2 Translation into Science and Policy

By settling on the central watershed, first the Ndebele (1838–1840) and then *vachena* (1890–1893) built their settlements based on *ruzivo* (knowledge) and millennia of strategic deployment in and modification of the environment by local *vedzimbahwe*. I argue that it is impossible and ahistorical to consider the project of creating a Rhodesia absent the *ruzivo* upon which its establishment was founded. The same is true for the Ndebele before *vachena*. They had displaced VaRozvi. It is also true of all incoming *vedzimbahwe*, who had scattered and/or subjugated Basarwa (the San). That is not to say these newcomers added nothing to environmental management knowledge, but to caution against a tendency to blow the transformative power of incoming things out of proportion. Instead, encounters between incoming and local *vanhu* are repositioned as *kusangana kweruzivo* (knowledge encounters).

It was not by accident that the *dzimbahwe* plateau became white man's country, while *vatema* were squeezed out to crowded reserves and the *hutunga*- and *mhesvi*-infested lowlands that *vedzimbahwe* had strategically deployed themselves against and away from on the watershed (Ford 1971). Reserves like Gwai and Shangani in Ndebele country, Hurungwe in the north, and Matibi II in the southeast were drought-prone, *mhesvi*-prone, and infested with *mhuka*. People felt that they were being treated as *mhuka*, evacuated to live with other *mhuka*: *nzou* the elephant, *shumba* the lion, *gudo* the baboon, and other creatures of the forest. Forced resettlement in such areas inevitably set up confrontation between *hurumende yevadzvanyiriri* and those calling themselves "African nationalists" (who popularized the labels of *vanhu*/*vatema* as "Africans") from the 1940s onward (McGregor and Ranger 2000). The point is that the originators of the *ruzivo* that made the plateau into livable space were being thrown to the undesirable margins.

Methodologically, *vapambevhu*'s theft of land made livable by *vanhu* serves as a call to carefully explore the encounter between *muchena* and *mutema* as one about *ruzivo*. The better starting point is not the moment of partition but the encounter between *vachena* traveling in the late nineteenth century and publishing, for example, in the *Journal of the Royal Geographical Society* (principally), and local custodians and practitioners of this *ruzivo*. Why did these *vapambevhu* (abductors of land) defer to *ruzivo rwevatema* (black people's knowledge)? Why did they write about it so candidly?

It's not that *vaive vanhu vakanaka chaizvo* (they were wonderful, objective human beings). The pain, loss, and sorrow that *mhesvi* inflicted upon these writers forced them to write about their experiences. With no experience of *mhesvi* overseas, these itinerant *vachena* had no choice but to defer to local inhabitants, who told them about and taught them their own means and ways of dealing with the insect. The itinerants then described these encounters in their memoirs and submissions to peer-reviewed journals, for which travel and experience were critical credentials of natural history.

Vachena's mobilities were disruptive by their very nature: Hunting with guns, wounding *mhuka* that then fled across the country, was disruptive. Even more disruptive was geographic exploration, which always entailed moving across—against—long-respected boundaries between *misha*, *sango*, and *hufuro*.

Equally, the local environment and its constituent elements were also facilitative of *vachena*'s mobility. Hospitality and hostility, availability or paucity of water, and the presence or absence of threats to good health were just three of many critical determinants of the success or failure of a journey into the Southern African interior. As carriers of a deadly *hutachiwana* (pathogen), *mhesvi* and *hutunga* often coexisted in the same places through which itinerant *vachena* passed.

As in the last, this chapter methodologically continues to read traveling *vachena*'s accounts in search of confessions—this time, first about the pain *mhesvi* exacts on them as they explore (according to them), hunt, trade, and preach, and then about the stratagems they learned from local people and wrote about in their journals and memoirs.

Translation: How Local Knowledge Moved into Western Science

In the nineteenth century, the *vachena* traveling in the Southern African hinterland to collect, write about, and paint *zvipukanana* were zoologists, specialized entomologists, and part-timers. They were not journeying in

terra incognita or places without political jurisdiction. They might have been on their own some of the time, but they were never alone; all were under the jurisdiction of one form of authority or another, political as well as spiritual (Mavhunga 2014). Fewer white travelers understood protocol more than Emil Holub, whose account illustrates the role of etiquette as a lubricant to mobility.

Writing in 1881 at the end of nearly a decade of staying and traveling in the regions between the Vaal and the Zambezi, the Bohemian implored the aspiring white explorer to make acquaintances among "the natives," entering their *misha* and seeking permission from their kings to pass through. The visitor had to purchase food from the local inhabitants and hire them as "servants." It was not scientific enough to merely "list names of tribes and countries" and describe their "most interesting customs" and just breeze through the countryside, spend a night or two, and then vamoose. The traveler, Holub said, could only understand "the natives" if he stayed months, even years, among them, learning their language, practicing their customs, observing how they related to each other and to other "tribes" and to the white men. Therefore, Holub elected to go into places that were "not yet in any way civilized," having also lived among "tribes living among the white men," so that he could "notice the difference between those who enjoy the benefits of civilisation and those who do not" (Holub 1881, 3).

