# 'If our cattle die, we eat them but these white people bury and burn them!' African Livestock Regimes, Veterinary Knowledge and the Emergence of a Colonial Order in Southern Rhodesia, c. 1860–1902

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This article discusses the micro-politics of knowledge in what became Southern Rhodesia by tracing the history of precolonial and early colonial interactions over African livestock regimes and biomedical approaches to the eradication of epizootics and panzootics. It demonstrates that political power determined which version of veterinary knowledge dominated and it explores the multiple functions played by colonial veterinary medicine as an opportunity for social control and 'performing' the alleged superiority of the settler society, as conquering livestock disease was integral to taming the local landscape. We show that the colonial veterinary establishment was still too slight by the end of the period under discussion to have a strong material (as opposed to ideological) impact, although assumptions about the superiority of veterinary knowledge and practice were entrenched. Moreover, divisions within the state and within the settler community inadvertently allowed local knowledge more power. We discuss the workings of late nineteenth and early twentieth century livestock management and healing regimes in both white and African communities and show how these regimes were contested over the time. We wish to historicise the decontextualised and romanticised view of local knowledge, by chiselling away at the taxonomic barrier between 'Western' and 'indigenous' knowledge - trying to demonstrate that those categories are fundamentally flawed.

Keywords

African livestock regimes, Southern Rhodesia, veterinary medicine, epizootics, indigenous knowledge systems

In 1901, veterinary officials and Native Department officers in Southern Rhodesia were officially instructed to *teach* Africans within their districts, the *proper* methods of curing livestock scab, and 'to personally superintend a number of operations conducted for such purposes in different parts of the district, *as object lessons for natives* ... *and to obtain the cooperation of missionaries, farmers and traders in teaching,* 

inducing and aiding natives to take proper steps to eradicate scab.'1 This directive displays the political dimensions of knowledge: it was simultaneously an attempt by the state to slot Africans into their world view and an effort towards replacing African livestock management techniques with a model approved by white veterinary experts. In the years that followed, these twin ambitions to spread modern methods of veterinary medicine and police their enforcement became more evident in the way regulations and instructions were crafted and disseminated. For instance, under the Animal Diseases Ordinance (1902), stock owners were obliged under law to report the presence of any disease among their herds to veterinary officers in their districts, police and native commissioners. By 1904, state cattle inspectors were granted powers to inspect and detect diseases among livestock in their districts. Yet, as late as 1927, almost paradoxically, Eric Nobbs, the director of agriculture in Southern Rhodesia, openly admitted that Africans (still) possessed an intimate knowledge of the medicinal virtues of herbs, root and bark which were 'similar in action to corresponding materials known to us, and in use are in more convenient form whether it be as purgatives, laxatives, diuretics, emollients, as stringers and so on.<sup>2</sup> This declaration offers rare evidence of official acknowledgement of the existence and even efficacy of African livestock regimes in Southern Rhodesia.

Nobbs' startling admission notwithstanding, the history of state veterinary services in Southern Rhodesia was largely characterised by attempts to replace and control African livestock regimes. In light of this, this article deliberately moves way from the earlier (important) efforts by Africanists<sup>3</sup> to uncover the contribution of African livestock regimes to 'Western veterinary science'. Instead, we examine the interactions of two knowledge bodies in the late precolonial and early colonial periods. We challenge two dangerous stereotypes that have seeped into the historiography. The first is the old colonial fabrication (embraced by the first generation of settler historians but pervasive today in popular culture) that local healing practices in Africa consisted of magic, witchcraft, sorcery, and spirit possession, set against a background of throbbing drums. The second is more recent and more well-intentioned but no less a fiction: that Africans possessed a pristine, homogenous, unchanging, hermetic and comprehensive set of veterinary solutions. Through examining the micro-politics of establishing and performing different knowledge bodies, by those in power, we show that African veterinary knowledge was neither static nor isolated, but rather accretive, drawing on Western knowledge at times, and both were syncretic and shifting.

<sup>1</sup> National Archives of Zimbabwe (NAZ), RG-P/AGR 5, General Instructions issued to officers charged with the administration of laws for the suppression of contagious and infectious diseases in animals in Rhodesia (1901), 12. Italics our own.

<sup>2</sup> E.A. Nobbs, 'The Native Cattle of Southern Rhodesia', South African Journal of Science, 24, 1927, 329–37. See also M.K.K. Mutowo, 'Animal Diseases and Human Populations in Colonial Zimbabwe: The Rinderpest Epidemic 1896–1898', Zambezia, 28, 1, 2001, 1–22.

<sup>3</sup> This term refers to a body of writing motivated by the desire to recover the African past and was, at times, strongly inspired by nationalism. Some of its practitioners have since been criticised for celebrating the African precolonial past uncritically – the so-called 'Merrie Olde Africa' approach, as A.G. Hopkins framed it. Se A.G. Hopkins, *An Economic History of West Africa* (London: Longman, 1973), 10, 27. See also G. Maddox, J. Giblin and I.N. Kimambo, *Custodians of the Land: Ecology and Culture in the History of Tanzania* (London: James Currey, 1996); D. Denoon and A. Kuper, 'Nationalist Historians in Search of a Nation: The New Historigraphy, *African Affairs*, 69, 277, October 1970, 329–49; A.J. Temu and B. Swai, *Historians and Africanist History: A Critique: Post-Colonial Historigraphy Examined* (London: Zed, 1981).

In order to approach the topic, we use the definition of 'micro-politics' to mean smallscale interventions that are used for governing the behaviour of groups.

Moreover, we demonstrate that state veterinary services were founded in and floundered in a highly racialised context.<sup>4</sup> We will contend that livestock disease management provided an opportunity for social control and 'performing' the supposed superiority of the settler state. In addition, we will argue that state veterinary services were considered by Southern Rhodesian settlers as a barometer for measuring the successes of colonial rule, since – we will argue – conquering livestock disease was primary in taming the local landscape.<sup>5</sup> However, we will add to an argument promoted by Andersson, that the ruling sect was comparatively limited in power at first; which allowed African knowledge more weight and more room to operate in the interstitial spaces.<sup>6</sup>

### **Existing Historiography**

Historians have long discussed cattle and African society. Studies (drawing on the first major investigation by Herskovits in the 1920s) have investigated the relationship between Africans and their cattle through the lens of the African Cattle Complex theory, which argued that African men fetishised cattle for cultural uses, especially social status, rather than for subsistence. A generation ago, historians pointed out that local ownership was not predicated only on cultural belief systems. For instance, Richard Mtetwa and Murray Steele have shown that Africans did not have an irrational Cattle Complex and were actually willing to sell their livestock to Europeans provided that they judged the prices offered to be adequate.<sup>7</sup> However, these studies were preoccupied with the exchange (economic) function of African livestock, eschewing the politics of veterinary knowledge both in the late precolonial and early colonial periods.

Drawing on the model offered by Diana Jeater, this study uses the development of veterinary medicine to understand 'what happens when humans encounter each other's societies in circumstances where they each find the other's behaviour strange and potentially threatening ... [It] focuses on how white administrators tried to make sense of African societies, but it is also about how the local peoples tried to make

<sup>4</sup> D. Gilfoyle, 'The Heartwater Mystery: Veterinary and Popular Ideas about Tick-Borne Animal Diseases at the Cape, c. 1877–1910', *Kronos*, 29, 2003, 139.

<sup>5</sup> See I. Scoones and W. Wolmer, 'Land, Landscapes and Disease: The Case of Foot and Mouth in Southern Zimbabwe', South African Historical Journal, 58, 2007, 42–64; R. Waller and K. Homewood, 'Elders and Experts: Contesting Veterinary Knowledge in a Pastoral Community' in A. Cunningham and B. Andrews (eds), Western Knowledge as Contested Knowledge (Manchester: Manchester University Press, 1997).

<sup>6</sup> Here we draw on J. Andersson, 'Administrators' Knowledge and State Control in Colonial Zimbabwe: The Invention of the Rural–Urban Divide in Buhera District, 1912–80', *Journal of African History*, 43, 1, 2002, 119–43. Andersson argues that we need a 'more regionally differentiated view of the role of the colonial state' which helps us to develop a consequently more differentiated view of African responses.

<sup>7</sup> R.M.G. Mtetwa, 'Myth or Reality: The "Cattle Complex" in South East Africa, with specific reference to Rhodesia', Zambezia, 6, 1, 1978, 23–35; M.C. Steele, 'The Economic Function of African-Owned Cattle in Colonial Zimbabwe', Zambezia, 9, 1, 1981, 29–48. See also G. Arrighi, 'Labour Supplies in Historical Perspective: A Study of the Proletarianization of the African Peasantry in Rhodesia', Journal of Development Studies, 6, 1970, 197–234; I.R. Phimister, 'Peasant Production and Underdevelopment in Southern Rhodesia, 1890–1914', African Affairs, 73, 291, 1974, 217–28; A. Shutt, 'The Settlers' Cattle Complex: The Etiquette of Culling Cattle in Colonial Zimbabwe, 1938', Journal of African History, 43, 2002, 263–86.

sense of the white people's interventions into their lives.'<sup>8</sup> Cattle are at the centre of this discussion, given their relative importance in the everyday lives of the local people, but generally the therapeutic ideas under discussion applied broadly to all types of livestock. Cattle were particularly important for their social, economic and religious uses, which included their role as a store of wealth, their use in *lobola* (bride-wealth) transactions, ploughing and transport, and as suppliers of milk and manure. At present there are histories that discuss livestock development,<sup>9</sup> but the history of veterinary medicine in Southern Rhodesia/Zimbabwe is almost unwritten except for isolated studies that trace how specific diseases that broke out during the early colonial period (such as East Coast fever, and foot and mouth disease) affected the beef industry in particular and the economy in general.<sup>10</sup> Indeed, more fundamental aspects relating to the relationship developing in the area between African livestock regimes and Western biomedical veterinary ideas prior to and immediately after white occupation have scarcely received historical analysis.

Besides attracting the attention of Africanists and environmental historians, professional veterinary and medical personnel as well as medical historians have examined the potential impact of local healing practices on the livestock economy. Dexter Chavunduka, a veterinary scientist and botanist discussed in detail later, was among the first researchers to identify some of the veterinary remedies used by Africans.<sup>11</sup> However, writing in the 1970s, he fell victim to the then popular notion among veterinary scientists that many local healing systems were archaic and irrational. Chavunduka declared that, 'to the less sophisticated African mind, derangement of health is attributed to some supernatural powers and evil spirits which cannot be remedied by medical treatment alone.'<sup>12</sup> From an almost antithetical perspective, local healing practices attracted the attention of public health professionals and medical historians during the 1980s and 1990s. Works by Steve Feierman and John Janzen, Gloria Waite, Terrence Ranger, Meredith Turshen, John Orley, Gordon Chavunduka and Michael Gelfand are more focused on public health issues.<sup>13</sup> Medical anthropologists and social historians have increased our understanding of the complexity

<sup>8</sup> D. Jeater, Law, Language, and Science: The Invention of the 'Native Mind' in Southern Rhodesia, 1890–1930 (Portsmouth: Heinemann, 2007), 1.

<sup>9</sup> Scoones and Wolmer, 'Land, Landscapes and Disease'; N. Samasuwo, 'Food Production and War Supplies: Rhodesia's Beef Industry During the Second World War, 1939–1945', *Journal of Southern African Studies*, 29, 2, 2003, 487–502; I.R. Phimister, 'Meat and Monopolies: Beef Cattle in Southern Rhodesia, 1890–1938', *Journal of African History*, 19, 3, 1978, 391–414.

