



We Need Social Archaeology to Understand Resilience and Build Usable Pasts

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Introduction

Africanist archaeologists have increasingly pursued usable pasts as one of our most important intellectual projects to local communities and the wider archaeological world. The range of topics covered in *AAR*'s Usable Pasts forums has demonstrated the wide reach of this approach, from food security to heritage tourism to pandemics. Despite these significant advances, I argue that to move forward in building *effective* archaeologies (Stahl, 2020), we need to understand the social dynamics that undergirded resilient and sustainable systems.

Much of the literature on sustainable and resilient practices has focused on reconstructing the technological achievements of ancient Africans, particularly as applied to agriculture (e.g., Davies et al., 2016; Lang & Stump, 2017) and water management (e.g., Pikirayi et al., 2016; Sulas et al., 2009). These studies have generated an impressive amount of data on the design, maintenance, and longevity of these systems, but we know considerably less about how they were managed and used (see Davies et al., 2014). Applied archaeology cases from elsewhere suggest that understanding the structure of social life and labor organization is critical if we hope to apply ancient technologies to the present.

The most compelling cautionary tale is the re-introduction of raised field technology in the Andes. In the Lake Titicaca basin, archaeologists found that raised fields significantly improved harvests in marginal environments (Erickson, 1988; Kolata et al., 1996), but when recreated among contemporary communities, the experiment quickly collapsed. For modern farmers, the labor requirements were too high, and the local social structures that ensured access to labor in the eleventh century CE vastly differed from those of the twentieth century. Archaeologists had mistakenly assumed that subsistence farmers of today operated in much the same way as those of the past (Swartley, 2002).

To use knowledge of the past to improve modern-day livelihoods, I suggest that we interrogate the “known unknowns” (Lane, 2021), which are the social strategies and contexts that allowed past technologies to thrive. We also need to ask ourselves when and why these technologies were abandoned and by whom to better understand the contexts in which they may not work today. I highlight four approaches that show promise for building more socially engaged usable pasts: (1) everyday life; (2) agriculture, labor, and communities of practice; (3) inequality, poverty, and gender; and (4) situated knowledge.

Everyday Life

Archaeologists have long focused on monumental architecture and infrastructure as proxies of social complexity. Yet, considerable research has shown that elites are not always necessary to construct or manage

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large-scale structures like irrigation. For example, Sulas et al. (2009) argue that water management at a household level was likely sufficient to support large-scale societies like Aksum. Unfortunately, we know little about how major agricultural technologies were organized because few studies incorporate analyses of non-elite contexts or surrounding villages—the very places where laborers likely resided.

Everyday practices directly inform long-term resilience by elucidating strategies for coping with change and continuities that survive the test of time. For example, in the Maya area, Robin's (2013) excavation of the small farming village of Chan revealed a bevy of long-lived, sustainable practices that enabled the town to survive much longer than urban centers. Studies like this suggest that household-level practical knowledge is central to understanding the strategies that enable the long-term success of many societies. For archaeologists, this means shifting the scale of inquiry to smaller settlements and households.

Agriculture, Labor, and Communities of Practice

Guyer's (1988) early work among Nigerian agricultural communities illustrates how the rhythms of everyday life are structured around key tasks, such as harvesting, that must be done in a particular time frame. For her, the most important innovations in African agriculture are social ones, where different social groups restructured labor to meet changing demands or goals.

The importance of labor to any economic activity, especially agriculture, cannot be overstated. Who provides labor and how they are compensated (or not) are best understood as social problems, not technological ones. Yet, labor organization likely changed significantly over time to take advantage of different economic and political opportunities (e.g., Davies et al., 2014). Hopkins (1973) suggested that labor shortage was historically a limiting factor in West African economies. However, such shortages are likely to have been most acute in the past few centuries following centuries of depopulation through the Atlantic slave trade (Rodney, 1972), suggesting that we need to empirically examine fluctuations in labor availability over time.

Social archaeology frameworks can make labor visible in the past. We can compare craft and culinary practices to identify inflection points between them,

suggesting changing pressures on artisans, cooks, and gendered relationships (Gokee & Logan, 2014). Ethnoarchaeological studies can train attention on the duration and seasonal scheduling of key tasks (e.g., Stone et al., 1990) to provide models testable in the archaeological record. For example, how long would it have taken to construct and maintain irrigation systems? Might their abandonment suggest a shift in labor organization? If so, we would likely see shifts in the production of other goods simultaneously.

