

# MEDICAL AUXILIARIES AND THE NEGOTIATION OF PUBLIC HEALTH IN COLONIAL NORTH-WESTERN TANZANIA\*

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## Abstract

This article investigates the development and employment of African medical auxiliaries during the German campaign against sleeping sickness in colonial north-western Tanzania. A case study from the kingdom of Kiziba demonstrates how widespread illness and colonial public health interventions intersected with broader political and social change in the early twentieth century. Ziba auxiliaries known as gland-feelers operated within overlapping social and occupational contexts as colonial intermediaries, royal emissaries, and familiar local men. The changing fortunes of the campaign and its auxiliaries illustrate how new public health interventions became a means for the kingdom's population to engage with or avoid both royal and colonial power.

## Key Words

Colonial intermediaries, disease, health, medicine, Tanzania.

Sometime in the early twentieth century, a disease variously called *botongo*, *isimagira*, 'sleeping sickness', or *ugonjwa wa malale* came to the Haya kingdom of Kiziba on the western edge of Lake Victoria.<sup>1</sup> People began to die after wasting into thinness and falling into a nodding, impenetrable sleep; the affected were primarily those who traveled to trade, work, and farm in Buganda to the north. Around the lake, African elites, colonial officials, missionaries, researchers, and a few scattered ethnographers documented the arrival of this

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1 'Haya' refers to an ethno-cultural and linguistic group in north-western Tanzania, of which Buhaya is the territory and Ruhaya is the language. For a discussion of changing 'Haya' identity, see K. Curtis, 'Neo-traditionalism in colonial Buhaya: a public debate', in R. W. Harms, J. C. Miller, D. S. Newbury, and M. D. Wagner (eds.), *Paths Toward the Past: African Historical Essays in Honor of Jan Vansina* (Atlanta, 1994), 157–75.

sickness, which may have been new to the area, and which was certainly unprecedented in its scale and severity. Decades later, Ziba political elites and Protestant lay leaders once again recounted the disease in memoirs, focusing on its impact on political life and personal fortunes. And a century later, middle-aged and elderly inhabitants of the countryside around the present-day village of Kigarama used sleeping sickness as a touchstone for discussing the area's colonial history and past misfortune.

Sleeping sickness does not present a pressing threat to the health of Tanzanians living on the western lakeshore today, but it was of signal importance as an engine of change before the First World War. Efforts to identify and control the disease preoccupied African and colonial authorities alike, leading to extensive interventions into daily life. In Kiziba, the key manifestations of German colonial and Ziba royal efforts to cope with illness and death were the sleeping sickness camp near the village of Kigarama and the group of young Ziba men deployed from the camp as 'gland-feelers' – medical auxiliaries tasked with finding suspected cases of sleeping sickness. Widespread illness and colonial public health interventions meshed with political, social, and economic change in Kiziba, and the changing fortunes of the sleeping sickness campaign tangled with shifts in the nature and focus of royal authority. Ziba medical auxiliaries operated in overlapping social and occupational contexts – as colonial functionaries, royal emissaries, and familiar local men – and the wider population made use of their interventions to engage with or avoid both royal and colonial power.

This article examines the history of the sleeping sickness camp at Kigarama and the Ziba gland-feelers deployed from it between 1907 and 1913. It explores the circumstances within which the German sleeping sickness campaign emerged, and then the impact of this on the kingdom of Kiziba specifically. Turning to Ziba medical auxiliaries, it examines their recruitment, training, and early deployment into the countryside around the sleeping sickness camp and locates this cohort of men in historical institutions of royal power and social organization such as *muteko* age-sets. Finally, it examines the problematic nature of the gland-feelers' work as their search for suspected cases of disease became less fruitful and as assessments of German sleeping sickness interventions changed. I argue that gland-feelers ultimately exacerbated the problems that they were supposed to solve, unsettling both relations between people and their king, and between Ziba of all ranks and the colonial authorities. As intermediaries representing both Ziba royal authority and colonial medicine, the gland-feelers' work triggered responses in the kingdom's population that led in part to a drawing-down of colonial surveillance and to a more cautious support of colonial health interventions by the Ziba palace.

This history of Ziba medical auxiliaries employed in the German anti-sleeping sickness campaign connects with histories of health, healing, and medicine in colonial Africa that have understood medical and public health interventions as catalysts for social, political, or economic change. In the last decades of the nineteenth century and into the early twentieth century, colonial authorities undertook numerous campaigns and programs, benefiting first European residents and, later, Africans. Programs combating malaria, plague, or syphilis brought ever-greater numbers of people under the purview of colonial health services, even as the reach of these services remained limited.<sup>2</sup> As a driver of environmental and social change, sleeping sickness has provided rich ground for historians such as Maryinez Lyons, Kirk Hoppe, Rita Headrick, and James L. Giblin, whose path-breaking

work on East and Central Africa has connected the expansion of sleeping sickness to colonial incursion and has highlighted how responses to new epidemics extended the reach of colonial rule.<sup>3</sup> This article follows a small cohort of actors in a specific field of activity – one kingdom – rather than taking the colony or region as a unit of analysis, in order to understand the factors that enabled or hindered such interventions at an intimate, local level. It sets auxiliary labor in its social and political context in Kiziba and in comparison with nearby interlacustrine societies in order to analyze the factors that fostered or constrained auxiliaries' participation in the German campaign.<sup>4</sup> Studying sleeping sickness interventions at a local level provides a counterpoint to the excellent research on Buhaya by Brad Weiss, Kenneth Curtis, Ralph Austen, Birgitta Larsson, and others that has examined contemporary changes in agriculture, trade, governance, and education.<sup>5</sup> This article further explores the extent to which public health surveillance and medical

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- 2 See, for example, P.D. Curtin, 'Medical knowledge and urban planning in tropical Africa', *American Historical Review*, 90:3 (1985), 594–613; M. J. Echenberg, *Black Death, White Medicine: Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914–1945* (Portsmouth, NH, 2002); M. Vaughan, *Curing their Ills: Colonial Power and African Illness* (Stanford, CA, 1991); J. L. A. Webb Jr, *Humanity's Burden: A Global History of Malaria* (Cambridge, 2009).
  - 3 M. Lyons, *The Colonial Disease: A Social History of Sleeping Sickness in Northern Zaire, 1900–1940* (Cambridge, 1992); M. Lyons, 'Sleeping sickness, colonial medicine and imperialism: some connections in the Belgian Congo', in R. M. Macleod and M. J. Lewis (eds.), *Disease, Medicine, and Empire: Perspectives on Western Medicine and the Experience of European Expansion* (London, 1988), 242–56; M. Lyons, 'The power to heal: African auxiliaries in colonial Belgian Congo and Uganda', in D. Engels and S. Marks (eds.), *Contesting Colonial Hegemony: State and Society in Africa and India* (London, 1994), 203–23; K. A. Hoppe, *Lords of the Fly: Sleeping Sickness Control in British East Africa, 1900–1960* (Westport, CT, 2003); R. Headrick and D. R. Headrick, *Colonialism, Health and Illness in French Equatorial Africa, 1885–1935* (Atlanta, 1994); J. L. Giblin, 'Trypanosomiasis control in African history: an evaded issue?', *The Journal of African History*, 31:1 (1990), 59–80; N. R. Hunt, *A Colonial Lexicon of Birth Ritual, Medicalization, and Mobility in the Congo* (Durham, NC, 1999), 92–6; M. C. Musambachime, 'The social and economic effects of sleeping sickness in Mweru-Luapula 1906–1922', *African Economic History*, 10 (1981), 151–73.
  - 4 I. Berger, *Religion and Resistance: East African Kingdoms in the Precolonial Period* (Tervuren, 1981); J.-P. Chrétien, *The Great Lakes of Africa: Two Thousand Years of History* (New York, 2003); H. E. Hanson, *Landed Obligation: The Practice of Power in Buganda* (Portsmouth, NH, 2003); N. Kodesh, *Beyond the Royal Gaze: Clanship and Public Healing in Buganda* (Charlottesville, VA, 2010); R. Reid, *Political Power in Pre-Colonial Buganda: Economy, Society, and Warfare in the Nineteenth Century* (Oxford, 2002); D. L. Schoenbrun, *A Green Place, A Good Place: Agrarian Change, Gender, and Social Identity in the Great Lakes Region to the 15th Century* (Portsmouth, NH, 1998); D. L. Schoenbrun, 'Conjuring the modern in Africa: durability and rupture in histories of public healing between the great lakes of East Africa', *American Historical Review*, 111:5 (2006), 1403–39; C. Wrigley, *Kingship and State: The Buganda Dynasty* (Cambridge, 1996).
  - 5 B. Weiss, *Sacred Trees, Bitter Harvests: Globalizing Coffee in Northwest Tanzania* (Portsmouth, NH, 2003); B. Weiss, *The Making and Unmaking of the Haya Lived World: Consumption, Commoditization, and Everyday Practice* (Durham, NC, 1996); K. R. Curtis, 'Capitalism fettered: state, merchant, and peasant in northwestern Tanzania, 1917–1960' (unpublished PhD thesis, University of Wisconsin, Madison, 1989); R. A. Austen, *Northwest Tanzania under German and British Rule: Colonial Policy and Tribal Politics, 1889–1939* (New Haven, CT, 1968); B. Larsson, *Conversion to Greater Freedom? Women, Church and Social Change in North-western Tanzania under Colonial Rule* (Stockholm, 1991); J. Iliffe, *A Modern History of Tanganyika* (Cambridge, 1979); J. Iliffe, *Tanganyika under German rule, 1905–1912* (Cambridge, 1969); M. P. Kilaini, 'The Catholic evangelization of Kagera in north-west Tanzania: the pioneer period, 1892–1912' (unpublished PhD thesis, Pontifical Gregorian University, 1990); F. X. Lwamgira, *Amakuru ga Kiziba: The History of Kiziba and its Kings*, trans. E. R. Kamuhangire (Kampala, 1969); P. Reining, 'Haya land tenure: landholding and tenancy', *Anthropological Quarterly*,

efforts also affected popular understandings of royal obligation and authority in the region. While the sleeping sickness campaign in German East Africa can be understood as an expansion of imperial power and an assertion of colonial authority, its specific institutions and tactics also represented a parallel elaboration of Ziba royal power.<sup>6</sup>

