UNRAVELLING THE PALAEOLITHIC

Conference Programme:

Sessions and events

31st March to 1st April 2023

Avenue Campus, University of Southampton

UnravelPalaeo

2023

University of Southampton

UTP 2023 webpage

Acknowledgements

The UTP 2023 conference committee would like to thank our CAHO Director, Dr Rachel Bynoe, and our CAHO colleagues Professor John McNabb (Mac) and Professor William Davies for all of their assistance in helping to organise the conference over the last year. We would also like to extend a big thank you to our sponsors and volunteers, without which we would not be able to run the conference. Finally, for all their help with the virtual and physical museum, we would like to thank Richard Henry (Curator, Southampton Museums), Yannick Ebner (University of Southampton), Benjamin Colvin (University of Southampton) and Dr Jaco Weinstock (University of Southampton).

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*UTP 2023 Exhibition

The conference will be hosting a virtual exhibition which will be running alongside a physical version of the same material showcasing some of the archaeological environments we have the privilege of being in the proximity of here in Southampton. **The exhibitions will be running throughout the day on Friday the 31st of March**. Both exhibitions will take place in Building 65 (Parkes Building). The virtual exhibition is located in our Digital Humanities Hub on Level 2 (first floor) in the north corridor and the physical exhibition will be located in Room 1101 on Level 1 (ground floor). For more information on the exhibition please see the 'UTP 2023 Exhibition' section on page 34.

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Day 1 – Friday 31st March 2023

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Paper and Poster Prizes

In recognition of the hard work that goes into preparing conference papers and posters, two of our sponsors have generously offered to award prizes for the best paper and poster presented during UTP 2023. The winners of each category will be decided by a CAHO judging panel.

A Paper Prize of £150 will be awarded by the Society for Archaeological Sciences.

A Poster Prize of £50 will be awarded by Dr Coco's Academic Proofreading Service.

Session abstracts

Session 1: Materials in the Mind: planning for change

Session host: Alexandra Barroso

Into the mind of the maker

Kate Anderson[1, 2], Prof. John McNabb[1, 2] and Dr Alexandra Karamitrou[1]

[1]University of Southampton, [2]Centre for the Archaeology of Human Origins

A wealth of research has been carried out to understand the ways in which hominins utilised Acheulean bifacial tools and what we can glean from them regarding hominin behaviour. Even within this somewhat saturated field, the Acheulean remains an enigma with numerous theories and methods produced in the hope of understanding the makers behind this enduring tool. This study focuses on the production of Acheulean tools, allowing us to explore the processes, decisions and restrictions present during tool manufacture. This enables us to use the tools themselves as a lens through which to explore the behaviour implications intertwined with the manufacture process. Primary among these behavioural implications is the idea of social learning and the transference of knowledge that were themselves at the heart of social developments occurring within hominin evolution. A diacritical approach is used to examine the final stages of the manufacturing process. The results of which can be examined for the presence – or absence – of patterns that indicate the decisions made by the tools manufacturers and by proxy ideas of a taught technique or the adherence to a preconceived notion of standardisation. This paper introduces the methodology being applied to a dataset made up of northwest European Acheulean sites as well as producing some initial results.

Exploring morphological variability in Acheulean handaxes

James Clark (he/him)

University of Cambridge

Handaxes have been a particular focus of investigation in Palaeolithic archaeology right from the beginnings of the field. One fascinating feature of their existence in the archaeological record is their persistence for around 1.5 Million Years, and their geographic distribution across much of Africa, Western Asia, and Europe. Some authors have used these patterns to argue for long periods of stasis in stone tool manufacture during the Acheulean, while others have emphasised that it does contain

substantial intra-assemblage variability that may have meaningful implications for behavioural variability. In this presentation, I approach this debate through an examination of variability in handaxe shape, symmetry, and allometry between sites from eastern Africa, the Levant, and northwestern Europe. I repeat findings from other authors that average handaxe shape—but not symmetry—is distinct between each region, albeit with substantial overlap between each. I will argue that these findings cannot be explained in terms of differences in raw material, blank type, or differences in the extent of resharpening, and that the results are therefore reflective of inter-personal transmission patterns.

I will also examine the specific circumstances in which resharpening (after McPherron, 1995, 1999, 2006) is deployed, to see if we can use allometric relationships to understand more about the functional basis of handaxes at individual sites. I tentatively suggest that such relationships may hint at a continuum of possible uses for handaxes, and that different reduction strategies were flexibly deployed according to the individual context. This may have important implications for the longevity of handaxe manufacture, and their deployment in a wide range of environments.

Variability *vs.* homogeneity and the importance of the blank in the Acheulean techno-complex: an approach based on the Large Cutting Tools from the Portuguese Atlantic Margin (between Lis and Tagus rivers)

Carlos Ferreira

Faculdade de Letras, Universidade de Lisboa

Current data suggest the extensive presence of Large Flake Acheulean assemblages (LFA) on the Iberian Peninsula. These sites are mainly dated to the second half of the Middle Pleistocene and display specific technological features within the European framework. These include the extensive use of large flakes, the presence of cleavers on flake, the low degree of shaping of light-duty tools on flake, or the absence of predetermined flaking strategies (e.g., Levallois method). Furthermore, there is a significant chronological gap with the reality recorded in other European regions, with an effective deployment of this techno-complex from Marine Isotopic Stage -MIS- 11, and especially between MIS 9-6.

Focused on the discussion on the variability of Acheulean assemblages, more than 500 Large Cutting Tools (LCTs) – mostly handaxes, cleavers and trihedral picks – from Portuguese sites, linked to middle fluvial terraces of Lis and Tagus rivers, were analysed. The LCTs were studied based on 2D geometrical morphometric, techno-typological, and techno-functional approaches. The complementarity and

inter-relation between the three procedures enhances a holistic comprehension of these artefacts, from patterns of shape selection of the blanks to its transformation degree by knapping.

In addition, variations in the conceptual and technological behaviour underlying different types of LCTs were evaluated. Moreover, despite the many differences observed, the tools share important features across all sites: the management of large volumes of raw material, with significant use of large support flakes, a correlation between the degree of secondary reshaping of the blank and its suitability, a widespread well-defined mental template, and a strong shape standardisation (i.e., as the careful selection of the blanks). These observations may be relevant for the discussion regarding the cognitive complexity of our ancestors' technological skills and contribute to deepen the understanding of the Acheulean techno-complex in Portugal.

Giant handaxes in the British Lower Palaeolithic

Dr Luke Dale

Historic Environment Scotland, Durham University, British Museum

Two seemingly contradictory observations have often been made of the Acheulean technocomplex and its defining tool, the handaxe: the first, is that the Acheulean was a relatively static and unchanging industry throughout its long history, with any innovations being infrequent and short-lived. The second is that a great deal of variation in morphology and typology can be observed within the broad definition of 'handaxe', at both an inter- and intrasite level. Explaining this variation has proved contentious, with a number of competing hypotheses suggested.