Social networks are also key to how repertoires of practical knowledge are shared and sustained. For instance, McIntosh's (1993) "pulse model" eloquently explains how subsistence specializations in the Middle Niger were structured, in part, by different social identities (see also Douglass & Rasolondrainy, 2021). In these cases, the interweaving of identity and subsistence helps to maintain skills over time and thus increases the sustainability of certain practices. We might see these dynamics play out over time by comparing households across different areas of the site, noting constellations of certain types of subsistence goods, tools, and craft goods (e.g., Gokee, 2016).

As Goldstein (in Logan et al., 2019) argues, understanding these "infrastructures" is critical to revealing strategies for food security. A good example is Mueller's (2018) study of North American seed exchanges, which uses archaeobotanical evidence to track seed sharing through social networks, effectively forming ethnobotanical communities of practice. Importantly, social networks were a powerful means of reducing risk by increasing the diversity of cultigens available to farmers. By building on well-developed archaeological methods for tracing communities of practice through pottery (Roddick & Stahl, 2016), we would do well to go a step further and consider the implications of these networks for building resilience through relationships.

Inequality, Poverty, and Gender

Archaeologists have long focused on inequality but have recently shifted their interests from elites to less powerful constituents. Understanding inequality is central to unraveling how (and for whom) societies attempt to maintain sustainable systems. For example, Brewington (2017) documents how elites in the North Atlantic Faroe Islands managed to maintain

their failing subsistence and economic systems by imposing stringent measures on the poor. Conversely, Dueppen (2012) has shown how some villages in Burkina Faso actively work to avoid pronounced inequality, which may ensure more equitable access to resources. The “wealth-in-people” (Guyer & Belinga, 1995) model highlights similar leveling mechanisms that societies may use to dissuade individual surplus accumulation. What impact do these social pressures and values have on resilience and sustainability?

Widening our focus on power to include studies dedicated to understanding poverty would greatly increase the usability of the past. Poverty has mostly been the domain of history (Acemoglu et al., 2002; Iliffe, 1987; Stephens, 2018), yet archaeological data are richly informative of economic life, from household production to involvement in trade and exchange, and can attest to relative wealth and poverty over time. Given the close association of poverty with vulnerability to environmental and other stressors, addressing economic situations is imperative for understanding resilience better.

Gender also deserves greater attention. Today, women constitute the majority of farmers on the continent and are the major focus of the UN’s Sustainable Development Goals. Nevertheless, women have often been left out of development initiatives, especially those focused narrowly on technological improvements (Ferguson, 1994) because their skill sets tend to be considered less economically profitable (Guyer, 1980). Viewed through a lens of resilience, however, we might train attention on tried and true practices that enable social reproduction and technological experimentation (e.g., Schoeman in Logan et al., 2019).

Situated Knowledge

Nazarea’s (1999) landmark edited volume on ethnology explores how local knowledge is situated in both the politics of the present and historical dynamics, thus providing an essential starting point for the potential usability of pasts in the present. Contributors document how development projects aimed at modernization through technology often reinforce existing social inequalities or create new ones when they do not account for social context. In effect, these cases illustrate that understanding social and political

dynamics in the present day is critical for any development initiative (Chirikure, 2021).

Building usable pasts requires that we connect the lived realities of present-day communities to the past in very intentional ways. The centuries or millennia between our archaeological periods of interest and modern-day communities are often left unexplored. This approach risks collapsing time and change and reifying stubborn notions of timelessness in African livelihoods (Lane, 2011; Logan, 2020), with major implications for applying past technologies to the present, as demonstrated by the cautionary tale of raised fields in the Andes.

Direct historical approaches, which start with modern-day communities and work backward in time to situate the present (Stahl, 2001), can be powerful tools in building usable pasts. While this kind of archaeology takes considerable time and effort, understanding the “in-between” means we can dramatically increase the usability of the past. Some of the added value comes from understanding how major historical processes—like the trans-Atlantic slave trade and colonialism—have undermined African capabilities (Rodney, 1972). This is an essential part of the development puzzle, which is too easily and conveniently overlooked by policy-makers. The other major benefit is that we can see how communities managed some of the most difficult historical circumstances the world has ever seen. Without knowing the “in-between,” we lack the connective tissue to link past and present and may overlook some of the most resilient strategies.

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