The Ziba gland-feelers at the heart of this study are not wholly undocumented, having cropped up in histories of the East African medical profession, of German tropical medicine, and of the Haya kingdoms themselves, where they are mentioned in passing as early auxiliaries to German colonial public health.<sup>7</sup> Their story provides a glimpse into early colonial dynamics of health, labor, and politics prior to the era of high colonialism, complementing the wider history of colonial intermediaries in Africa as well as the history of medical auxiliaries working after the First World War. Scholars have shown how intermediaries at work as field assistants, clerks, and interpreters were central to colonial governance, just as translators and guides had been indispensable to earlier exploration and trade.<sup>8</sup> Access to wage labor, education, and professional networks conferred new forms of social mobility and cultural capital upon these auxiliaries, who took advantage of opportunities to expand their own circles of influence in the course of their work for missionaries, researchers, and administrators. Medical auxiliaries did this and sometimes more, traversing African and European approaches to illness and wellness. Some became crucial participants in colonial scientific and medical work, influencing research agendas and shaping research outcomes.<sup>9</sup> Shula Marks, John Iliffe, and Nancy Hunt, among others, have explored the lives, work, and vocabularies of nurses, ‘dressers’, midwives, or medical assistants active after the First World War, whose work often took them away from their natal communities to treat diseases, deliver babies, or provide vaccinations.<sup>10</sup> As an early episode in this wider history, in which neither colonial politics

35:2 (1962), 58–73; P.R. Schmidt, *Historical Archaeology: A Structural Approach in an African Culture* (Westport, CT, 1978).

- 6 D. Arnold, ‘Introduction: disease, medicine and empire’, in D. Arnold (ed.), *Imperial Medicine and Indigenous Societies* (Manchester, 1988), 1–26.
- 7 W.U. Eckart, *Medizin und Kolonialimperialismus: Deutschland 1884–1945* (München, 1997), 348; J. Iliffe, *East African Doctors: A History of the Modern Profession* (Cambridge, 1998), 31–2; H. Isobe, *Medizin und Kolonialgesellschaft: die Bekämpfung der Schlafkrankheit in den deutschen “Schutzgebieten” vor dem Ersten Weltkrieg*, Periplus Studien (Berlin, 2009), 115.
- 8 J. Fabian, *Out of Our Minds: Reason and Madness in the Exploration of Central Africa* (Berkeley, CA, 2000); M. Hokkanen, ‘Towards a cultural history of medicine(s) in colonial Central Africa’, in A. Digby, W. Ernst, and P.B. Mukharji (eds.), *Crossing Colonial Historiographies: Histories of Colonial and Indigenous Medicines in Transnational Perspective* (Newcastle upon Tyne, 2010), 143–64; Hunt, *Colonial Lexicon*; B.N. Lawrance, E.L. Osborn, and R.L. Roberts (eds.), *Intermediaries, Interpreters, and Clerks: African Employees in the Making of Colonial Africa* (Madison, WI, 2006); E.L. Osborn, ‘“Circle of iron”: African colonial employees and the interpretation of colonial rule in French West Africa’, *The Journal of African History*, 44:1 (2003), 29–50; S.J. Rockel, *Carriers of Culture: Labor on the Road in Nineteenth-Century East Africa* (Portsmouth, NH, 2006).
- 9 N.J. Jacobs, ‘The intimate politics of ornithology in colonial Africa’, *Comparative Studies in Society and History*, 48:3 (2006), 564–603; L. Schumaker, *Africanizing Anthropology: Fieldwork, Networks, and the Making of Cultural Knowledge in Central Africa* (Durham, NC, 2001).
- 10 S. Marks, *Divided Sisterhood: Race, Class, and Gender in the South African Nursing Profession* (New York, 1994); Iliffe, *East African Doctors*; N.R. Hunt, ‘Letter writing, nursing men and bicycles in the Belgian Congo: notes towards the social identity of a colonial category’, in Harms, Miller, Newbury, Wagner (eds.), *Paths*, 187–210; Hunt, *Colonial Lexicon*; J. Turrin, ‘Colonial midwives and modernizing childbirth

nor public health approaches were stable, the story of the Kigarama gland-feelers encourage consideration of the diversity of auxiliary labor involved in colonial medical and public health efforts. Their history highlights the precariousness of public health surveillance work – as opposed to providing treatment or palliative care – in an era when royal authority, colonial power, and scientific knowledge were all in flux, and no durable cure for sleeping sickness was available.

## SLEEPING SICKNESS IN EARLY TWENTIETH-CENTURY EAST AFRICA

Sleeping sickness was one among several waves of illness that swept across East Africa at the turn of the century and one among many changes for African communities in the Great Lakes region.<sup>11</sup> Scattered instances of sleeping sickness in West and Central Africa can be dated to at least the eighteenth century, but on a much smaller scale than the full-fledged epidemics of the late nineteenth and early twentieth century.<sup>12</sup> Sleeping sickness struck populations from Senegambia to the Zambezi watershed, and in the Great Lakes region and Nile valley. Its spread was intimately linked with widening European colonial incursions and resulting disruption of social, environmental, and ecological balances.<sup>13</sup> These epidemics appear to have been new in their scope and scale; African communities pointedly recognized them as such.<sup>14</sup> In former Belgian Congo, where some 500,000 people are estimated to have died between the late 1890s and the 1920s, sleeping sickness came to be known as the ‘colonial disease’, connected to colonial labor regimes, resource extraction, and violence.<sup>15</sup>

Around Lake Victoria, the epidemic killed between 250,000 and 300,000 people between 1901 and 1920, primarily on the northern arc of the lakeshore.<sup>16</sup> It affected the kingdoms of Buganda and Busoga, recently incorporated into the Uganda Protectorate, particularly badly. The disease grabbed the headlines in Europe due to its novelty,

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in French West Africa’, in J. M. Allman, S. Geiger, and N. Musisi (eds.), *Women in African Colonial Histories* (Bloomington, IN, 2002), 71–94.

- 11 Sleeping sickness, also known as human African trypanosomiasis, is caused by a parasitic infection spread by the *tsetse* fly; it ultimately affects the central nervous system and is considered fatal when left untreated. Related parasites also affect cattle and domestic livestock. C. Burri and R. Brun, ‘Human African trypanosomiasis’, in G. C. Cook and A. Zumla (eds.), *Manson’s Tropical Diseases* (London, 2003), 1303–23.
- 12 J. Ford, *The Role of the Trypanosomiasis in African Ecology: A Study of the Tsetse Fly Problem* (Oxford, 1971); J. L. Giblin, *The Politics of Environmental Control in Northeastern Tanzania, 184–1940* (Philadelphia, 1992); Iliffe, *Modern History*, ch. 5; H. Kjekshus, *Ecology Control and Economic Development in East African History: The Case of Tanganyika, 1850–1950* (Athens, OH, 1996); G. H. Endfield, D. B. Ryves, K. Mills, L. Berrang-Ford, ‘“The gloomy forebodings of this dread disease”, climate, famine and sleeping sickness in East Africa’, *The Geographical Journal*, 175:3 (2009), 181–95; M. Malowany, ‘Unfinished agendas: writing the history of medicine of sub-Saharan Africa’, *African Affairs*, 99:395 (2000), 330–5.
- 13 Lyons, *Colonial Disease*; Headrick, *Colonialism, Health and Illness*; Hoppe, *Lords of the Fly*.
- 14 D. Steverding, ‘The history of African trypanosomiasis’, *Parasites & Vectors* 1:3 (2008), doi:10.1186/1756-3305-1-3; E. M. Fèvre, P. G. Coleman, S. C. Welburn, and I. Maudlin, ‘Reanalyzing the 1900–1920 sleeping sickness epidemic in Uganda’, *Emerging Infectious Diseases*, 10:3 (2004), 567–73.
- 15 M. Lyons, ‘African Trypanosomiasis’, in K. F. Kiple (ed.), *Cambridge World History of Human Disease* (Cambridge, 1993), 552–61, esp. 556; Lyons, *Colonial Disease*.
- 16 Lyons, ‘African Trypanosomiasis’, 556; Hoppe, *Lords of the Fly*, 27; Malowany, ‘Unfinished agendas’, 331.

the potential for a prestigious scientific discovery, its incurability, and the threat it posed to the colonial project as a whole. Sleeping sickness threatened potential pools of African labor, necessary for extracting resources and generating wealth.<sup>17</sup> It quickly became a top priority for German and British colonial administrations in East Africa and tropical medicine researchers internationally. Colonial responses to sleeping sickness constituted the first instance in which African health came to the forefront of public health measures in sub-Saharan Africa, representing a turning point in colonial medicine.<sup>18</sup>