Hence the ease with which itinerant *vachena* accessed *ruzivo* and practices about *mhuka*, *mhesvi*, and their actions. In this chapter, you will see traveling *vachena* appropriating this *ruzivo*—sometimes acknowledging its sources, usually representing it as commonsense, and sometimes considering it as a "myth" they now put under "experiment." In this way, these travelers installed themselves firmly as the producers of true *ruzivo*, derived from "scientific" method, whereas "the native" was content with "myths" and "legends."

Some traveling *vachena* acknowledged their local sources, whereas others did not, obviously to claim the credit of "discovery" and exaggerate the pain they had endured to "explore" and how their ingenuity and improvisation had saved them from certain death. Experience was a very good teacher, if only complementary to knowledge already shared with them by local inhabitants or gained as a direct consequence of heeding or disregarding "native advice" and entering into certain encounters they could have avoided.

To restate the question, then: Why did traveling *vachena* appropriate and write about *ruzivo rwevatema* (knowledge of black people) about *mhesvi*? The answer is very simple: They had no means of controlling *mhesvi* and there was nothing to work with except locally produced ideas and practices. Otherwise, they risked losing all their oxen or horses and having to walk and carry their loads themselves—or spend heavily on local porters.

William Cornwallis Harris was one of the first Englishmen to suffer the pain of *mhesvi* enough to write about it. In 1836, after the *chipukanana* had terrorized him greatly on the upper Limpopo, he was trying to describe it to his audience of *vachena*. He called this strange *chipukanana* "a large species of gad-fly, nearly the size of a honey-bee." Some early travelers called this "horrible" *chipukanana* a "warble fly" (Clark 1857), others a "poison-fly" (Chapman 1868, 174).

It was Batswana that revealed the name *tsetse* to the Englishman Roualeyn Gordon-Cumming as he hunted in the upper Limpopo environs between 1843 and 1849. The distinction between *ntsi* (the ordinary house-fly; plural *lintsi*) and *tsetse* (*mhesvi*) was very clear, because the latter's bite spelled doom for a Motswana's *dikgomo* wealth. Gordon-Cumming (1850) did not take long to bear witness to this: "When under the [Modimolle] mountains I met with the famous fly called 'Tsetse,' and the next day (17th August, 1846) one of my stud died of *tsetse*. He had been bitten under the mountain range lying to the south of this fountain" (227). The Englishman observed the head and body of the stricken animal to swell up "in a most distressing manner before he died. His eyes were so swollen that he could not see, and in darkness he neighed for his comrades who stood feeding beside him" (227). Meanwhile, two other *vachena*, Cotton Oswell and Major Frank Vardon, were hunting in the Marico-Limpopo area. The latter apprehended one *mhesvi* that he took on his person to England (Oswell 1894, 113). Traveling through the Letaba-Lepalale stretch, crossing the Limpopo, and out north toward the watershed, the German geologist Karl Mauch decried the presence of "the Tsetse (*Glossina*), this pest and scourge for anyone who does not travel on foot." Its bite on his right wrist had caused an hour-long inflammation, but the infliction on the oxen was fatal (Bernhard 1971, 99).

Traveling *vachena* usually "escaped almost unscathed," but the horses and *mombe* did not. They encountered *mhesvi* in the bush, "or among the reeds," ready at a stir's notice to pounce on the wayfarer, "but not rarely in the open country." They noticed while walking, through being bitten, that the *chipukanana* was confined to particular spots; *vanhu* that had lived long locally knew the *mhesvi* not to shift its haunts (Anderson 1856, 488). The

local chiefs and commoners told *vafambi vachena* (white travelers) things about *mhesvi*, guided, carried loads, and tracked for them.

After all, the local men these travelers employed as guides were the mobile sentinels who "reconnoitered in front, so as to announce the appearance of the poisonous insect at once" (Mohr 1876, 290). Countless times Moffat and Livingstone (figure 2.1) had been led by Basarwa guides through *mhesvi* country (Wallis 1976 vol. 2, 163). The men displayed encyclopedic *ruzivo* on what dangers inhabited which stretch of country and ways to avoid them. When the wayfarers outspanned, they always posted one of these local men "to watch every insect that approached them" (Baines 1877, 63). These men were usually moving well forward and, upon sighting *mhesvi*, tracked back to warn the main party of *vachena* further behind. Local knowledge defined the itinerary (Mohr 1876, 290).

