



African Archaeology Research Day

Saturday 25th November 2017

Department of Archaeology

University of York



#aardyork

OVERVIEW

Time	Activity	Location
8.30 – 9.00	REGISTRATION AND COFFEE	Common room
9.00 – 9.30	Plenary address by Dr Sarah Walshaw	K/133: Philip Rahtz Lecture theatre
9.30 – 10.50	Diet and agriculture	K/133: Philip Rahtz Lecture theatre
10.50 – 11.20	COFFEE	Common room
11.20 – 13.20	*Heritage and the Politics of the Past	K/133: Philip Rahtz Lecture theatre
11.20 – 13.00	*Shells, Bones and Tusks	K/159
13.00 – 14.00	LUNCH	Common room
14.00 – 15.20	*Geoarchaeology and Landscapes	K/133: Philip Rahtz Lecture theatre
14.00 – 15.20	*People and Histories	K/159
15.20 – 15.50	COFFEE	G/60
15.50 – 16.50	*Geoarchaeology and Landscapes	K/133: Philip Rahtz Lecture theatre
15.50 – 17.10	*People and Histories	K/159
17.10 – 17.30	AGM and prize giving	K/133: Philip Rahtz Lecture theatre
17.30	DRINKS RECEPTION	G/60

**Parallel session*

AARD 2017 Key note speaker

Following the overall theme of the research day, to champion current and up-and-coming research, our guest speaker for AARD 2017 has expertise that encompasses both traditional and specialist environmental archaeology skills that push the boundaries of African archaeology.

Dr Sarah Walshaw is a Senior Lecturer in the Department of History at Simon Fraser University, Vancouver, Canada.

Her research area is historical archaeology with her main focus being Africa utilising ethnobotany, food and culture and oral history. Sarah's recent research centres on archaeobotanical investigations into food and crops around the Swahili coast.

AARD 2017 Prize

Thanks to sponsorship from the AEA, Beta Analytic and Olympus we are delighted to be able to offer a prize to the best student paper presented at AARD 2017. This will be judged by the keynote speaker and the AARD committee. The best paper will be awarded a £30 Amazon voucher.

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OLYMPUS



AARD 2017 SCHEDULE

DIET AND AGRICULTURE

Philip Rahtz Lecture Theatre K/133

Chair: Suzi Richer

8.30 – 9.00	Registration and Coffee in the Common Room	
9.00 – 9.30	Sarah Walshaw	PLENARY: The Relevance of African Environmental Archaeology
9.30 – 9.50	Senna Thornton-Barnett	Permission to Thrive: Interrogating agricultural resilience and sustainability through comparative spatial analysis of wild, weedy and domesticated taxa in the charred plant macro-fossils from Engaruka, Tanzania and Konso, Ethiopia
9.50 – 10.10	Louis Champion	Food and agricultural evolution in the Seno Plain in Mali: an archaeobotanical study of the site of Sadia
10.10 – 10.30	Lara González Carretero	Sorghum porridge and cotton cloth: the agricultural foundations of the central Meroitic economy
10.30 – 10.50	Emuobosa Akpo Orijiemie	Climate change and Cultural Responses in Prehistoric Nigeria
10.50 – 11.20	Coffee in the Common Room (30 mins)	

HERITAGE AND POLITICS OF THE PAST

Philip Rahtz Lecture Theatre K/133

This is a parallel session

Chair: Paul Lane

11.20 – 11.40	Andrew Reid	Twentieth century archaeology and the foundations of modern Uganda
11.40 – 12.00	Laura Basell	Technology, Materiality and Cultural Heritage in Eastern Africa

12.00 – 12.20	Stephanie Wynne-Jones	Global challenges and coastal communities
12.20 – 12.40	Elochukwu Nwankwo	Heritage feminism: exploring new approaches to Heritage Studies in Nigeria
12.40 – 13.00	Jennifer Wexler	Visualising Rock Art: Digital Experimentation in the African Rock Art Image Project at the British Museum
13.00 – 13.20	Shadia Taha	Sea, boats, and traditional knowledge

BONES, BEADS AND TUSKS

Room K/159

This is a parallel session

Chair: Louise Iles

11.20 – 11.40	Marc Dickinson	Amino acid racemisation dating of mammalian enamel
11.40 – 12.00	Ashley Coutu	Bangles and beads: exchange networks in the southern African Iron Age
12.00 – 12.20	Abigail Desmond	What's the point? A chaîne opératoire approach to understanding bone tools, and the methods that make it happen
12.20 – 12.40	Annalisa Christie	Cowrie Shells in West Africa: A Comparative Analysis
12.40 – 13.00	Anne Haour	Back to ibn Battuta's island – excavations in the Maldives, 2017
13.00 – 14.00	<i>Lunch in the Common Room (60 min)</i>	

PEOPLE AND HISTORIES

Room K/159

This is a parallel session

Chair: Anne Haour

14.00 – 14.20	Kevin MacDonald	Windé Koroji: another look at an early agricultural site in Central Mali
14.20 – 14.40	Henriette Rødland	Cracking the coral: survey results from Tumbatu Island
14.40 – 15.00	Mark Horton	The Old Fort Zanzibar; excavations and survey 2017
15.00 – 15.20	Nadia Khalaf	Preliminary results of the 2017 Harlaa Archaeological Survey, Ethiopia
15.20 – 15.50	<i>Coffee in the G/60 (30 mins)</i>	
15.50 – 16.10	Jorge de Torres	The veins of the Horn: trade routes and merchants in Western Somalia (12th-16th centuries)
16.10 – 16.30	Monika Baumanova	Networks of trade and communication: urban centres on the coasts of sub-Saharan Africa
16.30 – 16.50	Kiah Johnson	Fear comes creeping: spirits-of-the-dead in San rock art

