"Extraordinarily Inconspicuous" Elephants: The Interspecies Constitution and

Contestations of the Ivory Commodity Frontier in Nineteenth-Century South Sudan

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**Abstract:** 

Elephants have been extraordinarily inconspicuous in the history of the ivory trade in

nineteenth-century Southern Sudan. One explanation for this is the process of

commodification, which abstracted ivory from its animal origins and rendered invisible both

elephants and the indigenous knowledge and labor that was vital to the trade. However, this

process of commodification was incomplete, unstable, and fundamentally shaped by the

relations of elephants, humans, cattle, and their environments. Through their movements and

bodily nature, elephants played a part in determining the geography and structures of the

ivory trade, which in turn shaped the territory and enduring marginalization of Southern

Sudan as an exploited periphery. At the same time, through cultural representations of their

behavior, elephants also indirectly contributed to the indigenous value systems that limited

commodification and prioritized animate life over inanimate objects.

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When seen moving in wooded country, the play of light and shadow on their backs produces an extraordinary illusion. Whilst watching what one imagines to be its broad back moving with the alternate shade and sun dancing on it, one suddenly realises that there is no elephant there. He has quietly shuffled off whilst the dancing lights and shadows have caught and arrested the eye. For his size, the elephant is as a rule most extraordinarily inconspicuous, whether moving or stationary. <sup>1</sup>

C. H. Stigand, 1913

Just as C. H. Stigand, a British hunter and colonial administrator in Sudan, was surprised by the silent invisibility of such a large animal, so it is extraordinary that elephants have been so inconspicuous in the written history of South Sudan, despite their obvious importance in the ivory trade that fundamentally shaped the region's geography and political economy.<sup>2</sup> Rising international demand for ivory in the nineteenth century coincided with the imperialist goals of Ottoman Egypt's rulers to drive the multinational ivory and slave-trading frontier southwards.<sup>3</sup> This has been seen by historians and political leaders alike as the beginning of Southern Sudan's subjugation to extractive, racialized political economies.<sup>4</sup> Reproduced by successive states based in the northern riverain Sudan, these exploitative patterns provoked the twentieth-century insurgencies that led ultimately to South Sudan's independence in 2011.<sup>5</sup> Yet despite this long-term significance, the Sudanese ivory trade has been studied much less than its East African counterpart and has not been the subject of environmental or animal history approaches. 6 More broadly, as the environmental historian Nancy Jacobs has noted, few historians of Africa "have grappled with human intersubjectivity with wild animals." Even the substantial historiography of the East African ivory trade has been more concerned with its effects on political economies and consumer cultures than with the animals or interspecies relations at its core.8

The inconspicuousness of elephants in these histories is not simply an accident or failing of the historiography, but integral to capitalist production of value through the appropriation, devaluation, and invisibility of "the unpaid work/energy of humans and the rest of nature," as the environmental historian Jason Moore puts it. 9 Nineteenth-century Southern Sudan exemplifies Moore's iteration of the "early commodity frontier," where the appropriation of both human labor and elephant life produced commodity value without substantial industrial infrastructure. 10 The ivory frontier thus spatially extended the processes identified by Alan Mikhail in Ottoman Egypt, where modernizing state capitalism transformed animals into "alienated and abstracted objects exploited for raw wealth accumulation."

However, the limits of this transformation soon become apparent by seeing the animals as historical subjects rather than only objects of commodification. The notion of commodity frontiers has become an influential critical model for understanding the process by which "native peoples have been dispossessed of land and rights, and the countryside has been endlessly reconfigured into a source for global capitalist growth." But while such a macro-level approach explains the invisibility of the animal and human work behind the commodity, it does not redress it: "native peoples" and "nature" appear only as the victims of capitalism's inexorable spread, obscuring their role in processes of commodification. Yet as the anthropologist Anna Tsing emphasizes, "a full understanding of alienation in the process of commodification requires attention to the life worlds of species other than humans." Indeed, as the historian Jonathan Saha argues, capitalism and imperialism were fundamentally interspecies processes, exploiting animals but also shaped by them.

Focusing on elephants not only reveals the significance of more-than-human agency in co-constituting the structures and geography of the Sudanese ivory trade, but also illuminates the agency of indigenous people and the complex of interspecies relations that

both enabled and constrained the commodification of ivory. Elephant behavior made traders dependent on indigenous hunters and middlemen, while cattle played a crucial role in motivating these people to exchange ivory. <sup>16</sup> Yet the value of cattle as living, individualized, and socially embedded markers of wealth also prevented their commodification and sustained alternative value systems which prioritized life over objects. The relations between elephants, humans, and cattle in South Sudan produced tensions and contradictions in the ways that indigenous people engaged with the commodity frontier, and thereby limited both its spatial reach and its transformation of economies and cultures.

The inconspicuousness of these interspecies relations in previous histories of the ivory trade results partly from the limited evidence in nineteenth-century sources. Unlike in Eastern Africa, very little archaeological research has been conducted in South Sudan. Written sources begin with external trading expeditions after 1840 and are largely limited to travel accounts of European traders, explorers, and officers employed by the Egyptian government. Few wrote about elephants, except for those who hunted them; even then, their stories are intended to demonstrate their own bravery and abilities in confronting "the most formidable of all animals." Yet as the historian Etienne Benson argues, these texts should not be approached as solely human-authored; they are in fact full of traces, tracks, and sounds of elephants. It is difficult if not impossible to read these accounts without imagining what the animal was experiencing. The individual elephant transmits its pain, fear, relationships, and will through the behaviors described in these texts and both through and beyond their effect on the authors, whose attempts to write dispassionately are occasionally breached by sympathy and pity, as well as their own fear and excitement. 19

Nineteenth-century European travel accounts are also, of course, extremely problematic sources due to their racially derogatory views toward the people of Southern Sudan and toward "Arab" traders and government officials from Egypt and northern Sudan.

While these sources therefore demonstrate clearly how the ivory trade was shaped by and shaped racial hierarchies, it is necessary to add South Sudanese perspectives to provide a more balanced picture. The author therefore commissioned oral history interviews, conducted by two South Sudanese researchers, Isaac Waanzi Hillary and Machot Amuom, in their home areas around Yambio and Yirol in 2021-22. Both researchers have a strong interest in the subject and helped to design the questions for the conversational interviews. They selected elderly interviewees who could remember encounters with or stories and songs about elephants. These memories go back only as far as the 1960s, but they reveal enduring knowledge and perceptions of elephant behavior. The interviews often echo and corroborate earlier stories and myths recorded by anthropologists or colonial officials as well as wider studies of human-elephant relations.

## 1. Elephants, People, and Cattle in Southern Sudan

Before the first Egyptian government ivory-trading expeditions reached the region in the 1840s, quotidian human-elephant relations in Southern Sudan were characterized by a mutual desire for avoidance, which was breached only occasionally by the mutual need for food. Like humans, elephants played a major role in shaping South Sudan's landscapes: as the zoologist R. M. Laws notes, "[a]fter man himself, probably no other animal has had as great an effect on African habitats as the African bush elephant, *Loxodonta a. africana.*" Described in ecological literature as "a super-keystone species," "engineers," or "giant bulldozers," elephants' consumption and destruction of vegetation transforms woodlands into savannah grasslands grazed by smaller species, including cattle. They also propagate tree seeds in their dung, as one interviewee emphasized: "elephants planted the mangoes." Elephants dig water-holes and create salt-licks used by other species. Cattle-herders particularly benefited from elephants' destruction of dense vegetation harboring tsetse flies,

which carry the *Trypanosome* parasites that cause bovine and human sleeping sickness.<sup>24</sup> An interviewee emphasized pastoralists' dependence on elephants:

