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Who Knows What About Gorillas? Indigenous Knowledge, Global Justice, and Human-Gorilla Relations

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The gorillas of Africa are known around the world, but African stories of gorillas are not. Indigenous knowledge of gorillas is almost entirely absent from the global canon. The absence of African accounts reflects a history of colonial exclusion, inadequate opportunity, and epistemic injustice. Discounting indigenous knowledge limits understanding of gorillas and creates challenges for justifying gorilla conservation. To be just, conservation efforts must be endorsed by those most affected: the indigenous communities neighboring gorilla habitats. As indigenous ways of knowing are underrepresented in the very knowledge from which conservationists rationalize their efforts, adequate justification will require seeking out and amplifying African knowledge of gorillas. In engaging indigenous knowledge, outsiders must reflect on their own ways of knowing and be open to a dramatically different understanding. In the context of gorillas, this means learning other ways to know the apes and indigenous knowledge in order to inform and guide modern relationships between humans and gorillas.

Keywords: *Conservation, Epistemic Justice, Ethnoprimateology, Gorilla, Local Knowledge, Taboos*

1.0 Introduction

In the Lebialem Highlands of Southwestern Cameroon, folk stories tell of totems shared between gorillas and certain people. Totems are spiritual counterparts. Herbalists use totems to gather medicinal plants; hunting gorillas puts them in danger. If the gorilla dies, the connected person dies as well (Etiendem 2008). In Lebialem, killing a gorilla risks killing a friend, elder, or even a chief (*fon*). A local account describes how a village lost their most effective herbalist after a hunter killed a gorilla (*ibid.*, 15). Even after crop-raiding and other conflicts, locals argue against hunting gorillas to avoid such risk. The possibility of human

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souls connected to certain wild animals inspires care, caution, and restraint in hunting (ibid.; Wright and Priston 2010).¹ Such folk stories may help guide positive human-gorilla relations, functioning akin to conservation (Etiendem et al. 2011). The totem belief is a form of a local conservation ethic.

The Lebialem Highlands are located in one of the most linguistically and culturally diverse regions of the world (Grimes 2000). Indigenous communities there have diverse and distinct ways of knowing gorillas, though their relationships are fading.² The gorillas of Lebialem, the Cross River subspecies of the Western lowland gorilla (*Gorilla gorilla diehli*), are critically endangered. Fewer than 300 remain, scattered over 13 hill sites in the Cross River headwaters along the border of Nigeria and Cameroon (Dunn et al. 2014). One hill site, Tofala, supports the approximately 20-30 gorillas left in Lebialem. Different conservation regimes span the gorillas' habitat, ranging from national parks to no habitat protection at all. Cross River gorilla conservationists need the support of indigenous communities, but many of those communities do not endorse conservation.

Where indigenous beliefs align with conservation, conservationists engage them. A traditional taboo on gorilla hunting helped conservationists establish the Kagwene Gorilla Sanctuary at a hill site in the Cameroonian Grassfields (Sunderland-Groves et al. 2009). Though taboos and totems offer local forms of conservation, many communities conflict with international efforts to conserve gorillas (Nkemnyi et al. 2013). Many locals perceive conserving gorillas and other wildlife as a foreign agenda representing outside interests. Their perception may come, in part, from the authority outsiders assert regarding wildlife. Westerners claim to know gorillas better and what to do about the gorillas' plight. For many good reasons, Western primatologists feel they hold the most accurate knowledge of gorillas. Also, for many good reasons, indigenous communities feel that their knowledge of gorillas is ignored.

During colonialism, control over knowledge production and authentication often prevented the inclusion of indigenous accounts (Goldman 2007). E.W. March (1957) described his failed attempt at hunting Cross River gorillas in Nigeria and his knowledge of the gorillas in great detail. He made no mention of indigenous Nigerian accounts. Contemporary scholarship on "knowledge of the ape in antiquity" describes possible Greek and Roman accounts of gorillas, but not African. Recounting his surprise that a gorilla appears depicted on a bowl from before the eighth century, Montagu wrote:

Startling, because knowledge of the gorilla was not established until the year 1847, when Savage and Wyman published the first account of the anthropoid. There can be little question that the gorilla had been beheld by human eyes long before the establishment of its existence in 1847... but it is extremely unlikely that those eyes ever belonged to a person other than a native living in close proximity to the native habitat of this animal (1940, 80).

Even Montagu, an anthropologist famous for his critique of race as a biological concept, oriented knowledge in this way: as only established if from the West. Indigenous knowledge of gorillas was dismissed as inaccurate, subjective, and not even worth noting.

Western ways of knowing claimed objectivity and greater rigor, but consider their struggles to describe the Cross River gorilla. Marschie (1903), a German zoologist, made the initial scientific classification, listing the Cross River gorillas as a distinct species, *Gorilla diehli*, based on measurements of eight skulls sent from the then-German colony of Kamerun.³ Marschie tended to declare each specimen he received a new species and was usually ignored (Beolens et al. 2009). His classification did not last long. Rothschild (1908), a British banker and zoologist, reclassified the gorillas as a subspecies five years later. Twenty years later, Coolidge (1929), a Harvard zoologist and a founder of both the International Union for Conservation of Nature (IUCN) and the World Wildlife Fund (WWF), lumped all gorillas together as a single species: *Gorilla gorilla* (Sarmiento and Oates 2000). Before Coolidge, the world had eleven species of gorilla (with many European names, e.g., *Gorilla jacobi*, *Gorilla schwarzi*, *Gorilla hansmeyeri*, *Gorilla zenkeri*, and *Gorilla graueri*) (Groves 2002).

Though Coolidge made some mistakes, e.g. his Cross River gorilla samples did not come from the Cross River region (Haddow and Ross 1951), his classification held for many years. In 1967, Groves reevaluated and reclassified gorilla taxonomy, splitting the ape into subspecies: Eastern (*Gorilla gorilla beringei*) and Western (*Gorilla gorilla gorilla*) (Groves 1970). Though nodding to the “Nigerian” (Cross River) specimens as the most distinct set within his Western gorilla data, Groves left all Western gorillas together as *Gorilla gorilla gorilla*. He split the eastern gorillas into mountain gorillas (*Gorilla gorilla beringei*) and an intermediate: eastern lowland gorillas (*Gorilla gorilla graueri*) (ibid.; Sarmiento and Oates 2000). Decades later, a series of studies convinced taxonomists to officially designate the Cross River gorillas as a subspecies: *Gorilla gorilla diehli* (e.g., Sarmiento and Oates 2000). Around the same time, they split the species of gorilla into two. Groves concluded his definitive account of gorilla taxonomy:

Science has advanced, but human behavior has not. People still hunt gorillas for food or trophies, and still cut down their forests; but now those same advances in science also enable forests to be cut down more efficiently, gorillas to be hunted more efficiently, human populations to increase ever faster, and press in on the remaining habitat, so that our second-closest relative is threatened with disappearing forever. More and more, the work of taxonomists and other biologists must be put at the service of conservation (2002, 30-31).

Splitting the species and delineating subspecies furthered conservation objectives as much as it tracked clearer scientific understanding of how to cleave and describe the natural world.⁴ Taxonomists reclassified gorillas less to clarify ontologies than to provide targets for conservation. Normative environmental ethics infiltrated the objective science of describing evolutionary distinctions and genetic differences between gorillas.

The taxonomic history shows the tenuous (but also self-reflective strength) of Western scientific knowledge and the complexity necessary to describe what makes Cross River gorillas distinct.

Conservation depends on the stability of this distinction. If Cross River gorillas are just more western lowland gorillas (of which there are hundreds of thousands in Cameroon, Gabon, and Congo), how important is it to conserve them? The unstable foundation of the Cross River gorilla's ontology, i.e. of what makes the Cross River gorilla a specific kind of thing in the world, is important for understanding the moral reasoning regarding the gorillas. Many of the arguments for the impositions of conservation in the Cross River headwaters rely on this ontology.

Western knowledge of gorillas is messy and complicated, but also authoritative. Conservation asserts Western ways of knowing gorillas as objective, impartial, and essential, which often contributes to ignoring the indigenous ways of knowing wildlife. Writing anonymously in 1934, F.S. Collier, Chief Conservator of Forests for Nigeria, argued:

To a native hunter in these rather inaccessible forests, a gazetted regulation means absolutely nothing unless he or his friends suffer penalties for infringing it. 'Scientific interest' is, of course, quite meaningless to them, and they will not refrain from hunting gorilla until it becomes inexpedient to do so. Unless there are Europeans on the spot who will take personal and active interest in the gorilla, there is little doubt that the Cameroons-Ogoja race of the species will be completely, if gradually, killed out in no very long period of years (Anonymous 1934, 102).

In 2013, following the killing of a Cross River gorilla, Louis Nkemi, a Cameroonian conservationist, explained: "This is a bad omen for the conservation world, given that it indicate[s] that the fight against poaching, ignorance, and people who do not yet understand the value of wildlife, is still very far from being achieved" (Nkemi and Leke 2013, 9). The issue is not only that indigenous knowledge is ignored, but that ignoring it allows outsiders to blame locals for the plight of the wildlife. Conservation efforts invite international intervention premised on the idea that Westerners know wildlife better and appreciate it more than the indigenous communities.