The disease's expansion compelled African and colonial political authorities around Lake Victoria to respond. In areas where flies existed to transmit the disease, such as Buganda, Busoga, or the Ssesse Islands, draconian measures of depopulation, restrictions on travel and use of the lakeshore, or confinement into camps were implemented. Centralized British colonial policies emphasized separation of humans and flies, targeting their overlapping settlements and habitats as the primary space for intervention; areas designated as 'infected' were marked for depopulation.<sup>19</sup> Elsewhere – particularly where the range and behavior of fly vectors had not been firmly established – the targets of intervention were less stable. The German sleeping sickness campaign in modern-day Tanzania and Burundi took a multi-pronged approach, laid out by Robert Koch at the end of his sleeping sickness expedition in 1907.<sup>20</sup> Koch outlined measures for the removal and resettlement of African communities to fly-free areas, the use of isolation stations, and the closing of colonial borders to limit contact between infected and non-infected populations.<sup>21</sup> Further measures included clearing fly habitats of vegetation and destroying any potential animal reservoirs of trypanosomes.<sup>22</sup> These measures fit into a developing set of standard practices used across colonial Africa.<sup>23</sup> However, in the German Residency of Bukoba and the Haya kingdoms, the sleeping sickness campaign was at times an improvisation, due to the recent implementation of civilian rule, an incomplete knowledge of the distribution of both human populations and fly vectors, and a public health campaign still in transition from an itinerant tropical medicine research expedition to a locally focused, intensified intervention.

Prevention measures required an accurate sense of the incidence and prevalence of the disease, relying on a combination of clinical observation and, ideally, microscopic confirmation of the causative trypanosome parasite in a human host. But diagnosing sleeping sickness was difficult, given the complexity of the body's response to the trypanosome and the parasite's own life cycle, in addition to the *ad hoc* research circumstances in which many colonial scientists still worked in the early 1900s. Often, doctors and health

17 Lyons, 'Sleeping sickness', 245; J. Koponen, *Development for Exploitation: German Colonial Policies in Mainland Tanzania, 1884–1914* (Hamburg, 1994), 245.

18 D.J. Neill, *Networks in Tropical Medicine: Internationalism, Colonialism, and the Rise of a Medical Specialty, 1890–1930* (Stanford, CA, 2012); Lyons, 'African Trypanosomiasis'.

19 M. Worboys, 'The comparative history of sleeping sickness in East and Central Africa', *History of Science*, 32:95 (1994), 89–102; Hoppe, *Lords of the Fly*; W. Eckart, *Medizin und Kolonialimperialismus*.

20 Bundesarchiv, Berlin Lichterfelde (BArch) R 1001/5896, R. Koch, Report, 5 Sep. 1907.

21 BArch R 1001/5897, Bethmann-Hollweg to Kaiser Wilhelm II, Summary Report, 23 Jan. 1908.

22 BArch R 1001/5876, Meeting Minutes, 18 Nov. 1907, 10.

23 See also M. Webel, 'Borderlands of research: medicine, empire, and sleeping sickness in East Africa, 1902–1914' (unpublished PhD thesis, Columbia University, 2012).

officers relied upon a historically known, if hardly foolproof, measure of illness – characteristically swollen cervical lymph nodes, known as ‘Winterbottom’s sign’.<sup>24</sup> Many believed that observing Winterbottom’s sign on a person, perhaps by palpating glands on his or her neck, allowed the identification of people in the early stages of disease who did not yet present sleepiness or neurological disorder. Once diagnosed, however, no effective cure was available in this era, although colonial doctors liberally dispensed a variety of drugs and chemicals to treat African patients.

African authorities’ responses to illness and death paralleled colonial efforts to limit the spread of sleeping sickness. The activities of Ziba healers or political leaders enter into the colonial archive during moments of connection with colonial medical services, typically when kings or chiefs notified colonial authorities of sick or dying people among their subjects and collaborated in public health interventions, or when healers offered a form of healing seen to compete with colonial biomedicine. Early twentieth-century Ziba inherited a system of healing and religious practice that involved royal authority, clan networks, and *kubandwa* societies of healers, similar to those elsewhere in the region.<sup>25</sup> In Kiziba, power rested chiefly with the divinely invested and recently enthroned *mukama* (king) Mutahangarwa, who ruled through a network of ministers, district chiefs, and village elders.<sup>26</sup> Patrilineal clans were an important element of the social and political structure there as in other interlacustrine kingdoms, as Neil Kodesh and Brad Weiss have argued; clan shrines and their ancestral spirits, as well as *kubandwa* societies overlapped and were consulted on matters of public healing as well as the amelioration of personal illness and misfortune.<sup>27</sup>

Ziba in the early 1900s would also have been familiar with European biomedicine from the White Fathers’ mission station at Kashozi, where priests kept a clinic, or on the basis of scattered forays made through the Haya kingdoms by colonial medical officers during the previous decade.<sup>28</sup> Use of biomedical resources did not, just as it still does not, indicate a rejection of traditional healing practices and treatments. Rather, people utilized multiple sources of healing, sometimes simultaneously, including those peripheral to political power.<sup>29</sup> This study of medical auxiliaries and colonial public health speaks primarily to the ways Ziba people engaged with the German sleeping sickness campaign – the most stable and assertive colonial medical presence to date – and not to their utilization of diverse healing practices.

Public health efforts such as the campaign envisioned by German authorities required intimate knowledge of disease epidemiology, vector habitats, and human behavior. They also required coordination with, or mitigating the interference from, ‘traditional’ African

24 Burri and Brun, ‘Human African Trypanosomiasis’, 1317.

25 Berger, *Religion and Resistance*; Schoenbrun, ‘Conjuring the modern’.

26 Weiss, *Haya Lived World*, 22.

27 *Ibid.* 16; Kodesh, *Royal Gaze*; Iliffe, *Modern History*, 30–1; Berger, *Religion and Resistance*; D. Schoenbrun, ‘A mask of calm: emotion and founding the kingdom of Bunyoro in the sixteenth century’, *Comparative Studies in Society and History*, 55:3 (2013), 634–64.

28 F. Nolan, *Mission to the Great Lakes: The White Fathers in Western Tanzania, 1878–1978* (Tabora, Tanzania, 1978), 24.

29 Kodesh, *Royal Gaze*.

authorities through which German administrators wished to rule the region. The success of such campaigns was premised upon an expectation of widespread popular adherence to medical recommendations, and, more fundamentally, on knowing who the sick were, where they lived, and the illness that affected them.

But in 1907, as the German sleeping sickness campaign began in earnest in outlying areas of the Bukoba Residency, significant gaps opened up between medical officers' expectations, colonial knowledge, and levels of participation by Ziba communities. Local circumstances forced the doctor in charge, Robert Kudicke, to work with Ziba authorities to shift the campaign's tactics and focus. A cohort of Ziba medical auxiliaries emerged in the interstices of royal politics, public health, and the local economy. These auxiliaries simultaneously filled an existing niche in the political, social, and economic landscape of Kiziba, while also occupying a new space created by the sleeping sickness campaign, one in which they mediated royal power and colonial authority.

### GLAND-FEELERS: AUXILIARIES AT WORK

The employment of African auxiliaries began as an attempt to mend gaps in colonial knowledge about the situation in Kiziba, which included inexperience with local languages and dialects, scant awareness of crossing points of rivers and swamps, and only basic information on the size, location, and distribution of the population in rural Buhaya.<sup>30</sup> Gland-feelers, exclusively men, were trained to find potential cases by identifying swelling of the cervical lymph glands, understood as an early presentation of sleeping sickness. Kudicke trained them to survey a population for sleeping sickness, relying on visual recognition of the correct glands as well as physical detection of enlarged glands through palpation. In addition to identifying those suspected of being sick, auxiliaries were intended to work along with *katikiros* – a Luganda title used by the Germans to refer generally to Haya officials – to bring the sick to the sleeping sickness camp near Kigarama, a village near the lakeshore. The sleeping sickness camp had been located near Kigarama in late 1907 on land designated for that purpose by the Ziba *mukama*, Mutahangarwa, who also provided laborers for its construction.<sup>31</sup>

The social and agricultural organization of Kiziba, the campaign's 'field of action', made finding individual cases of sleeping sickness difficult. Swamps, rivers, and high ridges cut through the land, while farms and villages filled in hillsides and plateaus. Kanyigo district, where Kigarama was located, was dominated by a narrow plateau.<sup>32</sup> There, the organization of villages and farms spoke to the importance of banana cultivation and also reflected the political and social structure in Kiziba. A main path led through the typical village, with side paths branching off toward each home – a traditional circular, domed *msonge* – set back among banana and coffee plants.<sup>33</sup> Densely populated and intensively farmed, the hillsides and fields in Kiziba presented colonial officials with a labyrinthine network

30 BArch R 1001/5897, F. K. Kleine, 'Schlafkrankheit', 31 Mar. 1908.

31 Lwamgira, *History*, 137; Isobe, 'Medizin und Kolonialgesellschaft'; BArch R 1001/5897, R. Kudicke, Report, 13 May 1908, 3.

32 Schoenbrun, *Green Place*, 166.

33 H. Rehse, *Kiziba: Land und Leute* (Stuttgart, 1910), 2.



of connected villages, interspersed with uncultivated fields or swampy land. This layout allowed people to evade colonial authorities. Several hundred homes and surrounding farms made up the largest Ziba villages, according to colonial surveys; knowledge of exactly how and where the population was distributed, however, remained inconsistent in the years before the First World War.<sup>34</sup> German doctors' unfamiliarity with and their inability to penetrate this Ziba landscape of villages and farmland to locate the sick presented the German sleeping sickness campaign with its primary challenge.