Within this spectrum of forms, hypertrophic 'giant' handaxes stand out as 'oddities'. They are a rare component of British Acheulean assemblages, yet they have been central to debates relating the social, cognitive and cultural 'meaning' of the handaxe. This paper examines giant handaxes in British assemblages and suggests that they are chronologically patterned, with the great majority having originated from Marine Isotope Stage 9 contexts. Giant handaxes tend to have higher planform symmetry than non-giants, and extravagant forms such as ficrons (elegant pointed handaxes with biconcave edges) are better represented; they may therefore be linked to incipient aesthetic sensibilities and, potentially, to changing cognition at the end of the Lower Palaeolithic. The fact that giant handaxes were also manufactured in areas with poor-quality locally available lithic resources (e.g., at Wolvercote) suggests that they had some additional 'value' beyond simple functionality which justified the additional effort taken to produce them.

Relevant examples from southern and western Europe are also considered, suggesting that giant handaxes are a phenomenon restricted both geographically (to southern Britain) and chronologically (to MIS 9), in agreement with the recently proposed 'Cultural Mosaic Model'.

Revisiting Palaeolithic plant food use and resource choice: recent evidence from carbonized plant macro-remains

Dr Ceren Kabukcu

University of Algarve, University of Liverpool

Over the past two decades there has been increasing evidence for the significance of plant foods in later Palaeolithic hunter-gatherer diets. To date, the majority of the evidence had suggested reliance on underground storage organs (USOs) and starch-rich wild grasses.

Recent archaeobotanical results from carbonised plant macro-remains from sites such as Shanidar and Palegawra Cave (Zagros, northern Iraq), Franchthi Cave (Aegean basin, Greece) demonstrate that there is a long-term reliance on wild pulses and nuts. In addition, evidence from the carbonised remains of prepared food items suggests greater complexity and diversity in plant food preparation practices at these sites, including multi-step preparation of plants with unpalatable and potentially toxic compounds. I will discuss this evidence in relation to plant resource choice in the context of Middle and Upper Palaeolithic and Epipalaeolithic/Mesolithic hunter-gatherer occupations in Southwest Asia and the Eastern Mediterranean.

Early Human adaptation in Karwi hills, India, with reference to Microblade Technology

Dr Jose Tom Rapheal, Pratik Pandey, Manish Kumar Rai

Banaras Hindu University

Microblade technology in the Indian subcontinent has been observed as a marker of early modern human activity, which requires specific reduction strategies and cognitive skills to manufacture. Due to the absence of required early hominin fossil remains, the study of these lithic tools provides crucial information about Prehistoric people, their behaviour, cognitive development and the requirement of technological adaptations for prehistoric human existence, throughout the Indian subcontinent. Our research objective is to access technological changes in Microblade production to understand the behavioural pattern of early modern humans across time and space in Karwi hills which is generally overlooked by archaeologist, and the role of this technology in the cultural evolution of human beings.

The Karwi hill lies between the central Indian upland and Indo-Gangetic alluvial plain in the Chitrakoot district of Uttar Pradesh. Extensive exploration has been done on different terrain ranging from 130 to 452 meters in the Karwi range to understand human-landscape interaction and its correlation with technological variations. The schematics and qualitative analysis of *Chaîne opératoire* indicate the evolutionary pattern and transition in Microblade technology. The area preserves multi-technological variation in microblade production and raw material procurement. An attempt has also been done to analyse lithic raw preferences in the tool making activity among the sites in the region to understand their catchment zone and behavioural response to microblade production. Flake and blade industries of this region have been taken into consideration and the aim of this presentation is to highlight the elements of regional variability characteristic of this area.

Session 2: Challenging Landscapes

Session host: Dr Rachel Bynoe

Redefining the late Mesolithic of southeast England: temporality and continental connections at Bexhill, East Sussex

Mike Donnelly[1], Tom Lawrence[2] and Elizabeth Kennard[1]

Oxford Archaeology[1] and Newcastle University[2]

During 2012-2014, Oxford Archaeology carried out fieldwork along the route of the new Combe Haven Way. This revealed a buried landscape sealed by alluvium and peat that contained over 250 in situ flint knapping sites dating from the late Glacial through to the later Bronze Age. Most of these scatters totalling over 300,000 struck flints dated to the late Mesolithic, a hitherto poorly dated block of time spanning 4000 years with only limited hints at phasing within it (e.g. Conneller and Griffiths, forthcoming; Griffiths, 2014-).

Work on the assemblages is still ongoing, but initial assessment identified between 7 and 10 phases of activity based on microlithic forms and variations in blade technology. These were tested through radiocarbon essay and have revealed several distinct phases of activity showing a complex sequence of traditions including the appearance of definitive narrow blade elements at around 7000calBC while Horsham groups were still present elsewhere on the scheme. Other late Mesolithic industries include those focused on crescents, very mixed assemblages with small isosceles triangles, Bexhill point/microtranchet industries and some very late large scalene triangle and curved backed point industries associated with 5th millennium dates. Unfortunately, some of our potentially latest phases including rod dominated assemblages have not produced datable material.

Many of these latest industries show clear continental connections. A new armature named the Bexhill point compares well to distinctive types from France and Spain. These microliths were most prevalent from c.5200-4300 cal BC, a period of great upheaval on the continent created by pressure on pre-existing Mesolithic groups from incoming Neolithic life-ways. The presence of these microlith types at Bexhill, then, has profound implications for how we understand the final stages of the Mesolithic in Britain – a research period often isolated from continental studies and one in desperate need of augmentation.

References

Griffiths, S. 2014. Points in Time: The Mesolithic–Neolithic Transition and the Chronology of Late Rod Microliths in Britain. Oxford Journal of Archaeology. 33(3): 221-243.

La Cotte de St Brelade and the last Neanderthal Populations of North West Europe

Matt Pope[1], Martin Bates[2], Ed Blinkhorn[1], Richard Bates[3], Chantal Conneller[4], Sarah Duffy[5], Jon Dobbie[6], Letty Ingrey[1], Josie Mills[7], Beccy Scott[8], Andrew Shaw[6], Jean-Luc Schwenninger[9]

[1]University College London, [2]University of Wales Trinity Saint David, [3]University of St Andrews, [4]Newcastle University, [5]University of Liverpool, [6]Wessex Archaeology, [7]University of Leeds, [8]British Museum, [9]University of Oxford

In 2022 the first large scale excavations at La Cotte de St Brelade since the 1970s were initiated. The project, funded by Jersey Heritage and undertaken by a combined team of archaeologists and engineers, will ensure the West Ravine area of the site is made safe from erosion and will provide an opportunity to characterise a 10m Pleistocene sedimentary sequence in terms of its age-range, palaeoenvironmental potential and its record of human occupation. While historic investigations in this part of the site have documented stone artefact assemblages of Middle Palaeolithic character, human fossil material recovered from associated deposits in the North Ravine give an ambiguous taxonomic signal. In a recent paper by Compton et al. (2021), the eleven surviving teeth comprising the collection show morphological features combining traits characteristic of both *Homo neanderthalensis* and *Homo sapiens* in more than one individual. The results suggest the possibility that the fossils represent a single population with shared ancestry.