<sup>10</sup> See C. van Onselen, 'Reactions to Rinderpest in Southern Africa, 1896–1897', *Journal of African History*, 13, 3, 1972, 473–88; P. Cranefield, *Science and Empire: East Coast Fever in Rhodesia and the Transvaal* (Cambridge: Cambridge University Press, 1991); Scoones and Wolmer, 'Land, Landscapes and Disease'; Mutowo, 'Animal Diseases and Human Populations in Zimbabwe'.

<sup>11</sup> D.M. Chavunduka, 'Plants Regarded by Africans as Being of Medicinal Value to Animals', *Rhodesian Veterinary Journal*, 7, 1, 1976, 6–8.

<sup>12</sup> Ibid, 8.

<sup>13</sup> S. Feierman and J.M. Janzen, 'Therapeutic Traditions of Africa: A Historical Perspective' in S. Feierman and J.M. Janzen (eds), The Social Basis of Health and Healing in Africa (Berkeley: University of California Press, 1992), 163–74; G. Waite, 'Public Health in Pre-Colonial East Central Africa' in Feierman and Janzen (eds), Social Basis of Health, 212–34; T.O. Ranger, 'Godly Medicine: The Ambiguities of Medical Missions in South Eastern Tanzania' in Feierman and Janzen (eds), Social Basis of Health, 256–84; M. Turshen, The Political Ecology of Disease in Tanzania (New Jersey: Rutgers University Press, 1984); John Orley, 'Indigenous Concepts of Disease and Their Interaction with Scientific Medicine' in E.E. Sabben-Clare, D.J. Bradley and K. Kirkwood (eds), Health in Tropical Africa during the Colonial Period (Oxford: Clarendon Press, 1980), 127–37; G.L. Chavunduka, 'The Organisation of Traditional Medicine in Zimbabwe' in M. Last and G.L. Chavunduka (eds), The Professionalization of African Medicine (Manchester: Manchester University Press, 1986), 29–50; M. Gelfand, 'The Traditional Shona's Attitude to Medicine', Central African Journal of Medicine, 18, 8, 1972, 164–5.

of healing regimes, settler rule, and how black people interacted with it (and under it) in diverse and shifting ways. For example, Karen Flint examines the changes in the medical, social, and political roles of healers in Zululand, a related context, and how these changed under white rule.<sup>14</sup> Luise White's pioneering work on rumour and history in colonial Africa is of importance to this study, especially the debates on the control of sleeping sickness in colonial Northern Rhodesia.<sup>15</sup> She looks at the interaction of African ideas on diseases and imperial science and settler ideas about the relationship between wild animals, tsetse flies, authority and shifting cultivation practices.<sup>16</sup> Since colonial stereotypes about the health of Africans were akin in some ways to those in veterinary issues, these studies are crucial in giving a wider context to what this study seeks to explore.

As a 'tool of empire', veterinary medicine made it possible for colonial farmers to overcome constraints on livestock production as well as to hold competition from African producers at bay.<sup>17</sup> Ian Scoones and William Wolmer have argued that the development of veterinary medicine was linked to the protection of the settler beef industries.<sup>18</sup> In fact, the Southern Rhodesian Veterinary Services Department, which was tentatively established in 1896, grew as an attempt to deal with recurrent disease that hampered the growth of a beef industry but this process occurred, sometimes deliberately, and sometimes inadvertently, at the expense of African livestock regimes, as we will show.

In a rebuttal of the triumphalist accounts of pioneer white settlers in southern Africa, and writing specifically about the role of colonial experts in the production of 'scientific' knowledge, John McCracken contends that the biggest fault of these specialists was the assumption that 'Africa had nothing to offer them.'<sup>19</sup> He argues that even well-intentioned settler medicinal interventions were often fatally flawed by paternalism and authoritarianism. The knowledge of the peoples being colonised (and later subjected to 'development') was passively overlooked or actively contested as a stumbling block to rational progress. Colonial experts were used to oversee and 'legalise' the appropriation of land for white farmers and mining corporations, to designate African 'reserves', to administer regulations concerning 'correct' methods of land and livestock husbandry, and they often performed paramilitary duties whenever the state felt its power was under threat.<sup>20</sup>

David Gordon and Shepard Krech, among others, have argued that even areas of colonial power that seemed most benevolent and most prone to indigenous influences in fact became responsible for the suppression of local knowledge, the reordering

<sup>14</sup> K. Flint, Healing Traditions: African Medicine, Cultural Exchange, and Competition in South Africa, 1820–1948 (Athens OH: Ohio University Press, 2008).

L. White, Speaking with Vampires: Rumour and History in Colonial Africa, (Berkeley: University of California Press, 2000), 90.
 Ibid, 208.

<sup>17</sup> V.E.M. Machingaidze, 'The Development of Settler Capitalist Agriculture in Southern Rhodesia with Particular Reference to the Role of the State, 1908–1939 (Unpublished PhD thesis, University of London, 1980).

<sup>18</sup> Scoones and Wolmer, 'Land, Landscapes and Disease'.

<sup>19</sup> J. McCracken, 'Experts and Expertise in Colonial Malawi', African Affairs, 81, 322, 1982, 101–116. See also R. Waller, "Clean" and "Dirty": Cattle Disease and Control Policy in Colonial Kenya, 1900 to 1940', Journal of African History, 45, 2004, 45–80.

<sup>20</sup> M. Bratton, 'Settler State, Guerrilla War and Rural Underdevelopment in Rhodesia', Issue: A Journal of Opinion, 9, 1/2, 1979, 56.

of local livelihoods and entrenchment of colonial hegemony.<sup>21</sup> Socio-environmental historians<sup>22</sup> including William Beinart, Karen Brown and Daniel Gilfoyle have use-fully demonstrated how local knowledges contributed to the rise of 'colonial science' in the colonies.<sup>23</sup>

However, in a bold revisionist piece, they have argued that experts have had perhaps an unfairly bad press by historians. Instead, they pragmatically point out that, in South Africa, veterinary research and regulation consumed half the colonial agricultural budget (from the appointment of the first vets in the 1870s to the 1930s). They argue that veterinary intervention was often both well-intentioned and beneficial, and that experts sometimes used local knowledge.<sup>24</sup> Gilfoyle has also pointed out how veterinary scientists offered relatively benign veterinary care, able to escape some of the colonial mandate to cultivate a culture of consent among African livestock owners.<sup>25</sup> What is needed though is a discussion of how these veterinary interventions were experienced by African livestock owners whose prior knowledge of livestock management ran contrary to biomedical practice.

There were predictable disparities in the allocation of state veterinary officials between black and white farmers,<sup>26</sup> with the latter receiving the direct and exclusive aid of almost all state veterinarians. Paradoxically, veterinary interventions for blacks were bad, but also insufficient. (This recalls the tale told in modern day Zimbabwe about two portly old ministers complaining about a Mugabe-hosted state banquet: the first one grumpily complains, 'The food is so bad!' 'Yes,' says the other, 'and there is so little of it!') Yes, the vet service was bad and there was too little of it. But our main point here is that Africans were still at the receiving end of coercive veterinary interventions and policies, and were less likely to receive curative and preventative treatments that would help them and their own animals individually (unlike white farmers) – and more likely to be directed to cull or quarantine for the 'common good' (which usually meant not polluting or infecting the white-owned section of the national herd).<sup>27</sup>

The arguable blind spot for both Africanists and environmentalists is that, while the former overestimated African agency and generalised the spatial position of colonial 'experts' in the imperial design, the latter sometimes underestimated the

<sup>21</sup> D.M. Gordon and S. Krech (eds), Indigenous Knowledge and the Environment in Africa and North America (Athens OH: Ohio University Press, 2012). See also J. Ferguson, The Anti-Politics Machine: 'Development', Depoliticization and Bureaucratic State Power in Lesotho (Cambridge: Cambridge University Press, 1990); P. Harries, 'Knowledge in Africa: Some Historical Perspectives', http://www.historicalstudies.uct.ac.za/hst/seminar/patrick-harries-knowledge-in-africa#sthash.LrWFLIxp.dpuf.

<sup>22</sup> H. Tilley, 'African Environments and Environmental Science: The African Research Survey, Ecological Paradigms and British Colonial Development, 1920–1940' in W. Beinart and J. McGregor, Social History and African Environments (Oxford: James Currey, 2003). See also K. Brown and D. Gilfoyle (eds), Healing the Herds: Disease, Livestock Economies and the Globalisation of Veterinary Medicine (Athens OH: Ohio University Press, 2010).

<sup>23</sup> W. Beinart, K. Brown and D. Gilfoyle, 'Experts and Expertise in Colonial Africa Reconsidered: Science and the Interpretation of Knowledge', African Affairs, 108, 2009, 432.

<sup>24</sup> Ibid, 413.

<sup>25</sup> Gilfoyle, 'Heartwater Mystery', 139–60.

<sup>26</sup> Pamela S.A. Woods, Wynne J. Herman, H.W. Ploeger and David K. Leonard, 'Path Analysis of Subsistence Farmers' Use of Veterinary Services in Zimbabwe', *Preventive Veterinary Medicine*, 61, 4, 2003, 339–58. For studies that deal with other settler economies see L. Hughes, ""They Give Me Fever": East Coast Fever and Other Environmental Impacts of the Maasai Moves' in Brown and Gilfoyle (eds), *Healing the Herds*, 146–62; Phule Phoofolo, 'Epidemics and Revolutions: The Rinderpest Epidemic in the Late Nineteenth Century Southern Africa', *Past and Present*, 138, 1993, 112–43.

<sup>27</sup> Commonalities certainly exist with other settler economies like colonial Kenya, in which 'nine out of ten of the [veterinary] department's work consists of free preventive and curative treatment given to the property of the Europeans, who own[ed] only five per cent of stock in this country.' Norman Leys, a Kenyan medical doctor, cited by Hughes, "'They Give Me Fever," 156.

influence of racial and political ideologies in the provision of veterinary services in the colonies. Both take a broad view geographically and historiographically. While we draw on the valuable work of both schools, we want to demonstrate that local singularity was more important than a regionalist historiographical model allows.

While the rising challenges to biomedical approaches have rekindled interest in local healing practices, this interest, led as it is by sociologists and veterinary and animal scientists, is mainly with development in mind – especially presentist concerns over how local healing practices can be preserved and applied. With the failure of the grand theories of development, the focus of many academics has moved to more modest and contextual theories that are location- and time-specific.<sup>28</sup> However, Briggs has cautioned that the romanticisation and decontextualisation of indigenous knowledge systems (IKS) have thwarted earlier hopes that IKS would offer a way out of the development impasse.<sup>29</sup>

Histories of a specific region in a clearly delineated time period, like ours offered in this article, help to avoid these pitfalls by offering an ideographic and critical history of local knowledge which shows its diachronic and hybrid nature. We also challenge the romantic notion that it was the marginalised and poor who held indigenous knowledge; it was frequently held and mobilised by local African elites in the performance and buttressing of their own power. Rather than an established body of knowledge that can 'be owned, written, and transmitted unchanged over time', indigenous knowledges may operate as 'strategic manoeuvres that challenge the imposition of power and make claims to power'.<sup>30</sup> Briggs also notes that most indigenous knowledge research has been into soil classification and woodlands, and significantly less into livestock management – so our article contributes in filling this gap.<sup>31</sup> He points out that most IKS research has been on empirical and practical knowledge rather than the sociocultural (and we would add, 'historical') contexts that used (and we would add, 'produced') them.<sup>32</sup> We hope to address a small facet of this large area in this article.