GEOARCHAEOLOGY AND LANDSCAPES

Philip Rahtz Lecture Theatre King's Manor (K/133)

This is a parallel session

Chair: Cruz Ferro-Vazquez

14.00 – 14.20	Chioma Ngonadi	Abandoned Later Iron Age settlement on Amaovuko Hill in Lejja southeastern Nigeria: an archaeological investigation
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14.20 – 14.40	Anna Shoemaker	The results of landscape surveys in Olgulului/Olarashi group ranch, Amboseli, Kenya
14.40 – 15.00	Tabitha Kabora	Putting the people back in the land: Agent-based modelling of historical water management in Engaruka, Tanzania
15.00 – 15.20	Oli Boles	Anthropogenic Land-Cover Change in Eastern Africa: Mapping 6000 Years of Land-Use
15.20 – 15.50	<i>Coffee in the Common Room (30 mins)</i>	
15.50 – 16.10	Alex Wilshaw	Aliel: A new monumental site from West Turkana, Kenya
16.10 – 16.30	David Kay	Bringing the House Down: Preliminary Results of Household Geoarchaeology in Marakwet, Northwest Kenya
16.30 – 16.50	Gianni Gallelo	The role of geochemistry for sediment provenancing at the archaeological site of Engaruka (Tanzania)
16.50 – 17.10	Stephanie Wynne-Jones	What is this house for?

AGM and PRIZE GIVING

Philip Rahtz Lecture Theatre King's Manor (K/133)

17.10 – 17.30 **Conference round up and prize giving**

DRINKS RECEPTION

G/60

Abstracts

DIET AND AGRICULTURE

Chair: Suzi Richer

Permission to Thrive: Interrogating agricultural resilience and sustainability through comparative spatial analysis of wild, weedy and domesticated taxa in the charred plant macro-fossils from Engaruka, Tanzania and Konso, Ethiopia.

Senna Thornton-Barnett and Daryl Stump

Department of Archaeology, University of York, UK

As the research programme of the Archaeology of Agricultural Resilience in East Africa Project nears its conclusion, I reflect upon the findings of the archaeobotanical study especially those revelations related to the spatial analysis of the crop and weed assemblages from Engaruka, in northern Tanzania, and Konso, in the southern highlands of Ethiopia. I present a data-driven discussion about the relationship between farmers and their land through an exploration of the rationale behind specific cropping strategies and subsequent impact on the sustainability of these systems. The data from each site have been queried to address questions about the presence and preservation of millets and pulses and non-crop taxa in both expected and unlikely contexts, providing information on a range of issues including cultivation strategy and practice, specifically relating to harvesting techniques, the role of wild and weedy taxa, and differential use of space. Discussion is based upon detailed investigations of plant cultivation, collection/harvest, and exploitation through quantification of charred plant macrofossils, gathered weeds/wild taxa, and interview data relating to farming practices. The results highlight the strengths of a multi-disciplinary approach to understanding resilience, sustainability, and, more generally, what it means to thrive in a challenging and dynamic agricultural landscape.

European Research Council Starter Grant Scheme (FP/200702013 / ERC Grant Agreement No. ERC-StG-2012-337128-AAREA)

NOTES:

Food and agricultural evolution in the Seno Plain in Mali: an archaeobotanical study of the site of Sadia.

Louis Champion⁽¹⁾⁽²⁾⁽³⁾, Anne Mayor⁽³⁾, Dorian Fuller⁽¹⁾, Sylvain Ozainne⁽³⁾, Eric Huysecom⁽³⁾.

¹*Institute of Archaeology, University College London (UCL), UK*

²*Royal Museum for Central Africa, Tervuren, Belgium (MRAC)*

³*Laboratoire Archéologie et Peuplement de l'Afrique (APA), Unité d'anthropologie du Département de génétique et évolution de l'Université de Genève (GENEV), Switzerland*

While narratives of the spread of agriculture are central to interpretation of African history, hard evidence of past crops and cultivation practices are few and far between.

The present research looks at flotation samples derived from Sadia in Mali being investigated in 2010-11 as part of the "Human population and paleoenvironment in Africa" project of the Laboratoire Archéologie et Peuplement de l'Afrique (APA, UNIG). Flotation success has provided plant macro-remains from 165 archaeobotanical samples dating from the 8th century AD to the 13th century AD. The most widespread crop on sites across the whole region and period is pearl millet (*Pennisetum glaucum*), the likely staple cereal of West Africa since the Neolithic. However, Fonio (*Digitaria exilis*) is also well represented. Fonio appears to be a later addition to agriculture in West Africa that helped to diversify agricultural production.