We are cattle-keepers and cattle-keepers are not different from animals. We need grass and water and it is the same for animals in the forest. When we used to drive cattle here, all these forests were thick and we had to follow the places opened up by elephants. Even the roads you see today connecting villages were routes of cattle-keepers and elephants... You know elephants move in groups like cows and they have seasons of movement like us. When the flood is high, they move out of the swamps to higher ground. So you could get elephants mixed with cows in the months of July, August and September.<sup>25</sup>

Cattle-keeping spread across what is now South Sudan from the last millennium BCE onwards. <sup>26</sup> By the nineteenth century, cattle were central to the economy and culture of most societies, except in the tsetse-infested forests of the south and west. The value of cattle derived only in part from the use of their milk, blood, dung, and hides (they were rarely killed for their meat) but principally from their exchange value, particularly as marital bridewealth, in which they represented social relations and perpetuated the lineage by establishing paternity of children. Cattle were not an abstract or easily alienable form of wealth; they were individualized in order to represent and strengthen specific human relationships and personhood. Among the Nuer and Dinka, young boys acquired a "personality ox," with whom they identified closely by taking his color pattern as their name.<sup>27</sup> Cattle were the subject of songs, dance, sculptures, and art. "The cow creates the person" was a common Nuer saying recorded by the anthropologist Sharon Hutchinson in the 1980s. Equating human and cattle life enabled people to overcome death by using cattle to marry and procreate in the name of the deceased. Asserting that "cattle and people are one" did not just require human cultural work: cattle too played a part by collaborating with humans.<sup>28</sup>

In contrast, human and elephant co-existence depended on physical distance. Heavy grazing by cattle prevented the regrowth of elephants' woody food sources. Elephants largely avoided people, particularly where hunting was more prevalent; they are known to learn from past experiences in assessing threats. In the nineteenth century, they took refuge during the dry season in swampy areas of eastern Equatoria remote from human hunting. Thorbahn shows that such sanctuaries were vital to elephant survival in East Africa over many centuries of ivory-hunting.<sup>29</sup>

Human crops could attract elephants, but high tannin concentrations made commonly cultivated sorghum less palatable while finger millet could be grown in "small compact stands that are easier to protect." People employed ritual methods of protection as well as sentries, fires, and noisy instruments. Elephants tended to eat crops only at night and in areas of lower population density; they generally moved more at night, which in turn made people fear nocturnal travel.<sup>31</sup>

Hostility to elephants seems to have been greatest in the southwest, where forests were denser. Here the climate and ecology supported higher human and elephant populations. Cattle-keeping was prevented by tsetse, and hunting was an important source of animal proteins and salts. Ivory was also used more extensively for both practical and ornamental purposes. The crops grown in these areas, such as maize and bananas/plantains, were more attractive to elephants (due to their sodium values). Interviews here reveal enduring fear of elephants because of their capacity to destroy crops and trample people: "That is why people never wanted them to get any closer," as one elderly man explained. A Zande saying translates approximately as "You are the elephant that killed the owner of the farm," a way to criticize someone for taking something by force.

Yet even this negative equation of human and elephant behavior reflects the widespread tendency to see elephantine qualities in people and human qualities in elephants.

Interviewees also compared elephants' protectiveness of their young with human parenting, and described women as "fruit-elephants" if their children were widely spaced, in reference to elephants' long gestation and lactation periods. In pastoralist Dinka societies, it was a complement for men to be compared to elephants in songs, such as a wrestler's song: "Elephant uproots the tree branch; I uproot men like trees." A Dinka interviewee explained the common saying "Akon ee ran" (elephant is a person) in terms of the reticence of elephants to attack people. Another recounted a fable which ended with the elephant forgiving the fox for his trickery:

The elephant is a merciful animal and that's why people say, "be like the elephant," Elephants ignore many things. When you are big, you just ignore things and move on. It makes you bigger.<sup>37</sup>

Elephant hunting and the killing of men in war was often equated, both in terms of the honor accrued and the need for ritual cleansing of the blood. 38 In the 1870s, Bari men were reported to wear an ivory arm-ring only if they had killed either a man or an elephant. 39 However, there is no evidence that ivory was a significant motivation for hunting elephants in Southern Sudan before the arrival of the foreign merchants from the 1840s. 40 The early traders were easily able to acquire tusks ("found ivory") that had been left in the bush or used as cattle-tethering pegs. As one such trader observed, "They possessed no ivory in the village, but brought us several damaged tusks from the woods, which, valueless to them, they had neglected, the elephants having been killed for their meat only." Even elephants' abundant meat and fat did not necessarily outweigh the risks of hunting: as an elderly interviewee emphasized, "when there are other animals, there is no need to kill the elephant. Hunting it down was difficult." 42

The external demand for ivory drove a fundamental change in people's relations with and valuing of elephants, not only through coercive extraction but also by creating the novel exchangeability of ivory and cattle. Together this made some people more likely to take the great risk of hunting elephants. But this did not mean that elephants were simply the objects and victims of the ivory trade. Rather they played a role in shaping the economy and geography of the ivory frontier, while their personhood in indigenous eyes helped to constrain the commodification of life.

## 2. Elephant Impacts on the Ivory Frontier

"If it had not been for the high value of ivory, the countries about the sources of the Nile would even now be as little unfolded to us as the equatorial centre of the great continent," declared the German botanist-explorer Georg Schweinfurth in the early 1870s. 43 Ivory had long been traded within the African continent and beyond, but its international value was transformed in the early nineteenth century by the accelerating European and North American industrial manufacture of commodities like ivory piano keys, cutlery handles, combs, and billiard balls. This coincided with the expansionist aims of Egypt's increasingly independent Ottoman viceroy, Muhammad 'Ali, whose conquest of northern Sudan in 1820-21 was motivated by the anticipated acquisition of enslaved soldiers, gold, and ivory. In 1840-41, a government-sponsored expedition from the new capital of Khartoum first broke through the Sudd marshes on the Nile to reach the Equatorial region and reported "ivory in great abundance." 44 This opened the way for annual government ivory-trading and enslaving expeditions through the 1840s, followed by European merchants in the 1850s, who also ventured west into the Bahr el Ghazal region. By the 1860s, the Europeans had largely withdrawn, unable to compete with the better-connected northern Sudanese, Egyptian, Turkish, and Syrian trading firms which were establishing networks of fortified stations known as zaribas (Arabic for "thorn-fenced enclosures") in the Bahr el-Ghazal and Equatorial regions. In 1874 the Egyptian government decreed a monopoly on ivory, and

provincial governors established stations (often former *zaribas*) where ivory was stored for shipment to Khartoum.

The zaribas have been the main focus of most published histories of nineteenthcentury Sudan, as the nodal points in the trading and raiding economy, where commodity value was accumulated for transport to the Khartoum ivory and slave markets. 45 The noise, smell, and smoke of these dense settlements would have deterred elephants from coming near. It was only when newly constructed that an occasional elephant or two found their way into a zariba and the terrifying response of alarms and gunshots would certainly have deterred their return. 46 Such a visit was "uncomfortable" for the inhabitants: living elephants had no place in these "depots for ivory." Like otters in the fur trade, elephants were "commodities-in-waiting" for the merchants, valuable only when dead and then only for the tusks, which required lengthy, difficult labor to excavate from the bone structures in which they were deeply embedded. 48 Such labor occurred not in the zaribas but at the sites of elephant deaths, which were beyond the control of the traders, determined by elephants' own movements and indigenous hunters. Even those traders who hunted themselves (and/or employed professional hunters from northern Sudan, Syria, or Europe) were dependent on local guides and trackers to find the elusive elephants. <sup>49</sup> Their own ability to evade humans thus contributed to the distancing of the living animal from the centers of commodity accumulation and hence to their invisibility in the histories of the ivory frontier. In the European sources, whose authors traveled with the trading caravans and stayed in the zaribas, the elephants have a shadowy, ghostly presence, often glimpsed only at a distance from boats or heard in the night.

Yet the elephants nevertheless left considerable traces and tracks in these sources.