There has been some recent research into IKS and livestock management. For example, Matekaire and Bwakura, who examine community based solutions to farmers' livestock problems in Mashonaland East, West and Central in post-independence Zimbabwe, conclude that 95 per cent of their sample never used veterinarians except for cattle dipping, which was mandatory.<sup>33</sup> Their findings are similar to those of Gueye on the use of ethnoveterinary medicine in poultry husbandry systems in postcolonial Africa.<sup>34</sup> Gueye argues that resource-poor village poultry farmers in Africa have neither

<sup>28</sup> Arun Agrawal, 'Dismantling the Divide between Indigenous and Scientific Knowledge', Development and Change, 26, 3, 1995, 413.

<sup>29</sup> John Briggs, 'The Use of Indigenous Knowledge in Development: Problems and Challenges', Progress in Development Studies, 5, 2, 2005, 99–114.

<sup>30</sup> D.M. Gordon and S. Krech, 'Indigenous Knowledge and the Environment' in D.M. Gordon and S. Krech (eds), Indigenous Knowledge and the Environment in Africa and North America (Athens OH: Ohio University Press, 2012), 2.

<sup>31</sup> Briggs, 'Use of Indigenous Knowledge', 101. He acknowledges exceptions like M. Bollig and A. Schulte, 'Environmental Change and Pastoral Perceptions: Degradation and Indigenous Knowledge in Two African Pastoral Communities', *Human Ecology*, 27, 1999, 493–514.

<sup>32</sup> Briggs, 'Use of Indigenous Knowledge', 101.

<sup>33</sup> T. Matekaire and T.M. Bwakura, 'Ethno-veterinary Medicine a Potential Alternative to Orthodox Animal Health Delivery in Zimbabwe', International Journal of Applied Research in Veterinary Medicine, 2, 4, 2004, 269–73.

<sup>34</sup> E.F. Gueye, 'Ethno-veterinary Medicine against Poultry Diseases in African Villages', World's Poultry Science Journal, 55, 1999, 187-98.

money nor access to chemical medicines so they rely on indigenous knowledge to control various poultry diseases. Recently, Zimbabwe is among those countries said to be increasingly reclaiming – or resorting to – ethnoveterinary medicine because of collapsing state infrastructure.

A more recent article by Francis Dube examines the racial application of veterinary policies, in the period immediately after this article's focus.<sup>35</sup> Indeed, this research is of crucial importance to our argument as it also touches on East Coast fever control measures, which we explore. Mwatwara and Swart's examination of how colonial 'experts' and African livestock owners related to each other – and their animals – from around 1912 to 1930 also exposes key aspects of the colonial encounter.<sup>36</sup> What we do in this study is partly captured in Beinart and Brown's recent book on African livestock knowledge and livestock health, which explores the contemporary manufacture of 'knowledge' and how it is used in modern day South Africa.<sup>37</sup> However, unlike these studies, our article deals with a much earlier period when the imposition of white authority was still in its infancy and therefore weaker.

### African Livestock Regimes Prior to White Occupation

In this section we explain the ambiguities and complexities of diverging ideas about animal disease in the period before the imposition of white occupation, and the roleshifting loci of power played. Cohn shows that power was, at least in part, enacted through visible display and that the theatre of power was managed not only by military men but by experts, especially from the nineteenth century. This was rendered visible by the state as part of its monopoly on knowledge legitimation.<sup>38</sup> We will show that prior to the imposition of white authority, conventional veterinary knowledge espoused by the first generations of Western explorers, botanists, doctors and missionaries from the 1830s onwards had very little if any impact upon African livestock regimes in Southern Rhodesia, given their initial lack of political power.<sup>39</sup>

The period after the 1860s offers an interesting case for historical examination as it was characterised by the cross-pollination of veterinary knowledge among Africans, between Africans and European explorers, and also among the Western veterinary experts. Indeed, precolonial veterinary interactions provided not only an opportunity for 'multidirectional flows'<sup>40</sup> in the circulation of knowledge but also shaped the parameters of how various bodies of veterinary knowledge interacted in the colonial period that followed.

<sup>35</sup> F. Dube, "In the Border Regions of the Territory of Rhodesia, There Is the Greatest Scourge...": The Border and East Coast Fever Control in Central Mozambique and Eastern Zimbabwe, 1901–1942; *Journal of Southern African Studies*, 41, 2, 2015, 219–35.

<sup>36</sup> W. Mwatwara and S. Swart, 'Better Breeds? The Colonial State, Africans and the Cattle Quality Clause in Southern Rhodesia, c. 1912–1930', Journal of Southern African Studies (forthcoming).

<sup>37</sup> W. Beinart and K. Brown, African Local Knowledge and Livestock Health: Diseases and Treatments in South Africa (New York: James Currey, 2013).

<sup>38</sup> B.S. Cohn, Colonialism and Its Forms of Knowledge: The British in India (Princeton: Princeton University Press, 1996).

<sup>39</sup> Gordon and Krech, 'Indigenous Knowledge', 9.

<sup>40</sup> P. Harries, 'Knowledge in Africa: Some Historical Perspectives', http://www.historicalstudies.uct.ac.za/hst/seminar/patrickharries-knowledge-in-africa#sthash.LrWFLIxp.dpuf. Accessed 1 January 2015.



Figure 1: G. Liesegang, 'Nguni migrations between Delagoa Bay and the Zambezi, 1821–1839', *African Historical Studies*, 3, 2, 1970, 318

Population movement across Southern Africa triggered by the Mfecane in the early nineteenth century resulted in two groups of people, the Ndebele and Shangaan, settling in what later became Southern Rhodesia, while another, the Ngoni, passed through the territory (see Fig. 1).<sup>41</sup> These population movements and increased interactions with European explorers and missionaries from the 1850s are often examined in the context of the white occupation of the territory but they also involved the exchange of veterinary knowledge due to new veterinary challenges such as lung sickness among Ndebele cattle in 1861. This outbreak, as we will show, offers a useful starting point and a lens into how the cross-pollination of veterinary knowledge (including ideas, beliefs and practices) in the precolonial period helped to reshape

<sup>41</sup> A note on place names: the authors are aware of the danger of anachronism and the politics of nomenclature but will, for the sake of convenience, use names of places that were used during the colonial period.



Figure 2: Southern Rhodesia, c. 1902. Adapted from Cranefield, Science and Empire, 220

African livestock regimes. Just as in colonial Africa and North America, indigenous knowledges in precolonial Southern Rhodesia changed, adopted new forms, and appropriated other types of knowledge.<sup>42</sup> Nonetheless, although the Nguni migrations certainly facilitated the dissemination of certain Zulu environmental control methods against trypanosomiasis to Southern Rhodesia, the extent to which all these factors influenced the development of therapeutic remedies during this time remains subject to debate.<sup>43</sup>

Precolonial ethnic groups (Shona, Ndebele, Shangaan/Hlengwe, Kalanga and Tonga) possessed a variety of domestic animals including indigenous fowl, pigs,

<sup>42</sup> Gordon and Krech, 'Indigenous Knowledge', 13.

<sup>43</sup> See K. Brown, 'From Ubombo to Mkhuzi: Disease, Colonial Science and the Control of Nagana (Livestock Trypanosomosis) in Zululand, South Africa, c. 1894–1953', Journal of the History of Medicine and Allied Sciences, 63, 2008, 285–322.

dogs, goats, sheep and cattle for which they had developed healing regimes.<sup>44</sup> Oral tradition suggests that these animal sub-species had become well adapted to the local environment, with disease outbreaks being infrequent. Of course, the oral nature of the knowledge made it fragile and its perpetuation in unchanged form more friable. Interviews carried out by native commissioners with African elders and herbalists seemed to suggest that epizootics became frequent only after white occupation.<sup>45</sup> These reports must be treated with some care, however, as informants may have wished to offer a subtle critique of the new regime by depicting a prelapsarian state of balance and prosperity.

Despite broad regional morphological and genetic commonalities, there were clear differences in the types of cattle possessed by the major ethnic groups (the Shona and the Ndebele). Concomitantly there were also differences in how to protect them against epizootics. During colonial rule, indigenous cattle suffered significantly less than imported breeds from redwater and gall sickness, and epizootics lost their virulence sooner.<sup>46</sup>

To avoid the reductionist trap of the extreme Africanist argument which blames everything on the imposition of white authority, diseases occurred among even these well-adapted animals long before white occupation in 1890. Indeed, Ford demonstrated that one of the earliest written accounts pointing to the existence of the cattle trypanosomiasis in the area appears in a 1569 Portuguese account of life in the Mutapa Empire.<sup>47</sup> In fact, familiarity with diseases as well as the availability of a large body of livestock therapeutics certainly suggests that the local environment was not disease free. Ethnographic research carried out by a trained botanist and also veterinary surgeon, Dexter Chavunduka (1934-2012, the first black veterinary surgeon in Southern Rhodesia and a member of parliament nominated by Mugabe for his proficiency in animal husbandry) is of great significance. Chavunduka revealed that at the time of white occupation in 1890, local people in both Matabeleland and Mashonaland had already developed remedies and practised homegrown environmental control measures with the twin objectives of improving animal health and productivity.48 Africans may not have offered the same explanations for these remedies' effectiveness or couched them in terms that privileged a scientific discourse, but recent analysis has shown that at least some of these had pharmacological value.<sup>49</sup>

However, the major flaw – or methodological naivety – in Chavunduka's work was that of generalising African livestock regimes across the territory. Understandably, as a veterinary scientist-cum-botanist working in the 1970s, his major motive was

<sup>44</sup> NAZ, N3/18/2-3, Livestock: General 1917-23.

<sup>45</sup> Ibid. See also D. Shropshire, 'The Story of the Anthropological Research Trek', NADA, 7 (1929), 52-63.

<sup>46</sup> See Nobbs, 'Native Cattle', 328–9, 336 and 338; and Mwatwara and Swart, 'Colonial State'. Redwater (bovine babesiosis) is a tick-borne disease of cattle characterised by reduced appetite, hollow left flank, high temperature, changes in the colour of skin and mucous membranes (the gums and under the eyelids) from pink to abnormally pale (anaemic) or yellow tinge (jaundice). See more at http://www.thecattlesite.com/diseaseinfo/196/bovine-babesiosis-redwater-tick-fever/#sthash.R3sZpQsI.dput. Gall sickness (anaplasmosis) is a tick-borne disease whose typical signs in cattle include anaemia, visible mucous membranes, depression, loss of appetite, incoordination and laboured breathing; and females abort and suffer a drop in milk yield (see http:// external.cis.strath.ac.uk/caddis/docs/Anaplasmosis.html).

<sup>47</sup> J. Ford, The Role of Trypanosomiasis in African Ecology (Oxford: Clarendon, 1971), 327.

<sup>48</sup> Chavunduka, 'Plants Regarded by Africans', 7.

<sup>49</sup> Ibid

to develop a catalogue of medicinal plants used by Africans and subject these to scientific analysis. Environmental and ecological (let alone sociopolitical) differences in African areas and the way these affected local knowledge (as well as beliefs and practice) were thus outside his scope. Despite the similarities in the therapeutic methods that have been retrieved, it would be wrong to suggest that ideas about veterinary diseases were homogenous – that a set body of thinking existed. A series of interviews with African elders carried out by native commissioners in the early colonial period dispelled Chavunduka's declaration of uniformity.