Linda Tuhiwai Smith calls this "the indigenous problem" (2012, 94-95). Conservation describes the locus of the threats to wildlife as in the local communities, rather than recognizing the role of grander social, political, and structural issues (ibid.). Efforts focus on policing the communities when the problems are much broader and stem from outside policies and pressures (e.g., Köhler 2005; Oishi 2013). The limited scope of problem orientation makes conservationists reaffirm their own beliefs, while ignoring their historical and current role in these issues. Igoe (2017, 110) describes conservationists as "deeply implicated in the very ruination that [they promise] to repair." For example, a limited orientation obscures the role the West played in the plight of gorillas, leaving out gorilla hunting and logging of forests in colonial times; contemporary global appetites for timber, cocoa, and other cash crops replacing forests; and the inequalities inherent in conserving gorilla habitat for ecotourism and science instead of for non-timber forest products and local use. By omitting their culpability, Westerners grant themselves the position of objective judge. They authorize themselves to determine conservation values and sensitize

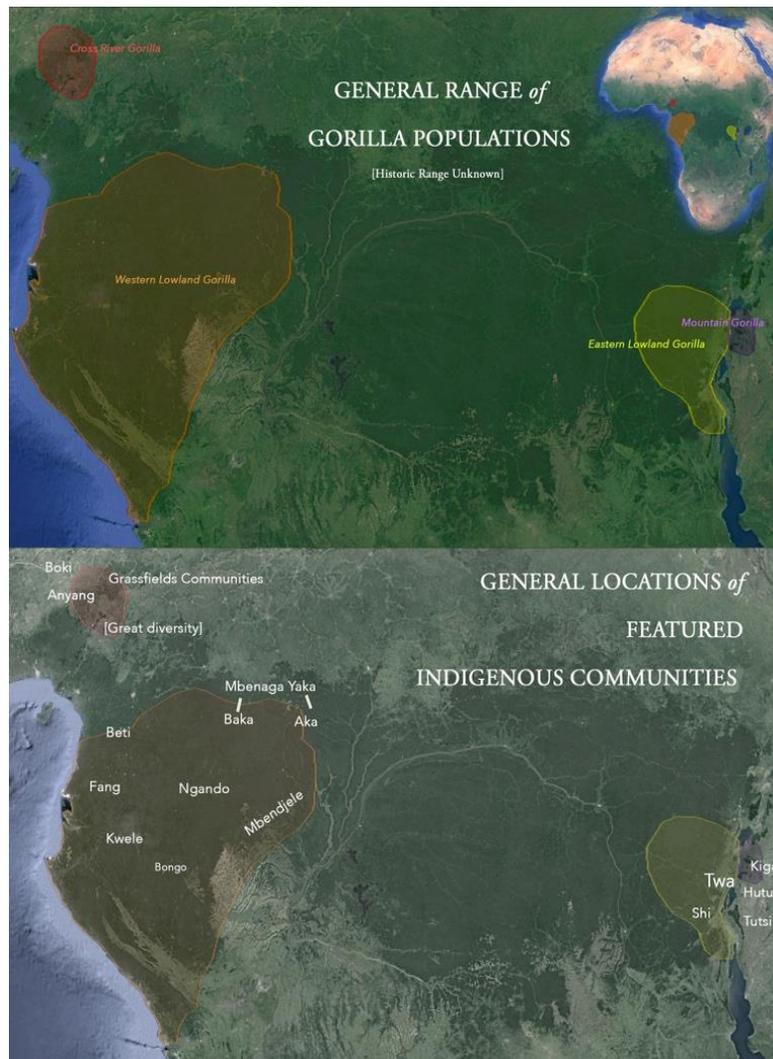
indigenous communities to these values because the communities are in need of education in Western environmental ethics. By seeking to “teach the value of wildlife,” conservationists further establish their position of superiority. As Smith describes (2012, 95), the disrespect and hypocrisy of this position exacerbates the problem: “For indigenous communities the issue is not just that they are blamed for their own failures but that it is also communicated to them, explicitly or implicitly, that they themselves have no solutions to their own problems... [This nurtures] deep resentment and radical resistance.” The legacy of the control over knowledge production is that international reasoning over what to do about the plight of gorillas depends upon Western research and thinking and lacks the context of indigenous African knowledge. As Goldman (2007, 310) writes, “By monopolizing what counts as valid knowledge—by claiming epistemological, methodological, and ontological superiority—Western science has silenced the knowledge of Africans.” This process began during colonization, but did not end with it. Some researchers now comment that locals do not know what gorillas look like (Rose et al. 2003; Webber and Vedder 2001). For generations, conservation regimes have kept many indigenous communities, especially those near the mountain gorilla (*Gorilla beringei beringei*), out of the forest and out of contact with gorillas. Across the gorillas’ range, from Nigeria to Rwanda, very little traditional knowledge of gorillas was recorded (Sicotte and Uwengeli 2002; Oishi 2013). As colonialism dislocated people from their place and culture, how much indigenous knowledge was lost? What were, and still are, indigenous ways of knowing gorillas and how might they help guide contemporary human-gorilla relations?

This paper focuses on the importance of engaging traditional and contemporary indigenous knowledge of gorillas. Section two deals with scholarship on gorillas to show how Western ways of knowing are validated and reinforced. I contrast them with hints of indigenous ways of knowing gorillas, then show how values inform the production of all knowledge of gorillas. Section three shows the consequences of omitting African accounts. Lastly, section four explores how indigenous knowledge can help improve understanding and guide modern human-gorilla relations. All of these sections highlight the importance of engaging indigenous knowledge with humility and respect, and not selectively engaging aspects that serve one’s own purpose. Throughout the paper, the general terms “gorillas” and “indigenous communities” are used as catch-alls for greater complexity. “Gorilla” refers to two species of closely related great apes: *Gorilla gorilla* and *Gorilla beringei*. The two species are morphologically and genetically distinct and separated by about 1,000 km (Tocheri et al. 2011). They split around 1-3 million years ago (ibid.). The two species further divide into two subspecies each: Cross River gorillas (*G. g. dielhi*); western lowland gorillas (*G. g. gorilla*); eastern lowland gorillas (*G. b. graueri*) and mountain gorillas (*Gorilla b. beringei*).

The indigenous communities across the gorillas’ range are too numerous to list. Language families can help identify general groups, but even these are vast. For example, the linguistic diversity of the Grassfields of Cameroon, at the northern range of all gorillas, hints at a cultural diversity almost without equal (Di Carlo 2011). Across their range, even single bands of gorillas may overlap with multiple indigenous communities. Historically, the Baka, Mbenga, Mbendjele Yaka, the Twa, and other forest-dwelling groups had perhaps the most overlap with gorillas (e.g., Lewis 2002).⁵ These people were

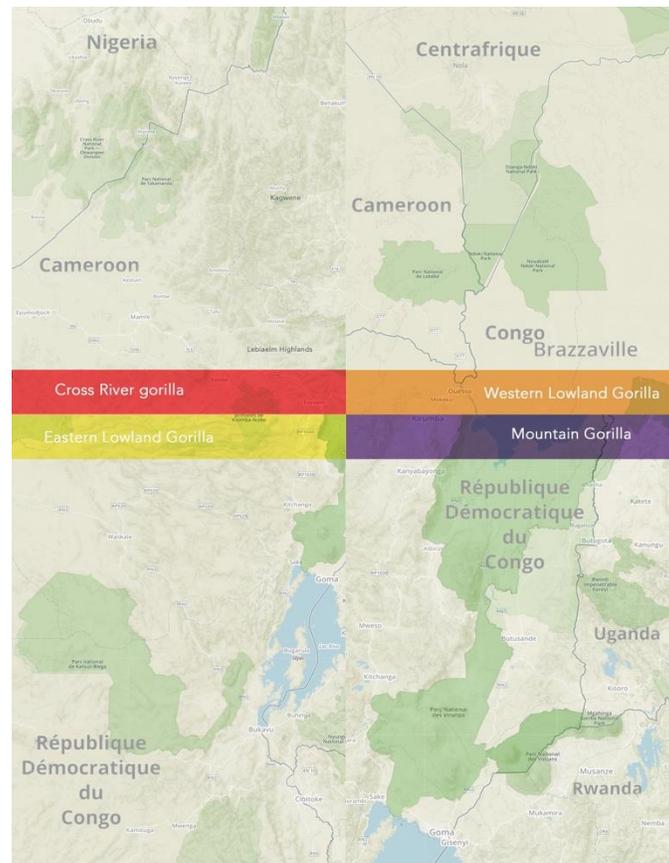
nomadic hunter-gatherers. They shared the forest habitat and had intimate knowledge of gorillas. Much more populous, often Bantu-speaking groups farmed on the fringes.⁶ In pre-colonial times, many lived in or near the forest. They also practiced hunting and gathering and had close relationships with wildlife, including gorillas (Köhler 2005). Colonial policies affected Bantu speakers much more directly and dislocated them from their relationships with the forest (ibid.).

Cross River gorillas in Nigeria live near Anyang, in the forest, and Boki communities, on the fringes. In Cameroon, they live near an incredibly diverse set of communities. For example, the band of Cross River gorillas at the Tofala Hill Site overlaps with 17 traditional kingdoms, including the Mundani, Bangwa, and M'mucok (Wright and Priston 2010). Western lowland gorillas are the most numerous of all gorillas and span the largest range. They can be found in Cameroon, Central African Republic [CAR], Congo-Brazzaville, Equatorial Guinea, and Gabon and overlap with numerous communities including the Mbendjele Yaka (made up of (Ba)Aka), Baka, Bulu, (Ba)Kwele, Njem, Fang, Mpiemu, Mbendjele, Ntumu, Ngando, and Bamileke).⁷ In the Eastern Democratic Republic of Congo [DRC], (Ba)Twa live in the montane forests. In South Kivu, Eastern lowland gorillas overlap with them, while groups, such as the (Ba)Shi, farm the valleys below. Not far away, in North Kivu, both the farming communities and the gorillas change. Here are mountain gorillas, who number fewer than a thousand, but have populations in three countries: DRC, Rwanda, and Uganda. The Twa share the slopes of the volcanoes with mountain gorillas while farmers including the (Ba)Kiga, (Ba)Nyarwanda, Fumbira, (Ba)Hutu, and Tutsi pastoralists work the lower landscapes. The process of knowledge production regarding gorillas, from historical literature reviews to contemporary science, obscures the diverse knowledge of all these groups.



Source: Courtesy of Author

Figure 1: Maps of the Populations of Gorillas and a General Overview of Corresponding Indigenous Communities



Source: Courtesy of Author

Figure 2: Map Details of Conservation Areas Discussed in the Text

2.0 Producing Knowledge About Gorillas

2.1 Western Histories of Western Ways of Knowing Gorillas

In 1959, George Schaller ventured to the Virunga Volcanoes to conduct the first study of gorillas in the wild. He began his work at a time when gorillas were little known to Western science. His two years of research became two classic manuscripts: *The Mountain Gorilla* (1963), the first thorough scientific study of the animal; and *The Year of the Gorilla* (1964), a more public account, celebrated for popularizing gorillas and dispelling the myth that they are dangerous brutes. Though Schaller's work preceded conservation biology, he anticipated its blend of entwining descriptive and normative knowledge. Schaller both described what gorillas are like and how humans should act towards them. He blended his ecology and ethology with ethics.