Kudicke answered the challenge of finding, examining, and diagnosing suspected cases of sleeping sickness by training local men as auxiliaries. Determining whether a person had sleeping sickness required close contact – measuring body temperature, palpating glands, perhaps taking blood – a process often hindered by people fleeing at the approach of a European doctor. In October 1907, shortly after taking over the sleeping sickness campaign on the western side of Lake Victoria, Kudicke proposed this novel solution to his superiors in the campaign:

...in order to treat these [sleeping sickness cases] as soon as possible, I will attempt to have individual villages searched by natives who have been trained in the palpation of glands. The sultan Mutahangarwa has sent me 10 young people for this purpose, whose training I have already begun.<sup>35</sup>

Kudicke organized this cohort of men, called simply *Drüsenfühlern* or gland-feelers, through his connections with local leaders and the Ziba king. He envisioned that the gland-feelers would identify suspicious cases, and would then bring people to the sleeping sickness camp at Kigarama for further examination, allowing him to confirm a diagnosis of sleeping sickness in his rudimentary laboratory. Their work was to function, in many cases, as the first survey of sleeping sickness in the outlying areas of Kiziba. Initially focused on communities nearest the Kigarama camp and the lakeshore, these auxiliaries went on to conduct searches for the sick in ever-widening swathes of territory to the west, extending into Kiziba and German Buddu. Around 25 gland-feelers worked for the sleeping sickness campaign at the height of their activity, covering an area that extended at least 400 square kilometers.

Gland-feelers operated within a system that offered incentives for cooperation with colonial medical authorities, but that also commodified the sick, or suspected cases, through this reward. Kudicke attached a specific economic incentive to the discovery of proven sleeping sickness cases from the outset: for their work, gland-feelers earned a monthly wage, as well as a premium per case identified. Wages and premiums shifted over the course of the campaign, varying from three to five rupees as a base monthly wage, with additional money for each confirmed case.<sup>36</sup> A reward of one rupee per positive case was provided in late 1908, increasing in 1909 to 'a reward of three Rupees ... guaranteed to the

34 *Ibid.* 1–3.

35 BArch R 86/2622, R. Kudicke, Report, 1 Oct. 1907.

36 BArch R 1001/5876, Reichsgesundheitsamt, Report, 28 Dec. 1908; BArch R 1001/5876, E. Steudel, Report, 4 Nov. 1908; BArch R 1001/5898, Gudowius, Report, 31 May 1908; BArch R 1001/5903, G. Ullrich, Report, 31 Dec. 1909, 5.

gland-feelers for each sick person'.<sup>37</sup> By comparison, a yearly hut tax ranging from three to five rupees was in place during the same period.<sup>38</sup> Further, a base wage of five rupees offered in 1908 – not including the premium paid per positive case – nearly matched the six to eight rupee indemnity offered by the Germans to people forced to relocate out of tsetse fly areas and thus abandon their farms.<sup>39</sup> Receiving the premium for each positive case depended not simply on getting suspected cases to the camp at Kigarama, but also on the confirmation of infection with trypanosomes through examining blood, lymph, or spinal fluid.

At the campaign's outset in 1907, the German plan was to detain confirmed cases in sleeping sickness camps and treat people with atoxyl, an arsenic-based drug used to varying degrees by the British, French, German, and Belgian colonial states.<sup>40</sup> At the time, no research had proven conclusively that atoxyl treatments could cure sleeping sickness, and doctors knew that it could cause serious, permanent side effects such as blindness.<sup>41</sup> But initial atoxyl injections did appear to suppress some symptoms of the disease. Though not a permanent cure, atoxyl's short-term effects inspired optimism in Robert Koch, who focused the German system of camps around an atoxyl regimen he developed on the Sese Islands in 1906–7.<sup>42</sup>

The availability of this new treatment attracted Ziba people to the Kigarama camp. After the camp opened in mid-1907, people initially sought treatment voluntarily or were brought by their relatives, if too sick to move around.<sup>43</sup> The population's relationship to the king informed their decisions about treatment-seeking. Mutahangarwa's support was instrumental in locating and building the camp, which became a hybrid space bolstered by colonial and royal authority.<sup>44</sup> Indeed, local stories a century later attributed the initial pull of Kigarama to the power of the king, reflecting earlier Ziba narratives concerning pre-colonial royal authority.<sup>45</sup> The camp was also a place to procure a variety of commodities

37 BArch R 1001/5903, G. Ullrich, Report, 31 Dec. 1909, 5.

38 Iliffe, *Tanganyika under German Rule*, 160; Austen, *Northwest Tanzania*, 54 and 91.

39 BArch R 1001/5904, G. Ullrich, Report, 16 Apr. 1910.

40 BArch R 1001/5904, G. Ullrich, Report, 31 Jul. 1910; W. U. Eckart, 'The colony as laboratory: German sleeping sickness campaigns in German East Africa and Togo, 1900–1914', *History and Philosophy of the Life Sciences*, 24:1 (2002), 69–89; C. Gradmann, "'It seemed about time to try one of those modern medicines": animal and human experimentation in the chemotherapy of sleeping sickness, 1905–1908', in V. Roelcke and G. Maio (eds.), *Twentieth Century Ethics of Human Subjects Research: Historical Perspectives on Values, Practices, and Regulations* (Stuttgart, 2004), 83–97.

41 Lyons, 'Sleeping sickness', 111; D. Steverding, 'The development of drugs for treatment of sleeping sickness: a historical review', *Parasites & Vectors*, 3(1):15 (2010), doi:10.1186/1756-3305-3-15.

42 BArch R 1001/5895, R. Koch, Draft Report, 15 Oct. 1906; Geheimes Staatsarchiv-Preußischer Kulturbesitz, Berlin (GStA PK), I. HA. Rep. 76 VIII, Nr. 4118, R. Koch, Report, 25 Nov. 1906; BArch R 1001/5896, R. Koch, Draft Report, 25 Apr. 1907.

43 Bethel Mission Archives, Wuppertal (BMArch) M 194, A. Kajarero, 'Aus meinem Leben', (1955–6?), 9–10; Interview with Bernard Mutekanga, Kashozi, Tanzania, 19 Aug. 2008; S. Feierman, 'Struggles for control: the social roots of health and healing in modern Africa', *African Studies Review*, 28:2/3 (1985), 73–147; J. M. Janzen, 'Therapy management: concept, reality, process', *Medical Anthropology Quarterly*, 1:1 (1987), 68–84.

44 M. Webel, 'Ziba politics and the German sleeping sickness camp at Kigarama, Tanzania, 1907–14', *International Journal of African Historical Studies* (forthcoming).

45 Interview with Bernard Mutekanga; see also G. Hyden, *Political Development in Rural Tanzania* (Nairobi, 1969) ch. 4; Weiss, *Sacred Trees*.

in addition to a new treatment. Throughout German East Africa, doctors manning sleeping sickness camps offered material incentives – sleeping mats, food, tobacco – to those who came to be tested and treated for the disease.<sup>46</sup>

Despite the fact that the camps were supposed to isolate the sick, people found ways to come and go of their own free will. Leaving the camp before completing an atoxyl regimen or fleeing illicitly became a regular occurrence as weeks stretched into months. Such unpredictable movements complicated German efforts to track the incidence of sleeping sickness and monitor people dosed with atoxyl and other drugs. And so, after 1908, the sleeping sickness campaign was reorganized, with a focus on the camps as sites of ambulatory drug treatments rather than as sites of internment and isolation (though advanced cases with severe neurological effects frequently remained at the camp).<sup>47</sup> As policymakers reviewed the campaign in its first year, the camp at Kigarama was seen as ‘commendable’ compared to others around lakes Victoria and Tanganyika, its success attributed to Kudicke’s ‘efforts to get along with the natives without compulsory measures’.<sup>48</sup> German officials believed that many more cases remained hidden in the surrounding countryside, posing the threat of continued transmission into ‘healthy’ areas. In fact, Kudicke’s model camp, unlike others in the region that relied upon searches conducted by European personnel and negotiations with individual village chiefs, used compulsion of a different sort. At Kigarama, African auxiliaries – Kudicke’s gland-feelers – had already begun to augment and sometimes supplant the work of German doctors.

Gland-feelers’ work focused on the identification of the sick and their delivery to the camp for treatment.<sup>49</sup> We can gather a sense of this work through stories of the camp recounted to the author during fieldwork in 2008; elderly Ziba men located stories of the camp within stories of local experience with German colonial rule and the history and chronology of Ziba and other kings, as well as relative to the First World War. In these tellings, sleeping sickness is a disease of the past that their grandparents and parents knew. One such story, passed down from grandfather to grandson, recalled the involvement of both Europeans and Africans at work at Kigarama: ‘The sick were helped by people to go to the hospital. The Germans send [sic] people to search for sick people. These are people who worked for the Germans and they were paid for that. The Germans did not go themselves.’<sup>50</sup> German doctors and Ziba auxiliaries divided the labor of public health, allowing doctors to remain in the camp and laboratory while auxiliaries went into the field. Searching for the sick was Ziba work.