NOTES:

Sorghum porridge and cotton cloth: the agricultural foundations of the central Meroitic economy

Lara González Carretero & Dorian Q Fuller

University College London (UCL), UK

The Meroitic kingdom was a major polity of in the northern Sudan, with its core region located approximately where the savannas gave way to the Sahara. It is therefore a mix of the Nile valley ecology, flood water farming and potential irrigation, with rainfed savanna ecology, supporting native African cereals and pastoralism. Systematic flotation in recent years as part of the Hamadab excavations of the German Archaeological Institute, have provided a large Meroitic period archaeobotanical assemblage through which to assess the agricultural basis of the core region near Meroe, including staple food production and cash crops. These data reveal the predominance of sorghum both from cereal remains and from food remains of boiled sorghum based porridges. This cereal was accompanied by pearl millet and a foxtail millet (plausibly the “lost foxtail millet” of Nubia, *Setaria sphacelata*). A range of savanna grasses may represent weeds or the use of animal dung fuel. Much more minor is evidence for wheat and barley, which may have been grown in small quantities on receding Nile floods. Second in quantity to sorghum is evidence of cotton seeds, which attests to the cultivation and processing for textiles of cotton, likely a central craft in the Meroitic kingdom alongside iron-working, which was also evident at Hamadab.

NOTES:

Climate Change and Cultural Responses in Prehistoric Nigeria

^{a,b}ORIJEMIE, Emuobosa Akpo

^a*McDonald Institute for Archaeological Research, University of Cambridge, UK.*

^b*Department of Archaeology and Anthropology, University of Ibadan, Nigeria*

Human responses to climatic changes are often subtly transformed into, and/or reflected in the material culture of a population. To gain insights into this concept, human ecological data from the Tiv area of the Middle Benue Valley (MBV), Nigeria were explored. Four periods of cultural changes (I, II, III and IV) associated with climatic instability were recognised. During Period I (933 ±29 BP), pottery was dominated by knitted mat impression. The people exploited a diverse array of plants (*Dioscorea* spp., *Pennisetum glaucum* and *Elaeis guineensis*), and engaged in iron working. In Period II, twisted mat impressed, twisted cord roulette and burnished pottery occurred; game hunting using microliths, and iron workings continued. In Period III (802 ±29 BP), pottery with carved wood roulette and bosses appeared; they are associated with iron workings of similar tradition in Nok and Cameroon areas, and rituals respectively. During Period IV (before 310 ±30 BP), there was a marked increase and diversification in artefacts; burnished pottery dominated while those with wavy, circular incisions, v-patterns, and notching became common. These were accompanied by marked increase in iron slags and occurrence of cf. *Sorghum bicolor*; *Pennisetum glaucum* and microliths disappeared. The significance of these cultural transformations is discussed in the context of the peopling of the MBV from prehistoric to modern times.

NOTES:

HERITAGE AND POLITICS OF THE PAST

Chair: Paul Lane

Twentieth century archaeology and the foundations of modern Uganda

Andrew Reid

University College London (UCL), UK

This paper explores archaeological remains dating to the early twentieth century from Ntuusi in southern Uganda. In the past such remains have been largely ignored in efforts to explore the older occupation of the site from the first half of the second millennium AD. A fresh consideration of the more recent remains, set within their historical context, indicates that they provide an important insight into the creation of modern Uganda. The twentieth century habitation at Ntuusi represented a newly imposed source of power in which the nature and focus of leadership was significantly changed. The building of structures and the construction of landscapes played key roles in the contestation of power in the broader Mawogola environment and addressed key issues that are still active in the modern Independent state. This archaeological study not only demonstrates that issues of identity and power that are active today were historically created, rather than being immutable and irreversible, and that these constructs need to be critiqued and challenged in the present if a more useful notion of the meaning of history is to be accessed.

NOTES:

Technology, Materiality and Cultural Heritage in Eastern Africa

¹Basell, L. S., ²Horton, M., Ali, A., Egberts, E., Hooper, F., Webber, H. and Mellor, N

¹*Queen's University Belfast, UK*

²*University of Bristol, UK*

This paper presents some preliminary results arising from a workshop focussed on “Embracing the Cultural Heritage of Eastern Africa” held in Zanzibar during June 2017. It will focus predominantly on terrestrial laser scan, drone and ground penetrating radar outputs from case studies on Zanzibar, including a cave system and Persian baths. The paper will consider the value of employing such technologies, their accessibility and practical applicability in the context of African heritage management. The tensions between materiality and virtual reality, modern and ancient technology will be explored.

NOTES:

Global challenges and coastal communities

¹Stephanie Wynne-Jones, ²Jon Henderson, ³Colin Breen, ⁴Paul Lane

¹*Department of Archaeology, University of York, UK*

²*University of Nottingham, UK*

³*University of Ulster, UK*

⁴*Uppsala University, Sweden*

This paper presents the hopes and plans of a project funded recently by the AHRC Global Challenges Research Fund International Network Plus scheme. The authors are archaeologists on an interdisciplinary team that includes anthropologists, marine ecologists, and specialists in development law; the challenge of this project is to bring these areas into conversation as a means of understanding and preserving the unique marine cultural heritage of eastern Africa. The scheme also works in a unique way, with most of the funding set aside for research projects suggested by others, and particularly from local scholars. This should allow eastern African colleagues to shape the agenda substantially.

The aim of this paper is to introduce briefly the project and its aims, and then to outline the challenges faced by the team in managing this project. It is hoped that the paper will initiate conversations and contributions, beginning the process of co-production that informs the project rationale.

NOTES:

HERITAGE FEMINISM: EXPLORING NEW APPROACHES TO HERITAGE STUDIES IN NIGERIA.

