate Period (AD 1000-1480). A third fragment was indicative of coastal Casma Encised Ware and again suggests a Late Intermediate Period date.

Base of Inka-style artifacts from excavations at Intiurán

The rest of the assemblage was more varied. The use of a recurved neck for a large jar or olla suggests a late Middle Horizon (AD 600-1000) date, although the use of recurved vessels extends well beyond this horizon itself. An important discovery was that of a fine-pasted, pale orange ceramic fragment with a black/orange geometric design. This geometric design shares close parallels with vessel vessels ascribed to the Middle Horizon Nepeña Black-White-Red Style; the design and composition of the paste suggest a Middle Horizon date for the ceramic, perhaps a local highland variation of the coastal polychrome Black-White-Red Style, which still remains ill-defined. Similarly, other decorated fragments are reminiscent of late Middle Horizon decorative techniques.

The identification of Middle Horizon ceramics associated stratigraphically with Late Intermediate Period ceramics is significant in that it demonstrates the conservative nature of indigenous cultures and their ceramic forms. The Middle Horizon ceramics discovered at this site prove that their use and elaboration prevail for much longer than the conservative chronological estimates given to Andean ceramic styles. Either through re-use or continued manufacture, ceramics in this area demonstrate an affinity and use that straddle the Middle Horizon through to the end of the Late Intermediate Period and probably beyond.

A crucial piece of evidence for Inka occupation though comes from a singular pottery fragment. This is a coarse-grained, dark grey-coloured base; this thick-walled fragment constituted the base of an arihula, a typically Inka ceramic form (see photo). The coarse-grained nature of this base and its rather asymmetrical form suggest that this might well have been a provincial Inka copy. It also serves to cement the site's association with the Inka; this is further supported by a single date obtained from the excavation calibrated to AD 1545±95. This date came from a burnt layer associated with the floor of a residential unit within the excavation. It is possible that this layer could be dating a final destruction level associated with the abandonment of at least this structure if not the site. The large amount of broken ceramics associated with the floor level and the burnt layer would seem to support this supposition.

To conclude, all the evidence from the site of Intiurán indicates a pattern of use that stretched from an indigenous Middle Horizon through to the establishment of a Late Horizon Inka administrative centre. In the Spanish Colonial Period, there are suggestions of an abrupt abandonment of the site. As such, the site serves to fill an important gap in our understanding of Inka colonial strategy in the north-central Andean region. Continuing surveys and subsequent excavations planned for this year will advance our knowledge of community organisation, subsistence strategies and importantly Prehispanic hydraulic technology in the area.

Kevin Lane, University of Manchester
Gabriela Contreras Ampuero, Universidad Nacional Mayor de San Marcos, Peru

DECORATION ON THE NEOLITHIC PAINTED VESSELS FROM THE REPUBLIC OF MACEDONIA

The Republic of Macedonia is known as a region where the process of Neolithization was highly active and from which it was dispersed through the northern part of the Balkans. Numerous excavations from the last six decades have shown that Neolithization in this area was the result of a long-range process which gradually penetrated from Anatolia, via Greece, into the Republic of Macedonia. Associated changes across various categories of material culture include the appearance of decorated ceramic vessels.

This research aims to assess the extent to which elements of visual similarity in ceramic decoration indicate the spread of the Neolithic from Anatolia to Macedonia, and also to examine how local traditions of pottery production which gradually developed their own individual character were created. For this purpose, detailed analysis was carried out on the decorative motifs present on the painted vessels from the Early and Middle Neolithic found on recent excavations from the northern and eastern part of the Republic of Macedonia. A large number of vessels and fragments were examined, providing information on the ornamentation and the development of motifs and compositional systems used in the Neolithic as a means of visual identification and communication.

The beginning of the Neolithic in the Republic of Macedonia is currently dated to the middle of the seventh millennium BC, and in its earliest phases painted vessels were present. In the earliest period, almost throughout the entire region, vessels were painted with white decoration similar to that from Thessaly in Greece. However, vessels which employ motifs known from the area of Anatolia are also known, demonstrating the remarkable chronological and geographical range over which these traditions of pottery production which gradually developed their own individual character were created. For this purpose, detailed analysis was carried out on the decorative motifs present on the painted vessels from the Early and Middle Neolithic found on recent excavations from the northern and eastern part of the Republic of Macedonia. A large number of vessels and fragments were examined, providing information on the ornamentation and the development of motifs and compositional systems used in the Neolithic as a means of visual identification and communication.
Inka Empire during the late fifteenth century AD, becoming part of the Huaylas province.

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The beginning of the Neolithic in the Republic of Macedonia is currently dated to the middle of the seventh millennium BC, and even in its earliest phases painted vessels were present. In the earliest period, almost throughout the entire region, vessels were painted with white decoration similar to that from Thessaly in Greece. However, vessels which employ motifs known from the Neolithic of Anatolia are also known, demonstrating the remarkable chronological and geographical range over which such traditions of pottery production which gradually penetrated from Anatolia to Macedonia.

Early Neolithic vessels from the Republic of Macedonia. Ancicabrovo: 1-3; Velushka Tumba: 4, 6; Porodin: 5.
vessels. This tradition of painterly expression, as it spread through the Balkan peninsula, dominated in the decorated compositions on pottery vessels, although the differences of wall decoration can be seen inside some of the houses in this area.