Their impacts on the landscape were impossible to ignore: "The vestiges of elephants are frequent at all times," as Schweinfurth put it. 50 As interviewees confirm, elephant tracks were

often the only routes through thick forests and bush.<sup>51</sup> Humans have probably been following elephantine footsteps since pre-history. Elephants establish regular routes across extensive territories, valuable particularly for exploratory hunter-gatherers.<sup>52</sup> Nineteenth-century trading expeditions found these tracks the only way of traversing the country. But elephant bodies were unruly even in their after-effects: the deep footprints created endless pitfalls, and elephants could go much longer without water than humans. Their pathways reflected their own intentional directions, which "might easily lead the wayfarer astray," as the explorer Wilhelm Junker found. Indigenous guides were therefore vital for travelers to effectively exploit these tracks, and even then elephant-footprints were a fatiguing challenge.<sup>53</sup>

In a broader sense, the ivory frontier was following elephants. The early *zaribas*, as Sidney Kasfir notes, were established "along navigable watercourses in places where elephants were the most abundant." Schweinfurth reported an example of two *zaribas* which "had been intentionally pushed forward towards the territory of the Madi, in order to ensure advantageous quarters for elephant-hunting," and another that was established deep in the southwest because "numerous elephants were in the surrounding regions." The network of trading stations was thus shaped fundamentally by elephant demography. Several of these *zaribas* would later become government stations and twentieth-century towns, demonstrating the endurance of this initial, elephantine geography. Secondary towards the saribas was thus shaped fundamentally by elephant demography. Several of these

Elephant bodies and behavior also contributed to the structuring of the ivory trade by making hunting extremely dangerous. The thick skulls and skin of elephants repelled bullets, and open landscapes made it dangerous to approach close enough for an effective head shot. <sup>57</sup> Some of the European authors hunted elephants with guns, including the traders Jules and Ambroise Poncet and John Petherick, and the later explorer and governor Samuel Baker, and they provide detailed descriptions of elephants under inevitably prolonged attacks. While no doubt intended to demonstrate the authors' prowess, the elephants are nevertheless

powerful, unpredictable protagonists in these stories, frequently choosing to charge their attackers rather than fleeing, and imparting their pain and "fury" through their deafening "screeching," "cocked ears and raised trunk" and desperate attempts to pour water or soil onto their wounds. In several cases they succeeded in hurling, trampling, or goring members of the hunting party, sometimes to the death.<sup>58</sup>

Most Sudanese and international traders were not willing to take these risks themselves, passing them down the racialized hierarchies of the commodity frontier. The ivory companies employed some hunters from northern Sudan. But they largely relied on indigenous hunting to supply ivory through chiefs and middlemen, or used Southern slave-soldiers to hunt, "a pursuit much too laborious for their oppressors," according to Schweinfurth. <sup>59</sup> It was not simply indigenous labor and life that was being exploited in this process, but also knowledge and skill in tracking and hunting, which gave local people some bargaining power. Poncet bemoaned having to pay two spears and a necklace, "an exorbitant thing for the place" to employ two Dinka guides for a day's hunting. <sup>60</sup>

The risks of hunting elephants with spears constituted an important test of male courage, physical prowess, and cooperation in many indigenous communities. Hunting for the ivory trade, however, was enabled and spread by other methods such as pitfalls or fire-circles, designed to reduce the agency and aggressive capacity of the elephants. Relying on knowledge of elephant routes, a common method was to hide in a tree and drive a weighted spear between the elephant's shoulder-blades from above. As the demand for ivory increased, such methods spread. The Equatoria Province governor Emin Pasha reported in 1881, "formerly in hunting elephants the [Agar Dinka] people only used the spear; now, however, pitfalls are employed, as well as weighted spears hung to the branches of trees, as is customary in the south." But elephants too learned to deal with the risk of traps, according

to Baker, despite the hunters' "cunning" in concealing their "artfully made" pits near waterholes:

The old bulls never approach a watering-place rapidly, but carefully listen for danger, and then slowly advance with their warning trunks stretched to the path before them; the delicate nerves of the proboscis at once detect the hidden snare, and the victims to pitfalls are the members of large herds who, eager to push forward incautiously, put their "foot into it," like shareholders in bubble companies. 63

The killing of older elephants for their large tusks would have removed some of this experience and left younger animals more vulnerable to traps. Baker's incongruous comparison of hasty elephants with rash investors encapsulates the risky environment of the ivory trade for all involved, including the few European traders of the early 1850s, described by Gray as "a speculative 'frontier' community" attracted by the ivory "rush." Creditors in Khartoum (initially European, increasingly northern Sudanese) charged up to 100 percent interest rates to finance ivory expeditions. As the limited ivory supplies were divided among increasing numbers of Egyptian, Turkish, and Sudanese traders, most turned to slave-trading to make profits and pay retainers.

By the time the Egyptian government sought to extend administrative control over the ivory frontier in the 1870s, the nodes and networks of commerce had already been shaped by the movements and nature of elephants and the resulting dependence of the traders on indigenous hunters, guides, and middlemen. Government forces often took over former *zaribas* and ivory remained the primary revenue source. Egypt's imperial frontiers continued to be shaped by the pursuit of elephants. As herds reportedly became scarcer in the Bahr el Ghazal, government forces pushed further southwest, where elephants were "numerous." Schweinfurth claimed that by 1869 there were no longer any elephants left in areas of the Bahr el Ghazal where the Poncets and Petherick had earlier exploited an "abundance of

ivory."<sup>67</sup> As the frontier moved southwards, Junker reported that in Makaraka Land, "the herds formerly so numerous have been greatly reduced."<sup>68</sup>

Such reductions may reflect not only deaths but also evasive movements.

Schweinfurth reported that elephants inhabited areas depopulated of people by raiding. 69

Without the previous human control exercised over vegetation and wildlife, thick bush soon regrew and provided habitat for many species: west of the Nile in Equatoria, Emin Pasha reported, "the country literally teems with herds of elephants." Elephants generally seek to avoid areas of human density, so it is likely that they became more concentrated in less populated areas.

The bodies, behavior, and movements of elephants helped to shape the geography of the ivory frontier as traders pursued their pathways and populations westwards and southwestwards, and as the riskiness of elephant-hunting kept *zaribas* as the loci of commodity value accumulation separate from the sites of hunting and ivory extraction in the bush. The reliance on indigenous hunters and supply chains also meant that the process of commoditization was diffused and dispersed into much wider areas beyond the *zaribas*, drawing more of the indigenous population into hunting and exchanging ivory. Yet this also drew ivory exchanges into the complexity of indigenous value systems, which were constituted through interspecies relations.

## 3. Contesting the Commodity Frontier

The process of commoditizing ivory was both enabled and constrained by indigenous interspecies relations. The values associated with elephants and cattle played a crucial and yet complex role in this process. While extracting ivory necessitated the death of the elephant, the value of cattle was based on their living and life-giving qualities.<sup>71</sup> Exchanging ivory became a way of obtaining and protecting bovine and hence human life. Consequently, the

value of living cattle was central to the ivory trade but at the same time constrained the process of commoditization because people refused to treat cattle as alienable objects. Ivory exchanges were thus determined by non-commodity values and did not become monetized. Even as elephants were killed more than ever for the exchange-value of their tusks, their social behavior was evoked by indigenous people to critique the implications of commoditization.

