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JUNE 2023 RICE UNIVERSITY HOUSTON, TEXAS

Program and Abstract Book

Biennial Meeting of the Society of Africanist Archaeologists June 1-6, 2023 Houston, Texas

Table of Contents

Sessions by number and date	2
Conference Program: Friday, June 2	6
Conference Program: Saturday, June 3	16
Conference Program: Sunday, June 4	24
Conference Program: Monday, June 5	37
Paper abstracts submitted to Symposium, by Session	48
Index (by first author/session number, abstracts submitted in Symposium)	.129

Sessions by number and date

Session 1. 25 Years Beyond Chiefdoms: Susan McIntosh's Pathways to Complexity Influence on African archaeology.

Chairs: Carla Klehm, Wolfgang Alders Sunday, June 4, pm

Session 2. Advances in African rock art studies

Chairs: Stanley Ambrose, David Witelson Monday, June 5, am

Session 3. Archaeological investigations of cities and polities

Chairs: Carlos Magnavita, Dil Singh Basanti Monday, June 5, pm

Session 4. Archeology in Zambia: New and Ongoing Work

Chairs: Evin Grody, Zach McKeeby, Maggie Katongo Monday, June 5, pm

Session 5. Ceramics and craft production

Chairs: Elizabeth Ademeyo, Jacques Aymeric, Per Ditlef Fredriksen Monday, June 5, pm

Session 6. Community archaeology and heritage management: monuments, museums and collaborative projects

Chairs: Maggie Katongo, Catherine Namono Friday, June 2, pm

Session 7. Contemporary debates and challenges to museums, heritage, and archaeological knowledge production across Africa Chair: Wazi Apoh Saturday, June 3, am

Session 8. Crafting new technologies: the archaeology of metallurgy Chairs: David Killick, Anne Mayor, Malebogo Mvimi Friday, June 2, pm

Session 9. Digital tools and community archaeology in Africa Chairs: Grant Bettinson, Stephanie Wynne-Jones

Monday, June 5, pm

Session 10. Early villages and farming from the Cameroon Grassfields to Victoria Nyanza and the Eastern Cape

Chairs: Bernard Clist, Gavin Whitelaw, Paul Lane Sunday, June 4, am

Session 11. Emerging Voices and Trends in West African Indigenous Archaeologies Chairs: Kofi Nutor, Dela Kuma

Sunday, June 4, pm

Session 12. Environmental and Human-Environmental History in Africa (online only)

Chair: Emuobosa Orijemie Saturday, June 3, am

Session 13. Ethnography, Indigenous Knowledge, and Material Culture

Chair: Joanna Ciesielska Sunday, June 4, pm

Session 14. From Pleistocene into the Holocene: Hunter-gatherers in southern Africa during the last 30,000 years

Chairs: Gregor Bader, Iris Guillemard Saturday, June 3, am

Session 15. Global Processes through Local Lenses: Perspectives from the Atlantic and Indian Ocean Coasts

Chairs: Tomos Llywelyn Evans, Madeleine Gunter-Bassett, Diogo Oliveira Sunday, June 4, am

Session 16. Historical archaeology: from 1500 through the colonial era Chairs: Cameron Gokee, Aribidesi Usman Saturday, June 3, am

Session 17. Honoring Professor Susan McIntosh and her contributions to African archaeology Chairs: Jeffrey Fleisher, Mary Prendergast Saturday, June 3, am

Session 18. Human origins and Pleistocene archaeology

Chairs: Lawrence Barham, Karen Lupo Sunday, June 4, pm

Session 19. Integrative approaches to African archaeogenetics

Chairs: Mary Prendergast, Elizabeth Sawchuk, Kendra Sirak Friday, June 2, pm

Session 20. Landscape and settlement: multidisciplinary approaches Chairs: Alexandre Livingstone Smith, Sonja Magnavita, Leanne Phelps Sunday, June 4, am

Session 21. Landscapes of Resistance: Archaeological Approaches and Comparative Perspectives Chairs: Cameron Gokee, Lydia Marshall Sunday, June 4, pm Session 22. Life, Death, and Belief on the Nile Chairs: Helina Woldekiros, Maciej Wyżgoł Monday, June 5, pm

Session 23. Linking Records of the African Past

Chairs: Nick Gestrich, Henning Schreiber Sunday, June 4, am

Session 24. Maritime archaeology and heritage in the southwest Indian Ocean Chairs: Zoe Crossland, Chantal Radimilahy, Kristina Douglass Saturday, June 3, am

Session 25. Multidisciplinary approaches to reconstructing past environments Chairs: Victor Iminjili, Anneke Janzen Friday, June 2, pm

Session 26. New insights on the Pleistocene of eastern Africa Chairs: Steven Brandt, Peter Lanzarone Sunday, June 4, am

Session 27. Of Stones, Sherds, and Clay: The Archaeology of Built Urban Environments west of the Niger

Chair: Gérard Chouin Monday, June 5, am

Session 28. Pots, Bones, Seeds, Molecules: Early farming lifeways and subsistence patterns in sub-Saharan Africa

Chairs: Julia Becher, Alex Schoeman, Freda Nkirote M'Mbogori Friday, June 2, pm

Session 29. Recent research in the Middle Senegal Valley

Chairs: Susan McIntosh, Roderick McIntosh Sunday, June 4, am

Session 30. Reconstructing ancient African foodways

Chairs: Julie Dunne, Amanda Logan. Dave Schmitt Saturday, June 3, am

Session 31. Rethinking fuzzy boundaries and sharp borders in African material culture Chairs: Dirk Seidensticker, Nicolas Nikis, Adrien Delvoye Friday, June 2, pm

Session 32. Technology and innovation in the Stone Age Chairs: Matthew Kroot, Lucy Timbrell Monday, June 5, pm

Session 33. The archaeology of African pastoralism

Chairs: Katherine Grillo, Shayla Monroe Sunday, June 4, pm

Session 34. The archaeology of foraging in Pleistocene and Holocene southern Africa Chairs: Alex Bertacchi, Genevieve Dewar Monday, June 5, am

Session 35. Roundtable: Visions of the past: teaching history as a tool of power Chairs: Zuzanna Augustyniak, Kamil Kuraszkiewicz, Hanna Rubinkowska-Anioł Monday, June 5, am

Session 36. Roundtable: Long-distance trade in Africa before 1500 CE Chair: David Killick Monday, June 5, am

Session 37. Roundtable: African Archaeology in Support of School Learning Chair: Ann Stahl Saturday, June 3, am

Session 38. Roundtable: Post-viewing discussion of the film Iron Technology as Ritual Performance: The Barongo of Western Tanzania Chair: Peter Schmidt Saturday, June 3, am

Session 39. Roundtable: Archaeological Sites & Monuments Registers and Planning Processes: Opportunities and Challenges Chairs: Paul Lane, Stefania Merlo, Carla Klehm Monday, June 5, pm

Session 40. Roundtable: Archaeology in African Universities Chair: Asmeret Mehari Monday, June 5, am

Session 41. Poster session Friday, June 2, pm; Sunday, June 4, am

Plenary Session

Location: Hudspeth Auditorium

9:00. Ibrahima Thiaw. Toxic Archaeological Collections and Truth Owning in Africa: Challenges and Opportunities for Alternative Decolonial Curatorial Practices from IFAN Cheikh Anta Diop, Senegal.

This presentation is a truth owning exercise which requires courage from all serious museums in such uncertain times of contestations but also of new opportunities. Collecting has always been essential to archaeological practices that are founded in the predatory and extractive colonial episteme. Archaeological collections are important archives but too often are brought in the museums in unethical and uncaring ways. I reflect on their toxicity for African institutions and on the challenges and struggles we faced over the years to develop alternative decolonial curatorial practices. I engage the topic to bring in urgent truths in archaeological practices in Africa.

9:30. Joanna Clarke. *The Future of Tipasa, a World Heritage Site on the Algerian Coast Threatened by Climate Change Driven Extreme Seas.*

The World Heritage site of Tipasa is located on the Algerian coast 70 km east of the capital Algiers. It is a serial property which includes three entities: two archaeological parks and the Royal Mauritanian Mausoleum. The archaeological parks are at the coast and include Roman and Christian buildings that have suffered coastal erosion in the past. Recent modelling by a team of experts has shown that extreme sea levels at 2100 under a moderate temperature rise of 1.5 degrees will threaten almost the entire Great Basilica and associated structures, and the Villa of the Frescoes. Around the headland, to the east of the harbour, the Punic necropolis is the most severely impacted of all heritage assets with a possible 100% of the area exposed to extreme seas. Even so, the State Party as of 2021 has done little to implement UNESCO's agreed management plan for the site. In this talk I will explore some possible cultural and historical barriers to effective climate change heritage management at the site and question whether Tipasa's future relies on community reengagement with a site tainted by colonial legacies.

10:00. Alemseged Beldados. *Archaeology in Conflict Zones: the case of North and North Central Ethiopia.*

Ethiopia is an ancient state in the Horn of Africa. The country is known for its rich pre-historic and historic heritage. In terms of human biological and cultural evolutionary studies, the region is one of the key areas globally. Despite rich heritage resources, however, researches to recover cultural and biological remains are currently at stake due to conflict. War has been recurrent in the recent and past history of Ethiopia and these have both weakened the economy of the nation with a decline in GDP of 4.8% and hampered tourism with a drop in visitor numbers from 812,000 in 2019 to 518,000 a year after. In the current war, which began in November 2020, between the Federal Government and the Tigray regional state in northern Ethiopia, palaeoanthropological, archaeological, historical, and heritage studies and research in other fields were first partially and subsequently fully interrupted. Besides Tigray Regional State, the conflict has also affected Amhara Regional State and Afar Regional State in north and north central Ethiopia locations rich in various archaeological and palaeoanthropological sites. This

presentation discusses the effects of the war on cultural heritage resources, their preservation and maintenance, the local environment, research, and tourism.

10:30. Coffee and tea break.

11:00. Solange Macamo. *Biocultural and Archaeological Heritage Parks: Opportunities for Heritage Preservation, Tourism and Community Co- creation in Mozambique.* Biocultural heritage is an important resource for community livelihoods. Communities value natural heritage for its resources, and their environments are shaped by cultural practices. Yet, conservation of natural and cultural heritage resources are often legislated and managed separately. This can reduce opportunities for community development, and hinders site protection. Creating biocultural and archaeological heritage parks can address this. This paper uses the heritage project from Mozambique sponsored by Gerda Henkel Foundation to demonstrate how such parks facilitate participatory management, enable sustainable tourism that support community livelihoods, while at the same time, benefit the preservation of archaeological sites and the ecosystems.

11:30. Akin Ogundiran. Urban Sprawl, Rural Expansion, and the Future of Archaeological Heritage Sites: The Nigerian Experience and Its Continental Implications.

Africa currently has the fastest-growing population in the world. The continent's population is projected to double by 2050. In this presentation, Akin Ogundiran uses two case studies from Nigeria—the Osun Grove and the Old Oyo National Park—to illustrate the footprints of population growth in urban and rural areas and their effects on archaeological sites. Placing these scenarios in continental, national, and local contexts, Ogundiran outlines the success and limitations of his research team's effort to engage multiple constituencies in archaeological site protection and the systemic action plans that should be put in place to save some of Africa's archaeological heritage sites from the inevitable urban sprawl and rural expansion associated with population growth.

12:00-13:30 - Lunch Break – South Servery

Session 6. Community archaeology and heritage management: monuments, museums and collaborative projects.

Archéologie communautaire et gestion du patrimoine : monuments, musées, et projets collaboratifs.

Chairs: Maggie Katongo, Catherine Namono Location: Room 109

13.30. *Digitization and the Collection Sustainability: Overview of the Grand Egyptian Museum Project, Egypt.* (online) Said Mohammed, Heba Khairy Metwaly.

13.45. *Voices from a remote mountain: The heritage of Jebel Moya (Sudan).* (online) Ezzeldin Hajjaj, Isabelle Vella Gregory.

14:00. *Excavating history: collaborative archaeology from experiences of excavation workers at Old Dongola.* Tomomi Fushiya.

14:15. Archeologie en zone interdite en Afrique de l'ouest: cas de Fada Gurma au Burkina-Faso et de la zone nord de la Cote d'Ivoire. Foniyama Élise, Thiombiano Ilboudo, Hélène Timpoko Kienon-Kaboré.

14:30. *Fouilles archéologiques et croyances en Côte d'Ivoire.* (online) Gninin Aïcha Touré, Mitanhantcha Yeo.

14:45. *Footprints of imperialism: The classical monuments of Fort Metal Cross, Ghana.* (online) Mark Seyram Amenyo-Xa.

.....TEA/COFFEE BREAK.....

15:30. *Stratégies de sauvegarde et de valorisation du patrimoine culturel colonial allemand au Togo.* (online) Aka Adjo Bebewou.

15:45. *Premiers résultats des recherches archéologiques sur le permis du projet minier Akom II (Sud-Cameroun).* (online) Fernando Ligue Engamba, Armand Ndewe, André Biane Titi

16:00. *Developing a model for coastal ecosystem monitoring: the cultural market project, Gaza Province, Mozambique*. (online) Ines Raimundo, Elena Skosey-LaLonde, Belisário Cau, Varsil Cossa.

16:15. *Stimulating retailing business for heritage preservation: community social and economic benefits in the Xai-Xai and Chongoene beach areas, Gaza Province, Mozambique.* (online) Berta Macamo, Miguel Raimundo, Paul Lane, Silva Mazuze, Solange Macamo.

16:30. Bonwa ka Kgopa: a community-driven collaboration to conserve Northern Sotho earthen vernacular built heritage in the Makgabeng, South Africa. Catherine Namono, Motsane Seabela, Elijah Katsetse, Filix Mosebedi.

16:45. *Assessing the effectiveness and impact of an interactive, travelling museum.* (online) Justine Van Heerden.

Session 8. Crafting new technologies: the archaeology of metallurgy Production des nouvelles technologies : l'archéologie de la métallurgie Chairs: David Killick, Anne Mayor, Malebogo Mvimi Location: Room 108

13.30. New Holocene Radiocarbon Dates from the Heart of the Sangha River Interval, Central African Republic. Dave Schmitt, Karen D. Lupo, Guy T. Amaye, Jean-Paul Ndanga, Lucien P. Nguerede, Henri Zana.

13.45. *An iron smelting technical tradition in mutation at Didé Ouest 1, Eastern Senegal.* Pierre Lamotte, Anne Mayor, Vincent Serneels.

14:00. Archaeo-metallurgical Investigation of Zangon Tama Iron smelting site, Nigeria: A preliminary report. (online) Rabiu Yusuf.

14:15. *Technology and Human Settlement: Survey and Excavation of Slag Mounds in Ugbene-Ajima, S.E Nigeria.* (online) John Ngonadi.

14:30. Iron Metallurgy in Madagascar from the 7th to the 20th Century: Diffusion et Transfer of Technology. Mélissa Morel.

14:45. *The "Bronze Age" of Southern Africa*. Jay Stephens, David Killick, Ryan Mathur, Wayne Powell.

.....TEA/COFFEE BREAK.....

15:30. *Migration of people, values, and objects: a review of blacksmithing culture in pre-colonial Igboland*. Augusta Obianuju Onyeka.

15:45. Wood fuel associated with iron production in the early Tswana site of Seoke, southeastern Botswana. Malebogo Mvimi.

Session 19. Integrative approaches to African archaeogenetics

Approches intégratives de l'archéogénétique africaine Chairs: Mary Prendergast, Elizabeth Sawchuk, Kendra Sirak Location: Room 107

13.30. *Challenges in reconciling genomic and archaeological data in Africa's deep past.* Mary Prendergast

13.45. *Ancient DNA in sediments from tropical Africa.* (online) Diyendo Massilani, Jessica Thompson, Michael Boyle, Flora Schilt, Jacob Davis, Temwa Nkhata, Hannah Keller, Potiphar Kaliba.

14:00. Ancient DNA from Tuto Fela (southwest Ethiopia) attests to a male-centered funerary tradition. Kendra Sirak, Solomon Kebede, Betrand Poissonnier, Andrew Duff, David Reich.

14:15. New insight of Sahel/Savannah belt prehistory through the lens of genetic and genomic diversity study. Mame Yoro Diallo, Martina Čížková, Iva Kulichová, Eliška Podgorná, Edita Priehodová, Jana Nováčková, Veronica Fernandes, Luísa Pereira, Viktor Černý.

14:30. *Genetic data reveals large-scale historical migrations in populations from West and Central Africa.* (online) Nancy Bird, Louise Ormond, Paschal Awah, Elizabeth Caldwell, Bruce Connell, Mohamed Elamin, Faisal Fadlelmola, Matthew Fomine, Scott MacEachern, Yves Monino, Pieta Nasanen-Gilmore, Nana Nketsia, Krishna Veeramah, Michael Weale, David Zeitlyn, Mark Thomas, Neil Bradman, Garrett Hellenthal.

14:45. *Genetics and social identities in Senegambia: the 'caste' endogamy of the griots in question.* Lamine Badji, Kendra Sirak, Ibrahima Thiaw.

.....TEA/COFFEE BREAK.....

15:30. *7,000 years of genetic continuity at Oakhurst rock shelter, South Africa.* Joscha Gretzinger, Victoria E. Gibbon, Judith C. Sealy, Sandra Penske, Johannes Krause, Stephan Schiffels.

15:45. *The genomic impacts of European colonialism in southern Africa*. Austin Reynolds, Dana Al-Hindi, Stacy Edington, Neus Font-Porterias, Justin Myrick, Sihaam Boolay, Jamie Saayman, Caitlin Uren, Marlo Moller, Brenna Henn.

16:00. *Toward an ethical and equitable future for African DNA/aDNA research: updates from DNAirobi.* Elizabeth Sawchuk, Kendra Sirak, Christine Ogola, Emmanuel Ndiema, Fredrick K. Manthi, David Reich, Mary Prendergast.

16:15. *Exploring the complex history of the Swahili coast through aDNA analysis*. Chapurukha Kusimba, Stephanie Wynne-Jones, Jeffrey Fleisher, David Reich, Esther Brielle.

16:30. Discussant: Scott MacEachern

Session 25. Multidisciplinary approaches to reconstructing past environments Approches multidisciplinaires pour reconstruire des paléoenvironnements Chairs: Victor Iminjili, Anneke Janzen Location: Room 110

13.30. *Diseases and human co-evolution: modelling malaria spread in the late Pleistocene.* (online) Margherita Colucci.

13.45. *New insights into the late Pleistocene paleoecology: stable isotope evidence from Gotera, southern Ethiopia.* Seminew Asrat Mogesie.

14:00. Late Pleistocene to late Holocene palaeoecology and human foraging at Kuumbi Cave, Zanzibar Island. Victor Iminjili, Mathew Stewart, Sean Hixon, Steve Goldstein, Mary Prendergast, Alison Crowther, Nicole Boivin, Patrick Roberts.

14:15. Application of TEX86 paleotemperature reconstruction in the Holocene coastal plains of *Mozambique*. (online) Elena Skosey-LaLonde, Rienk Smittenberg, Ana Gomes.

14:30. *Environmental Change and Continuity in Plant Usage in Iresi, Nigeria*. (online) Damilola Akinlolu.

14:45. *Elaeis Guinensis use in paleoenvironmental studies in Southern Nigeria*. (online) Temitope Funmilayo, Timilehin Ayelagbe.

.....TEA/COFFEE BREAK.....

15:30. *Principe Island: elucidating the deep-time past and future of an understudied biodiversity hotspot*. Bastiaan van Dalen, Denise Swanborn, Carla Fuenteslópez, Sophie Carlarne.

15:45. *The Impact of the Climate changes on Mid-late Holocene Settlements in the Western Desert of Sudan.* Fatima Edris, Yahya Tahir.

Session 28. Pots, Bones, Seeds, Molecules: Early farming lifeways and subsistence patterns in sub-Saharan Africa

Pots, os, semences, molécules : les modes de vie et de subsistance des premiers agriculteurs en Afrique sub-saharienne Chairs: Julia Becher, Alex Schoeman, Freda Nkirote M'Mbogori Location: Room 113

13.30. *New Research on Prehistoric Subsistence in Central Africa*. Katharina V. M. Jungnickel, Dirk H. Seidensticker, Julie Dunne

13.45. *Did the Pastoral Neolithic Exist in the Southern Highlands of Tanzania? Insights from Ceramics.* (online) Philbert Katto.

14:00. *Ceramic Use, Cuisine and the Creation of Community along the Swahili Coast in the 1st Millennium AD.* Elizabeth Hicks.

14:15. *Investigation of the Bantu arrival in southern Mozambique - In the light of geophysical prospection and archaeometric pottery analysis.* Sabrina Stempfle, Nikola Babucic, Jörg Linstädter, Martina Seifert.

14:30. *Early Iron Age lipid residue analyses from KwaZulu-Natal, South Africa.* Emma Loftus, Simon Hammann.

14:45. *Applying analytical approaches to museum collections - mission impossible or the force awakens?* Julia Becher, Alex Schoeman, Cynthianne Spiteri.

.....TEA/COFFEE BREAK.....

15:30. Holocene paleoecology of a wetland along Gerhard Minnebron River, North West Province, South Africa - Tracking climate change and anthropogenic activities. (online) Frank Neumann, Coert Coetzee, Chakira Pelser, Moteng Moseri, Sascha Roopa, Ginika Ramsawak, Alex Schoeman, Jonathan Taylor.

15:45. *Are phytoliths from dung good proxies for environmental conditions at archaeological sites?* (online) Tanya Hattingh, Alex Schoeman.

Session 31. Rethinking fuzzy boundaries and sharp borders in African material culture Repenser les limites floues et les frontières nettes dans la culture matérielle africaine Chairs: Dirk Seidensticker, Nicolas Nikis, Adrien Delvoye Location: Room 115

13.30. Boundaries and cultural variation at the Early to Middle Holocene shift: Takarkori, Central Sahara. (online) Rocco Rotunno, Savino di Lernia.

13.45. *Intersecting boundaries: spatial and temporal overlaps of Mesolithic and Neolithic pottery in Sudan.* Elena Garcea.

14:00. *Defining borders by mapping pottery and stone artifacts? Examples from the late prehistoric Sahara.* (online) Friederike Jesse.

14:15. *Modeling the chronology and route of the Bantu Expansion in eastern Africa*. Ricardo Fernandes, Steven Goldstein, Victor Iminjili, Kendra Sirak, Matthew Knisely, Emmanuel Ndiema.

14:30. *Fuzzy boundary and material culture: Insights from archaeological investigation at Ilorin, Nigeria.* (online) Bolaji Owoseni.

14:45. *At the rainforest's edge: Pottery traditions on the Ubangi unveil millennia old 'fuzzy boundary'.* Dirk Seidensticker.

.....TEA/COFFEE BREAK.....

15:30. *From large-scale diffusion to regional boundaries: roulette decoration distribution in N-Central Africa.* Nicolas Nikis, Alexandre Livingstone Smith, Birgit Ricquier.

15:45. *Shapes and practices: a look at the distribution of fishing devices in the Congo Basin.* Laurent Nieblas Ramirez.

16:00. *Mapping the Archaeological Landscape of the Kwilu-Kasaï River Network, DRC.* (online) Igor Matonda, Peter Coutro, Jessamy Domanm, Koen Bostoen.

16:15. *From Mâli to Bundu: Tracking medieval political boundaries through the study of pottery traditions.* Adrien Delvoye, Anne Mayor.

16:30. Les enceintes et structures en pierres: une architecture atypique en Afrique de l'ouest. Stone enclosures and structures: an atypical architecture in West Africa. (online) Hantissié Hervé Farma.

16:45. *Material memories at the fringe of the Mapungubwe polity*. Ceri Ashley, Xander Antonites.

15:30-17:00 - Poster session

Session 41. Poster session // Session de posters/affiches. Location: Dean's Commons

Conservation and Co-creation of Igbo-Olokun Heritage Site, Ile-Ife, Southwest Nigeria. Boluwaji Ajayi, Omokolade Omigbule, Abidemi Babalola, Adisa Ogunfolakan, Ayobami Diya, Boluwatife Abu, Sarah Olaleye, Promise Edegbai.

Southern African Holocene Ancestral KhoeSan body size and shape variation in the central interior. Michelle Cameron

Histoire, archéologie et héritage de la colonisation et de l'esclavage dans un village de la liberté au Sénégal : Sangane (Bawol occidental). René Ndiana Faye

The function and use of Little Muck Shelter's stone scrapers: a replication and use-wear study. Tim Forssman, Nicole Sherwood

Incorporating Mozambican Ceramics into the southeastern African record. Charlotte Jenkins, Elena Skosey-Lalonde

Ostrich habitat use and archaeological hunter-gatherer mobility revealed by Sr isotope analysis. Patricia McNeill, Xueye Wang, Renee Boucher, Alex Mackay, Vicky Oelze, Teresa Steele.

Early Ethiopian agriculture and the formation of Pre-Aksumite culture. (online) Degsew Mekonnen, Ana Gomes, Hugo Olivera

Routes of Interaction: archaeological-geographical studies of pathway networks in the northern Horn of Africa. Kristina Pfeiffer, Jacob Hardt

The Southern Ethiopian Rift: A Window into Plio-Pleistocene Prehistory and Paleoenvironments. Sahleselasie Melaku

Into the Depths: Examining the Deep-History of Fishing in the Kafue River Floodplain. Eréndira Quintana Morales, Lily Singman-Aste, Lucia Bryan, Lauren Castaneda-Molina, Evelin Aquino Cruz.

Ceramic Analyses as an Index for Intergroup Relationship(s) in northern Yorubaland, Nigeria. Oreoluwa Sodeke, Jonathan Aleru

Engagement, Knowledge Transfer, and Bioarchaeology: Talking About Past Lives at Ghazali. Robert Stark

Insights into tortoise exploitation and pyrotechnology by examining tortoises impacted by wildfire. Teresa E. Steele, Susan M. Mentzer, Susann Heinrich, Aspen Cooper, Mark Grote, Patricia J. McNeill, Juliana C-B. Wilder, Mareike C. Stahlschmidt.

Mobility and Land-use Patterns of Northern Kenya Populations during the Holocene. Sylvia Wemanya, Ephraim Wahome, Ben Nyanchoga, Emmanuel Ndiema.

Conference Program - Friday, June 2 - Evening

17:00 18:00 FILM SCREENING (EVENT CANCELLED)

FILM: Iron Technology as Ritual Performance: The Barongo of Western Tanzania (Discussion to follow on Saturday at 11:00 AM)

Location: Room 107

This is the premier screening of a film that documents now-lost ritual processes practiced among the Barongo iron smelters, with significant implications for archaeology and heritage studies. **Viewers are advised that one ritual performance incorporates unclothed bodies, an integral part of ritual reproductive power**. A discussion will follow Saturday at 11 AM.

17:00-18:00 - Remembering Professor Nic David

Location: Kraft Hall 130 (new location)

A memorial for Professor Nic David, organized by Scott MacEachern, Diane Lyons, and Judy Sterner

Session 7. Contemporary debates and challenges to museums, heritage, and archaeological knowledge production across Africa

Débats contemporains et les défis pour les musées, le patrimoine et la production de la connaissance archéologique en Afrique Chairs: Wazi Apoh Location: Room 115

8:30. Archaeological Coloniality in African Studies. Iman Nagy.

8:45. *Digging through museum collections for teaching and reserch in the post covid-19 era: a case study of university museum, Ahmadu Bello University, Zaria.* (online) Ishaq Ishaq Isah.

9:00. Ancestors and Relics in the Mix of Restitution and Reparations Debates in Ghana. Wazi Apoh.

9:15. *Les travaux d'aménagement : un facteur destructif du patrimoine archéologique de la ville, Ouidah.* Ismène Andréa Koudakpo, Didier N'dah.

9:30. *Archeological research agenda in Uganda past, present and future; 1922-2022.* Elizabeth Kyazike, Asmeret G. Mehari.

Session 12. Environmental and Human-Environmental History in Africa (online only) Paléoenvironnement et des interactions humain-environnement en Afrique (uniquement en ligne) Chair: Emuobosa Orijemie Location: Room 112

8:30. *The Ecological Past of Bàrà: Perspectives from Palynological Record.* (online) Emuobosa Orijemie.

8:45. Archaeobotany of the dietary strategies of the Bace in Central Nigeria: A preliminary analysis. (online) Chiamaka Mangut.

9:00. *Environmental history of Okomu National Park, Nigeria: archaeobotanical evidence.* (online) Timilehin Ayelagbe.

9:15. *Preliminary Palynological Evidence from Sediments of a Coastal Estuary in Lagos, Southern Nigeria.* (online) Linus B Ajikah, Dough Onah, Emuobosa A Orijemie and Marion Bamford.

9:30. *Impact of Human-Environmental Interactions on Foraging Preferences of Honeybees in West Africa*. (online) Sylvester Obigba, Noyo Edema, Anthonia Uselu, Oboghor Godstime, Bernard Ukoh, Henrietta Amuku, Okrakene Dafe, Dominica Samaly, Anthonia Aluya.

9:45. Discussant: Adebisi Sowunmi

Session 14. From Pleistocene into the Holocene: Hunter-gatherers in southern Africa during the last 30,000 years.

Du pléistocène à l'holocène : chasseurs-cueilleurs en Afrique australe au cours des 30 000 dernières années Chairs: Gregor Bader, Iris Guillemard Location: Room 107

8:30. *'Living on the edge' – On the persistence of MSA technology beyond 30.000 in southern Africa.* Gregor Bader, Ayanda Mabuza, David Price Williams, Nicholas Conard, Manuel Will.

8:45. *The Middle to Later Stone Age transition as seen from Umbeli Belli (Kwa-Zulu-Natal, South Africa).* Matthias Blessing, Nicholas Conard, Gregor Bader.

9:00. *Toumboura V-a: a new site to understand the Middle to Later Stone Age transition in West Africa.* Charlotte Pruvost, Eric Huysecom, Matar Ndiaye, Michel Rasse. Laurent Lespez. Sarah Davidoux, Irka Hajdas, Chantal Tribolo.

9:15. *The nature of the Robberg technocomplex of the Caledon River Valley, southern Africa.* Svenja Arlt.

9:30. Forager stone technology at Little Muck Shelter from the mid-Holocene until farmer contact. Tim Forssman, Justin Pentz, Siphesihle Kuhlase, Nicci Sherwood and Courtney Knell.

9:45. *From Little Muck Shelter to Leokwe Hill: trade relations and settlement transitions.* (online) Chante Barnard.

10:00. *Investigating late Holocene lithic traditions: from rock shelters to hilltops in the Limpopo Basin.* Iris Guillemard.

10:15. A river ran through it: Preliminary results from excavations at Welgelgen Shelter, South Africa. Alex Schoeman, Kathryn Croll, Peter Morrissey.

.....TEA/COFFEE BREAK.....

11:00. *Establishing regional syntheses: A technological study on the manufacture of OES beads from the Mbere Complex and Little Muck shelter in the Middle Limpopo Valley, southern Africa..* Siphesihle Kuhlase.

11:15. *The colours of change: rock paintings and the audience in south-eastern South Africa.* David Witelson.

11:30. *Earth Mineral Pigment Provisioning and Rock Art in Stone Age Eswatini.* Brandi L. MacDonald, Alexa Kuo, Elizabeth C. Velliky, Robert. R. Forrester, Jörg Linstädter, Gregor Donatus Bader.

11:45. *Clearing the brush of time: a re-examination of the Dikbosch 1 rockshelter legacy material and the Later Stone Age of the interior of South Africa.* (online) Sara Elizabeth Rhodes, Gregor Bader.

Session 16. Historical archaeology: from 1500 through the colonial era

L'archéologie historique : de 1500 à l'époque coloniale Chairs: Cameron Gokee, Aribidesi Usman Location: Room 109

8:30. *A Pan African bioavailable strontium isoscape with use for the archaeology of the slave trade.* Vicky M. Oelze, Xueye Wang, Gaëlle Bocksberger.

8:45. *Dynamics of Cultural Landscape of Ibadan City: A Predictive Model for Landscape Studies in Nigeria.* (online) Emmanuel Olaleye, Olusegun Opadeji.

9:00. Données archéologiques et tradition orale des sites de Farkoumo et de Lamordé dans la région du Faro (Nord-Cameroun). (online) Alice Mezop Noumissing.

9:15. The Innate Urge To Leave Marks - Colonial Era Engravings Of St Marks' Mission, Eastern Cape. Ayanda Mncwabe-Mama.

9:30. *The Spatial Distribution of Children's Diseases in Early Johannesburg from 1923-1925.* N.A. Geoghegan, A. Esterhuysen.

9:45. *Environments and Security: Impacts of Zambarima Slave Raids in Northern Ghana.* Dr. Samuel Nilirmi Nkumbaan.

10:00. *Trade, Commerce and Cross-cultural Interactions: The Archaeology of Amedeka-Akuse-Ghana*. Beatrice Darko-Yeboah.

10:15. *Ouidah: sur les traces d'un ancien centre de déportation négrier entre le XVIIe et XIXe siècle.* Angelo Affolabi Ayedoun, Didier N'dah.

.....TEA/COFFEE BREAK.....

11:00. Les pipes archéologiques : un indice matériel de la zone d'influence européenne au Bénin. Nestor Labiyi, Barpougouni Mardjoua, Tchékpo Egbadiran C. Assogba.

11:15. Aguda et essor de l'agroéconomie au Sud-Bénin (Afrique de l'ouest) entre les XIXè - XXè siècles. Léonard Dossou. Ahouassou, Romain Goussanou Azankpo, Julien Comlan Hadonou.

Session 17. Honoring Professor Susan McIntosh and her contributions to African archaeology Hommage au professeur Susan McIntosh et à ses contributions à l'archéologie africaine Chairs: Jeffrey Fleisher, Mary Prendergast Location: Room 108

8:30. Introducing Professor Susan K. McIntosh. Jeffrey Fleisher.

8:45. *The Middle Senegal Valley Project and the state of archaeology in Senegal.* Alioune Deme, Moustapha Sall.

9:00. Sacred Landscape and Polity: Re-examining Tumuli, Settlement, and Oral Tradition in Waalo (Senegal). Kevin C. MacDonald, Ibrahima Thiaw, Sirio Canos Donnay.

9:15. Understanding Ceramic Diversity in Early Second Millennium CE Southeastern Burkina Faso. Daphne Gallagher.

9:30. *The Social Life of Glass Making Crucibles in Early Ile-Ife, Nigeria.* Abidemi Babatunde Babaloa.

9:45. *Susan McIntosh Viewed from the East: The Inspiration of Her Resistance to Out-of-Africa Intellectual Hegemonies.* Diane Gifford-Gonzalez.

10:00. *Reflections on Swahili Urbanism: An Appreciation of Susan Keech McIntosh*. Adria LaViolette.

10:15. *The cultural patrimony of the Sahel today: fight against the looting of archaeological sites and the illicit trafficking of cultural property from Mali.* Mamadou Cisse.

.....TEA/COFFEE BREAK.....

11:00. *"Extraordinary claims demand extraordinary proof": Susan McIntosh's unwavering commitment to evidence.* David Killick.

11:15. *Beyond Chiefdoms: Hierarchy, Heterarchy, and Fragility in Ancient States.* Peter Robertshaw.

11:30. Beyond Jenné-jeno: Reflections on the Teaching and Mentorship of Susan Keech *McIntosh.* Abigail Stone.

Session 24. Maritime archaeology and heritage in the southwest Indian Ocean Archéologie et patrimoine maritime dans le sud-ouest de l'Océan Indien Chairs: Zoe Crossland, Chantal Radimilahy, Kristina Douglass Location: Room 113

8:30. Maritime archaeology in Madagascar. (online) Chantal Radimilahy.

8:45. *The zoning model: marine heritage preservation challenges and opportunities for coastal communities, Gaza Province, Mozambique.* Solange Macamo, Paul Lane, Zacarias Ombe, Hamido Atuia, Açucena Nhantumbo.

9:00. Advancing community-centered maritime archaeology in SW Madagasca. Kristina Douglass, George Manahira.

9:15. Oral Histories Reveal Information about Historical Coral Harvesting in the Lamu Archipelago, Kenya. Clare Randolph, Khalfan Bini Ahmed, Chapurukha Kusimba, Kristina Douglass.

9:30. An Ethnoarchaeological Approach In Shellfisihing And Shell Middens Formation In Vilankulos. (online) Celso Simbine, Abigail Moffett.

9:45. Alimentation et survie sur l'île de Tromelin (1761-1776). (online) Bako Rasoarifetra.

10:00. Archéologie de la piraterie sur une petite île de l'océan Indien. Première mission archéologique terrestre sur l'île Sainte-Marie, Madagascar. (online) Jean Soulat.

10:15. *Réexamen de l'épave pirate du Speaker 1702, île MauriceRe-examination of the pirate shipwreck of Speaker 1702, Mauritius.* (online) Yann von Arnim, Jean Soulat, Anne Hoyau Berry.

.....TEA/COFFEE BREAK.....

11:00. *Maritime History and Archaeology of Madagascar with a focus on the Serapis Project.* Michael Tuttle, Norine Carroll.

11:15. *Maritime Heritage of Inhaca Island: Resilience of traditional wooden dhow construction.* (online) Cezar Mahumane, Celso Simbine.

11:30. *Creating Community Economic Benefits through the Maritime Cultural Landscape in Kenya.* Caesar Bita.

11:45. Discussant: Paul Lane

Session 30. Reconstructing ancient African foodways

Reconstruire les cuisines africaines anciennes Chairs: Julie Dunne, Amanda Logan. Dave Schmitt Location: Room 110

8:30. *Connected cuisines: Comparing the everyday foodways of sub-Saharan North Africa (c.1000 BCE-1000 CE).* Steven Matthews, Ulrike Nowotnick.

8:45. *Economic plants and agricultural practices in Post-Medieval Nubia: Insights from Old Dongola, Sudan.* (online) Mohammed Nasreldein, Nicholas J. Conard, Simone Riehl.

9:00. *Lipid residue analysis of medieval (14-15th century) pottery from Old Dongola, Sudan.* Julie Dunne, Katarzyna Danys, Artur Obluski, Richard Evershed.

9:15. *Food Storage and Social Inequality: An Ethnoarchaeological view from Northern Ghana.* Elikplim Kuto.

9:30. Archaeobotanical Evidence of Food, Trade, and Environment at Ile-Ife, Nigeria. Amanda Logan, Emuobosa Orijemie.

9:45. *Exploitation of canarium versus African oil palm by ancient hunter-gatherers in tropical Africa.* Nicolette Edwards, Dave Schmitt, Karen Lupo.

10:00. *Recipes of Change: Cookbooks as Primary Sources for Archaeologists Investigating African Foodways.* Shelby Mohrs.

10:15. *ZooMS and Isotopic analysis of El Hammar and El Hattab II caves.* (online) Shaymae Iken, A. Bouzouggar, A. Grandal-d'Anglade.

11:00-13:00. Session 37. Roundtable: African Archaeology in Support of School Learning Chair: Ann Stahl

Participants: Ibrahima Thiaw, Foreman Bandama, Julia Budka, Katherine Grillo, Alexa Hoehn, Alex Schoeman, Abigail Moffett

Location: Room 110

Contributors to a forthcoming African Archaeological Review issue dedicated to "African Archaeology in Support of School Learning" come together to reflect on our process of collaboration with educators through a series of virtual workshops to develop resources that support culturally responsive teaching. Our work is motivated by the fact that archaeology brings long-term perspective to issues foregrounded in United Nation's Sustainable Development Goals (SDGs), interweaving knowledge grounded in social sciences, history, mathematics, arts, science and technology. As such, archaeology can contribute substantively to Quality Education (SDG 4), particularly when archaeologists work respectfully to braid western science with other knowledge perspectives grounded in the communities and places where archaeologists work. We aim to stimulate dialogue on how this model can inspire change in how we share archaeological perspectives with wider audiences.

11:00-13:00. Session 38. Roundtable: Post-viewing discussion of the film *Iron Technology as Ritual Performance: The Barongo of Western Tanzania*

Chair: Peter Schmidt

Participants: Akin Ogundiran, Phil DeBarros

Location: Room 112

This film documents a once vital part of life in pre-colonial times-iron smelting among a multiethnic, guild-like group, the Barongo of western Tanzania. The Barongo arose during the 19th century in remote Miombo woodland forests as a response to dangers during the interior slave trade. Suppressed by British colonials controlling markets in iron goods, the Barongo again prospered during WWII when their goods were essential to the war effort. After WWII, they escaped British sanctions by smelting in the deep forests until the mid-1950s. The film starts with 9 minutes of silent Super 8 shot in 1979 married to 24 minutes of high-resolution soundsynced 16mm film shot in 1984. This film is the only record of their highly nuanced ritual processes marked by extensive bricolage. The use of silent film asks the viewer for deeper engagement by reading short descriptions and thinking about their significance - interactive with content rather than passively listening to a Voice-of-God narrative.

Saturday, June 3 – 13:00-14:30 - Lunch Break – South Servery

Afternoon: 14:30-17:30 - MUSEUM EXCURSIONS

Session 10. Early villages and farming from the Cameroon Grassfields to Victoria Nyanza and the Eastern Cape

Les premiers villages et l'agriculture, des Grassfields du Cameroun à Victoria Nyanza et au Cap Oriental Chairs: Bernard Clist, Gavin Whitelaw, Paul Lane Location: Room 115

8:30. West-Central African Iron Age: continuities, transitions and dusting an old paradigm about the Bantu-speakers' expansion – the coastal trail. (online) Bernard Clist.

8:45. *Climatic and anthropogenic drivers of landscape change in East Africa during the last two millennia.* (online) Geert van der Plas.

9:00. 'Farming communities on the Northern shores of Lake Victoria Nyanza, Uganda". (online) Ruth Tibesasa, Mica Jones, Ceri Ben Shipton, Ceri Zaria Ashley.

9:15. Discussant: Pierre de Maret

9:30. Bantu arrival in southern Africa. Reanalyzing depot finds and new surveys in Mozambique and Eswatini. (online) Jörg Linstädter, Sabrina Stempfle.

9:45. *Defining the Early Iron Age Happy Rest facies in southern Africa: new data from key sites in South Africa and Botswana.* Wim Biemond.

10:00. *First millennium villages and early trade in eastern South Africa.* Alexander Antonites, Annie Antonites, Christian Perterson.

10:15. Silver Leaves and related facies in KwaZulu-Natal, South Africa. (online) Gavin Whitelaw.

.....TEA/COFFEE BREAK.....

11:00. Discussant: Shadreck Chirikure

Session 15. Global Processes through Local Lenses: Perspectives from the Atlantic and Indian Ocean Coasts

Processus globaux à travers des visions locales : perspectives des côtes Atlantique et de l'Océan Indien

Chairs: Tomos Llywelyn Evans, Madeleine Gunter-Bassett, Diogo Oliveira Location: Room 113

8:30. *Mozambique Island and Cabaceira Pequena in the 16th century: perspectives on transforming maritime cultural landscapes in the Western Indian Ocean.* Diogo Oliveira.

8:45. *Rethinking Capitalist Consumption with Global Artifacts: Ceramic at a Mauritian Sugar Plantation.* Julia Haines.

9:00. *Local Ecologies and Regional Networks: An Analysis of Shell from two Late Holocene Sites in Djibouti.* Madeleine Gunter-Bassett.

9:15. A Dahomean Prince in the Gulf Coast World: Archaeological Connections between Ouidah, Benin and Africatown, Alabama. Neil Norman.

9:30. *Global Trade through the Lens of the Ìjèbú: Liminality and Regulation at Sungbo's Eredo, Nigeria.* Tomos Evans.

9:45. *Human occupation on Landscapes of Trauma: Evidence from the Badagry Coast.* Abiola Ibirogba.

10:00. *Early Trade in Pre-Colonial Eastern Nigeria and the Emergence of Aro Chiefdoms*. Stanley Nwosu.

10:15. Discussant: Adria LaViolette

Session 20. Landscape and settlement: multidisciplinary approaches

Paysage et peuplement : approches pluridisciplinaires Chairs: Alexandre Livingstone Smith, Sonja Magnavita, Leanne Phelps Location: Room 107

8:30. Holocene grassy biomes to modern fire regimes: Madagascar reflects global challenges and opportunity. Leanne N. Phelps, Kristina Douglass, Caroline E.R. Lehmann, Maria (Bat) Vorontsova, Niels Andela, Dylan Davis, Mathieu Gravey, Christian Kull, Sean Hixon, MalagasyGrassyBiomes working group.

8:45. *Enquête orale et archéologie environnementale: étude de la foresterie ancienne dans le secteur de Kétou.* (online) Frejus Somalon.

9:00. *Taxonomie et unités géomorphologiques des sites néolithiques du Ferlo (Sénégal):): Occupation et production.* (online) Demba Kébé.

9:15. Modelling the presence of shell clusters in the Saloum Delta of Senegal: the use of predictive analytic hierarchy process. (online) Mamadou Thior, Adama Harouna Athie, Nicolas Sagna.

9:30. *The Tumuli Zone of Central West Senegal: Geophysical and Archaeological Investigations into a Buried Cultural Landscape.* Sonja Magnvita, Ibrahima Thiaw, Friedrich Lüth.

9:45. Archaeology from the sky, recognising of Southern African settlement sites from satellite images. Kezala Jere.

10:00. *A land in turmoil: population dynamics in Northeast Congo over the last 2 Millennia*. Livingstone Smith A., Nieblas-Ramirez L., Nikis N., Mayo W. Nkomba M., Mambu C., Mulumbwa Luna O., Ndjondjo J.-P. & B. Ricquier.

10:15. *Prospections archéologiques dans la haute Vallée du Logone.* André le Roi Sakafoulsou Dannga.

