Imperial Transgressions

_ ... _.

The Animal and Human in the Idea of Race

Sujit Sivasui	ndaram			
		 	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1/1/11/1/11/11/11

ow do we approach the conceptual history of the nonhuman in empire? In building on this special section, this essay suggests that the very idea of global difference and relatedness was produced in tandem with a disciplinary genealogy that carried on casting humans and animals as distinct, but that nevertheless brought them together as material remains.

The turn to the nonhuman apparent in the essays assembled here comes at a particular juncture. First, there is an increasing awareness of the Anthropocene and the geological force of humankind. Second, there is a need to respond to a wave of uncritically universalizing global and connected histories by reconsidering the continuing importance of empire, and European empires in particular. Such reconsideration should take up their role as agents and as intensifying forces of industrialization and capitalism in the centuries since the Enlightenment. These two moves seem rather at odds with each other in relation to temporality. One is posthistoricist in positing humanity as a species and placing human history in the context of its long-term engagement with matter, the earth, and other forms of life. The second, however, signals the particularity of modern European empires in the relations between humans and nature. In this essay I do not summarize the special section so much as provide a further vantage point of reflection, in following the injunction of Rohan Deb Roy, to find ways of integrating postcolonial studies of empire and actor-network theory. The vantage point I offer here concerns how Western empires since ca. 1800 shaped the terms of human subjecthood.

Since 1800, what it means to be human on the global scape has been tied to race and empire. Yet racial considerations in imperial science, as I argue, operated alongside, within, and against questions of animal difference and human-animal difference. In other words, it is possible to see that the definitive work achieved in the European imperial age was not simply to rigidify the human and nonhuman divide. Rather, the making of the divide was intimately linked with modes of intellectual and material transgression across the emerging divide. If one of the logics of empire was racial, and if race was fundamental to modes of imperial war, settlement, domestication, and education, nevertheless, that imperial project worked in tandem not with a natural backdrop, but rather with the material and disciplinary enmeshing

1. For an account of the European intellectual and scientific histories of race and the animal-human problem see Ritvo, *The Platypus and the Mermaid*, 120–30. A lot of the discussion has focused on literary and metropolitan dimensions, and the interrogation of empire and imperial contexts outside the West is rather minimal. See, for instance, Kete, "Ani-

mals and Human Empire." One call to look at the animal-human boundary that has been influential is that issued by Donna Haraway in *Primate Visions*. Yet Haraway was more concerned with the discourses and storytelling linked to primate science that intervene in sex and gender as well as nature and culture.

of natural and human. The role of bestialization in analyses of race is well known as a literary and imaginative motif.² But this essay moves beyond this mode of writing the animal in imperial histories. Instead it proposes that the assemblage of race—to adopt Latourian terminology—saw the material remnants of animals and humans, cohabiting animals and humans, and the supposedly distinct animal and human sciences brought together as specimens, beings, and thought.

Such a view does not lead to the rejection of historicism or to a proposal of absolute agency to the nonhuman. Instead, race can be seen as an idea that comes into being at the intersection of the human and animal in post-Enlightenment contexts. The imperial human came to be with animals. Addressing side by side the placement of race in relation to the social as well as the animal in this way allows a coming to terms once again in the literature with how the concept of race straddles the nature-culture dichotomy in politically powerful ways. Such an analysis also follows a rich tradition of work on the social history of race that places race alongside other concepts such as gender and class, and yet it adds the nonhuman as an important further context.3 Our moment in the engagement of postcolonial scholarship with environmental concerns, to follow Dipesh Chakrabarty, requires an interrogation of what it meant and means to be human, and what the exercise of reason can be, as well as the specific role of humanity as a species.⁴ Following this call, both the "Nonhuman Empires" special section and this essay suggest that the role of empire carries on being significant to the making of the human as the human engages with the material agency and ideological potential of the nonhuman.

In contextualizing this effect of empire and picking up post-Saidian and post-Foucaultian debates about the relations between knowledge and empire, this essay also considers the changing situations of racial knowledge about the human and animal. Colonial knowledge could count not

only as an appropriation of extant traditions in the wider world, but also as a repackaging of such traditions as bearers of the indigenous. Repackaging could in turn allow a further resituation of the animal and race in nationalist narratives. For the latter, the essay turns, for instance, to the alleged lion ancestry of the peoples of Sri Lanka and to the role of the cow in India.

In order to prioritize a form of analysis that casts the animal and human together in more than a metaphorical sense in histories of imperial race, the discussion is organized under two separate methodological rubrics. First, drawing from materialist histories, which have been influential in recent histories of science, the essay suggests that there was a material entanglement of animals and humans in histories of race after ca. 1800, despite the science of race being targeted toward the study of human subjects across the imperial world. Second, the essay turns to the disciplinary genealogies of race and animality, specifically pointing to how studies of aboriginality, criminality, and nurture versus heredity engaged with the question of the animal. In arguing that there were both material and intellectual complexes around race and animality that stretched across these years, before and after Darwinism, it is possible to intervene in historicism in order to open it up to a more robust engagement with more-than-human agents. It is also possible to see how reasoning about the human and nonhuman has transgressed this divide but has created it at the same time. In making such a provocation, the essay builds on the pieces in this special section and takes them back to a central question in imperial historiography: How might human subjecthood be approached again from its intersection with the nonhuman?

Material Entanglements in the Idea of Race

The collection of human skulls, according to existing scholarship, was connected to the scientization of ideas of tribe, nation, race, and character, and it served as a critical space for the study of types.

^{2.} For instance, see Denenholz Morse and Danahay, *Victorian Animal Dreams*, and Brantlinger, *Dark Vanishinas*.

^{3.} See, for instance, the following set of works with a specific interest in the history of science:

Stepan, "Race and Gender"; Schiebinger, "The Anatomy of Difference"; Stoler, Carnal Knowledge; Ghosh, Sex and the Family in Colonial India; Salesa, Racial Crossings; and Pierson and Chaudhuri, Historicizing Gender and Race.

^{4.} See Chakrabarty, "The Climate of History."

^{5.} For the argument about the recycling of the indigenous see Sivasundaram, *Islanded*.

Craniometry became a popular science of the nineteenth century across Europe, linked to measurement, especially of the cephalic index.⁶ Yet unrecognized in the present literature—and perhaps at the time, too—is an interpretative and material tension: human skull collections were curated alongside animal crania. This is problematic for the fact that comparative anatomists, ethnologists, anthropologists, and later Darwinists applied the term race predominantly to discuss variation among humans, especially in the debate between monogenists, who stressed the singular creation of humanity, and polygenists, who held to plural origins.⁷ Yet almost as an aside, catalogs of collections of human skulls reference animal remains, too. Here the question of race and the question of the animal-human boundary shared the same material spaces.

Take for instance the phrenological exhibition room of James De Ville at 367 Strand in London. De Ville learned how to read heads for character from J. G. Spurzheim, the popularizer of phrenology, and became the chief maker of phrenological casts in London from the 1820s to the 1840s. His lectures were even attended by Rammohun Roy, the Indian liberal thinker.8 The Phrenological Journal of 1830 described the "four walls of a large hall shelved round, and studded with casts and skulls from the floor to the ceiling, a height of at least eighteen or twenty feet."9 The controversial science of phrenology, parodied as the "science of bumps," held that the brain was the organ of the mind and that each mental faculty had a seat in the head.¹⁰ Despite its critics, phrenology consolidated a focus on the brain as a physiological marker of humanity. Though De Ville's room displayed criminality and genius in tandem with race, there were also within his walls animal crania: "Mr. Deville's exhibition-room contains upwards of EIGHTEEN HUNDRED casts or skulls, of men of every grade in society, of every profession, and almost of every face, from the most brutal and barbarous up to the most civilized. . . .