The acquisition of ivory was structured by disparities and incommensurability of values and interspecies relations rather than by any standardized commodity value. One of the earliest European traders, Petherick, found people eager to trade ivory in the 1850s: "that they could obtain such valuables as glass beads for useless tusks of elephants, seemed incredible." But beads quickly diminished in value and people demanded cattle, guns, or other prestige items in return for ivory. In the Aliab area, Poncet reported that the price in spears, hoes, and bracelets demanded for one tusk was higher than its commodity value in Cairo; it was nevertheless bought by a Sudanese trader. The value of tusks had to be negotiated individually, according to Petherick:

The barter of the tusks was the next great event — the entire population assisting, and the scene resembled a fair... The tusks were singly bartered for by the chief; and notwithstanding the earnest desire on both sides to conclude the bargain, so much haggling took place that two days were consumed ere the sale was effected.<sup>74</sup>

On another occasion, Petherick quoted a Dinka man extolling a tusk as a beautiful white "bride," while denigrating Petherick's beads as unripe, suggesting that indigenous negotiation conventions were shaping these early transactions. Collective claims to this tusk also compelled Petherick's party to distribute many beads to the gathering.<sup>75</sup>

By the later 1870s, Junker reported that people, "having learnt the value of the elephants' tusks, carefully buried them": 'The chiefs often conceal their ivory in this way to

keep it safe in case of attack, and also because they prefer bartering it piece by piece to parting with it all at once to the Nubians passing through." Such barter relied on the traders having cattle to exchange for ivory: "almost the only way of obtaining it," it served as 'the universal and indispensable medium of exchange." Baker estimated that a trading station of 350 men needed over 5,500 cattle a year for meat and to reward allies, obtain flour, and pay local porters to transport ivory. But while the traders valued cattle as meat and commodities for exchange, this was incommensurable with their highly individualized and socially embedded value in indigenous communities. This ensured a strong barrier to their two-way exchange: people refused to sell cattle. The traders therefore turned to raiding cattle with local allies, who were rewarded with a share of the captured cattle, women, and children.

Such alliances and ivory-trading brought opportunities for leaders to accumulate cattle and to distribute them to build up followings. It became increasingly widespread for chiefs or kings to demand one or both tusks of every elephant killed by their people. Some established key middleman positions, like King Legge of Lyria, who traded locally produced iron for ivory from further east:

Although there are very few elephants in the neighbourhood of Ellyria, there is an immense amount of ivory, as the chief is so great a trader that he accumulates it to exchange with the Turks for cattle. Although he sells it so dear that he demands twenty cows for a large tusk, it is a convenient station for the traders, as, being near to

Elsewhere, Baker claimed that a tusk could be obtained for one cow, indicating the highly negotiable exchange rates. <sup>80</sup> Rather than creating commodity markets, trade goods and ivory became symbols of prestige and authority, used to build alliances and followings. <sup>81</sup> Zande kings "regarded the iron and copper they received in exchange for ivory as tribute, rather than trade." <sup>82</sup> Chiefs sent gifts to the last Equatoria Province governor, Emin Pasha, including

Gondokoro, there is very little trouble in delivering the ivory on shipboard.<sup>79</sup>

ivory, and Emin in turn gave gifts of cloth, beads, copperware, and alcohol to maintain their loyalty. Emin's predecessor Charles Gordon tried but failed to institute commodity markets and copper currency to circumvent chiefs' control of trade. 83 These leaders in turn needed hunters, such as the specialist hunting clans among Bari-speaking communities, whose "professional" knowledge was closely guarded. Previously somewhat stigmatized, their status was enhanced by being able to obtain cattle for ivory. 84

Elephant bodies, geographies, and behavior had made the ivory-traders dependent on these supply networks, dictating terms of trade based more on indigenous value-systems than on market values. The traders resorted to raiding to obtain the vital cattle and enslaved people to pay their retainers and recover costs. But this also provoked greater resistance, which further shaped and limited the ivory frontier's expansion. Schweinfurth claimed that the Dinka, "hostile and intractable from the first, had never given the intruders the smallest chance of settling amongst them." Egyptian expansion to the south and east was also limited by resistance. Evasion and migration became the most common strategy to avoid the violent predation: "Wherever a trader settles the negroes withdraw to the densest *ghâbeh* (forest), in order to escape from his exactions." A few tribes were defeated, but never subjugated; many at the approach of the troops abandoned their villages, taking their cattle with them and seeking refuge among the mountains or in the interior of the country." For the Zande, these sanctuaries included wooded areas "spared from the fire and reserved for elephant-hunting." People thus followed elephants to find refuge.

The south-westward movement of the ivory frontier was also shaped by indigenous interspecies relations, where Zande and Mangbetu communities already hunted elephants for their meat and to protect crops, more so than communities elsewhere. Communal hunts and fire-circles enabled larger-scale killing, and powerful rulers accumulated ivory to exchange with the traders for copper, guns, and other goods. But even here, there were limits to frontier

expansion: the traders also faced attacks and opposition from some rulers. Keim argues that the trade had a relatively brief and limited impact on Mangbetu authority: "Caravans arrived only once a year at the most, and rarely penetrated beyond the Bomokandi River" and the Mangbetu were not willing to trade people for commodities. <sup>90</sup> Schweinfurth claimed that it was the enslaving practices of the trading and government forces – the commodification of human life – that most provoked Zande resistance. <sup>91</sup>

More widely, the traders sometimes captured women and children to ransom directly for ivory. 92 But if tusks could be commensurable with living persons, this contributed further to the limits of their commodification; they were hidden and exchanged at moments when it was most necessary or opportune in order to secure human and bovine life. Even tusks could not be entirely abstracted from the living elephants. Traders had their own categories of ivory, reflecting the size, age, gender, and quality. Tusks thus retained an association with the animal, referred to as elephants' "teeth." Traders were also aware of their role as tools since one of each pair was always more worn-down, termed by them "el Hadam" (the servant), and compared by Baker to human right-handedness. 93

Tusks could remind people not only of elephants but also of their seemingly human-like qualities. Baker was told by local people that elephants cooperated to overturn large trees, using their tusks as "crowbars." The anthropologist Simon Simonse suggests that "the partial humanity attributed to elephants may be due to their possession of tusks which are equated to spears." This is evident in the Lotuho myth of the bead and spear, which Simonse recorded in the 1980s (drawing on an Italian missionary record from roughly 1950), featuring two royal brothers: Facar and Attulang. One day Attulang attacked an elephant in his crops using Facar's spear, but the elephant fled with the spear embedded. Refusing any substitute, Facar insisted on the spear's return and so Attulang followed elephant tracks to their home, where the animals were dancing a funeral for their speared brother, with their

tusks laid aside like men's spears at a dance. <sup>96</sup> Depicting tusks as alienable in this way may show the effects of ivory-trading in objectifying them. But the myth also anthropomorphizes the elephants, echoing widespread stories that they have a human ancestor. <sup>97</sup> Lotuho hunters danced funerals for elephants that they killed, while tusks and spears were interchangeable in swearing oaths. <sup>98</sup>

The myth becomes a warning against insisting on the return of a borrowed object. Attulang regained the spear by tricking the elephants, and returned it to Facar, whose daughter subsequently swallowed a bead belonging to Attulang. Attulang demanded its return, which meant cutting it from the child's stomach: her death led to a violent feud between the two kings. The moral of this story, of which there are many versions across the region, "is that life, human or bovine, is more important than inert possessions," according to the anthropologist Godfrey Lienhardt. In some versions, the hunter is helped by the "mother of elephants" or by the wounded elephant who has turned into a man; the elephants, "whether or not anthropomorphic beasts or zoomorphic humans, were more reasonable and kindly in their dealings with the man who had wronged them than were human neighbours and brothers." In one northern Ugandan version, the bead itself came from Arab traders as payment for the tusks of the speared elephant. The myths thus inherently resist the valuation of inert objects over sentient life implied by commodification, and affirm social values through identifying humans with elephants.