Schaller started his research with a literature review, noting how the gorilla “[appears] to possess some transcendent quality which inspires every visitor to its realm to put his experiences into print” (1964, 1). He noted that he “read through literally hundreds of popular books, articles, and newspaper stories, and

[...] examined scientific papers and glanced through textbooks” (ibid., 2). He did not comment on the absence of indigenous accounts. Why do so many visitors to the gorilla’s realm put the experience into print while locals do not? Does this show a lack of value of gorillas to locals or reveal something more problematic: who gets to put things in print? Throughout the research process for this paper, not a single book about gorillas written by an African was located. There were a few articles, dissertations, and newspaper stories, but nothing in more popular press or media. It was also difficult to learn about the relationships between indigenous communities and gorillas beyond the realm of science and conservation, with the notable exceptions of scholarship by Denis Ndeloh Etiendem (2008; Etiendem et al. 2011), Angela Meder (1999), and a few others featured in a following section.

Even if he had found them, Schaller probably would have been skeptical of indigenous accounts. He began his research wary of most of the gorilla reports he read, dismissing the accounts of white hunters “since the ape is studied along the sights of the rifle” (1964, 2). He dismissed adventurers too, as the “the finding of a gorilla nest or perhaps a brief sighting of the ape itself makes him an expert on all aspects of the gorilla’s life history,” and because of how they would turn to “native tales, rumors, and statements from older literature, no matter how dubious” to make up for their lack of knowledge (ibid.). With this line, on the second page of the book, Schaller revealed how he orients to indigenous accounts. Unlike the adventurers, he did not accept indigenous tales as knowledge. He maintained this orientation throughout his literature review and fieldwork.

Schaller’s historical survey of knowledge of the gorilla begins in circa 470 B.C. with Hanno, the Carthaginian navigator. Pliny, writing in 150 B.C., described that Hanno encountered the Greek Γόριλλαι (*gorillai*), a “tribe of hairy women,” on the coast of what is now Sierra Leone. They acquired three females but the apes died on board. Hanno brought their skins to Rome. Though, from the location and behavior of the *gorillai* (hooting and throwing stones), the apes were probably chimpanzees, the name persisted, eventually being reassigned by Savage and Wyman to describe the first type specimen of a gorilla skull as *Troglodytes gorilla* in 1847. Before Schaller wrote of Savage, his history jumped from 150 B.C. to 1559 A.D. and continued with an English sailor, Andrew Battell. The Portuguese captured Battell and held him prisoner north of the Congo River. Upon release, Battell described two apes from the region: *pongo* and *engeco*. His writing on *pongo* clearly describes the gorilla. The name *pongo* persisted and ended up reassigned too. During the 1800s, Western taxonomists confused themselves with their descriptions of the great apes. They referred to many specimens as orangutans, resulting in the actual ginger Asian apes now carrying *pongo* as their scientific name. Western ape knowledge has a somewhat interesting history as in the past, orangutans received the name for gorillas and gorillas received an indigenous name for chimpanzees.

From Battell, Schaller then focused on Lord Monboddo in 1774, then Bowdich in 1819, then Du Challi in 1856 (often described as the man to “discover” the gorilla). Du Challi was the first of these authors to see the animal alive, not just reflect on specimens or recount native tales of a mythic ape. Throughout Schaller’s survey, knowledge of the gorilla comes only from foreigners. To be charitable, Schaller could

only refer to Westerners' writing of African stories. Most Africans lacked the resources to share their own accounts. Their knowledge lost nuance in the process of translation and interpretations by foreigners.

Scholars continue to follow Schaller's approach to the history of gorilla knowledge. In "*Discovering Gorillas: The Journey from Mythic to Real*," Newman takes a similar orientation:

Reports of a great ape lurking in the depths of Africa go back over two thousand years, but confirmation that one actually existed did not take place until the middle of the nineteenth century. A rush of hopeful discoverers then ensued. Few succeeded in seeing any, much less studying them, and thus "knowledge" about gorillas consisted mostly of fanciful tale-telling based on reports from Africans. By and large, it depicted a savage beast of enormous power that terrorized people, especially women (2013, 36).

Newman (2013 and 2006) only considers foreigners' accounts in recounting the history of knowledge of gorillas. He describes the long history before the gorilla was "verified" and how the word "gorilla" disappeared from Western literature for over a thousand years. For two centuries, Western reports came from Africa with relative agreement on size, nature, and name of a wild, human-like beast, "but still no sightings, just stories told by Africans filtered through visitors all too willing to believe" (2006, 39). Hard evidence, Newman reports, did not emerge until 1847 when an American medical missionary, Thomas Savage, acquired a skull.



Source: Courtesy of Author

Figure 3: A Gorilla Mask Carved by Artists in Oku, a Community in the Grassfields of Cameroon
Oku has a great forest but has lost its gorillas. Artists make masks to help the children remember what's been lost.

2.2 Indigenous African Ways of Knowing Gorillas

Not all researchers were dismissive of indigenous knowledge. A hundred years ago, some anthropologists asked about it. The stories locals shared with them did not describe the wild, women-stealing beast of hunter's tales. In 1911, Albert Ernest Jenks wrote *Bulu Knowledge of the Gorilla and Chimpanzee*. The Bulu are a group of Fang people living in Central and Southeastern Cameroon. Jenks became wary of anyone's knowledge, noting: "It is almost impossible for the white man in Kamerun, though in the center of the gorilla's geographic range, to have intimate knowledge of that animal" (1911, 56). He notes the Bulu's "credulity" and "tendency to exaggerate" (ibid.), but then goes on to describe the Bulu's detailed knowledge of gorillas including: size of bands of gorillas and how the bands change in number, rank, and structure; nesting behavior; foraging and diets; and how they rear their young. The Bulu described the opposite of a ferocious brute. They explained that gorillas only attack when attacked first. They stressed the gorilla's human-like behavior, such as how the mothers cradle their babies in their arms or carry their wounded away (1911, 57). Jenks reported on an "authentic instance" when, after a hunter shot a gorilla, he cut off the foot and took it to the village. When he returned, the body was gone. They eventually found it far away, clearly carried by its companions.

The Bulu considered the gorillas among the smartest animals in the forest—though not as intelligent as the chimpanzees—and to be their close relatives. Jenks included two Bulu stories depicting a close relationship between gorillas and people. In "The Gorilla and the Man," a hungry gorilla continues to invade a family's house. In "The Gorilla and the Child," a gorilla steals a woman's baby. In both stories, the gorillas speak to people, asking for help and trust. In the first, the gorilla is killed. In the second, a man tries to kill the gorilla and kills the child instead.

Sanderson made a case for the Assumbo of Cameroon, noting that they are "honest people and not given to imaginative story-telling" and arguing that "they probably see more gorillas and know more of their habits than does any other group of human beings in the world, I think their opinions should at least be listened to" (1937, 186). Sanderson describes that the Assumbo believed the gorilla to be another race of humans, rejected a tale popular among other tribes that gorillas carry off women, and knew all the bands of gorillas by sight. They knew where each band would be, what the band looked like, and how many bands there were.

More recent research has helped continue locating indigenous knowledge. Alesha (2004, 48) describes how gorillas hold an array of cultural roles across Africa. She notes how "cult-like worship" of gorillas is present even far from gorilla habitat, even among savanna tribes. One Cameroonian community shared a variety of stories and beliefs about gorillas, even though not a single member had ever seen a gorilla (Rose et al. 2003). Etiendem (2008) collected local stories strikingly consistent with those collected over a century earlier across the region by Du Chaillu (1861). Both share stories that include: if a pregnant woman sees a gorilla, she will give birth to a gorilla baby; and if a gorilla is killed, a man connected to it via a totem will die. In Nigeria, hunters tell a variation: if a woman eats gorilla meat, she will give birth to a strong baby. Some Fang groups refer to the spirit of the gorilla as *Essa-ngui*, or Father Gorilla. They

believed gorilla spirits to be so potent that, upon encounter, a pregnant woman would give birth to a gorilla (ibid.). Scholars rarely noted the gendered aspects of indigenous knowledge and beliefs, though hints appear in such stories. Hodgkinson (2009, 224-225) found that most non-Aka women in the Dzanga region of CAR would not eat gorilla meat, but would buy it for their husbands. She believed this to be for reasons more to do with traditional taste or relation to stories like those above.

Forest dwelling groups have abundant knowledge, vibrant stories, and spiritual relations with gorillas (Joiris 1997; Remis and Robinson 2017). The Mbendjele Yaka of Congo-Brazzaville call Western lowland gorillas (*b)ebobo* (Lewis 2002). The Baka in Cameroon have at least ten additional terms to distinguish individuals, tracking the gorillas' age, sex, and relation to others; only the forest elephant, the most important cultural species, has a similar abundance of Baka descriptors (Oishi 2013). The Bantu-speaking Kwele, who call the gorilla *dzil*, also have several terms to classify gorillas of various types, but they are less detailed than those of the Baka.

Many beliefs are consistent across regions and communities. The Fang call gorilla *ngi* or *ngui*, the Bulu call them *njamong* (Alesha 2004, 49). The name of gorilla, *ngi*, references fire and a positive force, in contrast to the evil represented by the chimpanzee. Near Virunga, the gorilla is a dark spirit. Speaking its name, *ngagi*, brings bad luck (ibid.). The names are similar a thousand miles apart. Across southwestern CAR, southeastern Cameroon, and northern Gabon, stories tell of totems, transformations, and reincarnations as gorillas (Giles-Vernick and Rupp 2006). Du Chaillu (1861) heard similar tales over a century ago.

The Kwele tell of gorillas with a reincarnated human spirit, *dzil-elizaliza*. These may be gentle revenants or violent witches (Oishi 2013, 12). These gorillas often visit human settlements. If recognized as a *dzil-elizaliza*, the gorilla is protected, but because it can be hard to tell, people often avoid harming any gorilla they encounter (ibid.). If a hunter kills a *dzil-elizaliza*, he will find human blood and rank meat. Oishi heard of six to eight *dzil-elizaliza* encountered over the past twenty years, including one tale in which a *dzil-elizaliza* interrupted a funeral, danced to the drum, and then stayed around the village for a month. He was immediately presumed to be the spirit of the deceased man. Gorillas that appear soon after someone's death are often thought to hang around places familiar to that person; the relatives of the deceased often feel a strong affinity to the gorilla (ibid., 14). Mpiemu call the gorilla *ntchilo*. A contemporary Mpiemu account tells a tragic story of a man losing his daughter and the girl returning as a gorilla. The gorilla often appears near the spot where she died (Giles-Vernick and Rupp 2006, 63).