.....TEA/COFFEE BREAK.....

11:00. *Etat des connaissances sur les sites archéologiques du delta du Saloum – Sénégal.* Aimé Kantoussan.

Session 23. Linking Records of the African Past

Relier des archives du passé africain Chairs: Nick Gestrich, Henning Schreiber Location: Room 108

8:30. *The Bugu-Poko Banana Split: New Linguistic Evidence on Plantains vs the History of the Congo Basin.* Birgit Ricquier, Edmond de Langhe, Luc Vrydaghs.

8:45. *Interdisciplinary Approach to the Origins of the Niger-Congo Phylum: Genes, Languages, and Stuff.* Koen Bostoen, Peter Coutros, Carina Schlebusch.

9:00. *Phonological innovations support new Bantu migration routes.* (online) Rebecca Grollemund, Braden Brown, Derek Nurse, Gerard Philippson, David Schoenbrun and Abigael Tomlinson.

9:15. Were they really the first Bantu speakers south of the Congo rainforest? (online) Sara Pacchiarotti, Peter Coutros, Jessamy Doman, Guy Kouarata, Igor Matonda, & Koen Bostoen.

9:30. Words, tools and actions - an ethnolinguistic study of present-day pottery cultures in West *Africa*. Esther Morgenthal.

9:45. *Supplementary dating: Dogon archaeological ceramic inventories and linguistic prototaxonomies.* Henning Schreiber.

10:00. *Network models of archaeological and linguistic pottery data on the Middle Niger.* Nick Gestrich.

10:15. *Toponymy of Swahili archaeological sites on the East African coast.* Monika Baumanova, Rosanna Tramutoli.

Session 26. New insights on the Pleistocene of eastern Africa

Nouvelles perspectives sur le Pléistocène de l'Afrique de l'Est Chairs: Steven Brandt, Peter Lanzarone Location: Room 109

8:30. Geoarchaeological Investigation of Middle Stone Age Sites in the Kilwa Basin, Coastal Tanzania. (online) Amanuel Beyin, David K. Wright, Kokeli P. Ryano.

8:45. Vegetation reconstructions of the Ethiopian highlands since the Last Glacial Maximum. Manuel Casas-Gallego, Angela Bruch, Katharina Neumann, Stéphanie Bodin, Marco Schmidt, Karen Hahn.

9:00. *Modeling the Ledge: Human occupation and stratigraphic association at Mochena Borago, Ethiopia.* Evan Wilson, Joshua Pike, Carlo Mologni, Peter Lanzarone, Casie Fort, David Ruiz, Menjivar, Elisabeth Hildebrand, and Steven Brandt.

9:15. *Mochena Borago before 50 ka: New perspectives on depositional and occupational history.* Elisabeth Hildebrand, Carlo Mologni, Joshua Pike, Courtney Sprain, Evan Wilson, Steven Brandt.

9:30. *New insights into a tectonostratigraphic interpretation at Mochena Borago rockshelter.* Peter Lanzarone, Carlo Mologni, Steven Brandt, Elizabeth Hildebrand.

9:45. *Techno/Typo Variability in Late Pleistocene Lithic Assemblages > 50 ka from Mochena Borago, Ethiopia.* Steven Brandt, Abebe Taffere

10:00. *Imports And Outcrops: Characterizing The Baantu Obsidian Source And Artifacts From Mochena Borago Rockshelter, Wolaita, Ethiopia, Using Portable X-Ray Fluorescence.* Benjamin Daniel Smith, Lucas R. Martindale Johnson, Steven A. Brandt.

10:15. New insights into the chronology of the Middle Stone Age of Lake Eyasi, Tanzania. (online) Maïlys Richard, Gregor Bader, Edwige Pons-Branchu, Arnaud Dapoigny, Naomi Porat, Chantal Tribolo, Pastory Magayane Bushozi, Nicholas J. Conard.

.....TEA/COFFEE BREAK.....

11:00. *Middle and Later Stone Age technology in southern Tanzania.* Pamela Willoughby.

11:15. Late Pleistocene Assemblages from southern Somalia: Testing the Economic Defendebility Model. Michaela Zewdu Tizazu, David Ruiz Menjivar, Mica Jones, Osman Yusuf Mohamad, Hussein Suleiman Ahmed, Steven A Brandt.

11:30. *The MSA assemblage of Mumba: New Insights and Perspectives.* Pastory Magayane Bushozi, Musa Said Mwitondi.

11:45. *Rescue archaeology around the University of Dodoma, Tanzania.* Kokeli Ryano, Augustino Mwakipesile, Krishna S. Rao, Ng'winamila Kasongi, Emanuel Temu, Edwin Ngowi, Rehema Kilonzo.

Session 29. Recent research in the Middle Senegal Valley

Recherche récente dans la moyenne vallée du Sénégal Chairs: Susan McIntosh, Roderick McIntosh Location: Room 110

8:30. *Le peuplement de la Moyenne vallée du fleuve Sénégal: résultats préliminaires de l'étude du site protohistorique de Méri.* (online) Mariama Ba.

8:45. Archéologie dans la moyenne vallée du fleuve du Sénégal : Étude des sites du Jeejengol. Aissata Thiam.

9:00. *Espace domestique à Hombo (Ve -XVIIe siècle) : organisation des dépôts et systèmes de production.* (online) Adama Harouna Athie.

9:15. *Extending the archaeomagnetic dating curve for the Middle Senegal Valley.* (online) Michael Corolla, Roderick McIntosh.

9:30. *Cultured landscapes on the river. First insights from the Cubalel, Walaldé and Dialowalli charcoal assemblages.* Alexa Höhn, Susan K. McIntosh, Alioune Dème, Peter Coutros.

9:45. *Diallowali and the end of the African Humid Period: Connections Along the MSV and Beyond.* Peter Coutros.

10:00. *The fauna of the evolving fluvial landscape: subsistence, economy, and environment at Walalde.* (online) Jessamy Doman, Peter Coutros.

10:15. Agropastoral re-alignments in the Middle Senegal Valley, 300 BCE—300 CE. Susan McIntosh.

.....TEA/COFFEE BREAK.....

11:00. *Revisiting Agriculture and Wild Plant Use in the First Millennium CE Middle Senegal River Valley.* Daphne Gallagher, Shawn Murray.

11:15. *Episodic settlement and mound formation context at Cubalel and Siwré sites, Middle Senegal River.* David Wright, Susan McIntosh.

11:30. 'Geoarchaeology of Islam in the Middle Senegal Valley: a hypothesis'. Alioune Deme.

11:00-12:00 - Poster session

Session 41. Poster session // Session de posters/affiches

Location: Dean's Commons

Conservation and Co-creation of Igbo-Olokun Heritage Site, Ile-Ife, Southwest Nigeria. Boluwaji Ajayi, Omokolade Omigbule, Abidemi Babalola, Adisa Ogunfolakan, Ayobami Diya, Boluwatife Abu, Sarah Olaleye, Promise Edegbai.

Southern African Holocene Ancestral KhoeSan body size and shape variation in the central interior. Michelle Cameron

Histoire, archéologie et héritage de la colonisation et de l'esclavage dans un village de la liberté au Sénégal : Sangane (Bawol occidental). René Ndiana Faye

The function and use of Little Muck Shelter's stone scrapers: a replication and use-wear study. Tim Forssman, Nicole Sherwood

Incorporating Mozambican Ceramics into the southeastern African record. Charlotte Jenkins, Elena Skosey-Lalonde

Ostrich habitat use and archaeological hunter-gatherer mobility revealed by Sr isotope analysis. Patricia McNeill, Xueye Wang, Renee Boucher, Alex Mackay, Vicky Oelze, Teresa Steele.

Early Ethiopian agriculture and the formation of Pre-Aksumite culture. (online) Degsew Mekonnen, Ana Gomes, Hugo Olivera

Routes of Interaction: archaeological-geographical studies of pathway networks in the northern Horn of Africa. Kristina Pfeiffer, Jacob Hardt

The Southern Ethiopian Rift: A Window into Plio-Pleistocene Prehistory and Paleoenvironments. Sahleselasie Melaku

Into the Depths: Examining the Deep-History of Fishing in the Kafue River Floodplain. Eréndira Quintana Morales, Lily Singman-Aste, Lucia Bryan, Lauren Castaneda-Molina, Evelin Aquino Cruz.

Ceramic Analyses as an Index for Intergroup Relationship(s) in northern Yorubaland, Nigeria. Oreoluwa Sodeke, Jonathan Aleru

Engagement, Knowledge Transfer, and Bioarchaeology: Talking About Past Lives at Ghazali. Robert Stark

Insights into tortoise exploitation and pyrotechnology by examining tortoises impacted by wildfire. Teresa E. Steele, Susan M. Mentzer, Susann Heinrich, Aspen Cooper, Mark Grote, Patricia J. McNeill, Juliana C-B. Wilder, Mareike C. Stahlschmidt.

Mobility and Land-use Patterns of Northern Kenya Populations during the Holocene. Sylvia Wemanya, Ephraim Wahome, Ben Nyanchoga, Emmanuel Ndiema.

Sunday, June 4 – 12:00-1:30 - Lunch Break – South Servery

Conference Program – Sunday, June 4 - Afternoon

Session 1. 25 Years Beyond Chiefdoms: Susan McIntosh's Pathways to Complexity Influence on African archaeology

25 ans <<Beyond Chiefdoms>>: l'influence de Susan McIntosh et ses <<chemins vers la complexité>> à l'archéologie africaine Chairs: Carla Klehm, Wolfgang Alders Location: Room 107

13.30. Botswana and Beyond: Reflecting on 25 Years of Influence of Susan McIntosh's Pathways to Complexity. Carla Klehm.

13.45. *Within chiefdoms: South African households in social complexity, 9th-13th century.* Raevin Jimenez.

14:00. *Fluid fortresses and shifting towns: an archaeology of complexity in southern Senegal.* Sirio Canós-Donnay.

14:15. *"Beyond Cities: Rethinking the Urban-Rural Continuum in Atlantic West Africa"*. J. Cameron Monroe.

14:30. *Heterarchy, Anti-Colonial Infrastructures, and the Busaid State in 19th-Century Zanzibar.* Wolfgang Alders.

14:45. What do settlement patterns tell us about Pre-Aksumite and Aksumite political organization? Michael Harrower, Catherine D'Andrea.

.....TEA/COFFEE BREAK.....

15:30. *Understanding cooperative dynamics in socio-political processes in Western Burkina Faso.* (online) Stephen Dueppen.

15:45. *Conceptualising Pathways to Complexity in Mauritanian Prehistory.* Gonzalo José Linares Matás.

16:00. *Clustering, Urban Taxonomies, and Remote Sensing: Fadugu and Markadugu in Ancient Mali.* Kevin MacDonald, Eloise Noc.

16:15. Discussant: Stephanie Wynne-Jones

16:45. Discussant: Susan McIntosh

Session 11. Emerging Voices and Trends in West African Indigenous Archaeologies Voix émergentes et tendances dans les archéologies indigènes d'Afrique de l'Ouest Chairs: Kofi Nutor, Dela Kuma Location: Room 113

13.30. *Re-linking archaeology and the public using digital visual media: The Elmina Castle Museum in context.* (online) Jacob Nii Marley.

13.45. *Interrogating Archaeological Archives and 'Excavating' museum storages: Begho in Retrospect.* (online) Daniel Kumah.

14:00. When We Die Our Tongues Would Not Decay: The Voices OfBui Dam Displaced Persons. (online) David Tei-Mensah Adjartey.

14:15. *Building Vernacular Architecture in Banda: A Heritage-making Process*. Zonke Guddah.

14:30. *Human agency and theory in West Africa: an insight into early forest agriculture in the Neolithic.* (online) Victoria Olajide.

14:45. *Archaeobotanical Investigation Of Likpe Kukurantumi Earthwork Settlement, Ghana.* Patricia Ayipey.

.....TEA/COFFEE BREAK.....

15:30. *"Legitimate' Trade: Local Tastes and Consumer Power in Southeastern Ghana, Amedeka (late 19th to 20th centuries).* Dela Kuma.

15:45. *The Peki in the Atlantic world: landscapes, power, and identities of slavery in southeastern Ghana.* Kofi Nutor.

16:00. *Our Canoes are not welcome: Waterfront redevelopment in Jamestown and indigenous community heritage.* Victoria A. Aryee.

16:15. Approche de l'archéologie communautaire dans le pays Soninké: entre méthode et perspective de décloisonnement de la connaissance. Fode Diakho

Session 18. Human origins and Pleistocene archaeology

Origines humaines et archéologie du Pléistocène Chairs: Lawrence Barham, Karen Lupo Location: Room 115

13.30. *Prehistory of two deserts. From Acheulean to the Neolithic at Bayuda and the Eastern Desert, Sudan.* Mirosław Masojć, Henryk Paner, Grzegorz Michalec, Patryk Muntowski.

13.45. *Burial traditions along late Pleistocene and early Holocene Nile.* (online) Lenka Varadzinová, Ladislav Varadzin.

14:00. *Trends of Acheulean Technocomplex during the Lower Pleistocene from East and South Africa*. Haftom Berhane Taezaz, Sarah Wurz, Agazi Negash.

14:15. *Phytolith analysis from the Middle Pleistocene sites from the Manyara Beds, Northern Tanzania*. (online) Mariam Bundala, Charles Saanane, Rahab Kinyanjui, Brian Kooyman, Susanne Cote.

14:30. *A taphonomic study of newly excavated faunal material from Duinefontein 2, South Africa.* (online) Deano Stynder, Ruan Brand.

14:45. *Ecomorphological analysis of some bovid remains from the Unit P deposit at Kromdraai, South Africa*. (online) Recognise Sambo, Raphaël Hanon, Nompumelelo Maringa, Christine Steininger, Bernhard Zipfel, José Braga.

.....TEA/COFFEE BREAK.....

15:30. *Pleistocene Hominin Occupation In The Magaliesberg: Exploring Lifeways Through Landscape Adaptations And Lithic Production Strategies*. Matt Lotter, Matthew Caruana, Marlize Lombard.

15:45. *A reference framework for the study of heat treatment of hornfels in the Stone Age of South Africa*. (online) Michael Toffolo, Ana Alvaro, Britt Bousman, Lloyd Rossouw.

16:00. *Paleolithic Aterian Culture in sudan (90,000-40,000 Bp) ElGa'ab depression, western sahara*. Rayan Jarelnabi.

16:15. *Geoarchaeology in Sudan: study of Paleolithic stone tools in El Ga'ab Depression, West of Dongola*. Sara Mohammed, Yahya Fadel Tahir.

Session 21. Landscapes of Resistance: Archaeological Approaches and Comparative Perspectives

Paysages de résistance : approches archéologiques et perspectives comparatives Chairs: Cameron Gokee, Lydia Marshall Location: Room 110

13.30. When I'll be free I will have nothing else to desire: freed people's worldmaking in northern Senegal. (online) Elias Michaut.

13.45. *Peuple des Pierres?: Resistance and Ethnomorphosis among the Bedik (Senegal).* Cameron Gokee, Fodé Diakho.

14:00. *The Regent Village Landscape: Entanglement, Nascent Colonialism, and Changing Spaces on the Sierra Leone Peninsula.* (online) Oluseyi Agbelusi.

14:15. *The Landscape and Society of Northern Yorubaland during the 19th century Yoruba Internecine Warfare, Northcentral Nigeria.* Aribidesi Usman.

14:30. War in the Kalashnikov zone: scales of identity and violence around the Mandara *Mountains*. Scott MacEachern.

14:45. *Extraction and resistance in the eastern Congo during the second half of the 19th century.* (online) Noemie Arazi.

.....TEA/COFFEE BREAK.....

15:30. *Refuge as Resistance: the power of retreat at Lilangangondo, Tanzania*. Lydia Marshall, Thomas Biginagwa.

15:45. *Cultivating Resistance: Plant Foods and Foraging Landscapes Amongthe Sandawe of Central Tanzania*. Matthew Knisley.

16:00. Unsettled life and the formation and deformation of ethnic identities in southern Tanzania: The Ngoni factor. (online) Thomas Biginagwa.

16:15. *Patrimoine des sites défensifs : sa gestion et la question de domination du bassin de l'Oti (Togo)*. Kandjime KonlanI.

16:45. Discussant: Paul Lane

Session 33. The archaeology of African pastoralism

L'archéologie du pastoralisme africain Chairs: Katherine Grillo, Shayla Monroe Location: Room 108

13.30. *The Traditional Ecological Knowledge of African Pastoralists and Environmental Archaeology.* Shayla Monroe.

13.45. *Resisting drought: herding strategies in Middle-Late Holocene in the Acacus massif (Central Sahara).* (online) Martina Di Matteo, Silvia Soncin, Krista McGrath, Savino di Lernia.

14:00. *Forager and agro-pastoral archaeology in northern Butana, central Sudan*. (online) Ahmed Nassr, Zeljko Rezek.

14:15. *Materialities of past and contemporary pastoralism at Musawwarat es-Sufra (Sudan)*. (online) Cornelia Kleinitz, Alfatih Mohamed Ali, Hassan Ebeid-Allah.

14:30. From the cairn to the mosque. An archaeology of nomadic pastoralism in the Horn of *Africa*.(online) Pablo Gutiérrez de León.

14:45. *Reconstructing sociality among the earliest herders in eastern Africa: new evidence from OES beads.* Jennifer M. Miller, Elizabeth Sawchuk, Yiming V. Wang, James K. Munene, Lauren Malone, Sierra Plympton, Asa Wong-Gómez, Emmanuel Ndiema, Anneke Janzen, Katherine Grillo, Elisabeth Hildebrand.

.....TEA/COFFEE BREAK.....

15:30. *The Environment and Technology of Megalithic Culture in the Lake Eyasi Basin*. Albert Samwel Mjandwa, Elizabeth Kyazike, Julius Lejju.

15:45. *Current trends and Prospects of the Neolithic Culture in the Lake Eyasi Basin*. Musa Said Mwitondi, Pastory Magayane Bushozi.

Session 13. Ethnography, Indigenous Knowledge, and Material Culture Ethnographie, savoir autochtone, et culture matérielle Chair: Joanna Ciesielska Location: Room 109

13:30. *An Ethnographic Study of the Unique Indigenous Kyenkyen Barkcloth in the Hani-Begho Area Of Ghana.* (online) Benedicta Nyikpah Atsu.

13:45. *Ethnographic Study Of Drum Making And Its Significance Among The People Of Oyo Town.* (online) Olatomiwa Sarumoh, David A. Aremu.

14:00. (*Im*)*material legacies and indigenous knowledge in post-war Igboland, Nigeria.* (online) Stanley Onyemechalu.

14:15. *Rethinking the Archaeology of Apiculture through Indigenous East African Beekeeping.* (online) Benny Qihao Shen.

14:30. *Tethering stones: new evidence from Wadi Farja, Sudan*. Nahid Abdelatif Hassan Mohammed.

14:45. *Resettlement as a Means to Suffer at Southeastern Ghana An Anthropological Perspective*. Vincent Dogbey.

17:00-18:00 INTRODUCTION OF ARTIST VICTOR EKPUK – Deans Commons

18:00-19:30 RECEPTION AT MOODY CENTER FOR THE ARTS

The reception includes a toast to 40 years of African Archaeological Review

8:00-10:00 SAFA BUSINESS MEETING: Hudspeth Auditorium

10:00-10:30 TEA/COFFEE BREAK

Session 2. Advances in African rock art studies

Avancées aux études de l'art rupestre africain Chairs: Stanley Ambrose, David Witelson Location: Room 107

10:30. *L'Art rupestre de l'Atlas saharien Algérien Djebel AmourRégion de Laghouat.* (online) Ahmed Hamdi.

10:45. Buahit Serit; A Newly Documented and Endangered Pastoral Rock Art Site in East Gojjam, Northwestern Ethiopia. Tesfaye Wondyifraw Tsegaye.

11:00. A Tale of two rock art sites: An archaeological reflection on rock shelters in North East, Ghana. Fatima Musa.

11:15. *Maasai rock art and New Testament overpainting: Decolonizing contested traditions.* Stanley Ambrose.

11:30. *Grappling with personhood: hunters and ritual specialists in selected mountain San rock art, South Africa.* (online) Dawn Green.

Session 27. Of Stones, Sherds, and Clay: The Archaeology of Built Urban Environments west of the Niger

Des pierres, tessons et argile : l'archéologie des environnements urbains construits à l'ouest du Niger Chair: Gérard Chouin

Location: Room 108

10:30. Archaeology and Indigenous Hermeneutics: Interpreting the Multiplex Functions of *Pavements.* Olanrewaju Lasisi.

10:45. *New overlapping potsherd pavements at Lújúmò Compound, Ilé-Ifè, Nigeria.* (online) Léa Roth.

11:00. *From Analog To Digital: Archaeology In Yoruba Land.* Adisa Ogunfolakan, Gerard Chouin, Martins Olorunfemi, George Ademakinwa.

11:15. *Mounds, Monuments, and Magic: Investigations of the Sungbo's Eredo Earthwork Landscape, Nigeria.* Emmanuel Adeara, Tomos Evans, Stanley Nwosu.

11:30. Searching for Pavements at Ita Yemoo: Experimenting with non-destructive methods. Adisa Ogunfolakan, Gerard Chouin, M. O. Olorunfemi, Ademakinwa Oni.

Session 34. The archaeology of foraging in Pleistocene and Holocene southern Africa L'archéologie des chasseurs-collecteurs en Afrique australe du Pléistocène et de l'Holocène Chairs: Alex Bertacchi, Genevieve Dewar Location: Room 109

10:30. *The last 30,000 years in the Zambezi basin: a major shift in land use for Later Stone Age foragers?* Alex Bertacchi, Stanley Ambrose, Jessica Thompson, George Mudenda, Potiphar Kaliba.

10:45. *Variability in forager mortuary behavior in the terminal Pleistocene and Holocene of Malawi.* (online) Jessica C. Thompson, Jessica I. Cerezo-Román, Elizabeth Sawchuk, Flora Schilt, Alex Bertacchi, Douglas J. Kennett, And Potiphar Kaliba.

11:00. *The Analysis of MIS 5 Middle Stone Age Points from Lovedale, South Africa.* (online) Britt Bousman, Zac Selden, Kristen Wroth, Lloyd Rossouw, Michael Toffolo.

11:15. *Robberg period faunal signatures from the Maloti-Drakensberg, Lesotho.* Genevieve Dewar, Julia Zastrow.

11:30. Palaeoenvironmental Change Throughout the Pleistocene/Holocene Transition in Lesotho: Insights from Carbon and Oxygen Isotope Analyses of Micromammal Teeth. (online) Brittany Sparrow, Mary Lucas, Patrick Roberts, Genevieve Dewar.

11:45. *Modeling environmental change, territoriality, and regionalization in the Zambezian Biome.* Benjamin Davies, Justin Pargeter, Alex Bertacchi, Potiphar Kaliba, and Jessica C. Thompson.

10:30-12:00. Session 35. Roundtable: Visions of the past: teaching history as a tool of power *Table ronde. Visions du passé : l'enseignement de l'histoire comme outil de pouvoir*

Chairs: Zuzanna Augustyniak, Kamil Kuraszkiewicz, Hanna Rubinkowska-Anioł Participants: Magdalena Pinker, Kinga Turkowska, Nagmeldin Karamalla-Gaiballa Location: Room 110

Past can be a powerful tool in a struggle for power; stability and effectiveness of an authority depends on its subjects' acceptance and submission, thus the process of shaping the picture of the state – and attitude towards it – among citizens has a crucial importance. Archaeological heritage – either because of its antiquity or its impressiveness (or both) – seems to be a particularly alluring reference point in constructing historical narrations that are intended to legalise authority, and different interpretations of archeological objects can strengthen or weaken narrations built around them. Thus, authorities use eagerly various ways to impact visions of the past formed in the consciousness of citizens – including school curricula or activities aimed at engaging local communities into protection of heritage sites. Importantly, in Africa, there is a strong opposition of western-constructed interpretation of the past with that passed as historical knowledge locally. Moreover, visions of history imposed by the ruling elite differ from those advocated by the opposition, all of them influenced by ethnic, religious and economic rivalries. The discussion based on the identification of the different, often conflicting visions of history and their comparison with the current state of knowledge will also contribute to the ongoing discourse on decolonisation and postcolonialism.

10:30-12:00. Session **36**. Roundtable: Long-distance trade in Africa before **1500** CE *Table ronde*. *Le commerce à longue distance en Afrique avant l'année 1500 <i>de notre ère* Chair: David Killick

Participants: Jay Stephens, Brian Stewart, Stanley Ambrose, Jane Humphris, Thomas Fenn, Shadreck Chirikure, Ashley Coutu

Location: Room 113

African archaeology has benefited since 2000 from the development of faster and cheaper methods of chemical and isotopic analysis. These methods have been used to infer the provenance of materials produced both within and outside Africa - including obsidian, ochre, copper, tin, glass, ivory and ostrich eggshell - and also to inferring migration of both people and animals. This roundtable focuses on the social interpretation of results obtained from these analyses. We will discuss in particular the mechanisms of long-distance trade in societies at various levels of social complexity - foragers, pastoralists, early agricultural societies, emerging complex societies, and states. We will also discuss transfers of materials between some of these societies, as for example between foragers and states. Another topic for discussion is whether we can distinguish transfer mechanisms - for example, down-the-line versus direct procurement at source - from distributions.

10:30-12:00. Session 40. Roundtable: Archaeology in African Universities *Table ronde. L'archéologie dans les universités africaines*

Chair: Asmeret Mehari

Participants: Elizabeth Kyazike, Ndukuyakhe Ndlovu, Robel Haile, Elgidius Ichumbaki Location: Room 115

This roundtable proposal aims to discuss the current state of archaeology in African universities. The introduction of archaeology into African higher education systems varies throughout the continent. In some countries, it took place much earlier; for example, in South Africa in the late 1920s and in Ghana in 1951. In other countries, archaeology was introduced or reintroduced much later. For example, the University of Asmara in Eritrea incorporated archaeology in 1997, and Makerere University in Uganda reintroduced archaeology in 2013. Similarly, only a few publications have directly discussed archaeology in African universities. This includes examples from Ghana, Nigeria, Tanzania, and South Africa. However, the state of archaeology in most African universities remains silent. This roundtable brings in several participants together to discuss the state of archaeology in African universities by addressing three themes: teaching, research, and community engagement.

Monday, June 5 – 12:00-13:30 - Lunch Break – South Servery

Conference Program – Monday, June 5 - Afternoon

13:30-15:00. Session 39. Roundtable: Archaeological Sites & Monuments Registers and Planning Processes: Opportunities and Challenges

Chairs: Paul Lane, Stefania Merlo, Carla Klehm

Participants: Akin Ogundiran, Rachel King, Omar Madime, Ibrahima Thiaw, Sam Makuvaza, Jackline Besigye, Agnes Shiningayamwe

Location: Room 110

The aim of this roundtable is to encourage a discussion on the current state of archaeological sites and monuments registers across different African countries, their role in heritage management decision making, and how they are currently integrated into general planning processes. Recognising that many registers exist only in paper form, can be difficult to access readily, and are rarely consulted in the planning process, we aim to identify examples of good practice and successful integration as well as reflect on the challenges and opportunities facing the profession. Since legislative structures and systems vary significantly, including with regard to pre-development archaeological impact assessments and mitigation activities, we aim to review how such systems might be improved and the ways regional measures aimed at data sharing and integration can be enhanced.

Session 3. Archaeological investigations of cities and polities

Enquêtes archéologiques sur les villes et les régimes politiques Chairs: Carlos Magnavita, Dil Singh Basanti Location: Room 108

13.30. *Spatial organization of Soba - precolonial metropolis on the Blue Nile.* Mariusz Drzewiecki.

13.45. *Ethno-cultural landscape of Soba, the capital of the medieval kingdom of Alwa.* Joanna Ciesielska, Petrous Le Roux, Mary Lucas, Erin Scott, Patrick Roberts.

14:00. *Tungul the Afropolis. The biography of an African capital city.* Artur Obluski Agata Deptula.

14:15. *Reconstructing Burial Rites and Post-Mortem Processing at Ancient Aksum (50-400 AD).* Dilpreet Singh.

14:30. *Change through coexistence: Archaeological study of the common grounds of the Medieval Horn of Africa.* (online) Carolina Cornax-Gómez.

14:45. Recherches archéologiques dans le caravansérail de Nikki (Nord-Bénin) : résultats de la première campagne et perspectives de recherche sur l'histoire du commerce caravanier en Afrique de l'Ouest. (online) Barpougouni Mardjoua, Olivier Gosselain, Didier N'dah.

.....TEA/COFFEE BREAK.....

15:30. *Tié: Kanem-Borno's first Islamic capital Njimi rediscovered*. Carlos Magnavita, Zakinet Dangbet, Tchago Bouimon.

15:45. *Espaces symboliques, cultuels et pouvoir politique à Lambaye et ses environs (1500-1800).* (online) Sidy Ndour.

16:00. Urban Space in Surame, Nigeria: dwelling and social identity. Aliyu Adamu Isa.

16:15. Some Insights into the Pre-19th Century Socio-Political Dynamics in Kasar Bauchi, Northern Nigeria. Abubakar Sule Sani.

16:45. *On missing links and bridging gaps: The Archaeology of Kubiku*. Russell Kapumha.

Session 4. Archeology in Zambia: New and Ongoing Work Archéologie en Zambie: travaux nouveaux et en cours Chairs: Evin Grody, Zach McKeeby, Maggie Katongo Location: Room 109

13.30. *Historical Linguistics and Archaeology in Concert: Report on Recent Research from the Bantu Mobility Project, Central Zambia.* Matthew Pawlowicz, Kathryn de Luna, Jeffrey Fleisher.

13.45. Crafting Animals: Assessing Animal Use in the Zambian Iron Age. Evin Grody.

14:00. *Human-Animal Interactions in Later Stone Age-Iron Age Zambia: Insights from Thandwe and Nachikufu Caves.* Martha Nchimunya Kayuni, Noel Amano.

14:15. A longue durée analysis of food regimes in Zambia: Ancient climate resilience, colonial disruptions and the rejuvenation of relict crops. (online) Jeremy Farr.

14:30. *Reevaluation of the chronology and structure for the spread of food production in Zambia*. Steven Goldstein, Jeremy Farr, Anneke Janzen, Andrea Kay, Nicole Boivin.

14:45. *Iron production in the Machile Valley: 1000 years of variation and innovation in sociotechnical practice.* Zachary McKeeby, Kenneth Luhila, Namunji Samuel Namunji.

.....TEA/COFFEE BREAK.....

15:30. Looking back, looking forward. Larry Barham.

15:45. Discussant: Jeffrey Fleisher

Session 5. Ceramics and craft production

Céramique et production artisanale Chairs: Elizabeth Ademeyo, Jacques Aymeric, Per Ditlef Fredriksen Location: Room 115

13.30. Uproot recipes: An archaeology of creative knowledge and memory-making in southern *Africa*. Per Ditlef Frediksen.

13.45. Social networks among Namib Desert nomads: isotopic signatures of recent pottery assemblages. John Kinahan.

14:00. *Revisiting the Softstone Quarries of Northern Madagascar: Résumé and Outlook.* Christoph Nitsche, Chantal Radimilahy, Guido Schreurs, Sylvain Velomora, Vincent Serneels.

14:15. *The use of clay in the medieval occupation of Djoutoubaya (Eastern Senegal): mudbricks, crucibles and ceramic vessels.* Céline Cervera, Sabine Klein, Nima Nezafati, Louis Champion, Patricia Chiquet, Eric Huysecom, Anne Mayor.

14:30. *In the shadow of tumuli: A first pottery sequence for Mbacké in central-west Senegal.* Cezary Szymanski.

14:45. *Every Room Matters: A Preliminary Study of Archaeological Pottery Found in Old Buipe (Ghana).* Jacques Aymeric-Nsangou, Denis Genequand, Wazi Apoh.

.....TEA/COFFEE BREAK.....

15:30. *Distinguishing Early and Later Iron Age Cultures of Bassar (Togo) using Mortuary Patterns and Ceramics.* Philip de Barros.

15:45. *Investigating Craft Production in Igbo Ukwu: Pathways for West African Archaeology.* Elizabeth Adeyemo.

16:00. West African Pottery and it's Autochthonous: A Report of Pottery Analysis from Zigam, Nigeria. (online) Abdulmalik Abdulrahman Abdulmalik.

16:15. *Scales, Daisies, Diamonds: Ceramic Distinctions from the Meroitic Period.* (online) Annissa Malvoisin.

16:45. Analyzing ceramics from Mgoduyanuka a Late Iron Age Site in KwaZulu-Natal using archaeometry. Dimakatso Tlhoaele.

Session 9. Digital tools and community archaeology in Africa

Outils digitaux et l'archéologie communautaire en Afrique Chairs: Grant Bettinson, Stephanie Wynne-Jones Location: Room 113

13.30. Creators not Content. Grant Bettinson.

13.45. *Towards Building a Framework for Transnational African Digital Heritage*. Malkia Okech.

14:00. *Sustainable approach to digital heritage management: Insights from the MAEASaM project.* Akinbowale Akintayo, Stefania Merlo, Stephanie Wynne-Jones, Paul Lane.

14:15. *Archaeological Practice in Challenging Times: The Case of Ibadan*. Kolawole Adekola.

14:30. *Communicating Heritage Issues Through Popular Music: A Case of East Africa's Bongo Fleva.* (online) Claudia Lubao, Elgidius Ichumbaki, Richard Bates Andrew, Wilson Christopher Gaffney, Thomas Sparrow.

14:45. *Creative Capture – Documenting the Development of the Digital Twin for Bagamoyo.* (online) Olivia Booker, Richard Bates, Tom Sparrow, Elgidius Ichumbaki, Chris Gaffney, Andrew S. Wilson.

.....TEA/COFFEE BREAK.....

15:30. *Immersive digital technologies: A disaster risk response on cultural heritage resources.* (online) Takudzwa Brian Denhere, Tavingeyi Tatenda, Mutyandaedza Bright.

15:45. *Integration, ownership, & a shared excavation: TfD as a sustainable approach to community archaeology*. Abdul Karim Hakib, Victoria A. Aryee.

16:00. *Securing digital archeological data*. Babalola Jacobs, Oluwaseun Tiamiyu, Mathias Jacobs.

Session 32. Technology and innovation in the Stone Age

Technologie et innovation à l'âge de pierre Chairs: Matthew Kroot, Lucy Timbrell Location: Room 107

13.30. Introducing the network Comparative Analysis of Middle Stone Age artifacts in Africa (CoMSAfrica). Manuel Will, Christian Tryon, Matthew Shaw, Eleanor Scerri, Kathryn Ranhorn, Justin Pargeter, Jessica McNeil, Alex Mackay, Alice Leplongeon, Huw Groucutt, Katja Douze, Alison Brooks.

13.45. *Replicability in lithic flake analysis: Results from the Comparative Analysis of Middle Stone Age Artifacts in Africa (CoMSAfrica) research project.* (online) Justin Pargeter, Manuel Will, Christian Tryon, Matthew Shaw, Eleanor Scerri, Kathryn Ranhorn, Jessica McNeil, Alex Mackay, Huw Groucutt, Katja Douze, Metin Eren, Alison Brooks, Alice Leplongeon.

14:00. *What's the point? An analysis of eastern African Middle Stone Age point forms*. Lucy Timbrell, Behailu Habte, Yosef Tefera, Christine Maroma, Emmanuel Ndiema, Kimberly Plomp, James Blinkhorn, Matt Grove.

14:15. *Tool Morphology And Functionality: A Case Study of Ground Stone Axes Assemblage from Akwanga, Central Nigeria.* (online) Okopi Ade.

14:30. Les caractéristiques techno-morphologiques des artefacts lithiques de la trame stratigraphique -50/-190cm de l'abri sous roche de Maadaga (sud-est du Burkina Faso). (online) Lassané Toubga.

14:45. *New Stone Age Sites in Bandafassi, Senegal.* Matthew Kroot, Cameron Gokee.TEA/COFFEE BREAK.....

15:30. *Continuity and Discontinuity in west African past lifeways during the final Holocene*. Khady Niang, James Alexander Blinkhorn.

15:45. *The 105-thousand-year-old lithic assemblage from Ga-Mohana Hill North Rockshelter, southern Kalahari Basin.* Precious Chiwara-Maenzanise, Benjamin J. Schoville, Yonatan Sahle and Jayne Wilkins.

16:00. *Howiesons Poort lithic technology from Nelson Bay Cave.* Sara Watson, Alex Mackay, Nicolas Zwyns, Teresa Steele.

16:15. *The social exchange of technical knowledge during the later Holocene in South Africa.* (online) Alex Gregory, Justin Pargeter.

16:45. *Characterizing Lithic Assemblages at two LSA sites in Ndali Crater Lakes Region (NCLR) Western Uganda.* Jackline Nyiracyiza Besigye, Peter R. Schmidt.

17:00. *Evidence For Early Human Activities From Central Nigeria*. Jonathan Ndarni, Okopi Ade.

Session 22. Life, Death, and Belief on the Nile

Vie, mort et croyance sur le Nil Chairs: Helina Woldekiros, Maciej Wyżgoł Location: Room 110

15:30. *The Meroitic Afterlife: a new Insight from Kedurma, Nile Third Cataract Region.* (online) Mohamed Bashir.

15:45. *Pottery from the households of Old Dongola (Sudan): diachronic and spatial perspectives.* Katarzyna de Lellis-Danys, Lorenzo de Lellis.

16:00. *Changing life of a house and its dwellers at Old Dongola (Sudan) in the 15th-17th century.* Maciej Wyżgoł.

16:15. *Stranded in Dongola, Sudan. A 16th-century account of the Ethiopian monk Takla Alfa, reconsidered.* Dorota Dzierzbicka, Daria Elagina.

16:45. *The Egyptian Temples of Amun in Ancient Sudan*. Hanaa Hafiz.

17:00. *The Role of God Abadmak in Meroeitic Civilization.* Manal Elamin Elshikh Omer.

17:15. *The Association of Fertility Cultural Practise and Gebel Elbarkal Temples.* Ismail Hamid Mohamed Elnour.

PAPER ABSTRACTS SUBMITTED TO SYMPOSIUM, BY SESSION

Session 1. 25 Years Beyond Chiefdoms: Susan McIntosh's Pathways to Complexity Influence on African archaeology // 25 ans après Beyond Chiefdoms : l'influence de Susan McIntosh sur l'archéologie africaine

Wolfgang Alders

Heterarchy, Anti-Colonial Infrastructures, and the Busaid State in 19th-Century Zanzibar

McIntosh's work has drawn attention to heterarchical forms of power and complexity in the African past. These non-linear modes of social organization came into sharp relief during the colonial period, when foreign powers tried to impose their political structures onto the continent. In Zanzibar, Tanzania the Omani Busaid state tried to control the socioeconomic systems of the Swahili Coast, but they had to contend with multiple overlapping infrastructures of social and ritual power. Across the east and south of Zanzibar Island, archaeological surveys of agricultural field systems attest to forms of cooperative labor among Swahili communities during the 19th century, as the Busaids constituted power in the urban center of Zanzibar Stone Town. Producing field systems drew Swahili farmers into relations of reciprocal exchange and generated social wealth, enabling communities to selectively interact with or withdraw from the coercive socioeconomic systems of the plantation zone. Historical map analyses of the settlement system on the island during the 19th century attest to the independence of Swahili communities across the island, and to the constrained power of the Busaids during the 19th century. The failure of the Busaids to integrate heterarchical Swahili elements during their attempt at state formation explains their rapid collapse when European powers began to colonize the region. While the Busaid state was incapable of resisting European colonial power, revolt against European rule quickly developed within the heterarchical mosaics of the East African coast. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52889

Sirio Canós-Donnay

Fluid fortresses and shifting towns: an archaeology of complexity in southern Senegal.

In *Beyond Chiefdoms,* Susan McIntosh called for a rejection of rigid neovolutionary formulations and a broadening of the empirical base for studies of social complexity, particularly highlighting the potential contributions of the African past. One of the volume's key themes was the importance of alternative modes of complex organization and the diversity of their material expression over the landscape. This paper will explore one case study featuring both elements: that of the Kingdom of Kaabu (13th-19th C) in the Senegambia. Kaabu's sociopolitical landscape was defined by politically stable but spatially shifting towns, and sturdy-looking but relatively ephemeral fortresses, that emerged and faded in reaction to changing geopolitical power balances. Over the past decade, archaeological work has begun to document the nature of Kaabu's sociopolitical organisation and its material manifestations, as well as the implications of these patterns for broader discussions about complexity

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50675

Stephen Dueppen

Understanding cooperative dynamics in socio-political processes in Western Burkina Faso

The archaeological record of the Mouhoun Bend of western Burkina Faso over the past three millennia attests to diverse cooperative dynamics that structured the initial networks of early farmers, political revolution and post-pandemic resiliency. This paper explores the contributions of the region's history of cooperative dynamics to broader debates in contemporary archaeological theory, including concepts of the state, centralization/decentralization, and structural variability in specialized economies. Following on *Beyond Chiefdoms*' emphasis on the importance of incorporating socio-political histories from Africa into global theoretical discourse on complexity, the paper will examine how Africanist scholarship over the past 25 years has shaped the general theory landscape around these issues and explore the potential for future contributions.

Michael Harrower, Catherine D'Andrea

What do settlement patterns tell us about Pre-Aksumite and Aksumite political organization?

Archaeologists have used settlement patterns as a key indicator of political organization for more than 50 years, but many long-standing presumptions about human societies and how they are revealed by settlement patterns have carried forward over many years with insufficient scrutiny. Comparison of societies and histories is helpful but, as Susan McIntosh's Beyond Chiefdoms highlighted, imagining that societies fit neatly into discrete types overlooks vast diversity. This paper presents results of Pre-Aksumite and Aksumite settlement pattern analysis based on archaeological survey of two areas of Ethiopia. Implications of these results for understanding and analyzing ancient political organization across the Horn of Africa and elsewhere around the world are discussed.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52849

Raevin Jimenez

Within chiefdoms: South African households in social complexity, 9th-13th century

Using evidence from comparative historical linguistics, this paper considers the ways Nguni-speaking households innovated and elaborated ideas of power around gendered conditions and relationships. While vital to the rise of kingdoms after the 16th century, new concepts of gender were also central to food production, accumulation of wealth, formation of factionalism, and integration of moral communities across short-range distances in earlier times. Drawing on Susan K. McIntosh's *Beyond Chiefdoms*, I argue for a history of complexity in the coordination of power and authority between households and across generations in Southeasternmost Africa at the turn of the second millennium.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52850

Kevin MacDonald, Eloise Noc

Clustering, Urban Taxonomies, and Remote Sensing: Fadugu and Markadugu in Ancient Mali

Settlement clustering and nucleation have been used as key factors in evaluating Middle Niger Urbanism since the 1970s. More recently, MacDonald and Camara advanced settlement taxonomies associated with Bamana Segou to differentiate state-generated (Fadugu) and self-organising (Markadugu) urban landscapes. New, extensive and systematic remote sensing data from the Arcadia Mapping Africa's Endangered Archaeological Sites and Monuments project (MAEASaM) allows us to critically evaluate the spatial distribution of clustered and non-clustered nucleated settlements across the Middle Niger and its margins. In this paper we will consider how prevailing urban models correspond with new data for the ancient settlement landscapes of Mali.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52894

Carla Klehm

Botswana and Beyond: Reflecting on 25 Years of Influence of Susan McIntosh's Pathways to Complexity

The publication of Susan McIntosh's Beyond Chiefdoms: Pathways to Complexity nearly 25 years ago recentered Africanist perspectives within comparative archaeological theory. In the oft-cited volume, McIntosh, along with thirteen African archaeological, anthropological, and historian colleagues, argues that models about social complexity derived from elsewhere do not encapsulate the historical trajectories of African societies, and that these provide substantive counterpoints for considering how we talk about the human past. This paper introduces a session about the influence of Beyond Chiefdoms on more than two generations of Africanist scholars, with contributions by researchers working across sub-Saharan Africa. This paper also discusses how the volume has challenged conceptions about Iron Age southern Africa, the connectedness and relative importance of the African interior, and how in Botswana and beyond we engage with topics such as power, heterarchy, and agency.

Gonzalo José Linares Matás

Conceptualising Pathways to Complexity in Mauritanian Prehistory

Assessing the formative pathways of prehistoric African polities contributes to a more holistic understanding of Africa's heritage, as well as towards expanding global debates on the nature, context, and manifestations of emergent patterns of socio-political complexity. The escarpments of southeastern Mauritania witnessed the emergence, consolidation, and transformations of social and architectural complexity at a scale hitherto unparalleled in West Africa. However, security concerns have prevented fieldwork in recent years. In this context, the availability of satellite imagery and the high detectability of stone-built features provide invaluable avenues for archaeological research. Here, I discuss the results of a comprehensive remote sensing survey documenting the prehistoric monumental funerary landscapes and settlement dynamics associated with the Tichitt Tradition, combining insights from the African Internal Frontier and the multi-scalar dynamics of complex adaptive systems. The archaeological record of southeastern Mauritania also illustrates how mobility and connectivity have constitute a recurrent survival strategy for agropastoral communities across the shifting and unstable frontier between the Saharan desert and the semi-arid grasslands of the Sahel. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50721

J. Cameron Monroe

"Beyond Cities: Rethinking the Urban-Rural Continuum in Atlantic West Africa"

Archaeology in West Africa has long focused on expansive precolonial cities, particularly those visible on the landscape in high relief. Inspired the pioneering work of Susan MacIntosh, archaeologists across the region have turned to the countryside to understand such urban communities within their broader regional landscapes. For forested regions, however, surveys have been hampered by the problem of identifying sites in a region characterized by dense vegetation, poor site preservation, and farming practices that generate low-density blankets of artifacts. Recent surveys conducted on Dahomean era sites in the Republic of Bénin adopted an artifact and feature-based approach to redress this issue. Patterns in the regional distribution of artifacts and settlement features provide a valuable perspective on the processes of urban settlement differentiation and the dynamics of settlement shifting, forcing us to rethink the nature of the urban-rural continuum in Atlantic West Africa.

