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Cover: Cape Town Floriography collage postcard featuring the flower sellers Aboebekar Oliver, Garonessa Spanningburg, Diela Gamildien and Soraya Williams. For further information see Melanie Boehi's contribution on pages 57–60 of this newsletter (Artwork by Melanie Boehi 2016).

RECHERCHE • FORSCHUNG • RESEARCH

TRACKING HUMANS IN PRE-COLONIAL WEST AFRICA: A BIO-ARCHAEOLOGICAL STUDY IN THE DOGON COUNTRY (MALI)

■ ANNE MAYOR, NONHLANHLA DLAMINI & IRKA HAJDAS

This research, funded by the Swiss National Science Foundation (01.10.2016–30.09.2018), aims to investigate the dynamics of what life was like during pre-colonial times for pre-Dogon and early Dogon people from the Bandiagara Escarpment in the Republic of Mali. The work forms part of a large body of research led by the Laboratory “Archaeology and Population in Africa” (APA) at the University of Geneva, concerned with the reconstruction of settlement history and the emergence of social complexity during the last two millennia.

Our research plans to adopt a new approach combining bio-anthropological, bio-chemical, chronological, and archaeological data to unravel the history of the peopling of the Niger Bend. We will explore themes such as population relatedness, geographic origins and mobility patterns of people, dietary continuity or change, economy, diseases, and evolution of funerary practices. To do so, we employ different methods including dental anthropology, stable isotope analyses (of carbon, nitrogen, and strontium), and palaeo-microbiology. Numerous AMS radiocarbon dates will also be processed from the human skeletal remains to establish the use of the different burial caves through time, as well as to detect possible epidemic events.

This study will also test the hypothesis of a non-continuous pattern of settlement in the Dogon country as suggested by the Toloy-Tellem-Dogon chrono-cultural sequence proposed by Bedaux (1972) and others. It asks: Are the pre-Dogon communities representative of culturally distinct groups of people that succeeded and replaced one another until the arrival of the Dogon in the 16th century AD? This sequence, which has been left unchallenged for more than 40 years until recently (Mayor et al. 2014)

consisted of three phases: a “Toloy” occupation during the 3rd-2nd centuries BC, a “Tellem” occupation from the 11th to 15th centuries AD and a Dogon occupation after the 15th century AD.

Chronologically, our previous research has shown the existence of sites dating from the 1st millennium AD in the Dogon country; a period previously considered a cultural gap between Toloy and Tellem cultures (Mayor et al. 2005, 2014, Huysecom et al. 2015). During the first millennium AD, occupations are important both on the plateau (ritual, settlement and metallurgical sites) and in the Escarpment (burial sites) as well

Human cranium from cave C (Dogon Country) studied at the Museum of Ethnology, Leiden (picture: Nonhlanhla Dlamini-Stoll).



as in the Seno Plain (ritual, metallurgical, and settlement sites). In the Escarpment, a refined chronology established using radiocarbon dating of 20 straw pieces taken from the building walls in Pégué A and Dourou-Boro, shows that an architecture made of clay coils has been used for almost 1,800 years (500 BC to 1400 AD), bearing witness to an impressive local cultural evolution. Various elements lead us to believe that these were primary funerary structures and not granaries reused as graves (Mayor et al. 2014), as previously reported in Bedaux (1972).

Situated at the interface between the Sahel and savanna zones, and part of the UNESCO cultural and natural world heritage, the archaeology of the Bandiagara Escarpment has revealed a long sequence of about 2,500 years of pre-historical occupation. The region has witnessed the emergence of social complexity along with constant interactions with groups of people from different cultural spheres (Mayor 2011, Mayor et al. 2014). These results shed light on the Dogon country in a new way indicating that this area was a zone of constant flow and interaction of people, skills and expertise for over two millennia. They lead us, therefore, to abandon the old concepts of "Toloy" and "Tellem" in favour of the more general term of pre-Dogon people.

