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Shifting Agendas and Competing Interests within Public Health, Science and Technology, and Medicine in Africa

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Shifting Agendas and Competing Interests within Public Health, Science and Technology, and Medicine in Africa

Abstract

In lieu of the abstract, here is the review's first paragraph:

Until recent times, the conventional history of public health, of science and technology, and of medicine has been presented in the West as a tale of out-migration from the advanced, developed world (principally Europe and the United States) to the less developed (or underdeveloped) world.¹ By this account, Africa emerges as a peculiar mix of charity case, experimental laboratory, and lucrative market. The four works considered here mark a significant turn in this curiously one-side and resilient story line. Each text begins from the premise—some more forcefully than others—that Africans have always been, and remain today, active agents in the creation, development, innovation, and adaptation of knowledge and practices across public health, science and technology, and medicine.

Disciplines

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Comments

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Shifting Agendas and Competing Interests within Public Health, Science and Technology, and Medicine in Africa by David Baronov

Jennifer Tappan. *The Riddle of Malnutrition: The Long Arc of Biomedical and Public Health Interventions in Uganda.* xx + 218 pp., figs., notes, bibl., index. (Perspectives on Global Health.) Athens: Ohio State University Press, 2017. \$25.99 (cloth). ISBN 9780821422465.

Guillaume Lachenal. *The Lomidine Files: The Untold Story of a Medical Disaster in Colonial Africa.* Translated by **Noémi Tousignant.** 237 pp., figs., notes, index. Baltimore: Johns Hopkins University Press, 2017. \$34.95 (cloth). ISBN 9781421423234.

Clapperton Chakanetsa Mavhunga (Editor). *What Do Science, Technology, and Innovation Mean from Africa?* xiv + 241 pp., bibl., index. Cambridge, Mass./London: MIT Press, 2017. \$36 (paper). ISBN 9780262533904.

Paul Wenzel Geissler; Guillaume Lachenal; John Manton; Noémi Tousignant (Editors). *Traces of the Future: An Archaeology of Medical Sciences in Africa.* 255 pp., illus. Chicago/London: University of Chicago Press, 2017. \$28.50 (cloth). ISBN 9781783207251.

Until recent times, the conventional history of public health, of science and technology, and of medicine has been presented in the West as a tale of out-migration from the advanced, developed world (principally Europe and the United States) to the less developed (or underdeveloped) world.¹ By this account, Africa emerges as a peculiar mix of charity case, experimental laboratory, and lucrative market. The four works considered here mark a significant turn in this curiously one-sided and resilient story line. Each text begins from the premise—some more

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¹ These conventional views are discussed in Randall Packard, *A History of Global Health: Interventions into the Lives of Other People* (Baltimore: Johns Hopkins Univ. Press, 2016); João Guilherme Biehl and Adriana Petryna, eds., *When People Come First: Critical Studies in Global Health* (Princeton, N.J.: Princeton Univ. Press, 2013); and Paul Farmer and Arthur Kleinman, *Reimagining Global Health* (Berkeley: Univ. California Press, 2013).

forcefully then others—that Africans have always been, and remain today, active agents in the creation, development, innovation, and adaptation of knowledge and practices across public health, science and technology, and medicine.

Indeed, the major trends in scholarship today that explore African contributions to public health, science, and medicine more generally are moving beyond the one-dimensional and outdated out-migration model. One important trend, for example, has brought a critical lens to the Africa-as-laboratory caricature by detailing the myriad roles and concrete contributions of Africans (as doctors, engineers, botanists, etc.) within these fields.² There is also an increased focus on chronic (over acute) health conditions. This indirectly undermines the trite, reductionist view of Africa as a repository for specialists in tropical medicine and, importantly, includes Africans in the modern mundane conversations about diabetes, cardiovascular disease, arthritis, and so on. Thus, beyond the exotic microbes carried out of the jungle, African diets and lifestyles now receive greater attention.³ In a related development, there is now a growing African public health focus on preventive medicine, disease screening and monitoring, and the role of technology. This effectively frames the African body as a contextualized patient, contra the notion of Africans as discrete, experimental subjects.⁴