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Session 2. Advances in African rock art studies // Avancées dans les études sur l'art rupestre africain

Stanley Ambrose

Maasai rock art and New Testament overpainting: Decolonizing contested traditions

Maasai warriors use rock shelters and caves near water for traditional meat feasting. Sites are often painted with battle shields and cattle brands. Enkapune Naudo on the Mara Plains in SW Kenya contains many shield designs and cattle brands. Beginning in 2016, numbered verses from the New Testament, warnings against slaughtering cattle, "no admission non-Christian", "no camping", "blood of Jesus" and Christian cross symbols were painted on the cave walls and entrance, some superimposed on Maasai paintings. Does contestation of traditional Maasai practices constitute perpetuation of Christian missionization from the colonial era for replacement of traditional culture and ethnic identities by national identities and western social, political, economic and educational practices? If so, can contemporary African Christian missionization by Africans be decolonized?

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Dawn Green

Grappling with personhood: hunters and ritual specialists in selected mountain San rock art, South Africa Certain San rock art research in southern Africa is grappling with notions of personhood and identity. With the influence from new ontologies and performative materialisms, equivalence between the experiences of ritual specialists and hunters in San ethnographies is suggested. Both ritual specialists and hunters establish relationships of reciprocity and obligation with antelope to provide for meat and fat. Further, both ritual specialists and hunters experience potency, a spiritual energy, and their close affinity with antelope can lead to antelope transformations. The implications are that certain San rock paintings may depict the experiences of hunters, not ritual specialists, or perhaps the concerns of both are emphasised with aspects of social conditioning. I examine certain ethnography and selected paintings to explore and grapple with the potential of distinguishing differences in how hunters and ritual specialists are depicted and their contexts. Multiplexity and context in paintings have important implications for understandings of personhood.

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Ahmed Hamdi

L'Art rupestre de l'Atlas saharien Algérien Djebel AmourRégion de Laghouat

En Algérie, l'art rupestre, c'est l'un des composants essentiels du patrimoine préhistorique, il se présente en abondance dans les régions de l'atlas et des massif centraux sahariens, cette contribution vise à présenter la région de Laghouat riche en patrimoine archéologique (toute période confondue). Cette région, est traversée par la chaîne montagneuse du Djebel Amour, qui est très prospère par sa diversité géologique et environnementale. Dès le début de l'holocène, l'homme a réalisé des œuvres artistiques, très exceptionnelles, qui expriment parfois le quotidien de l'homme préhistorique. La faune disparue de ces époques fut exprimée par des gravures avec une qualité artistique qui impressionne les chercheurs en raison de la facilité de la compréhension.

Les gravures que nous avons étudiées sont dans des états convergeant vers une dégradation qui menace leur existence. À cause aux lentes destructions de la nature, s'ajoutent à présent celles, beaucoup plus rapides de l'homme. De nombreux exemples de sites détruits par des tremblements de terre, le vent et les ruissellements, de graffiti modernes et d'actes de vandalisme stupides et gratuits, par l'utilisation du charbon ou du silex ont modifié le contenu de certaines gravures, pour cela la protection de ce patrimoine devenue une obligation à travers les compagnes de sensibilisation, de la population local ou les visiteurs avec l'aide des associations pour le maintien du patrimoine.

En conséquence, cette richesse mérite pourtant d'être mieux connue, non seulement pour sa valeur patrimoniale, mais aussi pour sa participation à un développement local durable s'appuyant sur un tourisme culturel. Elle mérite aussi d'être mieux protégée.

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Fatima Musa

A Tale of two rock art sites: An archaeological reflection on rock shelters in North East, Ghana

This research seeks to examine the archaeology of two rock art sites; one located between the villages of Jilik and Kambago and the other near Tusuk, along the Ghana-Togo border, all in the newly created North East Region of Ghana. These rock shelters have ancient paintings of anthropomorphic and zoomorphic motifs on their sides, and barns/granaries along the shelter space of Tusuk. Archaeological, ethnographic, and secondary data will allow an understanding and interpretation of the relationships between the excavated material culture and the rock paintings and between these sites. Archaeological data recovered from excavations will provide insights into the activities at the rock shelters including physiological and socioeconomic use of the spaces. Also, the excavated material will yield insights into the exploration and use of local environmental resources, patterns of behavioral and technological strategies to food storage in Tusuk. The barns/granaries constitute an integral part of domestic spacial organization for most prehistoric sites of North East Ghana, with significant gender and class implications

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Tesfaye Wondyifraw Tsegaye

Buahit Serit; A Newly Documented and Endangered Pastoral Rock Art Site in East Gojjam, Northwestern Ethiopia

This archaeological study reveals previously undocumented rock art along the Blue Nile on the walls of the Buahit Serit gorge in the East Gojjam Zone of the Amhara Regional State in Northwestern Ethiopia. Although Ethiopia has the largest number of documented rock art sites in the Horn of Africa, Buahit Serit is the first published rock art site in the Amhara Regional State. The Buahit Serit rock art is tentatively dated to the late Holocene (1000 BCE–1000 CE) based on comparison of the content and style of its paintings. The rock

paintings are composed of hunting, herding, and geometric representations. This study introduces the idea that some of the geometric designs may represent stylized headrest, which may connect the rock art to cultural continuity with living pastoralists. Today the Buahit Serit rock paintings, like many Ethiopian rock art sites, are endangered due to anthropogenic and natural causes.

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Session 3. Archaeological investigations of cities and polities // Enquêtes archéologiques sur les villes et les politiques

Aliyu Adamu Isa

Urban Space in Surame, Nigeria: dwelling and social identity

In the 1990s, research at Surame described the surface remains of wall building, two types of gate structures and the layout of compounds with mostly half public part in the west, and a more private section in the east, as a unique museum of Nigerian urbanism in the 16th and17th centuries. Subsequent review of surface finds suggested that the occupation of Surame was always not very dense or that it was more or less a ceremonial capital where kings often absent in defensive and offensive campaigns and inspection, visits. Recently, one among the layout of compounds known (in local folklore) as the 'citadel' was subjected to detailed excavation, where round stone structures apparently set around paved open courtyard, some of which held features including hearths and a cluster of pots, among other finds was revealed. The main thrust of this presentation is therefore a spatial interpretation of finds and its implication for dwelling and social identity in Surame.

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Joanna Ciesielska, Petrous Le Roux, Mary Lucas, Erin Scott, Patrick Roberts

Ethno-cultural landscape of Soba, the capital of the medieval kingdom of Alwa

The metropolis of Soba was the seat of a ruling family extending its authority over the immense reaches of the kingdom of Alwa (Sudan) for almost a thousand years (6th-15th c. CE). The city's location at the confluence of the White and Blue Niles placed it at the crossroads of major trading routes connecting vast reaches of north-eastern Africa, Mediterranean, and the Arab world. A bustling metropolis, its inhabitants were presumably a mosaic of cultures and ethnicities. During archaeological fieldwork in 2019, a small cemetery (ca. 11th c. CE) was uncovered in the northern part of the site. The heterogeneity in burial manner suggests cultural and religious diversity. Isotopic analysis of diet and mobility was applied to the investigation of population dynamics in medieval Soba. Results of research provide an important contribution to uncovering the socio-cultural realities of the medieval kingdom of Alwa and its entanglement within the population networks of north-eastern Africa.

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Carolina Cornax-Gómez

Change through coexistence: Archaeological study of the common grounds of the Medieval Horn of Africa Between the 13th to the 16th centuries, the Horn of Africa went through major transformations that marked the dynamics of this region. One of this transformations was the introduction of Islam through the Red Sea's trade circuits that linked the Horn of Africa with the rest of the world.

In this comunication, the aim is to analyse these changes through archaeology, studying the material culture, the conception and construction of the landscape, the hybridisation between pre-islamic and islamic elements, the maintenance of the sacred nature of some places from a time before the arrival of Islam, etc. Examine all these elements will not only provide an overview of the changes that this region of Africa underwent in medieval times, but will also enable us to understand it as a context in which there's no break with all that existed in the Horn of Africa before the Islam, but one that reflects changes but at the same time peaceful coexistence and even synergies between the two traditions.

Mariusz Drzewiecki

Spatial organization of Soba - precolonial metropolis on the Blue Nile

Soba is currently a part of the Khartoum agglomeration (central Sudan). This modern town in medieval times was the capital of the Kingdom of Alwa. The metropolis developed as a large and open urban settlement in the 5th/6th century CE. The city underwent a significant rearrangement around the 9th century and was abandoned in the 12th–13th century. Until the 1980s the ruins were sparsely inhabited. The remains of the city cover approx. 275ha. It is one of the largest archaeological sites in Sudan.

The team led by the author conducted archaeological, geophysical and ethnological research in 2019–2022 aiming to understand the spatial organization of the medieval city. Field research revealed well-preserved remains dated to the city's both phases as well as numerous small finds and organic materials. A hypothesis has been formulated that Soba started to develop as a polycentric city and in c. 9th century it has been reorganised to become a nucleated settlement.

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Barpougouni Mardjoua, Olivier Gosselain, Didier N'dah

Recherches archéologiques dans le caravansérail de Nikki (Nord-Bénin) : résultats de la première campagne et perspectives de recherche sur l'histoire du commerce caravanier en Afrique de l'Ouest

Avant l'essor du commerce maritime intercontinental, à partir du XVIème siècle, le commerce en Afrique de l'Ouest se faisait principalement par des voies terrestres. Connectant l'Afrique subsaharienne à l'Eurasie via l'Afrique du Nord, les routes commerciales traversaient plusieurs entités politiques via un réseau d'étapes secondaires et de villes-entrepôts, ces dernières, désignées comme « caravansérails » ou « zongo », c'est-àdire quartiers des « étrangers » fortement islamisés, comptent aujourd'hui parmi les principaux témoins matériels de ce commerce. Dans les villes caravanières, les commerçants avaient pour principales activités l'enseignement de la religion musulmane, le commerce, bien sûr, et certains artisanats. Ils sont identifiés par plusieurs ethnonymes selon les régions d'Afrique de l'Ouest : Wangara en pays hausa et au Nord-Bénin, Yarsé en pays Mossi dans l'actuel Burkina Faso, Dioula ou Sénoufo en Côte d'Ivoire. Ces régions avaient la réputation de fournir des produits spécifiques tels que l'or, la kola, le sel, les esclaves et les tissus. Au Bénin, les exemples de villes-entrepôts sont légion, particulièrement dans la partie septentrionale du pays. Les plus célèbres sont Nikki, Kandi, Parakou, Pèrèrè et Banikoara en pays baatonu ainsi que Djougou en pays yom. Ciblée dans le cadre de notre recherche postdoctorale, la ville-entrepôt de Nikki, connue sous le toponyme de « Nikki-Marou » ou le « caravansérail » Nikki, bénéficie de ses premières investigations archéologiques, centrées autour de la recherche documentaire et archivistique, les enquêtes orales et les travaux archéologiques dont les résultats obtenus font l'objet la présente communication. A la lumière de ceux-ci, des perspectives de recherche sont dégagées pour une recherche plus ambitieuse sur le commerce caravanier en Afrique de l'Ouest qui associerait des collègues du Nigeria, du Bénin, du Togo, du Ghana et de la Côte d'Ivoire, chacun appliquant un même protocole de recherche dans sa zone d'étude.

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Carlos Magnavita, Zakinet Dangbet, Tchago Bouimon

Tié: Kanem-Borno's first Islamic capital Njimi rediscovered

One of the most enigmatic topics in African historiography and archaeology relates to the yet unknown early capitals of the largest West and Central African pre-colonial states. Except for Gao, the famous capital of the Kawkaw and Songhay kingdoms, none of the early capitals of ancient Ghana, Mali and Kanem-Borno have been thus far confidently identified on the ground.

In the case of Kanem-Borno, both external and internal historical accounts refer to the existence of two early capitals, a pre-Islamic called Manan and an Islamic known as *Njimi*. Recent fieldwork carried out in the Chadian region of Kanem, where those two important places are supposed to have been once located, has very probably identified Njimi (12th-14th centuries). This paper presents the archaeological evidence supporting this suggestion and provides possible explanations as to why the early capitals of other African pre-colonial states have been so hard to find.

Artur Obluski, Agata Deptula

Tungul the Afropolis. The biography of an African capital city.

The paper narrates the biography of Tungul (Old Dongola), the capital of Makuria, an important medieval African state. The biographical approach, combined with new archaeometric methods, allows us to look at the settlement from a new perspective: identify research gaps and challenge paradigms. It presents results of the "UMMA. Urban Metamorphosis of the community of a Medieval African capital city" project funded by the European Research Council (ERC). The central point of the analyses is urban space and household. The presentation breaks away from the practice of archaeology of the elites, which dominates in research on Nile Valley cultures. It builds not on the changes on elite level which are usually quick but often superficial but on a household level which indicate the social extent, depth and intensity of transition. It discusses if and how the urban layout and household mirror religious changes of the community: the survival of Christian traditions and the encroachment of Islam between 14th and 19th century.

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Dilpreet Singh

Reconstructing Burial Rites and Post-Mortem Processing at Ancient Aksum (50-400 AD)

This paper presents bioarchaeological and histological research reconstructing the death rites of ancient Aksum's Stelae Park cemetery (50-400 AD). The Stela Park was once the primary cemetery of the ancient Aksumite polity and home to numerous monumental stelae. The Stelae Park is one of the best excavated features in African archaeology and has revealed much about Aksumite experiences of inequality and monumentality. However, the social and ritual dimensions of the ancient funerary culture have always seemed just beyond reach. To better investigate ancient Aksumite death rites, multiple bioarchaeology analyses were conducted on previously excavated human remains from the Stelae Park tombs. This paper will specifically focus on reconstructing the sequence of burial and post-mortem processing of Aksumite skeletons through analyses of micro-CT histological data and cutmark distribution. Together, these data provide new insights into the mortuary practices of ancient Aksum.

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Sidy Ndour

Espaces symboliques, cultuels et pouvoir politique à Lambaye et ses environs (1500-1800).

Thème : Espaces symboliques, cultuels et pouvoir politique à Lambaye et ses environs (1500-1800). L'organisation des structures politiques précoloniales africaines est souvent liée à la nature du pouvoir ellemême (McIntosh 1999 : 21-23). Dans cette forme d'organisation, les espaces symboliques, cultuels jouent un rôle important dans la négociation du pouvoir (Baum 1999; Fennell 2003 : 117-118). Ainsi, la combinaison entre le symbolisme et les religions du terroir ont contribué à l'essor et à la consolidation du pouvoir politique au Madagascar (Susan Kus et Victor Raharijaona 2000 : 101). En Sénégambie septentrionale, les royaumes historiques comme le Baol a émergé à partir du XVI^e et a connu un essor soutenu jusqu'à la fin XIX^e siècle. Quelle est la nature du pouvoir au Baol? Quel est l'apport du symbole dans l'organisation et la légitimation du pouvoir politique à Lambaye? Quel est l'apport du cultuel dans la médiation sociale au Baol? Pour étudier ces questions, notre communication examine le lien entre la nature du pouvoir et les transformations des espaces symboliques et cultuels au Baol, particulièrement à Lambaye entre le XVI^e siècle et le XIX^e siècle. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56928

Session 4. Archeology in Zambia: New and Ongoing Work // Archéologie en Zambie: travaux nouveaux et en cours

Larry Barham

Looking Back, Looking Forward

My post-PhD research career began in Zambia in 1993 at the site of Mumbwa Caves. The past 30 years have brought significant changes to the country notably the return of multiparty politics and ongoing economic

development. A renewal has also been underway in archaeological research with increasing cooperation between international teams and Zambian researchers. Against this background of change, my research interests have broadened geographically (e.g. Luangwa Valley, Kalambo Falls, Victoria Falls) and thematically (e.g. Early to Middle Stone Age transition; a genetic population history of the BaTwa; bark-cloth making an endangered material culture). I will touch briefly on these projects and highlight areas and themes for future collaborative research. Mumbwa Caves, in particular, warrants re-investigation as a regionally significant site for its deeply stratified deposits with organic preservation. The deposits still have much to offer to a new generation of researchers.

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Jeremy Farr

A longue durée analysis of food regimes in Zambia: Ancient climate resilience, colonial disruptions and the rejuvenation of relict crops

A longue durée analysis of farming practices in Zambia over the past 1500 years indicates farmers used drought-resilient cereals, sorghum, pearl millet, and finger millet, to maintain food security. Banana, casava, and sweet potato, were also adopted through connections with the Indian Ocean world system (1000 BP) and the Columbian Exchange (500 BP). The policies of the British Empire in the early 20th century see a shift in political ecology: prime lands were reserved for white plantations; and cash crops such as maize were promoted to facilitate time for wage labour and promote exports. Over the past 30 years the frequency of droughts have led to declines in maize yields creating price spirals resulting in widespread malnutrition. Data from archaeology, ethnobotany, and history demonstrates the resilience of past food systems. Interventions of the British Empire, and subsequent actions of international development agencies, have had a negative impact on food sovereignty in Zambia.

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Steven Goldstein, Jeremy Farr, Anneke Janzen, Andrea Kay, Nicole Boivin

Reevaluation of the chronology and structure for the spread of food production in Zambia

The spread of pastoralism and plant-agriculture across sub-Saharan Africa had profound consequences on regional economic, linguistic, and cultural trajectories. Despite this, basic data regarding when, where and how forms of food production became established remains sparse in many places. One such major data gap is Zambia- which likely served as an important transition zone for food production strategies as peoples moved from central and eastern Africa southward. Present hypotheses suggest this process involved an initial spread of mobile herders followed by waves of Bantu-speaking agropastoralists ~2000 BP. To test these models, we report subsistence data and radiocarbon dating of new excavations at known early food production sites in Zambia. We demonstrate food production likely appears centuries later than previously thought and foodways-while regionally distinct- maintained significant reliance on wild resources.

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Evin Grody

Crafting Animals: Assessing Animal Use in the Zambian Iron Age

Animal processing practices highlight the interdependence and interactions of ostensibly disparate crafts, when the metal butchery knife meets the hunted or herded animal flesh bound for the ceramic cooking vessel. This project utilises that unique way animals are positioned to bring such multi-craft conversations together. It examines how understanding the labour, technology, and knowledge invested in and around animal use may shed light on a wide array of economic, technological, and sociopolitical developments seen during the mid-first through mid-second millennium CE in Southern and South-Central Africa. Using a selection of Zambian Iron Age sites, this paper discusses how coupling fine-scale analysis of animal use and processing within craft production frameworks can help us understand the complex interactions between humans, animals, technology, and craft during this period of widespread change and local variation. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52817

Martha Kayuni, Noel Amano

Human-Animal Interactions in Later Stone Age -Iron Age Zambia: Insights from Thandwe and Nachikufu Caves The LSA-Iron Age transition in Southern Central Africa, and in Zambia specifically, is assumed/known to have been characterized by the arrival of herding/farming populations with some form of social organisation and distinct archaeological signatures, including, stone tools, knowledge of iron technology, herding, farming, permanent settlements, style pottery, social-politically organized societies and defined burial places. In terms of subsistence economy there is evidence for cultivation of plants, as evidenced by millets and sorghum seeds recovered from sites and the switch from mainly hunting and gathering to herding and animal husbandry. But recent studies showed that wild animals were still an integral part of the subsistence, with wild bovids and antelopes in several sites, in the Iron Age. Here we expand on the available information on LSA-Iron Age subsistence patterns by looking at faunal remains from two sites in the Northern and Eastern region. We apply zooarchaeological, taphonomic, and zooarchaeology by Mass Spectrometry approaches to analyze faunal remains recovered from excavations in Thandwe and Nachikufu Caves. Our preliminary results suggest the high abundance of wild animals in the iron age assemblage, including reptiles and fish with evidence of human modification. We discuss our results in the greater framework of human-animal interactions, considering rock art evidence presumably dating from the same period.

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Zachary McKeeby, Kenneth Luhila, Namunji Samuel Namunji

Iron production in the Machile Valley: 1000 years of variation and innovation in socio-technical practice. Decades of research on iron production in South-Central Africa has emphasized the myriad of ways that iron smelting and smithing often formed fundamental political, economic, and technological institutions throughout much of the region. The specific socio-technical decisions employed during production, as well as ways that iron production practices shaped local and regional political economies are, however, always historically specific and culturally mediated. This paper brings together historical, ethnographic, metallurgical, archaeological, and geophysical data to detail dramatic and non-uniform spatial, social, and technical variations in smelting and smithing practices over the past 1000 years in the Machile Valley, Zambia. The research shows that socio-technical practices relating to iron production such as furnace design and the spatial organization of production fluctuated independent of one another through time, disappearing and reappearing in new configurations, indicating that beliefs, practices, ideas, and norms around the production of iron were not immutable. Rather, these practices were subject to innovation, borrowing, and renegotiation as communities shifted and came into contact with one another. Putting variation in iron production practices into a broader historical and regional context paints an evocative historical narrative of changes in iron production in Machile through time. That these variations and innovations in practice occur within a physical space of only ~40 km underscores the nuance that emerges from such locally-focused research, and hints at the region's place in broader historical trends in South-Central Africa.

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Matthew Pawlowicz, Kathryn de Luna, Jeffrey Fleisher

Historical Linguistics and Archaeology in Concert: Report on Recent Research from the Bantu Mobility Project, Central Zambia

This paper discusses recent results from the Bantu Mobility Project in central Zambia, a multidisciplinary approach exploring the mobilities of Bantu-speakers as their language became dominant in a new place. Across multiple field seasons, beginning in 2014 and resuming in 2022 after a pandemic-related pause, the project has intensively investigated the area around two Iron Age mound sites, Basanga and Mwanamaimpa, and studied the Botatwe languages that the inhabitants of that area would have spoken. The variety of work completed in that time – including substantial excavations at multiple mounds, systematic archaeological survey, geoarchaeological, archaeobotanical, zooarchaeological, and isotopic analyses, and the collection of a substantial linguistic and ethnohistorical record – has produced a number of important findings about the lives of those inhabiting this part of south-central Africa and how those lives implicated broader trends of the Bantu Expansions, as we will detail.

Session 5. Ceramics and craft production // Céramiques et production artisanale

Abdulmalik Abdulrahman Abdulmalik

West African Pottery and it's Autochthonous: A Report of Pottery Analysis from Zigam, Nigeria. Abstract

Pottery is one of the most common material culture in most historic sites across the West- Africa Region. This is one of the most durable material cultures in archaeological deposits as it can withstand varieties of conditions such as acidic soil, weathering and relative humidity as the case may be. In a quest for the origin of pottery in the West Africa region and a contribution to many investigations with this motif, 'Zigam settlement' (one of the oldest settlements in Ganjuwa Local Government Area, Bauchi State) from North-eastern Nigeria, was chosen as a case study. This settlement comprises three sections, demarcated with compound walls and each section was characterized by material remains with potsherds inclusive. Twelve samples of potsherds out of 220 total number of potsherds collected from Zigam settlement were subjected to thin-section analysis, alongside a sample of clay from the claimed source from Zigam settlement. This paper is a product of laboratory investigation on the samples as to interrogate the relationship between the material culture and the raw materials deposited across the settlement. This paper presents the results of these analyses and suggested that the potsherds from the settlement were indigenous to the settlement where they were sourced.

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Elizabeth Adeyemo

Investigating Craft Production in Igbo Ukwu: Pathways for West African Archaeology

Igbo Ukwu (9th-12th century CE) in Anambra, South Eastern Nigeria is famed for its material remains recovered from excavations conducted by the archaeological team led by the Late Prof. Thurstan Shaw between 1959 and 1964. This paper presents data from the chemical analyses of archaeological ceramics across the three excavated areas, Igbo Isaiah, Igbo Richard, and Igbo Jonah situated within the broader historiography of Igbo Ukwu in antiquity. Using data from the archival studies of the 1959-1964 archaeological excavations, this paper also investigates changes in the macroscopic features of the ceramic assemblage through 400 years of Igbo Ukwu's history, which evidence significant investment in time and resources by the craft producers. This research further situates the Igbo Ukwu ceramic industry within a broader community of practice highlighting connections between craft industries in the ancient Igbo Ukwu society. This paper contributes to the growing body of knowledge about Igbo Ukwu, and advances comparative studies of craft connectedness in West African societies.

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Jacques Aymeric-Nsangou, Denis Genequand, Wazi Apoh

Every Room Matters: A Preliminary Study of Archaeological Pottery Found in Old Buipe (Ghana)

Since 2015, the Gonja Archaeological Project has been excavating Old Buipe, the capital of one of the Gonja chieftaincies, a polity created in the 16th century in the Northern part of present-day Ghana. These excavations allowed the discovery of several large structures made of cob and dated between the early 15th and the late 18th century CE. Moreover, an important collection of ceramics has been found inside many of the rooms unearthed in the different compounds. Some pots of this collection are entire and seem to have been found in their first depositional situation. The study of this ceramic collection aims to establish a typo-chronology and change in pottery manufacturing from the early occupation of Old Buipe. It will also try to understand the room's function in connection with the pottery found there. The main objective of this paper is to present the first results of this study through the morpho-typological, and stylistic analysis of a part of the ceramic collection excavated.<u>https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51072</u>

Céline Cervera, Sabine Klein, Nima Nezafati, Louis Champion, Patricia Chiquet, Eric Huysecom, Anne Mayor The use of clay in the medieval occupation of Djoutoubaya (Eastern Senegal): mudbricks, crucibles and ceramic vessels

Located in the Falémé Valley (Eastern Senegal), the site of Djoutoubaya is a settlement excavated since 2016 by the laboratory "Archéologie et Peuplement de l'Afrique" of the University of Geneva. Its occupation is divided in four phases which occur between the 9th and the 14th century AD, a period which sees the transition between the Empires of Ghana and Mali. Beside its size, the main interests of the site stand in the discovery of buildings in mudbricks dated back to the 12th c. AD, and the possibility of an in situ processing of non-ferrous metals such as gold and/or copper. One of the aims of our research is to understand the context of the appearance of these technologies during the occupation of the site, particularly through the chronoseriation of ceramic production, but also in the context of the Falémé Valley, an area well known for its gold resources during the historical times, and in the broader context of exchange networks in medieval West Africa.

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Per Ditlef Frediksen

Uproot recipes: An archaeology of creative knowledge and memory-making in southern Africa

What happens to the knowledge of craftspeople and their daily material practices in the aftermath of disruption and uproot? Using a temporally layered approach, this paper draws on three examples of problemsolving in the aftermath of involuntary relocation in southern Africa. Contexts of turbulence, stress and extraordinary mobility, in which violent factors set people, objects and materials in motion, often cause challenges to artisans' work – and may result in disruption or even discontinuation. However, craftspeople also tend to find creative means to express resistance or connectivity. A combination of contemporary and deeper-time cases offers several lenses through which to view ways of engaging with new materials, knowledges and networks. I outline an approach to technological knowledge and skills that centres on the creativity of ceramic learning networks, the vulnerability of homes and households as arenas for knowledge transmission, and craftwork as memory-making.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54217

John Kinahan

Social networks among Namib Desert nomads: isotopic signatures of recent pottery assemblages

Among Namib Desert pastoralists pottery was used in the exploitation of wild plant foods which ensured a degree of food security and complemented herd production. This involved lengthy expeditions to remote parts of the desert by groups of women, leaving a distinct archaeological signature. The pottery shows very little stylistic diversity and no evidence of defined local styles. Attribute analysis of whole vessels shows that all style combinations are present in all large assemblages of 50 or more vessels. Strontium (87/86 Sr) isotope ratios were used to generate a provisional isoscape which exhibited a high degree of variability, and several identifiable local anomalies. Strontium ratios for pottery were similarly variable, confirming that there was indeed movement and mixing of pottery. Neodymium (143/144 Nd) and three lead isotope ratios (206/204Pb, 207/204Pb and 208/204Pb) further confirm this and suggest that pottery was exchanged across the desert via extended social networks.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50713

Annissa Malvoisin

Scales, Daisies, Diamonds: Ceramic Distinctions from the Meroitic Period

The African Iron Age was a period of vast commerce which spanned regions and continents. During this period, the African continent and its surrounding continental regions entered the First Commercial Revolution (ca. 1000 BCE – 300 CE) (Ehret, 2016) where Nubia during its Meroitic period was surrounded by a great means of travel, both by land and sea. The material culture of this period reflects iconographical convergence that disrupts the view of the Sahara as an opaque barrier and suggests a more liberal movement of people, ideas, and things between "boundaries". This paper will ask questions of connection based on ceramic typologies and decorations dominant in Meroitic Nubia (ca. 343 BCE – 350 CE) that parallel typologies being produced during the same period in Mali, Nigeria, and Libya (African Iron Age, ca. 200 BCE – 1000 CE). The

presentation will investigate ideas, tastes, trends, and social context in order to create analyses based on particular decorative styles.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52970

Christoph Nitsche, Chantal Radimilahy, Guido Schreurs, Sylvain Velomora, Vincent Serneels **Revisiting the Softstone Quarries of Northern Madagascar: Résumé and Outlook**

Between 2017 and 2022, four research missions were conducted in northern Madagascar with the aim of studying the enigmatic softstone quarries that were operated by the Islamised Rasikajy population to produce lathe-turned tripod vessels up until the 16th century CE. In the course of this project, over 30 quarries - many of them previously unknown to the scientific community - were visited and documented. The survey allowed a detailed look into the production line of the quarries, which is very similar throughout the sites. However, local differences were still observed and suggest that while the vessel production followed a common technological tradition, it can not be considered as a standardised procedure. A unique feature of the production line is the use of an iron bar for the shaping of preforms, which has not been recorded elsewhere in the world and highlights the particularity of this Malagasy tradition.

In an attempt to refine the knowledge on the typology of finished vessels, different stylistic groups of Malagasy softstone vesselswere distinguished for the first time. In addition to the remarkable tripod vessels that were produced in the studied quarries, a second group of feet-less bowls made from talc schist was identified. This group, which was most likely produced in a second and older quarry zone south of the Bay of Antongil, is a rare find in the Malagasy archaeological record, but dominates the softstone inventory of Démbeni, an important trading port on Mayotte that was active in the late first millennium CE. The results from this study largely expand the history of softstone exploitation in northern Madagascar, from the identification of a second important extraction zone to the assessment of technological transfer from and within Madagascar. The tradition of softstone vessel production appears to be under a strong influence from the Middle East, where this material is in use since millennia, but the particularities of the Malagasy approach suggest that it developed with other inputs from the cultural realm of the Indian Ocean world. This paper aims to summarize these recent findings and provide an outlook into future research possibilities. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50671

Cezary Szymanski

In the shadow of tumuli: A first pottery sequence for Mbacké in central-west Senegal

The region of Mbacké is known in archaeology to this day mainly for its monumental tumuli. However, the other archaeological traces are difficult to recognise, mostly as a result of today's intensive agriculture. Although earlier surveys already gave a first impression of the pottery of this site, for a long time there was neither an exact typological nor chronological classification of this material due to scarcity of data. The recent excavations at Thiékène in the vicinity of Mbacké in 2019 and 2020 unearthed a considerable amount of pottery, which, formed the basis for establishing an initial chronological and typological sequence of forms and decorations. The analysis proves a clear temporal variability of the material spanning a period of about 1000 years, between the mid-first and mid-second millennium AD. The results indicate also a possible parallel occurrence of similar ceramic types between Mbacké and the Middle Senegal Valley in the second half of the first millennium AD.

Philip de Barros

Distinguishing Early & Later Iron Age Cultures of Bassar (Togo) using Mortuary Patterns and Ceramics Early excavations at the Early Iron Age (EIA, 400 BCE – 130 CE) site of Dekpassanware suggested its culture differed from the LIA Bassar in terms of technology, ceramics, and mortuary patterns. Recent excavations and ethnographic studies of Bassar mortuary patterns confirmed this. Petrographic analyses indicate the dominant Bright Mica Ware was made from clays containing plagioclase feldspar from the Kabiyè Complex 40 km to the NE. Vessel form and decorative attributes resemble those of present-day Kabiyè wares. Bassar mortuary patterns are characterized by individual tombs oriented N-S with adults and children buried in separate cemeteries without grave goods. The EIA cemetery consists of adults, juveniles, and children buried together, usually oriented E-W, with frequent use of iron bracelets, and sometimes carnelian beads, as grave goods. Burials are frequently disturbed with missing body parts and/or co-mingled bones from different individuals. Infants were sometimes buried in large bowls. Bassar, Early & Later Iron Ages, culture, ethnography, mortuary patterns, ceramics

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Session 6. Community archaeology and heritage management: monuments, museums and collaborative projects // Archéologie communautaire et gestion du patrimoine : monuments, musées, et projets collaboratifs

Mark Seyram Amenyo-Xa

Footprints of imperialism: The classical monuments of Fort Metal Cross, Ghana

This paper focuses on Fort Metal Cross, a component of the forts and castles of Ghana. By employing ground surveys, photography, interviews and analysis of textual data, the paper highlights and problematizes the classicisation of the precincts of the fort with ancient Greek-styled monuments and landscape. The physical fabric of the fort itself has been altered in ways that appear to water down the forts associated trans-Atlantic slave trade history and the sentiments attached to it. As a component of the forts and castles world heritage site, physical developments within its precincts have not only obliterated the archaeology of the site but have also been unsympathetic to the history and character of the fort. The paper concludes that the transformations at Fort Metal Cross are motivated by imperialism, an affront to the sacrosanctity of spirit and feelings associated with the site, and a blot on an already fragile world heritage status of the forts and castles of Ghana in general.

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Aka Adjo BEBEWOU

Stratégies de sauvegarde et de valorisation du patrimoine culturel colonial allemand au Togo

Cette démarche se veut de contribuer à la promotion de la culture et du tourisme togolais à travers les mémoires. Il est question des faits historiques de plus en plus proches des réalistes sur des sociétés délaissées en friche, notamment de l'héritage de l'époque coloniale. Ces sites méritent d'être entretenus, protégés, sauvegardés et inscrits sur la liste du patrimoine culturel togolais, pour leurs valeurs historiques, culturelles et économiques. C'est un phénomène dit de patrimonialisation qu'on remarque dans le monde entier. Il doit être effectif aussi dans notre pays pour booster le développement culturel et socioculturel. En dehors de la méthode qualitative cette étude s'appuie sur des données écrites, orales et iconographiques. Le Togo, à l'instar de la plupart de ces territoires colonisés, possède un énorme patrimoine culturel, hérité des époques coloniales allemande (1884-1914).

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Tomomi Fushiya

Excavating history: collaborative archaeology from experiences of excavation workers at Old Dongola Since the time archaeology in Sudan began in the nineteenth century, many Sudanese people have participated in excavations of archaeological sites and contributed to revealing the history of their locality and country. While acknowledgements of their contribution to excavation have long been reduced to simple labor without names, recent critical reflections on the history archaeology in Africa has pointed out the need of appropriate acknowledgement of workers (Shepard 2003; Doyon 2015; Ndlovu 2016).

Further, their experiences of participation in excavations provide important insights into how they consider archaeology, local history and heritage. Understanding their experiences and perspectives could show a way to reduce the effect of imbalanced power structure in archaeology. Drawing on interviews with excavation workers, local residents and archaeologists at Old Dongola, this paper explores an approach towards collaborative archaeology in Sudan.

Ezzeldin Hajjaj, Isabelle Vella Gregory

Voices from a remote mountain: The heritage of Jebel Moya (Sudan)

"The Mountain of Water is dry," so say the people of Jebel Moya. How do we tell the story of a complex site? We argue for a Community Museum as a means to create a powerful & productive space to address some of these issues. Unlike western museums this isn't a fixed space & gives primacy to human experience over objects. Such spaces across Sudan can encourage engagement with heritage, provide an additional route to education especially in rural areas & encourage multivocality. Hajjaj's Western Sudan Project takes heritage as a starting point & a civic platform for a broader role in peaceful resolutions. The Museum is also a platform for education & can provide revenue to communities via sustainable tourism. Focusing on Jebel Moya & the local community's historic exclusion, we argue this approach can be applied more broadly. This museum is built on adaptibility and flexibility & plays a role in the inter-connectedness of social groups in a country recovering from conflict.

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Fernando Ligue Engamba, Armand Ndewe

Premiers résultats des recherches archéologiques sur le permis du projet minier Akom II (Sud-Cameroun)

Ressource non renouvelable, le patrimoine archéologique est un élément important pour la restitution de l'histoire d'une société et sa gestion dans le cadre des grands projets d'infrastructures représente une préoccupation majeure pour les professionnels. Cet article présente les premiers résultats d'investigation sur les données de terrain prélevées dans le Sud-Cameroun. Pendant les travaux, les artefacts se trouvent souvent menacés, rares sont ceux qui sont encore intactes à cause de l'influence des travaux. Pourtant, ces vestiges nécessitent une étude afin de restituer la dynamique des cultures matérielles. Cette recherche concentre son analyse sur l'approche archéologique, associée à l'exploitation des sources orales et écrites. Les résultats viennent enrichir nos connaissances sur les activités des populations qui ont occupé cet espace et permet ainsi de formuler des hypothèses sur le peuplement ancien de la région.

Mots clés : Projet minier, archéologie, premiers résultats, Akom

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56933

Berta Macamo, Miguel Raimundo, Paul Lane, Silva Mazuze, Solange Macamo

Stimulating retailing business for heritage preservation: community social and economic benefits in the Xai-Xai and Chongoene beach areas, Gaza Province, Mozambique.

The Chongoene and Xai-Xai beach areas in Gaza province, southern Mozambique, are well-known tourist attractions. The developed tourism type depends heavily on privately owned hotels and self-catering accommodation, which also restricts access to coastal resources by most of the local population, particularly the communities living on the coast. Despite the many efforts dedicated to shellfish collection, these communities are impoverished, and women are often forced to sell what they gather in markets far from where they reside.

To transform local livelihoods while protecting cultural and natural marine heritage resources and assets, a Heritage Park has been established in the area. This paper outlines our conceptualization of a cultural market for the Park that is aligned with community tourism to generate income and job opportunities. The paper will first introduce an approach to marine heritage conservation developed within the Rising from the Depths program before going on to discuss how retailing businesses can be transformative in the household economies of coastal communities if organized using the existing marine resources that are part of their heritage. We also outline our methodology and community consultation process during the project design and planning process, outreach, and summarise the different project outputs for the intended users. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56975

Said Mohammed, Heba Khairy Metwaly

Digitization and the Collection Sustainability: Overview of the Grand Egyptian Museum Project, Egypt

Digitization has become an increasing trend in museums, transforming the whole concept of such institutions. So, it fundamentally alters the way we think about museums. Culture and technology are intertwined. Whereas, museums have a large societal impact as they provide an essential sociocultural role through wideranging exhibitions. Therefore, museums must be sustainable to enable continuous operations conveniently. Egyptian cultural materials are spread across all of Egypt and managed by hundreds of museums. GEM is considered one of the cultural enlightenment projects where Egyptian heritage truly meets the latest technological innovations. The task of digitization is a common challenge for all these museums. Digital sustainability and digitization in Egyptian museums are constrained by limited knowledge capacity, fundraising resources, and ICT infrastructure. This study focuses on the efforts and projects to create and sustain the digital transformation of the museum collection in the Grand Egyptian Museum project. Through an in-depth systematic analysis of the available literature, this study will be able to accomplish its goal. The report examines GEM's most recent technology to preserve the collections.

The study finds that; faced with these constraints, the Grand Egyptian Museum has addressed these challenges with an interdisciplinary approach through collaborative planning, management, digitization, and digital presentation of its collections. The study recommends a useful digitization strategy map for enhancing museums' sustainability through digitization.

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Catherine Namono

Bonwa ka Kgopa: a community-driven collaboration to conserve Northern Sotho earthen vernacular built heritage in the Makgabeng, South Africa

Bonwa ka Kgopa (BKKP) is a collaborative project between researchers and the Makgabeng community, attempts to conserve Northern Sotho earthen vernacular built heritage in South Africa. BKKP interrogated understandings of craft technologies and structures using vernacular materials and associated symbolism and techniques. BKKP enabled the transfer of indigenous knowledge and skills, empowered the community, and provided Northern Sotho homes for the benefit of the members of Makgabeng community. Globally, and in Africa especially, modernity is threatening the versatility and resilience of earthen vernacular built heritage. The socio-economic status associated with brick walls, metal sheet/tile roofing structures forments a perception that indigenous structures are old fashioned and stagnant. Some of the Makgabeng community sought to conserve and retain earthen vernacular built heritage values through documentation of craft technology, materials and values integrated in the construction processes so as to understand the resilience of these built forms. Thus BKKP provided an opportunity to renew, refresh, and reinvigorate indigenous knowledge, traditions of earthen vernacular built heritage and earth consciousness. BKKP is an example of how community empowerment at all levels is a powerful driver for heritage conservation. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54236

Ines Raimundo, Elena Skosey-LaLonde, Belisário Cau, Varsil Cossa

Developing a model for coastal ecosystem monitoring: the cultural market project, Gaza Province, Mozambique

in Gaza Province, along the southern coast of Mozambique. This park is unique in the country as it seeks to combine the conservation and protection of both coastal archaeology and coastal and marine ecosystems from a biocultural perspective in an area commonly affected by environmental disasters in the form of cyclones. Furthermore, the area encompassed by the Heritage Park is known to be a primary source of income for coastal communities who have traditionally collected the mussels and clams from the inter-tidal regions, caught reef fish and shrimp immediately offshore and gathered 'wild' fruits, such as tindzole, in the Chongoene and Xai-Xai Beach areas. The shells and the seeds of tindzole are also assets as communities use these for craft objects that they can sell to tourists. The sustainability of the project will require a monitoring process, as a way for communities, researchers, and stakeholders to verify the extent to which the park is succeeding in its efforts at biocultural heritage preservation while also guaranteeing livelihoods for local people. The monitoring model is based on giving the tools of how to 'control' and guarantee that resources are not depleted and are used correctly by local stakeholders. To enhance income generation while also protecting against resource depletion, Heritage Park envisages establishing a Cultural Products Market on site. Keywords: Ecosystems, Cultural Market, Coastal Zoning, Demographic Profile, Monitoring, Community Benefits.

Foniyama Élise Thiombiano Ilboudo, Hélène Timpoko Kienon Kaboré

ARCHEOLOGIE EN ZONE INTERDITE EN AFRIQUE DE L'OUEST : CAS DE FADA GURMA AU BURKINA-FASO ET DE LA ZONE NORD DE LA COTE D'IVOIRE.

L'Afrique de l'Ouest depuis les périodes précoloniales est sujette à de grosses crises de diverses natures. De nos jours, l'Afrique de l'Ouest en particulier est enclin à des crises sécuritaires importantes dans plusieurs pays de sa zone, dont le Burkina Faso avec la recrudescence des coups d'Etats et le terrorisme et la Côte d'Ivoire à travers la crise politico-militaire de 2002 à 2011.

L'Archéologie étant une discipline de terrain, elle est profondément impactée par ces crises au niveau de la recherche, de la protection des sites sur le terrain avec des pillages et aussi par la désorganisation des Etats qui ne permettent plus aux différentes sociétés de suivre les lois et procédure de l'approche du patrimoine archéologique.

Au Burkina-Faso, au cours d'une mission d'enseignement à l'Université de Fada N'Gourma dans la région de l'est à Fada N'Gourma, une prospection archéologique a été réalisée le long des berges du barrage qui traverse la ville d'est en ouest. 75 sites archéologiques, essentiellement des sites métallurgiques ont été découverts. Ils présentent à travers les vestiges en présence et notammen

En Côte d'Ivoire, la crise politico-militaire de 2002 à 2011 a aussi montré la conséquence de l'insécurité sur l'archéologie. La crise de 2002 à 2011 a non seulement ralenti la recherche sur cette partie, mais aussi à une certaine période, elle s'est arrêtée. Il a fallu repenser les stratégies de recherche afin de nous adapter à la nouvelle donne, en nous concentrant sur la zone méridionale difficile d'accès. quelles problématiques liées à la recherche archéologique dans ce contexte.

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Gninin Aïcha Touré, Mitanhantcha Yeo

Fouilles archéologiques et croyances en Côte d'Ivoire

L'archéologie, en tant que science qui écrit l'histoire des civilisations à partir de leurs cultures matérielles, fait des vestiges, son principal outil. A l'image du feuilletage des pages d'un livre, l'archéologue décape le sol en lisant les pages du passé. Il arrive toutefois que cette pratique se butte à certaines considérations. En effet, pour bien de communautés africaines, les sites archéologiques sont des réceptacles de valeurs culturelles qu'elles ont héritées et qu'elles se doivent de transmettre aux futures générations. Ces sites sont de faits craints et protégés. Or, la fouille étant par essence destructrice et généralement mise en œuvre par des allogènes, elle est vite perçue par les communautés comme un sacrilège. Aux vues de tout cela, nous nous proposons de faire ressortir les obstacles auxquelles les archéologues ivoiriens sont confrontés lors des travaux de fouilles dans le nord de la Côte d'Ivoire à partir de la documentation et des expériences vécues sur le terrain.