Elephants' own defense of life through their efforts to protect wounded relatives and young could evoke human empathy and interspecies comparison. Hunters were most likely to witness such behavior; an interviewee who had hunted elephants recounted seeing females hurrying their young away from danger "just like people." Poncet was so affected by a herd trying to lift up a slain elephant with loud cries that he halted the hunt: "being upset and touched with pity for these animals that were so intelligent, I left them to lament in their

way."<sup>102</sup> Petherick also wrote of his "sympathy" for a baby elephant that he asked local hunters to capture but which died trying desperately to protect its mother from their attack. <sup>103</sup>

Killing elephants could be morally complex in some indigenous societies too. Poncet reported Rek Dinka hostility in 1861, "because of the massacre that we were making of their elephants." Some Dinka clans claim a totemic kinship with elephants, which might explain such opposition. Similarly, Petherick's caravan encountered a *monye* (chief) west of the Nile in Equatoria who refused to allow any trade or the consumption of elephant meat at his home "because he thinks that men originated from the elephants.... Elephant tusks should not be brought into the vicinity otherwise, they believe, people would die." Further north, Nuer beliefs in the common ancestry of elephants and humans also made elephant-hunting spiritually dangerous and deterred engagement with the nineteenth-century ivory trade, according to a later British colonial official. 106

More recent moral unease at the commodification of life is apparent in a Zande saying that "the money of blood has no value." An interviewee who had hunted and sold bushmeat and ivory explained that his income always seemed to evaporate:

Even if you get many bundles of money, when you buy a small thing, that balance would go like air. They say it's money of blood.

Interviewer [laughs]: Is it the same with the tooth of elephant, if you sell it?

A: Value was not in it. 107

A comparable Nuer saying that money "has no blood" was recorded by Hutchinson in the 1980s: "blood being the procreative substance of both cattle and people in their eyes." This did not prevent the increasing prevalence of money by then, but it necessitated complex categorizations of exchange to maintain a moral boundary between market and nonmarket economies. <sup>108</sup>

A similar boundary divided the bodies of dead elephants between tusks extracted for exchange and meat consumed communally. The collective hunting and consumption of elephants was constitutive of communities; as food, elephants were valued for their lifegiving properties. This division of elephant bodies also had a gendered element, as hunting and ivory-trading was done principally by men, while women were more involved in the cutting, preserving, and cooking of the meat and fat. 109

In the end, all that would have remained of the elephant was its skeleton, valued only by other elephants, who are known to pay particular attention to bones of their own kind. 110 Surviving elephants would have experienced the loss of family members as traumatic and disruptive. 111 In the longer term, the reduction of elephants led to vegetation growth, increasing tsetse fly habitats and hence the spread of sleeping sickness reported by European colonial governments in the early twentieth century. 112 Ivory would remain a lucrative resource for these governments. After the end of colonial rule, rebel armies in both Southern Sudan and northern Uganda engaged in ivory-trading: "It was the elephants that bought the guns," as one interviewee put it, implying animal subjecthood rather than objectifying their tusks. 113

The nineteenth-century ivory trade transformed indigenous perceptions of ivory's exchange value in enduring ways that would lead to the destruction of elephant populations with automatic weapons a century later. But this does not mean that elephants – or even their tusks – simply became commodities in nineteenth-century Southern Sudan. Even the objectification and alienability of tusks from elephant bodies evoked their comparability with human tools and weapons, contributing to perceived commonalities between human and elephant behaviors. Ivory transactions were determined by indigenous value systems that were themselves inflected by interspecies relations. Trading tusks became a means of accumulating and defending people and cattle, echoed in the twentieth century ivory-trading

by rebel armies. Even when exchanged for guns then, ivory was not simply a commodity but could also be a tool with which to defend life, as of course it was for elephants themselves.

### Conclusion

The limited attempts of the Ottoman-Egyptian government to suppress the slave trade and monopolize the ivory trade in the 1870s led to tensions and conflicts with powerful traders, increased opportunities for local leaders to exploit such divisions, and ultimately contributed to support for the northern Sudanese uprising led by the self-proclaimed Mahdi, which overthrew Egyptian rule in the 1880s. 114 Mahdist governance of Southern Sudan was even more limited than Egyptian administration, but when the Mahdist state was in turn defeated by the British-led "Reconquest" in 1898, the territorial boundaries of the Anglo-Egyptian Sudan were based broadly on the frontiers of Egyptian expansion in the 1870s. Those southern frontiers had been shaped both by the geography and movements of elephants and by the indigenous patterns of cooperation, resistance, and evasion that determined the geography of trading routes and stations. Stretching the lines of commerce and command in pursuit of elephants had made the commercial and imperial forces ever more dependent on indigenous labor, knowledge, and authority and hence on the underpinning interspecies relations between people, cattle and elephants. Yet the process of commodification and the racialized hierarchies of commerce and empire erased the vitality and values of these human and more-than-human actors in ways that contributed to producing the region as a marginalized periphery. South Sudan as a territory was thus co-constituted by the interspecies dynamics of the ivory trade, while simultaneously its enduring marginalization and exploitation was produced through the devaluation and invisibility of these dynamics and actors.

Addressing the historical significance of elephants in nineteenth-century Sudan demonstrates that capitalism and imperialism were interspecies processes, as Saha argues. 115 But it also shows the limits of these processes in Southern Sudan, in terms of both geographic expansion and the extent to which indigenous economies and value-systems were transformed. Rather paradoxically, some people risked their own lives and took elephant lives for ivory in order to preserve and perpetuate human and bovine lives. Such strategies would be echoed in the use of ivory to obtain guns by twentieth-century South Sudanese rebels. The historical inconspicuousness and eventual disappearance of elephants from the region are thus the product of more complex processes and interspecies entanglements than is captured by the model of commodity frontiers. In particular, attention to interspecies relations reveals the persistence of alternative values that were produced by people's observations and interactions with animals like elephants and cattle. Even in Western cultures, ivory's value may have been produced by its animal origin in ways that both contributed to its commodification and yet defied the alienating aspects of that process. 116 Focusing on the creatures that produced the resource thus helps to reveal the incomplete and unstable nature of commodification as a process, and the role of interspecies relations in constituting human values.

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#### **Notes**

<sup>&</sup>lt;sup>1</sup> C. H. Stigand, *Hunting the Elephant in Africa, and other recollections of thirteen years'* wanderings (Macmillan, 1913).

<sup>&</sup>lt;sup>2</sup> Richard Gray's *A History of the Southern Sudan 1839-1889* (Oxford University Press, 1961) remains the most detailed history of the Sudanese ivory trade yet barely mentions elephants. More recently, Keith Somerville's broader *Ivory: Power and Poaching in Africa* (Hurst, 2016), discusses elephants largely only as objects/victims of the trade. Alan Mikhail places animals "centre stage" in *The Animal in Ottoman Egypt* (New York, 2014) but does not include the ivory trade.

<sup>&</sup>lt;sup>3</sup> Edward A. Alpers, "The ivory trade in Africa: an historical overview," in Doran H. Ross (ed.), *Elephant: The animal and its ivory in African culture* (Fowler Museum of Cultural History, University of California, 1992), 349-63.

<sup>&</sup>lt;sup>4</sup> Jok Madut Jok, *Diversity, unity and nation building in South Sudan* (Washington: United States Institute of Peace, 2011).

<sup>&</sup>lt;sup>5</sup> Douglas H. Johnson, *The Root Causes of Sudan's Civil Wars* (3<sup>rd</sup> ed, Woodbridge: James Currey, 2016); Edward Thomas, *South Sudan: A slow liberation* (London: Zed, 2015).

<sup>&</sup>lt;sup>6</sup> An exception is Kjell Hodnebo, "Cattle and flies: a study of the cattle keeping in Equatoria Province, the Southern Sudan, 1850-1950" (University of Bergen, 1981).

<sup>&</sup>lt;sup>7</sup> Nancy J. Jacobs, "Reflection: Conviviality and companionship: parrots and people in the African forests," *Environmental History* 26 (2021): 647–670, at 660. See also Sandra Swart: "Writing animals into African history," *Critical African Studies* 8 (2016): 95-108.