A fourth trend finds, at long last, a serious engagement with African epistemological and cosmological frameworks for interpreting and assessing varying forms of knowledge. This has created an analytical basis for incorporating the African experience on its own terms (and in its own language), not merely as a quaint alternative addition to European traditions in explanations of medicine, science, and technology.⁵ Scholarship in the areas of globalism and neoliberalism and on the global/local nexus has also impacted the perception of Africans across public health, science, and medicine—providing novel conceptual frames for repositioning Africans as active agents.⁶ Meanwhile, in line with these developments, there has been an ongoing commitment to interdisciplinarity—the works considered here combine insights from the fields of history, archaeology, anthropology, microbiology, the visual arts, and medicine. Finally, though given less attention in the present works, a further contemporary theme very much linked to the subject

² See Julie Livingston, *Improvising Medicine: An African Oncology Ward in an Emerging Cancer Epidemic* (Durham, N.C.: Duke Univ. Press, 2012); and Valérie Delaunay, Alice Desclaux, and Cheikh Sokhna, eds., *Niakharr: 50 ans de recherche en santé e population dans un observatoire rural en Afrique* (Paris: Editions de l'IRD, 2016).

³ See Hansjörg Dilger, Abdoulaye Kane, and Stacy Ann Langwick, eds., *Medicine, Mobility, and Power in Global Africa: Transnational Health and Healing* (Bloomington: Indiana Univ. Press, 2012); Ama de-Graft Aikens, Samuel Agyei-Mensah, and Charles Agyemang, eds., *Chronic Non-Communicable Diseases in Ghana: Multidisciplinary Perspectives* (Accra: Sub-Saharan Publishers, 2013); Helen Tilley, *Africa as the Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870–1950* (Chicago: Univ. Chicago Press, 2011); and Melissa Graboyes, *The Experiment Must Continue: Medical Research and Ethics in East Africa, 1940–2014* (Athens: Ohio Univ. Press, 2015).

⁴ See Stacy Ann Langwick, *Bodies, Politics, and African Healing: The Matter of Maladies in Tanzania* (Bloomington: Indiana Univ. Press, 2011); and Ruth J. Prince and Rebecca Marsland, eds., *Making and Unmaking Public Health in Africa: Ethnographic and Historical Perspectives* (Athens: Ohio Univ. Press, 2014).

⁵ See Shadreck Chirikure, *Metals in Past Societies: A Global Perspective on Indigenous African Metallurgy* (New York: Springer, 2015); and Lyn Schumaker, *Africanizing Anthropology: Fieldwork, Networks, and the Making of Cultural Knowledge in Central Africa* (Durham, N.C.: Duke Univ. Press, 2011).

⁶ See Tamara Giles-Vernick and James L. A. Webb, eds., *Global Health in Africa: Historical Perspectives on Disease Control* (Athens: Ohio Univ. Press, 2013); Paul Wenzel Geissler, ed., *Para-States and Medical Science: Making African Global Health* (Durham, N.C.: Duke Univ. Press, 2015); David Baronov, *The African Transformation of Western Medicine and the Dynamics of Global Cultural Exchange* (Philadelphia: Temple Univ. Press, 2008); Wenzel Geissler and Catherine Molyneux, eds., *Evidence, Ethos, and Ethnography: The Anthropology and History of Medical Research in Africa* (New York: Berghahn, 2011); Ashley Ouvrier, *Faire de la recherche médicale en Afrique: Ethnographie d'un village-laboratoire en sénégalaise* (Paris: Karthala, 2015); and Salmaan Keshavjee, *Blind Spot: How Neoliberalism Infiltrated Global Health* (Berkeley: Univ. California Press, 2014).

matter across these texts has been the historical and contemporary role of the African state in the arena of public health.⁷

The story of malnutrition in Uganda chronicled in *The Riddle of Malnutrition* presents Jennifer Tappan with an opportunity to explore African ingenuity and sustainable practices that often emerge in conflict with Western plans and interests. Tappan's research examines the campaigns and activities surrounding the Mwanamugimu Nutrition Rehabilitation program, an initiative to combat childhood malnourishment. Housed in the Mulago-Makerere medical complex in Kampala proper and in the Luteete Health Center forty kilometers to the north, the program lasted over fifty years. Understood today as distinct points along a continuum, severe, acute malnutrition (SAM) was treated as two separate syndromes (kwashiorkor and marasmus) until the late twentieth century. Given fatality rates in Uganda as high as 75–90 percent before the 1950s, there had long been concerted efforts by African and Western medical teams to combat SAM. In chronicling this extended period of mobilization, Tappan argues that Ugandans remained active agents shaping local initiatives. "The public health approach that emerged in Uganda was far more of a local endeavor than it was a global health initiative" (p. 7).