Both the Baka and Mbenmdjele tell that *bilo* (term used for Bantu-speaking farmers) are reincarnated as gorillas after they die (Lewis 2002, 94; Koehler 2000, 10). Kisliuk (1998, 203-206) shares a Aka story of a *milo* (singular of *bilo*) who died, turned "diabolic (*dzabolo*), went into the forest, and became a gorilla." As a gorilla, he did not like the forest food. Missing manioc and other human foods, he decided to return and live in the village, causing a great stir.

Köhler (2005) describes the shape-shifting differently. More like the totems in Lebialem, shape-shifting is distinct from reincarnation. It is more malevolent and practiced by witches to ambush enemies or raid

crops. He shares a story of an elderly woman admitting that she transformed into a gorilla and attacked a successful farmer as part of a conspiracy (ibid., 418). Mystical hunters can also transform as a means of hunting or escaping danger. Killing a gorilla with a human spirit, whether reincarnated or a living totem, will bring a curse.

Kota in Northeastern Gabon share tales of totems like those of Lebialem; they tell of transformations and people dying after gorillas are shot (Alesha 2004, 50). The Twa also believe in gorilla totems, and traditionally would not hunt them (ibid.). The Twa respect gorillas more than chimpanzees and believe gorillas to be more peaceful. Alesha claims that nearby Bantu, by contrast, fear gorillas more than chimpanzees (2004, 50-51).

Other groups, in the lowland forest, share a wary fear of gorillas. Ngando, Baka, Mpieum, and Baka hunters all tell of gorilla attacks (Giles-Vernick and Rupp 2006, 59). Gorillas can anticipate the actions by humans and will sometimes ambush; hunts can quickly turn violent (Oishi 2013). Baka women and children, traveling alone, have special plant charms for protection from gorillas (Giles-Vernick and Rupp 2006). Only the elephant is more dangerous to hunt; successful hunts bring great prestige (ibid.). Baka hunters tell of the gorilla's great intelligence, how they lay traps and play tricks; they describe hunts as battles of wits with individual gorillas (Oishi 2013).

Gorillas' strength, intelligence, and similarities to people make them potent symbols. Traditionally, gorilla parts held great power. The Ibo in Nigeria, far from gorilla habitat, sent hunters to retrieve gorilla parts for medicine and magic. Canines, fingernails, and dried hand fetishes brought good luck or fertility. Gorilla hair and skin offered protective charms, or decorated ancestor masks. For the Fang, the brain was of particular importance (Du Chaillu 1861). Rubbing a hand or wearing teeth can bring strength (Alesha 2004, 92). For the Bamileke in Cameroon, the chief alone can wear the sagittal crest of the silverback. Skulls provided protection to fetishized war shields in Nigeria, Cameroon, and Gabon. The Mboko in Northern Congo used gorillas' "dried skin [from] supraorbital ridges" to protect themselves from living gorillas (ibid., 94).

In southeastern Cameroon, Gando, particularly the Bodawa group who have a primate totem, tell stories of gorillas helping people carry burdens through the forest (Nelson and Vennant 2008, 14). They believe gorillas recognize them and let them pass safely; in turn, they do not eat the meat. Regional Aka groups share these stories and totems. Around Njikwa, in the Cameroonian Grassfields, many believe the gorillas to be their ancestors (Wittiger and Sunderland-Groves 2007). Older stories from Beti and Bulu describe people and gorillas sharing ancestors and kin, social spaces, and relations, until a fight over an elephant head (Laburthe-Tolra 1981, 427; Giles-Vernick and Rupp 2006, 56-57).

Sacred gorilla societies exist in Gabon and eastern Cameroon, e.g. the Ngi society of Pangwe (a Fang group), the Kwele's Gorilla Dance Society, and probably elsewhere, too (Siroto 1969; Meder 1999). Secret societies often do not share information, especially with outsiders or strangers.⁸ Alesha suggests that these cults are male-based and may still be active. Indigenous knowledge is not known, in part, because it is kept secret.

Almost all these accounts reflect outsiders documenting curious local beliefs.⁹ From these scant notes, it is hard to know how much indigenous people knew of gorilla behavior (though they must have known much to successfully hunt such an intelligent species). Many indigenous accounts of gorillas include magical or fairy-tale aspects. The stories describe real occurrences: village visits and crop-raiding by gorillas, the threat a wild gorilla may pose to a child, the danger of eating gorilla meat—while weaving these descriptive facts into a normative narrative, akin to a fable or a morality tale. The blend may have caused Western scholars, aiming at scientifically accurate accounts of gorillas, to be skeptical of the reliability of local stories. Instead of untangling the descriptive and normative elements, they dismissed the knowledge.

Schaller was consistent in his critiques, challenging the folk knowledge of both colonial hunters like Sanderson and indigenous communities. He noted that the habits of lowland gorillas remained largely unknown at the time of his writing. “Hunters shoot them, zoo collectors catch them, and explorers take random notes in passing, but only one scientist has made a definite long-term attempt to study the ape” (1964, 5-6). Again, Schaller referred only to Westerners including hunters, as knowing about gorillas, but he eventually referenced indigenous knowledge when discussing his fieldwork.

Unable to locate the gorillas in certain regions during the fieldwork, he “resorted to second-hand information about gorillas from miners, government officials, and especially from the native residents” (1964, 85). He described indigenous communities that hunted gorillas for food and gorilla attacks. He hinted at a few local beliefs, e.g. “the Wabembe in this region believe that the gorilla, the *kinguti*, is not an ape but a man who long ago retreated into the forest to avoid work” (1964, 86). Perhaps the Wabembe and other indigenous communities farming lower on the Virunga Mountains knew less of the mountain gorillas higher up on the slopes than the Bulu, who share a forest with the lowland gorillas, did. Or, perhaps Schaller’s relationships with the locals obstructed opportunities for them to share their knowledge. He wrote: “It is never easy to get to know the natives. They usually remain in a world of their own, and most attempts to draw them out are met with silent rebuff” (1964, 42). He may have heard stories, considered them more distracting than valuable, and chose not to include Africans’ accounts due to their perceived inaccuracy:

Reuben and the other guides told us many things about the family life of the gorillas, but like the other Africans we met, they were not reliable. When it came to confirming the presence or absence of the apes or of pointing out the various food plants, our guides were invaluable, but when they were describing the behavior of the gorillas they simply assumed that it resembled their own. Thus, gorilla males were said to bring food to their families, and a female about to give birth left the group and secluded herself (Schaller 1964, 45).

Schaller may have omitted indigenous knowledge out of frustration, too. He described difficulty in attaining even simple knowledge from locals while they searched for gorillas. The Twa would not tell him

what gorillas eat or how they nested but gave cryptic guidance such as, “If you call the animal you are seeking by name, you will never find it” (1964, 51). On a fresh trail, one man repeated “If you follow this trail, the gorillas will kill you,” repetitively, like a mantra (1964, 58). Different people or groups contradicted each other:

One Bantu had told me that gorillas grab flying spears when hunted and throw them back at the attacker. When I asked Bishumu [a Twa] about this he smiled and replied: “This is a fable. We tell such tales to the Hutu and they believe them. The gorillas fear man. They bark and roar and run away (1964, 53).

Schaller omits indigenous knowledge beyond the mentions above.¹⁰ Newman, too, passes over African tales in his accounts of knowledge of gorillas, though he does offer a few fanciful tales from sensational Western naturalists writing in the late 1800s, such as how gorillas smash elephants’ trunks with a tree-branch to defend their favorite fruit. When Newman does recount African stories, via the colonists who recorded them, his concern seems to be that African stories were so fanciful that the colonists “must have had their legs pulled” (2006, 38).

The concern that indigenous knowledge is not reliable or true, and therefore should be excluded, mistakes an important understanding of knowledge. Knowledge is not only scientific fact. Many indigenous accounts describe gorillas in relation to humans. Locals understand gorillas not as wild creatures living in remote forests, but through correspondence to their community, behavior, and interactions. Indigenous knowledge of gorillas helps guide and explain behavior; it helps navigate gorilla and human relationships. It differs from the objective knowledge sought by Western science, but is no less valuable.¹¹

As a scientist, Schaller was concerned with descriptive knowledge that offered an objective account of gorilla behavior. Descriptive knowledge presents the way the world is. It provides facts about gorillas. It is the sort of knowledge produced by scientific study. It does not explain why to conserve gorillas, only what gorillas are. Indigenous knowledge describes how to relate to gorillas, not just what gorillas do. Such normative knowledge describes how one should act in the world. It is more apt for considering moral questions about values and ethics regarding gorillas. It helps humans and gorillas coexist while considering morals to guide action and behavior. When indigenous accounts included information about how to interact with gorillas, they confused Western scientists who were looking for objective facts. Local stories were wrapped in metaphor, mixing observational facts with myths. Further, primatologists were visiting for research. They were not trying to build a community or raise a family among gorillas; they were trying to figure out what a gorilla is. To them, a gorilla was defined not by its interactions with humans, but by its role in the ecosystem. The gorilla knowledge Westerners produced, even if objectively-oriented and descriptive, rested on normative Western assumptions of what nature should be and what sorts of things about gorillas should be studied and characterized as descriptive of the species.

Western scientists wanted to study gorillas in their “natural” habitat. They wanted to know how gorillas act unaffected by people. Their position came from a Western tradition of separating humans and human

influence from nature. This position affected their research as they would not study gorillas when they interacted with the indigenous communities, but only as they acted alone out in the forest. The researchers did not want local anecdotes. They wanted proof from hard science—study of evidence, behavioral observations, and other data collected in the Western way. When the terms and criteria of Western science set the standard for valid knowledge, locals' observations and other ways of knowing about gorillas were lost.

Locals may not have always provided accurate descriptive knowledge. To them, it may have been more important to share knowledge that was relevant and useful, e.g. what one needed to know to interact with gorillas upon an encounter. Why discuss abstract ideas about what gorillas do out on their own—unless you plan to hunt them?