Doctors initially considered these auxiliaries a great success. Within eight months, Kudicke’s initial group of ten gland-feelers had expanded to 23, with 85 new cases admitted during the first quarter of 1908. The total number of people treated by late May 1908 was 581. He noted that ‘by far the most newly admitted [cases] have been found

46 See BArch R 1001/5897, R. Kudicke, Report, 13 May 1908; BArch R 1001/5897, O. Feldmann, Report, 1 Apr. 1908.

47 Belgian authorities in the Congo made a similar shift in 1910. Lyons, *Colonial Disease*, 125–6.

48 BArch R 1001/5876, E. Steudel, Report 4 Nov. 1908, 3–4.

49 BArch R 1001/5896, R. Kudicke, Report, 1 Oct. 1907.

50 Interview with Bernard Mutekanga.

by Africans trained in gland palpation', and went on to describe how gland-feelers did their work:

In the field of action of the sleeping sickness camp 23 such assistants are working and with the following assignment: every hut will be searched individually. A representative of the katikiro should if possible be at each examination. The gland-feelers note the names of all people with swollen neck and armpit glands. Only people with at least bean-sized glands will be sent, with the help of the katikiro, to Kigarama ...<sup>51</sup>

This marked a shift from the camp's first few months, when Kudicke would have gone out to villages and farms himself, likely accompanied by a few soldiers and an elder, carrying with him the tools to collect samples of blood or lymph. Though conversant in the colonial government's preferred Swahili, he would have relied on the elder to communicate in the Haya language. In screening people, Kudicke and other doctors would have looked for 'Winterbottom's sign' and other, more serious symptoms of sleeping sickness such as swelling of the hands or face, wasting, or sleepiness. Finding the right glands with the right level of swelling was not a straightforward matter, as the exact meaning of different grades of inflammation for a person's health was not known.<sup>52</sup> Nonetheless, attention to swollen glands remained the most widely used method for initial screening. Diagnosis was ideally confirmed through examining spinal or lymphatic fluid, or less ideally blood, under a microscope for trypanosomes. Kudicke does not describe examining blood or lymph samples in the field, nor performing spinal punctures, suggesting that suspected cases were brought to the camp for further testing.

Now, with the presence of the disease confirmed and the support of the Ziba palace established, Kudicke sent gland-feelers into the field. Their survey work was no great departure from what he himself might have done. Ziba auxiliaries allowed the campaign to survey a greater number of people more quickly than Kudicke could have done alone, as the sole medical officer north of Bukoba, responsible for the kingdom of Kiziba as well as Bugabu and German Buddu. They also allowed Kudicke to remain in his laboratory at the camp, identifying trypanosomes under the microscope, monitoring long-course regimens of atoxyl, and keeping track of disease mortality and the drug's effects. Between January and June 1908, Kudicke supervised the treatment of upwards of 500 people at the camp each month, leaving little time for tours of the area.<sup>53</sup>

Just as the Ziba court had been involved in the establishment of the camp at Kigarama, so, too, was Ziba political life a part of the camp's activities. Like the location of the camp itself near Kigarama, medical auxiliaries were the product of a collaborative relationship with the *mukama* Mutahangarwa. Kudicke had not, after all, simply plucked men out of the general Ziba population to be trained as gland-feelers. Equally important to what the gland-feelers did as they moved among Ziba farms and villages was on whose behalf they did it: in this case, both the divinely invested *mukama* and the German colonial medical officers at Kigarama.

51 BArch R 1001/5897, R. Kudicke, Report, 31 May 1908, 1.

52 BArch R 1001/5904, Scherschmidt, Report, 4 Jan. 1910; BArch R 1001/5911, Scherschmidt, Report, 1 Jan. 1914; BArch R 1001/5910, Lurz, Report, 1 Jul. 1913; BArch R 1001/5911, Lurz, Report, 1 Oct. 1913.

53 BArch R 1001/5901, R. Kudicke, Chart, 9 Aug. 1908.

## GLAND-FEELERS AND THE ZIBA COURT

*Mukama* Mutahangarwa's broader claims on the labor and produce of his subjects provide additional historical context for the auxiliaries' work at Kigarama. The political economy of land use and labor in Kiziba focused on the demands of the *mukama* and his district and village subchiefs. A *mukama* was a 'receiver of milk' or 'milker', linking the importance of possessing cattle and controlling their products to one's political power and legitimacy.<sup>54</sup> Cattle husbandry remained socially and politically important, although herds had been diminished by the devastating cattle diseases of the late nineteenth century.<sup>55</sup> The royal title also connoted the extractive role of the king, and the primacy of royal claims on his subjects' labor, goods, and harvest.<sup>56</sup> Tribute, in the form of 'first fruits' of a farm, such as bananas, grain, livestock, or hides, were brought to the royal court, Peter Schmidt has shown, and the *mukama* also had control of all crafts, such as ironworking and bark-cloth production.<sup>57</sup> Large, consolidated farms held by clan heads and granted by favor of the king called *nyarubanja* (meaning a large *kibanja*, or banana plantation) were 'important sources of patronage, labor, and tribute for their noble estate holders' and the *mukama*. Ongoing processes of the alienation and granting of land by royal fiat connected clients to the king.<sup>58</sup>

Royal claims were exercised in the form of tribute given to the king and his chiefs, but also in the requirement of able-bodied men to travel to the palace and 'work there without payment for one month . . . cleaning plantations, erecting buildings, cutting firewood, herding cattle, etc.'<sup>59</sup> Responsibilities differed for young men and young women; colonial ethnographer, linguist, and sometime planter Hermann Rehse asserted that young women helped with cooking and keeping courtyards clear, while young men spliced rope together, fished, hunted, and brought 'taxes' to the royal court.<sup>60</sup> Young men might have simply brought tribute from a family or clan farm to the court, in the form of a tax in cowries and first fruits of the harvest. Though Rehse does not record that boys 'carrying the taxes' spent an extended period of time at the court, a responsibility to travel regularly to the court also served to socialize Ziba boys and orient them in the political hierarchy.

This deployment of young male labor also accorded with the Ziba social and political institution of a *muteko*, or age-set group. A *muteko* was composed of young men of a common age cohort who had been selected by local political leaders to serve at the *mukama*'s palace. Arriving at the palace between ages ten and twelve, boys learned

54 Schoenbrun, *Green Place*, 213 n76 and 222–3; D. M. Anderson, 'Cow power: livestock and the pastoralist in Africa', *African Affairs*, 92:366 (1993), 121–33.

55 Austen, *Northwest Tanzania*, 10; Reining, 'Haya land tenure'; Weiss, *Sacred Trees*, 35.

56 Schmidt, *Historical Archaeology*, 101; Rehse, *Kiziba*, 1.

57 Schmidt, *Historical Archaeology*, 29–30; H. Cory and M. M. Hartnoll, *Customary Law of the Haya Tribe, Tanganyika Territory* (London, 1945), 125 and 261–2; H. Cory, *Historia ya Wilaya Bukoba* (Mwanza, 1956); Rehse, *Kiziba*, 54.

58 Weiss, *Sacred Trees*, 111; Cory and Hartnoll, *Customary Law*, 123–6.

59 Cory and Hartnoll, *Customary Law*, 125; Schmidt discusses a similar institution, *kikale*, in *Historical Archaeology*, 29.

60 Rehse, *Kiziba*, 115.

‘the arts of war’ but were also responsible for pasturing cattle, cleaning out cattle enclosures, cutting grass, and other general maintenance work.<sup>61</sup> Promising young men remained at the court for several years after the standard three years of service, receiving additional training in civil and religious matters, with a successful few entering the king’s service as officials at the court or in outlying districts; some may also have been sons of his chiefs or young blood relations from within his extended descent-group or clan.<sup>62</sup> Schmidt’s late twentieth-century informants’ discussion of their *muteko* indicates that contact with the court was an important marker of generational identity and status.<sup>63</sup> In regional perspective, the Ziba system of *muteko* was comparable to the training and socialization of young men as pages at the Ganda court.<sup>64</sup> The various *muteko* that circulated through Ziba palace functioned similarly as a means for training in statecraft and military service, and success in the palace defined a trajectory of upward political mobility. This Ziba institution allows us to locate the gland-feelers in a social, political, and demographic context. The normal progress into royal service suggests that gland-feelers (whom Kudicke referred to as ‘young men’ and not ‘boys’) would have been older than 16, but were likely younger than Kudicke’s own age of 30.<sup>65</sup>

Gland-feelers’ association with the royal court, their training as a group by Kudicke, and their work from the camp at Kigarama set them apart from the broader Ziba population. Particular skills, objects, and clothing would also have signaled a different status. In addition to their political and social education at Mutahangarwa’s court, they were literate; they had learned to read and write at either the small government school in Bukoba or, more likely, at a nearby White Fathers mission school.<sup>66</sup> They almost certainly carried paper and a writing instrument to note the names and locations of the sick, as their surveillance work required. Gland-feelers were also likely given clothing and materials by the camp, such as shoes, a hat, or a uniform.<sup>67</sup> Their European-style clothing would have been familiar, if not widely available to most Ziba, and indicative of elite status. Mutahangarwa had self-consciously refashioned royal attire during this period, becoming ‘the first King in Kiziba to dress like Europeans’, according to his minister and historian F. X. Lwamgira.<sup>68</sup> Clothing that came from the Germans would have been distinctive from barkcloth made locally or printed cotton cloth acquired through

61 Schmidt, *Historical Archaeology*, 29; Austen, *Northwest Tanzania*, 11 and 144; L. Stevens, ‘Religious change in a Haya village, Tanzania’, *Journal of Religion in Africa*, 21:1 (1991), 8; Nolan, *Mission to the Great Lakes*, 21; Hyden, *Political Development*, 79–82.