In addition to these, he has begun a collection of the skulls of animals, of which he possesses between three and four thousand, many of them of great interest, viewed in connexion with the habits of the animals."

Animal phrenology was not a widely practiced discipline in the period because phrenologists believed their theories applied particularly to the human head. They were sensitive to the criticism of being materialist. In the substantial historiography of phrenology, then, there is minimal discussion of animals. The widely read George Combe, in his A System of Phrenology (1853), cautioned against reading animal skulls to indicate features of human skulls, for "[a] monkey is not a man made down into an inferior animal; it is a creature of a distinct species."12 He urged that the skulls of separate species needed to be studied with their own kind. Yet Combe positively cited the work of Joseph Vimont, the Parisian doctor and phrenologist who wrote a treatise on comparative phrenology and who had a particular interest in the brains and nervous systems of animals and birds. Vimont linked the character of these creatures to the physiology of their heads while holding that man was distinct from other species in relation to the development of the anterior portion of the cranium.¹³ In London in 1830, Vimont laid before the Phrenological Society of the city a large number of drawings from his collection. For these observations, he raised 1500 animals in his own garden. He noted that a lion had a less-developed portion of the skull corresponding to intelligence and that parrots and geese had more capacious skulls than the domestic fowl or turkey. The commentary was gendered and cast into a language of civilization; the organ of the "love of progeny" was developed in those that looked after offspring and those that ate meat had a "propensity for destroying," which was evident in the corresponding faculty.14 Vimont's Traité de Phrenologie Humaine and

^{6.} For a good primary account of the collections of skulls in Britain, Europe, and North America, see Meigs, "Hints to Craniographers." The broader literature on the history of race and difference is of course indebted to the early insights of George Stocking. See Stocking, Victorian Anthropology.

^{7.} For an overview of the history of science and race across the nineteenth century see Sivasundaram, "Race, Empire, and Biology," 114–38.

^{8.} See Chapman, *Harriet Martineau's Autobiography*, 1:395.

^{9. &}quot;Phrenology in London," 570.

^{10.} For the history of phrenology see Cooter, *The Cultural Meaning of Popular Science*.

^{11. &}quot;Phrenology in London," 572.

^{12.} Combe, A System of Phrenology, 382.

^{13.} See "Review of Dr. Vimont's Work."

^{14. &}quot;Dr. Vimont's Collection of Crania" and "Comparative Phrenology, Mons. Vimont's Collection of Crania" 353.

Comparée (1831) included lithographs of monkey skulls.¹⁵

On the other side of the Atlantic, the same productive tension was apparent in the collection and analysis of animal and human heads by phrenologists. The catalog of proslavery and polygenist physician Samuel George Morton, of the Academy of Natural Sciences in Philadelphia, ranges widely over specimens. 16 It was perhaps the largest collection of skulls in the world and included "3 CHI-NESE: man aetat. 6o. Born in the Province of Canton," "34 MEXICAN Indian of the Tlahuica tribe," "712 THUGG of India, executed at Calcutta," and "428 JAVANESE of the District of Djogocarta: man, aetat, 20." It contained 867 human skulls and 601 of what Morton termed "inferior animals," which were sent to him by friends across the globe. The catalog organized the human skulls according to racial types, under the headings of "Caucasian," "Mongolian," "Malay," "Aboriginal American," and "Negro," but it also listed the titles "Mixed Races," "Lunatics," and "Idiots." Each skull had a measure against it to denote the "facial angle" and the "internal capacity." 17 Yet interspersed within the list of human skulls were missing numbers, which indicated animal skulls. These animal crania were arranged together at the end of the catalog under the categories of mammals, birds, and reptiles. They also came from all over the world, including an orangutan from Borneo, a hog from Senegal, a monkey from West Africa, and a boxfish from the China Sea.

This entanglement of materials—human and animal—was not accidental; it had a bearing on race theory. The rise of new disciplines such as comparative anatomy, geology, and zoology are seen to divide up the old natural history of the early modern period into distinct slices of the human and nonhuman. Yet the material collections connected to these disciplines did not bear out such neat delineations. Early dabblers in science in the colonies could stretch their inquiries across allied fields, despite the felt need to keep humans and animals apart. At the same time, the

Great Chain of Being, linking all of life and the created realms, which was a tool of thought bequeathed down the centuries, was inherently contradictory in positing relations between man and the rest of creation, while at the same time placing man in a superior category close to the deity. Arguably, it continued to have a life in these collections, despite the rise of the new sciences.

In the context of the early nineteenthcentury empire in India, ethnologists and administrators were very interested in manipulating skulls. 18 Specifically, the study of animal fossils was said to shed light on the history of the human race in India. Tracing the distant past of the subcontinent was an orientalist program that was directed in particular toward Hindu history. Take for instance Hugh Falconer's paper "Ancient Animal Races of India," which was delivered to the Royal Asiatic Society in London in 1844 on the subject of the Siwalik fossils. Falconer was a surgeon of the East India Company and, from 1832, superintendent of the Saharanpur Botanic gardens. It was here that he encountered these fossils, first discovered by the canal engineer P. T. Cautley in the Siwalik hills, which Falconer then investigated in turn, digging up 300 fossil bones in six hours on one occasion. Eventually, 236 cases of fossils were shipped to London, through official channels, giving rise to a competition for the heads of the "Hippopotamus, Garial and Crocodile," and making the Siwalik fossils one of the greatest finds in geology in the period.¹⁹ In "Ancient Animal Races of India," Falconer argued: "If we desire to dive further into antiquity, we have to fall back on the monuments and inscriptions constructed by nature, on the fossil remains of the extinct races of animals which formerly peopled the earth."20 To do this, Falconer adopted a method of reasoning that crossed the human and the animal: for instance, in asking why the giant turtle was extinct, he turned for suggestive reasoning to Hindu myth, or in asking whether the hippopotamus was familiar in ancient India, again, he turned to texts translated by orientalists.²¹ Animal evidence thus

^{15.} See Vimont, *Traité de Phrenologie Humaine*. 16. See Morton, *Catalogue of Skulls*.

^{17.} Morton, Catalogue of Skulls, iii-vii.

^{18.} See Kapila, "Race Matters." For collecting heads, see also Roque, *Headhunting and Colonialism*.

^{19.} Arnold, *Science, Technology, and Medicine*, 26–27; see also Nair, "Eyes and No Eyes."

^{20. &}quot;Abstract of a Discourse," 107.

^{21.} See Nair, "Eyes and No Eyes," 381.

filled the gap where human evidence failed, and ancient texts were brought together with fossils in this kind of theorizing.