<sup>&</sup>lt;sup>8</sup> E.g. Richard W. Beachey, "The East African Ivory Trade in the Nineteenth Century," *The* Journal of African History 8 (1967): 269-90; Abdul Sheriff, Slaves, Spices, and Ivory in Zanzibar: Integration of an East African commercial empire into the world economy, 1770-1873 (London: James Currey, 1987). Scholars have been more concerned with the ecological effects of elephant depletion than with their living agency: e.g. N. Thomas Håkansson, "The Human Ecology of World Systems in East Africa: The Impact of the Ivory Trade," Human Ecology 32 (2004): 561-91; Edward I. Steinhart, "Elephant Hunting in 19th-Century Kenya: Kamba Society and Ecology in Transformation," The International Journal of African Historical Studies 33 (2000): 335-49; Andrew Reid, "Archaeological ivory and the impact of the elephant in Mawogola," World Archaeology 47 (2015): 467-485; Peter F. Thorbahn, "The precolonial ivory trade of East Africa: Reconstruction of a human-elephant ecosystem," University of Massachusetts PhD (1979). Recent studies have highlighted the animal behind the commodity by exploring ivory's elephant origins in East Africa: A. C. Kelly, "The material lives of ivory and elephants: a historical anthropology of the 19th-century ivory trade," Stanford University PhD (2014) and Ashley N. Coutu, "Tracing the links between elephants, humans, and landscapes during the nineteenth-century East African ivory trade: a bioarchaeological study," University of York PhD (2012).

- <sup>12</sup> S. Beckert, U. Bosma, M. Schneider & E. Vanhaute, "Commodity frontiers and the transformation of the global countryside: A research agenda," *Journal of Global History* 16 (2021): 435-450, at 437; also Tony Weis, "Animals as and on Resource Frontiers," *Commodity Frontiers* 3 (2021): 1-13.
- <sup>13</sup> A criticism also made by Maxine Berg, "Commodity frontiers: Concepts and history," *Journal of Global History*, 16 (2021): 451-455.
- <sup>14</sup> Anna Tsing, "Sorting out commodities: How capitalist value is made through gifts," *HAU: Journal of Ethnographic Theory* 3 (2013): 21–43, at 39.
- <sup>15</sup> Jonathan Saha, *Colonizing animals: interspecies empire in Myanmar* (Cambridge University Press, 2022), also Rohan Deb Roy, "Nonhuman empires," *Comparative Studies of South Asia, Africa and the Middle East* 35 (2015): 66-75.
- <sup>16</sup> In contrast to the broad claim by e.g. Jane Carruthers that "ivory was traded predominantly for firearms and liquor": "Romance, reverence, research, rights: Writing about elephant hunting and management in southern Africa, c.1830s to 2008," *Koedoe* 52 (2010), available online at <a href="https://www.scielo.org.za/pdf/koedoe/v52n1/v52n1a04.pdf">https://www.scielo.org.za/pdf/koedoe/v52n1/v52n1a04.pdf</a>
- <sup>17</sup> Baker, *The Albert N'yanza*, 1:200; John M. MacKenzie, *The Empire of Nature: Hunting, Conservation, and British Imperialism* (Manchester University Press, 1997).

<sup>&</sup>lt;sup>9</sup> Jason W. Moore, Capitalism in the Web of Life: Ecology and the Accumulation of Capital (London: Verso, 2015), 54.

<sup>&</sup>lt;sup>10</sup> Moore, Capitalism in the Web, 59; also John F. Richards, The World Hunt: An environmental history of the commodification of animals (University of California Press, 2014); Immanuel Wallerstein, The Modern World-System (New York: Academic Press, 1974).

<sup>&</sup>lt;sup>11</sup> Mikhail, Animals in Ottoman Egypt, 161.

<sup>&</sup>lt;sup>18</sup> Etienne S. Benson, "Animal Writes: Historiography, Disciplinarity, and the Animal Trace," in Kalof, L. & Montgomery, G.M., (eds.), *Making Animal Meaning* (Michigan State University Press: 2011), 3-16.

<sup>&</sup>lt;sup>19</sup> Jamie Lorimer and Sarah Whatmore, "After the 'king of beasts': Samuel Baker and the embodied historical geographies of elephant hunting in mid-nineteenth-century Ceylon," *Journal of Historical Geography* 35 (2009): 668–689, at 678-9.

<sup>&</sup>lt;sup>20</sup> R. M. Laws, "Elephants as Agents of Habitat and Landscape Change in East Africa," *Oikos*21 (1970): 1-15, at 2; L. A. Evans & W. M. Adams, "Elephants as actors in the political ecology of human–elephant conflict," *Trans Inst Br Geogr.* 43 (2018): 630–645, at 635.

<sup>&</sup>lt;sup>21</sup> Coutu, "Tracing the links"; David Western, 'The ecological role of elephants in Africa', Pachyderm 12 (1989), 42-5; Thorbahn, "The precolonial ivory trade"; Håkansson, "The Human Ecology"; also Emin Pasha, Emin Pasha in Central Africa, Being a Collection of his Letters and Journals, edited by G. Schweinfurth et al (London, 1888), 406; Wilhelm Junker, Travels in Africa (London, Chapman & Hall, 1890-92), 2:110.

<sup>&</sup>lt;sup>22</sup> Interview by Isaac Waanzi Hillary with an elderly man in Yambio, 15 December 2021.

<sup>&</sup>lt;sup>23</sup> Jeheskel Shoshani, "The African elephant and its environment," in Ross (ed.), *Elephant*, 43-59; Jules Poncet, *Le Fleuve Blanc: notes géographiques et ethnologiques et les chasses à l'éléphant dans le pays des Dinka et des Djour* (Paris: Arthus Bertrand, 1864), 118; Interview by Isaac Waanzi Hillary with a male church elder in Nzara, 16 December 2021.

<sup>&</sup>lt;sup>24</sup> Reid, "Archaeological ivory", 482; Hakansson, "The Human Ecology".

<sup>&</sup>lt;sup>25</sup> Interview by Machot Amuom with an elderly male cattle-keeper, Yirol East, 24 December 2021.

<sup>&</sup>lt;sup>26</sup> Douglas H. Johnson, *South Sudan: A new history for a new nation* (Athens: Ohio University Press, 2016), 34-6.

<sup>&</sup>lt;sup>27</sup> Francis M. Deng, "The Cow and the Thing called 'What': Dinka cultural perspectives on wealth and poverty," *Journal of International Affairs* 52 (1998): 101-29, at 108.

<sup>&</sup>lt;sup>28</sup> Sharon Hutchinson, *Nuer Dilemmas: Coping with Money, War and the State* (Berkeley: University of California Press, 1996), 60-63; Erica Fudge, "What was it like to be a cow? History and animal studies," in L. Kalof (ed.), *The Oxford Handbook of Animal Studies* (Oxford University Press, 2017), 258-78.

<sup>&</sup>lt;sup>29</sup> Thorbahn, 'The precolonial ivory trade', 293; Poncet, *Le Fleuve Blanc*, 114; Emin Pasha, *Emin Pasha in Central Africa*, 222, 401; Evans & Adams, "Elephants as actors"; Interviews by Isaac Waanzi Hillary with an elderly man in Yambio, December 15, 2021, a male church elder in Nzara, December 16, 2021 and an elderly male retired wildlife officer, Ezo, December 20, 2021.

<sup>&</sup>lt;sup>30</sup> Reid, "Archaeological ivory," 482.

<sup>31</sup> P. P. Howell, "A Note on Elephants and Elephant Hunting among the Nuer," *Sudan Notes and Records*, 26 (1945): 95-103; S. L. Kasfir, "Ivory from Zariba Country to the Land of Zinj" in Ross (ed.), *Elephant*, 309-27, at 318; Shoshani, "The African elephant," 54; Evans & Adams, "Elephants as actors"; Emin Pasha, *Emin Pasha in Central Africa*, 263, 389; Samuel W. Baker, *The Albert N'yanza: Great Basin of the Nile* (London: Macmillan and Co., 1867), 1:180, 226 and 2:293; Samuel W. Baker, *Ismailia: a narrative of the expedition to Central Africa for the suppression of the slave trade, organized by Ismail, Khedive of Egypt* (London, 1874), 1:407; Gaetano Casati, *Ten Years in Equatoria* (London and New York: Warne, 1898), 1:49, 302. Interviews by Isaac Waanzi Hillary with an elderly man in Yambio, 15 December 2021 and a male community elder in Rimenze, December 26, 2021, and by Machot Amuom with an elderly male cattle-keeper, Yirol East, December 24, 2021 and an elderly man, a renowned hunter and wrestler, in Yirol East, December 28, 2021.

