

CBA Wessex 60th Anniversary Conference 2018

The conference was held at the University of Southampton on Saturday 3rd November 2018, and a record audience of 400 people booked to hear the awe-inspiring group of speakers talk on the theme of **Dawn: from our earliest ancestors to the hunter-gatherers of the Mesolithic**. This is an enormous stretch of time and the topics ranged from half a million years ago to about 5000 BCE, which seemed like almost yesterday, and took the audience with them. It was a great opportunity to meet friends old and new and to hear some of the latest ideas in Palaeolithic research mainly from Britain, and also in Europe, Africa and Asia.



Many of the speakers reflected on earlier work and offered new interpretations of evidence in light of modern scientific methods, for instance Dr Beccy Scott from the British Museum (BM), talking about *Neanderthals of the Western Channel: view from an Ice Age Island*. Earlier discoveries of mammoth 'bone heaps' below a cliff on the present shore at La Cotte de St Brelade, Jersey were interpreted in the last century as a hunting site where animals were driven to their death by Neanderthals. Reinterpretation of the bones and a vast assemblage of stone tools (95kg) has revealed evidence of activity zones for tool production and butchery, suggesting the animals were hunted on the extensive plain which existed 250,000 years ago, now covered by the sea. The team have rediscovered Neanderthal occupation sites and traces of lost tracks and paths around the island, enabling them to show how this rich landscape was exploited and details of the hunter/gatherer way of life.

This was followed by Steve Mithen of Reading University who spoke about *Late Pleistocene and Early Holocene Hunter-Gatherers in Western Scotland*, a review of his long-term research into post-glacial occupation in Western Scotland 14,500 to 5500 years ago. The area's ecological diversity attracted Mesolithic hunter-gatherers who arrived after the end of the last Ice Age, and discussion focused on island sites especially the Isle of Islay and tool-making industries such as Mesolithic narrow-blade technology. A movement of colonisation from the east was proposed following the inundation of 'Doggerland' by the North Sea, with a possible sequence of pioneer exploration from ~12,200 years ago, residential settlement from ~8200ya, followed by decline to ~5200ya. The prominence of fireplaces on Mesolithic sites led to the suggestion that this was the central focus for activities such as tool-making, eating - with concentrations of hazelnuts and remains from fish and animal hunting - and possibly storytelling. The scattered settlements were vulnerable to disruption by climatic events, eventually fading out before Neolithic funerary monuments begin to appear.

Chris Stringer of the Natural History Museum then spoke on *Human Evolution*, indicating how his own ideas have changed with discoveries in the last ten years. Up to ~60,000 years ago four species of Humans were co-existing (Neanderthals, Denisovans, Floresiensis and Sapiens) but by 35,000 only H Sapiens remained; and he suggested that the extreme climate fluctuations of the last 2m years influenced the demise of the other species as H Sapiens proved to be more adaptable. Recent evidence from European sites such as Atapuerco, Spain; Mauer, Germany and Boxgrove, Britain may indicate an earlier spilt from a common ancestor. Possible successive waves of anatomically modern humans' (AMH) dispersal from Africa were proposed: first ~120,000ya and later 80-60,000ya, and the earliest arrivals may have reached Australia ~65,000ya, with a second wave 45,000ya. Recent dating evidence for artistic expression has shown dates of over 65,000ya for handprints, and lines and groups of dots in Iberia, too early to have been produced by AMH. DNA studies show that AMH and Neanderthals interbred (with modern humans having up to 5% DNA in common) although there is little evidence of the DNA from AMH in Neanderthals. Chris Stringer ended by forecasting there will be much more to discover and change our ideas in future.

Another speaker from the BM, Nick Ashton, spoke about *Migrants from Europe 400,000 years ago: new results from Barnham, Suffolk*. The site at East Farm, Barnham has been studied since the mid-nineteenth century with the focus on identifying the use of different stone tool industries, including the earliest introduction of hand-axes in Britain. It is suggested that intermittent migrations took place during the Hoxnian Interglacial or MIS 11, a warm period of ~50,000 years (424,000 – 374,000ya) when groups of hominins with varying traditions colonised Britain from further east in Europe; more westerly sites used hand-axes while those further east employed technologies with cores/flakes. Advances in scientific dating techniques have enabled the identification of three separate incursions into Britain based on sequences at Barnham Pit: twisted ovates; traditional hand-axe styles; and core and flake technology, all of which reflect variations in Palaeolithic technology within Europe.