Contagious abortion (brucellosis) and screw worm (*Cochliomyia hominivorax*) in cattle are examples that demonstrate both differences and similarities in livestock therapeutic practices in the precolonial period. Elders from all over the country suggested that contagious abortion never struck in severe epidemic form before occupation, and that it occurred when there were droughts.<sup>50</sup> However, in some areas where it was prevalent, Africans did not have any effective remedy. For instance, precolonial livestock owners in what is now Plumtree (see Fig. 2) knew this disease but did not regard it as serious enough to demand a remedy.<sup>51</sup> The native commissioner for Inyati reported, 'Chief Sikokobo ... states that only a few cases of abortion were known, and that these generally occurred when the cattle were low in condition. Losses from this cause were so few that the matter never called for any attention.<sup>52</sup> Yet, the disease occurred frequently in the east. The native commissioner at Inyanga reported:

I am informed by older natives that contagious abortion in cattle frequently occurred among the cattle before the Rinderpest. It seems to have disappeared about the time of the occupation by the BSA Company... No herd appeared to be immune from it. It occurred all over this district. Sometimes it was very severe and large numbers of abortions occurred. In these days there are several native doctors who claimed to have remedies for this disease.<sup>53</sup>

The Victoria, Shamva and Mtoko districts seem not to have known the disease except as abortion, which occurred occasionally in healthy herds due to accidents or other non-contagious causes.<sup>54</sup>

There were local variations to the treatment of screw worm in cattle, which are larvae of a certain fly species that feed on living tissue of *animals*. While the disease occurred frequently in Fort Rixon with salt being the only remedy used,<sup>55</sup> in Umtali it came at intervals of some years usually after or during wet seasons and knifing was considered the only way of removing the maggots.<sup>56</sup> In Umzingwane,

<sup>50</sup> NAZ, N3/18/2-3, Livestock: General 1917–23, letter from NC [Native Commissioner at] Plumtree to Superintendent of Natives (Bulawayo), 8/11/1921.

<sup>51</sup> Ibid.

<sup>52</sup> Ibid, letter from NC Inyati to Superintendent of Natives, 21/11/1921.

<sup>53</sup> Ibid, letter from NC Inyanga to Superintendent of Natives, 21/11/1921.

<sup>54</sup> Ibid, see letters from the NCs for Victoria, Shamva and Mtoko.

<sup>55</sup> NAZ, N3/18/6, Screw worm in Cattle: 1919, letter from the NC Fort Rixon to Superintendent of Natives (Gwelo), 07/08/1919.

<sup>56</sup> Ibid, letter from the NC Rusape to Superintendent of Natives (Umtali), 01/08/ 1919.

Nyamandlovu and Charter,<sup>57</sup> Africans used the crushed leaves of the *Acacia macro-thyrsa* plant (*mhlahlampethu* [Ndebele] / *muwengahonye* [Manyika] / *mutandahonye*/ *muvhunambezo* [Zezuru/Karanga]) which, on being applied to the wound, either caused the maggots to come to the surface or killed them. It was used effectively as a preventative measure against flies settling on a wound and laying their eggs. This remedy continued to be used in colonial times and, in some instances, attracted interest from white colonial administrators. In 1919, for example, the native commissioner in Charter was so positive about the efficacy of *muwengahonye* that he wrote, 'I have seen this remedy used and can verify as to its efficacy in cleaning a wound. The shrub grows near here and I could send some leaves should they be required.<sup>58</sup>

Unlike Chavunduka's synchronic 'timeless' perspective, Ford provides an indepth understanding of ethnoveterinary control practices of vector-borne diseases by demonstrating how precolonial people inhabiting the tsetse-fly belt in the southeastern areas controlled cattle trypanosomiasis.<sup>59</sup> The Shangaan led by Soshangane first settled in the south-east in the 1830s and returned later for an extended occupation from 1862 to 1889, during which time they demonstrated environmental ingenuity by avoiding certain environments.<sup>60</sup> Areas with mopane trees were avoided because they were considered harbingers of sleeping sickness.<sup>61</sup> From the 1860s they developed methods of tsetse control that did not involve wholesale slaughter of wild game, a policy taken by the settlers during the colonial era.<sup>62</sup>

One notable example was the settling by Mzila and his Shangaan subjects in the tsetse-prone Msilizwe Valley. Through his *sondela enkosini* ('Draw nigh to the King') decree, Mzila created cattle concentration areas away from the bushes while deliberately leaving other portions unsettled to act as game reserves. What is interesting about this decree is that the Shangaan knew that certain epizootics spread from wild to domestic animals. Thus, they kept a standing army whose sole purpose was to slaughter any game that trespassed into areas inhabited by livestock. Similarly, Dube has shown that transhumance, which was predicated on disease control, involved movements of cattle from the lowlands on the Mozambican side of the border to the highlands in Zimbabwe during the rainy season, when the incidence of trypanosomiasis increased, and back to the lowlands during winter for better pastures.<sup>63</sup> The rains promoted the growth of lush vegetation and created humid conditions in the lowlands, thereby expanding the tsetse habitat. By the late 1880s, when Mzila's successor Gungunyana was under colonial pressure from the Portuguese

<sup>57</sup> Ibid, letters from the NC Umzingwane to Superintendent of Natives (Bulawayo), 08/08/1919; from the NC Nyamandhlovu to Superintendent of Natives (Bulawayo), 08/08/1919; and from the NC Charter to Superintendent of Natives (Salisbury), 20/08/1919.

<sup>58</sup> Ibid.

<sup>59</sup> Ford, Role of Trypanosomiasis.

<sup>60</sup> Mzila and Gungunyana were Soshangane's descendants. See G. Liesageng, 'Nguni Migrations between Delagoa Bay and the Zambezi, 1821–1839', African Historical Studies, 3, 2, 1970, 317–37.

<sup>61</sup> Ford, Role of Trypanosomiasis, 330, 333.

<sup>62</sup> See E. Gargallo, A Question of Game or Cattle? The Fight against Trypanosomiasis in Southern Rhodesia (1898–1914), Journal of Southern African Studies, 35, 3, 2009, 737–53.

<sup>63</sup> Dube, 'In the Border Regions', 226.

in the east and the British from the south and could no longer maintain the ecological balance in the region, there was the resurgence of cattle trypanosomiasis.<sup>64</sup>

While those in the south-east were controlling trypanosomiasis successfully from the 1860s, Mzilikazi and his Ndebele subjects were fighting lung sickness in the south-west.<sup>65</sup> The case of the Shangaan reveals how certain Africans had developed stratagems for controlling trypanomiasis, but that this became impossible due to the colonial partition. The 1861 lung sickness outbreak among Ndebele cattle is important for two reasons. Firstly, it was the first known highly contagious disease of European origin to occur among local livestock in precolonial times. Secondly, it occurred in a highly polarised political environment characterised by competition involving two knowledge systems – traditional healers and missionaries.<sup>66</sup> Missionaries were key in the initial group of people responsible for the spread of basic veterinary science and they used their personal experiences to disseminate 'knowledge' of tropical veterinary challenges. In a situation where they were facing competition from missionaries over the control of knowledge, African traditional healers blamed the former for upsetting the ancestors, resulting in animal malaise as punishment for their living descendants.

It is important to note that lung sickness was actually first reported among draught oxen brought into the Ndebele state by the missionaries. Perhaps being influenced by ideas relating to reverse zoonosis (where diseases spread from humans to animals), Mzilikazi first ordered the treatment of the 'diseased' missionaries by his traditional healers, and then the quarantining of the diseased animals.<sup>67</sup> During this time, as Gilfoyle and Brown have shown, Western veterinary ideas already pivoted on separating clean from unclean livestock.<sup>68</sup> This raises questions. Firstly, was the idea to guarantine locally inspired or it was suggested by the missionaries? While McCorkle and Mathias-Mundy have argued that there was a general policy among precolonial people of separating sick from healthy animals,<sup>69</sup> it is not clear whether ideas informing the control of 1861 outbreak were entirely local given that Mzilikazi had been in close contact with Robert Moffat, a Western missionary with whom he had had personal contacts dating back to the 1820s when he was a fugitive from Tshaka. Moffat was presumably aware of the 1853-7 outbreak in the Cape and the measures taken to combat it.70 This possibility cannot be dismissed because when the disease broke out in parts of what later became South-West Africa in 1859, missionaries played a pivotal role in its containment by adopting quarantine measures.<sup>71</sup> But this may as

<sup>64</sup> Paragraph draws on Ford, Role of Trypanosomiasis, 334.

<sup>65</sup> See H.P. Schneider, J.J. van der Lugt and O.J.B. Hubschle, 'Contagious Bovine Pleuropneumonia' in J.A.W. Coetzer, G.R. Thomson and R.C. Tustin (eds), *Infectious Diseases of Livestock with Special Reference to Southern Africa* (Cape Town: Oxford University Press, 1994), 1485. See also C.B. Andreas, 'The Spread and Impact of the Lung Sickness Epizootic of 1853–57 in the Cape Colony and the Xhosa Chiefdoms', *South African Historical Journal*, 53, 2005, 50–72.

<sup>66</sup> S.J. Ndlovu-Gatsheni, 'Rethinking Religious Encounters in Matabeleland Region of Zimbabwe, 1860–1893', African Journal of History and Culture, 1, 2, 2009, 023.

<sup>67</sup> Ibid, 23. For more on traditional healers see G.L. Chavunduka, 'Organisation of Traditional Medicine'.

<sup>68</sup> K. Brown and D. Gilfoyle, 'Introduction' in Brown and Gilfoyle (eds), Healing the Herds, 1-18.

<sup>69</sup> C.M. McCorkle and E. Mathias-Mundy, 'Ethnoveterinary Medicine in Africa', Africa: Journal of the International African Institute, 62, 1, 1992, 67.

<sup>70</sup> See Andreas, 'Spread and Impact', T.J. Stapleton, 'Reluctant Slaughter: Rethinking Maqoma's Role in the Xhosa Cattle-Killing (1853–1857), International Journal of African Historical Studies, 26, 2, 1993, 345–69.

<sup>71</sup> Schneider et al, 'Contagious Bovine Pleuropneumonia,' 1485.

well demonstrate the previously delineated argument made by Harries that Western veterinary science either benefited from ethnoveterinary knowledge or developed side by side until this complementarity was broken by the professionalisation and commercialisation of Western veterinary knowledge.

More importantly, though the primary concern of missionaries in Africa was to convert the heathen, their theological concerns overlapped with a deep historical curiosity about the natural world: 'These men wrote extensively about the new and diverse plants, animals and insects they discovered; and compared them with findings made elsewhere in the world.'<sup>72</sup> Indeed, the missionaries who brought lung sickness into the Ndebele state were 'part of a new generation of missionaries who worked "in the field", often beyond the political frontier.'<sup>73</sup> Mzilikazi allegedly sprinkled 'medicine' on the missionaries soon after this outbreak. Did this suggest that the missionaries were suspected of having carried the disease into the area, and therefore needed to be disinfected? It has been argued that the ritual was an important process meant to chase away 'bad spirits' accompanying white people and causing diseases and other misfortunes.<sup>74</sup> These actions demonstrate yet another facet of African live-stock regimes, that supernatural practices often accompanied natural ones – just as they did colonial practices, where prayers from settler farmers often accompanied state veterinary efforts.<sup>75</sup>

Secondly, how effective were these methods? While one may celebrate the attempt to separate infected from disease-free animals, the Ndebele still lost a significant number of cattle to this disease.<sup>76</sup> These losses thus demonstrate two major weaknesses of African livestock regimes: their inadequacy in dealing with highly infectious diseases, and the fact that while livestock management measures were helpful when the disease was intermittent or localised, they could not halt epidemics.<sup>77</sup> Since lung sickness is not mentioned in missionary accounts after the 1861 outbreak or in colonial records until 1895, the disease's further spread must have been halted naturally by rapid victim mortality.78 Nonetheless, what these different experiences suggest is that by 1890 the fundamental principles surrounding the treatment of diseases among Africans hinged on environmental factors - natural infection - as well as supernatural explanations. It also demonstrates that before the start of white authority there were already power dynamics evident in African knowledge regimes. The different methods used to deal with disease as shown in this section also demonstrate the differences in knowledge, belief and practice, and how practice was often an outcome of beliefs and knowledge about the nature and cause of disease. For instance, most of the diseases that Africans showed ability to control (redwater, gall sickness and trypanosomiasis) have insect and arachnid vectors and were strongly associated with locale.