Regarding the painted decoration on the Early Neolithic vessels from Macedonia, a wide range of white motifs were employed, creating unique and rarely repeated compositions. These usually consisted of zig-zag lines, stair-like ribbons, triangles, dots and so called vegetal motifs. Some researchers consider that the choice of motifs relate to the functions of the vessels, indicating for example pots in which herbal remedies were prepared or which were used during particular ceremonies in dwellings or settlements. Exceptionally important are the local styles these motifs create which indicate that, across the wider area of Macedonia, several local communities were established, using decoration as an element of mutual visual identification. Although there appear to have been one or more waves of demographic expansion in the earliest phases of the Neolithic, in its later stages it can be seen that distinct regional traditions emerge which are reflected in differences in material culture. Hence, there are remarkable differences between Early Neolithic decoration in the Skopje region (northern Macedonia), the Ovce Pole region (eastern Macedonia) and in Pelagonia (southwest Macedonia).

The situation in the Middle Neolithic changed significantly. The decoration on the vessels found in settlements across the eastern half of Macedonia is very similar, so that identical ornaments can be found in the Skopje and Ovce Pole regions, and also in other parts of the east of the country. This suggests that local Early Neolithic communities were gradually assimilated into one bigger grouping which in the Middle Neolithic developed new elements of visual communication. It is interesting to note that in this period there was a complete transformation in the typology of painted vessels, as well as in the structure of the compositions, which now included new kinds of motifs. The motifs were painted in brown and black; now only a small percentage was white. Painted compositions usually consisted of extended triangles, spirals, vertical and oblique lines and egg shaped motifs which were precisely disposed across the structure of the composition. There are few other motifs, nor are there variations of previously mentioned ornaments, so it can be assumed that the Middle Neolithic population from this region developed its own firmly-defined iconography that was reflected in various different types of material culture.

Recently, there have been several attempts to study the function of the vessels and the significance of their decoration. Because of their petrographic features, as well as the time and skill invested in the production of these vessels, it has been suggested that they were exceptionally important for the communities that inhabited these Neolithic settlements. It is therefore assumed that they had a ceremonial or symbolic character, and that they were used during domestic celebrations, holidays, festivities and rites. Furthermore, the wide range of ornaments painted on these vessels were also present on the figurines, stamp seals, altars and on the walls of shrines dating to the same period, and it is therefore thought that they symbolized ideas of rain and regeneration.

Whatever the case, these objects and their decoration undoubtedly indicate that the people of the Early and Middle Neolithic in this region had a high level of technical and artistic accomplishment. Their ability to produce these vessels and to paint them so precisely surely proves that in this period, the level of visual perception, geometrisation and organization of micro-space was highly developed. This way of creating and maintaining the painterly tradition therefore established specific visual communication and symbolic interaction between members of one community, as well as between several communities across the wider region.

Goece Naumov, University of Skopje, Institute for History of Art and Archaeology, The Republic of Macedonia
Email: gonaumov@mail.net.mk

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I am grateful to the Prehistoric Society for supporting this research through the Research Fund award. My special thanks to Joanna Brück for helpful comments and corrections on an earlier draft of this article. I would also like to thank my colleagues from museums in Macedonia for allowing me to work on previously excavated material.

As a result of the interest shown in the article on the ‘deer stones’ of Mongolia, published in PAST 54, I offer some information on a fascinating rock art site in Kazakhstan that is also the site of an excavated ‘deer stone’.

Rock art exists throughout the varied landscape of Kazakhstan, certain concentrations of known sites extending into neighbouring countries. The petroglyphs have a wide date range from the late third millennium BC to the recent past, but each period has its own style. Such is the international interest in the central Asian sites that a number of collaborative teams of local and foreign archaeologists have been working concertedly in recent years to document and protect them. The initiatives include participants from France, Germany, Norway, Poland and the USA, as well as Britain, as Ken Lymer has previously reported in PAST (Nos 9 and 23). Arguably the most significant sites are in the eastern and southern parts of the country, but it is Tamgaly, a complex with more than 3000 individual petroglyphs, which I wish to describe.

Tamgaly is an isolated valley in the dry steppe and desert landscape that embraces the low foothills of the southeastern Chu-Ili Mountains, themselves an extension of the Northern Tien Shan range. It is situated about two and a half hours’ drive west of Almaty, the country’s capital. Extensive rock art was discovered here by chance in 1937 by A. A. Popov, a photographer from an archaeological team working under the direction of A. G. Máximova who excavated a local Bronze Age cemetery. The first account of Tamgaly, published the following year by Máximova, used the study of a site in neighbouring Kyzylkasan (Saimaly-Tash) to attribute the artwork to a number of different periods. Subsequently, more detailed recording has been undertaken, while excavations at cemeteries in the area have discovered petroglphys within graves, which help to date the different styles represented on the open rock faces.

The copy date for PAST 57 is 1 October 2007. Contributions to Joanna Brück, School of Archaeology, Newman Building, University College Dublin, Belfield, Dublin 4, Ireland. Email: joanna.brueck@ucd.ie. Contributions on disc or as e-mail attachments are preferred (other word or rich text 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, Western Archaeology, Portswood House, Old Sarum Park, Salisbury, Wiltshire, SP 4 6EB. Email: escargot@locali.co.uk. Queries over subscriptions and membership should go to the Society administrator Tessa Mackling at the London address above.