62 M. P. Kilaini, ‘Catholic evangelization’, 12–13; Rehse, *Kiziba*, 110.

63 Schmidt, *Historical Archaeology*, 29.

64 L. A. Fallers with S. B. K. Musoke, ‘Social mobility, traditional and modern’, in L. A. Fallers (ed.), *The King’s Men: Leadership and Status in Buganda on the Eve of Independence* (Oxford, 1964), 170–71; R. Reid, ‘The Ganda on Lake Victoria: a nineteenth-century East African imperialism’, *The Journal of African History*, 39:3 (1998), 349–50.

65 Cory and Hartnoll, *Customary Law*, 271.

66 BArch R 1001/1029, Haber, Report, 30 Jun. 1904, 6; Iliffe, *Tanganyika under German Rule*, 174; Iliffe, *Modern History*, 122.

67 BArch R 1001/5897, O. Feldmann, 1 Apr. 1908; BArch R 1001/5910, Governor Schnee to Dar es Salaam, 24 Jan. 1913, incl. Sacher, 19 Oct. 1912 and Penschke, 6 Nov. 1912.

68 Lwamgira, *History*, 137–8.

trade.<sup>69</sup> These various markers of different status also signaled Ziba royal authority, with its growing interest in modernization.

As intermediaries moving among the population, gland-feelers conducted essential epidemiological groundwork: surveying communities, documenting the incidence of cases in a population, and establishing site-specific records.<sup>70</sup> The success of Ziba auxiliaries also came to the attention of the acting Resident for Bukoba, who reported to the Colonial Office in May 1908:

The attempt of the leader of the sleeping sickness campaign in this district to have the sick located through [Africans], who are trained in the palpation of glands, has evinced fine success and led to the discovery of a whole number of typical cases of sickness. This searching for typical cases must be continued, if in a still more intensive and expanded measure than previously.<sup>71</sup>

Throughout that year, gland-feelers continued to canvass areas to the north and west of Kigarama. Several auxiliaries trained at Kigarama also began to expand searches into southern parts of the Residency, particularly the large kingdom of Ihangiro, from a base at Bukoba. Others had been posted alone or in pairs at key crossings on routes in and out of Uganda, such as the ferry on the Kagera River at Kifumbiro and on the main road south of Kigarama at Kikongoro. Soldiers – either *rugaruga* on the king's retainer or colonial African *askari* – were posted with these outlying gland-feelers, to assist with transporting suspected sleeping sickness carriers to Kigarama.<sup>72</sup> With an eye on trade and the impossibility of perfect monitoring, Kudicke reported that he had instructed auxiliaries posted at Kifumbiro and Kikongoro to avoid anything that could be cumbersome to the free traffic of healthy people. This signified a shift in German policy: Kudicke now instructed gland-feelers to pay attention to people only with 'significant' swelling, and had begun to issue permits from the camp that allowed a person treated for sleeping sickness to travel more widely in the district.<sup>73</sup> These passes presaged those proposed for people moving between Belgian and German territories around Lake Tanganyika, and echo the 'health passports' issued by doctors in other areas affected by epidemic sleeping sickness before the war.<sup>74</sup> This less stringent approach reflected the view that the majority of sleeping sickness cases in the district had been identified and that the disease was in check locally, even if existing cases could not be cured. It also suggests a recognition of the limitations of the campaign and the importance of proceeding in a way that did not disrupt the rhythms of trade and movement or alienate the population. However, policies remained stricter with respect to people traveling to and from Uganda, who continued to be closely scrutinized.<sup>75</sup>

69 B. Weiss, 'Dressing at death: clothing, time, and memory in Buhaya, Tanzania', in H. Hendrickson (ed.), *Clothing and Difference: Embodied Identities in Colonial and Post-colonial Africa* (Durham, NC, 1996), 133–54.

70 Hunt, *Colonial Lexicon*.

71 BArch R 1001/5898, Gudowius, Report, 31 May 1908, 59–60.

72 M. Moyd, 'Becoming askari: African soldiers and everyday colonialism in German East Africa, 1850–1918' (unpublished PhD thesis, Cornell University, 2008).

73 BArch R 1001/5899, R. Kudicke, Report, 18 Dec. 1908, 1.

74 Lyons, *Colonial Disease*, 199–206; Headrick, *Colonialism, Health and Illness*, 89–91.

75 BArch R 1001/5898, R. Kudicke, 'Bericht über die Bekämpfung der Schlafkrankheit im Bezirk Bukoba 1. Mai bis 31. Juli 1908', undated 1908, 1.

Kudicke's instructions to the gland-feelers remind us that many methods of medical diagnosis were not yet standardized in the early twentieth century, least of all in terms of sleeping sickness.<sup>76</sup> Despite crediting gland-feelers with a great number of new cases, Kudicke acknowledged in December 1908 that examination and screening procedures were generally flawed, and noted that 'individual observations indicate that gland-swelling to the extent which we consider typical develops comparatively late'.<sup>77</sup> Such ambiguity meant that neither German doctors nor gland-feelers had a truly reliable means of detecting the early stages of infection. Without an alternative, however, the search for swollen glands and other telltale symptoms continued to guide the anti-sleeping sickness campaign.

## TROUBLE IN THE FIELD

Camp doctors at Kigarama recognized the importance of the Ziba population's tolerance of, if not participation in, campaign measures – hence the use of African auxiliaries. Gland-feelers' position between newly imposed colonial technologies of disease prevention and the potential targets of these interventions awarded them significant discretionary power. Judgments about the people they encountered – about who might be sick and might be removed to the camp at Kigarama, and who could remain at home – were at the core of gland-feelers' work. People subject to examination used a range of strategies in response, from negotiation to outright evasion. Challenges to gland-feelers' efficacy resonated within particular Ziba political and social frameworks, in addition to signaling a rejection of colonial health interventions. The trouble that gland-feelers encountered in the field mirrored a change in the camp's fortunes, with repercussions for both the Ziba court and colonial officials.

Kigarama intake charts showed fewer cases in late 1908, and reports indicate that the cohort of gland-feelers was reduced that September. Several auxiliaries remained on the payroll into 1909, mostly posted at transit checkpoints, the Kifumbiro ferry, and to monitor ship and caravan traffic in Bukoba town. After over a year of work, and more than two years after the establishment of the camp, German officials began to question the efficacy of gland-feelers working near Kigarama. They believed that gland-feelers were missing suspected cases of sleeping sickness in the field either because they were being bribed not to report them, or because they were not searching areas as directed. In Kiziba, concerns began to surface in the monthly reports from Kigarama. Kudicke wrote of efforts to search neighboring Bugabu in late 1908: 'Doubtless multiple sick people have been overlooked by the gland-feelers. Inspection by Europeans therefore cannot

76 O. Amsterdamska, 'Demarcating epidemiology', *Science, Technology & Human Values*, 30:1 (2005), 17–51; M. Worboys, 'Tropical diseases', in W.F. Bynum and R. Porter (eds.), *Companion Encyclopedia to the History of Medicine, Volume I, Art and Science of Medicine*, (London, 1993), 527; M. Worboys, 'The emergence of tropical medicine: a study in the establishment of a scientific specialty', in G. Lemaine, R. Macleod, M. J. Mulkay, and P. Weingart (eds.), *Perspectives on the Emergence of Scientific Disciplines* (Chicago, 1976), 75–98.

77 BArch R 1001/5898, R. Kudicke, 'Bericht ...', undated 1908, 3.



be spared.<sup>78</sup> Dr Georg Ullrich, who temporarily replaced Kudicke as the supervising doctor at Kigarama in 1909, complained:

At the beginning of March, the sanitation under-officer [sic] stationed here was sent out in order to check on the gland-feelers active in the district and to survey the western part of Kiziba for the presence of [people with sleeping sickness]. 62 people with suspicious glands were discovered by him, which had escaped the gland-feelers. . . . It speaks in no way for an intensive activity of the gland-feelers, when so many suspected [cases] in a relatively small district have evaded [them], which are found by a European within 5 days, 2 of which are lost to the walk out and back.<sup>79</sup>

Despite the fact that of the 62 suspected cases that Ullrich's junior colleague found, only one showed trypanosomes in the bloodstream, the inconsistency between what African auxiliaries reported and what European superiors found on their own investigation troubled doctors. German criticisms of Ziba auxiliaries' work were also deeply colored by racialized evaluations of African dedication to the work. The initial response was increased oversight by European officers, although this could only be a temporary solution, given limited numbers of European personnel and the importance of auxiliaries in facilitating the campaign among the local populace. Moreover, the gland-feelers' supervisors gradually came to see the wage structure itself as an issue. Of Ziba gland-feelers at work near Bukoba, the station doctor wrote:

In general the gland-feelers bring many fewer people to examination themselves. I have the feeling that these people, employed with a set monthly wage, now limit themselves to making a small circuit through their area from time to time and then to bring this or the other man to Bukoba for examination, in order to not seem completely inactive.<sup>80</sup>

The monthly wage, in other words, did not constitute an adequate incentive.

Thus in mid-1909, the set monthly wage for gland-feelers was all but eliminated in the southern part of Bukoba and in Kiziba, with the exception of men stationed at transit points. Gland-feelers bringing verified cases of sleeping sickness to a camp would receive three rupees only, and no wage otherwise; but now, sick people who voluntarily came to camp would also receive a payment of three rupees.<sup>81</sup> German officials apparently did not consider, or at least did not admit, that the proportion of positive cases among the population might have declined to levels difficult to detect.