The copresence of the animal and human in scientific collections and theories connected to the earth and life sciences in the early nineteenth century came to a head by the mid-1800s. It was not in India, but in West Africa and Southeast Asia that the issue arose in potent form; in these regions, supposed missing links such as gorillas and orangutans became critical to determining the bounds of the human, specifically in relation to the head and brain. The "gorilla races" of the late 1840s and early 1850s saw the Americans, the British, and the French competing to get hold of gorilla skulls, followed by gorilla skeletons and live gorillas.²² It began with missionaries in West Africa who sent back to naturalists reports of skulls kept as fetishes by local people. Popular attention exploded around the travels of Paul Du Chaillu, who was fostered by West African missionaries, and whose Explorations and Adventures in Equatorial Africa (1861) had rocketing sales, selling ten thousand copies in England in two years.²³ Du Chaillu saw his contest with the gorilla as a personal fight. According to the naturalist and surgeon Frank Buckland, Du Chaillu's "great ambition was to meet face to face, and to fight hand to hand a battle with the great gorilla himself."24 In his book, Du Chaillu narrated his first meeting with the gorilla thus: "Nearly six feet high (he proofed four inches shorter), with immense body, huge chest, and great muscular arms, with fiercely-glaring eyes, a hellish expression of face, which seemed to me like some nightmarish vision: thus stood before us this king of the African forest."25

Du Chaillu went on to describe his find as "half-man, half-beast"; his prose took on an ethnographic and sensationalist character in describing the gorilla's behavior and its roar, which he cast as indicative of a "lurking reminiscence of humanity." He also adopted a phrenological style of describing the West African peoples. Richard Owen,

the English comparative anatomist, intervened in the debate about the veracity of Du Chaillu's account, arguing that only the human brain had a ridge called "the hippocampus minor," which was unseen in gorillas. Thomas Henry Huxley disagreed. Huxley's Evidence as to Man's Place in Nature (1863) brought gorillas, orangutans, chimpanzees, and gibbons together, from the frontispiece on, and contended that man's nearest relatives were either of the first two (see fig. 1). The arrangement and logic of Huxley's argument is worth underlining: he compared the differences between different apes and then compared the differences between what he saw as the separate races of man. As a result, he concluded that the gap between the higher apes and man was no greater than the differences between different men or different apes. The skull attracted particular study. Huxley wrote, "Even in the important matter of cranial capacity, Men differ more widely from one another than they do from the Apes; while the lowest Apes differ as much, in proportion from the highest, as the latter does from Man."27 Both the methodology and content of this parallel comparison gave momentum to ideas of race, especially given the social Darwinism that came in the wake of Huxley, "Darwin's bulldog," no less.

The first chapter of Huxley's book draws from the accounts of naturalists and officials from Dutch Southeast Asia on the orangutan. In Southeast Asia itself, Alfred Russel Wallace's explorations from Singapore to Borneo and in Java, Sumatra, and East Timor, from 1854 to 1862, benefitting from the friendship of James Brooke, the "white raja" of Sarawak, served as an independent context for the emergence of a theory of evolution. Famously, Wallace sent this theory to Charles Darwin as an essay titled "On the Tendency of Varieties to Depart Indefinitely from the Original Type," from Ternate, now in eastern Indonesia, via steamer mail.28 This prompted the coming out of Darwin's theory. In The Malay Archipelago, The Land of the Orang-utan and the Bird of Paradise (1869), Wallace

^{22.} See McCook, "It May Be Truth," and Rushing, "The Gorilla Comes to Darwin's England."

^{23.} See Rushing, "The Gorilla Comes to Darwin's England," 37–38.

^{24.} Cited in ibid., 2.

^{25.} Du Chaillu, Explorations and Adventures, 70.

^{26.} Mason, "These Blurred Copies of Himself,"

^{27.} Huxley, Evidence as to Man's Place in Nature. 78.

^{28.} See Van Wyhe and Rookmaaker, introduction to *Alfred Russel Wallace*. ix–xii.

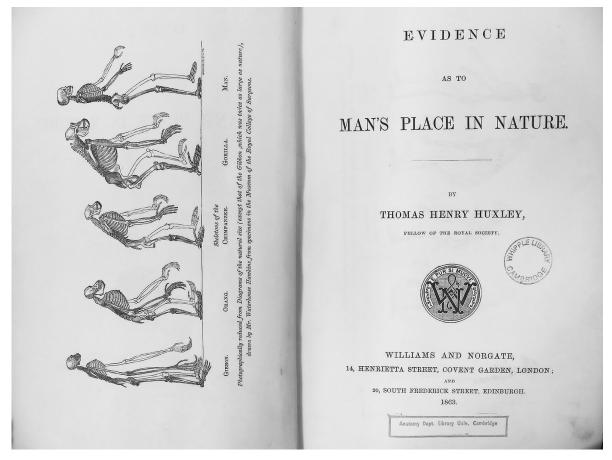


Figure 1. Thomas Henry Huxley, Evidence as to Man's Place in Nature (1863), showing man placed against specimens from the Museum of the Royal College of Surgeons

wrote that he had brought back from the East an incredible 125,660 specimens.29 The appendix of the book followed a general account of, as the title reads, "The Races of Man in the Malay Archipelago." It took as its subject the possibility of classifying races on the basis first of crania, and then on language. On skulls, Wallace noted that they were becoming less useful in determining racial difference and that Huxley himself had disputed their value for the classification of mankind. However, he proceeded to take three measurements from a series of the skulls of "83 Malays, 28 Papuans, 156 Polynesians, 23 Australians, and 72 Negroes," namely capacity, proportion of width to length, and proportion of height to length. For capacity he simply used "male crania," "so as not to introduce the sexual difference of size."30 Using these measurements he provided further corroboration

of what became the "Wallace Line": a division of Papuan and Malay natural history. He wrote: "The Malays and Papuans are radically distinct races; and . . . the Polynesians are most nearly allied to the latter."³¹

If Wallace was a mapper of race, in a region of the world that had stood at the margins of empires and waves of migration, his explorations nevertheless anxiously straddled the human and the animal. The question of the orangutan saw him wrestle with what it meant to be human. For instance, in writing to his sister Frances Sims in 1855 from Sarawak, he wrote of how he had an "orphan baby" that he had reared for a month: "I am afraid you would call it an ugly baby for it has very dark skin and red hair, a very large mouth but very pretty little hands & feet. It has now cut its two lower front teeth & the uppers are com-

ing. At first it would not sleep at night alone but cried very much, but I made a pillow of an old stocking, which it likes to hug and now sleeps very soundly."³²

He did not call the "baby" an orangutan in this letter, though he made this explicit in The Malay Archipelago. In writing to Frances he noted that he adopted it after shooting the baby's mother, "a wild woman of the woods," and preserving her skin and skeleton. The mother and baby fell out of a tree, and the baby attached itself to Wallace's beard, clutching it "so tight that [he] had great difficulty in making it leave go." In a further indicator of Wallace's interest in experimenting on orangutans, he wrote that since the "baby" was "lonely," he put a "little monkey into the cradle to keep it warm." "When the monkey wants to run away by himself a little, as he often does, baby clutches him by the tail & ears & drags him back, & if the monkey does succeed in escaping, screams violently till he is brought back again."33

In The Malay Archipelago is further evidence of how this tale supported the parallel histories of racial differentiation, on the one hand, and animal-human differentiation, on the other hand. Wallace was anxious to give the baby orangutan some milk and wrote, "I had no milk to give it, as neither Malays, Chinese nor Dyaks ever use the article, and I vain inquired for any female animal that could suckle the little infant." Even as Wallace compared across races, he also compared the baby orangutan and monkey in the cot: the orangutan "looked more baby-like by the comparison."34 This sequence of events and narratives are full of multiple transgressions. Even as orangutans are cast as human, monkeys are not, and as Wallace, a bachelor male English experimenter, takes on the role of a knowledgeable parent, he casts himself against the non-milk-drinking natives.