The evolution of SAM treatments illustrates both change and continuity and reveals the dilemma of pursuing a magic bullet solution—thereby undermining efforts to build sustainable, community-directed, preventive approaches. The development of a concentrated milk-protein formula in the 1950s, for instance, shifted the focus from prevention to treatment and led to an impressive reduction in the mortality rate for SAM in Mulago of 10–20 percent. This success garnered significant global acclaim and led to a strategic emphasis on "the protein gap." By the late 1960s, foods fortified with protein were marketed to the developing world for infants and young children. This tactic, however, met with only limited success, and the narrowed focus on supplemental nutrition soon resulted in the replacement of breastfeeding with bottle formulas.

By the early 1960s, a growing pushback against a purely curative approach led to a novel preventive approach in the village of Kasangati (near Kampala) under the direction of Josephine Namboze, a Ugandan medical officer. In coordination with a team of pediatricians at the Mulago Hospital, a program of mothers teaching mothers about nutrition was created. This was the Mwanamugimu Nutrition Rehabilitation program, "a hybrid of biomedicine and local cultures" (p. 81) emphasizing locally sourced, high-protein foods. Among these, kitobero—a readily available, popular type of food mixture—became the preferred option. Buttressing the efficacy of kitobero for preventing and treating SAM was its strong ties to the local campaigns led initially by mothers (and then by select influential women) to train others how to measure and mix the ingredients for its preparation. Innovative teaching techniques—making use of songs, plays, stories, proverbs, calendars, and photographs—were a hallmark of Mwanamugimu. The program reached Luteete by the mid-1960s and mushroomed into a comprehensive public health program soon thereafter. Tappan details how Mwanamugimu was an "effort to demedicalize malnutrition and empower Ugandan women in the management of nutritional health [leading] to the establishment of a hybrid local public health model" (p. 109). By the 1980s, this hybrid model came to represent an important source of resistance against the tide of structural adjustment edicts from the World Bank and the International Monetary Fund, along with the HIV/AIDS pandemic and the chaos of Ugandan politics.

⁷ Nancy Rose Hunt, *A Nervous State: Violence, Remedies, and Reverie in Colonial Congo* (Durham, N.C.: Duke Univ. Press, 2016); Paul Wenzel Geissler, Richard Rottenberg, and Julia Zenker, eds., *Rethinking Biomedicine and Governance in Africa: Contributions from Anthropology* (Heidelberg: Transcript, 2012); Keith Breckenridge, *The Biometric State: The Global Politics of Identification and Surveillance in South Africa, 1850 to the Present* (Cambridge: Cambridge Univ. Press, 2014); and Anne Cornet, *Politiques de santé et contrôle social au Rwanda 1920–1940* (Paris: Karthala, 2011).

In an epilogue that both extends and deepens her analysis, Tappan discusses a 2005 Niger campaign to reduce SAM that signaled a remedicalization of malnutrition grounded in a foreign aid approach and a commercial drug-based model. Earlier efforts to create supplemental food forms had run into spoilage or contamination difficulties. Nutritionists had created F-100—a ready-to-dilute therapeutic milk—in the 1990s. But this failed, for technical reasons, to be a practical solution. F-100 was then reformulated as a spread mixed with peanut butter to create a ready-to-use therapeutic food with a lower moisture content that was patented as “Plumpy’Nut.” Over time, the use of Plumpy’Nut expanded beyond active cases of SAM to serve as a general preventive remedy. However, whereas kitobero is locally sourced and produced, Plumpy’Nut must be imported. Dependence on foreign sources and the shift from sustainable and local prevention strategies have thus returned as major concerns. “Mwanamugimu was specifically designed to demedicalize malnutrition, to decenter doctors from the treatment and prevention of severe acute malnutrition in order to empower mothers and caregivers with the knowledge needed to independently promote nutritional health in their communities, while [Plumpy’Nut] may reestablish a relationship of dependence” (p. 142).