<sup>32</sup> Curtis A. Keim, "Long-Distance Trade and the Mangbetu," *Journal of African History* 24 (1983): 1-22, at 4; Reid, "Archaeological ivory," 482; Junker, *Travels in Africa*, 2:170, 288, 447; Casati, *Ten Years*, 1:143-4.

- <sup>34</sup> Interviews by Isaac Waanzi Hillary with a male community elder, Rimenze, December 14, 2021, and an elderly man and woman in Yambio, December 15, 2021.
- <sup>35</sup> Interviews by Isaac Waanzi Hillary with an elderly man in Yambio, December 15, 2021, a male community chief in Ezo, December 19, 2021, and an elderly male retired wildlife officer, Ezo, December 20, 2021.
- <sup>36</sup> Interview by Machot Amuom with two elderly male cattle-keepers in Yirol North, December 21, 2021; Deng, "The cow," 110.
- <sup>37</sup> Interviews by Machot Amuom with an elderly man, a renowned hunter and wrestler, in Yirol East, December 28, 2021, and an elderly man, a renowned hunter, in Yirol East, January 16, 2022; Sharon Hutchinson, "'Dangerous to Eat': Rethinking Pollution States among the Nuer of Sudan," *Africa* 62 (1992): 490-504, at 495.
- <sup>38</sup> Simon Simonse, *Kings of Disaster: dualism, centralism, and the scapegoat king in Southeastern Sudan* Revised ed. (Kampala: Fountain, 2017), 163, 328; Howell, "A Note on Elephants"; Interview by Isaac Waanzi Hillary with a male church elder in Nzara, December 16, 2021. More widely: Coutu, "Tracing the links," 20.
- <sup>39</sup> Charles T. Wilson and Robert W. Felkin, *Uganda and the Egyptian Soudan* (London: S. Low, Marston, Searle & Rivington, 1882), 2:97.

<sup>&</sup>lt;sup>33</sup> Interview by Isaac Waanzi Hillary with an elderly man in Rimenze, December 14, 2021.

<sup>&</sup>lt;sup>40</sup> Cf Reid, "Archaeological ivory," 475.

<sup>&</sup>lt;sup>41</sup> John Petherick, *Egypt, the Soudan and Central Africa* (Edinburgh and London: William Blackwood, 1861), 448; John Petherick and Katherine Petherick, *Travels in Central Africa*,

and explorations of the western Nile tributaries (London: Tinsley Brothers, 1869), 1:209-10; Simonse, Kings of Disaster, 256.

<sup>&</sup>lt;sup>42</sup> Interview by Machot Amuom with an elderly man, a renowned hunter, in Yirol East, January 16, 2022.

<sup>&</sup>lt;sup>43</sup> Georg Schweinfurth, *The Heart of Africa: three years' travels and adventures in the unexplored regions of Central Africa. From 1868 to 1871*. Translated by EE Frewer (New York: Harper, 1874), 1:6.

<sup>&</sup>lt;sup>44</sup> Gray, A History, 19.

<sup>&</sup>lt;sup>45</sup> Junker, *Travels in Africa*, 1:409-10; Gray, *A History*; Douglas H. Johnson, 'Recruitment and entrapment in private slave armies: the structure of the *zara'ib* in the southern Sudan', in Elizabeth Savage (ed.), *The Human Commodity: perspectives on the trans-Saharan slave trade* (London: Frank Cass, 1992), 162-73; Paul J. Lane and Douglas Johnson, "The archaeology and history of slavery in South Sudan in the nineteenth century," in Andrew Peacock (ed.), *The Frontiers of the Ottoman World* (Oxford University Press, 2009), 502-37.

<sup>&</sup>lt;sup>47</sup> Romolo Gessi, *Seven Years in the Soudan* (London: Sampson Low, Marston & Co., 1892), p. 89; Schweinfurth, *The Heart of Africa*, 1:6.

<sup>&</sup>lt;sup>48</sup> Rosemary-Claire Collard, "Disaster Capitalism and the Quick, Quick, Slow Unravelling of Animal Life," *Antipode* 50 (2018), 910–928, at 915; Poncet, *Le Fleuve Blanc*, 145, 161.

<sup>&</sup>lt;sup>49</sup> Poncet, *Le Fleuve Blanc*, 80-84, 110, 116-8, 146; Petherick, *Egypt, the Soudan*, 371; Baker, *The Albert N'yanza*, 1:190.

<sup>&</sup>lt;sup>50</sup> Schweinfurth, *The Heart of Africa*, 1:64.

<sup>&</sup>lt;sup>51</sup> Interviews by Machot Amuom with an elderly male cattle-keeper, Yirol East, December 24, 202, and with two elderly male cattle-keepers in Yirol North, December 21, 2021, and by Isaac Waanzi Hillary with an elderly man, Rimenze, December 26, 2021.

<sup>52</sup> Gary Haynes, "Mammoth landscapes: good country for hunter-gatherers," *Quaternary International* 142–143 (2006): 20–29.

Junker, *Travels in Africa*, 3:115, 1:424, 440; Poncet, *Le Fleuve Blanc*, 80-84, 110, 116-8, 135, 146; Petherick, *Egypt, the Soudan*, 371; Baker, *The Albert N'yanza*, 1:190, 2:309; Casati, *Ten Years in Equatoria*, 1:66, 222; Emin Pasha, *Emin Pasha in Central Africa*, 310; Wilson and Felkin, *Uganda and the Egyptian Soudan*, 2:59; Schweinfurth, *Heart of Africa*, 2:143; Cf Coutu, "Tracing the links," 33.

<sup>&</sup>lt;sup>54</sup> Kasfir, "Ivory from Zariba Country," 311.

<sup>&</sup>lt;sup>55</sup> Schweinfurth, *The Heart of Africa*, 1:181, 2:149.

<sup>&</sup>lt;sup>56</sup> Cherry Leonardi, *Dealing with Government in South Sudan: Histories of chiefship, community and state* (Woodbridge, 2013); Johnson, *South Sudan*, 102.

<sup>&</sup>lt;sup>57</sup> Baker, *The Albert N'yanza*, 1:200-202; Poncet, *Le Fleuve Blanc*, 170-2.

<sup>&</sup>lt;sup>58</sup> Petherick, *Egypt, the Soudan*, 413-4; Petherick and Petherick, *Travels in Central Africa*, 1:232-3; Poncet, *Le Fleuve Blanc*, 80, 86, 96, 128-9, 131-2, 147-8

<sup>&</sup>lt;sup>59</sup> Schweinfurth, *The Heart of Africa,* 1:229-30. Petherick's favourite hunter was a Syrian soldier: *Egypt, the Soudan,* 349.

<sup>&</sup>lt;sup>60</sup> Poncet, Le Fleuve Blanc, 91-2.

<sup>&</sup>lt;sup>61</sup> Petherick, *Egypt, the Soudan*, 464-71, 413-5; Junker, *Travels in Africa*, 1:303; Petherick and Petherick, *Travels in Central Africa*, 1:232; Poncet, *Le Fleuve Blanc*, 134.

<sup>62</sup> Emin Pasha, Emin Pasha in Central Africa, 339.

<sup>&</sup>lt;sup>63</sup> Baker, *The Albert N'yanza*, 1:203-4; Poncet, *Le Fleuve Blanc*, 172.

<sup>&</sup>lt;sup>64</sup> Gray, *A History*, 29-30.