Elochukwu Nwankwo

Department of Archaeology and Tourism, University of Nigeria, Nsukka

The current state of feminist studies on heritage and the response of culture and tradition to gender issues in the rural areas is the basis for this paper. The paper examined the role of women in heritage preservation and promotion in Southeast Nigeria and beyond; looking at the issues arising from the activities of feminist studies in heritage studies. At the end, the study suggested new dimensions to the study of heritage that accommodate the relevance of women in heritage preservation and studies. These include Feminist Heritage which implies that women and heritage can be studied in two fronts; looking at the activities of women in heritage preservation and looking at the activities of women in heritage studies. Also is the WECS Feminist Heritage Model which tends to address likely issues that may arise. The implication of the study is that it will open a new direction in heritage studies that would not only accommodate the relevance of women to heritage preservation and studies but also ensure smooth feminist studies on heritage resources in Southeast Nigeria and beyond.

NOTES:

Visualising Rock Art: Digital Experimentation in the African Rock Art Image Project at the British Museum.

Jennifer Wexler, Helen Anderson, Elizabeth Galvin,

British Museum, London, UK

The African Rock Art Image Project at the British Museum (www.britishmuseum.org/africanrockart) was launched in 2013 to catalogue, curate and make publicly accessible a collection of 24,000 images from 19 countries throughout the continent of Africa. The project has focused principally on how to make the project's data available to both researchers and members of the public. As part of this, we have been looking at new ways of visualizing and transforming the 20-year-old archival rock art images by experimenting with innovative digital tools. This has allowed us new and inventive ways of engaging with the rock art data, including 3D modeling for online curation and the further contextualization of rock art landscapes through the creation of immersive VR tours. Using these digital techniques has wide-reaching implications for the way museums and cultural heritage agencies use their historical data. Archival resources are not only key educational and research resources, but also increasingly play an important role in possible reconstructions of endangered or destroyed heritage. This paper will focus on what we have learned in the 4 years of running a major digital heritage project in a museum environment, and how we are working to ensure ongoing, open access to the archive.

NOTES:

Sea, boats and traditional knowledge

Shadia Taha

University of Cambridge, UK

The ancient port of Suakin, on the Red Sea coast of eastern Sudan, has played a considerable role on the maritime trade and commercial exchange across the Red Sea. The wealth of traditions and practices encompass a distinctive material and immaterial heritage. It is almost unfeasible to consider Suakin's heritage without taking into account its past and present maritime heritage and its profound connection with the sea. It is incongruous for an area which is well-known for its maritime significance to have its maritime heritage neither protected, nor listed as heritage. There remain no standard measures, instruments, policies or strategies directed explicitly to the safeguarding of maritime cultural heritage in Sudan

The research illustrates the importance of the skills and practices of present-day communities and calls for a holistic understanding of cultural heritage in Suakin. The research suggests that to fully understand the practices and culture of a maritime community, it is necessary to recognise the whole cultural landscape of Suakin. There is a fundamental need for heritage management to appreciate and to provide for the whole host of intangible values that are integral part of Suakin's cultural heritage landscape.

NOTES:

BONES, BEADS AND TUSKS

Chair: Louise Iles

Amino acid racemisation dating of mammalian enamel

¹Marc Dickinson, ²Adrian Lister and ¹Kirsty Penkman

¹*Department of Chemistry, University of York, York, YO10 5DD, UK.*

²*The Natural History Museum, London, UK*

Establishing a robust chronology for mammalian species is imperative for our understanding of hominin evolution and migratory patterns. Directly dating mammalian remains older than the limit of radiocarbon dating (~50 ka) is extremely challenging and is often impossible. Amino acid racemisation (AAR), which uses the predictable breakdown of proteins and amino acids, has been a powerful tool for Pleistocene age estimation (~2.5 Ma) of a wide variety of calcium carbonate (CaCO₃) based biominerals, including ostrich eggshell. By targeting a protein fraction within the crystalline structure of biominerals, it is possible to prevent the difficulties associated with contamination, leaching and environmental influences. Tooth enamel (which is composed of a form of calcium phosphate) has the potential to provide an environment complementary to that found within the CaCO₃ subfossils, so has the potential to be applicable to AAR dating.

We present the assessment of the suitability of enamel for AAR dating by both testing the intrinsic properties of the inorganic crystal structure of enamel and the nature of the protein breakdown. Originally developed on elephantid enamel in the UK, this AAR framework is able to provide age estimation for unknown age elephantid material from the same temperature region. However, this technique has the potential to be expanded to a range of mammalian species (including hominins) and can be adapted to different geographical regions, and here we present the first data on African mammals. The focus of this framework has been on Quaternary age samples, but due to the apparent slow breakdown of the enamel proteins the dating range of this method may be much broader. This novel application of AAR dating has the capacity to improve our understanding of the mammalian fauna over the last 3 Ma.

NOTES:

What's the point? A chaîne opératoire approach to understanding bone tools, and the methods that make it happen.

Abigail Desmond

University of Oxford, UK

The Moroccan cave site of Taforalt has yielded the most extensive collection of Palaeolithic North African bone tools to-date. With over 200 implements recovered (so far!), these tools were excavated from Iberomaurusian (early LSA) archaeological contexts. As no modern study has been made of these tools, they offer a novel opportunity for material insight into changing lifeways, here associated with emergent sedentism. I shall explore why the “chaîne opératoire” is a useful analytic programme in describing bone tools, as it takes into account the temporal dimensionality (or “life history”) of these objects. This allows for a higher resolution understanding of different tool stages, from initial taxa selection to blank production, through to tool-shaping strategies, industrial functions and uses, articulations with different materials (e.g. the human hand, fibres, skins, etc.), and, finally, deposition (including taphonomic processes).