The “biography of Lomidine” detailed by Guillaume Lachenal in *The Lomidine Files* is reasonably brief and uncomplicated. For Lachenal, however, the true tale to tell is less the bare chronology of events and more the galvanizing rationale informing French actions and policies. Lomidine (or pentamidine) is an antimicrobial drug that was developed in the 1930s. It remained in use by French officials as a treatment for (and a prophylactic agent against) trypanosomiasis (or sleeping sickness) across French West Africa, French Equatorial Africa, and Cameroon from the 1940s through the late 1950s. These years coincided with the era of mass medicine, marked by a technological, messianic faith in which eradication, not mere treatment, became the goal and “African bodies became a means to demonstrate colonial beneficence” (p. xx). African colonies provided a vast experimental terrain for testing (and marketing) new European pharmaceuticals in this period. Lachenal thus frames the French Lomidine campaign in Africa as a unique window into the peculiar contours of a blind French fidelity to modernity, rationality, authority, and empiricism as sources of national pride, virtue, and sacrifice.

This imperial point of emphasis is critical for understanding Lachenal’s seeming inattention to Africans themselves. With the important exceptions of a handful of African doctors and politicians, along with the occasional faceless throngs of Africans who resist French medical campaigns via noncooperation, Africans remain passive recipients of French actions over the course of this study. For instance, it is the French response to African noncooperation (or “indiscipline”)—a sustained combination of condescension and force—rather than the organized African resistance that fits the larger theoretical scaffolding supporting Lachenal’s account. (By way of intellectual context, among the louder muses assisting in this tale are Gustave Flaubert, Achille Mbembe, Michel Foucault, Bruno Latour, Roland Barthes, and Ann Stoler.)

As the story unfolds, we are presented with several disastrous and interlocking developments. To begin with, there is the dubious value of Lomidine itself. By the 1960s, it was understood by French medical officials that the apparent prophylactic effect of Lomidine was due to an inability to screen persons properly and that any short-lived positive results were due to its therapeutic effect on those already infected. Next, there is the death and suffering left in the wake of Lomidine. Beyond the relatively common side effects (infection, gangrene, abscesses), there were occasional instances where a few dozen persons died in a single village campaign—such as the village of Gribi in eastern Cameroon in 1954. Last, there is the pretext provided by the (mistaken) promise of Lomidine that reinforced a vast administrative structure of control in the name of progress and modernity. These efforts were (ironically) simultaneously delegitimizing “progress” and “modernity” while building up a massive, coercive administrative machinery that came to dominate much of postcolonial Africa.

For Lachenal, Lomidine is an ideal specimen for understanding the French colonial mind in three acts. In Act 1, we have a drug, initially hailed as a tool of French colonial rule, to wipe out trypanosomiasis, demonstrating the humane, benevolent, selfless, and progressive nature of the colonial project. In Act 2, doubts grow about both its efficacy and its actual harm. Lachenal depicts the French response as a predictable, prideful arrogance that initially blames the African medical teams for improper execution while remaining confident in the underlying science and procedural rationale from which Lomidine sprang. In Act 3, confronted with the failures of Lomidine as a chemotherapeutic agent and of the massive campaign to eradicate trypanosomiasis, the French state responds with silence and denial. Unwilling to account for errors that follow from hubris and a faith-based adherence to scientific rationality—rather than errors linked to departures from such a rationale—French officials move ever forward. Ultimately, the failure of Lomidine does not lie with African obstinacy or incompetence, and, by definition, the fault cannot lie with the underlying scientific rationality. Thus, as Lachenal suggests, it is an indefatigable French attachment to *bêtis*—a “particular species of unreason” underlying the colonial state—that proves its own undoing. “The entire scientific history of [Lomidine] is contained in these questions: How could they make failure fit into the order of things, and how in this way, might we redefine their mission, given its fundamental inefficacy?” (p. 111).

In *What Do Science, Technology, and Innovation Mean from Africa?* Clapperton Chakanetsa Mavhunga has gathered a compelling set of authors who accomplish two aims. First, their essays deepen an ongoing challenge to predominant Western paradigms of science and technology that privilege the laboratory as an exclusive site of knowledge production. Second, they build on a growing literature that expands on the Western notion of the scientific process. This expanded view of the scientific process emerges via two avenues. On the one hand, the contributors conduct empirical studies of discovery and innovation among African peoples that challenge conventional Western categories framing science and technology. On the other hand, they engage in a pointed conceptual-philosophical dialogue with the basic epistemic and ontological premises of science as an activity in the West. The goal of this volume is to restore Africans as both agents of this history and consequential contributors to material culture, scientific knowledge, and technological innovation. To this end, these essays consciously build on the important earlier works of V. Y. Mudimbe, Mamadou Diouf, Ngugi wa Thiongo, Henry Odera-Oruka, Achille Mbembe, and Mahmoud Mamdani, among others. African epistemologies, vernacular constructions, and experiences shape the structure and subject matter of the essays gathered here.

