

Abstracts Booklet Addenda

Additional Abstracts/Session Information

Tuesday 18th September

Lecture Theatre Two

From 14.00

John Gowlett

Introduction: Fire and its language

Fire has come to have a great importance in human culture, but it also creates great ambivalence – is it primarily technological or social? Social anthropology, for example, is a social discipline, but its textbooks sometimes make no mention of fire. Western societies have tended to build fire out of life recently, so that rooms often no longer have fireplaces. Yet fire often has a prominent place in literature, and has been the focus of fire festivals across Europe. It is widely held as sacred or used in rituals in other parts of the world. In evolutionary terms it seems fire's role is probably both technical, social and biological. This paper aims to take a broad view of issues, and especially to consider fire's potential links with language.

Adam Caris

Foraging and fire: How a close association between early Homo, wildfire and wildfire burnt landscapes could affect their 'landscape of fear' and biological fitness

While many hypothesised drivers or motivators for the uptake of fire use strategies have been forwarded one area yet to be well investigated is how a close association between early members of the genus *Homo* could have significantly altered their 'landscape of fear'. The concepts of 'Predation risk' and 'fear' are concepts well established in animal behaviour modelling and literature; foragers live in a landscape of 'fear'. In many studies fear has been identified as being a controlling factor on the types of foraging choices and strategies deployed by a wide range of animals. Prior to this study the landscape of fear has yet to be modelled for early *Homo*. This talk will provide a resume of the initial framework being developed for modelling a landscape of fear, and by drawing on experimental fieldwork data collected over the previous 12 months, suggests how a landscape perspective on anthropogenic fire use provides a much more resilient way of examining the very earliest hominid fire use strategies as opposed to attempting to identify the earliest instances of anthropogenic fire use by simple recourse to the archaeological record and the deployment of ever more complex analytical techniques.

Sally Hoare

Current issues and future directions in analysing the onset of anthropogenic fire use

Both the use and control of fire are seen as one of the major technological adaptations and developments by the hominins as fire was the first energy resource to be controlled. Fire provided hominins with a number of adaptive advantages with important evolutionary implications, for example extension of daylight hours, providing a focus for social activities, and the cooking of meat and underground storage organs potentially killing toxins. Fire may have facilitated the movement of hominin populations out of Africa by making it possible to cope with colder ambient temperatures. Identifying the timing of controlled fire use, along with its adaptive benefits, is extremely problematic. For example Wrangham (1999, 2009, 2010) takes a dietary and energetic approach whilst Gowlett (2010) a social and technological approach with both authors arguing for early fire use toward the end of the early Pleistocene. However, a number of scholars see the onset of anthropogenic fire use as occurring in the Middle Pleistocene onwards. This paper discusses two major research issues vital towards analysing the onset of anthropogenic fire use both from natural sources (bush fires) and through the ability to kindle fires. The first is archaeological evidence from Plio-Pleistocene hominin sites (the results of two recent experimental studies from Kenya, East Africa will also be discussed) and the second the role of tertiary and quaternary climate systems as one of the evolutionary drivers and controls on fire as a developing technology.

Ceren Kabukcu

Fuel experiments with reeds (Phragmites australis) at Neolithic Boncuklu, Konya plain, central Anatolia

Archaeobotanical and ethnoarchaeological research in the use of dung fuel has demonstrated successfully that such practices contribute to the species diversity and composition in archaeobotanical assemblages, especially with regard to the abundance of small seeds often preserved in dung. Carbonized remains of reeds, small seeds from various wetland taxa and an abundance of reed phytoliths are routinely reported from early Neolithic sites in central Anatolia. In this paper I present preliminary results from burning experiments which are compared to the archaeobotanical finds from the aceramic Neolithic site of Boncuklu in the Konya plain of central Anatolia. Fire experiments with modern dry reed roots, willow wood and grass stems were carried out in order to evaluate the survival and preservation of charred reed stem, rhizome, tubers, small seeds and wood charcoal in carbonised assemblages and compare them to archaeobotanical sample composition. This study suggests that carbonized reeds, small seeds from wetland taxa, tubers and rhizomes found together in early Neolithic botanical assemblages may originate at least in part from the use of dry reed roots as fuel in combination with wood, especially in the absence of dung from domesticated animals.

The talks will be followed by discussion and debate on the status of Fire.

Discussant: Dr Eleni Asouti

Lecture Theatre Six

<u>09.00 onwards</u>

"The Current Crisis: Restructuring and the future of Archaeology and Classics in the UK"

Panel:

Chair: Bruce Routledge, University of Liverpool

Prof. Jeremy Huggett, University of Glasgow

Dr. Ben Geary , University College Cork

Prof. Tom Harrison, University of Liverpool

Mr. Don Henson, Consultant in Public Archaeology and Education

Mr. David Jones, Bridgwater