<sup>72</sup> Harries, 'Knowledge in Africa'.

<sup>73</sup> Ibid.

<sup>74</sup> Ndlovu-Gatsheni, 'Rethinking Religious Encounters', 23.

<sup>75</sup> McCorkle and Mathias-Mundy, 'Ethnoveterinary Medicine', 71. See also Phoofolo, 'Epidemics and Revolutions', 127.

<sup>76</sup> Ndlovu-Gatsheni, 'Rethinking Religious Encounters', 23.

<sup>77</sup> McCorkle and Mathias-Mundy, 'Ethnoveterinary Medicine', 72.

<sup>78</sup> NAZ, N1/1/3, Monthly Reports, December 1894: letter from the NC Umfuli District to the Chief Native Commissioner (CNC), 09/03/1895.

### Veterinary 'Knowledge' in the Making of a Colonial Order in the 1890s

While the previous section has delineated the dominant precolonial livestock therapeutic ideas and how they intersected with external influences from European explorers, this section explores the colonial encounter in the 1890s, a period characterised by two devastating wars (the Anglo-Ndebele War, 1893-4 and the Chimurenga Uprising, 1896–7) and the outbreak of a serious bovine disease (rinderpest from 1896 to 1898). The reorganisation of power and transformation of African livelihoods during the early colonial period inspired new understandings of the world.<sup>79</sup> Thus, as we will show, white occupation occasioned violent acts of domination, amidst acts of resistance and rebellion that resulted in very uneven exchanges of knowledge.<sup>80</sup>

We will demonstrate that opportunities for the appreciation and use of other forms of knowledge were often curtailed by both physical colonial conflicts and ideological stereotypes. These developments were not peculiar to Southern Rhodesia as they mirrored what was happening in the world at large. Indeed, the increased influx of Western visitors into Africa ranging from missionaries, doctors and explorers to botanists and ecologists (among others) peaked after the 1850s. We end by showing that, essentially by the 1890s, the colonial veterinary establishment was still too weak to have a major impact, although assumptions about the superiority of white veterinary knowledge had already been made and were to endure.

Towards the end of the nineteenth century, most colonial states created academic and administrative positions specifically to study Africa, and professional scientists started to replace the 'amateurs' who had hitherto provided much of the data in the development of veterinary knowledge. In this new climate of confidence, as Harries has shown, Europeans quickly reduced African drugs and medical practices to the categories of 'magic' and 'superstition' and healers and diviners to 'witchdoctors'.81 In a colonial setting, state livestock disease management extended beyond preventing the outbreak of epizootics and enzootics since, as Waller has noted in Kenva, 'framing the problem raised questions of knowledge and power; imposing solutions pitted the new and uncertain authority of the colonial state against the certainties of established African pastoral practice; control encompassed not just livestock but also their owners.'82

Up until the crushing of African resistance movements in 1897, the state largely lacked authority or had not vet pacified much of the countryside. With regard to veterinary challenges, most of its activities were reactive and were also being challenged even by some of the settlers. Yet, perhaps more importantly, state bureaucrats often assumed a homogenous set of veterinary knowledge across the territory and also that the Western one would eventually be embraced by all inhabitants, black and white. Just as local knowledges were diverse, there was certainly no homogenous body

<sup>79</sup> Gordon and Krech, 'Indigenous Knowledge', 15.

<sup>80</sup> Ibid, 14.

<sup>81</sup> Harries, 'Knowledge in Africa'.
82 Waller, "Clean" and "Dirty", 46–7.

of 'Western knowledge'. For example, Worboys and others have shown that there were, of course, many germ theories and that these were put into practice in very different ways by various individuals and branches of medicine. Veterinarians tended to support 'contagionism' but preferred quarantines and other administrative controls over germ practices such as vaccination.<sup>83</sup> Among the major challenges to the Western corpus that it sought to impose was the reality on the ground that most herds (white or black) were still pastured together and also that the colonial breeders in fact relied on African breeds for their foundation stock.<sup>84</sup> Indeed, from the 1890s up until the reorganisation of the agricultural industry in Rhodesia in 1907, though state efforts were made to run agriculture along Western lines, some whites had not accepted certain notions of Western veterinary medicine and therefore depended perforce on local knowledge.

The early years of colonial rule in Southern Rhodesia reveal the core dilemma at the heart of European conquest in Africa and also the challenges of imposing its own version of modernity upon the local population. The settlers were never so sufficient in number that they could impose their authority unaided and as such had to use African policemen.<sup>85</sup> (An estimated white population of 1500 in 1891 rose to only 11,000<sup>86</sup> out of a total population of 487,200 in 1901.)<sup>87</sup> The British South Africa Company (BSAC) government was very weak and also complicated to run. Besides resistance from Africans, colonial veterinary knowledge itself was seriously questioned in certain branches of the colonial hierarchy; hence, alternative versions of livestock regimes held sway among both Africans and some settlers.<sup>88</sup>

It was widely believed by the settlers that 'Africans are only at the best of times children, and they must be dealt with as children.<sup>89</sup> Indeed, as Jeater has shown, this was a useful metaphor that allowed for the possibility of Africans 'catching up' with the demands of an industrial society but insisted that whites remain paternalistically responsible for African welfare.<sup>90</sup> This ensured that African livestock regimes were not officially acknowledged (except sometimes by individuals within the bureaucracy such as Nobbs) as a useful body of knowledge. In fact, the traditional healer or herbalist, who was the custodian of local medical and veterinary knowledge, was considered, 'an unwholesome charlatan, and from the crown of his head to the sole

<sup>83</sup> M. Worboys, Spreading Germs: Disease Theories and Medical Practice in Britain, 1865–1900 (New York: Cambridge University Press, 2000).

<sup>84</sup> W. Mwatwara, "Where Nature Objected to Anything Imported": Africans and the Cattle Quality Clause in Southern Rhodesia, c. 1912–1930, paper presented to the Southern African Historical Society Biennial Conference, University of Botswana, 27–29 June 2013.

<sup>85</sup> See P. McLaughlin, "The Evolution of the Southern Rhodesia Military System, 1903–1927' (Unpublished PhD thesis, University of Zimbabwe, 1982; T.J. Stapleton, No Insignificant Part: The Rhodesia Native Regiment and the East African Campaign of the First World War (Ontario: Wilfred Laurier University Press, 2006).

<sup>86</sup> A.S. Mlambo, 'A History of Zimbabwean Migration to 1990' in J. Crush and D. Tevera (eds), Zimbabwe's Exodus: Crisis, Migration, Survival, (Cape Town: Southern African Migration Programme, 2010), 52–76.

<sup>87</sup> NAZ, LO 4/1/21, Report of the Administrator (1905–06), 25.

<sup>88</sup> P. Robbins, 'The Practical Politics of Knowing: State Environmental Knowledge and Local Political Economy', *Economic Geography*, 76, 2, April 2000, 126–44.

<sup>89</sup> Statement by Dr Sauer, the Matabeleland representative, Legislative Council Debates, First Session, First Council, 15 May 1899, 13.

<sup>90</sup> D. Jeater, 'Imagining Africans: Scholarship, Fantasy, and Science in Colonial Administration, 1920s Southern Rhodesia', International Journal of African Historical Studies, 38, 1, 2005, 2.

of his foot there is no soundness in him ... [hence it] is necessary that the whole spirit system of medicine be thrown off doors.<sup>91</sup>

Since, as already noted in earlier sections, by the 1890s, colonial veterinary knowledge no longer had space for contributions from the colonial subjects as it was now monopolised by scientists based in institutes, administrators looked to these for perceived professional science-based solutions. Thus, in the 1890s, herbalists such as Mnyenyezi of Matabeleland, 'who knew all the grasses by name and the trees which cattle browsed on in times of drought and likewise many native cures for stock diseases', were no longer recognised as possessing alternative veterinary knowledge nor were they permitted to contribute their knowledge to veterinary policy even in a limited way.<sup>92</sup> Officially they were considered an administrative nuisance.

Previous sections have already established the conflict involving the precolonial Africans (as exemplified by Mzilikazi's Ndebele people) and missionaries who later became accomplices, albeit temporarily, in Rhodes's BSAC taking over the territory. In supporting white occupation, missionaries had envisaged the creation of a Christian state, but after the imposition of white authority they became embroiled in conflict with the BSAC over the future of the state. The state itself remained secular although there were instances when it expropriated certain expedient elements of Christian religion in its state building.<sup>93</sup>

Since Southern Rhodesian native policy was the product of arguments, debates and profoundly conflicting interests among the whites – administrators, missionaries and settlers – who interacted with Africans on a daily basis, veterinary policy and its implementation were closely influenced by the conflicts within the colonial state, which were shifting but maintained the ultimate goal of insulating whites from black competition.<sup>94</sup> For instance, the Native Affairs Department was given the duty of safeguarding the perceived interests of Africans and making known their wishes and needs. 'Safeguarding' African interests involved maintaining the framework of 'traditional life' or rather maintaining such features of it as were permissible given the context of a settled colony.

Although without official mandate, missionaries were given an important role in decision making because of their relatively intimate knowledge of the Africans. However, the missionaries had their own interests in changing rather than preserving the established way of life of what they regarded as the 'heathen' masses.<sup>95</sup> As in Tanganyika,<sup>96</sup> the institution of veterinary regulations served in part to facilitate, justify and consolidate the expansion of state control into the lives of the Africans. Veterinary interventions became highly controversial, pitting administrators,

<sup>91</sup> A. Burbridge, 'How to Become a Witch Doctor', NADA, 8, 1930, 86. See also A. Boos, 'The Springtime of the Mashonaland Mission', Zambesi Mission Record, 1, 4, 1899, 121–7.

<sup>92</sup> NAZ, WE 3/2/4, Weale's reminiscences: Recollections of Matabele tribal days and of the Matabele War, the stories of Nyamanza and Mnyenyezi.

<sup>93</sup> M. Munetsi, 'Civil Religion in Zimbabwe: Unpacking the Concept' in E. Chitando, Prayers and Players: Religion and politics in Zimbabwe (Harare: Sapes, 2013), 1–18.

<sup>94</sup> Jeater, 'Imagining Africans', 1.

<sup>95</sup> Murray, Governmental System in Southern Rhodesia, 273, 279, 280, 281.

<sup>96</sup> See D.L. Hodgson, 'Taking Stock: State Control, Ethnic Identity and Pastoralist Development in Tanganyika, 1948–1958', Journal of African History, 41, 1, 2000, 55–78.

missionaries, and settlers against one another and also against African livestock regimes. Jeater captures this aptly when she argues, 'In the 1890s, awash with ignorance about the peoples around them, whites flailed around for parallels and metaphors that would both explain what they saw and justify what they did.'97

In line with the settlers' self-declared 'civilising' efforts, the first veterinary measure to be taken in the 1890s was the publication in December 1891 of a regulation in connection with lung sickness and the appointment of an inspector of cattle.<sup>98</sup> Close connections with the Cape Colony were leaned on legislatively as most of the regulations applied during the 1890s were derived from the Cape, particularly the Animal Diseases Act (1881), which made provision for the isolation of livestock suffering from contagious and infectious diseases.<sup>99</sup> In this way, the legislative extension of knowledge was transplanted onto a regional model. Ordinance 1 of 1893 announced the incorporation of the Cattle Removal Act (1870) and the Cattle Removal Amendment Act (1889) as well their usage in Mashonaland as the Cattle Removal Amendment Ordinance (1893).<sup>100</sup>

However, these veterinary regulations were simply a declaration of good intent because, in practice, state veterinary services were almost nonexistent beyond settler towns. The authorities had neither the knowledge nor the resources to enforce the provisions of the ordinances in all parts of the territory. Beginning from areas where they had established administrative offices, the availability of state veterinary facilities tended to favour the white settler farmers who were located in areas where such administrative centres existed. In turn, this meant that African settlements were mostly in the periphery.<sup>101</sup> Above all, these circumstances also reveal one crucial indication – that the discourse about 'scientific' as against 'native' systems of livestock management might have served primarily as an ideological instrument rather than as a policy. In fact, what 'science' actually was remained unclear. Jeater argues that it 'could mean anything from the ability to predict eclipses in order to save Our Hero from death at the hands of ignorant savages, to the ability to grow crops more productively. Whatever it was, however, "science" served as the marker of difference between whites and Africans.'<sup>102</sup>

Moreover, in areas where official veterinary services were offered, the principal 'veterinary' experts were cattle inspectors who, in the spirit of protecting local cattle traders from outside competition, were mainly preoccupied with preventing the importation of livestock into the territory rather than the management, containment and eradication of epizootics.<sup>103</sup> The administration's obsession with procuring gold and the seeming absence of epizootics also militated against the early establishment

<sup>97</sup> Jeater, 'Imagining Africans, 1.