The human and animal division was thus never far away from the analysis and depiction of racial boundaries through the course of the nine-

teenth century. All of this, however, might be contextualized in the broader project of empire that served as a field for skull collecting. For skulls such as those collected by phrenologists and anatomists could come from sites of war. In the early nineteenth century, the colonization of New Zealand unleashed a trade in toi moko, or tattooed and preserved heads; the trade involved the barter of heads by the Maori for muskets from Europeans and was at its peak in the 1820s.35 Later in the century, with the Scramble for Africa and the rise of new imperialism, dictated by advances in military armament, human skulls could become trophies of war with the "savages," thought to be disappearing in the midst of the advance of Europe's industrial capitalism. Indeed, it was in parts of the world such as the Pacific and Africa, which were traditionally cast as occupying low points in the Enlightenment ladder of civilizations, that human remains could be most intensively collected like natural historical finds.36

Collecting skulls in late nineteenth-century Africa drew from the practices of local peoples, yet it denoted the fundamental power differential at play in this continent.37 Perhaps a potent example of both these elements was the display of the head of General Gordon, the British commander who was killed in 1885 by Mahdist forces in Sudan. In 1889, in return, Anglo-Egyptian forces dug up the body of the self-proclaimed Mahdi or redeemer, Muhammad Ahmad, taking his severed head as a trophy. The plan to ship it for scientific study to the College of Surgeons in London had to be given up in the midst of opposition even from Queen Victoria, necessitating its reburial in Khartoum.³⁸ In the Belgian Congo, which was conceived as something of a private estate for expansion, replete with minerals for exploitation, hunting humans might have seemed acceptable. Msiri was a powerful Katangan leader who fell to this advance in 1891; William Grant Stairs, a Canadian in charge of a Belgian force, took Msiri's capi-

^{32.} Alfred Russel Wallace to Frances Sims, June 25, 1855, from Sadong River, Sarawak. Van Wyhe and Rookmaaker, *Alfred Russel Wallace*, 48.

^{33.} Ibid., 48-49.

^{34.} Wallace, *The Malay Archipelago*, 53–56.

^{35.} For the trade in Maori heads see Orchiston, "Preserved Human Heads of the New Zealand Maoris."

^{36.} See Sivasundaram, "Natural History Spiritualized."

^{37.} In this paragraph I rely on an important essay by Simon Harrison. See Harrison, "Skulls and Scientific Collecting."

^{38.} See ibid., 290, and Maclaren, African Exploits 286

tal.³⁹ Msiri was shot by Captain Bodson, and in one of his last actions, Bodson decapitated Msiri and announced: "I have killed a tiger! Vive le roi!"40 Bodson in turn was killed by Msiri's soldiers. Dan Crawford, a missionary based at Msiri's court, wrote that the decapitation was conducted by Zanzibaris: "His head—and he was proud of it—was shaped as I have seen no other man's, the bumps towering away like Alps on Alps marking him off as one capable of doing wild, wicked things. Ever since I have known him, a look of cunning craftiness clung to his shriveled features, his general demeanour overbearing and haughty."41 In the context of violent imperialism, here once again was the afterlife of a long-running scientific view of the head and the physiognomic evaluation of human character, entangled with new practices of hunting and a militarized vocabulary of the skull as animal trophy.

While the trade in heads was made illegal in New Zealand in 1831, there were still those who engaged in it. Among them was Major General Horatio Gordon Robley, who fought in the New Zealand wars and wrote a book describing Maori tattooing, including a chapter on museum collections of toi moko.42 Robley made his own collection of thirtyeight New Zealand heads after returning to London and offered them to the New Zealand government, which declined the proposal.⁴³ When put on display in 1897, they drew crowds of 800 to 1000 visitors in a day. Robley was photographed, perhaps in 1895, with his collection of skulls, inserting his own head within the ranks (see fig. 2). When they were sold, it was alleged that he had decorated his bedroom with these skulls: "When unable to sleep at night [he] would rise and comb his Maoris' hair, and felt himself soothed."44 Robley may have been an eccentric, and this tale of grooming may be mythical. However, when Robley's collection appeared on walls and in a photograph, the human

skull took up a space normally accorded to animal heads or natural history specimens. In contradiction, Robley's physical and domestic engagement with the skulls humanized them yet made him a social outcast in London. The *toi moko* inhabited an uncertain location across racial boundaries, especially given theories of the Aryan Maori, and they also cut across the animal-human boundary with respect to styles of display and modes of engagement.

To connect these points, from the Second British Empire to the new imperialism of the late nineteenth century, race arose from collecting practices that were directed symmetrically to the animal and human. Such copresence resulted from the sites of collecting: where war, trade, and hunting brought the material remains of humans and animals together, particularly in places cast at the lower end of Enlightenment stadialism. The new sciences of race—despite being targeted toward humans—were entangled with the non-human in material terms.

Disciplinary Genealogies for Human and Animal Science

The turn of the twentieth century saw a rise of interest in heredity, culture, and nurture as a new terrain for the entanglement of notions of difference. These topics came together most potently in an imperial context around questions of domestication and socialization. Domestication has crept into this discussion, with Wallace's infant or Robley's alleged nighttime interaction with skulls. As an imperial practice it was altered in the midnineteenth century into a more segregationist tenor, and the Indian Rebellion of 1857 played a key role in this. Though ideas of race and science had cohered before 1857 in India, as in the work of Falconer and other allied men of science, the rebellion challenged the optimistic rhetoric of im-

^{39.} On Msiri see Gordon, "Owners of the Land and Lunda Lords."

^{40.} Crawford, *Thinking Black*, 308–10.

^{41.} Ibid.

^{42.} See Robley, Moko.

^{43.} I thank Kate Stevens for pointing me to this account and have drawn from Stevens, "Thinking about Heads." For Robley's biography see *Encyclopedia of New Zealand 1966*, s.v. "Robley, Major-General Horatio Gordon," accessed July 15, 2014, www.TeAra.govt.nz/en/1966/robley -major-general-horatio-gordon.

^{44.} Catalog entry from "Horatio Robley, seated with his collection of severed heads of Maori. Photograph by H. Stevens, 190-." Wellcome Library no. 664088i, accessed July 15, 2014, catalogue .wellcomelibrary.org/record=b1664088.

^{45.} For the relationship between the Indian Rebellion and race, see Metcalf, *Ideologies of the Rai*.

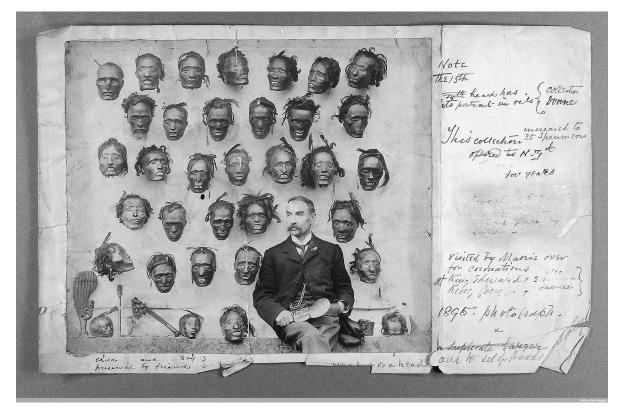


Figure 2. Major General Horatio Gordon Robley with his collection of tattooed Maori heads. Photograph dated 1895, Wellcome Library London, Loo32965, Creative Commons

proving India that had run through the first half of the nineteenth century. Darwinist thought gave rise, perhaps in sequence, to a new notion of the mutability of species, the worry about the degeneration of Europeans in the tropics, and the fear of sexual attack on white women, or "black peril," for instance, in the colonial home.