In this paper we consider the initial results of our first full season of excavation, alongside those of our previous investigations at the site over the past 12 years. We consider this data in terms of the sparse evidence for either an Initial or Early Upper Palaeolithic presence from the Channels islands and neighbouring areas of France and consider how the archaeology of La Cotte, as the key record for the region, can help frame our understanding of Neanderthal replacement in western La Mancheland.

A route through the mountains. The re-colonisation of the high-altitudes between the Lateglacial and the Early Holocene: the case-study of Casera Staulanza lithic assemblage (Belluno Dolomites, Italy)

Marzio Cecchetti, Stefano Bertola, Alice Soncin, Davide Visentin, Federica Fontana

Dipartimento di Studi Umanistici, Università degli Studi di Ferrara, Italy

Lateglacial climatic amelioration caused intense environmental change and the expansion of human communities towards new territories. The re-colonisation of the high altitudes, in particular, is a well-debated phenomenon bound with adaptations in resource exploitation, hunting strategies, and mobility. In this paper, we present a case study from the Italian Alps, the open-air site of Casera Staulanza (Veneto region, Italy).

The site is located at 1681 m a.s.l. in the Belluno Dolomites, in a strategic position not far from a mountain pass. Here we present the techno-economic analysis of the lithic assemblage. The reconstruction of flaking methods and techniques, as well as of the exploited raw materials allowed to identify two distinct occupations characterised by independent raw material provisioning basins. They took place diachronically and reveal different débitage strategies, described with the support of a wide number of refittings. The first is a Late Upper Palaeolithic occupation (Late Epigravettian culture) characterised by a cared lamino-lamellar débitage on fine-quality exogenous cherts, with blanks retouched into tools (particularly burins) and arrow implements. The latter corresponds to an Early Mesolithic (Sauveterrian) occupation revealing a more expedient behaviour on both exogenous and local raw materials aimed at microliths manufacture through the micro-burin blow technique.

The discussion adds important information to our vision of the last hunter-gatherers' techno-economic behaviour. Casera Staulanza represents one of the northernmost and highest Lateglacial sites in Italy provided with a surprisingly ancient chronology (Allerød Interstadial) according to the techno-typology of its lithic assemblage. This brings further insight into the study of the re-colonisation process of the Alpine fringe and its exact timing and modalities. On the other hand, the Mesolithic occupation perfectly fits the models proposed for raw material circulation and exploitation, as well as regional insediative patterns.

Using edaphics to decipher the ecological properties of the Acheulean settlement at Rodafnidia on Lesbos (NE Aegean)

Peny Tsakanikou[1], Simon Kübler[2], George Iliopoulos[3] and Nena Galanidou[4]

[1]Department of History and Archaeology, University of Crete, Greece, [2]Department of Earth and Environmental Sciences, Ludwig Maximilians University, Munich, Germany [3]Department of Geology, University of Patras, Greece

The Aegean region has been for long left out of the discussion about the early hominin Eurasian settlement(s). Although it lies at the crossroads between Africa, Europe and Asia, in a very promising biogeographical location, the hominin signal sent out is surprisingly weak, representing a lacuna in the Lower Palaeolithic map. This narrative needs to be informed. Recent advances in the study of the Aegean submerged landscapes and island archaeology during the past two decades reveal fascinating evidence about dramatic, and previously unknown, changes in the palaeogeography over the past 400 Ka, along with robust archaeological evidence for the presence of Acheulean groups on the island of Lesbos (NE Aegean), recovered from fluviolacustrine deposits absolutely dated to the Middle Pleistocene, between 476-164 Kya.

During the glacial lowstands of the Early and Middle Pleistocene, terrestrial environments prevailed in the largest part of the Aegean basin, now covered by sea. Continuous land bridges connected western Anatolia to the Greek mainland and western Europe, while Lesbos was part of this extended dryland. Hominins along with other continental fauna would have crossed terrestrial passages to reach Rodafnidia on Lesbos. The site is located very close to the Kalloni Gulf, which was transformed into a palaeolake with the lowering of the sea level, and over a volcanic landscape traversed by an extensive river system during the Middle Pleistocene.

Here we introduce the study of edaphics to further explore the hominin presence and activity in changing, dynamic landscapes. Modern soil properties (chemistry and distribution) are used as a proxy to reconstruct the properties and nature of the past landscape. Rodafnidia is acting as a case study to evaluate, through edaphics, the contribution of natural/ecological attractors traditionally linked to topographically complex settings, such as fresh water supplies and thermal spring environments to hominin dispersal and landuse.

Palindia: A network analysis approach to Lower Palaeolithic sites in India

Vaneshree Vidyarthi[1] and Timo Geitlinger[2]

University of Cambridge[1], University of Zurich[2]

Whilst archaeological research in India has immense potential, it remains currently untapped due to various limitations; especially a lack of research funding, infrastructure, and a dearth of community interest in archaeology is exacerbating archaeological research. In this current scenario, the utilisation of computer-based research approaches, such as GIS or network analysis tools can prove to be an effective and relatively low-cost method to map, analyse and enlarge existing archaeological datasets. Our main aim for this study is to use network analysis as a tool to visualise and understand emerging lower palaeolithic patterns in the state of Maharashtra, India. The Indian palaeolithic record is unique, with the youngest lower palaeolithic evidence in the world (~126kya) and a key location in the middle of the Old World, linking disparate regions of Africa, Europe, and the Levant. Currently, the spatial aspects of this period have not been studied through a network analysis approach. For such a pilot study, the state of Maharashtra is ideal due to the large number of Palaeolithic sites already recorded there. As it's part of the Deccan plateau with multiple drainage systems, Maharashtra offers an opportunity to study the effects that various geologies have on the movement and development of lower palaeolithic hominins. The similarity network, its topological properties and geographical significance will

allow us to focus on crucial questions of past human behaviour; where can we reconstruct corridors of communication that emerge between sites? Is the proximity or lack of raw material sources a limiting factor in the development of stone tool technology in the region? How does the location of rivers and other water courses impact the continuity of these sites? Consequently, this analysis has the capability to shed light on these spatial questions, and also to demonstrate the applicability of computer-based approaches to archaeological research in India.

Moving places: exploring the mobility of the earliest people in the Siberian Arctic

Wouter Bonhof

University of Exeter

The Yana RHS site complex yields the oldest archaeology in the Siberian Arctic at circa 32 ka BP. Its rich archaeology has already revealed many aspects of the life of the Yana people: they actively hunted mammoths; ivory was a valuable substitute for wood in spear production; personal ornaments were abundant; the common cold was already doing the rounds etc. Little attention, however, has so far been paid to the logistical and residential mobility of the Yana people. Although the productive Mammoth Steppe would have provided ample dietary resources, the highly variable seasonal conditions in the Arctic would have posed substantially different challenges than more southern regions.