I shall briefly discuss two such stages in the chaîne opératoire, and the methods employed to investigate each. I begin with the primary stage; initial raw material selection, as investigated by ZooMs (ZooArchaeology by Mass Spectrometry). This method allows us to identify which animals’ bones were being used to make tools.

Next, I shall discuss how, during subsequent stages along this operational chain, different physical processes literally shape the tools, leaving a palimpsest of traces (though in sequential order) on the bones’ surface. To this end, I shall discuss how RTI (Reflectance Transformation Imaging) can be deployed in disentangling and sequencing these traces.

NOTES

Cowrie Shells in West Africa: A Comparative Analysis

Annalisa Christie and Anne Haour

University of East Anglia, UK

Cowries (*Cypraea moneta* and *Cypraea annulus*) are ubiquitous in the archaeological record across West Africa. Used as currency and in a variety of socio-symbolic contexts it often assumed that *Cypraea moneta* were initially sourced from the Maldives, brought in to the region via trans-Saharan caravan routes; and that *Cypraea annulus* were only introduced later from c. 17th - 18th century onwards brought in via European maritime routes from East Africa.

Despite their dominance in archaeological contexts, there is comparatively little consistency in the way in which these shells are recorded and reported in archaeological publications. As part of the Leverhulme funded Cowrie Shells: An Early Global Commodity project (PI: Haour), and with thanks to those archaeologists who allowed us to look at their shells, we have examined cowrie collections from over 60 sites across the region. This study aimed to elucidate, the species, size and evidence for anthropogenic modification to the remains and has resulted in the identification of potential local modification practices.

This paper presents the outcomes of this research, providing a comparative assessment of the cowrie shell assemblages we have analysed to evaluate whether current interpretations regarding the provenance and introduction dates of these shells are borne out in archaeological data.

NOTES:

Back to ibn Battuta's island – excavations in the Maldives, 201

A Hours, A. Christie, A. and S. Jaufar

University of East Anglia (UEA), UK

This paper reports on the second season of fieldwork carried out in the Republic of Maldives by a team led by Anne Haour in the context of a Leverhulme Trust-funded study of medieval settlement on these islands and their significance for the trade in cowrie shells to West Africa.

While our 2016 field season involved test pitting at a range of locations, this year's work focused largely on the island of Kinolhas, which is mentioned in historical records as a place of significance. Most famously, the traveller ibn Battuta tells us that when he arrived in the Maldives in the 14th century he disembarked on "Kannalús, a fine island containing many mosques".

Our survey in 2016 had identified a promising site for excavation within the island. Some distance from the modern village and described by villagers as the location for the medieval settlement, the site was characterised by surface scatters of pottery (including handmade, low-fired wares and apparent Asian imports) and of coral stone and sandstone. Test pitting, excavations and survey over January and February 2017 revealed a range of structures and a varied artefactual assemblage which included not just the obligatory pottery and cowrie shells, but also a suite of glass and metal finds.

NOTES:

PEOPLE AND HISTORIES

Chair: Anne Haour

Windé Koroji: another look at an early agricultural site in Central Mali

Kevin C. MacDonald, Louis Champion and Kat Manning

University College London (UCL), UK

Windé Koroji Ouest is an early agro-pastoral site situated at the eastern periphery of the Inland Niger Delta of Mali, north of the Gandamia and Bandiagara escarpments. This paper reviews new subsistence and environmental information concerning this site which was excavated by the senior author in 1992/1993. The presence of domestic millet ca. 2100-1900 BC is confirmed, as well as sheep during this same period, with cattle attested subsequently (post 1600 BC). The role of the environment and potential environmental change in the economy of this site is reviewed. It is argued that Windé Koroji Ouest existed within wider, seasonally mobile settlement networks exhibiting a range of flexible subsistence adaptations.

NOTES:

Cracking the Coral: Survey results from Tumbatu Island, Tanzania

Henriette Moberg Rødland

Uppsala University, Sweden

Henriette Moberg Rødland PhD student at Uppsala University AARD 2017 in York Proposed session: Peoples and histories Cracking the Coral: Survey results from Tumbatu Island, Tanzania The 12th to 15th centuries CE represent the height of Swahili commercial, architectural and cultural development, as well as a period of heightened social inequality. In my doctoral study, I focus on the ways in which this inequality is reflected and negotiated through material culture, and how we can challenge previous assumptions about elite and non-elite Swahili people, with particular emphasis on labour and servitude. In this paper, I will discuss the preliminary results from the first field season on Tumbatu Island, the location of a 12th to 14th century stone town site in the Zanzibar Archipelago. A number of house ruins and mounds are still visible on the surface, spread out along almost a kilometre of coastline. During 6 weeks of fieldwork the location of these ruins and mounds were mapped, and 244 shovel-test-pits were excavated in order to analyse the distribution of different types of luxury and non-luxury items, production activities, and food remains. These preliminary results indicate a predominantly elite population at the site, reflected in the absence of wattle-and-daub houses and production activities, which spurs further discussions about domestic labour and the relationships between towns and hinterland.

NOTES:

The Old Fort Zanzibar; excavations and survey 2017.