It was in connection with this line of ideas that the animal-human divide was sensationalized by stories of feral children. Though it had early modern predecessors, the late nineteenth-century tale of the child raised by animals was inaugurated by military man William Sleeman in his *A Journey through the Kingdom of Oudh* (1858), published post-humously in the immediate context of the Rebellion, which he was said to have presaged. ⁴⁶ From here his accounts of Indian children raised by wolves were disseminated widely in the periodical press of Europe. Sleeman is best known for his official role in suppressing the threat of "thugs": the

criminal thug was consolidated as a general legislative and racial category by the British to deal with occasional robbery and murder conducted by itinerant traders and mendicants.⁴⁷ Given the 14,000 thugs who were allegedly hanged between 1826 and 1840, the thug threat also generated a series of skulls, including one noted above in the Morton collection. Sleeman's twin role in generating the racialized thug and the animalized "wolf-child" has been unnoticed and sits well with the argument of this essay about parallel and transgressive debates.

Sleeman's commentary on children reared by wolves in Sultanpur, in Oudh, came in the context of the "vagrant life" exhibited by "the lowest class" of Hindus. He noted that such itinerant communities "destroy any living thing, eat jackals and all kinds of reptiles, and catch all kinds of animals, either to feed upon themselves, or to sell them to those who wish to keep or hunt them."⁴⁸

46. See Wheeler, "Sleeman, Sir William Henry," and Hotchkiss, "The Jungle of Eden."

47. For a discussion of Sleeman, "thugs," and skulls, see Wagner, "Confessions of a Skull."

48. Sleeman, *Journey through the Kingdom of Oude*, 1:206. The accounts of wolf children appear on pages 207–22.

However, the wolves were the exception. These communities, he alleged, did not kill wolves; they preferred to live off the proceeds that came from selling the "gold and silver bracelets, necklaces and other ornaments worn by the children whom the wolves carry to their dens."49 The tales of boys raised by wolves, which followed, had recurrent features. One was that military men and sepoys would observe a wolf with her whelps and a boy, both drinking water, for instance at a river. After these men rescued the child, there proceeded an attempt to domesticate the boys. The predominant narrative was one of failure: the wolf-child would prefer raw meat; he would have difficulty in speaking and would continue to snarl or growl at times and refuse to wear clothes. He would continue to smell despite every effort at washing him and could revert to moving on all fours. The returning child would also struggle to form any kind of attachment to humans. In Sleeman's narrative, in one case the boy in question was again visited by wolves and was said to recognize the whelps with whom he had grown up and started to play with them.⁵⁰ When the idea of vagrant humans and wolf-like children are put together, what appears is the colonial project's concern with domestication being tested by alternatives; people who live like animals need to be dealt with by violence, and the fears of children raised by wolves are indicated by measures of eating, hygiene, language, sociability, and dress, which are used to discuss and change them. All of these civilizational measures have consistently been applied to the category of race; they are here also applied to the animal-human boundary. The difficulty posed by vagrants and wolf-children in India is that they didn't occupy a clear space in debates about either race or animality.

A case has been made that Sleeman's reports influenced Rudyard Kipling's creation of Mowgli in *The Jungle Book* (1894).⁵¹ Kipling's father, in his *Beast and Man in India* (1891), referred to one of Sleeman's cases and wrote that "India is probably

the cradle of wolf-child stories."52 Sleeman's account of how a wolf-boy recognized the whelps he had been raised with is said to mirror how Mowgli engaged with his wolf brothers. The impact of Kipling's writings were such that they reverberated into the twentieth century, but so also did the fascination with wolf children in India, so much so that it is argued that they formed a "class" of cases.⁵³ Stories of humans who had turned animal operated at the boundary of the fictional, and debates arose about the veracity of the evidence, which in turn hinged on who the witnesses were and whether Europeans had observed the events.⁵⁴ Another high point of interest occurred with the controversial publication of Arnold Gesell's Wolf Child and Human Child (1941), which had repeated quotations at the start of chapters from *The Jungle Book*.⁵⁵

Gesell was a Yale University academic and director of its Clinic of Child Development, which used film and photography to make the stages through which the child develops tangible as evidence. Gesell devoted his career to the task of setting out the developmental stages of a "normal" child. The subject of the book-which received negative reviews-was the alleged discovery of two girls, Kamala and Amala, who had been raised by a "wolf mother" and had been rescued and taken to a Christian orphanage in Midnapur in Bengal in 1920. Both of them would soon die, though Kamala outlasted Amala. The story was especially controversial because the chief witness was an Indian clergyman.⁵⁶ The discovery of these children came as the clergyman in question—Rev. A. L. Singh was searching for "human habitations in the jungle" in an attempt to bring Christianity to aboriginals.⁵⁷ Once again there was the symmetry evident in Sleeman's stories and biography between an interest in humans living undomesticated lives, who were racialized, and children raised by animals. Singh described how he was taken to the girls by a "Kora, by race" [one of the aboriginal tribes in India]."58 Using Singh's diary and going against

```
49. Ibid., 1:207.
```

^{50.} See ibid., 1:218.

^{51.} See Hotchkiss, "The Jungle of Eden," and also Benzaquen, *Encounters with Wild Children*.

^{52.} Kipling, Beast and Man in India, 313.

^{53.} Benzaquen, *Encounters with Wild Children*, 223.

^{54.} Kipling noted that the most credible account was that supported by European witnesses. See Hotchkiss, "The Jungle of Eden," 439-

^{55.} See Benzaquen, "Kamala of Midnapore."

^{56.} See ibid., 63.

^{57.} Gesell, Wolf Child and Human Child, xxix.

^{58.} Singh, "Diary of the Wolf-Children," 3.

the prevalent view, Gesell insisted that wolf children carried on being human and normal even if they were socialized in a nonhuman context. This challenged prevailing environmentalist accounts of wolf children in psychology, emphasizing instead the importance of inheritance: in Gesell's words, "Environmental factors support, inflect and modify, but they do not generate the progressions of development." ⁵⁹

Though this was Gesell's agenda, which contrasts with Sleeman's emphasis on wolf children as unnatural, Gesell's work points to how socialization could change character and behavior in striking ways. Take, for instance, his description of Kamala's infancy, which was surely fictive. It emphasized "mammalian" commonality between wolves and humans, which had a chemical base:

She had no difficulty even at the tender age of six months in finding the udders which nourished her with mammalian milk that was chemically very like the milk to which she was accustomed. She already had good control of the movements and postures of her head. . . . Her dark-adapted vision, her sense of smell, and her memories of location, always brought her back to her mother when occasion demanded. . . . In terms of wolf culture this was all very "natural."

If Kamala had become acculturated to being a wolf, Gesell nevertheless followed up this view with an insistence that she was not a "wolf creature." "She must be envisaged as a human infant who was confronted with a monstrously exceptional situation, and who solved it within her capacities as a human being" (17).

