S-96 – African Encounters: Making Scientific Knowledge in Africa before and after European Colonization, 1500 to 2000

Global South

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Abstract:

Historians of science and empire have recently begun to challenge the standard view of how non-European knowledge entered the European scientific lexicon. Simplistic characterizations of European imperialists merely extracting “indigenous” knowledge fail to capture the dynamism of local knowledge systems, as well as the sometimes eager collaboration between European scientists and their non-European counterparts. Yet when it comes to scientific exchanges between Africans and Europeans, the old paradigm still tends to reign: Europeans simply “appropriated” African “indigenous” knowledge. The four papers on this panel challenge this view, focusing on transformations of sub-Saharan African knowledge both before and after its encounters with European scientists. Ranging from the fifteenth to the twentieth centuries, the papers collectively demonstrate that when it came to medicinal, botanical or metallurgical knowledge, local African knowledge systems evolved and varied greatly across space and time, well before it encountered Europeans. Moreover, after the point of encounter, both European and African ways of doing science transformed significantly as a result of cross-cultural exchanges. To be sure, these interactions were often fraught, and the scientific norms, methods and meanings that developed were never quite as fixed as either group supposed.

Shadreck Chirikure, a professor of archaeology at the University of Cape Town, highlights the dynamic evolution of metallurgical practices in southern Africa long before British colonization in the nineteenth century. He demonstrates how local metal technology became a crucial tool in local state formation, and continued to evolve as Britons entered the region. The early difficulties British colonists had extracting tin, copper and iron resulted not from the lack of a sophisticated local metallurgical culture, but the failure of British scientists to fully understand it.

Hugh Cagle, a professor of history at the University of Utah, explores the many medicinal meanings of a single Guinea plant as it circulated among enslaved and free African healers and European physicians, between 1480 and 1900. Guineans had been using the plant for medical and religious purposes when Portuguese physicians encountered it in a local market in 1480, and soon renamed it “Crossopteryx febrifuga.” As the plant made its way back to Spanish and English physicians in Europe, its uses mutated further. Yet the plant’s uses were never quite stable, or, for that matter, solely defined by Europeans. Enslaved African healers held by the Portuguese in Sao Tome and the Spanish in Fernando Po used the plant for new purposes. Cagle thus demonstrates that no single medical
community, and no single empire, ever managed to monopolize the medical meaning of this common tropical plant.

In a similar vein, Kalle Kananoja, a postdoctoral fellow at the University of Helsinki, explores the way Portuguese physicians, Angolan medical healers, and enslaved Africans in Brazil circulated medical knowledge throughout the South Atlantic region between 1650 and 1800. He suggests that what emerged in that particular space and time was a hybrid medical cultural that, if always contentious, nonetheless served a useful purpose to the many different peoples who relied up it.

Last, Eric Herschthal, a doctoral candidate at Columbia University, attempts to complicate our notion of who exactly we mean when we say “European” and “African” scientist. He investigates the bio-prospecting that occurred in Sierra Leone from 1787 and 1807, when it became a British colony for freed slaves. As the colony’s first setters, former African slaves from North America played a central role helping the colony’s official European botanists collect local medicines and valuable commodities. The indigenous Temne people, meanwhile, were often divided among themselves as to whether to help: some saw aiding the colony’s botanists as a means to end the slave trade, while other Temnes, often in collusion with British slave traders, refused to help, since they had become dependent on the slave trade themselves. The scientific culture that emerged in Sierra Leone ultimately defies any simple characterization: it was neither black nor white.

Helen Tilley, a leading scholar of the history of science and empire in Africa and a professor at Northwestern University, will chair the panel.

**Keywords:** sub-Saharan Africa, Europe, and the Atlantic World – medical, botanical and metallurgical knowledge – fifteenth to twentieth centuries – science and empire – colonialism.

**Participants:**
- Shadreck Chirikure
- Helen Tilley
- Kalle Kananoja
- Eric Herschthal
- Hugh Cagle