The *mhesvi* was also an annoyance with its "incessant persecutions," as this account from Thomas Baines, a veritable artist, shows: "At the moment, perhaps, when one requires the utmost steadiness and delicacy of hand, a dozen of these little pests take advantage of his stillness, and simultaneously

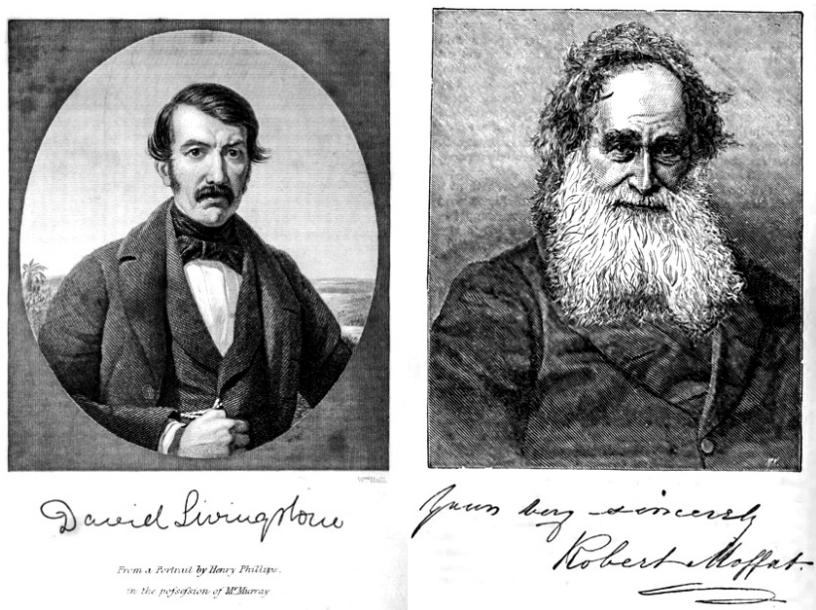


Figure 2.1
David Livingstone (left) and Robert Moffat (right).
Source: National Archives of Zimbabwe.

plunge their preparatory lancets into the neck, wrists, and the tenderest parts of the body; one or more cunning fellows actually selecting the places where the lines of fortune radiate or cross, with a skill in palmistry that would do honour to an experienced gipsy" (Baines 1864, 511).

Anyone who has seen *mhesvi* will know that this *chipukanana* is a persistent, if uninvited, companion of anything that moves. "They accompany us on the march, often buzzing round our heads like a swarm of bees," noted David and Charles Livingstone (1865, 205) as they proceeded up the valley leading to the Mburuma pass along the Zambezi. John Kirk's account of an encounter with *mhesvi* near the Zambezi-Kafue confluence is particularly hilarious: "While walking along the river-bank in search of game, under flat-topped acacias, I heard a buzzing sound, and saw a cloud of bees, I ran off, while they followed. On looking back I found it was only 'Tsetse'; so, arming myself with a leafy branch, I kept them off and continued my journey; they accompanied me for some distance however. I have never again seen them congregate in this manner" (Kirk 1865, 155).

Mhesvi was a "cunning" companion with "intention" to feed. Hence, "when intending to bite," the flies landed "so gently that their presence [was] not perceived till they thrust in their lance-like proboscis [long mouth]." The pain was "acute" but brief, giving way to "the disagreeable itch of the mosquito's bite" (Livingstone and Livingstone 1865, 207; Chapman 1868, 175–177). In 1857, Moffat remarked on the state of Mzilikazi's bare-skinned messengers to David Livingstone, "after passing through the tsetse and arriving with skins stung till they are rough as a file" (Wallis 1976b, 109). (For a portrait of Mzilikazi, see figure 2.2a.)

What types of locally generated knowledge of *mhesvi* did these white writers translate into written text for their white audiences? The answer: any information and stratagems that people shared with them verbally and in practice. Take their use of night movement to cheat *mhesvi* as an opening example of *vachena* using *ruzivo rwevatema*. Writing on the move in the Sesheke area of the upper Zambezi, David Livingstone ([1857] 2001) tells of traversing the "20 miles infested by the tsetse during the night … so pitchy dark [that] we could only see by the frequent gleams of lightning" (353). Later, as he trudged through the upper Limpopo *mhesvi* belt, Baines (1877) was grateful that "the night was dark and cloudy, preventing any observation for latitude, but affording us additional security against the insect pest" (66). Advising his all-*vachena* public about the road from Pretoria to Delagoa Bay via the Lebombo Mountains, Baines (1877) warned of a forty-mile strip of unhealthy country that needed to be crossed "as

rapidly as possible, and at night or during a cold day, when the fly is dormant" (108–109). The distance from the Lebombo mountains to the port of Delagoa Bay was thirty to forty miles, low country with a "not undeserved reputation for unhealthiness," a significant portion of it *mhesvi*-infested but "sufficiently narrow to be passed through in one night" (108–109). Here we see how travelers manipulated temperature and the darkness of the night to "cheat" *mhesvi* as *vatema* had educated them to do.

These wayfarers took this *ruzivo* to Europe, where, as geographical explorers, they presented their papers before scientific associations such as the Royal Geographical Society and the Linnaean Society. They published in the *Journal of the Royal Geographical Society*, *The Field*, *Country Life*, *Fortnightly Review*, and other forums in which explorers and other empire publics "congregated." They also deposited trophies they brought from the colonies into museums of natural history, live *mhuka* in zoos, and plant varieties in botanical gardens (Austen 1908). The most influential south to north transfer of *ruzivo rwemhesvi* and its forest animal hosts occurred during the past five hundred years, peaking in the last two hundred.