Yet this refrain was contradicted not only by an interest in the common biological features of wolves and humans, which allowed Kamala to be socialized to wolf culture, but also by an early modern and even nineteenth-century sensationalism. Gesell described the girls in the course of their rescue in language reminiscent of that used by Du Chaillu for the gorilla: "a hideous looking being—hand, foot, and body like a human being but the head was a big ball of something . . . Close at its heels came another awful creature exactly like the

first, but smaller in size. Their eyes were bright and piercing, unlike human eyes" (23). Note here the emphasis on the head. This sensationalism came partly from Singh's diary, which, unlike Gesell's book, claims that the environment trumps heredity. Singh claimed that the girls had altered in an anatomical sense when they lived with the wolves and that Kamala's limbs had to be readjusted by a regular course of massaging, undertaken as a maternal duty by Mrs. Singh. The aim was, for instance, to "straighten the knee joints and the ankle joints by constant light rubbing, twisting with the application of mustard oil, and gentle jerking." 61

Though Gesell intended to show how Kamala readjusted her behavior to a human context by demonstrating her normality, Wolf Child and Human Child also pointed to the great difficulties that beset any attempt to expunge "wolf ways," "which persisted even after human ways had been adopted."62 Gesell highlighted the moment when Kamala started to treat animals like animals rather than as kin as a critical turning point. This came as she interacted with some pet goat kids in the orphanage: she reacted to them not "as a comember of a pack, but as something which children play with. . . . Soon thereafter she showed a similar extroverted interest in the chicks, in a hyena cub, in a pet cat" (43-44). It is worth approaching the extraordinary photographs that accompanied Gesell's book as indicative of a developmental record, as they illustrated Kamala's progress from crawling on all fours to walking. Yet the majority of them showed her behaving as an animal (see figs. 3 and 4). These are inherent moments of contradiction, which to readers would have pointed not to a normal child, in Gesell's sense, but to a child who would have seemed to have "turned animal," reminiscent of another colonial malady, "going native." Yet Gesell's analysis insisted that biological inheritance was remolded by culture. The organ that attracted focus was the brain: "Kamala's brain, likewise, was constituted of billions of neurons. She probably had as many as the estimated human average (12,000,000,000); and she lost none of them as a result of her years with the wolves. What she

59. Gesell, Wolf Child, 75.60. Ibid., 14–16.

61. Singh, "Diary of the Wolf-Children," 65.62. Gesell, Wolf Child, 35.



Figure 3. "Both Kamala and Amala used to sleep... overlapping one another." Plate 5 from Arnold Gesell, *Wolf Child and Human Child: The Life History of Kamala* (1941)

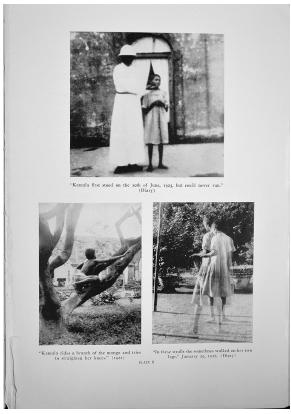


Figure 4. "Kamala first stood on the 10th of June 1923, but could never run,"; "Kamala rides a branch of the mango and tries to straighten her knees"; and "In these strolls she sometimes walked on her two legs." Plate 8 from Arnold Gesell, Wolf Child and Human Child: The Life History of Kamala (1941)

lost was the opportunity to organize these neurons into complex systems of socialized thought and of civilized action" (61).

The controversy over Gesell's work, Singh's diary, and Gesell's opponents, and even the contradictions inherent in Gesell's writings, point to how a new language of culture came to dictate the course of discussion about the animal-human in the interwar period. This picked up the inheritance of race, in positing that societies were different and would develop differently, but pointed to the rise of new disciplines with an intellectual stake in this area, such as psychology or sociology. The possibility that societies and cultures would follow different tracks of development, necessitating different styles of education, for instance, in Africa, operated alongside discussions of the animal-human problem, just as these issues had been twinned with a different vocabulary around craniometry or phrenology. Nevertheless there

were those, like Gesell, who sought to stress the distinctive features of the human child, even one brought up by wolves, yet their writings too operated in a field of concepts where the animal-human distinction was one that could be transgressed.

There are two moments in Gesell's book that hint at the politics of India in the interwar period. Describing a photograph of Kamala and picking up her very thin frame, Gesell described her as "Gandhi-like" (56). Elsewhere appeared a map of India with an infant close to Punjab, wolves north of Calcutta, and cattle in the center of the subcontinent. This essay has focused thus far on how the imperial project provided a symmetric political context to two problems of differentiation, namely the race question and the animal-human one. However, colonized peoples and nationalists were bequeathed this language of nature and the animal and recast it for their own purposes.

One example of this recasting is how in India

in the last two decades of the nineteenth century cow protection, or gaurakshini, became widely spread. Cow-protection societies may point to a critique of the consumptive and industrial capacities of colonialism; they also unleashed public violence against Muslims as beefeaters and butchers.⁶³ Cow protection mobilized long-extant textual traditions of venerating the cow, evident from the earliest written texts of India, which gave the cow cosmic associations; the movement tied these traditions to a principle of ahimsa, or nonviolence. It also consolidated a specific vocabulary of nationhood in the late nineteenth and early twentieth centuries. Relatedness to cows came to stand for cultural and national heritage, and this set of meanings might be compared with the colonial technique of studying animals to scrutinize race and culture. This political vocabulary also saw a synergy and stand off between evolutionism and notions of karmic rebirth in South Asia. Take, for instance, the words of M. K. Gandhi in his English-language periodical, Young India, in 1921:

"Cow Protection" to me is one of the most wonderful phenomena in all human evolution; for it takes the human being beyond his species. The cow to me means the entire sub-human world. Man through the cow is enjoined to realize his identity with all that lives. Why the cow was selected for apotheosis is obvious to me. The cow was in India the best companion. She was the giver of plenty. Not only did she give milk, but she also made agriculture possible. The cow is a poem of pity. One reads pity in the gentle animal. She is the "mother" to millions of Indian mankind.⁶⁴

This set of sentences bears the echoes of imperial problems with the animal-human divide, in using the terms *evolution*, *species*, and *subhuman* all at one time. Difference and relatedness come together. The contradiction allows for a mobilization of Mother India as cow. Gandhi is not exceptional: for instance, the cow served the same function in the work of B. G. Tilak, the advocate of *swaraj*, or self-rule, who appealed to the cow in his popular

festivals and public pronouncements in the late nineteenth century.

Farther to the south are yet other indicators of the adoption of notions of relatedness with animals to authorize cultural and national heritage. In Sri Lanka, the origin myth of the Sinhala people, which became canonical by the nineteenth century, retold how the Sinhalese were descended from a lion. 65 The Mahavamsa, a fifth- or sixthcentury Buddhist chronicle, is the source of this tale, and it was printed by the British in the nineteenth century as the key historical source on the island. The story involves multiple transgressions: the daughter of a king being taken by a lion, this woman giving birth with the lion to a son and daughter, and the son slaying the lion and marrying his sister. Vijaya, the founder of the Sinhala race, is alleged to be the oldest son of the brothersister union. Among the Sinhalese, in the twentieth century, lion ancestry has supported a culture of militancy, as is even evident in the national flag. In recent decades such nationalism has been set against the "Tamil Tigers," who in turn have deployed an animal motif, which has currency in South Indian cultures of rulership, in order to bolster their bid for an independent nation. Even more than with the cow in India, the rhetoric of lions and tigers has been a deeply ethnicized vocabulary of national alternatives. In Sri Lanka, talking about lion ancestry has been a way of stressing purity and exclusiveness, especially given the fact that lions are not found in Sri Lanka. Yet animal ancestry can seem problematic for the Sinhalese, and for that reason the slaying of the lion in the Mahavamsa story is useful as an indicator of the regaining of humanity. Accordingly, early in the story's use, the hero could be cast as a slayer of the lion, rather than a descendant of the lion. Later in popular twentieth-century theatrical renditions, the hero was Sinhabahu, who killed the lion.66 The slipperiness of the entanglement between the animal and human, and between notions of descent and race, is observable yet again.