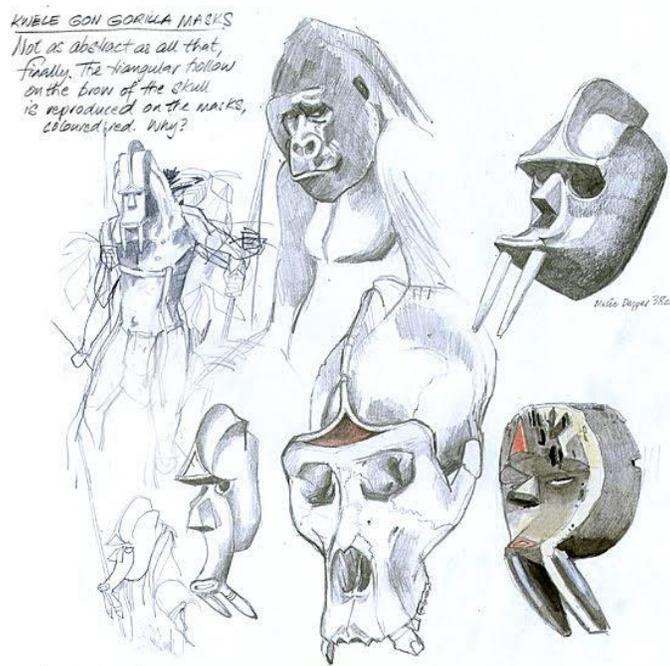
People in the indigenous communities who directly interact with the primates, such as hunters, have particularly nuanced knowledge. Gorillas are difficult to hunt. They do not fear humans the way other animals do (Köhler 2005, 419-420). Gorilla hunting remains a practice in some forests (Giles-Vernick and Rupp 2006, 59). Hunting gorillas requires intimate and intricate knowledge of the animal. Forest-dwelling groups understand gorilla behavior so well they can mimic it. In Gabon, hunters have a gorilla dance, to help them appear as gorillas and deceive them while hunting (Giles-Vernick and Rupp 2006; Reade 1864, 164-167). Hunters also have the ability to communicate with the gorillas by mimicking their vocalizations (Giles-Vernick and Rupp 2006). Baka hunters understand gorilla social structure, nesting behavior, and habitat selection (Oishi 2013). They know the diversity of social arrangements and how they change, and their knowledge tracks that of primatologists. For example:

An adult male living and foraging alone (*ndonga*), which seems to correspond to the 'solitary male' in modern primatology terms, is considered to be an old *ngille* (mature silverback) that has been driven away from his troop by younger adult males (*mokolo a ngille*) (Oishi 2013, 5).

Oishi argues the Baka have developed their own "empirical knowledge." Some Baka knowledge matches current primatology, other knowledge does not, "e.g., primatologists have a different interpretation of the solitary male phenomenon" (ibid.). The unique and precise knowledge hunters have about gorillas is often descriptive. Such Traditional Ecological Knowledge (TEK) is built on observations and interactions with a particular environment and provides descriptive accounts that align with the methods of science. Folk biologists and ethno-ecologists often work with TEK to co-produce descriptive knowledge about the natural world. Ethno-primatology emerged from anthropologists' observation that all primates overlap with human communities and that "coexistence translates into knowledge" (Sousa et al. 2014, 130).¹² Communities coexisting with gorillas have indigenous, descriptive knowledge of gorillas and their behavior. As Oishi (2013) shows, this is akin to Western knowledge of primates accrued with study, i.e. primatology.

Just as science produces descriptive Western knowledge, moral philosophy produces normative Western knowledge, such as ethics. Indigenous knowledge can be further distinguished as well. Where TEK tracks

science, other forms of indigenous knowledge are built on cultural history and traditional beliefs. They provide normative guidance. Indigenous cultural knowledge of gorillas both emerged from and guides the communities' long relationship with the animals. It is not so different from Western knowledge reflecting on relationships to nature, e.g. environmental ethics.



Source: Desmond Bovey

Figure 4: An Example of a Culture Relationship with Gorillas: Kwele Gorilla Masks from Gabon

2.3 Values Informing Knowledge Production

Schaller wrote *“The Year of the Gorilla”* to separate his feelings from his objective account of gorillas contained in his scientific manuscript *“The Mountain Gorilla.”* His writings exemplify the blend of descriptive and normative knowledge that would come to characterize the discipline of conservation biology, a science with embedded values. Schaller’s writings often blend facts and values, beginning with a descriptive statement that gorillas are gentle, followed by asserting they should be saved.

Schaller described how the first Westerner to see a mountain gorilla reacted by shooting it and how the mountain gorilla is now named after the shooter, Von Beringe. He recounted his enlightened relationship with the gorillas: “It was a wonderful feeling to sit near these animals and to record their actions as no one had ever done before,” offering a new, better way to relate to gorillas (1964, 37). He refused to enter the forest with a gun and describes sitting with the gorillas in peace. He contrasts himself with Akeley, his

famous predecessor, who claimed “the white man who will allow the gorilla to get within ten feet of him without shooting is a plain darn fool” (1964, 10). Schaller feels immense wonder:

I felt a desire to communicate with him, to let him know by some small gesture that I intended no harm, that I wished only to be near him. Never before had I had this feeling on meeting an animal. As we watched each other across the valley, I wondered if he recognized the kinship that bound us (1964, 35).

Schaller’s blend is not unusual. Conservation biology often offers precise and descriptive knowledge along with guiding normative knowledge. Western reasoning justifying conservation builds upon Western scientific knowledge of nature. Conservationists produce descriptive knowledge about a species of conservation concern to aid in the normative project of conservation. The validity of the normative knowledge supporting the project—Western reasoning, especially environmental ethics—is assumed, ensured, and unchallenged in part because it is conjoined with science. Descriptive Western knowledge is presented as the most accurate way to understand the natural world and its precise facts clearly lead to moral prescriptions. Yet normative Western knowledge is produced in a certain way, from a certain context, and its foundations are far from sound or uncontested (Vucetich and Nelson 2013).

Indigenous normative knowledge can help guide and inform conservation efforts but has been lost, obscured, or overlooked. In its place, conservation education programs teach locals Western descriptive knowledge and embed Western environmental ethics (Western normative knowledge). For example, they stress the need to conserve the Cross River gorilla. They do not discuss their focus on the value of the rare evolutionary history of that particular type of gorilla. Engaging indigenous knowledge is especially important for improving understanding of historic and modern human-gorilla relations. If Western reasoning is guiding moral and political action in an international context without understanding indigenous normative knowledge, then such efforts may continue to replicate epistemic injustice, colonial hierarchies, and remain ripe for abuse (Kapoor 2002).

Conservationists and indigenous communities have much to offer and learn from each other. The issue is not with knowledge exchange or congruity, the issue is with one knowledge being considered more valid, accurate, and correct than the other. Lee notes “ethics, aesthetics and traditional values attached to primates are discussed in the literature, but on the ground, indigenous peoples’ interactions with primates tend to be predominantly negative in perception as well as consequence....” but rather than be discouraged, she adds, “If conservation only works when it is emergent rather than imposed, then perhaps it is time to listen more and tell less?” (2010, 929)

Scholarship on issues of knowledge and power warns of the many challenges in working across knowledges, from the problems of even conceiving of indigenous and Western knowledges as necessarily separate to concerns of unequal power and unshared cultural assumptions when engaging different ways of knowing. Few Africans have had the opportunity to study gorillas with the methods and resources of Western science. Even fewer Africans have had the opportunity or support to put their studies and ideas of

gorillas into print. The lack of African publications or authority does not track a lack of value or worth of indigenous knowledge of gorillas. Recognizing that this knowledge has been belittled, ignored, or even suppressed, explains why Westerners characterize indigenous communities' relationships with gorillas as antagonistic at worst, ambivalent at best.



Figure 5: A Community Meeting to Discuss Concerns with Conservation; Bomaji II, A Village Enclosed within Cross River National Park, Nigeria.

3.0 The Problems with the Absence of African Accounts

3.1 Epistemic Justice and Gorilla Conservation

Fricker's work on epistemic justice (2007) explains how injustice can occur in relation to African communities, African wildlife, and conservation education. She describes two types of epistemic injustice: testimonial and hermeneutical. Both are caused by prejudice, conscious or unconscious, against the speaker's social identity. Testimonial injustice occurs when a listener discounts a speaker's credibility, and thus knowledge, due to prejudice against the speaker's identity. An example of testimonial epistemic injustice occurs when a villager tells a story about how gorillas care for their young, and a primatologist dismisses the story as apocryphal due to the villager's lack of scientific language or study. Testimonial injustice can also be preemptive. Group members may be prevented from testifying due to a perceived lack of credibility. Injustice can also come from social structures that exclude groups from testimony. For example, during colonialism, Africans struggled to gain credibility or establish their knowledge of wildlife.

Anderson (2012) builds on Fricker's work by showing additional structural injustice. Systematic epistemic injustice occurs when a group's knowledge and credibility is continually discounted due to prejudice and discrimination, in turn denying them resources and other opportunities. Without proper education and opportunities, tools, or platforms for expressing or presenting their knowledge, a group's

knowledge may continue to be discounted, dismissed, or lost. “Testimonial exclusion becomes structural when institutions are set up to exclude people without anyone having to decide to do so” (2012, 166). Structural epistemic injustice may be the cause of the great dearth in Western and global literature of African knowledge on African animals such as giraffes, gorillas, hyenas.

Hermeneutical injustice may identify the cause even better. Fricker (2007) describes hermeneutical injustice as always structural, occurring when the prejudicial marginalization of a speaker and their knowledge group prevents society (including both the speaker and the listener) from having the “interpretive resources” to make sense of the speaker’s claims and experience. African communities suffer from hermeneutical injustice because they lack the interpretive resources to isolate the injustice they suffer through prejudicial epistemic marginalization. When confronted with conservation efforts that challenge their relationships to the natural world, they are unable to explain their alternative ways of knowing nature since they do not have the resources or established authority to present their knowledge as equally valued. Unable to show how they appreciate wildlife in their own ways, local communities seem like they undervalue it. As a result, conservationists enroll local children in education programs and conduct sensitization programs for adults. Locals struggled to offer their own accounts of their relationships to wildlife in response. Instead, they must accept the knowledge presented by visiting Westerners and the Westerners’ corresponding normative prescriptions. Local African knowledge is absent from science, media, and reasoning that support the conservation actions of wild animals. It seems as only Westerners can speak for the needs of wild Africa. With their superior knowledge, Westerners know the best way forward for local communities. Since Africans are unable to present their knowledge as equally valuable, they suffer from structural injustice. The listeners and readers are unaware of the missing African accounts.

For both testimonial and hermeneutical injustice, the exclusion of the victims is based in prejudice. Even though the victims have sought to articulate their knowledge and experiences, they were marginalized. Although many wildlife researchers visit Africa, few research, record, and publish the voices or ideas of Africans in relation to wildlife or conservation. Fewer provide the training, tools, or resources for Africans to document and present their own knowledge. As Garland describes:

...the historical and racial politics of the international wildlife field are such that [African’s] intimacies [with wild animals] rarely translate into the kinds of successes enjoyed by their non-African counterparts and employers. Africans are simply not currently a central part of the narrative that renders African wild animals glamorous and valuable in the global scheme of things” (2008, 67).