Drawing together evidence from isotope, cementochronological, and raw material analyses, we discuss the use of the landscape by the Yana people. Firstly, the different sites that the Yana complex exists of are discussed. Differences in faunal assemblages and composition of the osseous industries are examined to better understand the nature of the site and the activities that took place there 32.000 years ago. Next, we zoom out and look at evidence for logistical mobility. Assuming the Yana complex was the basecamp of an Upper Palaeolithic group, what can we learn about their local foraging and hunting? Finally, we look at residential mobility. If Yana was inhabited only seasonally, where did the people go during the rest of the year? These discussions and resulting hypotheses give new insights into the subsistence strategies employed by the earliest people in the Siberian Arctic.

Session 3, Part 1: New approaches and modern perspectives – the view from Hampshire

Session host: Professor John McNabb

The Victorian discovery of Palaeolithic Southampton

Dr Francis Wenban-Smith

University of Southampton, Centre for the Archaeology of Human Origins

Southampton was one of the earliest places in England where Palaeolithic flint handaxes were recognised and was considered in the late 19th century as one of the richest areas in the country for their discovery. The paper reviews historic sources to identify the various gravel pits and other exposures that provided these remains, reviews the remains themselves, and places the early search for Palaeolithic artefacts within the academic/intellectual context of the era. It will also look briefly at some of the people who were doing the flint hunting, and how their antiquarian activities fitted in with their other life. Finally, it will consider how it is that so few remains have more-recently been found, in an area that was once so rich.

A revised Middle-Late Pleistocene terrace stratigraphy of the Western Solent (Christchurch Bay to Southampton Water): a framework for the Palaeolithic archaeology of the Solent region.

Dr Marcus Hatch

Queen Mary, University of London

Remnant Pleistocene fluvial gravels of the former Solent River survive in the Western Solent area as extensive deposits between Barton on Sea and Southampton Water. A staircase of terrace levels extends from the New Forest plateau in the north of the region to the shoreline of the current Solent. Fourteen terraces were recognised in previous mapping schemes, those of Allen and Gibbard (1993) and Westaway et al. (2006), although there are several correlation differences between them. The fluvial archive of the Solent River is important as both the major source of Palaeolithic archaeological material in the region and as a framework for contextualising that material. A better understanding of the stratigraphy of the extensive terrace deposits in the Western Solent is key to understanding the Palaeolithic record of the wider Solent region.

In order to produce a revised terrace stratigraphy of the Western Solent, a variety of methods were utilised in a multi-technique approach. Coastal sections and sedimentary logs were recorded at either

end of the terrace sequence. GPR surveys were conducted to provide a clearer definition of the terrace stratigraphy in key areas. Samples were taken from sand lenses within coastal sections to attempt Luminescence dating (both IRSL and OSL) of the terraces. The available borehole record held by the British Geological Survey was also examined alongside the data produced during fieldwork. This extensive dataset was used to construct long profile projections of the revised Western Solent terrace stratigraphy, enabling attempts to correlate the sequence with the Bournemouth area upstream and the River Test terraces downstream. The study contributes to better defining the Western Solent terrace stratigraphy and how it relates the wider region.

"There rolls the deep where grew the tree": rediscovering the Southampton Docks collection

Rebecca Ferreira (she/her)

University of Southampton, University of Reading

During the excavations of the Southampton dock area from 1838 to 1934, a substantial amount of archaeological material was recovered, including *in situ* remains. The typology of the artefacts, associated stratigraphy and pollen analysis of the material indicated human activity in the area from the Palaeolithic through to the Saxon period, with a significant amount of the evidence recovered representing the Mesolithic.

Despite the substantial evidence of Mesolithic activity, the dock material has received little attention. This lack of attention can be attributed in part to the assumption by later scholars that historical data of the dock excavations was of little use because of the limited stratigraphical contexts afforded in these earlier excavations. This was further compounded by the vague locational details in the original reports. Resultingly, there has been limited empirical analysis of the dock material. This evidence has therefore not been incorporated into the understandings of the Mesolithic in the south or in Britain more broadly.

The recent rediscovery of a portion of this material in the Southampton Museums collections by the present author has provided a unique opportunity for this material to be re-analysed using current scientific techniques. The re-analysis of the dock material has the potential to provide meaningful understandings of Mesolithic activity in the Solent area and in Britain more broadly.

This presentation will provide context to this rediscovery, as well as outlining the next steps to be taken for data collection and re-analysis.

A Palaeolithic Enigma? New Investigations at Great Pan Farm, Newport, Isle of Wight

Dr Andrew Shaw[1], Alex Brown[1], Jon Dobbie[1], Hayley Hawkins[1], Mark Stewart[1] and Phil Toms[2]

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Great Pan Farm is considered a Middle Palaeolithic site of national importance, having produced a lithic assemblage including Levallois flakes and a characteristic Bout Coupe handaxe. However, the full significance of site for the Palaeolithic settlement history of Britain has remained elusive due to limited understanding of the stratigraphic context, taphonomic history and age of the archaeology.

This paper reports on new research at Great Pan Farm. This includes the first recent investigations carried out within and adjacent to former Great Pan Farm gravel pit (Wessex Archaeology 2021; In Prep) and reassessment of the historic artefact collection and available archive curated by Isle of Wight County Archaeology and Historic Environment Service.

This new research has established the lithostratigraphy of the Quaternary deposits within and adjacent to the site (Poole 1925; Shackley 1973, ASE 2006, OA 2005, ARCA 2016, Wessex Archaeology 2021; In Prep.) and the lithostratigraphic context of historic (Poole 1925) and new Palaeolithic finds (Wessex Archaeology 2021; In Prep). Through luminescence dating, a chronological framework has been established which, when linked to techno-typology and taphonomy of the artefacts, allows the full significance of the Palaeolithic archaeology from great Pan Farm to be considered for the first time.

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Techno-Typological Reassessment of the Palaeolithic Artefacts from Dickett's Field

Dr Patrick Cuthbertson

PADMAC Unit, Oxford

The site of Dickett's Field is located within the clay-with-flints deposits of Holybourne Down, close to Alton, Hampshire. It was one of many sites discovered and field-walked in the first half of the 20th century by George Willis and his associates and was more recently field-walked and excavated by the Oxford-based PADMAC Unit. With a pedigree of study stretching back almost a century, the site has featured in the literature several times under a variety of names. However, substantial ambiguity still surrounds many aspects of the Palaeolithic material in the assemblage.

The field-walked component of the assemblage contains a number of handaxes, which have variously been interpreted as Acheulean or Mousterian by previous researchers. The presence of a Levallois component in the assemblage has been debated but not confirmed, with terms like proto-Levallois and pseudo-Levallois being applied. Some diagnostically Mesolithic and Neolithic artefacts have also been recovered, which are easily distinguished from the earlier material on the basis of condition. Recent investigations by the PADMAC Unit have added substantially to the field-walked component of the site, and also located a number of artefacts during excavation.