Take, for example, John Kirk, who in his address to the Royal Geographical Society in 1865 "forgot" to acknowledge who had educated him about *ndedzi* when talking about his movement by night to cheat *mhesvi* in the Zambezi Valley. Clearly, Kirk is building on this local practice as he tries to "scientifically" explain night movement as a strategy against *mhesvi* bite: "In the morning while the dew hangs on the grass, and before the heat of the rising sun has warmed the air, the 'Tsetse' is dull and sluggish, resting on the underside of some leaf or blade of grass; when forced to take wing they may then be easily caught. … By night I have never been bitten by 'Tsetse,' nor do they fly about after sunset" (Kirk 1865, 150).

In his diary entry of October 23, 1871, Baines too does not acknowledge the source of his wisdom, but takes two precautions against *mhesvi* that we earlier discussed people using. He says he "sent word to have the oxen kept away till after dark"; then, with his local staff, he "set fire to the grass and to heaps of rubbish to drive away the Tsetse, a few of which we saw." Curiously, Baines acknowledges the Boers for cutting through the Limpopo *mhesvi*-infested belt from the Transvaal into Ndebele territory. But who taught the Boer farmers this knowledge of *mhesvi*? *Vanhu vatema*, as shown in the previous chapter. Boer farmers like Theunis de Klerk told Baines that they "knew where to ride their horses with safety between the patches of fly; they also have safe or inoculated oxen and even ride their horses in; they will not tell their medicine, but charge an ox for making a horse safe" (Baines 1877, 61, 68). Baines found that *mhesvi*, "though occupying large

tracts of country, does not completely overspread it, but leaves parts which are known to various hunters, and which serve as channels by which a course may be steered with some chance of escape from the deadly insect." Of course, as Baines discovered, the ability to steer through these patches depended on whether one was able "to obtain a skillful pilot" (80). A farmer named Andreas Duvenage told Baines of "a safe passage through the fly, between Blauwberg and Zoutpansberg." Devenaar lived eighteen miles north of Marabastad and was reputed to have the best-known road through the *mhesvi*-infested belt. He crossed the Limpopo at Commando Drift, west of Musina, "meeting only one patch of fly, which he rides through in the night" (81, 84).

In 1881, a young *muchena* named Humphrey gave an account of *mhesvi* in the same area in which Baines had found it, and he described the distribution of the *chipukanana* and ways of cheating it through tactful mobilities: "Leaving the last halting-place free from tsetse in the evening, they travelled all night to avoid the insect, and before morning reached a narrow strip of country free from fly but without water, though there was grass for the oxen. The next night a shorter march brought them to the river in time for the oxen to drink and return back to the spot free from fly before daylight" (cited by Frere 1881, 15). It bears repeating that, as I showed in the previous chapter, it was the standard practice of *vatema* to travel by night to cheat *mhesvi* all across east, central, and southern Africa.

By 1888, the scientific position in Britain was based on *ruzivo rwevatema*:

> At present no cure is known for the bite, nor does inoculation seem to afford any protection. The fly is said to avoid animal excreta, and in some parts a paste composed of milk and manure is smeared on cattle which are about to pass through the 'fly-belts.' This affords a certain amount of protection. Lion fat is used in the same way, and is said to be efficacious. The fly is found as a rule in the neighbourhood of water, and its habitat is usually sharply defined. Often it occurs on one side of a stream, but not on the other. The limits of the 'fly-belts' are well known to the natives, and travelers can ensure comparative safety to their cattle by passing through these districts after sundown. (Encyclopaedia Britannica 1888, s.v. "Tsetse-fly [*Glossina morsitans*]")

This was the *Encyclopedia Britannica* entry on the tsetse that year—copied directly out of *ruzivo rwevatema* and noting the surest way to avoid trouble from *mhesvi*.

The nineteenth-century evidence indicates that people in practically all *mhesvi*-infested areas believed that the *chipukanana* was always present wherever there was *nyati* the buffalo—and big *mhuka* generally. These

people had long lived near and hunted within *nyati*-inhabited country—some for centuries, the indigenous San for millennia. The belief among the San (the original inhabitants of Southern Africa) was that *mhesvi* fell pregnant and gave birth to whitish worms. Said Bradshaw (1877–1878): "The Bushmen have told me that the fly breeds in the buffalo droppings, and it seems as if there was some truth in it, because where the buffalos have been driven away in certain tracts, the fly has almost disappeared" (52). The Kololo believed that *mhesvi* laid eggs, reddish in color, on *mopane* tree leaves, on twigs scattered in the ground, and in the cow dung of *nyati* the buffalo.