The lack of fair distribution of resources and opportunities present a more familiar case of injustice. Fairness and distribution are challenging to quantify in a global context, but parsing questions of global justice is important in cases of international interactions such as gorilla conservation.

3.2. Unjust Benefits and Burdens

Distributive injustice refers to the unfair distribution of the benefits and burdens of conservation (see, e.g., Martin et al. 2015). It is the great postcolonial challenge facing Western conservationists. In an unjust global environment, with such inequality and disproportionate power, how can international conservation be conducted in a just manner? Conservation efforts tend to subordinate global justice questions to the moral righteousness of their cause. In contrast, the field of political ecology raises important questions such as: who benefits and who suffers from wildlife conservation? Conservation biologists tend to describe nature without engaging the political implications of their work or their power to do so. Those who control the language of nature prescribe conservation. They make and inform the normative decisions of which wildlife should be conserved, how, and why. Just as people may degrade nature, they also construct nature through conservation, establish populations and habitats, and foster a certain type of ecosystem. The political questions of who defines what construction should entail and who is responsible for constructing nature are both important.

Epistemic injustice is characterized by other unjust acts of marginalization and oppression. The exclusion of indigenous knowledge echoes the removal of indigenous communities to create space for colonial inhabitation (Igoe 2017). The separation and abstraction of interpretations reinforce the erasure and excludes indigenous communities by controlling their narratives around wildlife and conservation space.

Historically, the power to define and respond to ecological problems often falls upon colonial lines, tracking boundaries determined by colonial powers. As international concern grows for African wildlife, African environments continue to fall under outside influence. Westerners determine, define, and pursue desired ecological landscapes beyond their home countries. The hierarchy in control of land began with colonialism and continues with conservation. The main drivers of global conservation are all Western institutions, but none of the millions of conservation refugees are in the West (Dowie 2011).

For example, the Twa are among the most marginalized by gorilla conservations.¹³ In 1964, what is now Bwindi Impenetrable National Park became a gorilla sanctuary and as a result, the authorities expelled the Twa from the forest (Poole 2003). Belgian authorities established what is now Kahuzi-Biéga National Park in 1937, but the charter did not allow them to evict people living in the forest (Barume 2000). They added the region around Mount Biéga after consultation with the *mwamis* (chiefs). When the reserve became a national park in 1970, they evicted the Twa without compensation or new land. Around 580 Twa families were expelled (ibid.). In the 1990s, authorities evicted the Twa from the Virunga National Park in the Democratic Republic of Congo (DRC), Volcanoes National Park in Rwanda, and Mgahinga Gorilla National Park in Uganda (Poole 2003). Without land rights, these groups suffer great insecurity, especially as civil unrest and increasing unregulated exploitation further degrade the forest. Although conservation regimes allow hunting in buffer zones, all activities except ecotourism and research are prohibited from the areas of the national parks in which the gorillas inhabit (ibid.). A Twa man describes:

We are treated like animals. Our whole life has been distorted. We cannot even claim our rights before courts and tribunals. We cannot hunt or fish any more. Our children cannot gain access to schools. Our

wives do not benefit from any health care service. We do not even have access to land. Every time we attempt to get land as others do, we are told that we cannot... (Barume 2000, 93).

The Twa suffer further discrimination that is distinct from their neighbors (Barume 2000). Sicotte and Uwengeli (2002) show that other Rwandans compare the Twa to animals, disparaging them for not farming or building proper homes. Other forest-dwelling groups in Cameroon, Congo-Brazzaville, and the Central African Republic (CAR) suffer similar marginalization after evictions from parks and restrictions on their forest access and use (Lewis 2002; Köhler 2005; Nelson and Venant 2008; Remis and Robinson 2017). Many feel the needs of the gorillas are the priority of outsiders; gorillas are not only perceived to be protected *from* them, but *over* them as well. Sandbrook (2006, 173) reports similar sentiment in Uganda, where decisions not to allow a road, and thus easier travel through the forest, made people feel the gorillas' needs were placed before their own. People also lost access to traditional cultural and burial sites within the forest (*ibid.*). There is similar concern around the Cross River gorilla habitat in Nigeria and Cameroon (Amir 2019).

Questions of justice fall along three lines: retributive, reparative, and distributive. Distributive and reparative justice are applicable to conservation. Reparative justice describes the need to repair the natural world after degrading it, at least when others depend on it for ecosystem services (if not for the sake of the natural world itself). Whether humans have duties to the natural world—be it to individual animals, species, or even ecosystems—is an enormous and contentious concern discussed across environmental ethics literature. Thus, reparative justice may require that, if one degrades nature, one need repair it for others. Justice may also require that one not degrade nature if repair is impossible. States or other entities may bear responsibility for looking after nature, particularly when it is unique. This is called the “burden of endemism.” African countries home to gorillas—Nigeria, Cameroon, Central African Republic, Equatorial Guinea, Gabon, Congo-Brazzaville, Democratic Republic of Congo, Rwanda, and Uganda—may have a responsibility to conserve gorillas. If they do not, the gorillas will be lost to the world forever.



Figure 6: Ndimuh Bertrand Shancho, a Cameroonian Conservationist and Researcher, at Work in Bechati, Lebialem Highlands

3.3 The Burden of Endemism

Now, in the 21st century's global culture, there are many shared values. Such cosmopolitanism means the global community knows about gorillas and people across the planet—in New York, London, Seoul, São Paulo, Minsk, Lagos, Yaounde, and Ouagadougou—care about gorillas. The value of gorillas can be construed beyond any intrinsic value they may or may not hold. Many people should care about gorillas because they are special to the world. Even if these people have never seen a gorilla, they value the gorillas' existence. Nine African countries oversee conserving gorillas as they are the only countries where they exist. These efforts are comparable to those of the Chinese with pandas and of the Americans with Hawaiian monk seals, kangaroo rats, and prairie chickens.

The burden of endemism includes international expectations. The global community makes demands for the gorillas, sometimes at the expense of the gorillas' home country. For example, a group of international organizations, including the British government, are trying to block a super-highway from being constructed in Cross River, Nigeria. The super-highway would connect the port of Calabar with the large town of Obudu. It would also cut through Cross River National Park, home to the Cross River gorilla. The German firm Broad Spectrum Industrial Services and the China Harbour Engineering Company are funding the construction. Critics argue that the construction violates many international agreements Nigeria has signed, including the Convention on Biological Diversity, UN Framework Convention on Climate Change, and the Convention on Migratory Species, all of which may bring sanctions against Nigeria if the project goes through. Governor Ayate says he is committed to completing the project and the protection of Cross River biodiversity. The unique nature of the Cross River forests and their inhabitants makes the global community feel they have a stake in the Cross River state's development

plans (which are also a global endeavor due to international investors and the global market supporting the expansion).

Endemism is not only a burden; it can also offer a source of pride. These nine countries can be recognized by the world as the only places where gorillas can be found. Indigenous people may be appreciated as wise caretakers and begin receiving credit for conserving gorillas to date.

The challenge is justifying conservation to those who are directly affected. For gorillas, conservation campaigns often target the wider international community rather than the locals. This may be to raise pressure against the local governments, but in so doing, it often villainizes the locals. For example, the Cross River gorillas may be most threatened by a global challenge like cocoa production and chocolate consumption, yet few people make lifestyle or behavioral changes to support gorilla conservation like they do for chocolate consumption. It's evident that there is minimal global connection.

4.0 Engaging Indigenous Knowledge to Improve Understanding

4.1. Conservation as an Indigenous Value

Many locals say they do not support gorilla conservation because it does not take their views into consideration (Nelson and Vennant 2008; Powell et al. 2010; Nkemnyi et al. 2013). Near Virunga, interviewees connected caring for gorillas as part of white culture, akin to the way Rwandans cared for their cows (Sicotte and Uwengeli 2002). The increasing establishment of ecotourism, in which locals take on roles of servitude to connect outsiders to gorillas further such impressions. Tumusiime and Svarstad (2011) report that communities around Bwindi describe both the great burden gorilla conservation places on them and high hopes that the gorillas will bring economic improvement through tourism. They endorse the park, but are disappointed by the lack of benefits and power in decision-making. The political and economic orientation of these positions may belie the lost cultural relationship. Their conversations around conservation do not concern gorillas but relations between locals and outsiders. They focus on issues of sovereignty, power, and value. Despite crop-raiding, physical danger and the vast habitat needs, few communities have problems with the gorillas.

Indigenous values do not necessarily oppose conservation. They may oppose the methods of international efforts, but not the idea of conservation (Ekpe 2015). Some communities call for conservation themselves, noting depleted game and extensive logging (Jackson 2004). In Cameroon, the Bagyeli sought gun restrictions because they were worried about overexploitation of wildlife (ibid.). Also, to the west, the Baka sought better control of commercial hunting by outsiders. Communities within Cross River National Park share similar concerns, blaming the ease and efficiency of modern hunting technology and foreign poachers. Locals explain they know better than to hunt gorillas.

Many indigenous communities already have their own forms of conservation. International efforts often forget, if not omit, local social institutions—taboos, myths, and wildlife tales—that correspond with their goals (Ekpe 2015). Traditional beliefs and stories can greatly affect people's values and relationship to the

natural world, especially as elements of cultural identity. Taboos reveal explicit normative guidance for these communities. Etiendem describes the effect of taboos in the Lebialem Highlands:

...informal institutions and traditional practices such as local tales and taboos, guided by cultural norms, can play an active role in nature conservation. In these areas, it is social norms, rather than governmental juridical laws and rules, that determine human behavior. People do not disregard taboos against hunting gorillas because, if they do, they may be punished by the ancestors or traditional institutions, unlike the wildlife law, which is either poorly understood or hardly recognized (2008, 15).

Taboos offer a method of community conservation that align with both local culture and conservation goals. The way taboos are spread and shared— myth, narrative, apocryphal accounts—addresses the topic of conservation. Taboos protect value while storytelling describes it since stories are an indigenous way of rationalizing conservation.

Taboos can be difficult to justify to both outsiders and new generations, but their existence among communities shows that indigenous knowledge includes normative codes guiding human-gorilla relations. Conservationists may be reluctant to work from local stories and taboos because they worry about supporting traditional beliefs and values that are false. Once a person breaks a taboo and nothing happens, what keeps that person from losing respect for the taboo, the connected values, and the indigenous conservation ethic? Conservationists may feel that promoting “false” beliefs is either patronizing or harmful because it perpetuates misinformation and confusion.