<sup>98</sup> NAZ, A7/1/1, Original signed copies of Ordinances: 1891–99, vol 1.

<sup>99</sup> D.A. Lawrence, 'The History of Veterinary Services in Rhodesia: Earliest developments, 1890 to 1899', Rhodesia Veterinary Journal, 1, 2, 1970, 30. For more on the Cape Legislation see D. Gilfoyle, 'Veterinary Research and the African Rinderpest Epizootic: The Cape Colony, 1896–1898', Journal of Southern African Studies, 29, 1, 2003, 133–54.

<sup>100</sup> NAZ, A7/1/1, Original signed copies.

<sup>101</sup> W. Wolmer, From Wilderness Vision to Farm Invasions: Conservation and Development in Zimbabwe's South East Lowveld (Oxford: James Currey, 2007), 2.

<sup>102</sup> Jeater, 'Imagining Africans', 23.

<sup>103</sup> See NAZ, A7/1/1, Original signed copies.

of a veterinary services department.<sup>104</sup> In fact, Charles E. Gray, the first qualified veterinary surgeon in the country, came with the Pioneer Column in 1890 but for lack of a job was employed in the ranks of the Post Office at Fort Victoria until 1896, when he was 'unearthed like Cincinnatus from the plough, and called upon to form a veterinary department to control Rinderpest.'<sup>105</sup>

While the African livestock regimes were being sidelined in official circles, the incoming settlers experienced a number of veterinary challenges whose efficacy could not be found immediately in conventional veterinary science. Indeed, at the end of his tenure, Llewellyn E.W. Bevan, the first bacteriologist in the territory, revealed rather unwittingly the inadequacy of Western veterinary knowledge when he reminisced that during the 1890s, 'Southern Rhodesia was always a source of veterinary surprises – as it is today.'<sup>106</sup> He noted that one such surprise was a mysterious disease where animals appeared to be stiff in one or more limbs or the muscles of the throat, hence they called it 'stiff sickness'; and another, 'because we veterinarians knew nothing whatever about it, we gave it the more dignified title of "ephemeral fever.<sup>37107</sup> These examples underscore the early challenges faced by orthodox veterinary medicine despite the hubris that accompanied efforts to sideline African livestock regimes.

Among other things, political constructions of nature hinged on thinking that African-owned livestock were spreading disease to white-owned livestock. Besides the suspicion that African herds would spread diseases to pedigree breeds, white farmers, like their South African counterparts, feared that interaction would result in the degradation of their stock breeds.<sup>108</sup> This veterinary argument was also mobilised in justifying racial ownership of land in the territory.<sup>109</sup> Thus, in the 1890s some Africans, particularly the Ndebele after the 1893–1894 War of Dispossession, were driven into disease-prone areas such as Gwaai and Shangani in 1895.<sup>110</sup> The Ndebele considered the Shangani Reserve as '*amagusu amnyama*' (dark forests), thickets to be afraid of, as dark and fearful, places of tall, crowded trees and no people, places where outcasts and witches were made to live.<sup>111</sup>

In this place, Africans and their livestock had to go through a very difficult process of acclimatisation. Although African reserves and European settled areas were marked out in the mid-1890s, conflicts over space emerged and also over disease control. However, many African livestock owners remained on white-owned land and Crown lands; the initial impact of the creation of reserves thus need not be overemphasised as labour tenancy played a significant role in keeping a considerable proportion of dispossessed Africans on white land especially in the period before the passage of the Private Locations Ordinance (1907).

<sup>104</sup> R. Palmer, 'The Agricultural History of Rhodesia' in R. Palmer and N. Parsons (eds), The Roots of Rural Poverty in Central and Southern Africa (London: University of California Press, 1977).

<sup>105</sup> NAZ, BE 11/9/12, Historical Manuscript. Lucius Quinctius Cincinnatus (519–430 BCE) was a Roman aristocrat serving as consul in 460 BCE and dictator in 458 BCE and 439 BCE.

<sup>106</sup> NAZ, BE 11/9/12, Historical Manuscript: A brief history of veterinary research in Southern Rhodesia by L.E.W. Bevan. 107 Ibid.

<sup>108</sup> T.V. McClendon, "Hiding Cattle on the White Man's Farm": Cattle Loans and Commercial Farms in Natal, 1930–50, African Economic History, 25, 1997, 47.

<sup>109</sup> Palmer, 'Agricultural History of Rhodesia', 132.

<sup>110</sup> Cluer, 'Assessment of Rural Development and Planning', 60.

<sup>111</sup> Alexander et al, Violence and Memory, 23, 36.

Prior to 1896, the administration tried to disseminate Western veterinary ideas to Africans via field cornets, missionaries and native commissioners. These officials were expected to report as well as deal with livestock diseases on an ad hoc basis. However, state veterinary services were not introduced in a manner that was understandable and acceptable to blacks.<sup>112</sup> Despite the intention to force Africans to adopt veterinary medicine, early interactions between colonial officials and Africans were, in the main, through tax collection and exploratory journeys. Limited veterinary contact between Africans and state officials concomitantly affected the rate at which biomedical ideas spread. Ironically, while African livestock regimes were dismissed as lacking scientific foundation, veterinary issues were not placed with qualified scientists but native commissioners.

As long as livestock health merely remained their auxiliary task, Western veterinary knowledge got no further. Most native commissioners had hardly received formal education and therefore knew little, if anything, about the scientific basis of veterinary diseases.<sup>113</sup> As a result, African livestock regimes thrived – an undesirable effect in the eyes of officialdom. Native commissioners were also laden with nonveterinary responsibilities. These included tax collection (by far their most important activity), issuing a variety of passes which Africans were obliged to carry, acting as arbitrators in cases involving Africans, enquiring into complaints brought by Africans, registration of dogs, rifles, brands, births and deaths, issuing cattle permits, inspecting farms whenever reports were called from headquarters, and acting as locust officers and vaccinators, and labour recruiters.<sup>114</sup>

Because they operated in a largely cashless economy, the activities of these officials often entailed the confiscation of local livestock, and therein lay their dilemma. Africans viewed them not as veterinary officials but as 'a collector of debts they owed?<sup>115</sup> Throughout the territory, Africans hid their livestock each time these officials appeared.<sup>116</sup> In some districts, the mere appearance of a white man was an ominous sign for loss of cattle. For instance, in December 1894, just two months after the passage of the Hut Tax Ordinance, the native commissioner for Victoria, which had the largest cattle population in the territory and hence was subject to many cattle raids (both official and unofficial) by settlers, reported that 'the Mashonas have a habit of clearing away from their villages on the approach of any white man.<sup>117</sup>

So pervasive was the abuse of power by tax collectors-cum-veterinary officials that within a decade (1897–1907) most had become prolific livestock owners – large enough to threaten European cattle traders.<sup>118</sup> Even reporting disease outbreaks was eschewed by Africans. In fact, the first real veterinary interaction between Africans

<sup>112</sup> D.M. Chavunduka, 'Veterinary Teaching Methods in African Areas', Newsletter of the Veterinary Research Laboratory, 2, 1, 1967, 7.

<sup>113</sup> NAZ, WE 3/2/5, Weale's reminiscences.

<sup>114</sup> NAZ, SRG4, Report of the Board of Inquiry into the Public Service in Rhodesia, 58.

<sup>115</sup> Earl Grey (the administrator of Southern Rhodesia) quoted in the Legislative Council Debates, Fourth Session, Third Council, 18 December 1907, 18.

<sup>116</sup> NAZ, N1/1/3, Monthly Reports, letter from NC Umfuli to the CNC, 31/08/1895.

<sup>117</sup> Ibid, Quarterly report dated 31/12/1894.

<sup>118</sup> NAZ, A3/2/5/5, Cattle Trading by Native Commissioners: 1907, letter from the CNC (Bulawayo) to the Chief Secretary (Salisbury), 01/02/1907.

and veterinary officials occurred by accident in 1895 when cases of lung sickness among African cattle were reported by a native commissioner in Umfuli District while collecting tax.<sup>119</sup> Thus, from both choice and necessity, by 1896 most African livestock regimes continued to thrive though their use was discouraged.<sup>120</sup>

The controversial nature of Western biological knowledge and the coercion that accompanied it precipitated passive local resistance in defence of local therapeutic knowledge, exploited by both some settler and African livestock owners.<sup>121</sup> An interesting case of therapeutic pluralism is that of Colonel Napier, a ranch manager and close friend of a local herbalist Mnyenyezi who, after the occupation of Matabeleland in 1894, made extensive use of Mnyenyezi's veterinary remedies.<sup>122</sup> This suggests that biomedical ideas which the veterinarians were championing were also a subject of debate among settlers, and that while African livestock regimes were not recognised at an official level, experiences of pragmatic settler farmers demanded that they sometimes adopted them. Some settler farmers also used knowledge garnered from practical experience to develop their own therapeutic remedies. For instance, contagious poultry diseases that broke out among imported chickens from 1890 had by 1895 been brought under control by settler home remedies – like a concoction of salt, tobacco and water.<sup>123</sup>

Perhaps a more telling example of the how widespread therapeutic experimentation was among Southern Rhodesian white settlers is provided by an ox transport owner Stanley Hyatt<sup>124</sup> and a colonial veterinary officer R.F. Stifling, who both noted widespread use across the territory of therapeutics ranging from 'Bluestone' mixed with tobacco and 'dop' (Cape impure spirit) to methyl-arsenate of sodium and 'Trypan-Blue' as well as carbolic acid, quinine and calomel.<sup>125</sup> What this discussion reveals is that, by 1895, Western veterinary knowledge had failed to make the impact envisaged by state bureaucrats, and that local ways of knowing still had currency especially among Africans who were still to be pacified by the BSAC government. It also shows the syncretic nature of veterinary healing and the heterogeneity of opinions within the settler society.

#### The 1896-8 Rinderpest Epidemic

As we have said, amateur scientists like missionaries and native commissioners played a very important role in the construction and promotion of Western veterinary knowledge in the 1890s. We now discuss, on the one hand, how the campaign against rinderpest reflected both the state of veterinary knowledge and the power (or lack of it) of the colonial state in imposing its preferred methods of livestock

<sup>119</sup> NAZ N1/1/3 Monthly Reports: letter from the NC Umfuli District to the CNC, 09/03/1895.

<sup>120</sup> Waitte, 'Traditional Medicine', 238.

<sup>121</sup> NAZ, WE 3/2/4, Weale's reminiscences.

<sup>122</sup> Ibid.

