## **HEALTH & DISEASE**

**Kirk Arden Hoppe.** *Lords of the Fly: Sleeping Sickness Control in British East Africa, 1900–1960.* Westport, Conn: Praeger, 2003. xii + 203 pp. Photographs. Maps. Bibliography. Index. \$67.00. Cloth.

African trypanosomiasis, also popularly known as sleeping sickness, is caused by flagellated protozoa of the genus *Trypanosoma*. There are numerous species of *Trypanosoma*, some of which uniquely infect animals. However, only the subspecies of *Trypanosoma brucei* infect and cause disease in humans. These subspecies are *Trypanosoma brucei gambiense*, found primarily in central and West Africa, and *Trypanosoma brucei rhodesiense*, present in much of East Africa. The former causes a milder and less acute form of the disease than the latter. Both organisms initially infect the hemolymphatic system and then inevitably the central nervous system, where they cause a meningoencephalitis that leads to a somnolescent state, coma, and death.

African trypanosomiasis is transmitted by the bite of tsetse flies that belong to the genus *Glossina*. There are a score of species of tsetse and numerous subspecies. The ecology of the disease is rendered complex by the existence of animal reservoirs for trypanosomes and the ability of the latter to undergo genetic change in the mid-gut of the fly, thus altering already existing virulence. *Glossina* have specific environmental requirements for survival and reproduction, including vegetation characteristics and temperature. Unlike most flies, *Glossina* possess a viviparous method of reproduction in which eggs are not laid, but rather a single larva is produced and nourished within the fly's uterus. Larvae are deposited on the ground in the shade, pupate, and eventually emerge as flies. Flies infected with trypanosomes tend to have a longer period of probing while biting, thus ensuring more efficient transmission of the parasite.

African trypanosomiasis is a devastating and deadly disease in both its endemic and epidemic forms. According to the book reviewed here, it killed perhaps a quarter of a million people during the epidemic in Uganda at the turn of the twentieth centuryu. However, trypanosomiasis in Africa is often a disease that goes undetected in the absence of active surveillance and screening. The late Benitieni Fofana, minister of public health and social affairs of Mali, once summed this up for me when he said: "Epidemics of trypanosomiasis do not exist until you start looking for them" (personal communication, 1974). Kirk Arden Hoppe observes that the statistical disappearance of trypanosomiasis during the 1960s and 1970s was most likely due to a decline in surveillance, screening, and control efforts on the part of poorly resourced, newly independent African states. The increases noted in the 1980s and 1990s may not necessarily have represented a true rise in incidence, but simply the fact that public health authorities began looking for the disease.

The case management of patients infected with trypanosomiasis has always been very challenging because of the toxic nature of the drugs used, their administration either intravenously or intramuscularly over prolonged periods of time, and the need for an infrastructure of well-trained medical personnel and laboratory facilities to examine blood and cerebrospinal fluid. Patient compliance with courses of treatment is often difficult to maintain, not only because of drug side effects, some of which are severe and life threatening, but also because of their duration.

Kirk Arden Hoppe is an assistant professor in the history department at the University of Illinois at Chicago. His study of colonial sleeping sickness control in East Africa came about as a result of his research into the history of fishing on Lake Victoria, an important epicenter for the disease, especially at the beginning of the twentieth century. He has attempted to write an "environmental history of British colonial sleeping sickness control that examines the social and cultural meanings of depopulations, resettlement, and brush clearing in East Africa" (3), framing his discourse within the rhetoric of postcolonialism and establishing his central arguments in a hermeneutics of suspicion. As a consequence, he presents the historical record through an exclusively postcolonial optic; not surprisingly, the text evidences numerous instances in which historical events are forced into a postcolonial interpretive framework in the interests of antifoundationalism. Thus he projects onto the leading European scientific figures in early efforts to control this disease only motives of "rapidly gaining or keeping political and professional power" (29), while overlooking other evidence for altruism and dedication.

The book is organized into seven chapters, including an introduction that presents the ecology and known history of sleeping sickness, colonial science, sleeping sickness control in a continental context, resettlement, and other related topics. The author accurately contrasts the distinctly different strategies of trypanosomiasis control in British and French Africa. Whereas the former relied on environmental interventions aimed at the destruction of flies and their habitats and reducing human-fly contacts, the latter focused on surveillance, screening, diagnosis, and treatment. Citing a secondary source, he states that French administrators and concession companies "resisted restricting population movements because of the disruption to labor supplies, tax collection, and the extraction of coffee and rubber" (14–15). Unmentioned is the fact that the French were primarily dealing with Trypanosoma brucei gambiense, which causes a less acute form of the disease than Trypanosoma brucei rhodesiense, which the British had to confront in East Africa. This milder form of the disease lent itself to screening and treatment by mobile teams of health workers organized into a separate medical service known as the Service des Grandes Endemies (Endemic Disease Service). Having participated in trypanosomiasis control and treatment efforts in both northern Tanganyika in 1961 and in Mali in the late 1960s and early 1970s, I know first-hand the very different ecological, biological, and demographic variables that largely determined the earlier approaches chosen by colonial authorities.