Muchena proved *vatema*'s facts about the *mhesvi-mhuka* association through the barrel of his gun. By the 1850s, *nyati* the buffalo, *nzou* the elephant, and *ndunguza* the antelope had vanished, along with *mhesvi*, from areas along the Southern African coastline (Livingstone [1857] 2001, 82–83). In the 1870s, *Serowe* and another Englishman and William Finaughty observed this correlation between the extinction of *nyati* and the disappearance of *mhesvi* on the Linyanti (Chobe) River and Shashe-Limpopo confluence, respectively (Selous 1881, 190–203; Selous 1893, 294, 298; Finaughty 1916, 175–176). Other travelers noticed the same thing across the once *mhesvi*-infested stretch between the Lebombo Mountains and Lourenço Marques (Maputo) (Frere 1881, 19; Swynnerton 1921a, 335–336).

There were many figures engaged in this movement of *ruzivo* from Africa into Europe and North America through peer-reviewed journal publication, but the central one in the context of *mhesvi* was without doubt *Serowe* (Selous). Arriving in the Ndebele kingdom in 1871 aged nineteen years, the Englishman would cut his teeth as a hunter under local mentors who tracked for, guided, and showed him how to kill *ndlovu* the elephant and other big *inyamazana* that made him famous (Selous 1881, 51). Twenty years later, he would betray the trust of these people who had been good to him when he enlisted as the chief scout of the Pioneer Column. This was the occupying force that British capitalist and Cape politician Cecil John Rhodes organized to occupy land that his British South Africa Company (BSAC) had fraudulently acquired from Mzilikazi's son and successor, Lobengula (figure 2.2b), in 1889 under the Rudd Concession. After annexing *vedzimbahwe*'s lands to the east, in 1893 the BSAC invaded the Ndebele kingdom. The territory became to *vachena* the "colony" of Southern Rhodesia in honor of Rhodes.

Ten years after the annexation of the Ndebele kingdom, Ernest Edward Austen's *A Monograph of the Tsetse Flies* was published. In it are found

a)

b)

Figure 2.2a, b
Mzilikazi (left) and Lobengula (right).
Source: National Archives of Zimbabwe.

excerpts of *ruzivo rwevatema* about *mhesvi* and nineteenth-century white travelers' affirmations and applications of the same, complete with experiments on the move as the travelers encamped, walked, hunted, and decamped. Major Austen, a bacteriologist specializing in blood-sucking flies at the British Museum of Natural History in London, initially endorsed *Serowe*'s ideas in his 1903 intervention concerning the *mhesvi-nyati* connections, but the discord started not long afterward. That exchange (summarized here) is significant because it marked a shift in the basis of *hunyanzvi* (expertise) on tsetse derived from *experience* (*Serowe* the "big game hunter," imbiber of "native testimony," witness to its veracity through experience) to *experiment* (Austen, lab scientist, trained bacteriologist, using experiment

to prove fact or falsehood). Austen was suggesting a paradigm shift: that neither *nyati* the buffalo specifically nor *mhuka* in general was necessary for the survival of *mhesvi*; that instead of taking the *mhuka-mhesvi* association for granted, attention must be focused on the latter's relationship to the environment. Knowing through experiment should now become the only permissible route to facts; *kuziva* (knowing) *mhesvi* through the experience of losing oxen to it no longer counted (Mavhunga 2007).

Austen's call for a "scientific" approach to *mhesvi* and *Serowe*'s insistence on the role of big *mhuka* and *nyati* inaugurated serious research interest in at least four elements of mobilities—namely, of *mhesvi* itself; of *mhuka*, whose blood constituted its food; of *hutachiwana hwen'gana* contained in the blood; and of *zvipfuyo* and *vanhu* it bit, infected, and rode on. The goal of this research was to design ways to detect, catch, suppress, or eliminate *mhesvi*,[1] to target both the surroundings and *n'gana*-spreading mobilities.

Swynnerton (see figure 2.3), whose writings about *sondela enkosini* we discussed in chapter 1, was born December 3, 1877, in Lowestoft, England. At an early age, he spent time in India with his army chaplain father before returning to attend school at Lancing College, Sussex, where his natural history interest blossomed. In 1897, aged twenty years, he was admitted into Oxford University but elected instead to migrate to Natal, South Africa. There, he met a naturalist named Guy Marshall, who encouraged him to accompany him to settle in Southern Rhodesia, where Marshall had been already well established in Salisbury since 1893. Swynnerton briefly worked in a store that Marshall partially owned, but the job was very boring. The young Englishman removed to the Melsetter (Chipinge) district, where he found work as a farm manager. In those days, a person just needed to be a white male and prepared to withstand living in remote areas to get such a job. In 1900, the Englishman moved to Gungunyana Farm, abutting Chirinda Forest, again as a farm manager.

Gungunyana is a corruption of *Ngungunyana*, the son and successor of Mzila and the last Gaza king, who in 1889 migrated to Bilene to avoid Anglo-Portuguese encirclement. Swynnerton arrived just a decade after this emigration. In 1902, his boss and friend Marshall bought the farm. Swynnerton would spend the next two decades at Gungunyana Farm. During that time, he undertook detailed studies of the local ecology, tapping into the *vutivi* (knowledge in *xitsonga*) of local people—that is, what remained of the epicenter of the Gaza kingdom. In 1919, aged forty-two years, he relocated to Tanganyika to take up a new position as a game warden. In

Figure 2.3
Charles Francis Massy Swynnerton.
Source: http://rayhewlett.org.