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Justine Van Heerden

Assessing the effectiveness and impact of an interactive, travelling museum

Accessing heritage is often problematic, especially in developing countries. Not everyone has the resources available to them to travel to or afford entry to museums, and people with disabilities are often unable to access or fully experience heritage displays. In South Africa, this reinforces inequalities, and further disassociates people from their heritage. The Hunter-Gatherer Archaeological Research Project has launched a community outreach initiative based on a travelling, interactive museum. This museum presents forager histories for a region where their past has mostly been neglected while simultaneously allowing the public to observe archaeology, interact with artefacts and learn about the archaeological process. This presentation discusses the effectiveness of bringing heritage to people and exposing them to archaeological work with a travelling museum, and the impact that the tactile element has on the experiences people create with heritage.

Session 7. Contemporary debates and challenges to museums, heritage, and archaeological knowledge production across Africa // Débats et défis contemporains concernant les musées, le patrimoine et la production de connaissances archéologiques

Ishaq Ishaq Isah

Digging Through Museum Collections for Teaching and Reserch in the Post Covid-19 Era: A Case Study Of University Museum, Ahmadu Bello University, Zaria

Ever since it was established, University Museum, Ahmadu Bello University, Zaria (UMABUZ) has been building up a collection of archaeological objects through field work carried out in different parts of northern Nigeria by the Department of Archaeology and Heritage Studies Ahmadu Bello University, Zaria. The novel Corona Virus set in 2020 and changed the traditional system of field trips. COVID-19 coupled with insecurity forced the department to search for a new medium of training students the rudiments of archaeological field work. Therefore, this paper is aimed at highlighting the role archaeological collections in UMABUZ can play in training students without necessarily embarking on traditional fieldwork to a country side. The surrounding of the museum can serve as a training ground for mock excavation while the collections in the museum can be used for training in classification, analysis and interpretation. Qualitative research methodology was adopted in order to get the in-depth views of the interviewees.

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Iman Nagy

Archaeological Coloniality in African Studies

Archaeological interpretations examining interconnections across Northeast Africa are often framed within a colonial episteme inherent to Egyptology. However, there has been limited discussion surrounding the effects of the Egyptological footprint on the methodology and interpretations of Northeast African archaeology. Coloniality as a mode of knowing/interpreting the world centers essentialized cultural units, emphasizes binaries such as core:periphery and origin:diffusion, and enforces categories of social difference. The ontology of coloniality remains the primary lens for examining interconnections between the ancient cultures of Northeast Africa. This paper argues that rather than merely reflecting upon the historical process of colonialism and its coevalness with Egyptology, we must instead explore coloniality as a knowledge system which continues to influence the praxis of Northeast African archaeology via an Egyptological lens. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52762

Session 8. Crafting new technologies: the archaeology of metallurgy. //. L'émergence de nouvelles technologies : l'archéologie de la métallurgie

Pierre Lamotte, Anne Mayor, Vincent Serneels

An iron smelting technical tradition in mutation at Didé Ouest 1, Eastern Senegal

Excavations led in 2018 by A. Mayor at Didé Ouest 1 shed light on one of the most ancient iron production sites in Senegal, dated from the 4th-3rd c. B.C.E. Similar to the tradition previously identified in Birandjikou (Walmsley et al. 2020), its distinctive features are the massive tuyeres with additional openings perpendicular to the main conduct, scorified palm nuts, and very high concentrations of manganese inside the slag. Numerous tuyeres were used to build two concentric walls found buried in the middle of the mound. The excavation was re-opened by P. Lamotte in 2022. It revealed a complex situation, with two superimposed slag mounds and a production spread out from the 4th c. B.C.E. to the 4th c. C.E. Numerous furnaces where identified, whose spatial distribution is linked to the development of the mounds. Systematic sampling allows to compare the slags from different stratigraphic contexts using XRF, XRD and SEM, in order to reconstruct the technical history of the site.

Mélissa Morel

Iron Metallurgy in Madagascar from the 7th to the 20th Century: Diffusion et Transfer of Technology Before the 10th century, no metallurgical production is attested in Madagascar. Iron production started in the North from the 11th century, where a production intended for local needs was implemented. The furnaces are small bowl dug into the sand. This smelting tradition (MDG01) was probably adapted from smithing techniques. Other metallurgical districts appeared progressively, in particular close to Antananarivo and in the South-East. Two technical traditions of different origins were implemented. The first one (MDG02) uses barrel-shaped furnaces built out of stone. Until now, no parallel with any other known technical tradition could be made. The second (MDG03) is a large pit with a conical covering structure. This technique may be derived from the MDG01 tradition. This diachronic work is based on the reinterpretation of archaeological, ethnographic and historical data. The aim is to understand the mechanisms of technology transfer, and therefore of cultural contacts, at work on the island.

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John Ngonadi

Technology and Human Settlement: Survey and Excavation of Slag Mounds in Ugbene-Ajima, S.E Nigeria.

This research seeks to investigate and establish archaeological data currently unavailable for the origin and development of bloomery ironworking and human settlement in Ugbene-Ajima, in Uzo-Uwani local government area, southeastern Nigeria. Evidence of the origin and metallurgical development by its neighbours in Nsukka, (Lejja, Opi and Nru) is known and well-documented compared to Ugbene-Ajima. Using a combination of foot survey, surface collection, and GPS record archaeological signatures on the landscape, three slag mounds were identified and two were sampled. Excavation of three units of the slag mounds identified iron slag, potsherds, smoking clay pipe and other cultural materials. The results of the survey and excavation will be presented, together with the first bulk analytical data obtained from XRF, XRD, SEM and Thin section.

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Dave Schmitt, Karen D. Lupo, Guy T. Amaye, Jean-Paul Ndanga, Lucien P. Nguerede, Henri Zana

New Holocene Radiocarbon Dates from the Heart of the Sangha River Interval, Central African Republic Radiocarbon assay of charcoal from four sites in Nola, Central African Republic provide new age estimates from the Sangha River Interval and doubles the number of radiocarbon dates from the center of this important and controversial biogeographical tract. The new age estimates mark occupation of a village ~ 575 cal BP, two iron smelting events about 1550 cal BP, and a 2700 cal BP iron production feature that represents one of the earliest smelting sites in the Congo Basin. Although the numbers of dated sites in the north-central Sangha River Interval remain unfortunately small, most represent iron production loci that predate 1550 cal BP and suggest Nola supported widespread Early Iron Age smelting on the cusp of a proposed human population collapse. The extant record also indicates this profusion of smelting occurred hundreds of years before intensification in metallurgy in the neighboring Lobaye River basin.

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Jay Stephens, David Killick, Ryan Mathur, Wayne Powell

The "Bronze Age" of Southern Africa

Bronze (the alloy of copper and tin) was produced in only two regions of sub-Saharan Africa - in Nigeria and in southern Africa. The large prehistoric tin mines at Rooiberg, South Africa, were rediscovered around 1900, and bronze was documented by chemical analysis of finds from Great Zimbabwe and Mapungubwe in the 1920's and 1930's. Our project focusing on the provenance of non-ferrous metals in southern Africa has expanded the number of sites with bronze to 34, illustrating that bronze was much more common in the archaeological record than previously realized. Sites with bronze are distributed from northern South Africa to the Zambezi valley, and the tin content in these samples ranges between 1.1-15.5%. This presentation will summarize lead isotopic, tin isotopic, and chemical data for more than 150 bronze samples. We also assess temporal and spatial patterns in alloying practices and infer the copper and tin sources. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52820

Rabiu Yusuf

Archaeo-metallurgical Investigation of Zangon Tama Iron smelting site, Nigeria: A preliminary report.

This paper presents the preliminary report of an archaeological survey and excavation carried out at Zangon Tama ironworking site in Yabo Local Government Area of Sokoto State, Nigeria. The survey and excavation were conducted from February 2018 to September 2020 as part of a (PhD) thesis research. Zangon Tama was one of the iron smelting sites within the Sokoto region. The surface configuration of the site consists of iron slag, fragments of tuyeres and remains of furnaces. The survey revealed the extent of the site while the excavation provided the archaeological data to be used for the archaeo-metallurgical analyses that will shed more light on the technical aspect of the smelting that took place on the site. Drawing on the oral traditions, historical works and archaeological evidence found at the site, preliminary postulations were made that will help in the evaluation of iron smelting technology at Zangon Tama.

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Session 9. Digital tools and community archaeology in Africa // Outils numériques et archéologie communautaire en Afrique

Kolawole Adekola

Archaeological Practice in Challenging Times: The Case of Ibadan

The scope, methods and integrative nature of archaeological practice shifted significantly in the last two years. The Covid-19 pandemic that ravaged the globe since December, 2019 left an indelible mark in all spheres of life archaeology practice inclusive. The pandemic spread like wide fire from one corner of the world to the other. The corona virus, though microscopic has killed over three million people across the world with the number still increasing. At a time, the entire world was under lockdown with restrictions observed from one country to the other. Movements even from one neighborhood to the other became problematic while airlines were grounded just as medical considerations became enormously important in person to person interactions. Being largely a field discipline, archaeology was badly hit. The recovery from the pandemic meant series of health protocols to safeguard the lives of practitioners as well the public. In Ibadan, the impact was enormous. There were fewer fieldworks even when such were available, the numbers of personnel engaged were drastically reduced just as the health protocols became the dominant features of the fieldwork landscape. This paper gives some vivid scenarios in Ibadan as well as how Nigerian archaeologists 'managed' the recovery process from the pandemic.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56974

Akinbowale Akintayo, Stefania Merlo, Stephanie Wynne-Jones, Paul Lane

Sustainable approach to digital heritage management: Insights from the MAEASaM project.

In the past twenty years, several projects have been developed to create digital repositories of heritage sites around the globe. Most of these projects have been based in the global North, where conspicuous funding from supra-national bodies and established digital infrastructures exist. Nevertheless, leveraging on the capabilities of GIS and remote sensing techniques which are applicable in archaeology and can be applied using open-source approaches and data, projects that create accessible and open-access repositories of heritage sites in other parts of the world, such as Africa and Asia are starting to emerge. One of such projects is Mapping Africa's Endangered Archaeological Sites and Monuments (MAEASaM). In the last three years, the project has been working to create a digital database of heritage sites using GIS and remote sensing techniques. The workflows developed allow for data collection, verification and aggregation from archival, remote sensing based and field data in collaboration with various national authorities that manage heritage sites in the respective countries. In this paper we appraise one of the digital approaches employed by the MAEASaM project for archaeological field survey and site recording: Open Data Kit (ODK) regarding how the toolkit is used and shared with staff of museums and antiquities department from our in-country partners. We also reflect on the challenges encountered and how they have been addressed. Finally, we describe how the project has helped museums and antiquities departments transit from analogue to digital methods of heritage management.

Grant Bettinson

Creators not Content

Digital tools are now integral to archaeology and heritage practice. The range of these tools, workflows and products are utilised across the breadth of practice. Digital tools are often seen as inclusive, providing access to the results of research for a wide audience and giving space for broader participation in heritage debates. The persistent challenge that arises from these methods is whether and how these tools benefit and engage communities? Are they the correct tools for the intended purpose? Do they reflect the principles of bottom-up design, inclusivity, respect, equality, diversity, well-being and benefit upon which community archaeology was founded? Using Kilwa Kisiwani & Songo Mnara in Tanzania as our case study area, this presentation reviews how digital heritage has been used for community engagement. Drawing on research with local community stakeholders, we suggest tools and workflows that show the greatest potential for community engagement.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52510

Olivia Booker, Richard Bates, Tom Sparrow, Elgidius Ichumbaki, Chris Gaffney, Andrew S. Wilson Creative Capture – Documenting the Development of the Digital Twin for Bagamoyo

In this paper, I will discuss the potential for filmmaking to highlight the embodiment of data collection and the material reality of documenting the tangible and intangible aspects of heritage. Created in conjunction with the project, "Reimagining Tanzania's Townscape Heritage", the film will witness the data collecting process of making a digital twin for Bagamoyo, focusing particularly on its connection with the more ephemeral elements of the city including the sounds, stories, songs, and traditions that the researchers encounter throughout the digital recording process. The creative process of filmmaking can help to contextualize the digital twin project amidst the broader themes of what it means to preserve heritage, providing an intimate view of the entangled nature of the city, its people, and its infrastructure.

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Takudzwa Brian Denhere, Tavingeyi Tatenda, Mutyandaedza Bright

Immersive digital technologies: A disaster risk response on cultural heritage resources.

Natural, human induced and climate change induced disasters on heritage resources pose great threat to the physical integrity of cultural heritage properties, as well as their existence (Stovel 1998). This study argues for the need to adopt immersive digital technologies as tools to respond to the impacts of disasters and climate change on built cultural heritage properties and their environments. This demonstrates the use of immersive technologies in the form of Virtual Reality (AR), Augmented Reality (AR), and Mixed Reality (MR) as crucial tools in the management of cultural heritage resources as they provide effective means of monitoring long and short-term effects of disasters and climate change on cultural heritage resources. These tools also are of use in first aid to cultural heritage in the event of disaster, crucial tools when conducting restoration exercises (ICCROM 2015), provide effective and efficient means of documenting cultural heritage resources amongst other things. Small pilot projects carried out in Zimbabwe's two (their names) heritage sites have proven beyond reasonable doubt that immersive digital technologies are crucial tools in preparing for disasters. These projects include a detailed VR showcasing a 3D reconstruction of the Great Zimbabwe's Great Enclosure, Mixed Reality mobile application for Tsindi cultural heritage site in Marondera, Zimbabwe and a virtual tour for Town House historic building in Harare. This study thus, highlights the importance of immersive technologies as tools necessary in preparing for disasters and climate change and providing solutions when they occur.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54691

Claudia Lubao, Elgidius Ichumbaki, Richard Bates, Andrew Wilson, Christopher Gaffney, Thomas Sparrow Communicating Heritage Issues Through Popular Music: A Case of East Africa's Bongo Fleva

This paper focuses on how popular music can be used as one of the strategies to communicate heritage issues for preservation effectively. It specifically takes advantage of how the brain processes text and speech differently when it is set to music, and as a result, information communicated through music can be remembered more easily and have a greater effect on the listener. The paper seeks to expand people's outreach by using popular music to preserve and communicate heritage. It is building on a previous joint effort of "Musicalizing Heritage" of writing popular music, which raises awareness of heritage. Therefore, this talk will highlight two specific issues: i) the adaptation of new approaches among academics and researchers in communicating their findings and ii) how popular music (particularly Bongo Fleva – the main style of popular music in Tanzania) is used and can continue to be used in communicating heritage issues. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56941

Malkia Okech

Towards Building a Framework for Transnational African Digital Heritage

As a Digitisation Specialist with African Digital Heritage (ADH), a Kenya-based digital heritage education initiative, I have been working on their forthcoming Digitisation Curriculum. This curriculum will create an educational resource for museums and cultural heritage organizations throughout Africa. One case informing this work is the Book Bunk project facilitated by ADH to digitize the rare archives of McMillan library. In addition, I have been building and digitizing an archive local to me at Paul Robeson House & Museum (PRHM), located in Philadelphia, USA. Both initiatives desire to broaden access to the tools and resources to build digital heritage projects. For each case, evidence for analysis includes project documentation, reviews of public reception, and interviews with volunteer participants. My paper works to define the network and threads between these projects, informing the movement towards a more holistic and decolonial approach to digital heritage.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54552

Session 10. Early villages and farming from the Cameroon Grassfields to Victoria Nyanza and the Eastern Cape // Les premiers villages et l'agriculture des Grassfields du Cameroun à Victoria Nyanza et au Cap Oriental

Alexander Antonites, Annie Antonites, Christian Perterson

First millennium villages and early trade in eastern South Africa

The early farming communities that inhabited the Letaba-Olifants confluence area (LOCA) in northeastern South Africa has to date been typecast as transitory and social and economically marginal. However, new research highlights the need to revisit these notions. The LOCA is now known to have some with the earliest glass trade beads in the southern African interior as well as imported ceramics from the Near East. This coincides with substantial evidence for increasingly intensified big game hunting, copper and iron smelting and smithing, and a rapid population increase. Understanding the developmental trajectory of trade and complexity in the southern African interior, demand study of their LOCA antecedents. This paper will present the recent results from the LOCA as part of a new understanding of Early Iron Age social dynamics in comparative perspective.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52827

Wim Biemond

Defining the Early Iron Age *Happy Rest* facies in southern Africa: new data from key sites in South Africa and Botswana.

Among the first African farmers arriving in the southern Africa interior at about AD 400 were makers of *Happy Rest* facies pottery. *Happy Rest* facies settlements at Happy Rest, Klein Afrika and Diamant in South Africa and at Maunatlala in Botswana were investigated. The remains include houses, grain bin platforms, refuse pits, middens and iron-smelting debris. The *Happy Rest* facies has been broadly classified under the Early Iron Age Western Stream, which raises the question whether the *Happy Rest* facies originated parallel with other facies within the *Kalundu* Tradition or from an earlier Western Stream facies, such as *Benfica*. To date no comprehensive ceramic collection from a *Happy Rest* site has been fully analysed; as such its origins and ascription to the Western Stream need to be re-examined. In this paper a stylistic analysis of the ceramics recovered from the four sites is used to critically examine the poorly understood *Happy Rest* facies. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51249

Bernard Clist

West-Central African Iron Age: continuities, transitions and dusting an old paradigm about the Bantuspeakers' expansion – the coastal trail

Discontinuities in the material culture of the people of Central Africa are well-known since the Late Stone Age - Neolithic/Iron Age transition, evidence of the first wave of horticulturalists expanding in the region between 3,500-2,300 cal BP. A second major shift has been recognized since the 1990s starting several centuries later, often around 2,200-2,000 cal BP. It consists of the diffusion of iron metallurgy and new pottery styles, also along a north to south geographical and chronological gradient, but now moving from inland towards the coast. We will present and briefly describe in our paper the list of known discontinuities or transitions in the material culture in the region west of the Congo River. It will lead to propose a general pattern, helping to convince us we do have now in the 2020s, 30 years after the identification of a two-waves expansion, a much more diverse and fascinating picture given by new research. We may tentatively link it to similar dynamics found in Eastern and Southern Africa. We will renew the expansion paradigm suggested years ago that the main thrust of the expansion of possibly Bantu-speakers went along the Atlantic Ocean coastline and not through the forest or a savanna corridor we know now not to have existed. Several rain forest areas were ignored until the second Iron Age expansion starting c. 2,200 cal BP, the so-called Sangha River Interval and the Bateke highlands in southern Congo being two of them.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52419

Jörg Linstädter, Sabrina Stempfle

Bantu arrival in southern Africa. Reanalyzing depot finds and new surveys in Mozambique and Eswatini The appearance of pottery in southern Africa is associated with the Bantu arrival about 2000 years ago. The oldest pottery sites like Matola are found in Mozambique and a spread from here to South Africa and Eswatini is assumed. However recent researches are challenging this model due to existing research gaps and new dating results, which are dating Matola pottery a few hundred years earlier. This would turn the current chronology of the migrations process upside down. The study of pottery in southern Africa focuses primarily on the form and decorations. In our research project we are reanalyzing depot finds from Mozambique and Eswatini by using archaeometric approaches as well as studying new finds from surveys and excavations. The aim is to examine the process of pottery manufacturing regarding the diversity in raw material, techniques, usage and to compare the results with the traditional defined pottery units to get new information about the Bantu arrival in southern Africa.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51969

Ruth Tibesasa, Mica Jones, Ceri Ben Shipton, Ceri Zaria Ashley

Farming communities on the Northern shores of Lake Victoria Nyanza, Uganda

Farming along the northern shores of Lake Victoria Nyanza is associated with the spread of Early Iron Age (EIA) Urewe ceramic-producing groups from regions to the West. The production and distribution of Urewestyle pottery is well studied in the region, but little is known about the settlement patterns and general lifestyles of the people who made and used these pots. To begin understanding who these people were and how they related to Later Stone Age (LSA) foraging groups in the area, we present results from excavations carried out at Lugala A site on the northern shores of Lake Victoria Nyanza, eastern Uganda between 2016 and 2018. The lowest deposits at the site contained LSA cultural material characterised by Kansyore ceramics, lithics, shell and bone. This layer was overlaid by roughly 30cm of sterile soil followed by two partial EIA human burials, which had been previously damaged by sand mining activities. One of the burials contained well-made Urewe pottery, the other did not. Radiometric, osteological, ceramic, and preliminary stable isotopic data from the two burials provide new information about EIA occupation patterns, mortuary behaviours, and diet in the region. Coupled with evidence from earlier LSA occupations, the Lugala A burials also offer insights into changing land-use patterns in eastern Uganda during the Later Holocene. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52231

Gavin Whitelaw

Silver Leaves and related facies in KwaZulu-Natal, South Africa

New data from northeast KwaZulu-Natal, a little more than 100 km south of Maputo Bay, indicates that agriculturists of the first phase of the Iron Age in southern Africa (Silver Leaves, AD 280-450) reached as far south as KwaZulu-Natal. The sites were exposed by the over-exploited and retreating waters of Lake Sibaya and thus indicate something of the climatic conditions that prevailed there during the first centuries AD. Small-scale rescue excavations south of modern Durban show that descendant communities exploited shoreline shellfish colonies and maintained a practice of probable ritual filling of deep pits. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52818

Geert van der Plas

Climatic and anthropogenic drivers of landscape change in East Africa during the last two millennia The long history of human influence on the landscape of East Africa is often obscured by climate variability and natural disturbances. Yet understanding the role of humans in past landscape changes is vital for understanding the response of modern-day landscapes to anthropogenic and natural environmental pressures, and essential in a region where human well-being is so dependent on the carrying capacity of the landscape. Paleoecological reconstructions of past climate and landscape changes are hugely important in disentangling these human-climate-landscape interactions. By identifying the patterns of climate change and its effects on the landscape, the overlaying influence that humans have had on the landscape can be revealed. East African lakes have registered this long-term history within their sedimentary archive, allowing records of environmental change and vegetation dynamics to be reconstructed with the goal of answering these questions.

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Session 11. Emerging Voices and Trends in West African Indigenous Archaeologies // Voix émergentes et tendances dans les archéologies indigènes d'Afrique de l'Ouest

Patricia Ayipey

Archaeobotanical Investigation Of Likpe Kukurantumi Earthwork Settlement, Ghana

Archaeologists cannot ignore studies on Earthworks to understand the Iron Age period of Ghana's history. My study at the Likpe Kukurantumi Earthwork Settlement, Ghana, a Late Iron Age site, seeks to understand the foodways of the pre-Atlantic era and how the people of the past interacted with their environment. This paper presents a preliminary overview of the archaeobotanical research conducted at the Iron Age abandoned settlement of the Likpe Kukurantumi Earthwork in the contemporary people of Likpe in the Oti Region of Ghana. In this research, I work closely with the Laboratory of Archaeobotany and Paleoecology at the University of South Bohemia, the African Archaeobotany Department at Geothe Institute Frankfurt, and the Likpe Kukurantumi community to understand the foodways and how the people of the past interacted with their environment. The indigenous knowledge holders are community knowledge holders of Likpe Kukurantumi. This study contributes new empirical evidence that documents some of the evolution of West African food traditions during the past two millennia through the analysis of archaeobotanical samples of the study area. This research is timely because it contributes to knowledge and the discourse on the foodways during the pre-Atlantic era.

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David Tei-Mensah Adjartey

When We Die Our Tongues Would Not Decay: The Voices Of Bui Dam Displaced Persons

Consideration of how fast large-scale development projects destroy heritage resources, disrupt livelihoods, and other cultural practices raises a methodological question when researching forced resettlement as process of socio-cultural change. This paper examines the potentials of adopting co-production in exploring the lived experiences of Bui Dam forced displacement in Ghana based on my personal experiences in

conducting community-based participatory ethnographic documentary filmmaking research with displaced persons over the past ten years. It discusses co-production as the main ethical principle that guided my inquiry into how resettled persons could be partnered to record knowledge issues on socio-cultural change. The paper offers a reflection on the inherent ethical challenges and concludes that film is a valuable tool for capturing everyday life, including the voices of displaced persons before, during, and after forced displacement and resettlement.

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Fode DIAKHO

Approche de l'archéologie communautaire dans le pays Soninké : entre méthode et perspective de décloisonnement de la connaissance

La pratique de l'archéologie en Afrique de l'Ouest, depuis sa création au début des années 1900, a été largement dirigée par des chercheurs expatriés. Cependant, de nombreux archéologues formés localement et à l'étranger ont mené des recherches qui ont repoussé les limites de la discipline au fil des ans. Ce symposium rassemble des articles basés sur des recherches récentes menées principalement par des archéologues indigènes émergents travaillant sur divers sujets et périodes en Afrique de l'Ouest. Les articles abordent les techniques et théories conventionnelles et nouvelles de la pratique archéologique et anthropologique qui jettent un pont entre la préhistoire et le présent ethnographique. Ils réfléchissent à ce que signifie faire de l'archéologie chez soi, un processus qui implique non seulement d'assumer de multiples rôles dans les communautés de recherche, mais aussi de faire preuve de sensibilité culturelle et de s'engager dans une recherche collaborative publique et communautaire. Ce symposium se penchera donc sur les défis et les perspectives des archéologies indigènes africaines dans un domaine qui se débat encore avec la nécessité de décoloniser ses récits du passé.

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Zonke Guddah

Building Vernacular Architecture in Banda: A Heritage-making Process

In this paper, I draw on data from my PhD research project on contemporary digital heritage approaches and vernacular architecture as an indigenous cultural practice and process at Banda, Ghana. I focus on two major approaches, public archaeology and heritage-making as a process enhanced by digital resources. Discussing cultural materials including vernacular architecture from past archaeological studies and current anthropological data emerging from the pluralistic indigenous contexts of Banda as an affordance, I explore how community engagement by archaeologists and anthropologists are shifting paradigms in heritage discourse from concept saturated with commodification of ancient monuments, sites, and objects by gatekeepers. Rather I focus on how communities perceive heritage as an ongoing process in the present through (re)valuation of past practices such as earthen constructions, thereby lifting and representing indigenous voices in Africa.

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Dela Kuma

'Legitimate' Trade: Local Tastes & Consumer Power in Southeastern Ghana, Amedeka (late 19th to 20th centuries)

In the wake of the 1807 British abolition of the trans-Atlantic slave trade, economic priorities pivoted to the exploitation of tropical agricultural products that fueled the machines and tastes of the Industrial Revolution. West Africa has often been viewed as a source of raw materials rather than an active part of the so-called 'legitimate' trade. In this paper, I centralize local consumers in the narratives of legitimate trade using ceramics data from the late 19th Century hinterland site of Amedeka in southeastern Ghana. I argue that local notions of taste mediated the reception and consumption of imported and regional goods. This paper further pushes for reframing how we present Africans in the making of the modern world.

Daniel Kumah

Interrogating Archaeological Archives and 'Excavating' museum storages: Begho in Retrospect

Begho, an ancient market town located in Ghana traded with Jenne in the Niger Bend during the Trans-Saharan trade. Begho's importance is recorded in Arabic manuscripts, and European records and narrated through oral accounts by the Hani people of the Bono Region. From 1970 to 1979, a series of excavations identified five large Begho quarters and three ironworking suburbs.

Although much work was done at Begho, not much is known about the archaeological practice at the site. Many questions have arisen regarding the fieldwork, analysis and why Begho's publications and archaeological report have not seen the day of light. Some scholars have problematized this and termed it the 'Begho Mystery'.

The study examined archival documents of previous researchers at Begho and identified and analyzed Begho artefacts at the Museum of Archaeology, University of Ghana. Recent surveys, excavations and analysis of materials were also conducted at Begho. An approach involving gathering documentary and archival records such as field notes, site plans, maps, illustrations and photographs of various researchers at Begho from the 1970s was studied. Based on the archival data source, a rigorous search and analysis of some Begho cultural materials kept in Museum storages were undertaken.

This research provides insights into the reconstruction of an archaeological site by using archival records and museum artefacts which are key components in the creation of an archaeological repository. Also, the survey conducted revealed new Begho quarters and the analysis of crucibles revealed gold particles. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54423

Jacob Nii Marley

Re-linking archaeology and the public using digital visual media: The Elmina Castle Museum in context Elmina is the earliest Transatlantic trade site in Ghana, however, public access to research findings from the site is relatively minimal. Aside publications, museum and on-site exhibitions have been popular trends by which research findings are publicly disseminated in Ghana. For exhibitions to be effective, however, there is a need to identify and understand the interests and capabilities of the various groups of target audiences. The Elmina Castle, a UNESCO World Heritage Site, through its museum exhibition is meant to educate the public about history and culture of Elmina among other things. Yet, this aim has not been fully achieved over years. The paper looks at the current exhibition at the museum and provides preliminary insights into factors that influence its visitation and enjoyment. It also explores the use of digital visual and audio-visual media in diversifying public accessibility to history and culture of Elmina.

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Kofi Nutor

The Peki in the Atlantic world: landscapes, power, and identities of slavery in southeastern Ghana

This paper explores the complex history of Atlantic slavery in Peki, a frontier Ewe community in present-day southeastern Ghana. In the 19th century, Peki and other inland Ewe communities (Krepi) became a major hub for the post-abolition Atlantic trade. The paper draws on archaeological, archival, and ethnographic data to understand ways in which the Peki were drawn into the Atlantic mercantile economy in West Africa. It explores how the Peki navigated the complex power dynamics of European imperialism and local political rivalry in the 18th and 19th centuries to account for the position of interior communities that survived in the interstices of centralized expansionist states in West Africa. Finally, it highlights the utility of collaborative community-engaged and interdisciplinary research in understanding ways that the material remains, memories, and social identities of enslavement are preserved or erased as local values and power dynamics have changed over time.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52006

Victoria Olajide

Human agency and theory in West Africa: an insight into early forest agriculture in the Neolithic.

Despite the fact that the need to study early indigenous agricultural systems in Africa has long been recognized and re-affirmed in recent archaeological discuss, African agricultural practices are still being modelled using concepts, terminologies, questions, lines of evidence and methods derived from research

elsewhere in the world. Studies in West African archaeological research, especially within the Neolithic have provided evidence for developing models for the spread of farming yet theoretical investigations of the emergence of food production systems, particularly in the forest-savanna region, have been limited. Hence, this presentation aims to highlight the possibilities and challenges of modelling forest (forest/savanna) agriculture through diverse theoretical approaches, while emphasizing the role of agency in the development and intensification of early socio-economic systems within the forest/savanna region. The goal, therefore, is to contribute towards the growing wealth of knowledge in West African theoretical and archaeobotanical discussions, by creating insight into understanding the dynamics of forest-agriculture in West Africa. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52879

Session 12. Environmental and Human-Environmental History in Africa (online only) // Histoire de l'environnement et de l'environnement humain en Afrique (en ligne seulement)

Linus Ajikah, Orijemie Emuobosa A

Preliminary Palynological Evidence from Sediments of a Coastal Estuary in Lagos, Southern Nigeria The environmental history of parts of the Lagos lagoon during the Late Holocene was reconstructed based on the palynological analyses of a 800cm sediment core retrieved from Itokin, Lagos, Nigeria. Three phases (I-III) of environmental changes, beginning from 1480±30 BP, were recognized. The inferred environmental changes were characterized by the mangrove swamp forests, freshwater swamp forests and open vegetation in varied proportions, and accompanied by conditions that fluctuated between wet and dry climates. The pollen evidence reveals that the Itokin landscape has remained open since the last 1500 yrs BP, being dominated by open vegetation and freshwater swamp elements, The mangrove swamp forest decreased at some point but recovered. In contrast, the rain forest remained low in occurrence throughout the core. The drivers of these environmental changes and their ecological implications are then highlighted. The vegetation appears to have just been re-established. Open vegetation taxa expanded but the mangroves and rain forest elements remained low. This was most likely a result of the impact of human activities such as agriculture as evidenced by the cultivation of oil palm; Elaeis guineensis, and possibly some local dry conditions. Also, human activities and interference with the environment increased. For the past 1400 yrs BP, the rain forest has witnessed significant natural changes that were compounded by anthropogenically driven disturbances in the area. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52499

Timilehin Ayelagbe

Environmental history of Okomu National Park, Nigeria: archaeobotanical evidence

An environmental archaeological study of Okomu National Park, Nigeria was carried out with a view of reconstructing the palaeoenvironment of Okomu. Two sediment cores from Lake 51 (45cm) and 52 (35cm), and sediment samples from a test pit (TP 1) excavated in compartment 65 were subjected to palynological, and sedimentological analyses. Four pollen zones (I, II, III, and IV) were recognized from the palynological analysis. The earliest vegetation in zone I had mangrove swamp forest species dominating. In zone II secondary forest species dominated while mangrove swamp forest species had a sharp decline. Mangrove swamp species reemerge in zone III alongside with lowland rainforest species and open vegetation species suggesting human occupation. Zone IV is characterized by a sharp decrease in both mangrove swamp and secondary forest but increases in freshwater swamp forest. Sedimentological evidence shows a wet environment with changes in medium of depositional which was predominantly fluvial. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52755

Chiamaka Mangut

Archaeobotany of the dietary strategies of the Bace in Central Nigeria: A preliminary analysis

Plant knowledge is vital for the cultural continuity and identity of a people. The ancestors of the Bace once occupied Dutsen Kura hill. They carried out activities at Dutsen Kongba hill, located two kilometers away, where one of Nigeria's oldest Later Stone Age rock shelters was identified in the 1970s, dating to the 6th

Millennium BC. Presently, the Bace people, now reside down Dutsen Kura hill. They cultivated cereals, such as pearl millet, legumes, such as black beans, and tubers, which they inherited from their ancestors. However, some of these crops have been abandoned. Nine sediment samples, with an average of 10 liters, were collected and floated from a 1 x 2 m excavation unit with a depth of 80cm. This archaeobotanical study is one of the very few carried out in the region. It investigates the dietary habits of the present and past Bace people, providing new insight into dietary evolution, plant use, and the replacement of diets of indigenous origin with those derived from introduced or exotic crops.

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Emuobosa Orijemie

The Ecological Past of Bàrà: Perspectives from Palynological Record

Bàrà, a dry Guinea savanna locality in Nigeria, was a satellite town of Oyo-Ile, the capital and mega-city of the Oyo Empire, c. AD 1570-1830. It is also believed to have served as the necropolis of the kings of Oyo for almost three centuries. Recent archaeological excavations in Bàrà, at site BSM6, revealed the existence of pre-Oyo Empire occupation phases from c. 400 BC to the mid-16th century AD. The palynological study of sediments from a 1.4m column in one of the excavated units indicates the prevalence of comparatively wetter conditions in the earliest period than the present. Three periods of dry climate that are coeval with similar events in tropical West Africa were noted. Unlike the recent practice of uncontrolled tree felling and charcoal production, past human-ecological interactions did not lead to significant biodiversity loss. Such behaviors contributed to the longevity of human presence in Bàrà.

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Session 13. Ethnography, Indigenous Knowledge, and Material Culture // Ethnographie, savoirs autochtones et culture matérielle

Benedicta Nyikpah Atsu

AN ETHNOGRAPHIC STUDY OF THE UNIQUE INDIGENOUS KYENKYEN BARKCLOTH IN THE HANI-BEGHO AREA OF GHANA

Barkcloth processing is an ancient heritage that has contributed to Africa's indigenous knowledge system and today's fashion. The barkcloth, *Kyenkyen* in the Akan language, is a product that reflects the once popular indigenous knowledge and craft traditions of many societies in Africa. Its production and use, however, have waned over time and can only be found in a few locations in Africa. Begho in the Bono Region of Ghana currently produces barkcloth in small quantities. It is considered an indigenous and ancient craft product which is about to go extinct in Ghana. By way of intervention, a study, presented in this paper, was conducted to unearth and document the processes and uniqueness of Barkcloth production in Hani-Begho through the use of ethnographic approaches in data gathering. The research examined the *Kyenkyen* indigenous technology and associated socio-cultural practices and provides reflections on its conservation. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52262

Stanley Onyemechalu

(Im)material legacies and indigenous knowledge in post-war Igboland, Nigeria.

Is the impact of violent conflict on heritage *only* destructive? How can we appreciate the transformative and 'generative' impacts of violent conflict and its legacies on the (in)tangible heritage landscape of affected communities? These contending questions in conflict-heritage studies remain underexplored. Combining site visits, interviews and archival/historical research, I examine this complex relationship between heritage and the legacies of violent conflict in the context of the 'Biafra war' (1967-1970) in Igboland, Nigeria. As part of my ongoing PhD research, this paper raises the prospect of a 'generative' impact of violent conflict on heritage and the crucial role of indigenous knowledge practices in (post-)conflict survival. This work makes an important contribution to our understanding of heritage and civil war in relation to the contemporary Nigerian nation state as well as to debates about heritage and civil conflict more generally. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50921

Olatomiwa Sarumoh

ETHNOGRAPHIC STUDY OF DRUM MAKING AND ITS SIGNIFICANCE AMONG THE PEOPLE OF OYO TOWN

Drum making is a very vital part of Yoruba cultural heritage. It holds a special place in the tradition of the Yoruba people, and its use in Yoruba folklore cannot be overemphasized. The erosion of cultural technology in preference for new technologies is a problem for drumming in Yoruba Land. The motivation of this research is to increase the empirical understanding of the potential of the art and craft of drum making. This paper attempts to assess the methods of production and preservation of hides and other materials used in the production of local drums by the indigenous people of Oyo town, and to rationale how and why the methods have changed over time. It also emphasizes the importance of drumming and drum making as an integral part of our cultural heritage. Data were obtained using direct observation, key informants, and in-depth oral interviews. This project was carried out among the people of Owode and Apini, Oyo east local government area, Oyo state. Despite the decline in the tradition of drum making due to urbanization, Oyo Drum makers still make drums for one purpose or the other. This project contributes to the knowledge of the concept of drum and its making, as well as elucidates its significance in Oyo and Yoruba land.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50740

Benny Qihao Shen

Rethinking the Archaeology of Apiculture through Indigenous East African Beekeeping

Despite of its well-attested antiquity, apiculture has been overlooked in archaeology. Current methods that traced the origin of beekeeping to early agriculturalist Near East, relying on either the remains of apicultural structures or lipid analysis of beeswax, become infeasible when encountered with sub-Saharan African apiculture where hives and receptacles were mainly made from perishable materials and where beeswax was not widely collected until recently. This study problematised current approaches in the archaeology of apiculture from an Africanist perspective by comparing the Artefact Conservation Probability of Indigenous East African beekeeping with other beekeeping methods through Bayesian modelling. Moreover, this study proposed the conceptualisation of 'bee-scape' as alternative lines of evidence to detect ecological/landscape indicators of past apicultural activities in East Africa, leading to novel understandings of the human-bee entanglement and the origin of apiculture.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52808

Session 14. From Pleistocene into the Holocene: Hunter-gatherers in southern Africa during the last 30,000 years // Du pléistocène à l'holocène : chasseurscueilleurs en Afrique australe au cours des 30 000 dernières années

Svenja Arlt

The nature of the Robberg technocomplex of the Caledon River Valley, southern Africa

The Caledon River Valley in the Maloti-Drakensberg region houses one of the few larger concentrations of sites associated with the Later Stone Age Robberg technocomplex. Dating from *c*. 25–12 ka BP and identified across much of southern Africa, the Robberg is often portrayed as a uniform phenomenon across time and space.

This paper addresses the patterns of fine-scale spatial and temporal variation using lithic artefacts from welldated occupational sequences of Ntloana Tšoana and the nearby sites of Ha Makotoko and Rose Cottage Cave. The Robberg assemblages are characterised by a miniaturised bladelet technology with few formally retouched tools, an emphasis on bipolar and laminar reduction systems, and a preference for fine-grained lithologies. Nevertheless, shifts in the raw material usage and the frequency of bladelets are evident, accounting for a certain degree of variability within the five millennia-long Robberg sequence in the Caledon River Valley.

Gregor Bader, Ayanda Mabuza, David Price Williams, Nicholas Conard, Manuel Will

'Living on the edge' – On the persistence of MSA technology beyond 30.000 in southern Africa Recent research in southern Africa has shown that artificial boundaries between the Middle and Later Stone Age (MSA & LSA), as originally defined by Goodwin and van Riet Lowe, became increasingly fragile. Innovations like personal ornaments, symbolic items, and tools from organic material, once associated with the LSA exclusively, were meanwhile found in several MSA contexts. In addition, advances in dating technology have tremendously shifted temporal limits of technological solutions. Intensive archaeological fieldwork in the eastern part of southern Africa, specifically KwaZulu-Natal and Eswatini, proved that technologies traditionally characterized as MSA persist well up to 30.000 and beyond whereas claims about an origin of LSA technologies before 40.000 are lacking support. This paper deals with regional and chronological variability of the latest technological expressions assigned to the MSA in southern Africa and the potential drivers behind.

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Chante Barnard

From Little Muck Shelter to Leokwe Hill: trade relations and settlement transitions

Over the last two millennia, the trade of exotic goods and local wealth items contributed to economic, political and social changes across southern African. Local farmer communities were more actively involved in these trade economies, and the aftereffects thereof, and as a result, research has primarily focussed on their histories. Our understanding of the role forager communities played is under-developed. This study examines trade wealth across apparent social boundaries to better understand how different communities participated in local trade networks. The results from Little Muck Shelter and Leokwe Hill, a forager and farmer settlement, respectively, in proximity to one another and which saw alternating episodes of trade engagement are presented. This shows the role foragers played in a system that contributed to considerable social upheaval in the region and how they extracted wealth through their own contribution to these networks. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52908

Matthias Blessing, Nicholas Conard, Gregor Bader

The Middle to Later Stone Age transition as seen from Umbeli Belli (Kwa-Zulu-Natal, South Africa)

The Early Later Stone Age or Middle to Later Stone Age transition in southern Africa is still poorly understood. This is partly due to a lack of sites that contain assemblage from the period in question, let alone sequences that span from the Late MSA into the Robberg. Umbeli Belli is such a site. The Later Stone Age sequence at Umbeli Belli entails four geological horizons (GH 3 to 6) which date from 21 ± 2 ka to 32 ± 3 ka. GH 3 is a Robberg industry while GH 4 to 6 show elements of both MSA and LSA lithic technology. The LSA sequence connects to a final MSA occupation making Umbeli Belli one of few sites that span the entire transition from the MSA to the LSA in southern Africa. This paper presents an analysis of the lithic technology from GH 3 to 6. Based on these results, questions about the suitability and meaning of the Middle and Later Stone Age boundary are discussed against a backdrop of research history of the Stone Age tripartite in southern Africa. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52823

Tim Forssman, Justin Pentz, Siphesihle Kuhlase, Nicci Sherwood and Courtney Knell

Forager stone technology at Little Muck Shelter from the mid-Holocene until farmer contact Studies into the Later Stone Age sequence of the Mapungubwe region show several important changes in forager toolkits. Notable shifts include the appearance of ceramics, glass beads and metal, and changes in stone tool preference patterns in some contexts. Few studies have considered stone tool technological shifts

from pre-contact into contact periods. By studying forager stone tools, it is possible to examine the manner in which forager groups deployed their own technologies and innovations in contact scenarios to aid and assist with social relations and exchange or trade patterns. In this study, the results of a detailed stone tool analysis from Little Muck Shelter are presented. They highlight several changes over time and particularly from the pre-contact period into the contact phase and also at key moments in the valley's sequence. It demonstrates the role forager technology played in the local economy and how it was used to facilitate social relations. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54230

Iris Guillemard

Investigating late Holocene lithic traditions: from rock shelters to hilltops in the Limpopo Basin

From around two thousand years ago, sheep first appear in southern Africa following modalities that are still debated. A few centuries later, agro-pastoral communities reach South Africa, and encounter local hunter-gatherers. Centuries of interactions later, hunter-gatherers and agro-pastoral communities have followed different trajectories, while mutually borrowing and developing new cultural elements. In this talk, I focus on the central Limpopo Basin where hunter-gatherers produced stone tools before and after the arrival of agro-pastoral communities. I will discuss and compare the modalities of stone tool production at the Later Stone Age site of Balerno Main Shelter, and at the hilltop site of EH Hill which is associated with agro-pastoral activities.

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Siphesihle Kuhlase

Establishing regional syntheses: A technological study on the manufacture of OES beads from the Mbere Complex and Little Muck shelter in the Middle Limpopo Valley, southern Africa.

Despite extensive research on ostrich eggshell (OES) beads from eastern Africa, and various regions in the interior of southern Africa, research from the Middle Limpopo Valley, focusing on the technological aspects of these items, has been lacking. As such, this study presents results on the manufacture of OES beads from two sites that show the agency and craftsmanship of Stone Age communities. The Mbere Complex and Little Muck, show similar forms of interaction between farmers and hunter-gatherers, yet the production of beads varies stylistically and morphologically. This study untangles the manufacturing processes of OES beads at these two sites and investigates regional variability in bead production. The findings made are crucial since they will help us understand how hunting and gathering communities might have used this craft to integrate themselves within the local trade economy, and maintain social relationships, not just only between themselves, but also with farmers. In addition, a comparative technological study of OES beads can open the discussion for hunter-gatherer regional variability, which has hitherto been lacking in the MLV. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52241

Brandi L. MacDonald, Alexa Kuo, Elizabeth C. Velliky, Robert. R. Forrester, Jörg Linstädter, Gregor Donatus Bader Earth Mineral Pigment Provisioning and Rock Art in Stone Age Eswatini

Earth mineral pigments, including iron and manganese oxides, were used to produce rock art throughout Eswatini. Eswatini is home to one of the earliest known sites of iron oxide collection, Ngwenya ochre mine, signaling a longstanding relationship with this mineral resource. Here, we present preliminary results of a multi-site investigation of rock art paints and associated raw material resources. Our research uses a multimethod approach including elemental (NAA, LA-ICP-MS, pXRF) and mineral and structural (XRD, SEM-EDS, Raman spectroscopy) analytical techniques to better understand the composition, manipulation, and likely provenance of ingredients used in paint mixtures, as well as to characterize the environments in which rock art is produced, including rock shelters and caves. The results provide insights into patterns of artistic and mineral preferences during the Middle and Late Stone Ages.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51924

Charlotte Pruvost, Eric Huysecom, Matar Ndiaye, Michel Rasse, Laurent Lespez, Sarah Davidoux, Irka Hajdas, Chantal Tribolo

Toumboura V-a: a new site to understand the Middle to Later Stone Age transition in West Africa The Pleistocene to Holocene sedimentary sequence of the Falémé Valley, eastern Senegal, is one of the rare contexts in West Africa documenting the Paleolithic. Here, the Middle Stone Age (MSA) to Later Stone Age (LSA) transition seems to occur between the end of MIS 3 and the beginning of the Holocene, a period during which several successive techno-cultural units are identified, although currently understood with varying degrees of accuracy. The Toumboura V-a (TMBV-a) site, excavated in 2021, sheds new light on one of the techno-cultural units, characterized by flake industries. With an age of 18-17,000 calBP, TMBV-a pre-dates by 1,000 years the occurrence of the first LSA industries in the Falémé valley, with backed pieces and segments, and post-dates the last known MSA occurrence by a dozen thousand years. This site is therefore of great value for understanding techno-cultural dynamics during this key period, and for questioning the definitions of the MSA and LSA in West Africa.