Next a talk by Louise Humphrey of the Natural History Museum, on *Cemeteries and Sedentism? Later Stone Age hunter gatherers from Tatoralt, Morocco*. The focus of this research is on people who occupied Grotte des Pigeons in Morocco ~25,000ya, producing a technology of microlithic backed bladelets known as Iberomaurusian. Their long sequence of occupation built up a massive midden deposit among which emerging bones led to the discovery of a cemetery with 180+ skeletons, in an alcove concealed behind a 'stalactite curtain'. Distinctive funerary rites included bodies placed seated or semi-reclining and stone slabs laid above infant/foetus burials, with use of ochre and accompanied by animal teeth, marine shells, horn cores and grindstones. The skeletons showed signs of tooth modification before death, and tooth decay suggesting consumption of sticky carbohydrates. The huge archaeological deposits indicate an intensification of human occupation about 15,000 years ago, and analysis of DNA (earliest from Africa) indicates these people originated from the eastern coastal region of N Africa, 63.5% (Natufian) with 36.5% sub-Saharan (W African).

Alistair Pike, Professor of Archaeological Science at University of Southampton spoke on *Science and the study of the Palaeolithic*. Palaeolithic studies have been revolutionised by new scientific techniques, such as the application of geochemical methods in archaeology including the use of U-Th series dating on bones and on speleothems (calcareous deposits

eg stalagmites/-tites, or flowstones overlying painted images on cave walls). Strontium isotope analysis has enabled the study of past landscape use and patterns of mobility; while the study of aDNA has confirmed the probability of interbreeding between Neanderthals and AMH. As an example of the use of U-Th series Alistair cited his own work, published this year, to obtain direct dates for cave paintings in Spain (eg El Castillo, Cantabria; Cueva de los Aviones, south east Spain). These gave dates of 65,000 years ago (rather than 35/40,000ya) for certain motifs, which indicates some images were made by Neanderthals rather than AMH. Pike suggested there is evidence of symbolic behaviour by Neanderthals in Europe which is similar to that of AMH in Africa from 65,000 years ago.

The next speaker, Vince Gaffney wowed us all with his talk on *Not drowning but waving! Doggerland and the Lost Frontiers Project*, a European-wide and Chinese collaborative project to create a map and ecological model of the Doggerland landscape beneath the North Sea and Irish Sea. Drawing on a previous project which generated topographical maps of the sea bed, and extending the technologies used they have identified fluvial systems and also the position of sandbanks and lakes in the early Holocene environment of Doggerland. They then turned to the west coast area where by environmental sampling and the use of coring they have been able to determine whether the shoreline was wooded and the position of cliffs (White Cliffs of Dogger?) Mesolithic activity at Bouldnor Cliff off the Isle of Wight has been identified by the Maritime Archaeological Trust and also evidence for the development of the landscape around the Mesolithic/Neolithic transition: but so much data has been lost under the sea that it has distorted our view of how this landscape was used – and now we know that we have so much more to discover!

The final keynote talk was given by Alice Roberts who spoke on *Tamed: three species that changed our world* (from the title of her new book). She looked first at the Palaeolithic/Mesolithic transition following the last Ice Age, when humans were hunting and gathering as they had done for thousands of years, which continued alongside the advent of farming about 7,000 years ago. However, archaeologists found dog bones on sites dating to 14,000 years ago and DNA studies have shown that dogs had split from their wolf ancestors by 15kya. This early date for domestication of dogs was finally accepted: the process is thought to have been that wolves were attracted by the debris of human habitations, and began to stay nearby for food, so both species benefitted as the hunters became more successful with help of wolves/dogs. In domesticating cattle there were problems as the wild aurochs was very large with massive horns; and few early humans were able to digest the milk until gradually they learned to modify it and digest it more easily, so around 7,000 BCE they began the process of selection to breed smaller easier to manage animals. Horses had been hunted for food throughout the Palaeolithic in Europe and Asia and the earliest evidence for domestication dates from around 3500 BCE in the steppe grasslands of Central Asia, before the use of horses for riding and transport was adopted across the Eurasian landmass. The audience was spellbound by these stories illustrating the long-term interdependence of humans and animals, and Alice left us with the message that we need to protect our environment and learn to value the species who share our planet if we are all to survive – and the hope that we have the knowledge and will to co-operate globally to achieve this.

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