Thomas, South Sudan, 65-7; Gray, A History, 51, 72; Petherick, Egypt, the Soudan, 387.
 Cf. Thorbahn, "The precolonial ivory trade," 117.

<sup>&</sup>lt;sup>66</sup> Emin Pasha quoted in Casati, Ten Years in Equatoria, 1:258.

<sup>&</sup>lt;sup>67</sup> Schweinfurth, *The Heart of Africa*, 1:47, 120-1.

<sup>&</sup>lt;sup>68</sup> Junker, *Travels in Africa*, 1:303: "500 elephants were formerly captured every year; but in the last few years the number fell to not more than ten."

<sup>&</sup>lt;sup>69</sup> Schweinfurth, *The Heart of Africa*, 1:163 Junker *Travels in Africa*, 1:481, 2:115-6.

<sup>&</sup>lt;sup>70</sup> Emin Pasha quoted in Casati, *Ten Years in Equatoria*, 1:258; Emin Pasha, *Emin Pasha in Central Africa*, 7, 314; Hodnebo, "Cattle and Flies."

<sup>&</sup>lt;sup>71</sup> Cf. Michael Glover, "A cattle-centred history of Southern Africa?," in Jan-Bart Gewald *et al* (eds.), *Nature Conservation in Southern Africa* (Leiden: Brill, 2019), 25-47, at 32.

<sup>&</sup>lt;sup>72</sup> Petherick, Egypt, the Soudan, 463.

<sup>&</sup>lt;sup>73</sup> Poncet, Le Fleuve Blanc, 150-1.

<sup>&</sup>lt;sup>74</sup> Petherick, *Egypt, the Soudan*, 472.

<sup>&</sup>lt;sup>75</sup> Petherick, Egypt, the Soudan, 368-79, 463; Gray, A History, 35.

<sup>&</sup>lt;sup>76</sup> Junker, *Travels in Africa*, 1:448, 2:361; Gray, *A History*, 48-9.

<sup>&</sup>lt;sup>77</sup> Baker, *Ismailia*, 2:100-1.

<sup>&</sup>lt;sup>78</sup> Simonse, *Kings of Disaster*, 246; Petherick, *Egypt, the Soudan*, 351-3; Casati, *Ten Years in Equatoria*, 1:142-5.

<sup>&</sup>lt;sup>79</sup> Baker, *The Albert N'yanza*, 1:129.

<sup>&</sup>lt;sup>80</sup> Baker, The Albert N'yanza, 1:15; Simonse, Kings of Disaster, 51, 256-8.

<sup>&</sup>lt;sup>81</sup> As in East Africa: Steinhart, "Elephant Hunting," 338, 341-2; Stephanie Wynne Jones, "Lines of Desire: Power and Materiality Along a Tanzanian Caravan Route," *Journal of World Prehistory* 23 (2010): 219–37; Thomas John Biginagwa, "Historical Archaeology of the Nineteenth-Century Caravan Trade in Northeastern Tanzania: A Zooarchaeological Perspective," *Azania* 47 (2012): 405–6.

<sup>82</sup> Johnson, South Sudan, 73

<sup>83</sup> Simonse, Kings of Disaster, 107-110; Kasfir, "Ivory from Zariba country," 312.

<sup>&</sup>lt;sup>84</sup> Scopas Poggo, "The origins and culture of blacksmiths in Kuku society of the Sudan,
1797–1955," *Journal of African Cultural Studies* 18 (2006): 169-186; G. O. Whitehead,
"Suppressed Classes among the Bari and Bari-Speaking Tribes," *Sudan Notes and Records*34 (1953): 265-280.

<sup>85</sup> Schweinfurth, The Heart of Africa, 1:113.

<sup>86</sup> Simonse, Kings of Disaster, 93-5, 125-8, 139-40; Gray, A History, 142-6.

<sup>&</sup>lt;sup>87</sup> Junker *Travels in Africa*, 1:371, also 270, 2:116, 132; Johnson, *South Sudan*, 76; Johnson, "Recruitment and entrapment," 170; Gray, *A History*, 125, 131.

<sup>&</sup>lt;sup>88</sup> Gessi, Seven Years, 82.

<sup>89</sup> Schweinfurth, The Heart of Africa, 1:206.

<sup>90</sup> Keim, 'Long-Distance Trade', 17-18.

<sup>91</sup> Schweinfurth, The Heart of Africa, 2:189; Gray, A History, 63-8, 133-4, 138.

<sup>&</sup>lt;sup>92</sup> Junker, Travels in Africa, 1:468; Baker, The Albert N'vanza, 1:16.

<sup>&</sup>lt;sup>93</sup> Junker, *Travels in Africa*, 1:303; Baker, *The Albert N'yanza*, 1:198; Petherick, *Egypt, the Soudan*, 417.

<sup>94</sup> Baker, The Albert N'yanza, 1:199.

<sup>95</sup> Simonse, Kings of Disaster, 328.

<sup>&</sup>lt;sup>96</sup> Simonse, Kings of Disaster, 326-8.

<sup>&</sup>lt;sup>97</sup> Ibid., 58; Howell, "A Note on Elephants"; Dan Wylie, *Elephant* (London: Reaktion Books, 2008), 25-6.

<sup>98</sup> Simonse, Kings of Disaster, 328, 24.

<sup>&</sup>lt;sup>99</sup> Godfrey Lienhardt, "Getting your own back: themes in Nilotic myth", in J. H. M. Beattie and R. G. Lienhardt (eds.), *Studies in social anthropology: essays in memory of E. E. Evans-Pritchard by his former Oxford colleagues* (Oxford: Clarendon, 1975), 222-4, 234-5.

- <sup>100</sup> Sverker Finnström, *Living with Bad Surroundings: War, History, and Everyday Moments in Northern Uganda* (Durham, NC: Duke University Press, 2008), 50.
- <sup>101</sup> Interviews by Isaac Waanzi Hillary with an elderly man in Yambio, December 15, 2021 and a male community chief in Ezo, December 19, 2021; Petherick, *Egypt, the Soudan*, 415; Poncet, *Le Fleuve Blanc*, 127, 148.
- <sup>102</sup> Poncet, Le Fleuve Blanc, 95.
- <sup>103</sup> Petherick, *Egypt, the Soudan*, 415-7.
- <sup>104</sup> Poncet, Le Fleuve Blanc, 100-101.
- <sup>105</sup> Franz Morlang, "The journeys of Franz Morlang east and west of Gondokoro in 1859", in Elia Toniolo and Richard Hill (eds.), *The Opening of the Nile Basin: Writings by Members of the Catholic Mission to Central Africa on the Geography and Ethnography of the Sudan,*1842-1881 (New York: Barnes and Noble, 1975), 109-28, at 118-9.
- 106 Howell, "A Note on Elephants."
- <sup>107</sup> Interview by Isaac Waanzi Hillary with an elderly man in Yambio, December 15, 2021.
- <sup>108</sup> Hutchinson, *Nuer Dilemmas*, 56-7.
- <sup>109</sup> Schweinfurth, *The Heart of Africa*, 1:291; Petherick, *Egypt, the Soudan*, 472; Interview by Isaac Waanzi Hillary with an elderly man in Rimenze, December 14, 2021; Kelly, "The material lives," 108.
- Petherick, Egypt, the Soudan, 472; Petherick and Petherick, Travels in Central Africa,191; Wylie, Elephant, 58-9.
- <sup>111</sup> Lorimer and Whatmore, "After the 'king of beasts'," 679.
- <sup>112</sup> Reid, "Archaeological ivory," 480; Thorbahn, "The precolonial ivory trade," 293.
- <sup>113</sup> Interview by Isaac Waanzi Hillary with a male community elder, Rimenze, December 14, 2021.
- <sup>114</sup> Gray, *A History*, 152-3.

<sup>115</sup> Saha, Colonizing Animals.

<sup>116</sup> Kelly, "The material lives."



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