At the same time, two separate but closely related problems also emerged: allegations of extortion against gland-feelers and flight from gland-feelers' examinations into British territory. Gland-feelers' work was predicated on a novel exchange unlike other wage work for the colonial administration. Rupees changed hands around the delivery of a person to the camp and the confirmation of trypanosomes in that person's body by the camp doctor. The reward for each positive case was explicitly intended to 'spur [gland-feelers] on to eager action', yet the exchange of money for potential patients was inherently problematic.<sup>82</sup>

78 BArch R 1001/5899, R. Kudicke, Report, 18 Dec. 1908, 4.

79 BArch R 1001/5901, G. Ullrich, Report, 31 Mar. 1909.

80 BArch R 1001/5901, Ruschhaupt, Report, 1 Jul. 1909.

81 *Ibid.*

82 *Ibid.*

As intermediaries between king, camp, and people, they were subject to competing claims and conflicting responsibilities. Kudicke and subsequent camp doctors needed the gland-feelers to be broadly familiar with their territory, but also wanted them to be neutral, unbiased, and scientific, bringing in all suspected cases of sleeping sickness to the camp where the microscope would ideally deliver a verdict of infection or health. But familiarity could also potentially be a liability, when relations through clan lineage or family connected local auxiliaries to the people they examined. The gland-feelers' rootedness in Kiziba, which initially made them attractive as auxiliaries, also rendered them susceptible to claims upon the use of their discretionary power: whether to leave an older relative in peace, or to delay removal of household members until planting or harvest was done, or to identify a rival as a 'suspicious' case. Kudicke began to recognize the potential for trouble late in 1908, noting that 'in order to prevent colored gland-feelers being enticed, perhaps, to corruption, it is ordered that they must change their area from time to time (in Bugabu as well as in Kiziba)'.<sup>83</sup> Transferring gland-feelers to less familiar surroundings restored neutrality to their work and eliminated possible 'corruption', and promised better returns, ironically, than deploying them closer to home as originally planned.

Two further cases shed light on the tensions created by the combination of subjective identification of the 'right' kind of swollen glands, the cash bounty per positive case, and the potentially serious impact of removal to the Kigarama camp. On Bumbire Island, south of Bukoba, gland-feelers trained at Kigarama had come into conflict with the population and complained about the increasing resistance among the latter to examination. The supervising doctor noted that askari had to be sent in 'to enable the gland-feelers to carry out their charge' among the 'particularly hard-headed' islanders. On the other hand, however, 'grievances from the people had come in about blackmail from the gland-feelers'. In one such case, a Kigarama-trained gland-feeler found guilty of blackmail was punished.<sup>84</sup> Closer to home, Ullrich acknowledged the possibility of blackmail and extortion among gland-feelers working in Kiziba and neighboring Kianja. Although he had not personally heard of blackmail similar to cases on Bumbire, he believed it might well exist, 'at the very least with respect to the attainment of foodstuffs'.<sup>85</sup> In these predominantly agricultural kingdoms, people could offer payments of food to auxiliaries in return for overlooking a household or an individual with suspicious glands.

Recognizing that both auxiliaries and the people they examined acted to protect their own interests should not lead us to conclude that the gland-feelers were a particularly venal cohort of men. Emily L. Osborn, Nancy Hunt and others have seen the enterprising use of colonial employment for social and economic mobility as a hallmark of the emergence of a new class of African colonial functionaries in the early twentieth century.<sup>86</sup> Further, to read negotiations and counter-payments as one-sided, driven by greed and abuse of power by functionaries of colonial public health, ignores gland-feelers' position in the Ziba political world and the agency of Ziba households. Negotiations

83 BArch R 1001/5899, R. Kudicke, Report, 18 Dec. 1908, 4.

84 BArch R1001/5901, Ruschhaupt, Report, 1 Jul. 1909, 2; BArch R 1001/5899, Marshall, 7 Jan. 1909.

85 BArch R 1001/5903, G. Ullrich, Report, 1 Jul. 1909.

86 Osborn, 'Circle of Iron'; Osborn, Lawrance, and Roberts, *Intermediaries, Interpreters, and Clerks*; Hunt, 'Letter writing'.

and counter-payments could reflect an effort by households to maintain historical forms of exchange, such as the collection of tribute or ‘first fruits’ by young men of the palace, within which people acknowledged the *mukama*’s extractive rights and reaffirmed ties between king, people, and prosperity.<sup>87</sup> These negotiations also suggest that people attempted to regain some control of whether or when they or their kin were removed to the camp. Interactions around examination, cast negatively by colonial officials as African corruption or blackmail, reveal complex layers of negotiation between gland-feelers and households generated by the circulation of wages, bounties, and bodies from Kigarama.

While some people engaged the gland-feelers, some fled examination entirely. This, rather than reports of blackmail, was seen as the most damaging outcome of gland-feelers’ work. Flight from the camp at Kigarama occurred regularly, but involved relatively small numbers – worrisome, no doubt, but regarded by camp doctors as unavoidable. The departure of entire families or villages after an auxiliary’s circuit through the area was an entirely different matter. Early in 1909, gland-feelers traveled through western Kiziba, followed by a junior German officer’s tour through the area; many people identified for further examination did not turn up at the camp. Of those, nearly half ‘emigrated with their families and all their possessions to British territory, according to the katikiros of the relevant districts’.<sup>88</sup> In July 1909, Dr. Ullrich reported of kingdoms near Kiziba that the ‘constant presence of a gland-feeler had led to agitation in the population, resulting in the migration of entire families . . . over the British border’.<sup>89</sup> Such uncontrolled mobility presented an administrative problem for the campaign.

Read through the lens of precolonial chiefly politics in the interlacustrine kingdoms, flight from auxiliaries and avoidance of sleeping sickness campaign surveillance can be understood as a response to the *mukama* and his chiefs, as well as to the camp itself. Colonial ethnographers Hans Cory and M. M. Hartnoll noted that emigration could be a check on a king’s tendency toward ‘despotism’, while Goran Hyden’s subsequent research suggested that ‘the only way a commoner could show withdrawal of support for his superior was by migrating to another area’.<sup>90</sup> While the extent of outward migration in Buhaya is not well-documented, it was certainly a key means of expressing displeasure with political leaders elsewhere in the precolonial period.<sup>91</sup> The movement of households or villages, which colonial doctors saw as a response to gland-feelers’ search for sleeping sickness victims and which represented a troublesome administrative problem, would also have registered as a response to gland-feelers as emissaries of the king and the camp as an institution associated with the Ziba court. Flight out of Kiziba, or to a district further away from the palace, could be read as a rejection of royal authority and a critique of Mutahangarwa’s cooperation with the colonial authorities. It may also be seen, as we

87 Hanson, *Landed Obligation*, 63–4 regarding tribute and obligation in Buganda.

88 BArch R 1001/5901, G. Ullrich, Report, 31 Mar. 1909.

89 BArch R 1001/5903, G. Ullrich, Report, 1 Jul. 1909.

90 Cory and Hartnoll, *Customary Law*, 264; Hyden, *Political Development*, 89; Hanson, *Landed Obligation*, 61–72.

91 See, for example, J. Giblin, *Politics of Environmental Control*, ch. 8.

will see below, as reflecting a lack of faith in the treatments offered at Kigarama, and anxiety about the health of the kingdom more broadly.

What people in the countryside may have known or heard about events at Kigarama affected how they received gland-feelers who circulated among their villages and farms. Ziba responses changed over the course of the campaign. German officials were quick to mention, however obliquely, the power of superstition and rumor in the Ziba population; they were less eager to recognize Ziba responses as judgments about the efficacy of treatment offered. Doctors acknowledged rumors about procedures and treatments at the camp, and although they provided only limited detail in reports to their colonial superiors, these reports indicate that Ziba people were well aware of what happened following positive diagnosis: namely, subjection to several months of injection with atoxyl and other drugs.<sup>92</sup> Some of these drugs were experimental; none were tolerated well over the longer term.<sup>93</sup> Ullrich linked the ‘duration of treatment’ to the serious discredit of the camp and believed people were hiding from investigation effectively: the six gland-feelers sent out under the auspices of Ullrich and Mutahangarwa in 1909 discovered only one sick person in the course of a month.<sup>94</sup>

Understanding Ziba frameworks of healing and treatment-seeking sheds further light on why gland-feelers ran into trouble in the field. Both colonial and African narratives of sleeping sickness investigations in the early twentieth century emphasize the importance of close proximity in identifying people who may have been sick. Finding suspected cases of sleeping sickness required touch – literally getting hold of someone – which may have been consistent with the methods and goals of colonial public health campaigns but which was at odds with Haya models of healing and ways of ordering social interactions. Finding possible signs of sleeping sickness required scrutiny of particular parts of the body and close physical contact. Such examinations could be coercive, uncomfortable interactions:

The Medical Officer sent young men all over the villages to go and press the necks of the people to see those who had signs of Botongo disease. If they found any, they would send the person to Kigarama for treatment. ... They captured a lot of people, but when some saw how the Doctor pierced their shoulders injecting them, they feared and migrated to other areas. The doctor continued capturing people and taking them to Kigarama and those who did not have it, were not affected.<sup>95</sup>

It was very likely gland-feelers who ‘captured’ people to check for signs of sleeping sickness. What made this interaction fraught was not the use of touch as a diagnostic tool, but rather who was touching whom and in what context, indicating that gland-feelers’ work was perhaps inherently hindered by factors that colonial doctors had not begun to consider.