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Sara Elizabeth Rhodes, Gregor Bader

Clearing the brush of time: a re-examination of the Dikbosch 1 rockshelter legacy material and the Later Stone Age of the interior of South Africa

The South African Later Stone Age (LSA, ~32,000 – 1,500 BP) saw dramatic climatic changes, which likely catalyzed cultural adaptations for local inhabitants. However, data on the cultural and climatological history of the country's interior regions during the LSA is scarce, particularly in the Northern Cape savannah biome. Dikbosch 1 is a rockshelter located along the southern expanse of the Ghaap Plateau Escarpment in the Northern Cape. Past excavations revealed a rich LSA sequence dating between 13,200 and 1,700 BP and excellent organic preservation, making this an ideal site to illuminate these gaps in our data. Here, we present the results of our new examination of the Dikbosch 1 lithic and microfaunal assemblages. This ongoing study allow us to draw detailed inferences on the timing and duration of paleoclimatic events and how the groups occupying the site adapted to them.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56973

Alex Schoeman, Kathryn Croll, Peter Morrissey

A river ran through it: Preliminary results from excavations at Welgelgen Shelter, South Africa

Ki t'ama in southern Bokoni, Mpumalanga is one of the few places in South Africa where ||Xegwi (a southern San language) was still spoken in the twentieth century. This community attracted significant attention from cultural and physical anthropologists, as well as linguists. Peculiarly, the region appears to have been of little interest to archaeologists, and the only published results from excavations are Schoonraad and Beaumont's (1971) work at Welgelegen Shelter. The report on their excavations lacks sufficient detail to be of much use in research on the region's occupation dynamics and sequence. Consequently, we returned to Welgelgen Shelter. In this paper, we report on preliminary results from these excavations, focusing on the last 1000 years during which the sporadic flooding of the shelter by the Vaal River, which flows immediately below the shelter, constrained use of the site.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54386

David Witelson

The colours of change: rock paintings and the audience in south-eastern South Africa

Hunter-gatherer social life in southern Africa was altered dramatically by the arrival of herders and agropastoralists around 2,000 years ago. The subsequent interactions between these groups were never unidirectional. It has long been known that rock painting techniques and subject matter changed in the context of cultural contact and interaction. Less is known about the precise mechanisms by which these changes occurred. New research on rock paintings in the Stormberg area of the north Eastern Cape Province contributes to our understanding of the regional painted sequence in the broader Maloti-Drakensberg region. It proposes that significant changes to the appearance of the rock art (its 'style') in the precolonial contact period occurred because of changes to performances of image-making as a direct result of changes in the composition of the audience for those performances.

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Session 15. Global Processes through Local Lenses: Perspectives from the Atlantic and Indian Ocean Coasts // Processus globaux à travers des visions locales : perspectives des côtes Atlantique et de l'Océan Indien

Tomos Evans

Global Trade through the Lens of the Ìjèbú: Liminality and Regulation at Sungbo's Eredo, Nigeria

The Sungbo's Eredo monumental earthwork is a massive 100-mile-long bank and trench, encircling a core area of traditional Ìjèbú Kingdom territory, southwest Nigeria. From at least the 15th century AD, the Ìjèbú

Kingdom was a major player in coastal Atlantic trade, its role strengthened by its close connections with the Benin Kingdom, Lagos, and the interior Yorùbá kingdoms. By the 19th century, it lay between the British Empire in Lagos, and the powerful Yorùbá city of Ibadan. The Ìjèbú are said to have carefully guarded access to their lands, restricting foreign merchants from entering, and thus maintaining a prominent status in these trade relations (which infuriated the British). Drawing from archaeological, ethnographic, and archival data, this talk explores the reasoning and logics of Ìjèbú regulation of trade and migration, the ways in which these contrasted with those of the British colonisers, and the role of Sungbo's Eredo – and its many liminal spaces – in these engagements.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50906

Julia Haines

Rethinking Capitalist Consumption with Global Artifacts: Ceramic at a Mauritian Sugar Plantation

Almost all of those who settled on the island of Mauritius starting in the 1500s migrated from around the Indian Ocean Rim. The Bras d'Eau sugar plantation archaeological site in northeastern Mauritius provides a 19th-century artifact assemblage associated with South Asian indentured laborers that simultaneously speaks to the global trade networks that the island was integrated into and the emergence of local consumption patterns resonate with regional cultural practices. This paper focuses on the ceramic assemblage, the majority comprised of imported transfer-printed and hand-painted whiteware sherds. These ceramic types were widely available and are found on contemporaneous domestic sites around the globe. Their ubiquity potentially reduces their analytical value, however shifting away from capitalist consumption analytical tropes to consider dish form rather than ware type shows that plantation inhabitants were building off of Indian Ocean traditions with European sourced materials.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54267

Abiola Ibirogba

Human occupation on Landscapes of Trauma: Evidence from the Badagry Coast

Two decades after the first archaeological exercise conducted in the Badagry region on the coast of Lagos, Nigeria, there is still a lacuna on the cultures associated with human occupation since the Late Stone Age in the area. I recently conducted a survey in the region, forming the basis of this paper's discussion. It highlights the materiality of coastal populations, Atlantic entanglements, and craft specialization across coastal Badagry islands encompassing Gun communities such as Topo, Ajido, Gberefu, and Badagry. The results of the survey reveal mound structures, remains of architecture, smoking pipe fragments, cowrie shells, and potsherds, showing intense human exploitation of coastal resources. The paper meshes this data with myth stories, oral histories, and documentary sources to highlight the agency of African peoples in making movement and settlement decisions in response to the uncertainties of war and slavery on the coast of west Africa. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51057

Neil Norman

A Dahomean Prince in the Gulf Coast World: Archaeological Connections between Ouidah, Benin and Africatown, Alabama

In the investigation of the African Atlantic, researchers are increasingly interested in the ways that the conditions of the Diaspora were framed by material culture. Enslaved Africans, freed people of color, and their descendents chose things that evoked earlier African historic dialogs and political actions. In so doing, these objects became points along the social landscape where memories were created, revived, and contested. This paper draws on 10 years of archaeological and historical research in Benin, West Africa. It musters evidence from 17 th through 19 th century material to consider the ways that broader West African stylistic trends and aesthetic traditions were projected into the Atlantic. It explores these meta-issues through a localized examples from Africatown: the archaeology of the Peter Lee House and historical research into material culture used by Cudjo Lewis.

Diogo Oliveira

Mozambique Island and Cabaceira Pequena in the 16th century: perspectives on transforming maritime cultural landscapes in the Western Indian Ocean

In traditional Portuguese and Mozambican historiography, the arrival of the Portuguese at Mozambique Island marks the beginning of the colonial period. Although the Portuguese intervention in Mozambique beginning in the 16th century can be characterized by regionalized impacts with global and historical consequences, characterizing this period as colonial may overemphasize a Eurocentric view of a dynamic human process. Early Portuguese intervention is part of a larger milieu of oceanic connections on the Northern Mozambique coast beginning in the 15th century and continuing until the middle of the 20th century. Alongside new historical insights, archaeological evidence can provide new perspectives on the exercise of agency and power on the northern Mozambican coast in the 15th and 16th centuries. By analyzing multiple lines of evidence, this paper will demonstrate that the coastal communities at Mozambique Island were actively reshaping their relationships with the ocean between the 15th and 17th centuries. The reanalysis of this period from an archaeological perspective will emphasize the role of coastal African actors as crucial agents in shaping the Indian Ocean economy. Ultimately, this paper seeks to challenge historical interpretations that overemphasize Portuguese power and control while deemphasizing African agency in the 15th and 16th centuries. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56939

Session 16. Historical archaeology: from 1500 through the colonial era // Archéologie historique : de 1500 à l'ère coloniale

Alice Mezop Noumissing

Données archéologiques et tradition orale des sites de Farkoumo et de Lamordé dans la région du Faro (Nord-Cameroun)

Le choix d'étudier les sites de Farkoumo et de Lamordé dans la plaine du Faro, Nord du Cameroun, tient en partie à leur importance dans la tradition orale. D'après les éléments de la tradition orale, l'histoire de la plaine du Faro est marquée par l'existence d'un substrat ancien de populations modifié progressivement par les déplacements des Tchamba, puis l'arrivée des Bata au 17^{eme} s et enfin celle des Foulbé au début du 19^{eme} s. Toutefois si ces sources permettent de penser à l'existence de plusieurs étapes de peuplement dans la région, le scénario d'occupation et la chronologie d'aucun ancien village ne sont connus de façon précise. Par ailleurs, aucune fouille archéologique n'y a été entreprise, alors que l'archéologie peut apporter une évaluation complémentaire. Les travaux réalisés à Lamordé et à Farkoumo, deux sites liés au niveau des données ethnohistoriques, ont pour objectif d'y proposer des tableaux d'occupation et de mettre en rapport les résultats de l'archéologie et ceux de l'histoire orale sur l'analyse de l'occupation de ces anciens villages. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51761

Vicky M. Oelze, Xueye Wang, Gaëlle Bocksberger

A Pan African bioavailable strontium isoscape with use for the archaeology of the slave trade

The effective use of strontium isotope analysis to identify small and large scale human mobility and migration heavily relies on information on the strontium isotope landscape (Sr isoscape) of a given region. However, while strontium isoscapes have been developed for many parts of the Global North and parts of East and Southern Africa, no bioavailable Sr isotope (87 Sr/ 86 Sr) data is yet available for the extensive key regions in West and western Central Africa from which humans were deported with force during the transatlantic slave trade. Together with help of more than 100 international collaborators we analyzed the 87 Sr/ 86 Sr ratios in 878 environmental samples (plants, soil, invertebrates and vertebrate remains) from 25 African countries, combined them with already published 87 Sr/ 86 Sr data from Africa (n=1899), and used a geographically weighed random forest regression framework to draft the first bioavailable strontium isoscape for sub-Saharan Africa. Our results show that 87 Sr/ 86 Sr ratios span an exceptionally large range and show distinct regional patterns relating to multi-environmental factors (e.g. dust, age of geology, precipitation, lithology, etc). In Angola alone, the 87 Sr/ 86 Sr ratios range from 0.70679 to 0.76815, making this region particularly interesting for reconstructions of individual life histories within the slave trade via 87 Sr/ 86 Sr analysis. Our Pan

African Sr isoscape lays a solid foundation for future ⁸⁷Sr/⁸⁶Sr-based provenance studies in prehistoric and historic archaeology, but also wildlife conservation and forensics. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50690

Emmanuel Olaleye, Olusegun Opadeji

Dynamics of Cultural Landscape of Ibadan City: A Predictive Model for Landscape Studies in Nigeria. Ibadan has witnessed different forms of development processes on its landscape, which have had negative impacts on the preservation of sites because they serve as threat to the historical sites in the city. This paper examines the use of the cultural space in Ibadan metropolis. Urbanization trend was studied through a period of 35years using spatial analysis of historical satellite images. The spatial data for historical and archaeological sites were plotted respectively on the base map of Ibadan and overlaid on GIS application to give us the spatial variations that have existed on Ibadan landscape. This makes it possible to see the changes that have occurred on the landscape and has helped to project what might become of these sites in the nearest future. This research reveals that major changes on this landscape over the last 35years could be attributed to the increasing human population, economic development, rural-urban migration and political status of the city. Keywords: Spatial analysis, Landscape, Urbanization, Patrimony, historical sites.

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Session 17. Honoring Professor Susan McIntosh and her contributions to African archaeology // Hommage au professeur Susan McIntosh et à ses contributions à l'archéologie africaine

Tunde Babalola

The Social Life of Glass Making Crucibles in Early Ile-Ife, Nigeria

Crucible is a technical ceramic vessel made for use in high-temperature activities. Glass making crucible is a ubiquitous material in IIe-Ife dating to the 11th century. Its occurrence in archaeological context around IIe-Ife has been uncritically suggested to indicate industrial activity. Using the biographical approach, this paper examines the life cycle of crucibles in early IIe-Ife. Besides the technical functions, it argues that crucibles had other "lives," such as aesthetic/architectural, ritual, and domestic/personal. These phases of life placed crucibles at the helm of social affairs in classical IIe-Ife. The paper navigates through the nexus of production, use, reuse, and discard of the crucibles to understand their biographies. It concludes that though crucibles would have been made for purely technical purposes, they were repurposed to serve other functions either in complete or fragmented forms. Thus, the interpretation of crucibles in IIe-Ife must consider context, association, quantity, and varieties within the assemblage for a better understanding of its use or function in early IIe-Ife.

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Mamadou CISSE

The cultural patrimony of the Sahel today: fight against the looting of archaeological sites and the illicit trafficking of cultural property from Mali

Mali has a rich and varied archaeological heritage including thousands of prehistoric sites, numerous remains of ancient villages and towns, funerary monuments (tumuli and hypogea), metallurgical sites. Although barely begun by scientific research, this heritage is deteriorating under the effect of several factors including, in particular, the looting of sites by clandestine excavations intended to fuel the illicit traffic of artworks and antiquities. Since 2012, the looting of archaeological sites has been exacerbated by the multidimensional crisis induced by the armed conflict and then the recurrent insecurity in the northern and central regions of the country by armed jihadist groups.

In this communication, we will talk about the sites deeply affected by looting activities across Mali, highlight the causes of this phenomenon of looting and the strategies developed in an inclusive approach to effectively fight against the looting of archaeological sites and the illicit trafficking of cultural goods. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52446

Alioune Deme

The Middle Senegal Valley Project and the state of archaeology in Senegal

In 1990-1991, a major archaeological research project was undertaken in the Middle Senegal Valley. The project, called Middle Senegal Valley Project (MSV Project) and conceived as a multi-stage research project, was a joint research between Rice University and IFAN Cheikh Anta Diop. Besides introducing the processual approach in Senegalese archaeology, the project built endogenous research capacity by training 4 Master students from the History Department who later got faculty positions in Senegal. The Middle Senegalese Valley Project has lasting positive effects on Senegalese archaeology both in terms of theoretical perspectives, diversity of research topics, gender equality in higher education, development (usable past), and training. This paper aims at highlighting those legacies.

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Jeffrey Fleisher

Introducing Professor Susan K. McIntosh

This paper will introduce Professor Susan K. McIntosh, describing her academic career and service to the profession and Rice University.

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Daphne Gallagher

Understanding Ceramic Diversity in Early Second Millennium CE Southeastern Burkina Faso

The archaeology of the Gobnangou region in southeastern Burkina Faso during the early second millennium CE is notable for the diversity of its ceramics, which incorporate different clays, tempers, forms, and decorations, often in consistent configurations. This paper explores the variability within these complex household assemblages and considers the functional and social roles of both the regularly occurring vessels which form a baseline assemblage present at almost every site and the rare or unique vessels that supplement them. The results illuminate the potential of detailed ceramic analysis for understanding the connections within a politically complex landscape of dispersed households.

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Diane Gifford-Gonzalez

Susan McIntosh Viewed from the East: The Inspiration of Her Resistance to Out-of-Africa Intellectual Hegemonies

Susan McIntosh has been a colleague and friend since the late 1970s. Many in this session are better placed than I to detail her personal and scholarly contributions to West African archaeology, especially to the emergence of African social complexity. My own debt to Susan, as an East Africanist researching pastoralist societies, has several sources. I have relied upon her service to SAfA as an officer and, more importantly, as our *griot*, recalling foundational events. More importantly, Susan inspired me to carry on interpreting the evidence as I saw it, which meant swimming against the current of widely held assumptions about the origins and trajectories of food production in Africa. In making evidence-based arguments about African cases, we both faced a dual hegemony: dominant views of historical "givens" taken from non-African examples and imposed upon Africa, and a subtler, gender-based dismissal of our proposals. My presentation considers this dual hegemony.

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David Killick

"Extraordinary claims demand extraordinary proof": Susan McIntosh's unwavering commitment to evidence.

Susan and Rod McIntosh began their hugely influential work at Jenne-Jeno (Mali) in 1973 – the same year that Colin Renfrew published *Before Civilization: The Radiocarbon Revolution and Prehistoric Europe.* Radiocarbon dating has been both a blessing and a curse for archaeology in sub-Saharan Africa. Many Africanist archaeologists naively assumed that radiocarbon dating eliminated the need for meticulous excavation and recording of stratigraphy, or for relative dating with ceramic assemblages. Rod and Susan insisted on the continuing relevance of these skills, and trained many students in them. In this talk, however, I will focus upon on Susan's criticisms of extraordinary claims in West African archaeology that are based on uncritical use of radiocarbon dates that lack well-documented contexts.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52112

Adria LaViolette

Reflections on Swahili Urbanism: An Appreciation of Susan Keech McIntosh

Susan McIntosh's research in the Inland Niger Delta helped shape my own on urbanism and social complexities on the eastern African coast. Contemporary exploration of indigenous African urbanism is tied inextricably to her paradigm-establishing archaeology there and elsewhere in West Africa. In this paper I reflect on the legacy of her research in my own studies and that of my students, including avoiding typological evolutionary frameworks; emphasizing bottom-up, household-based approaches to understanding the range of Swahili experience; and emphasizing local developments while recognizing engagement with other regions, trade centers, and global markets. Susan McIntosh has set a high standard in the scope of research questions asked, methods used, and anthropological and indigenous theory engaged. The results of aspects of my own research, summarized here, owe an enormous debt to her as a teacher, mentor, and friend. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52109

Kevin C. MacDonald, Ibrahima Thiaw, Sirio Canos Donnay

Sacred Landscape and Polity: Re-examining Tumuli, Settlement, and Oral Tradition in Waalo (Senegal) Waalo, in Western Senegal, is a multi-phase polity with origins extending into the 11th century. Its early history is largely embedded in myth, including the epic of Njajaan Njaay. Oral traditions present the region as a sacred landscape embedded within multiple political entities over time. Its landscape, previously documented by the McIntoshes and others, is dotted with monumental tumuli and historic villages. In 2018 the authors undertook a season of survey and oral tradition collection in Waalo, concentrating on accurately contextualising earlier research, starting with that of Joire (in the 1940s). This paper negotiates the contradictions of a sacred region which embraced monumentality and long distance trade, while eschewing the growth of large-scale urbanism and local coercive political structures.

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Peter Robertshaw

Beyond Chiefdoms: Hierarchy, Heterarchy, and Fragility in Ancient States

Susan's *Beyond Chiefdoms* volume asserted the value of African case studies for advancing theory pertaining to intermediate-level societies and the rise of complexity while also drawing attention to heterarchical forms of political organization. African states, which provide a rich corpus of data for comparative studies, have mostly not been scrutinized in similar manner and have often been ignored in theoretical discussions globally. Their investigation can offer insights into current discussions of fragility and resilience in early civilizations. Unpacking the concept of "fragility" may foster new ways of thinking about ancient states that move beyond processual evolutionary schemes. This presentation explores these ideas while drawing extensively on the example of Bunyoro in the Great Lake region. Finally, given my research history and Susan's interests, some discussion of glass beads is required!

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Abigail Stone

Beyond Jenné-jeno: Reflections on the Teaching and Mentorship of Susan Keech McIntosh

Susan Keech McIntosh is well-known in Africanist circles and beyond for her groundbreaking theoretical work on African urbanism. No less important are her contributions to the lives and careers of students she worked with as a professor at Rice University. Susan did essential work with African MA and PhD students during her career at Rice and was a tireless advocate for former undergraduate students who went on to study archaeology elsewhere. Rice is primarily an undergraduate institution, and Susan's work teaching and mentoring these students reached far beyond the confines of academic archaeology: she was a residential college magister and then a faculty associate at Baker College (one or Rice's 11 residential colleges), a promoter of independent student research, and an instructor of students from across the academic spectrum, ensuring that students going into fields like medicine and law had a thorough grounding in the human past and how it affects the human present and future. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52816

Session 18. Human origins and Pleistocene archaeology // Origines humaines et archéologie du Pléistocène

Mariam Bundala, Charles Saanane, Rahab Kinyanjui, Brian Kooyman, Susanne Cote

Phytolith analysis from the Middle Pleistocene sites from the Manyara Beds, Northern Tanzania. This project aims to develop a detailed habitat reconstruction for hominins living during the early Middle Pleistocene from 780,000 to 633,000 years ago, using phytolith remains from the Manyara Beds in northern Tanzania. The Manyara Beds have a substantial archaeological record and significant potential for investigating hominin adaptations to environmental variability in the Middle Pleistocene. We present the first palaeobotanical data for the Manyara Beds to examine the relationship between vegetation and hominin activities in the paleo-lake Manyara landscape. We present our results from archaeological sites MK 4, MK 2, and MK 17. Our analysis documents scattered woody vegetation, palm, and C₄ grassland species including Chloridoideae, adapted to warm and dry climates, and Panicoideae, which prevails in warm and humid areas. Our results document that varied habitats were available for the Acheulean tool-making hominins at the Manyara Beds.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52524

Matt Lotter, Matthew Caruana, Marlize Lombard

PLEISTOCENE HOMININ OCCUPATION IN THE MAGALIESBERG: EXPLORING LIFEWAYS THROUGH LANDSCAPE ADAPTATIONS AND LITHIC PRODUCTION STRATEGIES, by Matt G. Lotter, Matthew V. Caruana, Marlize Lombard

Wonderboom preserves one of the largest collections of Acheulean lithics in South Africa. First reported in the 1950s, it has since been excluded in discussions concerning the southern African archaeological record due to a lack of chronology. The site is situated in a shallow valley of the Magaliesberg and its position provided strategic value to local populations, as reflected by the production of ± 15000 lithics closely associated with outcropping raw materials. With this contribution, we unpack the topographical, geological, hydrological, and ecological aspects of the local landscape to provide insight into the strategies employed by Acheulean populations, while also investigating tool-production techniques and lithic sourcing preferences. Our results indicate that Wonderboom played an important role in the Pleistocene landscape and hominins utilised their knowledge of the local landscape to organise their subsistence activities and landscape use patterns.

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Mirosław Masojć, Henryk Paner, Grzegorz Michalec, Patryk Muntowski

Prehistory of two deserts. From Acheulean to the Neolithic at Bayuda and the Eastern Desert, Sudan The two deserts in central Sudan: Bayuda and the Eastern Desert are currently the subject of intense research into the earliest prehistory. A large series of OSL dates and radiocarbon dates supporting the results of the excavation show a settlement episodes in the area, from the Middle Pleistocene Acheulean to the Holocene Kerma culture. Existence of Pleistocene hominin groups using green corridors and Holocene hunter-gatherers far from the Nile valley will be presented. The two projects: Prehistoric communities of the Bayuda Desert in Sudan – new boundaries of the Kerma Kingdom and Homo erectus on the path to Eurasia. Stratified site's agglomeration of Acheulean tradition in the Arabian Desert in Sudan are financed by the Polish National Science Centre and implemented by the University of Wrocław, Poland.

Recognise Sambo, Raphaël Hanon, Nompumelelo Maringa, Christine Steininger, Bernhard Zipfel, José Braga Ecomorphological analysis of some bovid remains from the Unit P deposit at Kromdraai, South Africa. Here we present results of the first ecomorphological analysis of some bovid remains to reconstruct palaeoenvironments of Kromdraai Unit P (KW-Unit P). The Kromdraai site yielded the first Paranthropus robustus and abundant fossil fauna which have remained poorly documented. In this study, four Discriminant Function models were constructed using linear measurements obtained from 43 astragali and phalanges specimens, respectively, to compare morphologies of fossil bovids at KW-Unit P to those of modern bovids from open, light cover, heavy cover, and forest habitats. DFA produced habitat predictions with the maximum resubstitution of (79.9%) and cross-validation return of (76.4%) for the modern specimens. The fossil results are: 88%-combined for open and light cover and 12% heavy cover with no forest adaptations. This suggests that bovids from KW-Unit P have varied morphological adaptations to mosaic habitats, dominating open and lighter cover environments than heavy cover settings.

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Deano Stynder, Ruan Brand

A taphonomic study of newly excavated faunal material from Duinefontein 2, South Africa.

It has been suggested that South African late Acheulean hominins seldom acquired meat from large mammals. As evidence, the proponents of this idea have referenced the rarity of cut-marked bones at openair sites like Duinefontein 2 (DFT2). The suggestion that South African late Acheulean hominins were incapable of acquiring large mammal carcasses is surprising. Indeed, there is mounting evidence from across the Old World to suggest that by the Middle Pleistocene, large mammals were integral to the hominin diet. We report on a taphonomic analysis of recently excavated large mammal bones from DFT2. Our study confirms the rarity of cut-marked bones at the site. However, we also identified exceedingly poor bone surface preservation. Cut-mark preservation is heavily dependent on bone surface integrity, and this finding calls into question the appropriateness of using cut-mark frequencies to deduce aspects of hominin behaviour at South African open-air Acheulean sites.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50797

Haftom Berhane Taezaz, Sarah Wurz, Agazi Negash

Trends of Acheulean Technocomplex during the Lower Pleistocene from East and South Africa As part of a PhD research project, we are working on the Early Acheulean assemblages of selected East and South African sites. Preliminary results of assemblages from temporally similar but spatially different sites show technological specialization, exploitation of different raw materials and environments, and provide an insight into the cognitive development of hominins. Gadeb, an Acheulean site from East Africa, comprises assemblages which are characterized by the presence of two distinct chaîne opératoires, namely the LCTs and production of small debitage. The Early Acheulean record from Canteen Kopje, South Africa, comprised LCTS and Victoria West prepared core technology. Exploitation of different raw materials at the sites understudy was clearly observed. Therefore, comparing the raw material types and reduction strategies to see if correlations existed that might imply lithological properties may have constrained Acheulean toolmaking is at the center of this study. The results of this analysis will shed light on the Early Acheulean technological progression, hominins raw materials exploitation and on the mode and tempo that led to the regional technological specialization, with implications for the adaptation of hominins.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52727

Michael Toffolo, Ana Alvaro, Britt Bousman, Lloyd Rossouw

A reference framework for the study of heat treatment of hornfels in the Stone Age of South Africa

Heat treatment of lithic raw materials to improve the flaking quality and performance of stone tools is a wellknown pyrotechnological activity that took place at several prehistoric sites across the globe. Silcrete, an indurated soil crust cemented by silica that was extensively used at coastal sites in South Africa during the Middle Stone Age, is an example of rock that cannot be effectively knapped without prior heating. In the central interior of South Africa, the only raw material of good knapping quality is hornfels, found at many sites from Acheulean times onwards. Currently, there is no method to determine whether hornfels was thermally

treated to enhance its mechanical properties. We explored this possibility by using infrared spectroscopy to detect changes in the crystal structure of hornfels cobbles heated to elevated temperatures. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50952

Lenka Varadzinová, Ladislav Varadzin

Burial traditions along late Pleistocene and early Holocene Nile

Was there a characteristic burial tradition (or traditions) among late Pleistocene and early Holocene huntergatherers along the Nile? And if so, can we trace formal affinities between the burial tradition(s) along the Nile and in East and Central Africa from where expansion of at least one part of postglacial reoccupants of the Nile corridor has been assumed? We examine these questions based on published and unpublished burial grounds in these regions, including large cemeteries uncovered recently in the Sabaloka Mountains at the Sixth Nile Cataract (central Sudan). Our aim is to ascertain whether and to what extent a comparison of the funerary behaviour and the character of burial sites can indicate an expansion of hunter-gatherer populations or cultural traditions just like material culture or biological traits do.

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Session 19. Integrative approaches to African archaeogenetics // Approches intégratives de l'archéogénétique africaine

Lamine Badji, Kendra Sirak, Ibrahima Thiaw

Genetics and social identities in Senegambia: the "caste" endogamy of the griots in question

This paper explores the social process surrounding the construction of a specific, transethnic and sub-regional identity in West Africa. Building on the case of the griots, a group of endogamous craftsmen and musicians in Siin (Fatick region/Senegal), we examine the possible interconnections between caste endogamy, migrations, processes of miscegenation and hybridization. Caste specialist groups including the griots spread across West Africa in the 13th century following the Mande expansion routes. In the Sereer speaking country of Siin, griots occupy a rather special place in the social and environmental landscape. They are subject to a number of social taboos and are interred upon death in the hollows of baobab trees. This study questions the linkages between migration, the social constructions of taboos, and the biological trajectories specific to griots and non-griots. In other words, does genetic ancestry align with ideologies of social dichotomies in the Sereer country where it translates into strong socio-economic and political differentiations? Genetics, apart from the possibility of examining the demographic history of the people interred in baobabs, can make it possible to critically assess whether there is correspondence between genetic and social identities. We will develop in this paper three discursive axes: firstly, we sketch out the social and ideological rationale of griots internment in the hollows of baobabs; secondly, we will demonstrate theoretically and methodologically that biological archives are relevant for elucidating issues of identity in the Senegambia and; thirdly, we will present the preliminary archaeogenetic results of DNA analysis of individuals interned in baobab tree in Siin. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52128

Nancy Bird, Louise Ormond, Paschal Awah, Elizabeth Caldwell, Bruce Connell, Mohamed Elamin, Faisal Fadlelmola, Matthew Fomine, Scott MacEachern, Yves Monino, Pieta Nasanen-Gilmore, Nana Nketsia, Krishna Veeramah, Michael Weale, David Zeitlyn, Mark Thomas, Neil Bradman, Garrett Hellenthal

Genetic data reveals large-scale historical migrations in populations from West and Central Africa Recent improvements in methods that date mixing events between geographically separated populations allow us to understand the genetic impacts of historical events. Here, we present analyses of genetic data comprising 1360 individuals from 150 ethnolinguistic groups from west and central Africa. We infer multiple novel signatures of admixture, and link these and their associated date estimates to potential underlying events. Notable examples include intermixing that spans the trade networks of the early Kanem Empire and admixture in coastal Sudan with dates overlapping the Kingdom of Aksum. We examine admixture likely resulting from the expansion of Bantu-speaking peoples, including evidence for multiple waves. We also infer mixing between populations further west possibly facilitated by climate change during the early expansion. Our findings highlight how genetic data can complement historical and archaeological research to create a powerful framework for understanding the past.

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Mame Yoro Diallo, Martina Čížková, Iva Kulichová, Eliška Podgorná, Edita Priehodová, Jana Nováčková, Veronica Fernandes, Luísa Pereira, Viktor Černý

New insight of Sahel/Savannah belt prehistory through the lens of genetic and genomic diversity study Archaeological data have long served as a benchmark to light up the dynamic nature of cultural and possibly also population movements across Africa. Recently, also advances in genomic technics together with the rapid development of bioinformatics allowed us to contribute to the documentation of population events (expansions/contractions) in Late Pleistocene and especially Holocene. This presentation will discuss the key results of our latest studies and deal with long-standing questions about how genetic variation is distributed among local populations living in the Sahel/Savannah belt. The population structure revealed will further highlight past biological contacts between Sub-Saharan and North African populations based on mitochondrial DNA, and also thanks to genome-wide SNPs studies will show several signals of past and recent admixture events in African populations within the Sahel/Savannah space.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52805

Joscha Gretzinger, Victoria E. Gibbon, Judith C. Sealy, Sandra E. Penske, Johannes Krause, Stephan Schiffels 7,000 years of genetic continuity at Oakhurst rock shelter, South Africa

Both the archaeological and genetic record of southern Africa suggest a sequence of major demographic transformations during the past 2,000 years, resulting in substantial shifts in the genetic ancestry and diversity of the local hunter-gatherer populations. Inferences about their population structure before those demographic shifts are challenging to make, since the spread of pastoralism and farming has obscured the structures of Later Stone Age populations. The Oakhurst Rock shelter site in South Africa was excavated in the 1920s near the town of George with 42 human graves dating between 9,100 and 1,500 years before present. Using a temporal serial sampling strategy we present genome-wide ancient DNA data for ten individuals. We find that over the entire occupation term Oakhurst individuals show the highest genetic similarity to presentday San and Khoe-Kwadi-speaking groups still living in the wider area, namely the ‡Khomani, Karretjie, Taa, and Nama people of South Africa and Namibia. In contrast to those present-day individuals, the Later Stone Age inhabitants of Oakhurst rock shelter do not show East African Pastoralist ancestry, which entered all present-day San and Khoekhoe people during the last two millennia. In general, while the population genetic record of Eurasia and large parts of Africa in the last 10,000 years is shaped by multiple episodes of population movement, interaction, and replacement, the Oakhurst individuals exhibit genetic continuity over nearly 7,000 years, suggesting no major demographic turnovers in coastal South Africa before the advents of pastoralism and farming.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52526

Diyendo Massilani, Jessica Thompson, Michael Boyle, Flora Schilt, Jacob Davis, Temwa Nkhata, Hannah Keller, Potiphar Kaliba

Ancient DNA in sediments from tropical Africa

Recent evidence that archaic hominin DNA is preserved in sediments from Pleistocene caves opens new possibilities for investigating the human past. DNA from sediments may overcome our dependency on the scarce fossil record in challenging preservation conditions such as tropical environments. However, the geographical and temporal limits of ancient DNA preservation in sediment remain unknown. We investigate ancient DNA preservation in sediments from high altitude tropical environments at five late Pleistocene to Holocene sites in Malawi (eastern Africa), including sites that have produced the oldest human DNA from bones in Africa to date. To secure a high ancient DNA yield and allow for accurate micro-contextualization of the genetic signal, we collected in parallel samples of loose sediment and micromorphology blocks. The screening of these samples for ancient mammalian DNA will provide new knowledge about the feasibility of this approach in Africa and other under-sampled regions.

Mary Prendergast

Challenges in reconciling genomic and archaeological data in Africa's deep past

Archaeogenetics has seen explosive new growth in Africa, rekindling older debates on the goals, ethics, methods, and unintended consequences of a population genetics approach to the past. Spatial and temporal sampling gaps indicate that research is in an exploratory phase, biased toward particular problems. This talk sketches out a future in which the field has matured in terms of best practices, data resolution, and community engagement, underscoring challenges that will remain to reconcile multiple forms of evidence. Focusing on eastern Africa – where data density is currently greatest – enables us to detect socially meaningful divergences emerging from combined genetic, archaeological, bioarchaeological, and linguistic lines of evidence, as well as contrasts with better-studied parts of the world, such as Europe. These divergences indicate new directions for disciplinary integration, and unanswered questions whose resolution will ultimately require new archaeological research.

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Austin Reynolds, Dana Al-Hindi, Stacy Edington, Neus Font-Porterias, Justin Myrick, Sihaam Boolay, Jamie Saayman, Caitlin Uren, Marlo Moller, Brenna Henn

The genomic impacts of European colonialism in southern Africa

The Colonial period catalyzed major social and genetic upheavals around the world. Many contemporary populations today can trace their genetic ancestry to historic admixture events during this time period. The population history of admixed groups and the genomic impacts of European colonialism have been a major focus of genetic research in the Americas, but relatively little work has been done to address these topics in African communities. In this paper, we present genome-wide data from nearly 2000 members of Khoe-San descendant communities from South Africa. We present results on regional population structure, variation in admixture patterns, and changes in population size to better understand the genomic impacts of colonialism in this region. Finally, we discuss these results in the context of the Late Holocene archaeology and colonial history of southern Africa to explore the complementary nature and limitations of using genetic data to understand the human past.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50798

Elizabeth Sawchuk, Kendra Sirak, Christine Ogola, Emmanuel Ndiema, Fredrick K. Manthi, David Reich, Mary Prendergast

Toward an ethical and equitable future for African DNA/aDNA research: updates from DNAirobi

DNA from African people – ancient and living – is highly valuable to research, yet African scholars are starkly underrepresented in most DNA and ancient DNA (aDNA) collaborations. Major barriers include the lack of engagement among African and non-African scholars and issues raised by applying ethical practices developed elsewhere to diverse African contexts. The DNAirobi workshop planned for May 2023 in Kenya brings together archaeologists, geneticists, and other stakeholders from across Africa and the world to evaluate the state of our field. The workshop aims to discuss current research among multidisciplinary scholars; identify ethical issues specific to African contexts and brainstorm solutions; and strategize building capacity and establishing equitable partnerships to collaboratively pursue future work. We review our discussions with the intent of engaging a broader community of scholars committed to ethical and equitable archaeogenetics scholarship in the coming years.

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Kendra Sirak, Solomon Kebede, Betrand Poissonnier, Andrew Duff, David Reich

Ancient DNA from Tuto Fela (southwest Ethiopia) attests to a male-centered funerary tradition

Megaliths across Ethiopia often served as grave markers for followers of local religions. We present genomewide ancient DNA data for 15 individuals buried at Tuto Fela (Gedeo Zone, southwest Ethiopia). Thirteen were molecularly sexed as male, a significant overrepresentation. Ten of those 13 had male relatives buried at the site, while the two females had no relatives, suggestive of patrilocality. Genetic evidence of a male-centered funerary tradition is notable in light of the phallic and anthropomorphic stelae at the site whose cultural and religious significance is not well understood. We observe a high frequency of the rare east African-specific E-V2403 Y chromosome haplogroup, while genome-wide data reveals that the Tuto Fela individuals fall at the end spectrum of genetic variation of present-day Ethiopians and share affinity with an individual who lived 4500BP in the nearby Gamo Highlands. Here, we explore these data and discuss some of their implications. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51082

Session 20. Landscape and settlement: multidisciplinary approaches // Paysage et habitat : approche pluridisciplinaire

Demba KÉBÉ

Taxonomie et unités géomorphologiques des sites néolithiques du Ferlo (Sénégal):): Occupation et production.

La présence des groupes préhistoriques dans le Ferlo (Sénégal) est favorisée par un contexte géomorphologique et géologique complexes propices à la taille de la pierre et au façonnage de la poterie, dont la reconstruction a longtemps privilégié, au Sénégal, les caractères typologiques et stylistiques des artefacts. L'objectif de cette présentation est de saisir le cadre archéologique du Ferlo afin d'évaluer le dynamisme culturel la rattachant à la vallée du Fleuve. La zone d'étude se trouve sur les environs des rives de la vallée fossile constituée de multiples unités géomorphologiques. Par conséquent, les sites néolithiques se trouvent incrustés sur les croutes de levées sablo- argileuses décomposées par des réseaux de ravins. Mais la rareté des axiomes paléontologiques milite aussi pour une reconstitution du processus technotypologique et chronologique des évidences stratigraphiques des cultures matérielles héritées de la région afin de proposer un «expédient» des comportements techniques de la production des populations néolithiques https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56998

Sonja Magnvita, Ibrahima Thiaw, Friedrich Lüth

The Tumuli Zone of Central West Senegal: Geophysical and Archaeological Investigations into a Buried Cultural Landscape

Thousands of burial mounds are known throughout Senegal, but their number is particularly high in the country's central-west region around the town of Mbacké. Remarkably, apart from the presence of the prominent monuments, additional traces of former human occupation in the region long remained archaeologically elusive. Within the scope of a landscape-based project that started in 2019, we are demonstrating that settlement and other remains from various periods can be easily located if suitable methodology is employed. Centered on the burial mound clusters at Thiékène and Kael near Mbacké, the project is combining large-scale geophysical prospection and GIS with conventional archaeological surveys and excavations for locating and examining buried evidence. After two field seasons, hundreds of otherwise invisible anthropogenic structures have been mapped and some test-excavated. This paper gives a first overview on central results of that work.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52590

Angelinah Masolo

Peopling, practices, and place-making: Stone Age landscape shifts in the middle Limpopo valley

Foragers from the mid-Holocene in the middle Limpopo Valley were part of a vibrant social and economic network initially driven by themselves but eventually controlled by local farmer communities. Inter-site variations show different uses of space that also changed over time. However, it is unclear what led to these landscape shifts. To study these occurrences, this research seeks to examine cultural changes that began during the mid-Holocene period and also explores its impact on Stone Age landscape patterns such as settlement habits, resource exploitation patterns, and social dynamics. A combination of cultural material, faunal use-wear analysis, Geographic Information System modeling, and radiocarbon dating will be used to achieve the aims of this research.

Leanne Phelps, Kristina Douglass, Caroline E.R. Lehmann, Maria (Bat) Vorontsova, Niels Andela, Dylan Davis, Mathieu Gravey, Christian Kull, Sean Hixon, MalagasyGrassyBiomes working group

Holocene grassy biomes to modern fire regimes: Madagascar reflects global challenges & opportunity Local land use practices viewed as unsustainable are often assumed to drive grassy biome expansion and landscape degradation. Madagascar is often seen as an example of grassy biome expansion being abnormally high due to unsustainable land use practices, such as increasing human fire use. However, the Holocene evolution of grassy biomes and the role of people in mediating these relationships is still poorly understood, with empirical, interdisciplinary understanding critical to disentangling the complex spatio-temporal drivers of vegetation change. Furthermore, fire-human-vegetation relationships are often poorly characterised and globally contextualised in recent decades. Our research focuses on addressing these knowledge gaps using three main interdisciplinary approaches:

(1) Compile a collaborative framework to improve the interdisciplinary understanding of Holocene grassy biome change across the tropics, with Madagascar as the central case study.

(2) Apply a comparative approach to MODIS remote sensing data (2003 – 2019), to identify how long-standing narratives of unsustainable land use have led to unsubstantiated assumptions about human-fire-degradation relationships.

(3) Establish a continental-scale characterisation and comparison of Holocene livelihoods using Carbon and Nitrogen isotopes

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Frejus Somalon

Enquête orale et archéologie environnementale: étude de la foresterie ancienne dans le secteur de Kétou Au Bénin, le reboisement a connu des échecs récurrents dus, entre autres, aux exigences des plantes exotiques introduites dans le pays et au manque d'entretien des plants mis en terre. L'objectif général de ce travail est d'identifier les espèces végétales de la foresterie ancienne à travers les reliques d'arbres centenaires ou non, dans le secteur de Kétou. Les objectifs spécifiques sont élaborés comme suit : identifier et répertorier toutes les espèces végétales de la foresterie ancienne de la zone d'étude ; inventorier les sites archéologiques ; et enfin, répertorier les pratiques liées aux espèces végétales identifiées et établir la cartographie des espèces de la foresterie ancienne et des sites archéologiques de la région. Ainsi, cette recherche apporte une contribution à la connaissance des pratiques liées à la foresterie ancienne dans cet ancien royaume yorouba où l'on retrouve encore des reliques d'espèces végétales centenaires. A l'issu de ces travaux, la présence de vestiges archéométallurgiques a suscité en nous l'interrogation de savoir pourquoi, il n'y a pas d'individus centenaires des espèces à forte pouvoir calorifique qui sont utilisées dans la production ancienne de fer ?

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51938

Mamadou Thior, Adama Harouna Athie, Nicolas Sagna

Modelling the presence of shell clusters in the Saloum Delta of Senegal: the use of predictive analytic hierarchy process.

The Sine Saloum Delta situated in Dakar, Senegal has great archaeological potential, the geolocation of which is far from being exhaustive. The objective of our current study is to identify areas with high potential for shell cluster sites through predictive modelling based on remote sensing and GIS. The Analytic Hierarchy process method is used to locate and spatialise areas where shell clusters occur. Several environmental variables have been selected for this model including digital elevation models, morpho-pedology, geology, and distance to water. Predictive trends indicate a high probability for the occurrence of shell clusters at an elevation less than 500 m and within a 10m range from shorelines and mudflats. The present study not only helps to shed further light on the archaeological footprint of this landscape but highlights the role of remote sensing in the identification and documentation of heritage sites in Senegal.