¹Mark Horton and ²Tim Power

¹*University of Bristol, Bristol, UK*

²*Zayed University, Abu Dhabi*

The Old Fort (Gereza, Ngome Kongwe) in Zanzibar Stonetown, is one of the city's most prominent monuments, and has played a key part in the history of East Africa. Yet, apart from a brief excavation in 1984, the site has not been investigated. In 2017, as part of a joint University of Bristol/ Zayed University (Abu Dhabi) project to examine early modern connections between the Gulf and Zanzibar, a two-week investigation took place there with the assistance of the Zanzibar Department of Antiquities. The paper will report on the preliminary discoveries at the site.

The Old Fort as a monument is largely the product of the Busaidi occupation of Zanzibar in the mid 18th century. Denied control of Fort Jesus in Mombasa (with its governors, the al-Mazrui), they decided on Zanzibar as their main East African base. Built with four sides with corner towers and landward-facing gatehouse, the Fort is a very early example of Gulf (and especially Omani) architecture in East Africa. The new structure incorporated the ruins of an earlier Portuguese factory, church and mission, established around 1590. The mission of the Augustinian monks ended in 1694 with the murder of Vicar of Zanzibar, Manoel de Conceição.

The excavations focused on this Portuguese phase. Survey using ground penetrating radar located buried walls, while analysis of the surviving walls provided a useful insight into the overall phasing of the fort and earlier mission. Three targeted excavations were located to test this evidence, and to recover stratified material.

The project located the main mission church dating to c. 1610, which had been incorporated into the north-west wall of the later fort. The GPR survey gave a clear idea of its plan and size – a cruciform building, 35 metres in length and 16 metres wide, with two transepts. The earlier church seems to have been extended to the west at some point in the early 17th century and included the late 16th century factory wall.

Portuguese records recall that the Christian community was massacred in 1651, including the Vicar, Father Manoel de Nazareth, and much of the church destroyed. The excavations located a second church built over the first, and this may date to c. 1652, when the island was recovered by the Portuguese. This building was only 20 by 8 metres, and seems to have been a simple barn-like building. The second church contains numerous Christian burials below its floor, who could be the victims of the massacre as well as the Christians who later lived in Zanzibar in the seventeenth century. One burial was of a female, possibly a nun, with a sacred heart medallion around her neck; the Sacred Heart became particularly popular after 1675. Another burial was associated with a bronze crucifix. At least one burial seems to have had traces of a musket ball injury.

The Portuguese built their settlement on a long-occupied site. Below the level of the mission churches was a further 2m of stratigraphy, with dated imported finds from between the early 11th and 16th century. Structures, hinting at a long lived urban settlement with extensive Indian Ocean connections, suggest that this was a major Swahili stonetown. The historical evidence places the origins of Zanzibar Stonetown in late 18th century. This archaeological sequence indicates that the settlement was one of the long-lived and important Swahili towns, filling in an important gap between the abandonment of Unguja Ukuu in the 11th century and creation of new towns such as on Tumbatu island in the 13th century.

Preliminary Results of the 2017 Harlaa Archaeological Survey, Ethiopia

Nadia Khalaf

Institute of Arab and Islamic Studies, University of Exeter, UK

This paper will discuss the initial results of a field walking survey carried out at the village of Harlaa near Dire Dawa, Ethiopia, as part of the ERC-funded project 'Becoming Muslim: Conversion to Islam and Islamisation in eastern Ethiopia' (694254-ERC-2015-AdG). The main aim of the survey was to record features found in the village associated with the medieval Islamic period (c.10th-14th C. AD), and create a comprehensive topographic map of the area and associated gazetteer. During the survey, over 100 features of archaeological interest were identified including Harlaa period housing, storage pits, wells and grave markers. These findings compliment the ongoing excavations directed by Timothy Insoll indicating that Harlaa was a multi-component site with extensive evidence for trade, industry, settlement, and burial, as well as a mosques and defensive wall.

NOTES:

The veins of the Horn: trade routes and merchants in Western Somalia (12th-16th centuries)

Jorge de Torres

The British Museum

For thousands of years, the Red Sea has been a very active area linking some of the most important economic, cultural and political regions in the world, from the Mediterranean world to India, Persia, Arabia or the interior of Africa. At the core of this melting pot of civilizations, languages, commodities and ideas laid Somalia's coast, which was an international trade hub since at least the Hellenistic period.

Since 2015, a Spanish archaeological mission undertaken by the Institute of Heritage Sciences of the Spanish National Research Council (Incipit-CSIC) has been working in Somaliland, examining both the role of the region in the Indian Ocean networks and the local cultural processes, including sedentary communities and nomads, of whom virtually nothing is known. The results of the three fieldwork campaigns conducted so far will be presented, showing the emergence of a sophisticated trade framework supported by nomadic groups, settled communities and foreign traders from a variety of provenances in the Indian Ocean. We will discuss a range of archaeological sites –villages, caravan stations, nomadic centres and coastal towns- and materials that show the richness and complexity of a world so far mainly known through historical sources.

NOTES:

Networks of trade and communication: urban centres on the coasts of Sub-Saharan Africa

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The coastal zones of West and East Africa have a long history of urban development. In the Sahel, the “coast” of the Sahara, urbanism was significantly affected by long-distance trade at least from the 13th century CE onwards. This paper investigates the spatial organisation of Timbuktu and Old Djenné. It examines their historic street networks and what these signify for the spatial relationships between movement of urbanites and trade, also reflecting on the interconnectedness within each town and its residential quarters, and its links to the outside. Using data from satellite imagery and GIS mapping, the approaches presented build on the theoretical and methodological frameworks of space syntax and network theory.