1928, he was appointed the director of Tanganyika's Department of Tsetse Research at Shinyanga. Swynnerton died in a plane crash in 1938.

Whereas Marshall thrived as *xitivi* (an expert) on weevils and rose to become the director of the Commonwealth Institute of Entomology in London, Swynnerton carved out his early natural history career on Gungunyana Farm collecting plants in 1903 and with some intensity in 1905 and 1906. The large numbers of herbarium specimens he sent to the British Museum in London drew praises as demonstrating "a precision in localisation and notes on economic uses which made this collection a model one" (Marshall 1938, 39). Swynnerton made an immense contribution to the botany of Southern Rhodesia, to the extent that British Museum botanists even named "new" species after him (Rendle et al. 1911). In 1906–1908, he wrote an amazing description of plants in the Chimanimani mountains (Goodier and Phipps 1961). As a farm manager at Gungunyana, he spent considerable time researching the plant life of Chirinda Forest (Mullin 1994). Swynnerton was not only interested in vegetation; he published on

svinyenyana (birds) and *sviharhi* (wild animals) as well (Swynnerton 1908a, 1908b).

His major contribution was without doubt on *svifufunhunhu* (insects). Many of his extensive specimens found their way to the British Museum; in 1907, he was elected into the Linnaean Society. Health complications forced him to give up farming in 1918, and he now ventured into investigations on the habits and distribution of *ndedzi* (*mhesvi*) in northern Muzvirizvi (Mossurize) District. This area is located on the borderlands surrounding the Sitatonga Hills inside Mozambique. After taking up the wardenship in Tanganyika in 1919, he explored *sviharhi-ndedzi* relations even further, taking the ideas gathered at Gungunyana Farm and Muzvirizvi a step further into his experiments as director at Shinyanga, where he eventually published *The Tsetse Flies of East Africa* (Swynnerton 1936). When Swynnerton died in 1938, Marshall wrote a moving obituary in the US science journal *Nature*, omitting from his tributes the people who had taught the deceased man so much about the plants, *svinyengana*, and *svifufunhunhu*—and not least *ndedzi*.

Most of the elderly people who had taken part in *sondela enkosini* were still alive. They told Swynnerton exactly what had happened during and since Mzila's initiative. The local people who provided valuable *vutivi* upon which he based his "scientific" claims sometimes appear merely as "my native informants" in his text. Their *vutivi* to him also seems at times mere "information" and "native testimonies." By contrast, all *vachena* who barely contributed a thing to collecting the *vutivi* are recognized by their full names and their statements noted as concrete scientific positions. Regardless, Swynnerton's reason for turning to *vutivi* was that "the study of any successful campaign, by whomsoever carried out, is bound to add usefully to our general knowledge on the subject of controlling tsetse." Coming as a "botanist and ecologist rather than the unaided entomologist," he sought to understand from local *svitivi* (experts) the types of woodlands in which they had seen specific types of *ndedzi* (Swynnerton 1936, 317).

The Sitatonga study best demonstrates the huge debt Swynnerton owed his local "informants," as he called them. To his credit, he acknowledged it. His journeys with them—often led by them—into the local lives of *ndedzi* began in June 1918. For three months, he conducted a "preliminary investigation" to determine *ndedzi* habits and distribution. He had intended to focus on the Gogoi area, but it yielded little, so he relocated to the country east of the Sitatonga mountains, where he had caught considerable numbers of flies in 1900. He says the project was conducted "with the help of my own farm natives only" and local people through the offices of a local

Portuguese official named Senhor Lanne. The area west of the Sitatonga Hills had been the "*scene of a particularly fine experiment* in the banishment of tsetse" six decades earlier—by Mzila, the Gaza king (Swynnerton 1921a, 316; my emphasis). Indeed, it was a vast open laboratory.

Hlengwe locals were unanimous about the connections between big forest animals and *ndedzi* presence. *Mbavala* (bushbuck), *honci-nhova* (warthog), *khumba* (bushpigs), and *nhungu* (kudu) did not wander far and were "the fly's most reliable food-supply in its permanent haunts" (Swynnerton 1921a, 342). By contrast, *mhopfu* the eland, *ndlopfu* the elephant, and *nyarhi* the buffalo were wanderers, the latter two moving in great herds, covering extensive grazing grounds, and moving back and forth between them, splitting into smaller groups or ostracized into bachelor herds or lone bulls (342). *Nyarhi* the buffalo combined both the capacity to be a reliable feeder of *ndedzi* and an excellent organic vehicle for it as it moved through the countryside. Hence, Swynnerton found the problem in Muzvirizvi to be "not so much that [*nyarhi*] feeds the fly (which would be fed and contaminated in any case by the pigs) but that it carries tsetse far and wide in the rainy season and so brings it into contact with the cattle" (Swynnerton 1921a, 316).