Insights from epistemology and particularly ethnophilosophy may be helpful. First, value does not necessarily track factual truth. One can be clear and correct that gorillas have thirty-two teeth, but have no reason to care about them. Second, truth takes many forms. After centuries of thought and debate, philosophers struggle to define what makes something true. Truth is not limited to correspondence to scientific fact. Indigenous beliefs and stories contain many elements of truth—about their world, their relationships to each other, and nature. Moral truths, for example, are often contained in such stories because they transmit values. Lastly, Westerners need to be wary of how Western thought, including epistemology and ethics, functions as paradigms. Conservationists are passionate and devoted to saving gorillas and other wildlife even if their moral foundations are challenged and contested.



Figure 7: A Conservation Education Class in Wula, Nigeria, A Community Neighboring Cross River Gorillas; Louis Nkonyu Has Students Explain What a Gorilla Looks Like

4.2 Educating Away Indigenous Knowledge

To respect indigenous ways of knowing, conservationists must engage indigenous values and morality directly, especially as conservation seeks to prescribe new values and moral frameworks. Working within indigenous ways of knowing shows respect for their past choices, behavior, and governance. It reflects their appreciation of the past and current cultural identity particularly in relation to nature. By contrast, most current efforts either subsume indigenous knowledge into their own framework or actively work to replace it.

Though conservation efforts reference indigenous values to gain local support, education and sensitization programs based in Western knowledge often directly challenge local interests. Such efforts take a missionary role of raising consciousness and teaching locals to value their wildlife. A downside to this is that it obscures or even ignores normative knowledge already present in indigenous communities. The imposition of Western education may exacerbate local concerns with conservation as it takes the project beyond governing local behavior and resource access and into challenging indigenous culture, values, and morals.

Indigenous knowledge is conspicuously absent from the moral debate over how and why to conserve nature. Akin to how science overwhelms indigenous ways of knowing nature, Western philosophy denigrates other ethical approaches by dismissing their methods and reasoning, charging them with poor logic, and unfamiliar argument structure (Jaggar and Tobin 2013). Ethnophilosophers seek to address this, focusing on studying and appreciating indigenous philosophical systems. They also quickly point out that the distinction is not necessary; Western normative claims are based in a certain culture and it is a “local” philosophical system based in the West. All philosophers are ethnophilosophers.

The missionary approach of conservation education implies hierarchies of moral knowledge. The desire to raise awareness and convert the unenlightened reveal disparate positions of power and equality. When conservation education programs teach Western ways of knowing nature at the expense of indigenous knowledge, they overwhelm the rich nuance, stories, and descriptions of indigenous communities' relationships with the animals. These relationships, connected to community, history, and identity can be a source of great cultural and intellectual value.

Cultural knowledge, especially, can guide behavior. Hunters hold both knowledge of the location of gorillas and of their cultural importance. Though hunters can directly conflict with conservation goals, they also tend to have deep and complex relationships with their prey. For example, local hunters expanded conservationists' understanding of the Cross River gorillas' range when they found more nests in one year than conservationists had over eight years (Nicholas et al. 2010).

Despite the rhetoric depicting hunting as a main conservation threat, gorilla hunting has never been in direct conceptual conflict with conservation since people never hunted gorillas to exterminate them. However, hunting gorillas shows that they are valued. Traditionally, communities such as the Anyang regulated gorilla hunting; it was only allowed for the initiation of a new chief (Meder 1999; Alesha 2004). Strict rules dictated the use of the gorilla's body: the chief ate the brain and another high-ranking person ate the heart. If anyone else killed a gorilla at any other time, the chief sentenced the hunter to death. Oishi (2013) and Jost (2012, 133-134) found that contemporary Aka hunters do not hunt gorillas intentionally, but will if the opportunity, or danger, arises.

The population of gorillas is low because traditional regulations and government enforcement is so weak and the value of gorilla meat to urban markets is high. Any type of hunting now poses a direct threat to their survival. The economization via the bushmeat market and an increased global appreciation for the gorillas make hunting no longer a justifiable cultural expression. The loss of certain local cultural activities for the sake of gorilla conservation may only further the need to conserve other aspects of cultural identity, memory, and relationships related to gorillas.

Discounting such indigenous knowledge misses the important understanding about how to coexist and conserve wildlife. It also raises concerns of injustice and issues with how to relate with each other. By teaching Western environmental ethics as facts, conservation education teaches morality like a pastor, not an ethicist. Conservation efforts are certain of their moral authority that local values and beliefs are not considered unless they support conservation. Conservation raises tough questions about how to live in the world at both an individual and community level. Conservation efforts should help indigenous communities consider and navigate the ethical and political dilemmas while remaining wary of environmental-ethical relativism. For example, education programs can orient towards a fair and just exchange of normative knowledge in relation to environmental problems to arrive at a mutual moral understanding.



Source: Nzhu Jimangemi [The Gorilla's Wife]

Figure 8: The Fon of Bechati warns a young hunter, played by Nkemtazem Squiky, about the dangers of hunting wild animals, such as apes and elephants, which may be connected to people through totems. A still from Nzhu Jimangemi [The Gorilla's Wife], a participatory film retelling the gorilla totem story. Bechati, South West, Cameroon. 2014.

4.3 Expanding beyond Conservation-positive Indigenous Knowledge

The knowledge of indigenous communities can both challenge and support wildlife conservation. On one hand, by imbuing wild species with value, local beliefs and narratives can protect them. In contrast, the hunting, eating, and medical use of gorillas and other primates often follow traditional cultural beliefs and practices. The waning of traditional beliefs in the face of modernization and globalization can have both positive and negative effects.

When conservation engages indigenous knowledge, it selects only the conservation-positive local beliefs. In this way, it incorporates indigenous knowledge into its framework while still retaining its authority. For example, describing the “transvalue” (cultural, economic, ecological) of gorillas for both Western and African communities, Malone et al. (2014, 22) argue that “emphasizing the connections between different ways of valuing wildlife and integrating social as well as ecological research can reinvigorate global and local populations, providing a way forward for conservation.” Recognizing shared values is an important step, but outsiders cannot engage only these values as representative of indigenous interests or a fair characterization of indigenous knowledge. Indigenous knowledge is not considered equal except when it supports Western values. This limits the nuance, richness, and thought contained within the knowledge and maintains concerns of epistemic injustice by dismissing the other values embedded in the knowledge. It becomes less a conversation between ways of knowing and more a means of using one knowledge to validate another.

Adequately engaging indigenous knowledge requires humility. Outsiders need to allow the terms of conversation to change. They also need to learn to question the authority and nature of their own understanding. They must explore how their values and position affect their own ways of knowing and limit their understanding of others. Joiris (1997), for example, shows how indigenous groups in CAR (both Bantu-speaking farmers and forest-dwelling hunters and gatherers) conceptualize gorillas and other wildlife differently from “the whites” (Europeans and Africans working for the national park). Indigenous categorizations of wildlife include “good to eat,” “not good to eat,” and “good to think with.”¹⁴ “Good to think with” animals, such as gorillas, may have taboos, but not be categorized as bad for eating. The whites’ taxonomy is defined by conservation. Wildlife is a protected species, non-protected, or pest (*ibid.*, 99). Joiris argues that even if the two groups shared aspirations, reconciling conservation efforts with indigenous interests would require “a more profound western attempt at understanding local reality” (1997, 95, 103).

Knowledge of an animal is much more than a description of the creature. Much is contained in the metaphors, ways of knowing, and stories told about animals. Old Western records of indigenous tales tell of gorillas abducting people (Giles-Vernick and Rupp 2006, 58). Giles-Vernick and Rupp speculate such stories may function as metaphors for both the local and international slave trade (2006, 59):

Certainly, the parallels between the two forms of abduction are striking, both of them motivated by a voracious appetite for human beings, their labor, and the products of their labor. The similarities between ape aggression and struggles over labor suggest, therefore, that ape stories expressed the very real anxieties that Africans suffered. Reade, in fact, mentions that he gained some of his information about gorillas from slaves who worked as hunters (1864, 164).

Such stories, though rarely recognized as African, have seeped into global narratives. Meyer (1992, 58-62) and Giles-Vernick and Rupp (2006, 71-72) speculate that they are the source of King Kong, the giant gorilla movie icon. Western accounts at the time reflected their own concerns about their connection to slavery and their unease with evolution. The Europeans and Americans’ recorded accounts of gorillas venturing to the central African forest in the late nineteenth century. They wrote at a fraught conceptual time for understanding animals due to Darwin’s revelations about nature. Dickenson (2000) describes these authors as “packaging and selling the gorilla” to Western audiences.¹⁵ Dickenson describes how tropes of the time, including “boundary transgressions, dark doubles, haunting pasts, and threats of regression,” appear in their accounts, reflecting the anxiety of revelations about evolution and one’s place in relation to God, apes, and each other. Western accounts of gorillas have always been wrapped in metaphor.

Modern indigenous accounts help explain human-gorilla relations with conservation, but they often speak to something greater. In the CAR and Gabon, Giles-Vernick and Rupp (2006, 51) found that gorilla stories help people make claims about access to and control over human productive and reproductive labor, forest resources and spaces, and other forms of wealth; racial and ethnic relations; and human

existence and death, and they illuminate the complex social and political tensions generated by conservation interventions.

Gorillas have long functioned as metaphors for discussing local relationships. In the CAR, Mbendjele call *bilo* “*bebebo*” more as a descriptive statement than an insult (Lewis 2002, 210). They believe gorillas and *bilo* share similar characteristics, attitudes, and behavior; both are boisterous, aggressive, and large. Lewis (2002, 215) recounts Mbendjele will “point out forest foods saying with mirth, ‘*Bilo* and gorillas eat this!’” or joke about gorillas barking in the forest as if they own a particular section, akin to a *bilo* defending his farm. Mbendjele do not have private ownership; gorillas help them understand and interact with a different culture. Many of their stories about *bilo* and gorilla are *gano*: fables that include moral knowledge (ibid., 216-217).