Both Timbuktu and Djenné have been known as approximately contemporary trading hubs, where Islam played a significant role in urban life during the heyday of trade between 14th-16th centuries CE. They are of similar size and they developed from multiple cores or town quarters which became fully grown together only after several centuries. Their spatial organisation can hence contribute to the debate on spatial plurality which is represented in coastal urban traditions of dual settlements and Islamic towns composed of socially competing quarters known from West and East Africa.

NOTES:

Fear Comes Creeping: Spirits-of-the-dead in San rock art.

Kiah Johnson

University of the Witwatersrand, Johannesburg, South Africa

What face may fear wear to the San hunter-gatherers of southern Africa? One possible answer may lie in the strange, emaciated figures sometimes found in rock art. These could be spirits-of-the-dead, one of the most common, and most dangerous, supernatural forces recounted in San ethnography and ethno-history. This dissertation explores fear, spirits-of-the-dead and identity formation in San communities through a deep interpretation of rock art panel RSA-PTG11. In a panel peppered with images of trance dance and the trance phenomenon - a practice known to dispel tension and encourage unity in San bands – oppositional and frightening figures are present. These are the spirits-of-the-dead, and I propose that they, and the fear and disorder that they represent, may be a core element of San identity formation. These spirits give form to everyday San uncertainties, and when they appear at trance dance performances, chasing them away may bind communities against a common foe. Many elements of San ideology are depicted in rock art. Understanding spirits-of-the-dead, and the role that they play in San social negotiations, may contribute to a broader understanding of San lifeways.

NOTES:

GEOARCHAEOLOGY AND LANDSCAPE

Chair: Cruz Ferro-Vazquez

Abandoned Later Iron Age settlement on Amaovuko Hill in Lejja southeastern Nigeria: an archaeological investigation

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The landscape is the prime sphere where the combined effects of the society become visible. Humans not only construct and manage the landscape, but they also look at them and make decisions based on what they see, know and feel. This perspective helps us to explain landscape structure as an effect of culture and as an artefact that changes the culture. Hence it is believed that culture, structures the landscape and landscape inculcate culture. This is seen in the hilly town and valley bottoms of Lejja, south-eastern Nigeria, where slag blocks, haematite ores, furnace remains, pots and potsherds and other archaeological deposits on the landscape records the large-scale intensive and highly sophisticated iron production that was carried out in this region. Oral account suggests that the present occupants of Lejja down the valley lived up the valley tops during the late Iron Age A.D. 1430 to about 1950 cal. This paper outlines preliminary archaeological investigation in Amaovoko Lejja hilltop that revealed remains of abandoned buildings, resources in the form of farmland, water source, pens, fort and moat. Understanding these signatures and resources will elucidate the general framework of occupation and exploitation of the landscape and how it can inform our knowledge and understanding of the past land use practices and settlements.

NOTES:

The results of landscape surveys in Olgulului/Olarashi group ranch, Amboseli, Kenya

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Amboseli, located on the plains north of Mt Kilimanjaro, has been something of an archaeological terra incognita. Due to the paucity of historical and archaeological data pertaining to the area, a very generalized narrative of pastoral land use history in Amboseli exists. This narrative continues to influence development projects that aim to maintain or refine traditional pastoral practices. Surveys and excavations in Amboseli, as a component of the Resilience in East African Landscapes (REAL) project, sought to provide insights on how land and resources in the southern Olgulului/Olgarashi group ranch have been used by pastoralists, particularly over the last 500 years. This presentation will review the results of these surveys, and discuss how patterns in the distribution of ceramics and lithics across this area may be interpreted to determine when and how people were living on this landscape. Certain archaeological *fossiles directeurs* help to flesh out a picture of how Amboseli fits into larger regional spheres of LSA/PN/Iron Age interaction. In addition, using GIS software, the relationship between various artifacts and vegetation types, geological and hydrological features and historical Maasai settlement locations will be explored.

NOTES:

Putting the people back in the land: Agent-based modelling of historical water management in Engaruka, Tanzania

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The archaeological site of Engaruka, in north eastern Tanzania, has been an area of long-standing research due to the evidence of historical and contemporary water management practices. The abandoned agricultural system located in a semi-arid region, has an extensive irrigation system made of a complex of irrigation canals and stone-bound fields covering approximately 20km². However, the study of water management systems in Africa and in particular eastern Africa has been limited, and little is known about how the Engarukan system developed and functioned over time.

In this research, agent-based modelling provides a simplified reconstruction of the Engarukan system in order to demonstrate the interaction of socioeconomic and environmental factors across a temporal-spatial scale, to understand how this system developed. By representing the dynamic human-environment interactions and the key feedbacks, the study can represent the reciprocal impacts of human activity on natural systems and the effects of human landscape modifications on the environment. In this way, the research aims to identify some of the key factors that influenced the expansion of these systems and the effects of intensive agriculture on ecosystem resilience systems by providing a long term view of historical data. The current research aims to refine our understanding of the sustainability and resilience of the historical Engarukan system, as well as having applications in modern water management. In addition, the influence of agents and the shifting networks of agent interactions position future research into assessing the influence of political and social organisation on water management.