Migration and vehicular role aside, the local mobilities and habits of *sviharhi* were themselves critical to explaining which kinds *ndedzi* best preferred for blood. *Ndlopfu* used the same path to the waterhole and were predictable to *ndedzi*. *Mvubu* (hippopotami), by contrast, spent the whole afternoon basking in the sun poolside; *ndedzi* had something of a field day with them. The "natives of the *morsitans* area," Swynnerton remarked, were "unanimous" in stating that *ndedzi* fed on *mfenhe* the baboon and that "wherever you find baboons you will also find fly" (Swynnerton 1921a, 336). They gave him countless examples "in which baboons driven from their gardens had left numerous replete flies behind and others in which flies were attracted in numbers to baboons that were killed" (336). *Nkawu* the monkey also raided their gardens, but was not as readily found with flies as *mfenhe*, which were slower, bigger, and more visible to *ndedzi*. Occasionally, they also found *ndedzi* on cane rats, diurnal rodents of which there was a surfeit. They also "universally incriminated" *khumba*. Swynnerton concluded that "any attempt … to destroy the fly by starving it in its permanent haunts is doomed to failure if the bushpigs, and perhaps the baboons also, are not destroyed; and the destruction of the pigs in this type of country is not easy" (337). The same *xiharhi* (save *mfenhe*) would be targeted under Rhodesia's selective or discriminative game elimination from 1956 onward.

Ndedzi also drew on numerous *svinyenyana*, *svikokovi* (reptiles), and *dewulana* (bats) for blood. Slow-moving ground feeders included *mhangele* (guinea fowl), *nghwari* (crested francolin), *gumba* (white stork), and *ntsutsu* (egret). *Ngwenya* (crocodiles), *nyoka* (snakes), and *ngwahle* (iguana) were the most common reptile food hosts (Swynnerton 1921a, 328–329). Add to that *mhunti*, a little duiker that usually rests under logs and between tree buttresses, favorite resting places for *ndedzi*.

Locals disclosed to Swynnerton that smaller *sviharhi* also supported *ndedzi* populations in lieu of the more docile, slow-moving *nyarhi*. One of his guides, "a very observant native, was particularly convinced of it." When faced with a choice between *nyarhi* and other *sviharhi* that *ndedzi* followed, the guide said: "The buck are much more restless under its attentions than the buffalo, the hartebeests especially keeping up their dance when tsetse are about them; so that the fly can feed more easily on the buffalo" (Swynnerton 1921a, 339). Swynnerton subsequently concludes: "It follows *also from my observations* on this expedition that the old idea that tsetses possess a preference for *nyarhi* may be perfectly correct, though it will show itself strongly only where, and while, buffalos are so abundant as to make the fly comparatively independent of less favoured food" (340; my emphasis).

How then can we explain *ndedzi*'s preference for *nyarhi* the buffalo? Was it because the bovine was black? Yes, according to a local old-timer named Mabuzana, who lived close to the Mtshanedzi River south of Gogoi. Mabuzana told Swynnerton that *ndedzi* was especially attracted by a black coat, and an interesting conversation ensued. "How do you know that?" Swynnerton asked. "Because I have one!" Mabuzana replied (Swynnerton 1921a, 339). Four decades later, the Branch of Tsetse and Trypanosomiasis Control (BTTC) would embark on what it called "attractant studies" that found *ndedzi* to be attracted to dark colors.

The whole idea of "carried fly" was also something commonsensical and experiential. Locals had reported an increase in flies in their *tiko* (village) that were being brought from other areas on the bodies of *vanhu* and *sviharhi*. These people lived along the rivers where water remained as uplands dried up, so *sviharhi* would be coming to the river to drink. *Ndedzi* gathered at the waterholes in ambush. *Sviharhi* or people going to the river or passing through deposited flies picked in the uplands that were drying up, increasing as the dry Southern Africa winter intensified (Swynnerton 1921a, 370).

Yet it was not always the case that *sviharhi* brought *ndedzi*; in fact, local *vanhu* in the Mpapa area told Swynnerton that the *ndedzi* presence predated the arrival and concentration of *nyarhi* herds. At Masando, *vanhu*

said the herds were too small to qualify as "concentrations." At Kanyezi, the large collection of *mahlomalavisi* (pupa) showed that *ndedzi* concentration already existed prior to the temporary presence of *nyarhi*. As far as *vanhu* were concerned, it was common *vutivi* that *ndedzi* concentration was "permanent though variable in numbers, that it had been there before the buffalos came (as it had also survived their departure), and that the animals had stayed a very few days only" (Swynnerton 1921a, 371). Swynnerton's guide Kanyezi lived close to the valley where *nyarhi* had concentrated. He had lived with the flies and seen the *nyarhi* herds when they arrived and believed unequivocally that the concentrations preceded this bovine movement (371).