The introductory essay by Mavhunga sets the table for the pieces that follow. He first places the contemporary literature in historical context, framing the debates and controversies that have shaped consideration of African science and technology in precolonial, colonial, and postcolonial moments. He also chronicles the ongoing evolution of Western traditions in this regard. Importantly, Mavhunga notes that “most [Science and Technology Studies] scholars are trained in methods that enable them to work within only colonial and postcolonial history and anthropology; it requires a vaster repertoire to undertake an intellectual history of technology” (p. 7). This helps to explain, for example, how *kitobero*, an indigenous remedy for malnutrition in Uganda, can be marginalized by commercial Western products or how the only conceivable explanation for French health officials in the Cameroon village of Gribi during the Lomidine crisis was African ignorance and technical incompetence.

The opening essay, by D. A. Masolo, examines the technical prowess of Maasai spear-craft along with Egyptian mummification to detail the unique qualities of African science and technology. This presents an example of a necessary amendment to the standard Western portrayal of science and technology, along with what is presumed to fit this portrait and what does not. The second essay, by Mavhunga, examines *chimurenga*, the arts of war developed from *Murenga* (or Mwari), the God of the Shona people. His detailed and nuanced treatment of *chimurenga* allows

him to illustrate—in holistic fashion—the interpenetration of technical innovation, spiritual practices and beliefs, communal structures, and the African production of scientific knowledge in a fluid and historical context.

An essay by Shadreck Chirikure considers nonfixed laboratory sites, as illustrated by developments in African metallurgy and pottery making. Chirikure argues that for the full and accurate story of science and technology to be told it is essential that the dominant Western paradigm of “bench” science be expanded to account for how large areas of scientific knowledge are actually produced, tested, and disseminated. Geri Augusto extends this analysis to diasporic African communities in the era of slavery in the Americas. In this context, Africans are both recipients (and adapters) of Western knowledge and technology as well as conveyors of novel, non-Western knowledge and technology pertaining to the botanical sciences. Katrien Pype’s investigation of indigenous African terminology further complicates Western depictions of an Africa devoid of any significant role in the history of science and technology. For example, her distinction between *kindoki y mindele* (“witchcraft of the white man”) and *kindoki y biso* (“witchcraft of [the ba Kinois]”) demonstrates how the reception and adaptation of Western knowledge was a deliberate and intentional activity of the ba Kinois in Kinshasa.

In their essay detailing examples from the Senegal Colobane marketplace, the WoeLab project out of Lagos, and the iSpace enterprise in Accra, Ron Eglash and Ellen K. Foster are able to chronicle the creative borrowings and repurposings of Western technology by Africans. In fact, it is the value-added dimension that makes the original technology serviceable and relevant in the African context. The essay by Toluwalogo Odumosu extends this analysis to the mobile phone industry. Africans began their adaptation to mobile phones lacking both the indigenous technology for the production of the phones and the historical legacy of a wired telephone infrastructure or cultural practice. The Nigerian example is especially instructive for understanding how Africans transform Western technology no less than Western technology transforms Africans.

The final two essays address policy. Garrick E. Louis, Neda Nazemi, and Scott Remer critique the Millennium Development Goals and other long-range development plans. Integrating Abraham Maslow’s notion of essential human needs, the authors invite the reader to gauge development plans in relation to technology by the criteria of first meeting the basic needs of different African peoples and then recognizing the essential contributions of indigenous African innovation and creative reworking of Western science and technology. In the final essay, Chux Daniels argues that so long as key African institutions—such as the African Ministerial Council on Science and Technology—remain frozen in a paradigm that does not sufficiently account for the dialectical role of Africans who creatively interact with Western technologies there will remain severe limitations for the application of developmental policies.

The team of editors who compiled *Traces of the Future* have produced a work unusual in design, original in character, and difficult to unravel in summary fashion. Part biographic picture book, part fragmented transcript, part meta-archival scrapbook, and part reflective memoir, the text demands much of its reader—and overall this is much to the good. The scattered and intentional-yet-random pieces held up for our inspection are not meant either to imply an emerging whole or to fill out a story. Their intent is (rather literally) to lay bare the tracings of things past across five locations—Uzuakoli, Nigeria; Ayos, Cameroon; Amani, Tanzania; Niakhar, Senegal; and Kisumu, Kenya. For this purpose, the book’s contents occupy seven sections—a collection of introductory essays, five sections inspecting the tracings from each of the five locations, and an epilogue.