Session 21. Landscapes of Resistance: Archaeological Approaches and Comparative Perspectives // Paysages de résistance : approches archéologiques et perspectives comparatives

Oluseyi Agbelusi

The Regent Village Landscape: Entanglement, Nascent Colonialism, and Changing Spaces on the Sierra Leone Peninsula

This paper provides a critical analysis of the physical and social geography of Regent, a liberated African village on the Freetown Peninsula, Sierra Leone established during the early colonial period (1808-1896). Inspired by recent trends in Americanist historical archaeology, I draw on a landscape perspective that views past landscapes as arenas of relations of inequality, contested histories, genealogical histories, and social group identities to understand the environment that the village's inhabitants lived in, adapted to, and modified. First, I focus on the material dimensions of the village landscape such as house structures, cadastral grid and street layout, marketplaces, and the distribution of archaeological remains left behind by the inhabitants. Second, I delve into the discussion of how these material dimensions influence or reflect social relations, practices, and people's engagement with the material world. Third, I address the ordering of space by viewing certain spaces as in-between, which strengthens communal social formation. Throughout this paper, I examine how the British government used architecture and the ordering of space to reinforce European ideals of governance and civilization but also underscore the ways in which the village's inhabitants engaged, appropriated, and laid claim to the landscape.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/53493

Noemie Arazi

Extraction and resistance in the eastern Congo during the second half of the 19th century

This presentation focuses on the merchants who ventured from the East African coast into the area west of Lake Tanganyika. Involved in the trade of slaves and ivory they came to occupy a vast territory of the Upper Congo Basin during the second half of the 19th century. The legacies of this past continue to occupy and embody today's cultural landscape and memory. With the collaboration of resident communities it was possible to activate the documentation of a complex register of sites tightly linked to extraction, resistance and colonial conquest in the territory of Kasongo. They include the vestiges of trading centers by those involved in the ivory and slave trade, refuge sites, battle grounds and colonial monuments. This paper critically examines the results from our research, merging archaeology, archival sources and oral history. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54229

Thomas Biginagwa

Unsettled life and the formation and deformation of ethnic identities in southern Tanzania: The Ngoni factor

The Ruvuma region in southwestern Tanzania was the scene of major historic events during the 19th and 20th centuries. These included the Ngoni incursion, the slave and ivory trade, and the Maji Maji rebellion against German colonial rule. These events unsettled indigenous peoples' lives in a variety of ways, including through frequent relocation. The Matengo, Ndendeule, and Pangwa were originally one ethnic group and spoke one language, but were divided when the Ngoni arrived. The Matengo abandoned their vast plains and squeezed themselves up into the Livingstone Mountains; the Ndendeule fled northeast with some reaching lfakara in the Rufiji River Basin; and the Pangwa sought refuge in the Upangwa Mountains. Yet, many people in Ruvuma, including these ethnic groups, now comfortably identify as Ngoni. This likely developed through past strategic entanglements with their oppressor. This paper will discuss all these events in connection with the concepts of "marronage" and entanglement.

Cameron Gokee, Fodé Diakho

Peuple des Pierres? Resistance and Ethnomorphosis among the Bedik (Senegal)

Over the past century, colonial and ethnographic narratives have cast the Bedik as a "peuple des pierres" whose livelihoods and identities are inseparable from the dolerite hills of southeastern Senegal. Against this trope of traditionalism, Bedik oral histories explain how their villages emerged through dynamic processes of migration, cooperation, and conflict, largely in resistance to the predatory political economies of neighboring states and Atlantic markets during the 16-19th centuries. In this paper, we use archaeology to explore how these strategies of resistance, together with material culture and the physical landscape, shaped long-term cultural continuity and change in Bedik communities. Drawing on the results of regional survey and site mapping by the Bandafassi Regional Archaeological Project (BRAP), we argue that resistance through mobility (more so than refuge) was fundamental to this process, culminating in the composition of contemporary Bedik ethnicity.

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Matthew Knisley

Cultivating Resistance: Plant Foods and Foraging Landscapes Among the Sandawe of Central Tanzania

Scholarship on the foragers' survival and interactions with food-producers tends to emphasize processes and practices of isolation, avoidance, assimilation, marginalization, and opportunism. There is room, though, to explore strategies of resistance among past and present forager societies. For example, Woodburn contrasted immediate- and delayed-return foraging following ethnographic work among the Hadza, and this model has been used widely to theorize about the origins of human sociality. Less attention has been given to his later suggestion that immediate-return foraging is not a development baseline but a response to encapsulation by predatory neighbors. This paper brings these conceptual tensions into conversation with recent research that points toward the construction of landscapes that offer possibilities for varied forms of interaction, including collaboration and resistance. Drawing on recent archaeological and ethnographic work, I argue that the cultivation of plants was one manner through which a foraging identity and ethos has been maintained among the Sandawe.

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Scott MacEachern

War in the Kalashnikov zone: scales of identity and violence around the Mandara Mountains

Northern Mandara communities are exemplars of lives lived at the edges of predatory political economies, past and present. They place themselves literally within a landscape of resistance, as 'people of the rocks', but have also allied themselves strategically with predatory state representatives and predated themselves, when advantage or conviction dictated. Over time, the spatial and cultural bounds of this landscape have fluctuated. Archaeologists have used the distribution of pacific artefact types – ceramics and iron hoes, for example – to study the resulting scales of cultural variation within and beyond the Mandara Mountains. The Boko Haram conflict has brought global attention to this landscape of resistance. In a time of globalization and violence, new technologies and new alliances will probably be important in the production of Mandara identities, as they have been in the past.

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Lydia Marshall, Thomas Biginagwa

Refuge as Resistance: the power of retreat at Lilangangondo, Tanzania

Located in southwestern Tanzania, Lilangangondo is an inselberg that rises abruptly 300 meters from surrounding lowlands. It is remembered in oral histories as a refuge to which local people retreated to avoid slavers. This use is also supported by trade beads at the site, which point to its occupation during the height of the slave trade in the eighteenth and nineteenth centuries. Similarly telling is Lilangangondo's strategically high elevation and its location less than 25 kilometers from Lake Nyasa. We know from historical documents that the Lake Nyasa region was particularly devastated by slaving, and elevated settlements are more defensible and less visible from below. In this paper, we rely on anarchist theory to better understand retreat as a means to mitigate the harms of coercive power. We also review evidence for earlier occupations at the

site to consider retreat as a time-deep resistance strategy that we can study in the absence of supporting oral and written histories.

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Elias Michaut

When I'll be free I will have nothing else to desire: freed people's worldmaking in northern Senegal

In 1844, a Senegalese enslaved sailor named Maly M'Baye is recorded in a colonial document as having said: 'When I'll be free I will have nothing else to desire, because I will receive, in full, the fruits of my labour'. This paper takes a multi-scalar landscape approach to explore the ways enslaved people reclaimed their freedom and autonomy in the mid- and late-19th century in the hinterland of colonial Saint-Louis, north-western Senegal. It will particularly focus on the so-called *villages de liberté* (freedom villages) where many freed people were interned by the French colonial administration after their emancipation. Evidence from archaeological excavations as well as historical documents and oral histories will be used to highlight the diverse worldmaking practices of formerly enslaved people, particularly against the looming colonial discipline and necropolitics. Attention will also be given to the ways gender impacted these strategies, and to the afterlives of these processes.

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Aribidesi Usman

The Landscape and Society of Northern Yorubaland during the 19th century Yoruba Internecine Warfare, Northcentral Nigeria

Raiding, ambushing, pillaging, military threat, and the taking of captives have all occurred in northern Yorubaland in northcentral Nigeria both before and in the 19th century. Warfare in this area could be swift (or smash and grab) operation with little consideration for long-term exploitation, or it could be a prolonged siege with the imposition of machinery to exploit the conquered groups. War not only occurred, but it had left behind, in its path, a considerable transformation of the region's social and physical landscape. Oral, ethnohistorical, and archaeological evidence for such military aggression is present. This paper examines the nature of warfare, the people's reaction to these external threats, and the consequences of the wars in the region.

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Session 22. Life, Death, and Belief on the Nile // Vie, mort et croyance sur le Nil

Mohamed Bashir

The Meroitic Afterlife: a new Insight from Kedurma, Nile Third Cataract Region

Kedurma is located in Nubia, about 607km north of Khartoum. It has long been known as a major Meroitic town with elite residences, industrial areas, residential quarters and a cemetery.

The Meroitic cemetery of Kedurma has not been thoroughly investigated. However, limited excavations were conducted in the cemetery. New systematic excavations started in 2021 with the support of the National Geographic Society for one season. During that excavation, 17 graves were dug.

Therefore, this research aims to present the data generated from that fieldwork which revealed new details about the burials that characterized the site of Kedurma and showed that funerary practices changed and developed according to the life frame of the people. The excavated graves reveal practices and methods of burials and how mortuary practices can express special identities.

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Dorota Dzierzbicka, Daria Elagina

Stranded in Dongola, Sudan. A 16th-century account of the Ethiopian monk Takla Alfa, reconsidered

Information on 16th-century Sudan is scarce, and first-hand accounts of travelers are all the more precious for their rarity. The paper presents a reconsideration of such an account, which has received little scholarly attention. It is a colophon of a text written in Ge'ez by Takla Alfa, an Ethiopian monk, during his stay at Dongola in 1596. The fragment of interest (*Vat. Et.* 44, 71v–76v) is preceded by hymns composed by the monk and includes a narrative on the circumstances of their creation.

The authors offer a re-edition and English translation of the passage and comment on a series of interesting linguistic and historic aspects of this unusual text. The references to ethnic and social groups at Dongola (Nubians, Muslims and Arab(ian) *gelaba*) are discussed, identifying the *gelaba* as long-distance merchants known from sources dated to later centuries. Lastly, the authors discuss the possible interpretations of the light observed by the monk and inhabitants of Dongola on 23.08.1596.

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Maciej Wyżgoł

Changing life of a house and its dwellers at Old Dongola (Sudan) in the 15th-17th century.

Old Dongola is located on the right bank of the Nile, halfway between the Third and the Fourth Cataracts. From the 5th to the 14th century, it was the capital of the Kingdom of Makuria. After its decline, Old Dongola became the centre of a smaller, local polity – the kingdom of Dongola, which, from the 16th to the 19th century, remained under the dominion of the Funj Sultanate of Sennar. Centrally placed Citadel, the location of most of the Makurian official buildings, including a royal palace and churches, after their abandonment became densely occupied with houses of commoners. Domestic compounds comprising several houses clustered around a courtyard seem to form city's basic socio-economic units.

An archaeological investigation of one of the house compounds, established in the mid-15th century and uninterruptedly inhabited until the end of the 17th century, gives an opportunity to reconstruct its life history from the construction to the final abandonment. This paper aims to explore the way in which a life of Dongolese households was intertwined with a development of their dwellings and continuous shifts in space usage throughout their existence.

In this paper I will discuss how the construction, subsequent abandonments, redevelopments and reoccupations of buildings forming a house compound were associated with events restructuring life of a household and its social arrangement.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52798

Katarzyna de Lellis-Danys, Lorenzo de Lellis

Pottery from the households of Old Dongola (Sudan): diachronic and spatial perspectives

The ERC Starting Grant 'UMMA' from the Polish Centre of Mediterranean Archaeology University of Warsaw, developed a comprehensive research program on the liminal phases between the Late Christian and Islamic periods of Old Dongola (Sudan). Four years of excavations produced a massive corpus of data, including over 145000 fragments of pottery, dated to the 14th-18th centuries CE, including various classes like bowls, plates, and jars. This paper presents a diachronic and spatial perspective of the ceramic finds, based on the quantitative analysis of the assemblages, their relationship to the spatial context, and their variability through time. Issues of multifunctionality and association between pottery classes and with other types of artifacts, distribution, seriation, and composition of the assemblages are here discussed to offer a contextualized overview of the life cycle of the pottery in Old Dongola, from production to discard. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54315

Session 23. Linking Records of the African Past // Relier les archives du passé africain

Monika Baumanova, Rosanna Tramutoli

Toponymy of Swahili archaeological sites on the East African coast

This paper presents the results of a collaboration on the frontiers of archaeology and linguistics, examining a collection of over a hundred place-names under which past towns on the Swahili coast of East Africa have been known, featuring abandoned archaeological sites and living towns in Kenya and Tanzania. The collection of toponyms is examined in terms of their linguistic features, folk etymology and conceptual content. The study reflects on how the toponyms fit into some important themes in archaeology and history of the Swahili society, such as the attested relevance of trade, the built environment and life on the oceanfront. Utilising this knowledge, it reflects on how the names contributed to place-making and defining the identity of these towns both as individual entities and as part of the Swahili cultural sphere. The interdisciplinary perspectives

help to elucidate the connection between the socio-historical relevance of these sites with their cultural conceptualisations.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50752

Koen Bostoen, Peter Coutros, Carina Schlebusch

Interdisciplinary Approach to the Origins of the Niger-Congo Phylum: Genes, Languages, and Stuff

Niger-Congo (NC) is the world's largest language phylum – incorporating more than 1500 languages spoken across all except Northern Africa. Although the earliest stages of NC's development are not well understood, its purported origins lay between ~20-12 kya within West Africa. This time frame overlaps with the earliest phases of the region's repopulation during the African Humid Period. Despite the significance of this period, few attempts have been made to identify where and when NC originated and how it became Africa's largest phylum. We argue that despite serious methodological and empirical incompatibilities between various data sets, interdisciplinary approaches to these questions are the most fruitful. Thus, this paper will review the current state of linguistic, archaeological and genetic evidence related to the emergence and spread of NC speakers across and from West Africa. By doing so, we argue for situating the origins of NC in West Africa south of the Sahara.

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Nick Gestrich

Network models of archaeological and linguistic pottery data on the Middle Niger

In recent years, much discussion on how to combine archaeological and linguistic data on the African past has revolved around the concept of supplementarity. There is far less work on how to formalize and structure data that are related in this manner. This paper reports on an attempt to include archaeological and linguistic data on pottery from the Middle Niger into a network that models knowledge exchange in the domain of ceramics. Considerable adjustment in method and theory is needed in both disciplines to make their data interact in this way. We show the possibilities and limitations of this network approach and discuss other possibilities for supplementary data structures.

Rebecca Grollemund, Braden Brown, Derek Nurse, Gerard Philippson, David Schoenbrun and Abigael Tomlinson Phonological innovations support new Bantu migration routes

We present a new study of Bantu languages based on the analysis of phonological innovations extracted by means of the Comparative Method. While recent phylogenetic classifications of Bantu languages, resting on the study of basic lexical items, disagree on genetic groupings and migration paths, we think that working from phonological innovations allows us to get a more accurate picture of language divergence, hence, Bantu Expansion. We compile several comparative datasets for Western Bantu languages. For each language, we collected data from published sources to study the reflexes of the Common Bantu plosives *(N)p, *(N)t, *(N)k, *(N)b, *(N)d, *(N)g in C1 and C2 positions. The analysis of patterns of shared phonological innovations, such as the evolution of *k and *g, reveal new genetic Bantu subgroups (such as the existence of a Forest Bantu subgroup) that support new assumptions about Bantu migratory routes.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52771

Esther Morgenthal

Words, tools and actions - an ethnolinguistic study of present-day pottery cultures in West Africa

Tools are and were an important part of pottery production in West Africa. Even though there are usually only a small number of 'things' that are used as tools, they cannot be separated from the production process. Often one and the same tool is used here for various work steps. Today, when we look emically at concepts of tool use and their lexicalization, we get important clues about the potters' cognitions of the production process. We find a very similar repertoire of tools in many potter societies and we also find - even across language boundaries - similar cognitive concepts reflected in lexicalization. Furthermore, lexical borrowings for possibly appropriated production processes can be observed which could give us clues to historical connections. Using practical examples from current research in Mali and Gambia, the topic of the lexicalization of tool use in pottery will be discussed.

Sara Pacchiarotti, Peter Coutros, Jessamy Doman, Guy Kouarata, Igor Matonda, Koen Bostoen Were they really the first Bantu speakers south of the Congo rainforest?

Early West-Coastal Bantu (WCB) would be have been spoken by the first Bantu speakers south of the rainforest ~2,500 BP (Bostoen *et al.* 2015; Grollemund *et al.* 2015). From its homeland between the Kasai and Kamtsha Rivers in the present-day DRC, WCB would have undergone two expansions to the Atlantic Coast, a southern at the origin of the Kikongo Language Cluster and a northern from which Teke and its closest relatives rose (Pacchiarotti *et al.* 2019). The recent theory that a population collapse affected the entire Congo forest ~1,500 BP, possibly due to a pandemic, and was followed by a recolonization from ~1,000 BP supports a spread-over-spread model of Bantu Expansion and induces major uncertainty about how language phylogenies reflect the initial migration of Bantu speakers (Bostoen *et al.* forthcoming; Seidensticker *et al.* 2021). We confront here linguistic and archaeological data from the BantuFirst project (2018-2023) to assess whether WCB spread during the Early or Late Iron Age.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51922

Birgit Ricquier, Edmond de Langhe, Luc Vrydaghs

The Bugu-Poko Banana Split: New Linguistic Evidence on Plantains vs the History of the Congo Basin One of the big questions in the early history of the Congo Basin is when local communities acquired bananas (actually AAB plantains), along which trails this Asian crop was diffused over the continent, and whether this new plant facilitated communities to settle in a rainforest environment. Over the past decade, knowledge on both the natural and cultural history of the Congo Basin has much advanced, thus demanding a review of previous hypotheses. The present paper embarks on this review, but also forwards new linguistic evidence on the history of plantains. We analyze the distribution of bugu 'banana fruit gen.', (m)poko 'banana tree' and other banana-related words thanks to new data for languages spoken in the northeastern DRCongo. Considering the multidisciplinary approach, it is challenging to forward a hypothesis that does not stray from the available evidence. The paper will therefore focus on methodology, whilst not forgetting to also present new results.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52724

Henning Schreiber

Supplementary dating: Dogon archaeological ceramic inventories and linguistic proto-taxonomies

The matter of dating speech community events in African historical linguistics is mostly addressed in the realm of lexicostatistics, but it is also a secondary outcome of linguistic reconstruction. While relative chronologies may be established on the basis of linguistic distance or shared historical innovations, the identification of absolute time depth of community events in language history has proven to be extremely difficult — even if advanced methodologies such as "calibration" are applied. "Calibration" in this sense is achieved by anchoring moments of linguistic divergence in time by linking datable archaeological evidence to relative linguistic chronologies. We here modify this dating strategy by extending the idea of supplementary reconstruction to supplementary dating. This form of anchoring linguistic chronologies is attempted on Dogon ceramic inventories and innovations of pot types, which are linked to relative chronologies of reconstructed Dogon ceramic terminologies.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54221

Session 24. Maritime archaeology and heritage in the southwest Indian Ocean // Archéologie et patrimoine maritimes dans le sud-ouest de l'Océan Indien

Kristina Douglass, George Manahira

Advancing community-centered maritime archaeology in SW Madagasca

Maritime archaeology is vitally important for documenting and understanding Madagascar's past. Indeed, maritime archaeology has great potential to further reveal the diverse connections between ancient Malagasy peoples and the broader Indian Ocean world. Maritime archaeology can also shed greater light on the lives of coastal communities on Madagascar and help diminish the artificial divide between land and sea imposed to

some extent by terrestrial approaches. Finally, maritime archaeology can help reconstruct the historical ecology of coastal and marine environments, enabling us to better understand the legacies of human-sea interactions over centuries and millennia. Despite its clear importance, maritime archaeology in Madagascar remains the most inaccessible branch of archaeology for students and the most exclusive of stakeholder communities. Here we share a new initiative of the Morombe Archaeological Project and Olo Be Taloha Lab to develop a community-centered maritime archaeology facility and SCUBA diving program in Commune de Befandefa, SW Madagascar. Drawing inspiration from Diving With a Purpose, our aims are to ensure that seascapes and the changes they are rapidly undergoing are visible to community members, that knowledge about submerged seascapes is co-produced, and that a new generation of archaeologists can access training opportunities in maritime approaches.

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Solange Macamo, Paul Lane, Zacarias Ombe, Hamido Atuia, Açucena Nhantumbo The zoning model: marine heritage preservation challenges and opportunities for coastal communities, Gaza Province, Mozambique.

This paper focus specifically on the archaeological shellmiddens forming part of the marine and coastal heritage and coastal biodiversity of Gaza Province, Mozambique, and recent measures established to protect these sites and conserve their environmental setting. Key to this has been the creation of a Cultural Heritage and Biodiversity Park centres on the shellmiddens and coastal dune systems at Chongoene and Xai-Xai. The main goals have been to ensure *in situ* preservation of this biocultural heritage while at the same time creating opportunities for the utilisation of this heritage for the benefit of coastal communities depending on these resources. Since 2021, the project has been supported by funding from the Gerda Henkel Foundation, with active participation of the Gaza province authorities and stakeholders.

The Park was designed initially to encompass a limited coastal area of around 100 ha, at Chongoene. Subsequently, it was felt necessary to enlarge the Park to include the beach areas and adjacent dunes at Xai-Xai, forming now a protected area of nearly 300ha. Our paper describes the various steps involved, especially the use of a zoning model to control and monitor different activities, and how these are linked to relaising different community benefits, including the creation of a community-run market and restaurant. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56977

Cezar Mahumane, Celso Simbine

Maritime Heritage of Inhaca Island: Resilience of traditional wooden dhow construction

Oral tradition and historical accounts have shown that wooden sailing dhows have been used for centuries to establish connections between Maputo city and Inhaca Island. However, this situation changed from the 1950s when the Mozambique Government declared Inhaca Island a natural reserve and people were moved out from sensitive areas, limiting the harvesting of wood for dhow construction. Furthermore, in the 2000s the Government introduced a ferryboat, which influenced the growth of tourism activities on Inhaca Island and brought an increasing demand for faster fibreglass boats. Nowadays, a considerable disappearance of wooden sailing dhows is apparent, along with a lack of interest in transmission of traditional knowledge of dhow construction. This paper will investigate the dhow construction techniques that still persist on Inhaca Island; present a typology of dhows used for different activities; and map the main areas of dhow construction and raw material acquisition.

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Bako Rasoarifetra

Alimentation et survie sur l'île de Tromelin (1761-1776)

La presentation portera sur les résultats des fouilles archéologiques entreprises par le Gran (Groupe d' Archéologie Navale) entre 2006 et 2013 sur l' île de Tromelin où des Malgachesréduits en esclavage ont été abandonnés et en 1761. Plus tard le chevalier Tromelin est retourné sur l' île et a sauvé sept femmes et un bébé. La réflexion porte sur les vestiges découverts enfouis sous le sable et remis au jour par les fouilles. Comment les habitants de l' île ont pu survivre et qu'elle était leur alimentation. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56937

Chantal Radimilahy

Maritime archaeology in Madagascar

In recent decades Madagascar has received various proposals from different organizations to save our wrecks. Under the guise of scientific projects, these projects had other objectives. They all have very convincing oral arguments but many refuse to incorporate national underwater archaeologists and just want to have official permission to do what they want. Besides, there are international companies working in the country seemingly legally.

We have begun to identify how to manage maritime heritage. Malagasy part has worked on identifying who will accept to work with official institutions. Today, it is better to turn to the realization of the actions to be taken urgently for the preservation of the underwater heritage by proposing an opening of cooperation and collaboration, while remaining in our role as scientists.

The contribution will already be to work on the collections saved from the wrecks in order to preserve and value them.

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Clare Randolph, Khalfan Bini Ahmed, Chapurukha Kusimba, Kristina Douglass

Oral Histories Reveal Information about Historical Coral Harvesting in the Lamu Archipelago, Kenya Swahili architecture is well known for its grand structures, often constructed using carved, live-harvested coral. Research has been sparse on the practices of coral harvesting despite coral's importance for the medieval Swahili and for reef ecosystems. While coral harvesting practices had largely declined by the 17th century in east Africa, the Lamu archipelago remained a locus of active harvesting until as recently as 20-50 years ago. The authors conducted interviews and collected oral histories from elders in the Pate old-town community in July 2022. Here, we present preliminary results detailing the tools and techniques used for coral harvesting and the importance of local knowledge of seasonal and tidal changes for successful harvesting trips. The next phase of this research will compare the use of live-harvested coral between different Swahili city-states and what ecological impacts these practices may have had on local reefs. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52846

Celso Simbine, Abigail Moffett

An Ethnoarchaeological Approach In Shellfisinhg And Shell Middens Formation In Vilankulos

Research on shellfish in African archaeology has largely been dominated by an interest in its dietary function in the evolution of modern humans. However, in many regions of East Africa shellfish were an important component of subsistence strategies and socioeconomic lifeways for modern populations too. How shellfish resources were used by farming communities, and the material and technological practices within which their use was embedded in, is not yet full researched. In this ethnoarchaeological study of shellfish collecting we sought to explore contemporary practices of shellfish collecting and use in the Vilankulos District of Inhambane. This coastal area is known to have a rich variety of marine resources that support various subsistence, economic and social strategies of the local community. These resources were also clearly exploited through time, as attested to by the large shell middens at the site of Chibuene (700-1700 CE) south of Vilankulos town. We documented a range of ways in which coastal dwellers gathered marine mollusks in the intertidal zone, as well as their uses and discard. We explore the implications of the preferred shell species for their different functions and discard patterns. Finally, drawing on the archaeological site of Chibuene, we discuss evidence of continuity and change in the processes and practices of shellfish collecting in the region through time.

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Jean Soulat

Archéologie de la piraterie sur une petite île de l'océan Indien. Première mission archéologique terrestre sur l'île Sainte-Marie, Madagascar

L'objectif de cette communication sera de présenter les premiers résultats de la mission archéologique terrestre qui s'est déroulée dans la baie d'Ambodifotatra sur l'île Sainte-Marie (Madagascar) à la recherche des vestiges laissés par les pirates entre la fin du 17ème et le premier quart du 18ème siècle.

Cette expédition menée en mai 2022 pendant trois semaines a permis de lancer un programme de recherche franco-malgache sur les occupations pirates de la baie avec le développement d'un relevé aérien LIDAR sur le Fort de la Possession, l'île aux Forbans et tout le sud de la baie, dont la zone de l'Aiguade. Les premiers résultats sont extrêmement intéressants avec la découverte d'aménagements du littoral, d'aqueducs pour l'alimentation en eau, de différentes phases d'occupation ancienne du Fort, d'une zone de fabrication de chaux pour le carénage des navires.

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Michael Tuttle, Norine Carroll

Maritime History and Archaeology of Madagascar with a focus on the Serapis Project.

Throughout the age of sail, Madagascar sat just east of the strategic location where the Atlantic and Indian Oceans met off southern Africa. With over 3,000 miles of coastline Madagascar is the site of numerous shipwrecks from the early modern period through today, representing limited submerged cultural resources that warrant careful investigation and protection. During the worldwide conflict known as the American Revolution the island nation was not at the forefront of belligerent activity but played a part in imperial logistics. HMS Serapis, a 44-gun warship, was taken by John Paul Jones during one of the deadliest ship-toship battles of the war, the Battle of Flamborough Head and in 1781 Serapis was lost in the harbor of Ambodifotatra, Saint-Marie (Nosy Boraha). This paper will examine Madagascar as a significant historical location for shipwreck research and discuss the archaeological and historical techniques used to locate and identify the Serapis shipwreck site.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52921

Yann von Arnim, Jean Soulat

Réexamen de l'épave pirate du Speaker 1702, île MauriceRe-examination of the pirate shipwreck of Speaker 1702, Mauritius

Le 7 janvier 1702, le Speaker, un navire français de 500 tonnes et d'environ 30 m de long, sous le commandement du capitaine pirate John Bowen et avec un équipage de plus de 200 personnes, s'échoue au large de la côte est de l'île Maurice. Découverte en 1979 lors d'une expédition française menée par Jacques Dumas et Patrick Lizé, l'épave, qui gisait sous 2 à 4 mètres d'eau, n'avait pas conservé sa structure en bois. Il s'agit de la première épave de pirate authentifiée par l'histoire et l'archéologie au monde. La fouille archéologique réalisée en 1980 a permis de dresser un plan du site et de mettre au jour une grande quantité d'objets.

Une nouvelle mission archéologique a été organisée en novembre 2021. Le site a été cartographié et tous les vestiges visibles ont été inventoriés et étudiés. L'équipe a pu déterminer la zone d'échouage du navire matérialisée par deux tas de boulets de canon, témoins de la cargaison en place au moment du naufrage, et un regroupement de plusieurs canons au milieu de deux ancres.

On January 7, 1702, the Speaker, a French ship of 500 tons and about 30 m long, under the command of pirate captain John Bowen and with a crew of more than 200, ran aground off the east coast of Mauritius. Discovered in 1979 during a French expedition led by Jacques Dumas and Patrick Lizé, the wreck, which was lying under 2 to 4 meters of water, had not kept its wooden structure. It was the first pirate wreck authenticated by history and archaeology in the world. The archaeological excavation carried out in 1980 allowed to draw up a plan of the site and to bring to light a great quantity of objects.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52792

Session 25. Multidisciplinary approaches to reconstructing past environments // Approches multidisciplinaires pour la reconstitution des environnements passés

Damilola Akinlolu

Environmental Change and Continuity in Plant Usage in Iresi, Nigeria

Archaeological studies of Iresi (rock shelters) in southwest Nigeria have revealed Late Stone Age human occupation and vegetational histories. This paper investigates continuity in plant exploitation and usage of Iresi through systematic collection and analyses of botanical samples across contemporary settlement areas in the town. Ethnobotanical data were collected using key informant interview, ethnography and botanical identification. This reveals the exploitation of over 20 plant families, and further analyses suggest intentional continuity in exploitation of 5 plant families shaped by subsistence, economic, religio-political contexts of usage. This has far reaching implications for the investigation of the diet of the people. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52856

Margherita Colucci

Diseases and human co-evolution: modelling malaria spread in the late Pleistocene

Malaria is a major widespread disease that led to the rise of resistance mutations in the human genome (e.g. sickle-cell disease) and its worldwide incidence is strongly driven by factors contributing to the Anthropocene, particularly in the tropics. These include increasing human population density and urbanisation, with significant impact from environmental factors. Changes in the environment due to land use influence the choice of the Anopheles vector's breeding location, feeding habits as well as the climate, which is fundamental for the development of both the parasite and the mosquito. All these aspects may favour an increased malaria transmission, yet mutations in the human genome indicate that selection pressures predate urbanisation. This paper investigates the possible impact of anthropogenic alterations of the environment on malaria incidence in the late Pleistocene in West-Central Africa. We model the distribution of three vector groups, examining paleoclimate and environmental data, epidemiological information and signatures of human activity.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52512

Temitope Funmilayo, Timilehin Ayelagbe

Elaeis Guinensis use in paleoenvironmental studies in Southern Nigeria

Elaeis guinensis has been documented as one of tge most exploited species in Southern Nigeria. It has been used in the interpreting environmental changes and human-environmental interactions.

A review of the publications of the use of Elaeis gunensis in environmental reconstruction in South Nigeria was carried out. The result indicate an inconsistent occurrence of the species woth other ecological species and evidence of human occupation. This paper thus suggest a further research on the ecological significance of the species.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52764

Victor Iminjili, Mathew Stewart, Sean Hixon, Steve Goldstein, Mary E. Prendergast, Alison Crowther, Nicole Boivin, Patrick Roberts

Late Pleistocene to late Holocene palaeoecology and human foraging at Kuumbi Cave, Zanzibar Island Climate change played a major role in shaping regional human-environment interactions in Africa during the late Pleistocene-Holocene. In eastern Africa, however, the majority of work in this regard has been focused on the arid interior, with coastal and island settings being relatively neglected. Here, we present stable carbon and oxygen isotope analyses of zooarchaeological remains (n=229) recovered from Kuumbi Cave, Zanzibar Island, spanning the last glacial period and the Holocene (~20,000 to 500 cal. BP). Our data demonstrate that the vicinity of Kuumbi Cave was consistently covered by mosaic habitats, dominated by forests and small patches of open woodland and grassland. We suggest that the stable coastal forest mosaic habitats acted as a refugium for foragers during glacial periods and that the Iron Age inhabitants of Kuumbi Cave were not food producers migrating from the interior, but rather Indigenous foragers interacting with food production. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51325

Seminew Asrat Mogesie

New insights into the late Pleistocene paleoecology: stable isotope evidence from Gotera, southern Ethiopia

The origin of behavioral modernity, geographic dispersal, and technological development of Anatomically Modern Humans (AMH) coincided with the profound late Pleistocene stadial, and interstadial climatic episodes might have impacted human adaptation and resilience. It has been argued that tropical eastern African highlands with locally available resources such as water, landscape setting, precipitation, and highland forests were potential refugia during the Late Pleistocene environmental and climatic stresses. Nonetheless, this aspect becomes obscure in Ethiopia where site-specific environmental and climatic records of MSA sites remain poorly studied. Here, we present the result of δ 13Cenamel and δ 18Oenamel stable isotopic analysis of bulk and sequential samples (n=62) of mammalian teeth enamel from Gotera. The newly discovered MSA site of Gotera in southern Ethiopia dated to the Marine Isotope Stage 3 (MIS 3) provides fresh data about the ecological context of AMH in the region.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51975

Elena Skosey-LaLonde, Rienk Smittenberg, Ana Gomes

Application of TEX86 paleotemperature reconstruction in the Holocene coastal plains of Mozambique Understanding the global climate system is critical to the diverse research interests in southern and eastern Africa. Yet, existing climate reconstructions are either reliant on marine core data rather than terrestrial proxies, temporally fragmented or too coarse in resolution to make meaningful interpretations of the relationship between climate and Holocene communities. This is especially true in Mozambique during the Iron Age - an area recently coming to the forefront of global, and regional interest in African archaeology. The Inhambane region of Mozambigue's coastal plains, is characterized by a series of paleodunes which are cut by fluvial and elongated lagoonal depressions - a morphological pattern which preserves a sediment record suitable for climatic reconstructions, making it an optimal area on the western Indian Ocean coast to investigate the relationship between seasonality and Cyclone genesis. Since 2019, projects in the province of Inhambane have been underway to classify the holocene environmental context. Preliminary data from these multiproxy biogeochemical analyses, namely in Lake Nyalonzelwe, including micro-mollusk, ostracod and diatom identification, CHN elemental analysis, pollen and charcoal analyses, C14 dating, and δ 18O and δ 13C stable isotope analysis and precipitation reconstruction through both InMoz and MozSoon projects (see works of Gomes and Skosey-LaLonde) have indicated high carbonate levels in the lake sediments which make this site ideal for applying and refining the TEX86 in terrestrial lacustrine and archaeological dynamic contexts. This paper presents the TetraEtherIndex of 86 carbons (TEX86) method, a lipid analysis commonly used in climate science as a proxy for paleotemperature reconstructions, explores both the efficacy of TEX86 in the Nyalonzlwe Lake, Inarrime, and the relationship between cyclone intensification and temperature changes observed during the middle-late Holocene a period of expansive coastal settlement and social development in https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52840

Bastiaan van Dalen, Denise Swanborn, Carla Fuenteslópez, Sophie Carlarne

Principe Island: elucidating the deep-time past and future of an understudied biodiversity hotspot Considering the urgent need to reverse the rapid rate of worldwide biodiversity loss, further research on important - yet understudied - biodiversity hotspots is vital not only to improve our understanding of the current state of our environment but also to deliver new insights into human-environment interactions, past and present, and learn how these can contribute to future sustainability. Thus far, however, Africa has been relatively ignored in consideration of such issues and other debates in the field of island archaeology, largely due to a relative lack of research.

The island state of São Tomé and Príncipe provides an ideal case study as its smaller island, Príncipe, is extremely rich in biological diversity, human settlement on the island is assumed to have only begun in the late 15th century, and the island's population remains relatively small even today. Thus, providing an ideal research setting. Despite their rich biodiversity, both islands remain relatively understudied, with Príncipe being particularly overlooked. In fact, it might possibly be the only country in the world where no systematic archaeological fieldwork has yet been carried out.

To fill this gap, the Oxford Principe Project conducted fieldwork on the island in early 2023. Through three objectives – a baseline ecosystem survey, palaeoecological sediment coring (the first of its kind on the island), and interviews with locals, the deep-time environmental history and legacy of human impact on Principe will be brought to light.

Session 26. New insights on the Pleistocene of eastern Africa // Nouvelles perspectives sur le Pléistocène en Afrique orientale

Amanuel Beyin, David K. Wright, Kokeli P. Ryano

Geoarchaeological Investigation of Middle Stone Age Sites in the Kilwa Basin, Coastal Tanzania

Middle Stone Age (MSA) sites with centripetal Levallois and blades have been known from the Kilwa basin (coastal Tanzania) since the 1980s. Recently, we conducted geoarchaeological research at two of such locales, Mnaraeka (MN01) and Mapimbi (MAP01). The fieldwork included excavation, geomorphic prospection of sedimentary exposures, and sampling sediments for Optically Stimulated Luminescence dating. Our excavation at MN01 revealed lithic-bearing contexts up to 165 cm below surface. This paper will present archaeological, geomorphic, and chronometric datasets related to the sites. Depositional models related to the archaeology-bearing deposits will also be discussed to contextualize hominin settlements within the paleolandscape configuration of the study area. The study contributes to establishing the temporal, cultural, and paleoclimatic contexts of hominin occupation within the East Africa coastal ecozone, a location that occupies an important place in human evolutionary research.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56923

Steven Brandt, Abebe Taffere

Techno/Typo Variability in Late Pleistocene Lithic Assemblages > 50 ka from Mochena Borago, Ethiopia We present a techno/typo analysis of >7000 lithics from Late Pleistocene deposits at Mochena Borago, SW Ethiopia. 99% obsidian, the lithics are from central Area MB5. Stratified deposits >2m are >50 ka. On stratigraphic/sedimentary grounds, the earlier of a 2 phase industry may date to MIS 5/earliest MIS 4; the later phase may be MIS 4/earliest MIS 3 in age. Dominated by tabular shaped, min. prepared single/multiplat elongated flake/blade cores, Levallois flake, blade & point types = 2nd highest core %. Uni/bifacial pointed types form the >% of retouched tools. Scrapers = a distant 2nd in %. Laminar cores and backed pieces are absent. The later phase reveals changes in certain tool frequencies, a reduction in tool size & the earliest appearance of Nubian Levallois & bipolar core technologies. We conclude with a discussion of whether lithics can be used as proxies for examining hunter-gatherer temporal and spatial diversity in a purported Late Pleistocene ecological and social refugium.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52790

Manuel Casas-Gallego, Angela Bruch, Katharina Neumann, Stéphanie Bodin, Marco Schmidt, Karen Hahn Vegetation reconstructions of the Ethiopian highlands since the Last Glacial Maximum

The archaeological sites of Mochena Borago and Sodicho, located in the SW Ethiopian mountains, provide evidence of discontinuous human occupation during the Late Pleistocene and Holocene. In order to identify possible links between humans' dispersal across the region and past environmental habitats it is crucial to understand how plant ecosystems changed in the region through time. To do so, we have modelled past vegetation distributions in Ethiopia since the Last Glacial Maximum (22 ka BP) using detailed maps of modern potential vegetation combined with recently produced paleoclimatic data. The modelled distributions show significant changes in the extent of the main vegetation units which are validated by regional pollen records. The presented reconstructions at high spatial and temporal resolution provide a much-needed framework to test fundamental hypotheses on past human expansions into new landscapes and adaptations to new environments.

Elisabeth Hildebrand, Carlo Mologni, Joshua Pike, Courtney Sprain, Evan Wilson, Steven Brandt Mochena Borago before 50 ka: New perspectives on depositional and occupational history

Mochena Borago (MB) Rockshelter is one of a few known stratified sites in the Horn of Africa with potential to provide a sequence that spans much of the Late Pleistocene. Radiocarbon chronologies for multiple parts of MB extend back to the limits of 14C analysis (~50 ka). Below these well-dated layers, archaeological and volcanic deposits have prospects for clarifying human behavior and paleoenvironments during two key times: MIS 4 (72-58 ka, known for cold and arid conditions and a possible human population bottleneck), and early MIS 3 (58-50 ka, a period of fluctuating climates just before/during anatomically modern humans' successful

spread to/through much of Eurasia). July 2022 fieldwork focused on stratigraphy, geomorphology, and collection of dating samples (Argon, paleomagnetism, tephrachronology, OSL, and cosmogenic nuclide). Preliminary analysis of field data and samples provide new perspectives on chronology and depositional history for MB human occupations >50 ka.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52788

Peter Lanzarone, Carlo Mologni, Steven Brandt, Elisabeth Hildebrand

New insights into a tectonostratigraphic interpretation at Mochena Borago rockshelter

A revised interpretation of stratigraphic deposits at Mochena Borago rockshelter, southwestern Ethiopia, demonstrates the potential for tectonic influence over the site's sedimentary sequence. We highlight new observations from excavated profiles that show tilted strata and faulting-induced sedimentation. Ground-penetrating radar (GPR) images also show the potential for a faulted shelter basement surface, which through structural inheritance may have modulated shallower, artifact-bearing stratigraphic intervals. The orientation of faulted sedimentological features from excavations shows a similar orientation of the basement faults from GPR data and fractures from outside the shelter, corroborating our interpretation. We conclude that the age and timing of structural modification may have had an impact on Late Pleistocene human habitation of the shelter.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51032

Maïlys Richard, Gregor Bader, Edwige Pons-Branchu, Arnaud Dapoigny, Naomi Porat, Chantal Tribolo, Pastory Magayane Bushozi, Nicholas J. Conard

New insights into the chronology of the Middle Stone Age of Lake Eyasi, Tanzania

Eastern Africa is fundamental in the study of the origin and expansion of early *Homo sapiens* and the emergence of Middle Stone Age (MSA) technology, especially because of its strategic location, on the route connecting southern and northern Africa. In particular, the area of Lake Eyasi in northern Tanzania is of great interest since it documents both human fossils and MSA occupations.

Njarasa Cave and Mumba Rockshelter, excavated in the 1930s by Margit and Ludwig Kohl-Larsen, have been recently the object of new investigations, which include renewed excavations and analyses of the Kohl-Larsen collection curated at the University of Tübingen, as well as a detailed chronological study on teeth and sediment.

We present here the ages obtained using electron spin resonance/uranium series and luminescence dating, which allow framing human occupation in the region during the Late Pleistocene, and contribute to the discussion on the tempo of behavioural and cultural changes during the MSA.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51141

Benjamin Smith, Lucas R. Martindale Johnson, Steven A. Brandt.

Imports And Outcrops: Characterizing The Baantu Obsidian Source And Artifacts From Mochena Borago Rockshelter, Wolaita, Ethiopia, Using Portable X-Ray Fluorescence

We characterized forty-two obsidian samples from the Baantu obsidian source in southwestern Ethiopia, including 25 outcrop samples and 17 surface artifacts, using portable X-ray fluorescence spectroscopy. We then compared these source data to 116 obsidian artifacts from Mochena Borago Rockshelter. Results indicate that at least three geochemical source clusters are represented at the Baantu source: one derived from sampled outcrops and two deriving from as-yet unknown source locations. Comparing these data to obsidian artifacts at Mochena Borago excavated from levels dated to >50 ka and ~44 ka BP, early levels dating to > 50 ka preserve obsidian from as many as six as-yet unidentified sources, while Baantu obsidians were in the minority. By ~44 ka cal BP Mochena Borago occupants procured most if not all of their obsidian from the Baantu source. Comparison to regional published obsidian source data suggests little if any procurement from northern sources within the Ethiopian rift. We need more regional survey and artifact characterizations to identify the spatial scale and directionality of stone procurement in this area, but these data provide evidence that the occupants of Mochena Borago Rockshelter engaged with a variety of stone raw materials across periods of major ecological and likely social change in the Late Pleistocene Horn of Africa. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52947

Michaela Zewdu Tizazu, David Ruiz Menjivar, Mica Jones, Osman Yusuf Mohamad, Hussein Suleiman Ahmed, Steven A Brandt.

Late Pleistocene Assemblages from southern Somalia: Testing the Economic Defendebility Model. Archaeological fieldwork in southern Somalia ended in 1989, and new radiocarbon dates of ostrich eggshells from the 1980s excavation at Burr Heybe, southern Somalia have pushed back human occupation from https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52841

Pamela Willoughby

Middle and Later Stone Age technology in southern Tanzania

The Southern Highlands of Tanzania is yielding a long archaeological sequence spanning the time period from the Acheulean through historic and modern times. It has been studied since 2006 by members of IRAP, the Iringa Region Archaeological Project. Two rockshelters, Mlambalasi and Magubike, have produced a remarkable record from the Middle and Later Stone Ages (MSA and LSA). This includes a Late Pleistocene human skeleton from Mlambalasi which has recently yielded an ancient DNA sample, as well as isolated human teeth from the MSA at Magubike. MSA ostrich eggshell beads have also been recovered at Magubike. This presentation reviews the MSA and LSA archaeological sequence from these two sites, and places these finds within a cultural and technological framework.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50669

Evan Wilson, Joshua Pike, Carlo Mologni, Peter Lanzarone, Casie Fort, David Ruiz Menjiva , Elisabeth Hildebrand, and Steven Brandt.

Modeling the Ledge: Human occupation and stratigraphic association at Mochena Borago, Ethiopia Mochena Borago, Ethiopia is an archaeological site bearing deposits spanning more than the last 60,000 years. MB is situated both spatially and temporally at a critical point in the evolution of our species during which our ancestors successfully dispersed out of Africa to occupy the rest of the world, replacing several closely related hominin taxa along the way. Despite its importance, our understanding of MB has been inhibited by the site's complex depositional sequence and lithostratigraphy. Recent work has illuminated previously unknown relationships between excavation units and major depositional features that begin to clue us in to the nature of site formation processes and human occupation at MB. We use a combination of ground penetrating radar, geomorphology, tephrology, and 3D modeling to clarify stratigraphic relationships and to further our ability to understand and investigate human behavior in the Terminal Pleistocene of the southwestern Ethiopian Highlands.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52832

Session 27. Of Stones, Sherds, and Clay: The Archaeology of Built Urban Environments west of the Niger // Pierres, tessons et argile : l'archéologie des environnements urbains construits à l'ouest du Niger

Emmanuel Adeara, Tomos Evans, Stanley Nwosu

Mounds, Monuments, and Magic: Investigations of the Sungbo's Eredo Earthwork Landscape, Nigeria The monumental earthwork of Sungbo's Eredo is potentially the largest single example of its kind: a series of banks and ditches surrounding an important portion of the territory of the Ìjèbú Kingdom from at least the 15th century AD. Relatively little remains known, however, about when, how, and why this enormous structure was constructed, utilised, and maintained by generations of Ìjèbú people living in its vicinity. Even less is known about the chronology of material and conceptual change surrounding the earthwork and its adjacent landscapes. This talk will outline recent archaeological fieldwork conducted at sites associated with the earthwork, exploring what these new data tell us about the chronology, construction, maintenance, and evolving significance of it across the centuries.