In subsequent chapters, the author addresses colonial science, population evacuation in Uganda as a means of controlling epidemics, forced resettlement in both Tanganyika and Uganda to limit human–tsetse contacts, the creation of tsetse barriers, and the emergence of the Department of Tsetse Research at Shinyanga, Tanganyika, as the dominant force in trypanosomiasis control. The latter was primarily the creation of Charles F. M. Swynnerton, a skilled naturalist, hunter, and autodidact entomologist under whose leadership tsetse control became the focus for combating trypanosomiasis in Tanganyika.

Swynnerton launched a broad environmental effort to control trypanosomiasis which included several forms of brush clearing, the creation of tsetse-free corridors, controlled fires, game destruction, and the resettlement of human populations. His policies were to dominate British approaches to trypanosomiasis control in East Africa during the 1920s and 1930s, and well after his death in an air accident near Singida in 1938. In his fourth chapter, "Forced Resettlement in Tanganyika and Uganda, 1935–1960," Hoppe focuses on a very thorny issue. However, he does not inform it with comparisons to the forced resettlement policies of the first independent government of Tanganyika that created Ujamaa villages, ostensibly in the interests of more efficient social and educational service delivery, but also to facilitate taxation and political mobilization. The Ujamaa resettlement scheme was national in scope and unique in postcolonial Africa. Resettlement schemes to combat trypanosomiasis were also unique to Tanganyika and Uganda during the colonial era. Thus the author's unilateral discussion of the latter, with all their ramifications of alienable and inalienable rights, the more common good versus private preference, and the conflicts between government duties and individual rights, leaves a number of questions and issues unaddressed. Readers are not told whether or not the colonial era tsetse control resettlement schemes served as models for future Ujamaa villages, nor are they provided with any insights into how Tanzanians, who had experienced both, compared them. Such an expansion of the author's discourse would have broadened what is at present a heavily freighted antifoundationalist account.

The conflict between a greater public good and individual rights is common in many circumstances and especially in controlling epidemic diseases. Such conflict was not unique to colonial-era British efforts to control trypanosomiasis. Here again, a broader discussion of this complex issue would have helped to better inform the author's very detailed analyses of the multidimensionality of resettlement.

Often difficult to diagnose and treat, African trypanosomiasis is essentially fatal in the absence of medical interventions; unlike the disease in West Africa, that in East Africa is acute and often fulminating. Its impact on

social and economic structures in the early twentieth century was as severe in affected regions as HIV/AIDS is eighty years later. One does not come away from reading *Lords of the Fly* well informed about the vast human tragedy that confronted British colonial officials in East Africa a century ago. Unfortunately, Hoppe's analysis fails to capture both the enormity of the tragedy and the humanitarian motivations that gave rise to colonial interventions. These oversights emanate from a rigid framing of the inquiry within a postcolonial perspective in which medical science is uniquely presented as a force for justifying the moral ambiguities of colonial rule.

Despite these caveats, the book is a rich source of factual information that greatly adds to our knowledge of sleeping sickness control in British East Africa. It is enhanced by well-organized chapters, excellent notes, and an extensive bibliography. It will be of great interest to all who have an interest in African trypanosomiasis and the history of colonial-era medicine in East Africa.

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**Karen M. Booth.** *Local Women, Global Science: Fighting AIDS in Kenya.* Bloomington: Indiana University Press, 2004. 224 pp. Figures. Notes. Bibliography. Index. \$39.95. Cloth. \$16.95. Paper.

In Local Women, Global Science, Karen M. Booth attempts a "global ethnography" to examine a significant conundrum of the predominant biomedical model of HIV transmission, the "high frequency transmitter" model. This depicts women (categorized as prostitutes and reservoirs who transmit the disease to men, or wives and victims who transmit the disease to babies) as powerless to protect themselves and simultaneously the target of behavior change strategies for prevention of the disease. In her critique of the research model, Booth manages a review of feminist theory of biomedicine, a political history of national (Kenyan) AIDS policy, a multilayered critique of international STD and HIV research projects, a qualitative account of nurses' views on Kenyan sexuality, and finally a comparison of debates about AIDS treatment in South Africa-all in just 145 pages. With such a wide scope in a tight package, there are inevitable tradeoffs. Here the advantages of clear prose and multilevel coverage leave little room for the "thick description" of convincing ethnography. This is somewhat surprising in view of the fact that the author makes a claim for innovation in studying Kenyan nurses as conflicted mediators between foreign researchers and the study subjects (their patients). Since the author finds the conflict between the research model and development interventions expressed most strongly in nurses' statements, I was expecting the ethnographic portion to be the book's centerpiece. But it is shorter and not as