I will present the results of the first comprehensive techno-typological reassessment of the Palaeolithic material from Dickett's Field following the excavations. The goals of the reassessment have been threefold. Firstly, it has aimed to address unresolved typological issues in the assemblage. Secondly, to use systematic study of condition to assess the integrity and possible period mixing of the Palaeolithic component. Lastly, whether any preliminary behavioural conclusions can be drawn from the technology, débitage analysis, or raw material considerations. Absolute dates for the excavated material still remain elusive, but it is hoped that the results of this analysis may provide an impetus for further study.

Session 3, Part 2: New approaches and modern perspectives – a broader view

Session host: Professor John McNabb

New excavations at Creswell Crags: a landscape approach

Kevin L. Kuykendall[1], Timothy Cockrell[1], Angharad Jones[2], Guglielmo Strapazzon[1]

University of Sheffield[1], Creswell Crags[2]

Creswell Crags is a gorge located in the Magnesian limestone on the Derbyshire/ Nottinghamshire border and has a long history of archaeological and palaeontological excavation from the late 19th to the early 21st centuries. These excavations have produced a wealth of archaeological and osteological material – and the first recognized Late Upper Palaeolithic cave art —that are important for our current understanding of hominin presence, absence, and adaptation during the Middle to Late Upper Palaeolithic in Britain. However, the different field methodologies and excavation strategies used over the years, the biased collection strategies of earlier research, and the distribution and loss of important artefact collections have been problematic.

We began new excavations at Creswell Crags in 2019, with the aim of recovering Middle and Upper Palaeolithic archaeology from non-cave localities in the Creswell gorge and in the surrounding landscape. Our field strategy includes the use of ground penetrating radar (GPR) and UAV-SfM survey (Unmanned Aerial Vehicles - Structure from Motion) to help locate productive contexts for test pit excavations in the Creswell gorge and surrounding landscape. We have so far completed 11 test pits within the gorge and recovered artefacts representative of Middle Palaeolithic to historic periods. Most of these are derived from highly disturbed and mixed contexts, inhibiting their use in archaeological interpretation, but some intact contexts have been identified. These excavations demonstrate that new Middle and Upper Palaeolithic archaeological materials can be recovered from non-cave contexts in the Creswell Crags landscape, and the use of GPR and UAV-SfM survey has strong potential to identify additional productive contexts for future excavation, both at Creswell Crags and at other geologically similar regions in the Magnesian Limestone where a similar field approach can be applied.

Flights of Fancy: New perspectives on avian-Neanderthal symbolism

Hannah Andrews

Independent researcher, Creswell Crags, University of York alum

It is now widely accepted that Neanderthals were exploiting birds for non-utilitarian, probably symbolic purposes. This behaviour appears to be largely confined to two avian families: Raptors and Corvids. These species were repeatedly targeted for their feathers and talons, in a pattern evident across Europe and spanning a period of c. 80,000 years. Moreover, no other Middle Palaeolithic bird species were subject to this kind of exploitation. Raptors and Corvids therefore appear to have been preferentially targeted for their non-edible elements. However, there has been little further research into this intriguing cultural behaviour. Interpretations of talon and feather 'ornaments' have remained cautious, stagnating our understanding of Neanderthal complexity. My paper attempts to rectify this. Using multi-disciplinary approaches to ask new questions of Neanderthal archaeology, I attempt to challenge the extant biases in our interpretation of these enigmatic hominins. Many of these approaches – for example, considering ethnographic perspectives and animal behaviours – are frequently applied to similar archaeological assemblages recovered from Upper Palaeolithic contexts. Given recent revelations regarding Neanderthal cognitive complexity, it is now appropriate to apply these to Middle Palaeolithic archaeology. Exploring alternative perspectives on human-bird relationships offered new insights into the unique connection between Neanderthals, Raptors and Corvids. It was proposed that Neanderthals saw aspects of themselves in these birds, perhaps even considering them 'non-human persons'. This challenges the euro-centric bias through which avian-Neanderthal relationships have historically been interpreted, while offering a fresh perspective on their interactions with these animals. It was concluded that the Neanderthal exploitation of feathers and talons may have been a way to mediate these relationships and express the blurred nature of human/bird identities.

A functional approach to handaxe and non-handaxe assemblages in MIS11 Britain: Preliminary insights

Dylan Jones

University of Liverpool

The archaeological record of Lower Palaeolithic Europe presents a mosaic of assemblages varying in their component of handaxes. Some sites contain numerous well-made specimens, whilst others may not contain a single bifacially worked tool. As handaxes are the primary cultural identifier of the

Acheulean, their presence is used as a proxy for different populations of hominins, for which we can compare and contrast technological differences. MIS11 Britain has been central to this discussion in the past, with vigorous debates occurring through the 1990s reflecting numerous handaxe and non-handaxe bearing assemblages excavated in the East of England. These sites are well dated within isotope sub-stages and are stratigraphically well correlated with terrestrial palaeoenvironment records. Various approaches have been taken to explain the presence and absence of handaxes, including raw material availability, cultural traditions and site function. The focus on handaxes deflects attention away from full assemblage analyses. A functional approach to flake tools, through use-wear analysis, offers us a greater ability to compare and contrast expedient use of technology between these assemblages. In his seminal work, Keely (1980) took a functional approach comparing micro-wear traces on archaeological material to traces on reference tools of known functions, to draw inferences of tool use on artefacts from Clacton, Hoxne, and Swanscombe. The aims of this project are to undertake similar analysis on sites in the Brecklands: Beeches Pit, Barnham East Farm, and Elveden. This talk will present preliminary insights into analysis at Beeches Pit, with reference to ongoing taphonomic experiments assessing post-depositional wear patterns as a neglected factor in assemblage variability. Potential directions for further research will also be presented.

A scientifically-robust remote model for generating data from multiple museum collections

Lucy Timbrell[1], Christopher Scott[1], Behailu Habte[2], Yosef Tefera[2], Hélène Monod[3], Mouna Qazzih[4], Benjamin Marais[5], Wendy Black[5], Christine Maroma[6], Emmanuel Ndiema[6, 7], Struan Henderson[8], Katherine Elmes[8], Kimberly Plomp[9, 10], Matt Grove[1]

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The COVID-19 pandemic halted scientific research across the world, revealing the vulnerabilities of field-based disciplines to disruption. To ensure resilience in the face of future emergencies, archaeology needs to be more sustainable with international collaboration at the forefront.

We present a collaborative data collection model for documenting artefacts using digital photography and physical measurements taken in-situ by multiple local collaborators. Data capture protocols to optimise standardisation are outlined, and guidelines are provided for data curation, storage and sharing.