Another local named Gundoda told of a concentration that took place in the *tiko* during the rains in areas where *ndedzi* was abundant. He was basing his *vutivi* on what he had experienced in his own *tiko*, which not only had good shade but was located on the edges of a well-watered valley—a rather "tempting dismounting-place for fly." He described to Swynnerton that in spring and at the onset of the rains "every newcomer or passer-by would bring with him an accession of flies till their numbers became unbearable" (Swynnerton 1921a, 372). Some of the flies would follow these travelers, but many more stayed, accumulating with each passerby. To ward off these *svifufunhunhu*'s attentions, the itinerant carried a leafy switch, thrashing any that approached or bit into him.

The Language of Translation

Vanhu vantima (black people), *mirhi* (trees), *sviharhi* (wild animals), and *svifufunhunhu* (insects) did not enter *vutivi bya valungu* (the knowledge of whites) with their names but with those that *valungu* arbitrarily gave them. Even rivers lost the names that *vantima* had given them as a prerequisite for entering *vutivi bya valungu*, as did *vantima*'s names as a condition for getting birth certificates or baptism. In the process, such resources and the *vutivi* that *vantima* had volunteered to these writers was hidden in strange Latin or botanic names, *vachena*'s linguistic translations, and the written text. *Vutivi* was no longer recognizable to the very same people who had pointed it out to these strangers.

The movement of *vutivi* from *vantima* to *valungu* happened through not just any translation but what became known as *fanakaló* or *fanagaló*—a hybrid language composed of some English, Nyanja, and *chidzimbahwe*. Also known derogatorily as *kitchen-kafir*, *mine-kafir*, *pidgin bantu*, *isikula* ("coolie" or Indian), *chirooroo*, *fanikaroo*, and *chiraparapa* (*silapalapa*), *fanakaló*

emerged as an expedient language of communication in the Eastern Cape and Natal between mostly English-speaking *vachena* and local Zulu and Xhosa inhabitants in the early 1800s; it thrived in the diamond mines of Kimberley and the gold mines of Johannesburg later (Cole 1953; Hopkin-Jenkins 1948, vii; Bold 1952, 6; Lloyd 1950, 3). As workers returned home and as whites settled in Southern Rhodesia, *fanakaló* increasingly became the halfway language "spoken wherever black meets white from the Cape Peninsula to the Great Lakes of Africa" (Bold 1949, 77). Initially, entomologists such as Swynnerton spoke no local languages; they supervised and relied on workers with no English-language skills.

Swynnerton also began the process of mystifying and alienating the knowledge of *ndedzi* generated by local people through renaming. The mystification began with the new names for *mhesvi* itself. What locals knew as *ndedzi* (*xitsonga*) and *inthesi* (*xitshangana*) Swynnerton now called "tse-tse," which, as noted earlier, is Setswana. Even *tsetse* was not considered scientific enough, thus leading to *Glossina* (shortened to *G.*), a Latin word for bloodsucking flies (which now became *diptera*). *Glossina* was further subdivided into three "subspecies": two gigantic *svindedzi sva nkova* (*mhesvirupani* in *xitsonga*) or river-loving types *valungu* now called *G. pallidipes* and *G. palpalis*, and the small *svindedzi sva nhoveni* (*mhesvirutondo* or savannah-loving in *xitsonga*), which *valungu* now called *G. morsitans*.

In the *morsitans* category were *Glossina morsitans Westwood*, named after John Obadiah Westwood (in 1850); *G. austeni* and *G. pallidipes*, "discovered" by Ernest Edward Austen (1903); and *G. swynnertoni*, by Charles Swynnerton (1923). The twelve *G. fusca* "species" (because *vachena* said now they were; *vatema* had their own categories) were not found in *dzimbahwe* and have no bearing on this book. Of the riverine "species," two *G. palpalis*, "discovered" by Robineau-Desvoidy in 1830, and *Glossina palpalis gambiensis* were present, especially in the southeastern areas. There was also what *vachena* now called *G. brevipalpis* and *G. longipenis*.

Which *munhu mutema* would now recognize, let alone pronounce, these names? At least they could still pronounce *tsetse*, a Setswana name now universalized across all of Africa and even *ruzivo rwevachena*. The language of translation erased the tracks of the *vutivi* and hid it from its originators.

The Mobile Workshop

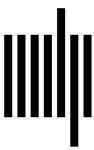
The Tsetse Fly and African Knowledge Production

By: Clapperton Chakanetsa Mavhunga

Citation:

The Mobile Workshop: The Tsetse Fly and African Knowledge Production
By: Clapperton Chakanetsa Mavhunga
DOI: 10.7551/mitpress/10492.001.0001
ISBN (electronic): 9780262345859
Publisher: The MIT Press
Published: 2018

The open access edition of this book was made possible by generous funding and support from MIT Libraries



The MIT Press

This book was set in ITC Stone Sans Std and ITC Stone Serif Std by Toppan Best-set Premedia Limited. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data is available.

ISBN: 978-0-262-53502-1

10 9 8 7 6 5 4 3 2 1