63. For a classic article on cow protection and violence see Yang, "Sacred Symbol and Sacred Space"

64. Young India, October 6, 1921, quoted in Jack, Gandhi Reader, 170.

65. For the lion ancestry of the Sinhalese see Gunawardana, "The People of the Lion."

66. This is a reference to the popular play by Ediriweera Sarachchandra, *Sinhabahu* (1961).

South Asia evidently has a long history of talk about animal descent and lineage and the use of animals to signify the divine, the cosmic, and other karmic incarnations of life. The wolf children, who were so sensational for colonial readers, operated within this landscape. Yet colonialism focused the intellectual work and material engagement around issues of creating racial types and dealing with the animal-human boundary around a genealogy of disciplines. Arguably that program gave new momentum to established senses of animal culture and their relationship to heritage, with the consolidation of ethnic and national vocabularies of differentiations, between Hindus and Muslims or Sinhalese and Tamils. In other words, the colonial repackaging of allegedly authentic knowledge made possible a further resituation of the indigenous.

Conclusions

Postcolonialism has followed in the track of empire in misplacing the animal-human issue as a topic of study and instead targeting interactions among humans. Even when the category of the subaltern was expanded, it never included the nonhuman within its bounds. This essay interrogates the agency of the nonhuman by approaching it from the formation of human subjecthood in scientific and imperial contexts at the interface with animals. In this sense it serves as an end reflection to this collection of essays, which have all discussed nonhumans and the way they impinge on the human in creating complexes or assemblages of agency.

Race is critical in the literature on empire, and yet race can be conceived differently if the human and nonhuman are integrated: to be an imperialist necessitated the working out of the boundaries of the human, even as those boundaries were shifted, changed, and transgressed by force. The level of violence in colonial war and the intensity of programs of acculturation, settlement, and domestication, which were part of empire, were inevitably tied up with the animal-human issue as well as the problem of race at the same time. It is important, then, to invert the traditional story in the history of the sciences about the taming of nature by colonizers and to ask how colonized nature impacted the imperialist. Did imperialists turn into animals even though their concern

was with how to place the colonized in relation to animality and race? If empire's classificatory obsession is traditionally explained by recourse to the idea that the colonies were unfamiliar, calling imperialists to put things in order, then transgression can also perhaps be explained as an indicator of the troubling of the imperial self by unknown nature, by the animal-humans of the wider world who eluded such classification.

The creation of human subjecthood at the interface of the animal raises the question of what it means to write histories that are both posthumanist and postracial. If one may extrapolate from this retelling of race science, it was the dual work of engaging and hiding the nonhuman that was productive for imperial and racial subjectivity and postcolonial nationalist renditions, too. To embark on a new form of subjective awareness that places the human in relation to the animal, the material, and the environmental, and to create a human-species with self-awareness, would require then not an effacing of the nonhuman. Such an effacing was what created a hierarchy constituted of subjects and nonsubjects. Rather, what is needed is a robust and open engagement with how the human and nonhuman have been enmeshed and a new distribution of agency across this collective.

These claims sit well with the other essays in this special section. For Rebecca J. H. Woods, the relation between animals and humans, specifically around the meat trade from New Zealand to Britain, has been a work of ellipsis, "the wrenching apart of the animate beast and comestible flesh." That ellipsis is produced through breeding in order to make New Zealand sheep and New Zealand itself fit into Britain. When viewed in the light of the current essay, Woods's argument indicates the hiding that has been part and parcel of the making of the imperial human, affecting all kinds of remains from consumable meat to racializable skulls. The hiding reappears in Alan Mikhail's violent account of dogs killed by poisoned meat or sunk on a ship sent from Alexandria. Yet this hiding can never be complete; the animal reappears and troubles any neat delineation of the human from its others. Another anecdote—the funeral of the woman's dog in the 1830s—reveals how an affective relation to dogs comes to life just as the state sets about ridding Cairo of canines. Relatedness and difference operate together in contradiction in animal-human matters, and this transgression is what makes the animal-human the ground of intensive and productive imperial theorizing.

Etienne Benson's essay on kob is a rich example of such theorizing. Territorialization became a technical concept of conservation biology, linked to the regulation of animal populations. This saw the transformation of an analogy from human society into a biological fact that could be used as an explanation for human society. It is just this sort of back and forth that has also appeared in the account of race offered here. One wonders what other imperial concepts came to be across the animal-human boundary: human and animal rights, slavery and the corralling of animals, and others may be opened up like this. Such analysis will at last make the animal in empire not simply the preserve of discourse. It may then demonstrate—following Jagjeet Lally—that forms of empire in turn have different registers of the animal. It is important to attend carefully to this point. Despite the fact that the animal figures heavily in Hindu, Muslim, and Buddhist cultures, as these essays demonstrate, and those resonances were resituated by European colonialism, it is critical to deal with different kinds of imperial projects in contrast. Lally's essay is a reminder that the form the animal takes—whether gift or image and even its location can change as the politics of empire shift in turn. Nonhuman empires may be differently nonhuman.

The focus of the current essay has been on European empires, in particular the British Empire and its postcolonies. In the Western imperial tradition, human-nonhuman transgressions have occurred in the twinning of topics and the straddling of boundaries, even as disciplines and boundaries were being set up. In engaging in and effacing this work, long-distance empires have been intellectually ingenious and flexible, and to expose their power requires a similar widening of horizons on our part. Distributing agency to the human and nonhuman would reverse the origins of racial thought evident in imperial contexts, while also allowing the nonhuman to enter into history. A critical conversation between postcolonial scholarship and science studies is thus of great urgency.

References

- "Abstract of a Discourse by Dr. Falconer, on the Fossil Fauna of the Sewalik Hills." *Journal of the Royal Asiatic Society of Great Britain and Ireland* 8 (1856): 107–12.
- Arnold, David. Science, Technology, and Medicine in Colonial India. Cambridge: Cambridge University Press, 2000.
- Benzaquen, Adriana S. Encounters with Wild Children: Temptation and Disappointment in the Study of Human Nature.

 Montreal: McGill-Queen's University Press, 2006.
- ——. "Kamala of Midnapore and Arnold Gesell's *Wolf Child and Human Child*: Reconciling the Extraordinary and the Normal." *History of Psychology* 4 (2001): 59–78.
- Brantlinger, Patrick. *Dark Vanishings: Discourse on the Extinction of Primitive Races, 1800–1930.* Ithaca, NY: Cornell University Press, 2003.
- Chakrabarty, Dipesh. "The Climate of History: Four Theses." *Critical Inquiry* 35 (2009): 197–222.
- Chapman, Maria Weston. *Harriet Martineau's Autobiography*. 3 vols. London: Smith Elder, 1877.
- Combe, George. *A System of Phrenology*. 5th ed. Edinburgh: Maclachlan and Stewart, 1853.
- "Comparative Phrenology, Mons. Vimont's Collection of Crania." *Phrenological Journal* 6 (1830): 364–68.
- Cooter, Roger. The Cultural Meaning of Popular Science: Phrenology and the Organization of Consent in Nineteenth-Century Britain. Cambridge: Cambridge University Press, 1984.
- Crawford, Dan. *Thinking Black: Twenty-Two Years without a Break in the Long Grass of Central Africa*. London: Morgan and Scott, 1912.
- Denenholz Morse, Deborah, and Martin A. Danahay, eds. Victorian Animal Dreams: Representations of Animals in Victorian Literature and Culture. Aldershot, UK: Ashgate, 2007.
- "Dr. Vimont's Collection of Crania." *Phrenological Journal* 6 (1830): 353.
- Du Chaillu, Paul. *Explorations and Adventures in Equatorial Africa*. London: John Murray, 1861.
- Gesell, Arnold. Wolf Child and Human Child: The Life History of Kamala, the Wolf Girl. London: Methuen, 1941.
- Ghosh, Durba. Sex and the Family in Colonial India: The Making of Empire. Cambridge: Cambridge University Press, 2006.
- Gordon, David. "Owners of the Land and Lunda Lords: Colonial Chiefs in the Borderlands of Northern Rhodesia and the Belgian Congo." *International Journal of African Historical Studies* 34 (2001): 315–38.