Olanrewaju Lasisi

Archaeology and Indigenous Hermeneutics: Interpreting the Multiplex Functions of Pavements

Pavements are pottery sherds and or stone cobbles arranged and pinned to the ground to form a mosaic of stones or potsherds. They have been found in several ancient cities in the West African rainforest and interpreted mostly as household floors and royal pathways. This paper examines new evidence for the multiplex functions of pavements. It uses the indigenous hermeneutics of rituals and ritual dramas, and early ethnographic reports by Leo Frobenius, to highlight other pavement functions, including their use as mnemonic devices of sundials, and cartographic and cosmographic maps.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/53838

Adisa Ogunfolakan, Gerard Chouin, Martins Olorunfemi, George Ademakinwa From Analog To Digital: Archaeology In Yoruba Land

Archaeological research in Ile-Ife was first based on accidental discovery. But by the late 70st when ingenious archaeologist started to emerge, thematic archaeological research works were embarked upon. This led to intensive work on the potsherd pavement that is abound in the ancient city of Ile-Ife and identified in other Yoruba cities. In an attempt to move from 'analog' to 'digital' archaeological work, geophysical tools were employed at Ita Yemoo to identified possible spread of the pavement and identified other cultural materials. This paper therefore examines the potential of the methods and result of the data gathered from the use of the tools and suggested its full use in archaeological investigations.

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Léa Roth

New overlapping potsherd pavements at Lújúmò Compound, Ilé-Ifè, Nigeria

This paper presents the preliminary results of the excavations of the Lújúmò Compound site at Ilé-Ifè in southwestern Nigeria, a fieldwork conducted in 2021 and 2022 as part of Ph.D researches. Among the most significant discoveries of the 2022 archaeological season, a succession of three distinct levels of potsherd pavements opens up promising perspectives for the study of the evolution and the organization of the Ife urban landscape. The preservation of 11th-13th century medieval levels under the deposits of a modern house, in an area particularly affected by erosion, illustrates the challenges of archaeology in the humid tropical zone.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/57004

Session 28. Pots, Bones, Seeds, Molecules: Early farming lifeways and subsistence patterns in sub-Saharan Africa // Pots, os, semences, molécules : les modes de vie et de subsistance des premiers agriculteurs en Afrique sub-saharienne

Julia Becher, Alex Schoeman, Cynthianne Spiteri

Applying analytical approaches to museum collections - mission impossible or the force awakens? Museum collections represent a valuable archive of human prehistory. Modern analytical methods, such as organic residue analysis, became increasingly important over the past decades. These methods can help to reveal details about human behaviour and subsistence in the past otherwise undetectable using standard archaeological methods, e.g. typology. Current research has shown that post-excavation handling and storage conditions can have a considerable influence on the preservation of organic molecules such as lipids and proteins. The current paper provides examples for the consequences of inappropriate versus ideal treatments of pottery and adhering materials based on reference samples from Africa and Europe. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52149

Tanya Hattingh, Alex Schoeman

Are phytoliths from dung good proxies for environmental conditions at archaeological sites? In the last two decades an increasing number of studies have used micro-botanical remains, for example

pollen, spores and phytoliths, as proxies for environmental conditions and regional vegetation in southern

Africa. Some of these researchers used pollen from cattle and hyrax dung. Yet, the viability and limitations of using phytoliths from dung as a proxy for past environments remains understudied. Our study starts to fill this lacuna by examining the phytoliths from eight modern dung samples (one from a domestic animal, Bos taurus, and seven from wild species indigenous to southern Africa) and determining if the phytoliths accurately reflects the current vegetation of the area in which the samples were collected. Our results found that the phytoliths from animal dung were a good indicator of the animal's diet, and plant presence in an area. It, however was of limited use for environmental reconstructions because the animal's diets were selective.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51018

Elizabeth Hicks

Ceramic Use, Cuisine and the Creation of Community along the Swahili Coast in the 1st Millennium AD Searching for patterns in the manufacture, use and deposition of pottery is an opportunity for archaeologists to reconstruct past consumption practices in dynamic and vivid detail. This presentation will focus on the analysis of the ceramic assemblage excavated from the site of Unguja Ukuu by the 'Urban Ecology and Transitions of the Zanzibar Archipelago' (UETZA) project in 2019. This research combines both in-organic, archaeometric methods of ceramic analysis (including Optical Microscopy, X-radiography, Ceramic Petrography and Scanning Electron Microscopy) with Organic Residue Analysis to reconstruct the life-history of the ceramics from Unguja Ukuu. Along the Swahili Coast, imported pottery has played a major role in constructing chronological frameworks, as well as tracing long-distance trade between actors across the Indian Ocean. In comparison, the presence of Early Tana Tradition/Triangular Incised Ware has been used to interpret the ethnicity of its makers and users, and as a consequence the spatial extent of a 'Swahili culture' across East Africa. The interdisciplinary, scientific approach adopted within this study offers the opportunity to bridge the conceptual divide between imported and local pottery, allowing this research to ask more complex questions of object assemblages. Specifically, this paper will discuss how cooking and cuisine may have played a role in the creation of identities within early farming communities; the relationship of pottery consumption to agricultural and subsistence practices; as well as analysing the changing structure of local, regional, and trans-regional networks of trade and exchange around the Zanzibar Archipelago during the 1st Millennium AD.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52616

Katharina V. M. Jungnickel

New Research on Prehistoric Subsistence in Central Africa

The introduction of ceramics into the archaeological record of Central Africa during the 1st millennium BCE is often equated with migrating farming communities. A neglect of research on prehistoric hunter-gatherer communities and their subsistence broadens misconceptions about the novelty of the observed changes in the material record. Our paper reviews the existing physical evidence for Central Africa related to subsistence and early domestication. It presents novel organic residue and lipid analyses conducted on 108 ceramic sherds from six sites, further supported by isotopic evidence from archaeozoological finds. We present tangible results on the role of ceramics in subsistence, pottery introduction and languages. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52507

Philbert Katto

Did the Pastoral Neolithic Exist in the Southern Highlands of Tanzania? Insights from Ceramics

In east and southern Africa there is long existing claim that Pastoral Neolithic (PN) cultures confined only in the Highlands and the Rift Valley of Tanzania and Kenya (Sutton 1969; Horton 1990). However, some recent archaeological research (e.g., Msemwa 2001; Chami 2009; Chami and Kwekason 2003) at the Swahili coast, on Zanzibar Island, and further interior of southern Tanzania provides some tangible evidence that makes the prevailing claim to be questioned. The current study joins those scholars by bringing ceramics that fall under PN period in the Southern Highlands of Tanzania. Being supported by the chronometric dates, the potsherds classified as belonging to the Narosura tradition are recorded in addition to other contextual evidence such as

lithics and domestic and wild fauna. Such evidence calls for archaeologists to rethink prevailing thoughts in the course of reconstructing the pre-history of the region. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52450

Emma Loftus, Simon Hammann

Early Iron Age lipid residue analyses from KwaZulu-Natal, South Africa

In south-east Africa, the coastal situation of some of the earliest farming sites (i.e., Mzonjani ceramic facies - c. 300-650 AD), suggests that pioneer groups utilised coastal routes when entering the region. Shellfish deposits further indicate that marine resources may have been important for the expansion into new environments. However, the ephemerality of these sites and generally poor organic preservation means that we lack detailed information about the subsistence of these communities, and how they differed from subsequent, cattle-centred, farming groups. Using lipid residue analysis, we investigate the molecular traces of foods preserved in the matrix of ancient cooking pots from five Early Iron Age sites in KwaZulu-Natal, South Africa. We principally assess evidence for aquatic and dairy resources, at pioneer sites situated close to the coast and later settlements in the river valleys leading to the interior, from deposits that together span the first millennium AD.

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Frank Neumann, Coert Coetzee, Chakira Pelser, Moteng Moseri, Sascha Roopa, Ginika Ramsawak, Alex Schoeman, Jonathan Taylor

Holocene paleoecology of a wetland along Gerhard Minnebron River, North West Province, South Africa -Tracking climate change and anthropogenic activities

The north-western part of South Africa is understudied in terms of Holocene palaeoecology, climate change and the impact of pre-European pastoralists and farmers on the landscape. Extensive peatlands exist along the Mooi River and its tributaries. The regional geology consists of dolostones and results in a landscape with karstic springs like Gerard Minnebron River where 5 sediment cores revealed a peat thickness of >6 m. A 1.50 m long core reveals the palaeoecological potential of the site. Using multiple proxies (pollen, diatoms, microscopic charcoal remnants and sediment grain size as well as pXRF) it is possible to infer past environmental conditions and changes within the last 9500 years. A grass-dominated open landscape with a high abundancy of Asteraceae and chenopods prevails whereas tree pollen were rare but include acacias and Combretaceae (bush willow). Chenopods and thistle as well as pine pollen show more recent anthropogenic activities due to the European colonization.

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Sabrina Stempfle, Jörg Linstädter

Investigation of the Bantu arrival in southern Mozambique - In the light of geophysical prospection and archaeometric pottery analysis.

The introduction of pottery in southern Africa is associated with the immigration of early farming communities (EFC) about 2000 years ago, referred to as Bantu speakers. Recent research challenges this model not only due to research gaps in the archaeological reconstruction of the migration movement, but also because of new dating results and the appearance of distinct pottery in archaeological contexts of hunter-gatherer communities. In 2018 and 2022 geomagnetic prospection was performed at open-air sites near the famous Daimane shelter in Mozambique revealing promising excavation areas, which in return will allow to confirm the geophysical results. The prospection is linked with pottery archaeometry with the aim to achieve new information about the Matola pottery, to study the beginning of pottery production in southern Africa and to test the Bantu model in general. The methods used are e.g. residue analysis, X-ray fluorescence analysis, polarizing microscope and infrared spectroscopy.

Session 29. Recent research in the Middle Senegal Valley // Recherche récente dans la moyenne vallée du Sénégal

Adama Harouna Athie

Espace domestique à Hombo (Ve -XVIIe siècle) : organisation des dépôts et systèmes de production. Depuis la définition de la province des sites d'habitat de la Moyenne vallée, la recherche archéologique s'est constamment renouvelée et permet d'apprécier l'évolution des productions sur la longue durée (1100 BC-1700 AD). Mais sa focalisation sur les sites du *waalo* se traduit par la marginalisation du *jeeri* dans les processus historiques et culturels de la sous-région. Cette orientation des recherches justifie la fouille archéologique des sites de Hombo (dans le *jeeri*), un complexe de trois buttes dont les dépôts permettent d'éclairer, sur plus d'un millénaire (0 à 1650 AD), la trajectoire des savoirs techniques et la dynamique processuelle de l'occupation et son impression sur les paysages. Se fondant sur une rigoureuse méthodologie de collecte de données, les stratégies de fouille articulent harmonieusement diachronie et synchronie pour donner plus de visibilité aux pratiques et habitus de la vie quotidienne dans l'espace domestique du village médiéval de Hombo.

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Mariama Ba

Le peuplement de la Moyenne vallée du fleuve Sénégal : résultats préliminaires de l'étude du site protohistorique de Méri.

Le site de Méri, découvert dans les années 1990 avec le MSV Project, couvre vingt-cinq hectares. Ce site est complexe en raison de trois aspects : sa grande superficie, sa localisation dans le *jéjeengol* (zone de décrue) et sa culture matérielle très riche et diversifiée. La céramique, matériel dominant du site de Méri, par la technomorphologie des bords et la technologie de décoration des pots, a été attribuée aux phases II et III de la Moyenne vallée du fleuve Sénégal (McIntosh et al ; 2016). Les ramassages de surfaces et les fouilles que nous y avons effectuées, ont permis de ressortir le potentiel archéologique du site. Nous nous sommes fondée sur différentes approches pour l'analyse et l'interprétation du matériel archéologique (céramique, cercles pierriers, petites trouvailles). Des charbons prélevés lors de nos missions de fouilles ont été datés par le laboratoire *Institute of Archeology, Academy of the Czech Republic* de Prague. Les datations par Carbonne 14 ont donné des âges compris entre (433-566 AD) et (581-646 AD). Cette séquence chronologique correspondrait entre le 5^e et le 7^e siècle de notre ère. Ces résultats que nous comptons compléter par d'autres datations semblent en partie corroborer la sériation établie par Susanne McIntosh en 1990. Ces deux approches montrent une occupation continue du site de Méri de (433- 566 AD) à 581-646 AD). Cet âge ferait de Méri la plus ancienne occupation du *jejeengool.*

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Michael Corolla, Roderick McIntosh.

Extending the archaeomagnetic dating curve for the Middle Senegal Valley

Excavations at Walade allow further refinement of the 2016 MSV archaeomagnetic reference curve. Expanded in the time (particularly on the early – Hallstatt Plateau and before) dimension and in field sampling methods, the refined curve is part of the efforts of the Yale University Archaeomagnetic Laboratory (YUAL) to bring high resolution dating of burnt archaeological deposits to parts of the globe hitherto neglected (equatorial and southern Hemisphere). The YUAL is dedicated to moving the archaeomagnetic method beyond the physics and field applications of its rock mag forebear.

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Peter Coutros

Diallowali and the end of the African Humid Period: Connections Along the MSV and Beyond

The Diallowali site complex is a network of interconnected mounds along the western Middle Senegal River Valley (MSV) occupied from the late 2nd to the late 1st millennium BC. Excavations between 2013 and 2017 revealed a deeply stratified settlement with extensive deposits, including more than 150kg of faunal material, 5000kg of ceramics, bone tools, and ceramic figurines, among other finds. Detailed analysis of this excavated

material and the regional settlement distribution defined by large-scale survey has provided the first robust chronological sequence for the western MSV. While few contemporary archaeological sites from West Africa have been identified and investigated, connections within and beyond the MSV as evidenced by ceramic traditions and other material culture can still be identified. This talk will present these findings in relation to the changing environmental conditions at the end of the African Humid Period (ca. 4000 BP). https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51097

Alioune Deme

Geoarchaeology of Islam in the Middle Senegal Valley: a hypothesis

The Middle Senegal Valley is a reasonably fertile floodplain located in the Sahel. Because of its rich ecological, geomorphological, and hydrological diversity, it has attracted surrounding populations and set the stage for the emergence of polities such as Takrur.

Takrur is one of the earliest historically known West African kingdom. The earliest evidence come from the 1068 account by al Bakri who mentioned two cities: Takrur and Silla. He also stated that people of both cities were Islamized by the king of Takrur War jabi. This made Takrur the earliest West African kingdom to accept Islam. Arabs chroniclers also mentioned the cultivation of sorghum by people of Takrur.

However, these historical accounts are in contradiction with archaeological data from the floodplain. This paper makes the hypothesis that the two other geomorphological units (specifically the intermediate zone between the floodplain and the upper) should be given more attention.

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Jessamy Doman, Peter Coutros

The fauna of the evolving fluvial landscape: subsistence, economy, and environment at Walalde

The first millennium BC was a time of important sociopolitical and climatic change throughout West Africa. Previous research from the Middle Senegal Valley (MSV) suggests that the geography of this region enabled a diversity of subsistence approaches that helped early settlers withstand widespread environmental stress at this time. First settled by agro-pastoralists during the transition from stone to iron technology (~800-550 BC), the site of Walalde therefore offers an important insight into the emergence of social complexity and changing subsistence strategies against a backdrop of environmental upheaval. This presentation reports on newly collected and analyzed faunal material from Walalde and, through comparisons with the nearby and largely contemporary site of Diallowali, as well as more recent sites in the MSV, constructs a picture of varying subsistence regimes and resilience in response to environmental shifts through time and across the landscape.

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Daphne Gallagher, Shawn Murray

Revisiting Agriculture and Wild Plant Use in the First Millennium CE Middle Senegal River Valley

The inland floodplain environment of the Middle Senegal Valley supports a rich, diverse flora. Today, farmers are able to cultivate a wide range of crops across multiple annual growing seasons using both rainfed and *decrue* (flood recession) techniques. The Middle Senegal Valley Archaeological Project produced a robust archaeobotanical data set with 295 analyzed systematically collected flotation samples from multiple archaeological sites, including Siwré, Sincu Bara, and Cubalel. This paper will re-evaluate the results of the seed and fruit analyses in light of recent refinements to the site chronologies to present updated insights into crop selection, agricultural strategies, and wild plant use and management with a focus on the first millennium CE.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52831

Alexa Höhn, Susan K. McIntosh, Alioune Dème, Peter Coutros

Cultured landscapes on the river. First insights from the Cubalel, Walaldé & Dialowalli charcoal assemblages Intentional fires, pastoralism and plant food-production have decisively shaped the composition and appearance of West African savannas today and in the past. Due to shifting cultivation and the protection of useful trees in fields, the woody vegetation forms an important constituent of these cultured landscapes, which allows characterizing past landscapes through anthracological research. Within the charcoal assemblages from three sites in the Middle Senegal Valley (dating between 1000 BCE and 1000 CE), acacias are well present and represent the Sahelian aspect of the landscape. Other taxa point to the exploitation of the seasonally flooded areas of the Valley, among them numerous fragments identified as possibly *Vachellia nilotica*, but also *Faidherbia albida* and *Guiera senegalensis*. The latter two taxa are connected to cattle herding, furnishing dry season fodder in the first case and indicating overgrazing in the second, but both also tolerate temporary flooding.

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Susan McIntosh

Agropastoral re-alignments in the Middle Senegal Valley, 300 BCE—300 CE

In the past decade, new excavations at Walaldé and a program of AMS dating have added important details on the agropastoral settlements in the Middle Senegal Valley between 1000 BCE and 500 CE. This paper details evidence for differences in subsistence strategy and productive economy in deposits associated with three different pottery traditions: a long-lasting tradition at Walalde between 1000-300 BCE, a very different assemblage at Kaskas and Cubalel between 100 BCE and 200 CE, and a third assemblage, clearly derived from the Walaldé tradition, but with important changes in style and decoration, present at Siwré from 200-500 CE. Excavation at more sites will help clarify to what extent these traditions were in fact temporally separate. The available evidence poses the possibility of dynamic changes and agro-pastoral re-alignments during the exceptionally arid period of 300 BCE-300 CE, including the presence of camel, now directly AMS dated. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51483

Aissata Thiam

Archéologie dans la moyenne vallée du fleuve du Sénégal : Étude des sites du Jeejengol

La moyenne vallée du Sénégal, a très tôt attiré les populations victimes des fluctuations de l'isohyète 400 mm pour son écologie riche et variée. De petites occupations au 1er millénaire seront suivies de grandes agglomérations sur plus de 4ha dès le début du 2e millénaire. Cette occupation c'est traduit par une multiplicité des sites archéologiques à divers endroits le long de la vallée. Dès 1916, mais plus concrètement en 1990, la vallée fera l'objet de recherches approfondies sur les sites du Waalo et sur ceux du Jeeri. Par ailleurs, nous savions peu sur les sites du Jeejengol. Nos recherches entreprises entre 2020 et 2022 à Mboumba et Diongui ont permis de documenter la dynamique d'occupations des sites du Jeejengol et des pratiques technoculturelles et alimentaires. Des chronologies d'occupations à cheval à celles du Waalo et du Jeeri ont été mises en évidence. Cette communication met en revue l'apport de ces études récentes dans l'historiographie du peuplement de la vallée.

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David Wright, Susan McIntosh

Episodic settlement and mound formation context at Cubalel and Siwré sites, Middle Senegal River

Recent analysis of microarchaeological deposits recovered in 1991 at the sites of Cubalel and Siwré in the Middle Senegal River Valley provide new insights into the context of mound formation beginning ca. 1900 yr BP. A new series of high-precision AMS dates confirm the interpretation, based on stratigraphic observation, of episodic human occupations and periods of rapid deposition. Pottery assemblages previously identified as time-successive phases are now reinterpreted using a Bayesian model to occur within stratigraphically separated, but temporally overlapping contexts in different occupation mounds. The results indicate rapid mound formation, providing context for stable nitrogen and carbon isotopes derived from the soils and sediments that host the archaeological deposits. This paper combines previously published and new data to reexamine the ways subsistence and land management processes affected ecological systems in the Middle Senegal River Valley in the first millennium CE.

Session 30. Reconstructing ancient African foodways // Reconstruction des anciens modes alimentaires africains

Julie Dunne, Katarzyna Danys, Artur Obluski, Richard Evershed

Lipid residue analysis of medieval (14-15th century) pottery from Old Dongola, Sudan

Organic residue analyses of archaeological ceramics has provided important insights into ancient foodways across prehistoric African contexts. To date, however, little attention has been paid to pottery from more recent contexts. Here, we investigate medieval (14-15th century) pottery from Old Dongola, Sudan, excavated within the framework of the ERC-funded project 'Urban Metamorphosis of the Community of a Medieval African Capital City', or UMMA. Lipid analysis, using GC, GC-MS and GC-C-IRMS, indicated that the majority of vessels were subjected to sustained use in the processing of high lipid-yielding commodities. The exploitation of ruminant products, meat and milk, dominates, with the very enriched $\delta^{13}C_{16:0}$ values indicating that the animals producing these fats were subsisting on C₄ diets, suggesting the presence of arid-adapted vegetation in the region. Notably, three vessels yielded unusual, but diagnostic, plant oil lipid distributions. These are currently undergoing further investigation but are suggestive of the processing/storage of plant oils, such as radish, castor, linseed or sesame, in the vessels.

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Nicolette Edwards, Dave Schmitt, Karen Lupo

Exploitation of canarium versus African oil palm by ancient hunter-gatherers in tropical Africa

Numerous oleaginous tree species exist across tropical Africa and indigenous populations past and present used them in various ways. Current literature emphasizes the importance of *Elaeis guineensis* (African oil palm) in the past due, at least in part, to its economic importance today. However, the importance and antiquity of exploitation of the lesser known *Canarium schweinfurthii* (canarium) by prehistoric foragers warrants further investigation. Although use of African oil palm in forested Central Africa is apparent across the past ~5000 years, canarium use predates *E. guineensis* use by ~6,000 years. While this disparity of use across time potentially resulted from different landscape distributions, it may also be due to technological constraints of early forager populations, notably the lack of ceramics. By comparing constraints on the exploitation of oil from these two species, this paper reconsiders the role of canarium in ancient forager diets. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51774

Shaymae Iken, A. Bouzouggar, A. Grandal-d'Anglade

ZooMS and Isotopic analysis of El Hammar and El Hattab II caves

The identification of fossil taxa is the main goal of palaeontology. Knowing the composition of communities is fundamental to characterising past ecosystems and understanding changes in environment and climate. However, taxonomic identification of animal remains is not always straightforward due to the high degree of fragmentation that bones tend to present.

Recently, a technique of molecular biology (proteomics) has been developed for the identification of bone fragments, through the collagen peptide fingerprinting by mass spectrometry (ZooMS). This requires the collagen to be removed from the bones and that this collagen maintains a good degree of preservation. Breaking the collagen molecule between specific amino acids with tripsine, the obtained set of peptides can be identified by MALDI-TOF (Matrix-Assisted Laser desorption/ionization, time of flight). Some of them are characteristic of a certain taxon, and their presence or absence will allow us to differentiate the taxon from which they come, working as true markers.

In this work we applied those techniques to animal bones remains from the cave sites of el Hammar and Hattab II, both located in northern Morocco.

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Elikplim Kuto

Food Storage and Social Inequality: An Ethnoarchaeological view from Northern Ghana

Food storage is the systematic attempt aimed at keeping food crops safe either permanently or temporally for use in the future. Storage helps insure the continuity of cultures through both predictable and unpredictable

situations, like variations in seasonal food availability and failed harvests. The presence of granaries, pits, and pottery vessels is a source of direct evidence for understanding food storage strategies among past and contemporary societies. Some of the indirect proofs are the presence of storage jars and archaeobotanical remains at potential storage spaces. Food storage has been a topic of significant interest in the fields of anthropology and archaeology, particularly how social organization impacts food storage approaches, and how a focus on food storage can illuminate social relations in archaeology. Using ethnographic and archaeological methods, this paper seeks to extend archaeologists' focus on storage and social life by investigating how storage informs social relations at the smaller, everyday scale of the household. This study is focused on Kpatritinga, a Bimoba ethnolinguistic community in the northeastern part of Ghana. In this paper, I show that food storage strategies within the domestic space reveal discriminatory and exclusionary practices that have significant implications for our understanding of social inequalities. Specifically, I demonstrate that food storage practices undergirded by societal norms produce structural inequity and denial of access to the food store through the performance of masculine dominance and patriarchal ideologies. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52881

Amanda Logan, Emuobosa Orijemie

Archaeobotanical Evidence of Food, Trade, and Environment at Ile-Ife, Nigeria

This paper reports on the first results from archaeobotanical work at Oduduwa College, a site in Ile-Ife, Nigeria excavated as part of the ongoing Ife-Sungbo Archaeological Project. Macrobotanical analysis has uncovered the largest assemblage of wheat to date in sub-Saharan Africa, surprising given Ife's humid forest environment but reflective of its central role in trans-Saharan trade. Large quantities of cotton may reflect domestic-scale craft production. In contrast, pearl millet and sorghum are present in limited contexts. Sampling and analysis focusing on landscape use and environmental health help situate food and trade in this urban context.

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Steven Matthews, Ulrike Nowotnick

Connected cuisines: Comparing the everyday foodways of sub-Saharan North Africa (c.1000 BCE-1000 CE)

The Connecting Foodways project investigates the culinary traditions of sub-Saharan North Africa for evidence of inter-regional interaction, based on domestic, everyday foodways. The focus is upon the study of food technologies, specifically cooking pots and their technical dimensions, and food stuffs, such as food traces and botanical remains. On this basis, a small group of 'culinary markers' are selected by which to investigate cultural transmission via household-level interaction over the long-term. A central component of these studies is the comparison of plant and animal lipids recovered from cooking pots using gaschromatography-mass spectrometry (GC-MS) and gas chromatography-combustion-isotope ratio mass spectrometry (GC-C-IRMS), in collaboration with Dr. Julie Dunne (Bristol University). Here we present a first overview of results, focusing on the analysis of these food technologies and food stuffs from across sub-Saharan North Africa in interregional comparative perspective.

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Shelby Mohrs

Recipes of Change: Cookbooks as Primary Sources for Archaeologists Investigating African Foodways

Africanist archaeologists have long been innovators in incorporating many primary sources. Cookbooks as primary sources have been overlooked, and in this presentation, I will demonstrate their value in examining African foodways. In doing so, I will review how African cuisines have changed throughout time and space by utilizing a unique dataset of over 50 cookbooks published on the continent over the last 100 years. The African continent is home to a dizzying array of cuisines, reflected in cookbooks published by African authors for African audiences. By tracking changes in technology, clarity of instructions, and conceptions of high versus low cuisine in cookbooks, I can investigate the axes with which cuisines change. However, this task is not possible without exploring the intersection of food and gender. This presentation examines how gendered labor is portrayed through cookbooks to understand the role of gender in influencing the construction and reception of African cuisines.

Mohammed Nasreldein, Nicholas J. Conard, Simone Riehl

Economic plants and agricultural practices in Post-Medieval Nubia: Insights from Old Dongola, Sudan This paper examines agricultural dynamics in Post-Medieval Nubia, a period that witnessed remarkable social and economic change. Migrations and trade routes accompanied the introduction of new crops and commodities. Although a limited number of archaeobotanical studies are available for Sudan, existing evidence suggests that agricultural practices have changed significantly through time. The archaeobotanical record demonstrates that the Nubian diet was typically based on cereals, such as sorghum, barley, and wheat. Based on systematic archaeobotanical investigations at Old Dongola, we can begin to reconstruct the subsistence patterns of Post-Medieval Nubia. The location of Old Dongola supported its growth as a controlling centre for trade routes and caravans. This setting fostered great cultural diversity. Through a wealth of new botanical data, we are now able to assess the subsistence regimes that helped to shape the social-economic life of the inhabitants of this important regional capital.

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Session 31. Rethinking fuzzy boundaries and sharp borders in African material culture // Repenser les limites floues et les frontières nettes dans la culture matérielle africaine

Adrien Delvoye, Anne Mayor

From Mâli to Bundu: Tracking medieval political boundaries through the study of pottery traditions. As Claude Lévi-Strauss suggested, communication within an ethnic group does not stop at its borders but passes through a threshold where it diminishes and is transformed. The identification of these boundaries and the understanding of the reasons for their expression (sharp or fuzzy) is central for archaeologists, and

ethnoarchaeological studies can provide keys to interpretation.

Pottery manufacturing processes here constitute an effective support to shed a new light on past societies. Drawing on two recent studies concerning present-day ceramic traditions from Senegal and The Gambia, this paper aims to clarify the boundaries observed through this material culture and to show the role of historical political formations, such as the *Mâli* and the *Bundu*. The distribution and characteristics of Mandinka pottery traditions in these regions and in Western Africa will be particularly examined, as well as archaeological evidence.

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Hantissié Hervé Farma

Les enceintes et structures en pierres : une architecture atypique en Afrique de l'ouest. Stone enclosures and structures: an atypical architecture in West Africa.

La terre crue était le matériau de prédilection utilisé dans l'architecture ouest-africaine. Cette harmonie du paysage architectural est perturbée par des vestiges d'enceintes et de structures en pierres aussi appelés « *ruines en pierres du pays lobi* ». Ils occupent un espace de 10.000 km² environ répartis sur les territoires actuels du nord-est de la Côte d'Ivoire et le sud-ouest du Burkina Faso. Leur caractère atypique a suscité l'intérêt des occidentaux au début du XX^e siècle et intrigue encore de nombreux chercheurs. Malgré des avancées significatives dans la compréhension de ces vestiges, certaines problématiques restent encore entières, dont celles relatives aux limites de leur distribution et les interprétations. La présente communication passe en revue les différentes hypothèses déjà avancées et développe de nouvelles pistes de réflexion à partir des nouvelles données.

Raw earth was the material of choice in West African architecture. This harmony of the architectural landscape is disturbed by the remains of enclosures and stone structures also called "stone ruins of the Lobi country". They occupy an area of about 10,000 km2 spread over the current territories of northeastern Côte d'Ivoire and southwestern Burkina Faso. Their atypical character aroused the interest of Westerners at the beginning of the 20th century and still intrigues many researchers. Despite significant advances in the understanding of these remains, certain issues remain unresolved, including those relating to the limits of

their distribution and interpretations. This paper reviews the various hypotheses already put forward and develops new lines of thought based on new data.

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Ricardo Fernandes, Steven Goldstein, Victor Iminjili, Kendra Sirak, Matthew Knisely, Emmanuel Ndiema **Modeling the chronology and route of the Bantu Expansion in eastern Africa**

The "Bantu Expansion" was one of the most transformative demographic transitions in recent human history, fundamentally reshaping linguistic, genetic, cultural, and physical landscapes of sub-Saharan Africa. Despite its important processes for understanding recent African history, the exact dynamics of the Bantu Expansion remain hotly debated across disciplines. Here, we apply multiple forms of spatio-temporal modeling to 600 radiocarbon dates across 93 archaeological sites associated with the Bantu Expansion into eastern Africa. Our analyses indicate that the spread of Early Iron Age traditions through this critical region occurred only after c. 2300 cal BP, centuries later than previously believed. Models also support Bantu speakers arriving in eastern Africa through the Congo Rainforest, as opposed to dominant hypotheses for northern or southern routes. Revisions to the timing and route of expansions to eastern Africa have implications for understanding the spread of Bantu languages, domesticated crops, and iron technology in Africa.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/53122

Elena Garcea

Intersecting boundaries: spatial and temporal overlaps of Mesolithic and Neolithic pottery in Sudan

In the literature, spatial and temporal boundaries of Mesolithic and Neolithic ceramic assemblages in Sudan often describe apparently precise limits. These formulations of models are inspired by functionalist principles and evoke unilinear evolutionary successions. With the aim to offer simplified descriptions of cultural contexts, they tend to exclude connectivity and interaction scenarios with geographical and/or temporal overlaps. The weakest aspect of these narratives is that peripheries may hardly be identified without knowing where the center of diffusion of a given cultural context is located. Often eponymous sites or the ones from the oldest excavations are artificially and implicitly placed in the center of hypothetical distribution areas. This paper does not claim to solve the problems of spatial and temporal overlaps of Mesolithic and Neolithic pottery in Sudan, but at least highlights its criticalities and proposes some intersecting boundaries. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51189

Friederike Jesse

Defining borders by mapping pottery and stone artifacts? Examples from the late prehistoric Sahara

When discussing 'fuzzy boundaries and sharp borders' not only the question of what role borders or border areas play is important, but also whether and how borders of a cultural group can be defined at all on the basis of archaeological material. This includes the question of what actually constitutes a cultural group and how such premises are then reflected in, for example, a mapping. For depending on which attribute(s) of a cultural group is/are mapped, boundaries can look very different. This topic will be taken up and discussed in the paper and exemplified for some areas using the example of pottery and stone artifacts in the Sahara. The period of investigation is the late Prehistory.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52152

Igor Matonda, Peter Coutros, Jessamy Doman, Koen Bostoen

Mapping the Archaeological Landscape of the Kwilu-Kasaï River Network, DRC

Since 2018, the BantuFirst project has engaged in a cross-disciplinary research program across multiple regions of the Democratic Republic of the Congo (DRC). Here we present results of three years of intensive archaeological research focused on Kwilu and Mai-Ndombe provinces, DRC, including the major river systems (Kwilu, Kasai, Kamtsha, and Loange) and inland regions (Idiofa and Gungu). Over the course of the project, 176 new archaeological sites were identified and sampled with 29 additional locations excavated. Subsequent analysis has defined several new material culture assemblages, produced palaeoenvironmental and subsistence data, and added dozens of new radiometrically dated occupation sequences to a region previously devoid of archaeological research. The focus of this presentation will be on the results of this work

as related to the dense archaeological landscape between the 1st millennium BC and 16th century AD across these newly investigated fluvial and inland regions.

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Laurent Nieblas Ramirez

Shapes and practices: a look at the distribution of fishing devices in the Congo Basin.

As part of the study on the role of riverine populations in the settlement of the northeastern Congo Basin, a focus is placed on a central activity: fishing. For the ancient past, we use archaeo(zoo)logy, but in order to be able to interpret the data, we also look at what was done in a more recent past. Fishing devices and practices of the past can be found both as objects, and in photographs and archival documents in the RMCA collections (Tervuren, Belgium). By creating a typology based on shapes, materials, and use, we can create distribution maps of the fishing devices and practices used in the Congo Basin from the end of the 19th century, and throughout the colonial era. In this paper, we will look at what these maps can tell us about the past and if boundaries between various objects and practices reflect areas of cultural influences or are linked only to environmental factors.

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Nicolas Nikis, Alexandre Livingstone Smith, Birgit Ricquier

From large-scale diffusion to regional boundaries: roulette decoration distribution in N-Central Africa Over 4000 years, roulette decoration techniques spread from West Africa to the south, reaching the Great lakes as southernmost limit during the last millennium. In the Congo Basin, recent data allows refining both the chronology of the apparition of these tools in the region and the limit of their distribution, located around at the Equator line in the eastern part of the Congo Basin and near the Ubangi River in the Western part. What does this limit represent? An interrupted process? A sociocultural boundary? Are we facing sharp borders from the past or blurry limits? And finally, does it results from similar processes throughout the Congo Basin or from unrelated regional events? By comparing the data for roulette decoration with pottery shaping techniques distribution, linguistic data and other aspects of material culture such as metal exchange and use, we question the materiality of this boundary around the Ubangi and Tshopo region and its significance in the past.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51760

Bolaji Owoseni

Fuzzy boundary and material culture: Insights from archaeological investigation at Ilorin, Nigeria.

An archaeological investigation was undertaken in 2020 as part of my doctoral research in llorin, northcentral, Nigeria, at a settlement known as Okesuna, one of its earliest quarters. Located between two ecological zones of the savanna and forest regions of Nigeria, llorin is known as a multi-ethnic society and part of the Yoruba world. The research is concerned with the social and political developments of llorin prior to the 19th century, as seen through the archaeological record. As a result, the investigation focuses primarily on the grounds of the present Kwara State College of Education, where archaeological material evidence, including pottery, grinding stones, and potsherd pavements were recovered. This paper will present the material evidence, chronology, and the possibilities of intersections of fuzzy boundary and materiality through time and space. The paper concludes that the nature of the material culture suggests no clear distinctive socio-cultural boundaries in llorin.

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Rocco Rotunno, Savino di Lernia

Boundaries and cultural variation at the Early to Middle Holocene shift: Takarkori, Central Sahara.

Despite being widely adopted in archaeological paradigms, migration, acculturation and contacts are difficult to disentangle in the material record. The ability to analyse records of discernible different chrono-cultural entities over a long sequence in the same context(s) makes it possible to address these issues. We present the case of Takarkori, which provides a stratigraphic sequence displaying the transition from Late Acacus hunter-gatherer-fishers to Early Pastoral herders. Via an intra-site spatial exam and a multiscale analysis of the pottery assemblage the study allowed the creation of sound chrono-typologies and the reconstruction of the pots' life histories among different groups. Pottery as a micro-basin of socioeconomic and behavioural events consents to decode the socio-cultural pathways among immediately succeeding chrono-cultural occupations. The study emphasises relationships, traditions, continuities and changes to interpret this key region's past social interactions.

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Dirk Seidensticker

At the rainforest's edge: Pottery traditions on the Ubangi unveil millennia old 'fuzzy boundary'

The importance of the vast river network in equatorial Africa has been discussed widely. Particular focus always laid on whether rivers constitute exchange barriers or, instead, if they are preferred pathways for expansion and axes of contact. This paper presents a unique case study from the northern Congo Basin, where along the Ubangi River, a seemingly impermeable border zone for pottery types existed for nearly two millennia. The finds from a survey conducted in 1985 have only recently been studied in detail. They offer a consecutive 850 km long transect from the heart of the equatorial rainforest to the northern savanna. The distribution of distinct pottery types found along the Ubangi River shows a very particular zonation. These zones are persistent and long-lasting, with ceramics only found rarely outside their specific region. These results offer a unique view into a putative lack of social connectivity along one of the major rivers in Central Africa.

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Session 32. Technology and innovation in the Stone Age // Technologie et innovation à l'Âge de Pierre

Okopi Ade

Tool Morphology and Functionality: A Case Study of Ground Stone Axes Assemblage from Akwanga, Central Nigeria

Morphological attributes can reveal much on the origin, history and the functionality of an artefact assemblage. One crucial component of lithic technological organisation that is most times given passing attention is the Kinetics. Kinetics is an important aspect, which can only be fully assessed by combining the use–wear approach with morphological analysis. Morphological studies could reveal enormous and vital information on the way tools were employed, as the form is intrinsically linked to kinetics. This paper thus focuses on the combined approach of using Use-wear and Morphological attributes to make inferences and meaning of Ground Stone Axes Assemblages from Akwanga, in Central Nigeria. **Keywords:** Ground Stone Axes, Morphology, Function, Kinetics, Use-wear. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52675

Precious Chiwara-Maenzanise, Benjamin J. Schoville, Yonatan Sahle and Jayne Wilkins.

The 105-thousand-year-old lithic assemblage from Ga-Mohana Hill North Rockshelter, southern Kalahari Basin.Precious Chiwara-Maenzanise, Benjamin J. Schoville, Yonatan Sahle and Jayne Wilkins The early Middle Stone Age (MSA) of South Africa is characterized by lack of distinct patterns in hominin technology and behavior. By contrast, clear patterns of novel technologies appear in the late MSA during Marine Isotope Stage (MIS) 5 (130-74ka). Much of our understanding of these patterns comes from coastal sites. Recent work at Ga-Mohana North Rockshelter, southern Kalahari has revealed that innovative technologies were not restricted to the coast. Dated to 105ka, the stratified DBSR deposits at Ga-Mohana yield evidence of innovations from the interior. Results of a technological analysis of DBSR lithics indicate that local raw materials dominate the assemblage. The lithic reduction is oriented towards the production of flakes, blades, and points and the recurrent Levallois technique is frequent. Inferences on social transmission based on similarities in MIS 5 lithic technology within the Kalahari are drawn. This paper highlights the value of detailed studies of lithic deposits from interior as a tool to understand early human behavior. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50670

Alex Gregory, Justin Pargeter

The social exchange of technical knowledge during the later Holocene in South Africa

Territorial formation can impact information exchange between forager groups but is difficult to identify archaeologically. From 6-4 ka cal BP, skeletal remains from past foraging communities show greater importance for group identity along the South African coast. This is evident from increased trauma, burials, and distinct dietary habits, further suggesting territorial boundary defense. The presence of boundary defense may have prohibited knowledge exchange between forager groups. Here, I present results from a pilot study that aims to use stone technology to track the transmission of technological knowledge across the South African coast. I use 3D models of stone cores to track similarities in core reduction and maintenance strategies between three sites. I first compare the frequency of core attributes between each site and then use Bayesian regression techniques to test the relationship between stone attributes and their archaeological context. These techniques allow us to validate differences in stone core maintenance strategies, but Byneskranskop and Nelson Bay Cave do not. From this, we can conclude that these differences are either an effect of reduction intensity or differentially shared knowledge. If the latter is true, then this would improve our understanding of territoriality's effect on how stone tools are made.

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Matthew Kroot, Cameron Gokee

New Stone Age Sites in Bandafassi, Senegal

A range of developments, from the diversification of foraging strategies to new patterns of sedentism and mobility, are associated with the Later Stone Age (LSA) of West Africa. Unfortunately, given the relatively understudied nature of the time period, we do not have a strong understanding of the social context of these changes. This talk describes the results of an analysis of lithics recovered as part of recent surveys by the Bandafassi Regional Archaeological Project in southeastern Senegal. Several substantially sized LSA sites with high degrees of inter-site differences in raw material usage, formal tool typologies, and reduction technologies are presented. Possible interpretations of this surprising degree of variability and their implications for our understandings of LSA society are discussed, as well as the benefits of analyzing multiple sites in a single region in order to understand assemblage differences across space and time. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56989

Khady NIANG, James Alexander Blinkhorn

Continuity and Discontinuity in west African past lifeways during the final Holocene

The Mid/Final Holocene is a very complex period in West Africa. The introduction of new forms of material culture such as ceramic, iron and changes in subsistence strategies through the spread of pastoralism and agriculture mark a period of profound changes in the socio-cultural and political landscape. The overlapping and the spatio-temporal variability in the adoption of these novelties hinder pertinent chrono cultural subdivisions and result in high terminological variability in the literature. Notably, lithic technology is a key feature of human behaviour that is persistently present across these substantial changes in West African lifeways. This paper presents results of survey and excavations at Somone a lagoon located on coastal Senegal. Technological and settlement patterns suggest long term occupation in which mangroves ecosystems have played a key role in the maintaining foraging and hunting subsistence practices. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/56940

Jackline Nyiracyiza Besigye, Peter R. Schmidt

Characterizing Lithic Assemblages at two LSA sites in Ndali Crater Lakes Region (NCLR) Western Uganda. This paper presents results from excavations conducted at Kabata 3 (KA-3) and Rusoona 1 (RU-1), two Late Stone Age sites in the Ndali Crater Lakes Region of western Uganda. It examines the sequence of LSA occupational horizons at the two sites, spanning from the first half of the first millennium CE, with presence of Boudine and Kansyore communities (*Schmidt et al* 2022), to the mid-2nd millennium. The paper also aims to understand the functionality of lithic materials of Ndali Kansyore hunter/gatherers/agriculturalist, particularly how lithics relate to settlement configurations, subsistence, and other social and economic phenomena. Differences in raw material, functionality, and chronology indicate that there are two LSA industries at KA-3 and RU-1. This is evidenced in knapping technologies and procurement strategies used at these sites. We suggest that there were changes in technology, activities, and land use patterns explained by chert in only upper levels at KA-3 as well as red ochre, usually associated by ritual practices (Bushozi 2022). The high proportion of points and other microlithic implements shows that the sites were initially occupied by LSA hunter gatherers and then later by those practicing a mixed economy including agriculture, with domestic animals and stone tools used within their home settings.

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Justin Pargeter, Manuel Will, Christian Tryon, Matthew Shaw, Eleanor Scerri, Kathryn Ranhorn, Jessica McNeil, Alex Mackay, Huw Groucutt, Katja Douze, Metin Eren, Alison Brooks, Alice Leplongeon.

Replicability in lithic flake analysis: Results from the Comparative Analysis of Middle Stone Age Artifacts in Africa (CoMSAfrica) research project

The patterned diversity of lithic artifacts inform archeologists about important

dimensions of human behavioral variability. Despite their importance, lithic artifacts can be problematic to study because lithic analysts differ widely in their theoretical approaches and in the data they collect. The extent to which differences in lithic data relate to prehistoric behavioral variability or to differences between archaeologists today remains incompletely known. We address this issue with the most extensive lithic replicability study yet, involving 11 analysts, 100 flakes, and 38 ratio, discrete, and nominal attributes. Using mixture models, we show strong inter-analyst repeatability scores on several attributes making them well suited to comparative lithic analyses. Based on our results we highlight 17 variables that we consider reliable when compiling datasets collected by different individuals for comparative analyses. Demonstrating this repeatability is a crucial first step in tackling more general problems of data comparability in lithic analysis and the ability to conduct large-scale meta-analyses that combine multiple datasets.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/51890

Lucy Timbrell, Behailu Habte, Yosef Tefera, Christine Maroma, Emmanuel Ndiema, Kimberly Plomp, James Blinkhorn, Matt Grove

What's the point? An analysis of eastern African Middle Stone Age point forms

Points are one of the key features used to define the African Middle Stone Age (MSA). Regional patterns of their shape and size through time have been proposed to, at least in part, reflect inter-group interactions and networks of MSA populations. As a result, they have been used to define cultural phases with the MSA, such as the Aterian and Still Bay. However, compared to other regions, eastern African MSA points have received relatively little attention beyond functional analyses, likely because eastern Africa does not have highly distinctive and widely applied chrono-stratigraphic variants that divides its MSA record. We present a metric and geometric morphometric analysis of eastern African MSA points and evaluate potential drivers of shape variation in relation to population structure and null models of isolation by distance, time, and environments. Results highlight that approximately half of the shape variance can be explained by spatial, temporal and environmental autocorrelation, indicating continuity in population structure through space, time and in relation to environments, as well as size and raw material use. Residuals likely represent stylistic differences between assemblages, which are often the subject of interest in archaeological studies.