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NOTES:

Anthropogenic Land-Cover Change in Eastern Africa: Mapping 6000 Years of Land-Use

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The LandCover6k project tracks global anthropogenic land-cover change over the last 6000 years, and emphasises the need to incorporate archaeological and historical data in paleoenvironmental modelling so as to understand the complex relationship between land-use and land-cover. In eastern Africa, this period incorporates the emergence of food production, metal technology and urbanism, alongside evidence in the paleoecological record of considerable changes in local environments, changes that have frequently been linked to human interventions such as forest clearance, burning and overgrazing. This paper will discuss a database of archaeological sites in eastern Africa, wherein data pertaining to subsistence and land-use practice have been gathered from published literature and personal archives, and present working-versions of maps of regional land-use across the last 6000 years. The current work is - and will likely remain - an ongoing project, with the dataset and map-outputs subject to expansion and refinement; rather than offer firm conclusions as to how economic change has impacted African landscapes, this paper aims to draw attention to the project and encourage comment, contribution and advice.

NOTES:

Aliel: A new monumental site from West Turkana, Kenya

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University of Cambridge

In August 2016, the In-Africa Project encountered a stone platform and cairn whilst surveying an area between the Napudet Mountains and the Kerio River in Southwest Turkana. Different from other simple cairns, this structure, locally known as Aliel, also exhibits: a) a single standing stone within the construction of the cairn; and b) a significant assemblage of pottery sherds (including Nderit ware) upon the surface of the platform. Such structures are normally associated with the spread of pastoralism, and an indirect radiocarbon date of 5300-5035; 5005-4980 Cal BP places Aliel chronologically with the earliest phases of pastoralist constructions in the area. This includes the oldest 'Pillar sites' of Turkana, Lothagam North and Jarigole, and Aliel is likely to be temporally and spatially part of the same landscape as these sites. However, besides its inherent importance as a source of information on pastoralist mortuary behaviour, Aliel also gives insights into the diversity of megalithic architecture that is neither a 'Pillar site', as defined by Grillo and Hildebrand (2013), nor one of the common types of cairn found in East Africa (Davies 2013) and raises questions about the relationships between different architectural elements, as well as emphasising the complex use of the landscape by early pastoralists.

References

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NOTES:

Bringing the House Down: Preliminary Results of Household Geoarchaeology in Marakwet, Northwest Kenya

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Following on from the first season of fieldwork conducted this May-July for my doctoral project, this paper will outline the preliminary results of geoarchaeological analyses on one of four abandoned households sampled within the Marakwet village of Kacheseke, which lies on the slope of the Elgeyo Escarpment in north-western Kenya. These analyses encompass both geochemical and micromorphological procedures, which combine to give an overview of the sedimentary signatures left by sedentary yet largely ephemeral habitation practices in this region. In this particular case, the household platform sampled was first inhabited approximately one hundred years ago, but was re-occupied and re-abandoned within the last five years, thus presenting an opportunity to not only assess the degree of recoverable data from recent habitation, but also the potential overprinting of earlier occupation phases within a discrete area. Moreover, this paper will situate this individual site within the wider context of the surrounding village, of which extensive household survey has also been conducted, connecting the present-day with roughly two-three hundred years of contiguous occupation. In this instance, I will explore the history of local settlement as a dynamic phenomenon which has continuously shifted, and indeed continues to shift, across the landscape of the Elgeyo Escarpment and its immediate environs. This survey data, combined with oral historical testimony and geoarchaeology, highlights the need for, and interpretative benefits of, archaeological considerations of African populations typically viewed as sedentary agriculturalists from a multi-scalar perspective which takes account of local movements and small-scale shifts in habitation practices over relatively short periods of time, in this instance that of the recent past.

NOTES:

The role of geochemistry for sediment provenancing at the archaeological site of Engaruka (Tanzania)

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Geochemical soil analyses are an effective tool to understand sediment provenance in stratigraphic alluvial layers in different archaeological sites.

Our study reports preliminary geochemical results from the ancient agricultural system at Engaruka (Tanzania). Engaruka has a long history of archaeological research and offered the opportunity to test the capability of major elements, trace elements and rare earth elements (REE) to understand soil provenance across an extremely broad time range and across a diversity of soil types. Deep alluvial deposits of up to 3m deep were deliberately accumulated to form agricultural plots by capturing sediments transported by water. 161 samples were obtained from the abandoned agricultural terraces and from the potentially related sediment sources. Geochemical results were acquired by inductively coupled plasma mass spectrometry (ICP-MS) and data processed using multivariate statistics.

Significant details regarding the sediment sources that supplied the terraces are reported.

NOTES:

What is this house for?

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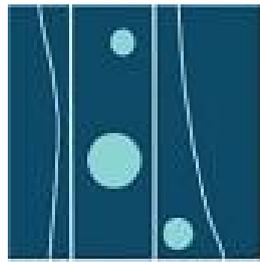
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In this paper, we review the archaeology and geochemistry of SM058, a wattle and daub house excavated at Songo Mnara, Tanzania, in 2016. The house is strange and excellent in many ways; it is one of a series of wattle and daub structures in the western open area of the site which confound our expectations. Rather than simple domestic structures, these buildings seem to have been the location for craft working of different types. Yet they were also lived in, as is evident in the archaeobotany and geochemistry, which testifies to habitation and to cooking around the structures. SM058 is a particularly large, and strange, structure. It has unexpected rubble surfaces which seem likely to be functional, but are difficult to decipher. This paper is intended as a puzzle. We present the archaeology of SM058, along with our tentative interpretations of the surrounding spaces and houses. It is our hope that we can draw on the expertise of our audience, suggesting approaches to the results, and avenues that we might follow.

NOTES:

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