African Epistemologies and Ontologies: Building a Pathway that Elevates African Ways of Constructing the World as Part of a Future African Archaeology

Peter R. Schmidt^{1,2,*}

¹Department of Anthropology, University of Florida, Gainesville, USA

²Department of Anthropology and Archaeology, University of Pretoria, Pretoria, Republic of South Africa

*Correspondence to Peter R. Schmidt. e-mail: schmidtp@ufl.edu

I join in celebrating the 40th anniversary of AAR by reflecting on the state of African archaeology over the 57 years I have been engaged as a teacher and researcher. This longitudinal standpoint carries advantages in being able to see stasis, engrained ways of practice no longer appropriate for a future African archaeology, and opportunities that arise—like a phoenix—from the ashes of failed scientific approaches. During the 2022 Pan-African Archaeological Congress meeting in Zanzibar, I highlighted what I see as challenges to a resilient and sustainable practice of African archaeology in future decades and centuries (Schmidt, 2023).

Philosophical obstructions and methodological orthodoxy continue to arrest the development of an African archaeology that uses African epistemologies (ways of knowing) and ontologies (realities/worldviews) as its foundation. These barricades come from different origins yet share the same goal-to keep African archaeological practice within Western paradigms. One fundamental obstacle curiously arises within humanities, specifically history. To understand the potency of this orthodoxy, it is instructive to review an article in *Current Anthropology* (Stump, 2013) that examines archaeology and development in Africa but also illustrates how some Western students of Africa see the engagement with African ontologies as treacherous, undermining historical protocols and methods if we incorporate local "conceptions" within our Western interpretations. Such approaches, it is argued, risk undercutting our authority as historians because the historical method precludes any reality that departs from our own. By asserting that there is only one reality, this authoritative prescription drips with disdain for the history of Africa. In fact, the historical method requires the opposite: we must inquire, evaluate, and understand history-making in a wide variety of contexts. The notion that African ontologies pollute history denies how African history is constructed by diverse cultures-within ontological frames that we are compelled to understand if we are to practice an archaeology sensitive to African realities.

Let us make no mistake about the insistent orthodoxy of this thinking. If we responsibly attempt to understand and incorporate African ontologies of history into our archaeological practice, we risk being berated for not examining whether we have compromised the Western historical canon (Stump, 2013). We are instructed that there is only the Western knowledge system, a valorization of the West at the expense of knowledge systems in Africa and elsewhere across the globe. Arguments of this genre, meant to intimidate and set boundaries, will proliferate as we seek to expand the scope of African realities in history-making. This deeply entrenched Western-centric orthodoxy sees African realities as a phenomenon to contain and submerge with threatening language. To stay the course and not lose our way to foreground Africanbased knowledge systems and worldviews as the foundation of African archaeology of the future, we might resolve to heed the last line of the chorus to a song by The Who (1971)—we "Won't Get Fooled Again."

The second fundamental obstacle in contemporary archaeology is the elevation of science at the expense of compelling historical narratives in African archaeology. We were fooled in the 1960s and 1970s by New Archaeology's promise of accurate, definitive answers to archaeological inquiries. Instead, our uncritical adoption of positivist practices submerged African history and turned Africa and other indigenous landscapes into testing grounds for Western hypotheses. I was initially part of this trend, having been force-fed positivism as a graduate student and then using that paradigm to initiate my first fieldwork in northwestern Tanzania (Schmidt, 2017). I was blessed by good fortune when Haya elders took me on as an apprentice in local history through a local lens. This emancipation led to my resolve to "not be fooled again" and to accept other knowledge systems outside the orthodoxy of Western science as the basis for structuring and giving meaning to the archaeological record in Africa.

This experience caused me to reflect on the role of science in African archaeology from two standpoints: (1) that scientific methods can contribute extraordinary insights into African technological innovation and expertise; (2) that an anthropologically informed view of African daily practices vis-à-vis the material world can unveil the practice of African science, a science that bears some affinities to the experimental method we know in the West as well as displaying characteristics distinctive to African practices of healing. The applications of scientific techniques to artifacts (e.g., SEM, metallographic analysis, residue analysis) are invaluable for revealing functions and innovations in the production and uses of material culture in human communities; and analyses of animal and human bones (e.g., aDNA, isotopic analyses) are central to understanding dietary practices and genetic affinities and differences over deep time. These and many other scientific analytical procedures are an integral part of an archaeologist's toolkit. They open new opportunities to enrich historical narratives, yet they risk obfuscation and mystification if not used in the service of more comprehensive narratives based on African realities. They also carry deeper contradictions: a Western scientific paradigm that may overwhelm and obscure the African realities we hope to bring to light.

We are now witnessing a proliferation of scientific studies pertaining to the African past, many of which disclose important new knowledge about how African peoples conducted their lives. One recent aDNA study, for example, tells us how Persian traders developed relationships along the Swahili coast from 1000 to 1500 CE with powerful women who headed matrilineal clans (Brielle et al., 2023). What makes this study significant is a powerful social narrative that overcomes the technical DNA statistics that are incomprehensible to most archaeologists, let alone lay people. DNA evidence shows that powerful coastal women—with extensive social and economic networks—married or had children with Persian traders. These science-based facts opened a new understanding of the riches both sides gained by such alliances, with the Persian traders gaining ready-made networks with access to highly desirable goods and the women obtaining many trading riches in return. This is a narrative that citizens of Kenya readily understand, as many Kenyans are familiar with the power of women in matrilineal decent systems. It is also a narrative that brings an unusual balance to the pendulum-like interpretations of Swahili origins, ranging from a foreign-founded civilization to one that is mostly African.