<sup>123</sup> NAZ, A15/1/1, NC Victoria Monthly Report: letter from Father Boos to the NC Victoria, 3/02/1895.

See S.P. Hyatt, *The Old Transport Road* (London: Andrew Melrose, 1914; Reprint: Bulawayo: Books of Rhodesia, 1969), 295, 296.
 R.F. Stifling, 'East Coast Fever in Rhodesia and Its Control' (Unpublished fellowship thesis, Royal College of Veterinary Surgeons, London, 1912), 11.

disease management, and on the other, questions about the politics of knowledge in a divided colonial administration. The outbreak of rinderpest in March 1896 offers a window into how African livestock regimes in Southern Rhodesia reacted to state veterinary services in the mid-1890s as well as how their relationship to the state was shaped by perceptions collected from missionaries and native commissioners. It also shows how missionaries used the growing body of 'colonial' science to push African livestock regimes to the fringes of veterinary policy formulation.

Given the nascent nature of its veterinary contingent, it was clear at the start that the Southern Rhodesian state, as in Kenya, 'had very little idea of the extent of the "disease problem" hence the assumption that the disease was ubiquitous in African areas.'<sup>126</sup> The Ndebele were the first to experience rinderpest as it spread first in Matabeleland and then on to other areas. So fast was its spread that within a period of 25 days of the first reported occurrence in Southern Rhodesia in early 1896 it reached a point 16 miles north of the borders of the Cape Colony on 31 March.<sup>127</sup>

Internationally, gaps existing in the veterinary knowledge of rinderpest set the stage for 'one of the keenest competitions medical science has ever seen'.<sup>128</sup> In South African colonies, the competition included teams led by Drs Arnold Theiler of the Transvaal, Herbert Watkins-Pitchford of Natal, and Robert Koch, a German microbiologist who worked in Kimberley at the Cape government's expense.<sup>129</sup> Theiler and Watkins-Pitchford developed a technique for immunising cattle with simultaneous but separate inoculations of immune serum and infectious disease. However, their method did not become very popular since immune serum was in short supply and time-consuming to produce. Robert Koch's method of prevention, which involved the injection of bile from infected animals into normal animals, was successful in the laboratory. Even though this conferred some degree of immunity, the main bone of contention was that inoculation with rinderpest blood sometimes spread other disease latent in the donor animal.<sup>130</sup>

Southern Rhodesian authorities closely followed veterinary developments in the South African colonies. In March 1897, Dr George Turner from the Kimberley rinderpest station visited Bulawayo and, on his advice, a system of compulsory inoculation against rinderpest was established.<sup>131</sup> At that time the scientific community had not yet produced a standard vaccine. Notwithstanding, this 'crisis of knowledge' did not inhibit Southern Rhodesia from adopting Western veterinary methods of containment: slaughtering infected cattle and those merely suspected of infection as well as restricting cattle movement in infected areas.<sup>132</sup>

It was not the only territory to gamble with the inoculation method, though, as the Cape Colony also resorted to a similar act of desperation.<sup>133</sup> In Matabeleland,

133 Ibid, 144.

<sup>126</sup> Waller, "Clean" and "Dirty," 60.

<sup>127</sup> Van Onselen, 'Reactions to Rinderpest', 473.

<sup>128</sup> See P.B. Rossiter, 'Rinderpest' in Coetzer et al, Infectious Diseases, 736.

<sup>129</sup> Ibid, 736.

<sup>130</sup> L.E.W. Bevan, 'Veterinary Research: Some Facts and Figures', Rhodesia Agricultural Journal, 11, 4, 1914, 518.

<sup>131</sup> NAZ, LO4/1/2, Report of the Deputy Administrator of Matabeleland, 30 September 1898.

<sup>132</sup> D. Gilfoyle, 'Veterinary Research and the African Rinderpest Epizootic: The Cape Colony, 1896–1898', Journal of Southern African Studies, 29, 1, 2003, 134.

inoculating stations were quickly established at Bulawayo, Ramaquabane, Gwelo, Manzinyama, Tuli, Khami and Queen's Kraal.<sup>134</sup> In Mashonaland the work of inoculating cattle was started much later, but after a few months the double method of inoculation was discontinued after it emerged that the rinderpest blood sometimes spread disease latent in the donor animal, as some had feared.<sup>135</sup>

These methods turned out to be impractical, expensive and politically controversial.<sup>136</sup> On their part, Africans did not understand the slaughter of 'healthy' cattle and their attempts to relocate and desperately hide cattle to avoid slaughter actually precipitated a faster rate of infection.<sup>137</sup> The reliance of the state on developments in the Cape Colony, Natal and the Transvaal also betrays the way metropolitan professionalised veterinary theory now dominated the application of practical veterinary ideas in the colonies and reflects, as Gordon and Krech have shown, the shift from reliance on missionaries, botanists, doctors and explorers, who had been at the forefront of the generation of knowledge in the colonies, to a more specialised group of scientists coming from institutes and professional associations. It also entrenched the sidelining of local knowledge.<sup>138</sup>

Mbangwa Ngomambi, an Ndebele eyewitness to the rinderpest outbreak in Bulawayo in 1896, gives us an insight into what transpired and how African livestock regimes reacted. Mbangwa was working at a mine when he saw cattle dying: 'cattle fell ill and we had plenty of meat. We would cut up what we wanted and leave the rest ... People now said, "Cattle should be released from their kraals, they should sleep outside" but the next morning you still find them dead.'<sup>139</sup> His testimony provides us with a new reading of the rinderpest epidemic as it betrays the challenges faced by Africans in dealing with an infectious viral disease. It affords us an opportunity to ask questions: What was the logic behind unkraaling them? Was it because people thought the disease was in the kraals? Was it because they thought the disease was contagious?

It is difficult to find definite answers to these questions, but they show that Africans were not simply resigned to their fate, that active preventative measures were taken. However, the disease demonstrated the ineffectiveness of both state veterinary services and African livestock regimes against a fast spreading viral disease. Africans were nevertheless quick to discover that (just as in South Africa), 'meat left in the wake of Rinderpest could be dried for biltong or eaten at once without ill effects.'<sup>140</sup>

While Africans were still to examine the effectiveness of their preliminary measures, the colonial state took over control of the situation and prescribed Westernstyle veterinary control measures, which hinged on quarantines and culling of

<sup>134</sup> Mutowo, 'Animal Diseases', 12.

<sup>135</sup> Colony of Southern Rhodesia, Official Year Book of Southern Rhodesia, 1, 1924, 59.

<sup>136</sup> Gilfoyle, 'Veterinary Research', 153.

<sup>137</sup> T.T. Jamu, 'The Growth and Control of African Herds, 1910–1955' (Unpublished MA thesis, University of Zimbabwe, 1987), 11.

<sup>138</sup> Gordon and Krech, 'Indigenous Knowledge', 9.

<sup>139</sup> NAZ, AOH/58, Rinderpest Epidemic: Oral interview with Mbangwa Ngomambi (born c. 1877-83), 14/07/1979.

<sup>140</sup> Van Onselen, 'Reactions to Rinderpest', 483.

infected or suspected unclean herds. Mbangwa recalled that the native commissioner for Gwanda District, C.G. Fynn, 'went to Bulawayo to collect bullets and then started killing the sick cattle ... you know if cattle fall ill Europeans kill them. They do not eat the meat. We herded all the cattle and drove them to some hidden area and there they were shot.<sup>141</sup>

Mbangwa did not hide the fact that in African areas the disease could not be controlled using local ways of knowledge but also shows that native commissioners were equally ignorant of the disease's aetiology. Correspondence between the native commissioner at Hartley and the chief native commissioner reveal that when cattle started dying from what later turned out to be rinderpest in early 1896, the former was not sure what this was despite carrying out tests.<sup>142</sup> Nevertheless, he was sure that it was not trypanosomiasis, for he wrote: 'The only symptom I noticed in the sick oxen was violent purging [diarrhoea] and a running from the nose. Nobody here has any idea of what the disease may be but they are sure that it is not the fly'.<sup>143</sup> Given that he did not know what this was, he asked his superiors: 'Have I any duties in connection with cattle diseases? Will you please let me know by return of post if I have, and what they are, that I may perform them.'<sup>144</sup>

This exchange is indicative of the inadequacy of state veterinary services offered to Africans. More, it reveals the political nature of state claims to possessing and also providing a superior form of veterinary service to Africans. Certainly native commissioners, to whom control over African livestock was given, did not have the requisite veterinary expertise. This underlines the irony of state claims to enjoying superior knowledge and lays bare the inadequacy of veterinary science at the time. In fact, the official attitude towards veterinary challenges, despite the rhetoric and imposition of regulations, is captured by the fact that no professional veterinarian was appointed to superintend the implementation of the state's regulations until 1896.

Despite Mbangwa's scepticism on the sanitary cordons and the slaughter policy, the state's extreme acts were defended by some white missionaries such as Francois Coillard. While acknowledging that the disease pursued its course relentlessly in spite of state veterinary measures, Coillard wrote apologetically arguing that the government had taken effective measures to combat it right from the beginning. Just as many Africans did, Coillard spiritualised the disease as he pleaded, 'Let us draw nigh to God, and he will draw nigh to us ... Let us humble ourselves in the sight of God, and he shall lift us up.'<sup>145</sup> Coillard, though, could afford to straddle both lines of science and spirituality without getting the stern rebuke against 'superstition' that Africans received.

Having failed to find either remedies or answers to this mysterious disease, Africans sought spiritual assistance.<sup>146</sup> Many Africans looked to their political and

<sup>141</sup> NAZ, AOH/58, Rinderpest Epidemic.

<sup>142</sup> NAZ, N1/1/3, Monthly Reports: Letter from NC Hartley to the CNC, 21/03/1896.

<sup>143</sup> Ibid.

<sup>144</sup> Ibid.

<sup>145</sup> F. Coillard, On the Threshold of Central Africa: A Record of Twenty-Five Years Pioneering among the Barotsi of Upper Zambezi (London: Frank Cass, 1971), 627.

<sup>146</sup> See Van Onselen, 'Reactions to Rinderpest'.

religious leaders for answers. In fact, the rinderpest outbreak and other ecological disasters of the 1890s also propelled into prominence some African individuals who were adamantly opposed to the idea of allowing the Europeans to settle in their areas. In this category were Mapondera in Northern Mashonaland, Mashayamombe in Hartley, Kaguvi in Chinamhora, Nehanda in Mazowe, and Muchemwa in Eastern Central Mashonaland. By pointing to the government's slaughter and inoculation policies, these men heightened the anti-colonial and anti-white feelings in the territory.<sup>147</sup> Their speeches made sense to the ordinary people since the slaughtering of local cattle was done by veterinarians who were long suspected of spreading the disease. Carcasses were either burned or buried, so they wondered, 'Whoever had heard of food being destroyed like this? If our cattle die well, we could eat them but these people bury and burn them, and grain is scarce. They want us to die of famine.<sup>148</sup>

Death tolls arising from inoculation trials carried out before the adoption of Koch's inoculation method in late 1896 strengthened the suspicion that the settlers were out to exterminate African cattle.<sup>149</sup> In particular, the branding of cattle increased people's fears and suspicions of the white man's designs for their livestock. Some Africans saw branding as some new form of sorcery.<sup>150</sup> So strong was the anti-colonial feeling that an African missionary, Bernard Mizeki, who, among other things, tried to explain the veterinary measures taken to deal with rinderpest, was murdered by radical elements opposed to colonial rule among the Nhowe people.<sup>151</sup>

Mizeki's relations with the Nhowe people first deteriorated in 1895 when he received smallpox vaccine from Llewellyn Meredith, the native commissioner for Makoni, which he administered to the populace.<sup>152</sup> Some people worsened after they were vaccinated and some developed sores on their arms; so, when cattle were being vaccinated in 1896, one traditional healer rhetorically asked, 'Did he [Mizeki] not cut our flesh with a sharp instrument and rub in poison? Did he not say this was to save us from sickness and yet some people had ugly sores and could not move their arms?'<sup>153</sup> Because Mizeki was an outsider (an African from Portuguese East Africa) and had actively assisted missionaries in 1895 in vaccinating locals against smallpox, the political leader Muchemwa argued that he was not really a black man but had been reared by the white men with an evil purpose of 'changing all the Mashona people into Europeans by witchcraft.'<sup>154</sup> Such was the local reaction to rinderpest. Of course, as historians we acknowledge the familiar nature of such a reaction to this epidemic: in times of social stress such general conspiratorial explanations frequently find fertile ground irrespective of culture, race or historical epoch.<sup>155</sup>

<sup>147</sup> Phoofolo, 'Epidemics and Revolutions', 119.