The introductory essays are distributed among different editors and provide perspectives on the project as a whole, including its origins. Varying combinations of editors formed teams to visit, excavate, and comment on the “findings” at each site. Finally, Iruka Okeke—a Nigerian professor of pharmaceutical microbiology—wrote the epilogue, reflecting in particular on the

role of Africans in the medical care and research captured by the local tracings at each location. The five sites were selected to be “in and near scientific landscapes.” Specifically, these are loci of past parasitological, epidemiological, pharmaceutical, and demographic research from both colonial and postcolonial eras. The Uzuakoli Leprosy Center was founded by Methodist missionaries in the 1930s. Ayoas began as a German sleeping sickness camp. The Amani location in the East Usambara Mountains in northeastern Tanzania experienced a series of German, British, and Soviet medical interventions. Niakhar is a site of postcolonial medical and demographic research. Kisumu is notable for its role as a major urban hub for the HIV/AIDS pandemic, as well as a Cold War arena with a significant Soviet investment in hospital care.

The emphasis on “not debris but *trace*” brings out the underlying methodology that entails less a gathering and sorting process of reconstitution and more a raw, asystematic excavation that follows the contours of each recovered memory (via photo, discarded beaker, medical record fragment, interview page, etc.) such that a picture can emerge leading not to an exacting recapitulation but to a more expansive view. Hence, there is as much attention given to layered affect and tonality as to the material and the enumerated. In a fashion akin to the work of Mavhunga and his colleagues, at least in spirit, it is argued that Africa’s histories of science are not linear or uniform; nor can they be regarded as a mere appendage to the European cultural experience. Thus, one important rationale for the asystematic approach described here is in the service of counternarrative. *Pace* Guillaume Lachenal, this results in a necessarily oppositional project, insofar as the official archive itself emerged at the close of the French and British empires as a political strategy and tool and was both a “construction and excavation” by which the proper legacy of each empire could be faithfully recounted and celebrated.

Insofar as African medical and scientific futures are linked to the African past experiences unearthed by this project, this volume must be understood not as a road map but as a gesture toward the outline of possible futures. “As a place, a population, a database, a station, Niakhar stands for the possibility of future research that builds on past investments” (p. 177). Evidence of the past as prologue can be seen in the tracings of colonial and postcolonial public health projects that were premised on industrial-scale European ventures to wipe out major diseases and pestilence via massive, state-driven, progressive enterprises—such as SAM in Uganda or trypanosomiasis in Cameroon. The iconic homage paid to Dr. Eugène Jamot (and his retinue of African assistants referred to as the *Jamotains*) in the materials and images found in Ayoas is emblematic of this era. The story of a Russian hospital in Kisumu in the 1960s runs parallel to those of Jamot in Ayoas a half century earlier, insofar as all that is new would appear to be past. “[The] amnesia about Russia’s past (and about the futures that the hospital stood for at the time) is all the more interesting because Kisumu is a future-oriented city” (p. 238). This, of course, likewise mirrors the “amnesia” of those in Uganda today who promote Plumpy’Nut for SAM over local preventive measures.

CONCLUSION

This “back to the future” notion is one of the recurring themes across all four works. The past events recounted in each find ready parallels with contemporary global health campaigns to eradicate malaria, stem HIV, or contain Ebola—or to combat chronic diseases via the wholesale transplanting of standard Western medical methods, materials, and protocols. As in yesteryear, medical priorities, scientific methods (and standards of care), and health goals are determined by those outside the continent on behalf of Africans. Add to this the long history of medical experimentation, of medical care serving as an instrument of colonial control, and of the exploitation of African disease and suffering as a source of pharmaceutical profits—and African skepticism of contemporary Western global health initiatives is clearly well grounded.

Each volume considered here contributes substantially to our understanding of public health, science and technology, and medicine in Africa. Individually, each has much to recommend with regard to its analysis of past and contemporary developments across these three areas, suggesting how Africa has reached its present state. In combination, these works incorporate and illuminate those broader themes informing the dynamic and contextual analysis of public health, science and technology, and medicine in Africa today.