This study, however, is the exception. Increasingly, aDNA studies add to our knowledge of the origins of various groups on the African continent, yet do not place their findings within historical narratives that examine old interpretative paradigms and attempt to weave a new, comprehensive narrative about ancient Africa (e.g., Llorente et al., 2015). This problem is compounded by grab-bag sampling, which leaves the reader scrambling for a coherent argument based on archaeological data derived from focused regional research (e.g., Wang et al., 2020). In other words, we risk doing science in a manner that fails to explain the historical significance of its findings and presents data in thick, technical arguments only the most specialized specialist can understand.

The dilemma of incomprehensible scientific reports must be confronted to develop an Africanbased archaeology. If a high proportion of archaeologists cannot comprehend a scientific report, how can we expect the African public to grasp what we are about? Our first responsibility is to the people whose ancestors we are privileged to study. If we use mystifying language that obscures significance, then we have failed to meet our responsibilities to those who host us and make our research possible. This trajectory will lead to the failure of African archaeology to develop a sustainable future. Yet, we see an increasing number of scientific reports funded mostly by public money in Western countries that are inaccessible to most African readers and a sizable proportion of archaeologists. Ironically, this trajectory repeats the assumptions and practices of the so-called New Archaeology when science proffered nifty solutions to Africa's past. What can be done to arrest this trend and encourage more reflexivity in our practice?

The first step is to ask: Who is our audience? Is it only other academics within our specific field? If it is, then it is doubtful that such research matters to an African audience—an unacceptable answer. Instead, we have it within our capacity to expand our vision to write approachable narratives that can touch the lives of African readers, resonating with their values and interests. This is demanding work, but it is noble work that can rescue exclusively scientific studies from their inevitable fate of being irrelevant to Africans. It requires that we take the time to author ancillary books that explain, in plain language, the significance of our findings for African history.

We must also face up to the realization that African modes of knowledge-making and ontologies structured the archaeological record. If our archaeology ignores these realities, then we are "working in the dark," itself a curious Western ontology (Kusimba & Pikirayi, 2020). By adopting longitudinal approaches to our inquiries and learning local languages over long residency periods, we may come closer to understanding the archaeological signatures of phenomena structured by theories of reality not readily grasped through strictly Western methods. In northwestern Tanzania (Schmidt et al., 2017), for example, spirits of dead ancestors inhabit snakes and leopards, and entire compounds—replete with special structures to house snakes—are constructed to accommodate and venerate spirit snakes in preparation for New Moon rituals of renewal. The belief that snakes represent ancestral agency into the future, by the constant "rebirth" of snakes, is common in Ethiopia (Schmidt & Arthur, 2018), where constrictors such as the rock pythons are an integral part of Gamo ontology. To confront, understand, and incorporate such ontologies into our theoretical frameworks, we require a revision of our practice with the goal of developing a new and more appropriate African archaeology.

As we develop African-derived theories that flow from African realities, we will encounter a constant tension between applying Western science to material analyses and accepting African

ways of constructing the past. Countering the hegemonic impulses of Western science will require constant reflexive toggling between both worlds. This resolve may be tempered by an immersive understanding of African realities, living and seeing the world through local eyes, plus institutional support that underwrites such critical efforts. Those who see and understand that this is a real future of archaeology must resist cries that it is "not scientific." To the contrary, we must resolve that we "Won't be Fooled Again" as we seek to incorporate and elevate African science and African ways of seeing the world. How can we possibly expect to represent the African past without taking this direction? Yes, we should continue to practice good [Western] science when it comes to analytical methods, but archaeological science must be in the service of unveiling African worlds and making them a vital part of future theory.

References

- Brielle, E. S., Fleisher, J., Wynne-Jones, S., Sirak, K., Broomandkhoshbacht, N., Callan, K., Curtis, E., et al. (2023). Entwined African and Asian genetic roots of medieval peoples of the Swahili coast. *Nature*, 615, 866–873. https://doi.org/10.1038/s41586-023-05754-w
- Kusimba, C., & Pikirayi, I. (2020). A conversation with Peter Ridgway Schmidt, the Sango of African archaeology. *African Archaeological Review*, *37*, 185–223.
- Llorente, M. G., Jones, E. R., Eriksson, A., Siska, V., Arthur, K. W., Arthur, J. W., Curtis, M. C., et al. (2015). Ancient Ethiopian genome reveals extensive Eurasian admixture in Eastern Africa. *Science*, *350*(6262), 820–822.
- Schmidt, P. R. (Ed.) (2017). Community-based heritage in Africa: Unveiling local initiatives and development. Routledge
- Schmidt, P. R. (2023). Meeting future challenges for a sustainable African archaeology: Are we sufficiently resilient that we won't get fooled again? *Studies in the African Past, 16*(1), 1–30.
- Schmidt, P. R., Bambanza, E., & Mohamed, Z. (2017). Njeru, the "White Sheep" and her snake. In P. R. Schmidt, *Community-based heritage in Africa: Unveiling local initiatives and development* (pp. 148–167). Routledge.
- Schmidt, P. R., & Arthur, K. W. (2018). Community-based approaches to African history. *Oxford Encyclopedia of African History*. https://doi.org/10.1093/acrefore/9780190277734.013.617.
- Stump, D. (2013). On applied archaeology, indigenous knowledge, and usable past. *Current Anthropology*, 54(3), 26–98.
- Wang, K., Goldstein, S., Bleasdale, M., Clist, B., Bostoen, K., et al. (2020). Ancient genomes reveal complex patterns of population movement, interaction, and replacement in sub-Saharan Africa. *Science Advances*, 6(24), eaaz0183. https://doi.org/10.1126/sciadv.aaz0183
- Who, The. (1971). Won't Get Fooled Again. On Who's Next. Decca and MCA.