STUDIES OF HUMAN SKELETAL REMAINS IN MUSEUM COLLECTIONS

Following the pioneering studies of the Dutch team in the Bandiagara Escarpment, and our research conducted since 1997, other questions concerning the mobility of pre-Dogon populations, their geographical origins and identities, as well as how their life ways have developed. This project focuses its attention on the human remains collected during the previous projects and accessible in curating institutions. To date, we have collected data and samples from 220 individuals housed at the Museum of Ethnology in Leiden, at the Institute of Humanities in Bamako, and at the Museum of Man in Paris. The samples include 84 cranial bone pieces for AMS radiocarbon dating, 214 dentin samples for carbon and nitrogen isotope analyses, and 165 enamel samples for strontium analyses.

We have studied the dental morphology of the pre-Dogon and Dogon human remains as a means to shed light on people's origins and biological relatedness. Data from dental diseases used to track dietary continuity or change, in combination with stable carbon and nitrogen isotopes, are being studied. The stable isotopes, currently being analysed at the University of Cape Town, are also used to facilitate investigations on the geographic origins and movement patterns of these past people. Finally, all the bone samples for AMS 14C dating are being processed at the ETH Zürich.

With the use of strontium isotope analysis ($87\text{Sr}/86\text{Sr}$), we plan to analyse the tooth enamel apatite samples obtained in order to evaluate geographic origins and migration patterns. Among other palaeo-microbiological investigations, we are interested to explore whether the bubonic plague (*Yersinia pestis*) reached this part of the Western Sahel. The second pandemic of the bubonic plague expanded from 1346 to 1353 and may have reached sub-Saharan Africa. This hypothesis has risen from our observation of a general abandonment of settlement sites around this period in numerous places of West Africa, previously inhabited for centuries (Mayor 2011, Chouin 2013, Huysecom et al. 2015). Our final step will be to confront all analytical data with archaeological and palaeoenvironmental data collected in the framework of our previous research to build a coherent picture of the dynamics of behaviours in pre-colonial West Africa.

MOTIVATION AND IMPETUS OF THE RESEARCH

The interests of this multidisciplinary project lie in the continuation of our efforts of twenty years of research aimed at reconstructing the history of West African pre-colonial populations, using a new methodology. Although anchored in the past, this project addresses topics relevant to today's societies of Mali, correcting the often simplistic views of their history. Finally, the use of museum collections overcomes the distressing news of the country and allows to continue research beyond its borders.

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REFERENCES CITED

- Bedaux RMA : Tellem, reconnaissance archéologique d'une culture de l'Ouest africain au Moyen-Age: recherches architectoniques. *Journal de la Société des Africanistes*, 42(2), 1972, 103–185.
- Chouin, G. : Fossés, enceintes et peste noire en Afrique de l'Ouest forestière (500-1500 AD). Réflexions sous canopée. *Afrique: Archéologie & Arts* 9, 2013, 43-66.
- Huysecom E., Ozainne S., Jeanbourquin C., Mayor A., Canetti M., Loukou S., Chaix L., Eichhorn B., Lespez L., Le Drezen Y. & Guindo N. : Towards a better Understanding of Sub-Saharan Settlement Mounds before 1400 AD: the tells of Sadia on the Seno Plain (Dogon Country, Mali). *Journal of African Archaeology*, 13(1), 2015, 7-38.
- Mayor A. 2011. Traditions céramiques et histoire du peuplement dans la Boucle du Niger. Frankfurt: Africa Magna Verlag (Journal of African Archaeology Monograph Series 7).
- Mayor A., Huysecom E., Gallay A., Rasse M. & Ballouche A.: Population dynamics and Palaeoclimate over the past 3000 years in the Dogon Country, Mali. *Journal of Anthropological Archaeology* 24, 2005, 25-61.
- Mayor A., Huysecom E., Ozainne S., & Magnavita S.: Early social complexity in the Dogon Country (Mali) as evidenced by a new chronology of funerary practices. *Journal of Anthropological Archaeology* 34, 2014, 17-41.