92 BArch R 1001/5898, R. Kudicke, ‘Bericht ...’, undated 1908, 2.

93 D. Neill, ‘Paul Ehrlich’s colonial connections: scientific networks and sleeping sickness drug therapy research, 1900–1914’, *Social History of Medicine*, 22:1 (2009), 61–77.

94 BArch R 1001/5903, G. Ullrich, Report, 1 Jul. 1909; BArch R 1001/5901, G. Ullrich, Report, 31 Mar. 1909.

95 Lwamgira, *History*, 138.

The examinations initiated by gland-feelers were different from other interactions centered on healing, which sought to resolve individual suffering, collective misfortune, or layered combinations of both, and which employed medicines and practices within particular social and moral frameworks.<sup>96</sup> Ziba people sought healers, submitting to patient-driven practices of diagnosis and healing that, at the time, likely involved palpation, piercing the skin, or introducing substances into the body.<sup>97</sup> By contrast, auxiliaries working for the German camp, wearing European-style clothes, sometimes accompanied by colonial police or soldiers, would not have operated within the realm of familiar forms of diagnosis or healing. These young, elite men demanded brief, specific physical contact with people across age and gender boundaries, but they were not healers of any recognizable sort; their work was driven by the demands of the *mukama* and colonial state. Further, their work ran against historically-grounded ways of ordering marriage, agriculture, land use, and labor that also directed relations between members of different clans, between elites and commoners, and, more generally, between the old and young, and men and women. Ziba gland-feelers circulated in a kingdom where relations remained, in the early twentieth century, strongly influenced by hierarchies of status.<sup>98</sup> Resistance to the gland-feelers was therefore in part rooted in their perceived transgression of accepted norms of interaction.

Auxiliaries' trouble in finding new cases was also connected to changing views of the Kigarama camp in late 1909. Kudicke returned after an eighteen-month furlough to find the campaign in disarray and the trust of the population 'gravely unsettled'.<sup>99</sup> To him, it was no wonder:

The grounds for this mistrust are of many different varieties: the people have seen that a great portion of the sick, who they themselves did not recognize as sick, deteriorated and died despite treatment. They have seen that almost all of the people who considered themselves sick – patients in the third stage – still could not be saved from death. They have lastly observed in many cases that sick people, who at the end of treatment found themselves in good condition, in the course of observation declined and in many cases perished shortly after being admitted again [to the camp]. It is hardly astonishing that these observations in many cases were interpreted in the sense that people first got sick in the camp and that upon people's death the treatment or taking of blood was to blame, not the sickness.<sup>100</sup>

Atoxyl, the promised cure, proved ultimately detrimental and sleeping sickness was fatal, meaning that people treated in the camp did not ultimately improve, rather worsened, after a stint there.

Meanwhile, Mutahangarwa had remained involved in the use of gland-feelers in Kiziba at least through late 1909, as they were deployed and then withdrawn from regular work in the kingdoms.<sup>101</sup> Trouble for the gland-feelers and the camp meant trouble for the *mukama* and eroded his support for the sleeping sickness campaign. By late 1910,

96 Schoenbrun, 'Conjuring the modern'.

97 Rehse, *Kiziba*, 137–9.

98 For a similar situation in Belgian Congo, see Lyons, *Colonial Disease*, 184–5.

99 BArch R 1001/5905, R. Kudicke, Report, 25 Oct. 1910.

100 *Ibid.*

101 BArch R 1001/5901, G. Ullrich, Report, 31 Mar. 1909.

Kudicke commented, 'the measures of the sleeping sickness campaign do not find the same support from the side of Sultan Mutahangarwa and his katikiros as before'.<sup>102</sup> The camp's relative failure had political consequences for Mutahangarwa, whose position was intimately linked with the health of the kingdom. The decision to pull away from prior support of the sleeping sickness campaign involved political calculations that weighed the importance of cooperation with the sleeping sickness campaign for his relationship with German colonial authorities against the importance of the stability and legitimacy of royal power among his people in Kiziba.

But why, and why at that time? Kudicke discussed the matter with 'katikiros' – the king's ministers or perhaps, here, village chiefs – and he learned that people with sleeping sickness living in the villages had, as he noted, 'emancipated themselves from the authority of the katikiros more than was good'.<sup>103</sup> The people who sought to 'emancipate' themselves from traditional authority were not untreated cases of sleeping sickness, but rather people who had been diagnosed and treated at the Kigarama camp. Their relationship with Ziba leaders may have begun to change because the camp had provided an alternative source of material goods and also of healing. Yet the material rewards available were somewhat diminished once treatment became more ambulatory in nature, while atoxyl and the other drugs offered at the camp hurt more than they healed. More likely, those people who increasingly challenged royal authority were those with personal experience of the camp, with knowledge of failed and indeed harmful treatments. With the king and young men of the palace closely associated with the camp, criticism of the camp implied disapproval of the palace. Rather than demonstrating royal responsibility for the health of the kingdom, the camp was used to call such responsibility into question and, perhaps, to offer more radical challenges to Mutahangarwa's legitimacy generally. By establishing a new distance between the palace and the camp, Mutahangarwa separated himself from discontent with the sleeping sickness campaign.

By late 1910, Kudicke judged gland-feelers' searches in Kiziba to be 'on the whole, fruitless' and stopped deploying them. His decision to discontinue the use of Ziba auxiliaries was made with the stability and future of the sleeping sickness campaign in mind, while also reflecting the decreasing number of cases of sleeping sickness in Kiziba proper. Indeed, Kudicke subsequently proposed an end to the use of atoxyl at Kigarama, in an apparent attempt to restore goodwill. His suggestion soon after for Kigarama to become a polyclinic likewise implies an attempt to attract people for treatment and to continue to monitor disease incidence among the Ziba population.<sup>104</sup>

Although no longer deployed to search independently for the sick in Kiziba and elsewhere in the Bukoba residency, gland-feelers remained posted at the main ferry on the Kagera River and at key crossings of marshes and of main roads until the outbreak of the First World War. A few of the men trained at Kigarama by Kudicke went

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102 BArch R 1001/5905, R. Kudicke, Report, 25 Oct. 1910.

103 *Ibid.*

104 BArch R 1001/5892, E. Studel, Excerpt from Report, 27 Apr. 1912, 13.

on to work for the sleeping sickness campaign on the coastal lowlands around Lake Tanganyika after 1912.<sup>105</sup> Now known primarily as ‘Bukoba boys’, these select gland-feelers trained at Kigarama became colonial functionaries of a different sort, their conduct apparently reliable and their skills valuable to European doctors.<sup>106</sup> Colonial officers sought to use their experience in identifying potential cases of sleeping sickness as they extended the campaign’s reach into German Urundi.

## CONCLUSION

While extant sources do not reveal what Mutahangarwa thought about the drugs and injections offered at Kigarama, his initial support of the camp appears politically sound. It was in his interest to promote the use of biomedical technologies against sleeping sickness, in line with his responsibility for the health of the kingdom. For a time, the king maintained a balance between this role, on the one hand, and the demands of the German colonial administration on the other. But as sleeping sickness progressed in Ziba bodies, as increasingly troublesome auxiliaries fanned out across the kingdom, and as people returned to their homes from Kigarama unhealed, the equilibrium began to break down. The history of the sleeping sickness camp at Kigarama demonstrates the precariousness of both African royal and European colonial power in the early colonial period.

The history of Ziba medical auxiliaries themselves reveals the complexity of decisions made by people contending with new assertions of colonial power and biomedical claims to heal and cure. Relationships which appear in the colonial archive as straightforward collaborations and transactions were in fact the subject of continual negotiation, driven by political expediency and evaluations of personal or familial gain and loss. Social structures such as the *muteko* age-sets transcended but also shaped the nature of both the cohort of gland-feelers and the work that they did. These auxiliaries also embodied Ziba royal power at a time of transition, as interest in modernization intersected with ‘traditional’ bases of legitimacy. Epidemic sleeping sickness and colonial public health interventions meshed with political and social change in Kiziba.

Gland-feelers tested Ziba communities’ tolerance for colonial public health interventions and introduced new forms of economic exchange, centered on the discovery and delivery of people infected with sleeping sickness. As intermediaries pioneered the exchange of bodies for rupees, the population of Kiziba responded with both negotiation and evasion, forcing a change in the strategy of both colonial doctors and the king, and demonstrating the continuing relevance of ideas about royal power, reciprocal obligation, and social stability. The presence of gland-feelers had a direct impact on relations between the people and their *mukama*, pushing the Ziba king to re-evaluate his engagement with colonial authority and his support for public health interventions. Gland-feelers’

105 BArch R 1001/5909, B. Eckard, Report, 1 Apr. 1912; BArch R 1001/5909, Vorwerk, Report, 4 Jul. 1912; BArch R 1001/5908, B. Eckard, Report, 1 Oct. 1911, 2–3.

106 J. Rich, ‘Searching for success: boys, family aspirations, and opportunities in Gabon, ca. 1900–1940’, *Journal of Family History*, 35:1 (2010), 9.

work also triggered a reassessment of the efficacy of those interventions by colonial medical officers. Representative of an experiment in colonial public health provision, Ziba auxiliaries nevertheless remained men with their own agendas, capable of independent action in the realms of politics and health in ways which neither the colonial authorities nor the Ziba court anticipated.