<sup>148</sup> Cited by D. Chanaiwa, 'A History of the Nhowe before 1900' (Unpublished PhD thesis, University of California, 1971), 246.

<sup>149</sup> Phoofolo, 'Epidemics and Revolutions', 132.

<sup>150</sup> M.C. Chikorowondo, 'Muchemwa and the Nhowe people: 1890–1909 (Resistance to Settler Government in Mangwende)' (Unpublished History Honours thesis, University of Zimbabwe, 1987), 10.

<sup>151</sup> Bernard Mizeki was an African Christian missionary and martyr born in Portuguese East Africa (now Mozambique) who moved to Southern Rhodesia from South Africa in 1891. See J. Farrant, *Mashonaland Martyr: Bernard Mizeki and the Pioneer Church* (London: Oxford University Press, 1966).

<sup>152</sup> Chanaiwa, 'History of the Nhowe', 212.

<sup>153</sup> Farrant, Mashonaland Martyr, 204.

<sup>154</sup> Ibid, 203.

<sup>155</sup> Phoofolo, 'Epidemics and Revolutions', 123.

It is clear that supernatural beliefs played a crucial role in how Africans understood rinderpest but it would be myopic to suggest, as the settlers did at the time, that Africans saw livestock diseases only through a spiritual lens. That some Africans viewed rinderpest spiritually does not mean that all Africans looked at epizootics in this way. We have already shown that there were some Africans who experimented with therapeutic remedies. In fact, quarantining and slaughter, which were at the epicentre of the conflict, were not totally incompatible with African livestock regimes.

Eye-witness testimony on the outbreak of smallpox among Lobengula's soldiers and on the canine rabies outbreak in Bulawayo in 1893 enables us to analyse African veterinary knowledge during the early colonial period. Lobengula quarantined the infected soldiers in the forests and those people developed immunity to the disease by voluntarily infecting themselves.<sup>156</sup> Coillard, who passed through Bulawayo during a rabies outbreak in 1893, reported that the Ndebele enforced a slaughter policy on all dogs showing signs of infection.<sup>157</sup> A 1902 ethnographic study by Charles Edmonds corroborates this. His interviews with Ndebele and Shona elders reveal that canine rabies had existed in precolonial times, and that as a rule the locals combated it by slaughtering all infected dogs.<sup>158</sup> In fact, a slaughter policy was usually done for contagious abortion in cattle.<sup>159</sup> These revelations challenge the idea that, in 1896, Africans resisted slaughter and inoculation because these were alien to them. Africans opposed these moves because state veterinary services were integral to an exploitative system they rejected.<sup>160</sup>

### Livestock knowledge and the Veterinary Department, 1898-1902

In the previous sections we showed that a litany of veterinary regulations was passed soon after occupation and that the state mainly administered veterinary services through unqualified cattle inspectors and native commissioners. Although politics determined which body of veterinary knowledge became official, we have since argued that Africans remained largely uninfluenced by Western veterinary ideas, and still tended to rely on local ways of knowing. Furthermore, the vastness of rinderpest's sweep and the rapidity of its spread resulted in a major reorientation of both Western and local world views. Rinderpest demonstrated two things to the administration: that the black political and religious leaders had a strong influence; and the vulnerability of livestock to diseases in the absence of an effective veterinary services department.

The state-buttressed structures were formed in 1896. Despite rinderpest being brought under control by 1898, the situation did not improve as the following diseases

<sup>156</sup> NAZ, AOH/58, Rinderpest Epidemic.

<sup>157</sup> Francois Coillard cited in K. Brown, Mad Dogs and Meerkats: A History of Resurgent Rabies in Southern Africa (Athens OH: Ohio University Press, 2011), 64.

<sup>158</sup> Charles Edmonds cited by Brown, Mad Dogs, 64.

<sup>159</sup> NAZ, SRG3/VET 2, Veterinary Report, 1918.

<sup>160</sup> Mutowo, 'Animal Diseases', 14

broke out among livestock in quick succession in the next three years: glanders (1898), contagious bovine pleuropneumonia (1900), ulcerative *lymphangitis* and East Coast fever (1902).<sup>161</sup> These diseases stretched the young veterinary department to the limit and required new veterinary responses for the twin purposes of controlling epizootics and plugging loopholes in legal measures that had been pushed through in the 1890s. Under the Animal Diseases Ordinance (1901), Lung Sickness Ordinance (1900) and Glanders Ordinance (1900), all livestock belonging to Africans in the reserves were to be dealt with by native commissioners or any other authorised officials of the Native Department.<sup>162</sup> This arrangement, a continuation of pre-rinderpest state veterinary policy, differed starkly with what was happening in European areas, where veterinary surgeons and inspectors in charge of European stock reported directly to the chief veterinary surgeon. White areas were served by qualified veterinary experts while Africans were served by ad hoc quasi-veterinary officials from the Native Department.<sup>163</sup>

The Veterinary Services Department, formed during the rinderpest outbreak, was intended to favour the literate and those familiar with the workings of colonial administration. Thus, the new regulations never formalised African exclusion from veterinary services – they never *needed* to. All services were available to the 'public' but whites became its major beneficiaries by default. For instance, applicants for services of the government veterinary surgeon had, at their own cost, to provide transport for these officers to and from their stations.<sup>164</sup> In all cases where veterinary advice was required, the owner was supposed to telegraph to Salisbury, with a prepaid reply, the nature of the complaint that the animal was suffering from, giving a full description of the symptoms. This, it was argued, was to enable the chief veterinary surgeon to telegraph advice at once and state whether or not he could arrange for veterinary attendance on the case.<sup>165</sup>

These provisions had the effect of conveniently disenfranchising African livestock owners, who were largely illiterate, with an economy run largely along barter trade and not included in the category of 'farmers'. Also, having been settled further away from the means of communication, it meant that Africans who may have desired this medicine needed to pay more. By 1902, therefore, veterinary services were skewed in favour of settler farmers who, unlike African livestock owners, had the political power to force through legislation that protected their interests.

<sup>161</sup> Ford, Role of Trypanosomiasis, 350–1. See also D. Hutcheon, 'Virulent Redwater in the Transvaal', Agricultural Journal, 33, 1903, 45. Glanders is a destructive and contagious bacterial disease of horses that can be transmitted to humans. East Coast fever is a tick-borne disease of cattle caused by the parasite *Theileria parva*; mortality can be over 90 per cent in susceptible cattle if the disease is not controlled. For further scientific views on its aetiology see Cranefield, *Science and Empire*; and J.L. Giblin, 'East Coast Fever in Socio-historical Context: A Case Study from Tanzania', *International Journal of African Historical Studies*, 23, 3, 1990, 401–21. See also T.T. Dolan, 'Dogmas and Misunderstandings in East Coast Fever', *Tropical Medicine and International Health*, 4, 9, 1999, A3–A11.

<sup>162</sup> NAZ, RG-P/AGR 5, General Instructions issued to officers charged with the administration of laws for the suppression of contagious and infectious diseases in animals in Rhodesia (1901), 2.

<sup>163</sup> Ibid, 5.

<sup>164 &#</sup>x27;Historical Note: Services of Government Veterinary Surgeons: October 1921', Rhodesia Veterinary Journal, 3, 2, 1972, 30.

<sup>165</sup> Ibid, 31.

## Conclusion

This essay has discussed the micro-politics of knowledge and its effects in specific areas of Southern Rhodesia through tracing the history of precolonial and early colonial interactions over African livestock regimes and epidemics. The success or failure of knowledge depended not only on the effectiveness of the information but also on who was enabled to implement it and in which context. This meant that livestock knowledge depended on large socio-political developments, but also on quotidian, subterranean competition between ordinary people, state officials and government departments. We have looked at the everyday fight to try to keep cattle healthy and alive. This has meant finding out whose knowledge has triumphed at particular times and why, who was able to claim ownership of the knowledge, and how this affected both people and animals.

It has, firstly, shown that that there were competing knowledge bodies on disease control, and that the uneven distribution of power played an important role in determining which would dominate. African livestock regimes thrived up to a point in the precolonial period when Africans were independent politically – but this should not be overly romanticised: even precolonial livestock regimes could not address challenges posed by certain diseases. Popular movements related to the Mfecane resulted in the spread of certain beliefs and practices on livestock disease control, and African livestock regimes were neither homogenous nor static as there were differences geographically and over time.

Interaction with Europeans before and after white occupation brought a variety of diseases which, before white rule, were unknown to Africans. In cases where African livestock regimes were unable to deal with these epizootics, Africans correctly linked such diseases with colonialism and the expansion of capitalist production. We accept the now well-known history of technical incompetence, coercion and scientific hubris evinced by the colonial regime, but we try to show heterogeneity within it and admit – à la Gilfoyle, Beinart and Brown – benign and even useful developments within it, and we demonstrate its slow initial pace. Of course, the distribution of veterinary facilities was highly racialised as there was no corresponding tendency by the administration to provide Africans with veterinary services in the reserves. Since veterinary tasks pertaining to African livestock were in the hands of native commissioners, who had little veterinary knowledge, the envisaged diffusion of Western ideas about disease did not occur at the state's desired pace as Africans kept their socio-cultural views of what constituted diseased and 'clean' animals.

Yet, even with their ingenuity in the face of adversity, one has to eschew romantic teleological impositions of comprehensive African indigenous knowledge systems on livestock regimes of health and acknowledge the inadequacy or even absence of a wide pool of local knowledge for some of the diseases, sometimes simply because these diseases were new and sometimes on account of pre-existing conditions. There is little evidence to suggest that local knowledge was unitary, shared throughout the community. Generation, political status and gender all played a role in how such knowledge was accessed and used. Histories of various African approaches

to managing diseases and regional variance in understanding whether a disease mattered (or was a disease) or not, which changed over time, help us to avoid the trap of reifying local knowledge. By showing how local powerful men mobilised knowledge and how violence could erupt from the African side, we can dispel the romantic notion that local knowledge was shared among all Africans equally and that it was always effective, or at least benign. Clear evidence of imported ideas by African groups who moved into the region challenges the simplistic use of the term 'indigenous'.

We acknowledge the historical interaction of local and diverse outsiders' knowledge to produce provisional and mediated knowledges, existing fluidly with a gamut of ideas. The binary between 'indigenous' and 'exotic' knowledge is thus an unhelpful lens into the past and also – we would argue – into the present. There were commonalities and overlaps between so-called local knowledge and so-called Western knowledge – neither was static or unchanging. Both were syncretic (to varying degrees) and fluid, and reflected negotiations and renegotiations between people (albeit between unevenly matched groups in an asymmetrical set of relations) and also negotiations between peoples and their changing environments. In the end, we want to underline the fact that knowledges are themselves hybrid creatures, animals that sometimes serve their masters but that also fight for dominance, escape their owners, and sometimes breed together.