Lassané Toubga

Les caractéristiques techno-morphologiques des artefacts lithiques de la trame stratigraphique -50/-190cm de l'abri sous roche de Maadaga (sud-est du Burkina Faso)

L'abri sous roche de Maadaga est situé dans le massif du Gobnangou, au sud-est du Burkina Faso. A la fin des années 1980, une équipe pluridisciplinaire de l'université de Frankfurt y a mené des fouilles qui ont permis d'identifier cinq niveaux stratigraphiques couvrant la trame 0/-190cm. Les vestiges de la transition entre le 4^e et le 5^e niveau ainsi que ceux du 5e niveau (-100/-190cm), étudiés par les auteurs des fouilles avaient montré deux séquences technoculturelles caractéristiques du Middle Stone Age. Les vestiges des 4 premiers niveaux restants étudiés dans le cadre de notre thèse de doctorat indiquent que ceux des 3^e et 4^e niveaux couvrant la trame -50/-100 cm, présentent également des caractéristiques techno-morphologiques du MSA bien que correspondant d'après les auteurs des fouilles à la transition entre la fin du Pléistocène supérieur et le début de l'Holocène. La mise en parallèle des vestiges de cette trame avec la précédente permet de comprendre la

problématique de plus en plus croissante de la persistance des technologies MSA dans les industries de la fin du Pléistocène supérieur et du début de l'Holocène en Afrique de l'ouest. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52752

Sara Watson, Alex Mackay, Nicolas Zwyns, Teresa Steele Howiesons Poort lithic technology from Nelson Bay Cave

The Howiesons Poort (HP) technocomplex has been central to discussions of the evolution of our species' cultural and cognitive capabilities during the late Pleistocene. Backed artifacts, bladelets, and geometric forms are characteristic of HP assemblages across southern Africa and are argued to encompass early composite tool technology and may represent some of the earliest projectiles. The site of Nelson Bay Cave, on the southern coast of South Africa, has a long sequence extending from the Holocene into the late Pleistocene. Descriptions of the lithics were foundational to the first comprehensive descriptions of the Middle Stone Age, but no publications reflect developments over the past 40 years. Here we discuss preliminary results from a sample that is part of a larger study. We provide overall assemblage descriptions and characterization of technological production methods used in Level 6, the oldest unmixed HP layer, and address questions related to technological decision making.

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Manuel Will

Introducing the network Comparative Analysis of Middle Stone Age artifacts in Africa (CoMSAfrica)

The Middle Stone Age (MSA) of Africa is a key phase for archaeological research as it encompasses the origin and early evolution of *Homo sapiens*. Lithic artefacts constitute the main source to study these processes as they are numerous and yield relevant behavioral information. The use of incomparable methods to study stone tools, however, has impeded communication between researchers and hindered efforts to compare data between regions. We founded the CoMSAfrica network at a workshop in 2018 to tackle these issues by gathering a collaborative group of 12 international scholars working in different parts of Africa with diverse methodological backgrounds in lithic analysis and access to large MSA datasets. Here, we broadly discuss the general challenges for comparative lithic work at African MSA sites, introduce the approaches that CoMSAfrica has developed in the last 5 years and present some of the results of an extensive lithic replicability study of flakes among members of our group.

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Session 33. The archaeology of African pastoralism // L'archéologie du pastoralisme africain

Martina Di Matteo, Silvia Soncin, Krista McGrath, Savino di Lernia

Resisting drought: herding strategies in Middle-Late Holocene in the Acacus massif (Central Sahara) Herders have a wide range of adaptive strategies for specific environmental variations, animal ecology, and socio-ideological and political contexts. Pastoralism, characterized by flexibility and mobility, is considered a resilient adaptation strategy and the key against environmental uncertainties and social pressure. The Central Sahara, the scene of high-impact environmental and climatic changes between Middle and Late Holocene, is a pivotal area for the study of how human groups have managed risk and mutable environment through herd management. Particularly, Uan Muhuggiag rock shelter in the Acacus massif (S-W Libya) represents a crucial site for the study of the Pastoral Neolithic.

High-resolution analysis of the faunal record, coupled with climatic, environmental, and cultural aspects, provides new data for a more accurate understanding of subsistence strategies facing the inexorable expansion of the desert, attempting to maintain a balance between humans, animals, and environment. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50908

Pablo Gutiérrez de León

From the cairn to the mosque. An archaeology of nomadic pastoralism in the Horn of Africa.

How do we study nomads in African archaeology is an arduous question due to the intrinsic perishability of their material culture. Nomadic pastoralists, masters of the caravans and the desserts, are often understood associated with the activity of commerce, which adds the majority of archaeological materials, like exogenous pottery and beads. Furthermore, encampments and huts are rarely preserved with the exception of few drystone walls and fireplaces. On the other hand, religious and funerary architecture is fairly common and widespread, especially in the Horn. Monumental cairns of diverse shapes, Islamic tombs and flat drystone mosques spark the landscapes of the pastoralists. The main goal of this conference is to highlight how these different architectures allow us to comprehend continuities and changes within nomadic societies and how they spread their livelihood through the eastern part of the continent and, moreover, to challenge previous assumptions about nomadic pastoralists.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50668

Cornelia Kleinitz, Alfatih Mohamed Ali Saeed, Hassan Ebeid-Allah

Materialities of past and contemporary pastoralism at Musawwarat es-Sufra (Sudan)

The valley of Musawwarat es-Sufra, with its numerous temples and other built structures, was one of the primary ceremonial centres of the Kingdom of Kush. It is today one of the major national heritage sites in Sudan and valorised on a global level as part of the 'Archaeological Sites of the Island of Meroe' serial entry on UNESCO's World Heritage List. While research and preservation efforts have long focused on the monumental archaeological site as part of the (Early) Meroitic state's symbolic landscape, a new project aims to complement, and counter, this narrative and logic by focusing on the pastoralist landscape and lifeworld that provides the setting for the ancient ceremonial as well as the modern (World) heritage site. Based on a research partnership with the local community – where workmen and guards for the archaeological site have long been drawn from – we explore materialities of pastoralism in this specific ecological context between archaeology, heritage and development.

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Jennifer Miller, Elizabeth Sawchuk, Yiming V. Wang, James K. Munene, Lauren Malone, Sierra Plympton, Asa Wong-Gómez, Emmanuel Ndiema, Anneke Janzen, Katherine Grillo, Elisabeth Hildebrand.

Reconstructing sociality among the earliest herders in eastern Africa: new evidence from OES beads Ostrich eggshell (OES) beads are an important source of evidence for understanding ancient social relationships. Their attributes, such as bead diameter, can reflect cultural preferences and potentially social identities. While OES bead morphology has shed light on the spread of herding into southern Africa, it has been difficult to evaluate similar processes in eastern Africa due to a lack of data from the earliest herding sites. Here, we analyze >700 beads from 'pillar sites' constructed ~5200-4200 cal BP by early herders around Lake Turkana, Kenya. Using a large dataset of OES beads from across Holocene Africa, we contextualize these beads within continent-wide patterns and examine regional questions about communities and relationships through the lens of bead form, production and use. This study provides an important foundation for future interdisciplinary research on cultural relationships associated with the spread of food production into the Turkana Basin and beyond.

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Shayla Monroe

The Traditional Ecological Knowledge of African Pastoralists and Environmental Archaeology

How do archaeologists studying past environments and culture engage with indigenous African knowledge of seasons, biomes, and climate? As tools for studying the paleoclimate of northeastern Africa become more sophisticated, we have an opportunity to make space for traditional ecologies of northeastern Africa's dryland peoples. Ethnography, oral history, and pastoralist poetry can enrich our understanding resilience, social cohesion, and decision-making among pastoralists, casting new light on how we interpret the material record of pastoralist responses to environmental duress.

Ahmed Nassr, Zeljko Rezek

Forager and agro-pastoral archaeology in northern Butana, central Sudan.

In July 2022 we carried out an archaeological survey in northern Butana, central Sudan. Our goal with this first season was to document the distribution of the Stone Age record and preliminary characterize its technology. The area is 270 km northeast of Khartoum. The landscape of the area consists of agglomerations of Nubian sandstone hilltops in the western part closer to the Nile and flat plains and shallow wadis with Hudi chert outcrops in the eastern part of the survey area. We recorded about 90 archaeological sites, representing the Middle Stone Age, Microlithic and the Neolithic. We sampled these locations systematically for lithic analysis. We also did a test excavation of some of the occupations of the early pastoralists of early Holocene. In this presentation we will present these results in the context of the regional Middle Stone Age and Neolithic. The presentation is to report the discoveries and to present the landscape of the archaeological sites diversities among prehistoric horizons, and the characteristics of the finds and to match them with the prehistoric archaeological context in central Sudan.

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Session 34. The archaeology of foraging in Pleistocene and Holocene southern Africa // L'archéologie des chasseurs-collecteurs en Afrique australe au Pléistocène et à l'Holocène

Alex Bertacchi, Stanley Ambrose, Jessica Thompson, George Mudenda, Potiphar Kaliba

The last 30,000 years in the Zambezi basin: a major shift in land use for Later Stone Age foragers? With its almost 1.4 million km², the Zambezi basin houses diverse woodlands and faunal communities. Despite the presence of important LSA sites in Malawi and Zambia, our understanding of climatic and vegetational change within the basin remains poorly resolved. We summarize over 800 measurements of stable carbon and oxygen isotopes in herbivore enamel from the basin, including unpublished results from the Mzimba district of northern Malawi and Leopard's Hill in southern Zambia, as well as published data from Kalemba and Makwe in eastern Zambia. We infer that during the Terminal Pleistocene, the Zambezi basin included rich mesic C4 grasslands, while the Holocene saw an increase in drought-resistant C3 open woodlands and less abundant large gregarious ungulate communities. These results question the simplistic view that wet-dry cycles can be equated to C3- and C4-dominated landscapes, respectively, which has implications for the socio-territorial organization of foragers in the basin.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50706

Britt Bousman, Zac Selden, Kristen Wroth, Lloyd Rossouw, Michael Toffolo.

The Analysis of MIS 5 Middle Stone Age Points from Lovedale, South Africa

Recent investigations on the farm of Lovedale in the Modder River valley in the western Free State have resulted in the recovery of a unique collection of Middle Stone Age (MSA) projectile points from a single site. The site was discovered in 2011 by Gary Trower then excavated in 2019 and 2021. Surface-collected and excavated points, most from a single occupation, have produced a sizeable point assemblage. Traditional linear and 2D morphometrics demonstrates the manufacture and use of two distinct forms. One form is produced by the well-known Levallois triangular point flaking technique common in MSA assemblages in the interior of South Africa. The other specimens, called Lovedale Points, are made on blades and flake-blades and distinguished by bifacial basal trimming. The excavated points date to late MIS 5 and are roughly contemporary with but distinctive from Still Bay bifacial points on the coast. Occasionally Lovedale Points have been found on other sites in South Africa but never in such frequencies which allow for a systematic statistical and shape analysis.

Genevieve Dewar, Julia Zastrow

Robberg period faunal signatures from the Maloti-Drakensberg, Lesotho

The re-excavation of Ha Makotoko (HM) and Ntloana Tšoana (NT) rock shelters in lowland Lesotho, produced animal remains from people using the Robberg technocomplex during the late Pleistocene (HM and NT Phase 5b) and early Holocene periods (NT Phase 5a). These data allow for the development of a regional foraging strategy, as there is a concentration of well known Robberg sites in the Maloti-Drakensberg, ie. Rose Cottage Cave and Tloutle. The macro and micro faunal signatures from HM and NT support previous interpretations that during the late Pleistocene, a relatively low diversity of primarily medium to large ungulates were available, indicating a relatively cool environment with low primary biomass productivity. The early Holocene deposits at NT also exhibit low NTAXA, but with a greater contribution of size 2 grazers, suggesting either a shift in hunting strategy or more likely the expansion of small species into the lowlands as the region warmed. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50707

Brittany Sparrow, Mary Lucas, Patrick Roberts, Genevieve Dewar.

Palaeoenvironmental Change Throughout the Pleistocene/Holocene Transition in Lesotho: Insights from Carbon and Oxygen Isotope Analyses of Micromammal Teeth

Ha Makotoko Rockshelter is a well-stratified site with good organic preservation in the central Caledon Valley of western Lesotho's lowlands (c. 1600 m a.s.l.). Although considerable environmental and climatic changes are likely to have occurred in southern Africa during the Pleistocene/Holocene transition, information is limited due to this lack of well-preserved sites with known dates. Using stable carbon and oxygen isotope analyses of four micromammal species (*Otomys irroratus, Otomys sloggetti, Myosorex varius, and Crocidura flavescens*), we have provided a well-dated palaeoenvironmental and palaeoclimatic sequence from the Middle Stone Age to the Late Holocene. Throughout the site's sequence, stable isotope results show a general trend toward greater contributions of C₄ taxa and thus warmer conditions. Findings indicate that this was not a gradual warming trend, but rather a period of climatic fluctuations. As the Pleistocene ends and the LSA/MSA transition begins, the climate warms. However, there is a notable cooling period between this transition and the start of the Woodlot period *c.* 9100 BP. The Woodlot is bounded by cooling periods, with a significant warming period in the middle. The transition from the Woodlot to the Late Holocene is marked by gradual warming.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52785

Jessica Thompson, Jessica I. Cerezo-Román, Elizabeth Sawchuk, Flora Schilt, Alex Bertacchi, Douglas J. Kennett, And Potiphar Kaliba

Variability in forager mortuary behavior in the terminal Pleistocene and Holocene of Malawi

Malawi has many skeletal remains from foragers living ~16,000-2,000 years ago. Early analyses emphasized biological profiles, not cultural and taphonomic contexts. New work at 5 sites in the Kasitu Valley shows variation in mortuary practice and post-depositional disturbance, revealed through single context excavations and microarchaeology. There are at least 16 individuals across 5 sites, with 10 observed from fragments sorted from the sieve; only 6 sets of remains (2 sites) could be recognized as more complete interments. Spatial distribution, skeletal part representation, fragmentation, burning, and bone surface modification reveal a rich and varied history of site mortuary use: complete interments, post-mortem element manipulation, defleshing, and ceremonial burning. These results highlight an important aspect of cultural behavior and site formation that likely existed at most Later Stone Age sites in the region, rendered "invisible" by earlier approaches to recovery and analysis.

Session 35. Roundtable: Visions of the past: teaching history as a tool of power // Table ronde. Visions du passé : l'enseignement de l'histoire comme outil de pouvoir

Zuzanna Augustyniak, Kamil Kuraszkiewicz, Hanna Rubinkowska-Anioł, Magdalena Pinker, Kinga Turkowska, Nagmeldin Karamalla-Gaiballa

Past can be a powerful tool in a struggle for power; stability and effectiveness of an authority depends on its subjects' acceptance and submission, thus the process of shaping the picture of the state – and attitude towards it – among citizens has a crucial importance. Archaeological heritage – either because of its antiquity or its impressiveness (or both) – seems to be a particularly alluring reference point in constructing historical narrations that are intended to legalise authority, and different interpretations of archeological objects can strengthen or weaken narrations built around them. Thus, authorities use eagerly various ways to impact visions of the past formed in the consciousness of citizens – including school curricula or activities aimed at engaging local communities into protection of heritage sites. Importantly, in Africa, there is a strong opposition of western-constructed interpretation of the past with that passed as historical knowledge locally. Moreover, visions of history imposed by the ruling elite differ from those advocated by the opposition, all of them influenced by ethnic, religious and economic rivalries. The discussion based on the identification of the different, often conflicting visions of history and their comparison with the current state of knowledge will also contribute to the ongoing discourse on decolonisation and postcolonialism.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/50701

Session 36. Roundtable: Long-distance trade in Africa before 1500 CE // Table ronde. Le commerce à longue distance en Afrique avant l'année 1500 de notre ère.

David Killick

African archaeology has benefited since 2000 from the development of faster and cheaper methods of chemical and isotopic analysis. These methods have been used to infer the provenance of materials produced both within and outside Africa - including obsidian, ochre, copper, tin, glass, ivory and ostrich eggshell - and also to inferring migration of both people and animals. This roundtable focuses on the social interpretation of results obtained from these analyses. We will discuss in particular the mechanisms of long-distance trade in societies at various levels of social complexity - foragers, pastoralists, early agricultural societies, emerging complex societies, and states. We will also discuss transfers of materials between some of these societies, as for example between foragers and states. Another topic for discussion is whether we can distinguish transfer mechanisms - for example, down-the-line versus direct procurement at source - from distributions. https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/52537

Session 37. Roundtable: African Archaeology in Support of School Learning

Ann Stahl

Contributors to a forthcoming African Archaeological Review issue dedicated to "African Archaeology in Support of School Learning" come together to reflect on our process of collaboration with educators through a series of virtual workshops to develop resources that support culturally responsive teaching. Our work is motivated by the fact that archaeology brings long-term perspective to issues foregrounded in United Nation's Sustainable Development Goals (SDGs), interweaving knowledge grounded in social sciences, history, mathematics, arts, science and technology. As such, archaeology can contribute substantively to Quality Education (SDG 4), particularly when archaeologists work respectfully to braid western science with other knowledge perspectives grounded in the communities and places where archaeologists work. We aim to stimulate dialogue on how this model can inspire change in how we share archaeological perspectives with wider audiences.

Session 38. Roundtable: Film discussion: Iron Technology as Ritual Performance:

The Barongo of Western Tanzania

Peter Schmidt

This film documents a once vital part of life in pre-colonial times-iron smelting among a multi-ethnic, guild-like group, the Barongo of western Tanzania. The Barongo arose during the 19th century in remote Miombo woodland forests as a response to dangers during the interior slave trade. Suppressed by British colonials controlling markets in iron goods, the Barongo again prospered during WWII when their goods were essential to the war effort. After WWII, they escaped British sanctions by smelting in the deep forests until the mid-1950s. The film starts with 9 minutes of silent Super 8 shot in 1979 married to 24 minutes of high-resolution sound-synced 16mm film shot in 1984. This film is the only record of their highly nuanced ritual processes marked by extensive bricolage. The use of silent film asks the viewer for deeper engagement by reading short descriptions and thinking about their significance - interactive with content rather than passively listening to a Voice-of-God narrative.

Session 39. Roundtable: Archaeological Sites & Monuments Registers and Planning Processes: Opportunities and Challenges

Paul Lane

The aim of this roundtable is to encourage a discussion on the current state of archaeological sites and monuments registers across different African countries, their role in heritage management decision making, and how they are currently integrated into general planning processes. Recognising that many registers exist only in paper form, can be difficult to access readily, and are rarely consulted in the planning process, we aim to identify examples of good practice and successful integration as well as reflect on the challenges and opportunities facing the profession. Since legislative structures and systems vary significantly, including with regard to pre-development archaeological impact assessments and mitigation activities, we aim to review how such systems might be improved and the ways regional measures aimed at data sharing and integration can be enhanced.

Session 40. Roundtable: Archaeology in African Universities // Table ronde. L'archéologie dans les universités africaines

Asmeret Mehari, Elizabeth Kyazike, Ichumbaki Elgidius, Robel Haile, Ndukuyakhe Ndlovu This roundtable proposal aims to discuss the current state of archaeology in African universities. The introduction of archaeology into African higher education systems varies throughout the continent. In some countries, it took place much earlier; for example, in South Africa in the late 1920s and in Ghana in 1951. In other countries, archaeology was introduced or reintroduced much later. For example, the University of Asmara in Eritrea incorporated archaeology in 1997, and Makerere University in Uganda reintroduced archaeology in 2013. Similarly, only a few publications have directly discussed archaeology in African universities. This includes examples from Ghana, Nigeria, Tanzania, and South Africa. However, the state of archaeology in most African universities remains silent. This roundtable brings in several participants together to discuss the state of archaeology in African universities by addressing three themes: teaching, research, and community engagement.

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Session 41. Poster session // Session de posters/affiches

Boluwaji Ajayi, Omokolade Omigbule, Abidemi Babalola

Co-Creation and Conservation of Igbo-Olokun Archaeological and Heritage Site, Ile-Ife, Nigeria.

Archaeological research at Igbo Olokun, Ile-Ife, Nigeria, has revealed the first known primary glassmaking workshop in Sub-Saharan Africa, dating to the 11th century AD. Igbo Olokun has yielded materials such as glass beads and debris, crucibles, ceramics cylinders, semi-finished glass, and furnace ruins that have

contributed to our knowledge of the high-temperature activities carried out at the site. While Igbo Olokun is listed as a monument site by the National Museum, Ile-Ife, and as part of the people's cultural heritage, it lacks proper care, and most people do not connect with it as a heritage site. The preceding is due to the lack of awareness about its significance. This poster presents the programmatic research agenda at Igbo Olokun, which centers on the people and their connection with and involvement in the archaeological and heritage site. The research adopts the concept of "co-creation" to engage the community and stakeholders in the site's conservation and rehabilitation.

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Michelle Cameron

Southern African Holocene Ancestral KhoeSan body size and shape variation in the central interior

Southern African Holocene Ancestral KhoeSan body sizes are well-characterized on the Cape coast (approx. 10000–200 BP), but individuals from the semiarid central interior (approx. 1000–200 BP) remain understudied. Archaeological evidence in this region suggests high dietary reliance on wild fauna alongside the presence of domesticates. Products from domesticates may have affected early life growth trajectories with implications for adult body size and shape variation. Skeletal dimensions and limb proportions, which may reflect early life challenges, are compared among central interior (n=63) and Cape coast (n=113) adults to see if domesticates benefitted central interior groups using Kruskal-Wallis tests. Cape coast individuals are divided into groups based on radiocarbon date to account for previously established temporal variation in body size. Correlations between skeletal dimensions and previously analyzed stable isotope data are also examined. Central interior males had similar dimensions to Cape coast males dating from 4000–2000 BP, which is a period of smaller and more variable body sizes potentially due to increased population pressures on the coast. However, central interior individuals who consumed higher trophic level foods, potentially including products from domesticates, had limb proportions indicative of better early life growth conditions. Marginal central interior conditions and population stresses from 4000–2000 BP on the Cape coast may result in similar, smaller body sizes among males. However, central interior individuals who consumed higher trophic level foods, potentially products from domesticates, represent those individuals who better mitigated early life stresses.

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René Ndiana Faye

Histoire, archéologie et héritage de la colonisation et de l'esclavage dans un village de la liberté au Sénégal : Sangane (Bawol occidental)

L'étude proposé s'inscrit dans une fourchette chronologique allant de la fin du XIXe au XXIe siècle, et examine les processus de l'abolition de la traite atlantique dans la zone de Sangane (Bawol occidental, centre ouest du Sénégal) à partir d'une combinaison de données multiples notamment archéologiques, archivistiques et mémorielles. Elle se focalise, sur le village de Mbambara Chérif, composée uniquement de communautés Bambara. Ces derniers constituent une population d'origine servile qui s'y est installée dans le courant de la fin XIXe siècle, à la suite d'instabilités provoquées par les puissances coloniales, principalement par l'empire coloniale française. En effet, cette période est marquée par d'importants bouleversements, qui découlent des processus de domination coloniale enclenchés par la France. La politique coloniale française qui se heurte avec les résistances africaines s'imbrique avec les politiques et les stratégies abolitionnistes de l'esclavage, incarnées par divers acteurs, en figure de proue l'administration coloniale. Autrement, l'abolition de l'esclavage en Afrique Occidentale Française s'imbrique l'installation de l'administration coloniale française, les résistances africaines, l'émergence des religions soufie ; mais surtout, les aspirations émancipatrices des populations vivant sous une condition servile de jouir de leur liberté. Les politiques émancipatrices aussi bien celles incarnées par l'administration coloniale que celles développées par les populations serviles, à l'image de la communauté Bambara, pour acquérir leur liberté occupent une place centrale dans la construction des identités contemporaines.

Tim Forssman, Nicole Sherwood

The function and use of Little Muck Shelter's stone scrapers: a replication and use-wear study

Little is known of forager behaviour shifts in the middle Limpopo Valley especially after the arrival of farmers. Some studies have shown changes in forager toolkits, but what these represent is not clear. A dominance of stone scrapers at Little Muck Shelter, for example, has been interpreted as the result of changing trade dynamics. However, what these tools were used to produce is not known. To resolve this an experimental protocol was designed to examine wear traces from working a range of materials with replicated scrapers in various fashions and using different tool and motion organisations to assess edge damage, wear, and polish. These results were compared to archaeological scrapers retrieved from excavations at the site. Our results show a preference for working rigid items but also leather. We argue that this demonstrates forager involvement in the production of various goods at a time when trade wealth was driving the appearance of wealthy elites and state level society.

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Charlotte Jenkins, Elena Skosey-Lalonde

Incorporating Mozambican Ceramics into the southeastern African record

Ceramics are a key archaeological proxy in interpreting migrations, social networks, subsistence methods, and cultural variability during the Iron Age in southeastern Africa. However, countless reviews and analyses of the southeastern African Iron Age archaeology including those by Dr. Huffman and reports along the Swahili coast by Dr. Kwekason, acknowledge a notable gap in these regional reviews: the record of Mozambique. Mozambique has long been neglected in regional patterning of material culture and behavioral variability in the archaeology of southeastern Africa. Using established methods of ceramic classification in southern and eastern Africa, this poster will present our working database of southeastern African Iron Age ceramics, incorporating the historical and chifumbaze assemblages present in the archives and reports from active excavations in Mozambique (Skosey-LaLonde et al., 2023), and consider the observed stylistic, and subsistence changes in their environmental context.

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Patricia McNeill

Ostrich habitat use and archaeological hunter-gatherer mobility revealed by Sr isotope analysis

Understanding a population's mobility patterns is key to reconstructing how a group gains resources and adapts to changing contexts. Strontium isotope (⁸⁷Sr/⁸⁶Sr) analysis is a powerful tool in archaeology to investigate past movements of humans and animals in relation to bioavailable ⁸⁷Sr/⁸⁶Sr maps (isoscapes). To investigate resource catchment during the Later Stone Age of Varsche River (VR) 003, southern Namaqualand (South Africa), we analyzed ⁸⁷Sr/⁸⁶Sr ratios in ostrich eggshell (OES) fragments (n=12) and identify their source via a regional Sr isoscape from environmental samples. Our data suggests that all the OES samples originated from a region 30-35 km from VR003. Indeed, we recently discovered modern eggshell and wild ostriches there, confirming the area as a potential source of past ostrich eggs for the VR003 occupants. Results also provide a way for historical ecologists to reconstruct past animal locations when the extant animals' distributions have been disrupted.

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Degsew Mekonnen, Ana Gomes, Hugo Olivera

Early Ethiopian agriculture and the formation of Pre-Aksumite culture.

Ethiopia is located at the intersection of agricultural innovations and crops from different regions: Egypt, the Arabian Peninsula, and West Africa. Moreover, crops such as tef were domesticated locally. The role of allogenous and indigenous crops and cultural inputs in the emergence of farming and urbanism is still poorly understood. Likewise, the role of Holocene climatic changes in adopting farming has been scarcely considered. Furthermore, the cause for the emergence of Pre-Aksumite culture is unclear. This research aims to shed light on the role of environmental changes and cultural dynamics in the origins of agriculture and the emergence of Pre-Aksumite culture. As such: 1) a compilation of Holocene environments for Ethiopia and neighboring regions 2) DNA analysis on allogenous and indigenous crops, and 3) reviewed archaeological

evidence for agricultural practices will be done. In this communication, we would like to present the preliminary results of the research.

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Kristina Pfeiffer, Jacob Hardt

Routes of Interaction: archaeological-geographical studies of pathway networks in the northern Horn of Africa (Kristina Pfeiffer, Jacob Hardt)

Archaeological sites in the region of Tigray often show an occupation continuity of hundreds up to thousands of years, which is especially evident for churches and monasteries. In this context, extensive mapping of historical sites including the documentation of their geographic and topographic conditions was carried out. Together with ongoing studies of historic maps, travelogues and least-cost path models, the data provide insights in historic mobility systems, settlement patterns and communication routes within the northern Horn of Africa that serve as a base for further prehistoric research. In addition, the spatial relationships between pathways and gully erosion are investigated, as gullies are typical factors of human interaction with the natural environment in rural areas of Africa. Preliminary results show that nearly 30% of the mapped gullies can be attributed to anthropogenic influences.

https://symposium.foragerone.com/safa-2023-26th-biennial-meeting/presentations/54224

Eréndira Quintana Morales, Lily Singman-Aste, Lucia Bryan, Lauren Castaneda-Molina, Evelin Aquino Cruz **Into the Depths: Examining the Deep-History of Fishing in the Kafue River Floodplain**

The Kafue River Floodplain is a seasonally inundated area in Zambia that extends across 6,500 km² and represents an important resource for local fisheries. Archaeological sites in this region chronicle the settlement and movement of Bantu-speaking people during the 6th-16th centuries. Recently excavated fish remains from mounds in the floodplain provide a long-term record of fishing practices. The goal of this project is to evaluate the socio-ecological impact of sustained fishing in the region. This poster presents preliminary results of species representation identified from the morphology of fish remains and size reconstructions estimated from measurements of catfish pectoral spines. Our findings help elucidate local practices and environmental changes related to the past movement of Bantu-speaking populations and can help develop sustainable fishing practices today.

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Oreoluwa Sodeke , Jonathan Aleru

Ceramic Analyses as an Index for Intergroup Relationship(s) in northern Yorubaland, Nigeria.

Emerging evidence indicates that northern Yorubaland (central Nigeria) was as a frontier region of the Imperial Oyo Empire (AD 1570-1830). The traditional classification methods of analyzing ceramics have been adopted as a strategy for understanding ceramics function in this region. However, the archaeological reconstruction of the culture of the region has not taken into consideration the knowledge of production and consumption, and as well as their roles in exchange and inter-group relationships. In this poster, we discuss the application of Petrography, X-ray diffraction (XRD) and X-ray fluorescence (XRF) techniques to advance our understanding to these processes using ceramics and sediment samples from Oke-emo in Igbaja, Kwara State, northern Yorubaland. These techniques provided data about the chemical and morphological attributes of the ceramics and sediment samples from the region. The petrographic, XRD and XRF results were used to answer questions that border on the provenance of the ceramic source materials. These, in turn, indicated the existence of both local and external influence from bordering communities and hence, shed light on intergroup relationships in the study area.

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Robert Stark

Engagement, Knowledge Transfer, and Bioarchaeology: Talking About Past Lives at Ghazali

Ghazali (ca. 680–1275 CE), located ca. 15 km from the Nile in the Bayuda desert of Sudan, was the site of a large monastery with nearby lay components. Burial excavations at the site and post-excavation analyses have shed significant light on the lives of the inhabitants of Ghazali. In 2021, a series of community engagement and knowledge transfer events were undertaken in Khartoum to discuss the nature of bioarchaeological

research undertaken at Ghazali and to provide opportunities for students, professional archaeologists, and community members to engage with the research we have conducted, provide commentary, and gain firsthand experience in the methods bioarchaeologists use for isotope and aDNA research. This presentation focusses on these community engagement events to provide insights to the nature of engagement undertaken, feedback from participants, and to map potential routes forward for developing engaged approaches to bioarchaeological research within Sudan.

Teresa Steele

Insights into tortoise exploitation and pyrotechnology by examining tortoises impacted by wildfire Archaeologists commonly interpret burnt materials as relicts of human fire use, but other processes may leave similar traces. We examine if wildfires would leave specific heating patterns or temperature signatures on faunal remains that would be different from those produced in campfires by studying the skeletal remains of 50 tortoises that perished in a brushfire at Cape Point, South Africa. We recorded element preservation and burning based on discoloration; used a multi-level statistical model to test predictions about burning location relative to tortoise position; and conducted Infraredanalyses on the tortoise remains and reference bones incrementally heated to assess burning temperature. Our results suggest that temperature is a low confidence deciding factor between wildfires and campfires. Skeletal burning pattern may facilitate this distinction, because wildfires tend to produce random and complete burning patterns while campfires may produce more localized signatures.

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Sylvia Wemanya

Mobility and Land-use Patterns of Northern Kenya Populations during the Holocene

The Holocene period recorded global climate variability whose manifestation varied across the globe. Evidence of this climate variability can be seen in the lacustrine sediments and terrestrial landscapes of northern Kenya's Turkana Basin. Lake Turkana experienced lake-level changes; it was highest in the early Holocene and declined in the mid-Holocene. These changes affected populations and influenced human behavior. The study analyzed obsidian stone tools to understand the extent of the mobility of these communities across the landscape. Raw material source distances were established through ED XRF analysis and compared with the cortex ratio values of five archaeological sites. This allowed us to understand how raw material access influenced human movements and tracked changes in human mobility patterns. There were diversified land-use patterns and increased mobility during the mid-Holocene when environments were increasingly dry. Potential avenues for future research are presented.

Index, by first author and session number, of abstracts submitted in Symposium

Name of presenter	Session #
Abdulmalik, A.A.	5
Adamu Isa, A.	3
Ade, O.	32
Adeara, E.	27
Adekola, K.	9
Adeyemo, E.	5
Adjartey, D.T.	11
Agbelusi, O.	21
Ajayi, B.	41
Ajikah, L.	12
Akinlolu, D.	25
Akintayo, A.	9
Alders, W.	1
Ambrose, S.	2
Amenyo-Xa, M.S.	6
Antonites, A.	10
Arazi, N.	21
Arlt, S.	14
Athie, A.H.	29
Atsu, B.N.	13
Augustyniak, Z.	35
Ayelagbe, T.	12
Ayipey, P.	11
Aymeric-Nsangou, J.	5
BA, M.	29
Babalola, T.	17
Bader, G.	14
Badji, L.	19
Barham, L.	4
Barnard, C.	14
Bashir, M.	22
Baumanova, M.	23
Bebewou, A.	6
Becher, J.	28
Bertacchi, A.	34
Bettinson, G.	9
Beyin, A.	26

	10
Biemond, W.	10
Biginagwa, T.	21
Bird, N.	19
Blessing, M.	14
Booker, O.	9
Bostoen, K.	23
Bousman, B.	34
Brandt, S.	26
Bundala, M.	18
Cameron, M.	41
Canós-Donnay, S.	1
Casas-Gallego, M.	26
Cervera, C.	5
Chiwara-Maenzanise, P.	32
Ciesielska, J.	3
Cisse, M.	17
Clist, B.	10
Colucci, M.	25
Cornax-Gómez, C.	3
Corolla, M.	29
Coutros, P.	29
de Barros, P.	5
de Lellis-Danys, K.	22
Delvoye, A.	31
Deme, A.	17
Deme, A.	29
Denhere, T.B.	9
Dewar, G.	34
Di Matteo, M.	33
Diakho, F.	11
Diallo, M.Y.	19
Doman, J.	29
Douglass, K.	24
Drzewiecki, M.	3
Dueppen, S.	1
Dunne, J.	30
Dzierzbicka, D.	22
,	

Edwards, N.	30
Evans, T.	15
Farma, H.H.	31
Farr, J.	4
Faye, R.N.	41
Fernandes, R.	31
Fleisher, J.	17
Forssman, T.	14
Forssman, T.	41
Frediksen, P.	5
Funmilayo, T.	25
Fushiya, T.	6
Gallagher, D.	17
Gallagher, D.	29
Garcea, E.	31
Gestrich, N.	23
Gifford-Gonzalez, D.	17
Gokee, C.	21
Goldstein, S.	4
Green, D.	2
Gregory, A.	32
Gretzinger, J.	19
Grody, E.	4
Grollemund, R.	23
Guddah, Z.	11
Guillemard, I.	14
Gutiérrez de León, P.	33
Haines, J.	15
Hajjaj, E.	6
Hamdi, A.	2
Harrower, M.	1
Hattingh, T.	28
Hicks, E.	28
Hildebrand, E.	26
Höhn, A.	29
Ibirogba, A.	15
Iken, S.	30
Iminjili, V.	25
Ishaq Isah, S.	7
Jenkins, C.	41
Jesse, F.	31

Jimenez, RJungnickel, K.V.M.2Katto, P.2Kayuni, M.2Kébé, D.2Killick, D.1Killick, D.3Kinahan, J.3Klehm, C.3Kleinitz, C.3Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kuto, E.3Lamotte, P.3
Katto, P.2Kayuni, M.7Kébé, D.2Killick, D.1Killick, D.3Kinahan, J.3Klehm, C.3Kleinitz, C.3Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kuto, E.3
Kayuni, M. 2 Kébé, D. 2 Killick, D. 1 Killick, D. 3 Kinahan, J. 3 Klehm, C. 3 Kleinitz, C. 3 Knisley, M. 2 Kroot, M. 3 Kuhlase, S. 1 Kuma, D. 1 Kuto, E. 3
Kébé, D.2Killick, D.1Killick, D.3Kinahan, J.3Klehm, C.3Kleinitz, C.3Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kuto, E.3
Killick, D.1Killick, D.3Kinahan, J.1Klehm, C.1Kleinitz, C.3Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kuto, E.3
Killick, D.3Kinahan, J.Klehm, C.Kleinitz, C.3Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kumah, D.1Kuto, E.3
Kinahan, J.Klehm, C.Kleinitz, C.SKnisley, M.ZKroot, M.SKuhlase, S.LKuma, D.Kumah, D.Kuto, E.
Klehm, C.Kleinitz, C.3Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kumah, D.1Kuto, E.3
Kleinitz, C.3Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kumah, D.1Kuto, E.3
Knisley, M.2Kroot, M.3Kuhlase, S.1Kuma, D.1Kumah, D.1Kuto, E.3
Kroot, M.3Kuhlase, S.1Kuma, D.1Kumah, D.1Kuto, E.3
Kuhlase, S.1Kuma, D.1Kumah, D.1Kuto, E.3
Kuma, D. 1 Kumah, D. 1 Kuto, E. 3
Kumah, D.1Kuto, E.3
Kuto, E. 3
,
Lanzarone, P. 2
Lasisi, O. 2
LaViolette, A. 1
Ligue Engamba, F.
Linares Matás, G.J.
Linstädter, J. 1
Loftus, E. 2
Logan, A. 3
Lotter, M. 1
Lubao, C.
Macamo, S. 2
Macamo, B.
MacDonald, K.
MacDonald, B.L. 1
MacDonald, K.C. 1
MacEachern, S. 2
Magnavita, C.
Magnvita, S. 2
Mahumane, C. 2
Malvoisin, A.
Mangut, C. 1
Mardjoua, B.
Marley, J.N. 1
Marshall, L. 2

Masojć, M. 18 Masolo, A. 20 Massilani, D. 19 Matonda, I. 31 Matthews, S. 30 McIntosh, S. 29 McKeeby, Z. 4 McNeill, P. 41 Mehari, A. 40 Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 31 Nikis, N. 31 Nikis, N. 31 <		-
Massilani, D. 19 Matonda, I. 31 Matthews, S. 30 McIntosh, S. 29 McKeeby, Z. 4 McNeill, P. 41 Mehari, A. 40 Mekonnen, D. 41 Mekonnen, D. 41 Mezop Noumissing, A. 16 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Morroe, J.C. 1 Morroe, S. 33 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A.		
Matonda, I. 31 Matthews, S. 30 McIntosh, S. 29 McKeeby, Z. 4 McNeill, P. 41 Mehari, A. 40 Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Morroe, J.C. 1 Morroe, S. 33 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. <td< td=""><td></td><td></td></td<>		
Matthews, S. 30 McIntosh, S. 29 McKeeby, Z. 4 McNeill, P. 41 Mehari, A. 40 Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Morroe, J.C. 1 Monroe, S. 33 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 33 Oelze, V.M. 16 Ogunfolakan, A. 27 <		
McIntosh, S. 29 McKeeby, Z. 4 McNeill, P. 41 Mehari, A. 40 Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Morroe, J.C. 1 Morroe, S. 33 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16		
McKeeby, Z. 4 McNeill, P. 41 Mehari, A. 40 Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Morroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16		
McNeill, P. 41 Mehari, A. 40 Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16	,	29
Mehari, A. 40 Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Morroe, J.C. 1 Monroe, S. 33 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 37 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 <		4
Mekonnen, D. 41 Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 37 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11 <	McNeill, P.	41
Mezop Noumissing, A. 16 Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Mehari, A.	40
Michaut, E. 21 Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Mekonnen, D.	41
Miller, J. 33 Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nasser, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Mezop Noumissing, A.	16
Mogesie, S.A. 25 Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 33 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Michaut, E.	21
Mohammed, S. 6 Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Miller, J.	33
Mohrs, S. 30 Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Mogesie, S.A.	25
Monroe, J.C. 1 Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nassreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Mohammed, S.	6
Monroe, S. 33 Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 111	Mohrs, S.	30
Morel, M. 8 Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 37 Okech, M. 9 Olajide, V. 11	Monroe, J.C.	1
Morgenthal, E. 23 Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 37 Okech, M. 9 Olajide, V. 11	Monroe, S.	33
Musa, F. 2 Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 33 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Morel, M.	8
Nagy, I. 7 Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Morgenthal, E.	23
Namono, C. 6 Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Musa, F.	2
Nasreldein, M. 30 Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Nagy, I.	7
Nassr, A. 33 ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Namono, C.	6
ndour, S. 3 Neumann, F. 28 Ngonadi, J. 8 Niang, K. 32 Nieblas Ramirez, L. 31 Nikis, N. 31 Nitsche, C. 5 Norman, N. 15 Nutor, K. 11 Nyiracyiza Besigye, J. 32 Obluski, A. 3 Oelze, V.M. 16 Ogunfolakan, A. 27 Okech, M. 9 Olajide, V. 11	Nasreldein, M.	30
Neumann, F.28Ngonadi, J.8Niang, K.32Nieblas Ramirez, L.31Nikis, N.31Nitsche, C.5Norman, N.15Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Nassr, A.	33
Ngonadi, J.8Niang, K.32Nieblas Ramirez, L.31Nikis, N.31Nitsche, C.5Norman, N.15Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	ndour, S.	3
Niang, K.32Nieblas Ramirez, L.31Nikis, N.31Nitsche, C.5Norman, N.15Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Neumann, F.	28
Nieblas Ramirez, L.31Nikis, N.31Nitsche, C.5Norman, N.15Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Ngonadi, J.	8
Nikis, N.31Nitsche, C.5Norman, N.15Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Niang, K.	32
Nitsche, C.5Norman, N.15Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Nieblas Ramirez, L.	31
Norman, N.15Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Nikis, N.	31
Nutor, K.11Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Nitsche, C.	5
Nyiracyiza Besigye, J.32Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Norman, N.	15
Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Nutor, K.	11
Obluski, A.3Oelze, V.M.16Ogunfolakan, A.27Okech, M.9Olajide, V.11	Nyiracyiza Besigye, J.	32
Ogunfolakan, A.27Okech, M.9Olajide, V.11		3
Ogunfolakan, A.27Okech, M.9Olajide, V.11	Oelze, V.M.	16
Okech, M. 9 Olajide, V. 11		27
Olajide, V. 11		9
	Olajide, V.	11
	Olaleye, E.	16

Oliveire B	1
Oliveira, D. Onyemechalu, S.	15 13
Orijemie, E.	13
Owoseni, B.	31
Pacchiarotti, S.	23
Pargeter, J.	32
Pawlowicz, M.	4
Pfeiffer, K.	41
Phelps, L.	20
Prendergast, M.	19
Pruvost, C.	13
Quintana Morales, E.	41
Radimilahy, C.	24
Raimundo, I.	6
Randolph, C.	24
Rasoarifetra, B.	24
Reynolds, A.	19
Rhodes, S.E.	13
Richard, M.	26
Ricquier, B.	23
Robertshaw, P.	17
Roth, L.	27
Rotunno, R.	31
Sambo, R.	18
Sarumoh	13
Sawchuk, E.	19
Schmitt, D.	8
Schoeman, A.	14
Schreiber, H.	23
Seidensticker, D.	31
Shen, B.Q.	13
Simbine, C.	24
Singh, D.	3
Sirak, K.	19
Skosey-LaLonde, E.	25
Smith, B.	26
Sodeke, O.	41
Somalon, F.	20
Soulat, J.	24
Sparrow, B.	34
Stark, R.	41

Steele, T.	41
Stempfle, S.	28
Stephens, J.	8
Stone, A.	17
Stynder, D.	18
Szymanski, C.	5
Taezaz, H.B.	18
Thiam, A.	29
Thiombiano Ilboudo, F.E.	6
Thior, M.	20
Thompson, J.	34
Tibesasa, R.	10
Timbrell, L.	32
Tizazu, M.Z.	26
Toffolo, M.	18
Toubga, L.	32
Touré, G.	6
Tsegaye, T.W.	2
Tuttle, M.	24
Usman, A.	21
van Dalen, B.	25
van der Plas, G.	10
van Heerden, J.	6
Varadzinová, L.	18
von Arnim, Y.	24
Watson, S.	32
Wemanya, S.	41
Whitelaw, G.	10
Will, M.	32
Willoughby, P.	26
Wilson, E.	26
Witelson, D.	14
Wright, D.	29
Wyżgoł, M.	22
Yusuf, R.	8