- Gunawardana, R. A. L. H. "'The People of the Lion': Sinhala Identity and Ideology in History and Historiography." *Sri Lanka Journal of the Humanities* 1–2 (1979): 1–36.
- Haraway, Donna. *Primate Visions: Gender, Race and Nature in the World of Modern Science*. New York: Routledge, 1989.
- Harrison, Simon. "Skulls and Scientific Collecting in the Victorian Military: Keeping the Enemy Dead in British Frontier Warfare." *Comparative Studies in Society and History* 50 (2008): 285–303.
- Hotchkiss, Jane. "The Jungle of Eden: Kipling, Wolf Boys, and the Colonial Imagination." *Victorian Literature and Culture* 29 (2001): 435–49.
- Huxley, T. H. *Evidence as to Man's Place in Nature.* London: Williams and Norgate, 1863.
- Jack, Homer A., ed. The Gandhi Reader: A Sourcebook of His Life and Writings. New York: Grove 1994.
- Kapila, Shruti. "Race Matters: Orientalism and Religion, India and beyond c. 1770–1880." *Modern Asian Studies* 41 (2007): 471–513.
- Kete, Kathleen, ed. A Cultural History of Animals in the Age of Empire. Oxford: Berg, 2007.
- Kipling, John Lockwood. *Beast and Man in India*. London: Macmillan, 1891.
- Maclaren, Roy, ed. *African Exploits: The Diaries of William Stairs 1887–1892*. Liverpool, UK: Liverpool University Press, 1988.
- Mason, Joshua Olivier, "These Blurred Copies of Himself: T. H. Huxley, Paul Du Chaillu, and the Readers' Place among the Apes." *Victorian Literature and Culture* 42 (2014): 99–122.
- McCook, Stuart. "'It May Be Truth, but It Is Not Evidence': Paul du Chaillu and the Legitimation of Evidence in the Field Sciences." *Osiris* 11 (1996): 177–97.
- Meigs, J. Aitken. "Hints to Craniographers." *Proceedings of the Academy of Natural Sciences* 3 (1858): 1–6.
- Metcalf, Thomas. *Ideologies of the Raj*. Cambridge: Cambridge University Press, 1994.
- Morton, Samuel. *Catalogue of Skulls of Man and the Inferior Animals.* Philadelphia: Merrihew and Thompson, 1849.
- Nair, Savithri Preetha. "'Eyes and No Eyes': Siwalik Fossil Collecting and the Crafting of Indian Palaeontology (1830–1847)." *Science in Context* 18 (2005): 359–92.
- Orchiston, D. Wayne. "Preserved Human Heads of the New Zealand Maoris." *Journal of the Polynesian Society* 76 (1967): 297–329.

- "Phrenology in London—M. Deville's Museum—the Deaf and the Dumb." *Phrenological Journal* 6 (1830): 569–76.
- Pierson, Ruth Roach, and Nupur Chaudhuri, eds. *Historicizing Gender and Race*. Bloomington: Indiana University Press, 1998.
- "Review of Dr. Vimont's Work on Comparative Phrenology." *Phrenological Journal and Science of Health* 2 (1839): 121–22.
- Ritvo, Harriet. *The Platypus and the Mermaid and Other Figments of the Classifying Imagination*. Cambridge, MA: Harvard University Press, 1997.
- Robley, Horatio Gordon. *Moko: or, Maori Tattooing.* London: Chapman and Hall, 1896.
- Roque, Ricardo. Headhunting and Colonialism: Anthropology and the Circulation of Human Skulls in the Portuguese Empire, 1870–1930. Basingstoke, UK: Palgrave Macmillan, 2010.
- Rushing, H. "The Gorilla Comes to Darwin's England." Master's thesis, University of Texas, Austin, 1990.
- Salesa, Damon. Racial Crossings: Victorian Britain, Colonial New Zealand and the Problem of Races. Oxford: Oxford University Press, 2011.
- Schiebinger, Londa. "The Anatomy of Difference: Sex and Race in Eighteenth-Century Science." *Eighteenth-Century Studies* 23 (1990): 387–405.
- Singh, J. A. L. "Diary of the Wolf-Children of Midnapore." In *Wolf-Children and Feral Man*, edited by J. A. L. Singh and Robert M. Zingg, 1–126. New York: Harper, 1942.
- Sivasundaram, Sujit. *Islanded: Britain, Sri Lanka, and the Bounds of an Indian Ocean Colony.* Chicago: Chicago University Press, 2013.
- —. "Natural History Spiritualized: Civilizing Islanders, Cultivating Breadfruit, and Collecting Souls." History of Science 39 (2001): 417–43.
- ——. "Race, Empire, and Biology before Darwinism." In *Biology and Ideology from Descartes to Dawkins*, edited by Denis Alexander and Ron Numbers, 114–38. Chicago: Chicago University Press, 2010.
- Sleeman, W. H. A Journey through the Kingdom of Oude in 1849–1850. 2 vols. London: R. Bentley, 1858.
- Stepan, Nancy. "Race and Gender: The Role of Analogy in Science." *Isis* 77 (1986): 261–77.
- Stevens, Kate. "Thinking about Heads: Mokomokai, Cannibals, and Colonials in a Digital World." Unpublished manuscript, Microsoft Word file.
- Stocking, George. Victorian Anthropology. New York: Free Press, 1987.

- Stoler, Ann. Carnal Knowledge and Imperial Power: Race and the Intimate in Colonial Rule. Berkeley: University of California Press, 2002.
- Van Wyhe, John, and Kees Rookmaaker, eds. Alfred Russel Wallace: Letters from the Malay Archipelago. Oxford: Oxford University Press, 2013.
- Vimont, Joseph. Traité de Phrenologie Humaine and Comparée. Paris: J. B. Ballieré, 1831.
- Wagner, Kim. "Confessions of a Skull: Phrenology and Colonial Knowledge in Early Nineteenth-Century India." History Workshop Journal 69 (2010): 27-51.
- Wallace, Alfred Russel. The Malay Archipelago, The Land of the Orang-utan, and the Bird of Paradise. New York: Harper and Brothers, 1869.
- Wheeler, Stephen. "Sleeman, Sir William Henry (1788-1856)." Oxford Dictionary of National Biography. Oxford: Oxford University Press, 2004.
- Yang, Anand. "Sacred Symbol and Sacred Space in Rural India: Community Mobilization in the 'Anti-Cow Killing' Riot of 1893." Comparative Studies in Society and History 22 (1980): 576-96.