The collaborative model is then tested and validated via a bespoke control test, involving the production of 3D printed replica assemblages for global distribution among collaborators. Each collaborator measured their copy *in situ*, following the same protocols as those used to collect the actual data. Analyses of the differences between data sets, and comparison to a corresponding data set collected by a single individual mirroring a traditional research framework, demonstrates that levels of error are low enough when working collaboratively for accurate analyses.

Adopting collaborative research strategies can have long-term advantages beyond the COVID-19 pandemic, by encouraging dual-project development and knowledge-sharing between international collaborators, decreasing emissions associated with archaeological research, and improving accessibility for those who are not able to travel extensively for access to disparate museum samples. We propose that archaeology should use the COVID-19 pandemic as a catalyst for change through encouraging deeper collaborations and the development of remote models of science as a complement to in-person research.

Session 4: 'What a Day', adapting to life in the Palaeolithic

Session host: Kate Anderson

George Morrow's prehistoric cartoons: bridging Prehistoric Peeps and The Far Side

Greg Michaelson

University of Aberdeen

Edward Tennyson Reed (1860-1933) is widely acknowledged as shaping modern "Flintstones" stereotypes of prehistoric lives, through his Prehistoric Peeps (1893-1908). These cartoons recapitulate a cosy late Victorian British culture, based on contemporary technologies elaborated from "Stone Age" materials. Despite the 1860s "Deep Past" scientific consensus, that dinosaurs long predated humans, Reed often presented their co-existence, for humorous effect.

In contrast, Reed's near contemporary George Morrow (1869-1955) portrayed prehistoric people with modern middle-class sensibilities, making the best of a harsh world that was consistent with contemporary archaeological knowledge. Morrow's initial cartoons, from 1919 onwards, were based on known Mesolithic and Neolithic technologies, and with humans co-existing with plausible large mammals, rather than dinosaurs. Where women are largely absent from Reed's cartoons, Morrow played on tropes of henpecked husbands and houseproud wives, alongside stereotypes of male violence towards women in courtship, derived from early 19th century racist ethnological analogies.

Then, from the late 1930s, Morrow showed prehistoric people living in proximity to dinosaurs, and with impossible understanding of their contexts, for example, referring to Glacial and Inter Glacial periods. Hence, Morrow's later work seems to pre-figure Johnny Hart's B.C. (1958-) and Gary Larson's Far Side (1980-95), both set in prehistoric worlds of lithics using people, with self-knowledge derived from a far future, co-existing with dinosaurs.

This paper explores Morrow's work and discusses his conception of prehistoric people. It derives from an ongoing exploration of long-established stereotypes of prehistory in cartoons, and why they persist, despite continuing changes in archaeological understanding. The research is grounded in analysis of over 400 cartoons about prehistory, from Punch, from 1841 to 2002.

If the Shoe Fits: Assessing Neanderthal Footwear Requirements

Phoebe Baker

University of York

Interest in Neanderthal clothing has grown substantially within the past two decades, reflecting wider recognition of Neanderthal diversity, complexity, and resilience. Unfortunately, taphonomic constraints have meant that no direct examples of Middle Palaeolithic clothing currently exist, resulting in a limited picture of clothing as a whole. This has resulted in a debate often limited to determining relatively fundamental baselines, such as whether clothing was worn and how much (or how little) clothing was required for basic survival. However, the debate has now reached a point where more nuanced questions may begin to be teased from the archaeological record, enabling a more holistic understanding of cultural adaptations to environmental extremities. Within clothing, footwear is a particularly important functional element and whilst earlier anatomical modelling has indicated limited footwear use by Neanderthals, a comprehensive assessment of footwear in the light of environmental pressures is lacking. This paper confronts the limited evidence and debate on Middle Palaeolithic footwear through the development and use of a multi-pronged GIS-based model. This model incorporates evidence from a range of sources, including environmental, biological, osteological, footprint and material culture records across the period MIS 9-3. By using such varied strands of evidence to inform the model, it is demonstrated that footwear use was likely to have been relatively widespread among Neanderthals, with considerable variations in design to suit differing functional and environmental needs. This approach might be usefully applied to other types of clothing in future and the conclusions drawn contribute to the debate surrounding Neanderthal clothing use, adding support to the view that Neanderthals did use clothing and that it was likely sophisticated.

Tell me what animal you are and I'll tell you where you come from: the territorial identity of Palaeolithic bestiary in the Iberian Peninsula

Miguel García-Bustos

University of Salamanca

One of the main characteristics of Palaeolithic art is its reduced iconographic catalogue. Moreover, the fact that a few themes are represented far above others is evidence that it was not an activity motivated by chance, but by well-established and shared artistic and cultural preferences. The quantification of the motifs represented is, therefore, something to be taken into account. The

present study aims to provide an updated corpus of figurative parietal representations from all over the Iberian Peninsula. This corpus comprises around 3300 figurative graphic units in the more than 150 sites of Palaeolithic chronology consulted. Both multivariate analyses and hypothesis tests (binomial test, Z-score and Chi-square) have been applied to this bestiary in order to compare our results with the corpora of other researchers and to describe the territorial distribution of peninsular iconography. Preliminary tests indicate that at the macro-geographical level there are significant differences between the three territories considered: the Cantabrian, the peninsular interior and the Mediterranean slope. It has also been found that not all animal themes participate in these differences in the same way. Horses, goats and deer are the figurative motifs that form the common iconographic background: their presence is proportional and statistically similar in all three regions. However, the number of certain animals such as the hind, the auroch or the bison are the most different. In conclusion, by updating the iconographic bestiary of the Iberian Peninsula, it is possible to understand one of the most important branches of Palaeolithic art, namely the theme represented. Likewise, by applying a series of statistical analyses, it has been possible to investigate further the iconographic structure, the discriminating power of the themes and the particularities they present on a quantitative level.

Materialising childhood in archaeological sites. Using Yaghan ethnoarchaeology to trace children's material culture and spaces in Hunter-Gatherer societies.

Blanca Pierres Tejada

Independent researcher

Since the emergence of Archaeology of Childhood as a discipline, many theoretical and methodological approaches have been proposed to identify children's activity in archaeological sites. New theoretical frameworks recognise children as relevant subjects of archaeological inquiry since ethnographic, historical and archaeological evidence acknowledge their significant social and economic contributions to past societies. However, despite this widespread interest in children and childhood studies, children's material record is still overlooked in archaeological sites. Therefore, a more systematic methodology is still required to identify children in archaeological contexts. The aim of this research is to deepen the understanding of childhood among Hunter-Gatherer groups by conducting a systematic analysis on children's material culture and spaces in Yaghan archaeological sites. The Yaghan were a hunter-gatherer-fisher society located in the southernmost extreme of South America, Tierra del Fuego (today Argentina and Chile). To this end, an ethnoarchaeological approach is applied in order to develop a critical confrontation between ethnographic and archaeological

information. The cultural construction of childhood among the Yaghan is explored through a critical revision of the ethnographic sources, and a detailed description of children's roles, behaviours and expectations is also undertaken. The archaeological implications of this ethnographic research are examined in a case study: the site Lanashuaia II, a shell midden located on the Beagle Channel coast. This piece of research will provide a new methodological approach to identify children's production and creation of material culture, as well as children's use, sharing and making of social spaces in the specific context of Tierra del Fuego. This information is a highly valuable contribution to rethink how we identify children and childhood experiences in archaeological sites of Hunter-Gatherers from a broader insight.