In Congo-Brazzaville, the Baka have similar stories and accounts of their *bilo* (Köhler 2005).¹⁶ They call them gorillas because the farmers claim territories and seek to control them. The farmers think the timid Baka are chimpanzees. Köhler argues, they wield their metaphor differently, to implicitly challenge the Baka’s humanity. The Baka use metaphors to discuss the “gorillaness of Bantu” and the “Bantu-ness of gorillas,” while the Bantu call the Baka “chimps” to justify their marginalization and reject their access to rights (ibid., 420). The Mbendjele are called chimps as well. Ngando and Aka accuse each other of transforming into apes, too. Giles-Vernick and Rupp (2006, 65) show how such characterizations relate to arguments over rights, access to resources, and conflicts over power and authority. Köhler (2005, 420) offers the example of how Baka also now call soldiers gorillas because they accept bribes just like gorillas raid crops.

These conceptions affect how outsiders understand indigenous relations with gorillas. Köhler (2005) shows how Westerners romanticize forest-dwelling groups such as the Baka. They are seen as “archetypal ecologists,” almost of nature (akin to how the Bantu see them). Like the gorillas, they are endangered and evolved for the forest and are seen as more indigenous. These notions make these people less threatening to gorillas and make their knowledge more valuable, while helping to villainize the Bantu-speaking farmers “as invading the forest with little or no conservation ethic” (ibid., 407). This challenges the Bantu-speakers’ rights to land and forest resources, and dismisses their knowledge and values. It allows Westerners to side with “traditional” ways and reject modernity for indigenous groups, as if one group’s relation with the gorillas is more benign. Ironically, conservation regimes dislocate and empower forest-dwellers, evicting them from their homes and then hiring them to guide others in. While “modern” Bantu-speakers are seen as threats for pursuing change and development, “the Baka, however, could easily be integrated into conservation-related research as knowledgeable trackers and guides to forest fauna and flora, as have Pygmies in other national parks. They would likewise fit well into low-level (eco)tourist projects of safari hunting, photo-safaris, and other forms of guided forest tours” (ibid., 416).

These are also morality tales, “In a familiar scenario of good and evil forces, the idyllic Pygmy picture is complemented with the construction of their ethnically and phenotypically distinct farming neighbors as antagonists of forests and wildlife” (ibid., 413). These characterizations are so pervasive in both

indigenous and outside thought. Köhler shows that it is hard to know the truth and to remove the mythic elements when exploring these groups and their relations with gorillas. Heeding this, this paper engages forest-dweller and Bantu knowledge of gorillas as equal.

Both groups are marginalized by current gorilla conservation regimes, which usually allow only for two activities in protected areas: research and tourism. Like researchers, tourists hold great power over these landscapes, amplified by their financial power. In 2018, a one-hour visit with mountain gorillas costs \$1,500 USD per person in Rwanda. Only a few other sites like Virunga, Bwindi, Mgahinga, and Kahuzi Biega have habituated gorillas and ecotourism programs. The eventual benefits of ecotourism are often touted to encourage local support for conservation. Such orientations allow the interests of foreign tourists to affect not only indigenous rights and lifestyles, but regional and national governance as well. Tourist perceptions of gorillas hold great weight. Emboldened by education, wildlife media, and conservation rhetoric, most tourists think they know gorillas and their needs. Laudati (2010) found that 86 percent of tourists to Bwindi believed the natural areas of the park needed to be expanded and the unnatural area, such as the surrounding communities, need to be restricted and depopulated.

Tourists have a notion of wild gorillas in a pristine jungle and they desire to experience and document this vision. As they spread, share, and replicate, tourist narratives become the dominant way of knowing gorillas, or at least of knowing what makes gorillas valuable (Igoe 2017). This is a very particular way of knowing nature, at once romantic and removed, based on spectacle and trust in technological expertise to describe, monitor, and care for it (*ibid.*, 76-77). Tourist expectations are also self-fulfilling because they create the context they desire (*ibid.*). They transform actual spaces of nature into images, “which in turn are transformed into money and are used to fix and transform actual spaces of nature and produce more images. As demand for these spaces and images grows over time, these looping transformations often intensify and perpetuate over time” (*ibid.*, 9-10). Tourism has very real impacts for indigenous communities who are policed to maintain the spectacle of the wild gorillas tourists expect and desire (Laudati 2010, 733). They are sometimes consumed and expected to adhere to the paying tourists’ expectations of what they should be, e.g. more exotic and traditional (*ibid.*).

Regardless of different ways of knowing them, gorillas will act and behave in a certain way because their agency affects how they are understood. For example, in the revenant reincarnation stories, the lone gorillas that appear in villages are usually silverbacks, old, gray males expelled from their band by younger rivals (Köhler 2005). Their old age and appearance reflect the elderly as well. Their bold behavior, unusual for wild gorillas, strike people as further proof of the human spirit inside and prevents them from harming the individual, which encourages the gorilla’s comfort around humans. The presence of ecotourism relaxes gorillas around people. This emboldens them to leave the forest to raid crops and explore more human spaces, leading to increased conflicts and a sense that current conservation regimes are not enough (Laudati 2010, 732).

In addition, Cross River gorillas at Kagwene have been recorded throwing objects at people. Wittiger and Sunderland-Groves (2007) guess the gorillas perhaps learned this trick after watching humans. Kagwene’s

gorillas are unusually comfortable around people because the people are comfortable around them. Traditional beliefs describing the gorillas as ancestors guide peaceful and positive human-gorilla interactions. The sense of safety allows Kagwene's gorillas the chance to interact with humans more often. In turn, they learn and exhibit similar behaviors, further reinforcing impressions that they are ancestors and relatives.



Figure 9: Serika Lucas, The Traditional Leader of Njikwa, The Community Neighboring Kagwene Gorilla Sanctuary

5.0 Conclusion

Who knows what about gorillas? Anyone who studies, encounters, or observes gorillas. It's clear that levels of knowledge vary widely. Different relationships with the apes lead to different sorts of knowledge. Primatologists hold precise, careful knowledge after great study, but also understanding built on relationships of acquisition, exotification, adventure, and distance. They do not know the gorilla as a neighbor. It may be an evolutionary relation, but not a cultural one. Indigenous groups hold an array of knowledge, some totems and taboos, others of wariness and distrust. Some relationships wane with modernity, and knowledge is lost as forest access becomes restricted and gorilla populations dwindle. Others develop knowledge as they track gorillas daily for ecotourism, guard them for conservation, work with Western researchers, and become researchers and conservationists themselves. The goal of this essay is to encourage support for the many ways of knowing gorillas. In a moment of crisis, let us know gorillas not only in Western ways, for this will dictate how they are understood, how they are characterized, how and why they are conserved, and what we are left with. This not only limits thinking of possible solutions, it limits the sorts of world and relationships we may end up with.

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Endnotes

¹ This belief is not very different from Western arguments that the great apes and other social and intelligent animals have something like a soul.

² The words "indigenous" and "local" are not interchangeable. "Indigenous" references a historical connection to a place with a corresponding distinct culture. Viergever (1999, 335) describes, "In most articles and studies on indigenous knowledge, indigenous simply means traditional or local. The difference between traditional and indigenous communities is that indigenous knowledge peoples' communities, despite the pressure to integrate within the larger society of the national states of which they are part, still have their own distinct cultures. On the other hand, local communities usually do not have a distinct cultural identity that separates them from the larger society, or at least not to the same extent as in the case of indigenous peoples' communities."

³ Herr S. Diehl, an employee of the German Northwestern Kamerun company and possibly a temporary governor of Kamerun in 1900, acquired the skulls from villages in what is now Takamanda National Park (Beolens et al. 2009). The Cross River gorilla still carries the name.

⁴ Geneticists continue to aim for accuracy in classifying species. Though the early 2000s brought continued confusion and contestation of the appropriate phylogenetic position of the Cross River gorilla based on the genetic data, in 2018 they remain a subspecies with the support of most primatologists (Bergl and Vigilant 2007).

⁵ See Lewis (2002, 49-51) for a careful explanation of forest-dwelling groups and their names.

⁶ 'Bantu' is a rough reference for groups speaking Bantu languages (of which there are hundreds). Many authors use Bantu to refer to farmers. Köhler (2005, 426) notes Bantu groups are also "linguistically and ethnically distinct peoples and the use of a generic term such as 'Bantu', to distinguish them as a group from the Baka, does not imply a link between Bantu languages, cultures, and phenotypical traits, particularly since there are both Bantu-speaking Pygmy groups and non-Pygmy, Bantu-speaking hunter-gatherers."

⁷ The "ba" that precedes the names of many African groups means "people of."

⁸ Lewis (2002, 215) describes how "in Yaka tradition, notions of exclusive individual ownership are only rigorously applied to ritual and mystical knowledge, or intellectual property. Certain personal possessions are considered to be owned by individuals, but unlike ritual and mystical knowledge, they can be shared..."

⁹ Despite problems, the records remain of value. Giles-Vernick and Rupp (2006, 55-56) note that though colonial Euro-American writing of Africa was exaggerated, racist, and exploitative, "outsiders' stories about... gorillas in the nineteenth century bear a striking resemblance to our contemporary ethnographic evidence and recent ethnographies."

¹⁰ Schaller was more interested when he thought local myth tracked scientific fact. For example, he provides an accurate, complete, local tale about hippopotamuses, allocating more space to the story than to any discussion about gorillas (1964, 64).

¹¹ For example, Lopez describes how modern Western understandings of wildlife seem strange to Inuit ways of knowing: "...because we have objectified animals, we are able to treat them impersonally. This means not only the animals that live around us, but animals that live in distant lands. For [Inuit], most relationships with animals are local and personal. The animals one encounters are part of one's community, and one has obligations to them. A most confusing aspect of Western culture for [Inuit] to grasp is our depersonalization of relationships with the human and animal members of our communities. And it is compounded, rather than simplified, by their attempting to learn how to objectify animals" (1986, 80).

¹² Lopez's description of how indigenous communities come to know a landscape applies well to how they learn to know the gorilla as well. He says, "Over time, small bits of knowledge about a region accumulate among local residents in the form of stories. These are remembered in the community; even what is unusual does not become lost and therefore irrelevant. These

narratives comprise for a native an intricate, long-term view of a particular landscape. And the stories are corroborated daily, even as they are being refined upon by members of the community traveling between what is truly known and what is only imagined or unsuspected. Outside the region this complex, but easily shared “reality,” is hard to get across without reducing it to generalities, to misleading or imprecise abstraction” (1986, 273).

¹³ This is in part because the more populous Bantu-speaking tribes suffered much more directly and immediately from colonization. They had been displaced and disrupted a century before. See Köhler 2005.

¹⁴ I am working from Köhler’s translation (2005, 428-429).

¹⁵ Quoted in Giles-Verick 2006: 55-56.