All Wrapped Up? A Revaluation of Neanderthal Clothing Requirements through Predictive Modelling of Female BMR, and its Implication for Children

Ani Searle (they/them) and Stephanie Piper

University of York

To have survived the First Glacial Maximum and the transitional phases leading up to the Last Glacial Maximum in the extreme winter conditions of OIS-4 and OIS-3 Northern Europe, Neanderthals required clothing. However, studies of Neanderthal clothing requirements have underestimated the needs of females, as the predicted Basal Metabolic Rates on which these models are based have only utilised male Neanderthal data. Whilst the BMR of Neanderthal children cannot be ascertained, their clothing requirements are considered to be even greater, as would those of the elderly and disabled. In re-evaluating Neanderthal clothing requirements by predictive modelling using female BMR data, this study suggests that during the coldest phases of OIS-4 and OIS-3 female Neanderthals would have routinely required >85% body coverage; furthermore, children would have required more clothing than adults. This implies that Neanderthals would have required closed and effective cold weather clothing, despite current debates that suggest this was outside their technological capacity. The technological requirements needed to create Effective Cold Weather Clothing, in contrast, have been overestimated; alternate technologies to create seams are just as effective as Eyed Bone Needles, and within Neanderthal capabilities. Nevertheless, the advantages given by greater physiological adaptations to the cold mean that while Neanderthals did require closed clothing, it is likely they still required less clothing than contemporary Anatomically Modern Humans, sufficient forms of which are discussed. Due to Neanderthal presence in areas that required >85% body coverage, the extreme winter conditions of OSI-4 and OSI-3 are unlikely to be a direct limiting factor in the habitation ranges of Neanderthals during these periods.

Session 5: Evolving minds and bodies: biological and ecological responses to change

Session host: Professor William Davies

Prefrontal cortex development in the small-brained hominins

Emma Brooks

University of York

The small-brained hominins have all presented evolutionary conundrums after their discovery. *Homo habilis*, *Homo naledi*, and *Homo floresiensis* do not conform to what is expected of a member of *Homo*, with statures and brain sizes closer to that of *Australopithecus*. However, it is clear from a comparative review of these species that they all exhibit behaviourally modern cognition, despite their small endocranial capacities. All three species demonstrate a disproportionate expansion in the prefrontal cortices, a region of the brain believed to control many aspects of a unique 'human' cognition, such as language capabilities, emotional intelligence, and executive functions. Through a comparison of the endocasts of LB1 (*H. floresiensis*), DH3/4 (*H. naledi*), and a new virtually reconstructed KNM-ER 1813 (*H. habilis*), a pattern of development in the Broca's region and frontal poles of these species can be identified, often in more extreme ways than the species' contemporaries. However, there are slight variations between the species due to differential selective pressures. The shared expansion may be due to the requirement for socio-cognitive niche construction in order to remain competitive with larger-brained species. Through mosaic brain evolution, the small-brained species can limit overall, and costly, neural investment, and focus on areas key to cooperation and socio-cognitive niche constructing behaviours to remain adaptively successful despite what may appear to be limiting morphology. These findings allow us to understand what aspects of human cognition may have been driving factors in human cognitive evolution, as they appear to be retained when overall encephalization, which has always been characteristically human, is not possible.

Environmental Risk and Tool Complexity in the Precocious Industries of the South African MSA

Alexandra Kelly

Chris Butler Archaeological Services, University of Cambridge alum

The short-lived Still Bay and Howiesons Poort technological industries, appearing across a variety of sites in southern Africa around 60-80,000 years ago, present both a conundrum and an opportunity for understanding the circumstances and developmental history behind the unique cognitive abilities

of modern humans. These sites stand out within the Middle Stone Age as possessing a variety of technological and behavioural features typically not seen until around 40,000 years ago, with both more complex and refined tools, and indicators of symbolic behaviour. In this paper, environmental risk is explored as a driver of the innovation and use of increasingly complex tools, due to the need to adapt to scarcer and more difficult-to-procure resources. This is approached through the development of a measure of tool complexity, based on the work of Miriam Haidle and colleagues, which can be used to track changes in tool complexity at 3 different sites - Sibudu Cave, Blombos Cave, and Diepkloof Rock Shelter. These trends were then compared to 3 variables representative for environmental risk – temperatures derived from ice cores, δ^{13}C levels, and an aridity index. The results indicate a link between increasing tool complexity during the periods under study, and both lower temperatures, and more open or fragmented environments – suggesting that whilst environmental risk is unlikely to be the sole driver behind tool complexity, the relationship between the two points to the flexibility with which hominins were responding to changes in their worlds on the small-scale. Furthermore, it suggests that ideas surrounding tool complexity and cognition need continual reassessment. Instead of viewing complexity as an aggregated package, an understanding of cognitive capacity and performance may be a more productive way to investigate behavioural complexity, by centring discussion on how and why different forms of behaviour were expressed in different circumstances.

Facial Morphologies of Middle Pleistocene Europe: Implications for Middle Pleistocene Hominin Phylogeny and the Evolution of *Homo neanderthalensis*

Siri Topsø Olsen

University College London

Hominin evolution during the Middle Pleistocene is highly debated, with little consensus as to the number of penecontemporaneous lineages, their correct taxonomy, and their phylogeny. Studies addressing this debate present conflicting results depending on the methods used and the morphological area under consideration. This paper aims to explore the connection between facial morphology and geography in Middle Pleistocene hominins and to test the morphological basis for the hypothesis of a single-lineage phylogeny in Europe encompassing the Middle Pleistocene hominins and *Homo neanderthalensis*. The craniofacial morphology of European Middle Pleistocene hominins is examined using a multi-method approach which combines geometric morphometrics with categorical observation to allow for a comparison of the results generated by different methods. The results highlight that Middle Pleistocene hominins are characterized by morphological mosaicism in

the craniofacial region; symplesiomorphic and apomorphic traits are combined, suggesting that discrepancies between previous studies likely stem from this mosaic morphological profile in combination with a lack of uniquely distinguishing traits that could help to separate Middle Pleistocene hominins from other hominin groups and from each other. Furthermore, intracontinental craniofacial variation in European Middle Pleistocene hominins is found to be roughly equal to intercontinental variation in Middle Pleistocene hominins more broadly, highlighting the complexity and multiplicity of hominin morphology during this period and lending support to the suggestion of multiple hominin lineages. This paper then argues for the development of a more fluid approach, aimed at understanding the broader evolutionary processes guiding hominin evolution during the Middle Pleistocene. An important step in this process will be to free Middle Pleistocene hominins from the restrictive context of the evolution of *Homo neanderthalensis* and *Homo sapiens*, allowing members of this group to be studied outside of their role as transitional forms and instead to be understood as hominins with their own evolutionary fate.

High Altitude Adaptation in the Middle Palaeolithic of the Zagros Mountains, Iran

Andreas Nymark[1, 4], **Amir Beshkani**[2], **Peter Bye-Jensen**[3, 4]

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The MP of the Zagros Mountains of Iran and Iraq languished for most of the 20th Century as a sort of intellectual backwaters of knowledge production on human origins research due to fragile political climates. Models of MP hominin behavioural evolution and environmental adaptations in southwest Asia, therefore, historically have been grounded in research based on fieldwork in the Levant. Consequently, lithic technological adaptation within the MP of the Zagros, gauged through production variability, raw material preferences, and functional decision-making through use, have been lacking behind the better-known industries of the Levantine Mousterian. Intensification of fieldwork in the Zagros Mountains over the past two decades have provided crucial new insights into the region, and revealed a much more complex patchwork of MP lithic industrial variability than hitherto appreciated. The Zagros MP historically has been associated – or even equated – with the so-called 'Zagros Mousterian' (Skinner 1965; Dibble 1984; Lindly 1997), an industry featuring pointed and heavily-retouched tools, in particular Mousterian points (Solecki and Solecki 1993) and scrapers (Dibble & Holdaway 1993). The Zagros Mousterian has been explained as a techno-behavioural expression of hominin summer-seasonal adaptation, specifically designed to manage lithic raw material scarcity within lowland to highland mobility strategies of high-altitude land-use (Lindly 1997). In a new series

of studies on the high-altitude MP rockshelter of Houmian (Bewley 1984) in the Iranian Zagros, this talk will present the findings of a re-analysis of the lithic and pollen records (Nymark 2021), as well as a technological study (Beshkani and Nymark, *in prep*) identifying multiple – and non-Mousterian MP – technological strategies of production, and a use-wear study (Bye-Jensen and Nymark, *in prep*) revealing evidence of specific materials targeted by hominins in the surrounding landscape. The resulting evidence contribute to a re-appreciation of the MP of the Zagros as a dynamic region of hominin complexity.

Decolonising prehistory

In conversation with Dr Benjamin Elliott, Professor Liv Nilsson Stutz, Dr Nupur Tiwari and Professor Graeme Warren

Structure

The structure of the session is inspired by the below quote on decolonisation from Mignola (2018: 108):

> "The answer to the question "What does it mean to decolonize?" cannot be an abstract universal. It has to be asked by looking at the other W questions: Who is doing it, where, why, and how?"

At the beginning of the session, we will provide context to the current work of decolonising prehistory in Archaeology, but the main focus of the session will on the why and how questions. It is important to note that this session is part and parcel of a larger on-going and evolving discourse in and around decolonisation. There is no straightforward "solution", and this session will not provide concrete answers to the questions of why and how we decolonise prehistory, but rather aims to encourage debate as a way of working through these issues.

Code of Conduct

Decolonisation is a sensitive topic and discussions surrounding it can be difficult and challenging for those who participate in them. Colonisation represents significant historical traumas, the effects of which still continue to marginalise and oppress a diverse range of people in numerous present-day contexts. Untangling and challenging the legacy of colonialism can present confronting realities to those who engage in these discussions. Such realities include the uncovering of unconscious biases and reflecting on oppressive behaviours which perpetrators have been previously unaware of. It can also involve revisiting painful memories and reflecting upon continuing oppression.

With this is mind, and to ensure that the session is respectful, we ask that all participants in the discussion follow the code of conduct below. The following has been adapted from the code of conduct written for the 'Decolonising the Mesolithic? Workshop' hosted by Dr Benjamin Elliott and Professor Graeme Warren at University College Dublin on the 21st of May 2021. Elliott and Warren's code of conduct followed the principals of the Brave Space Ground Rules, set out by Arao and Celemens (2013) and further developed by Verduzco-Baker (2018).

Views expressed by other participants during this session may generate feelings of discomfort or upset. This may be because they present your own thoughts and actions is an uncomfortable light, or

because they do not acknowledge experiences of trauma and hardship that you are directly or indirectly affected by. Challenging these views is completely fine, but we ask that you do so with civility and respect.

If you disagree with another participant, please ensure that you keep the discussion and debate focussed on the idea and concepts being discussed and not the individual themselves.

Treat other participants with respect. If you wish to make a point, please do not speak over or cut others off. If you are participating online, please make use of the "raise hand" function on Microsoft Teams when you would like to contribute, and the chair will invite you to speak when appropriate.

Please be conscientious of the fact that your shared thoughts and opinions may be upsetting to others, even if you did not intend them to be. Ensure that you take you time to carefully choose your words and to listen and talk through other responses to your views.

Engagement in the session is by choice. We appreciate that there will be different types of engagement by participants, with some participants talking more, some only choosing to share thoughts concisely, and others who only want to listen and process the discussions internally. Sometimes participants may even be too tired or opt out of responding to a particular question. We will not force responses, but please keep in mind that people facing oppression do not have the choice to opt out.

This session aims to encourage participants of all ages and university/career levels to take part in discussions. We want provide participants with a platform to comfortably express their views and make space for these to be informed or adapted following discussion. With this in mind, we will not be recording the session, and we ask that participants do not share screenshots, or direct quotes from named individuals with wider audiences, either during the workshop or after. Following the session, please allow yourself time to process the different views expressed before sharing these with others, wither online or in person.

References

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Mignolo, W. (2018). What Does It Mean to Decolonize? In: W.D. Mignolo and C.E. Walsh (eds), *On Decoloniality: Concepts, Analytics, Praxis*. Durham and London: Duke University Press.

Verduzco-Baker, L. (2018). Modified Brave Spaces: Calling in Brave Instructors. *Sociology of Race and Ethnicity*, 4: 585–592.

UTP 2023 Exhibition

The conference will be hosting a virtual exhibition which will be running alongside a physical version of the same material showcasing some of the archaeological environments we have the privilege of being in the proximity of here in Southampton. The virtual exhibition will be run in the University's Digital Humanities Hub and has been built as an immersive experience to explore how we can present Palaeolithic and Mesolithic landscapes in new, interactive ways. The objects and landscapes that will be explored in the virtual environment will also be displayed in a more traditional exhibition. We are hoping to generate data from these two experiences for students in the Department of Archaeology here at Southampton to use in undergraduate and master's dissertations exploring visitor experience and the benefits and limitations of both virtual reality and in-person exhibitions.

The exhibitions will be running throughout the day on Friday the 31st of March. Both exhibitions will take place in Building 65 (Parkes Building). The virtual exhibition is located in our Digital Humanities Hub on Level 2 (first floor) in the north corridor and the physical exhibition will be located in Room 1101 on Level 1 (ground floor).