

Decolonizing the Wild in the Land of Many Waters

word count: 2940

As the earth shifts in response to centuries of degradation wrought by colonialism and genocide, new generations are preoccupied with ancient questions: Who are we in relation to earth? What is our role in shaping our evolution? I answer through the lens of a wildlife ecologist descended from Africans rendered nonhuman and enslaved in a ‘new world.’ Drawing from over 15 years researching wildlife, ecosystems, and stewardship alongside Black and Indigenous communities, my work is intent on decolonizing the wild so that we may reimagine the worlds humans build with earth. For my DPhil at the University of Oxford’s School of Geography and the Environment, I will explore these themes in the context of my ancestral homelands in Guyana, also known as “the land of many waters.” My research will explore the co-production of primates, communities, and ecosystems in Guyana through Black and Indigenous geographies and ecological sciences. In foregrounding these sciences as a woman of Afro-Caribbean heritage, my work has revolutionary implications for how we steward relations with other beings, the earth, and ourselves. Given the University of Oxford’s foundational role in the history of science, unparalleled archives, and cutting edge research, I am certain the School of Geography and the Environment is the best place for me to carry out my doctoral studies.

Introduction: Making the Human and the Wild

The history of geography reflects, in part, a history of how the natural and social sciences discipline the ways we name, know, and shape earth. My project is concerned with how the construction of borders between humans and wildlife impacts the scientific study and stewardship of the wild. This work draws on theoretical foundations across Ecology, Primatology, Black and Indigenous Geographies, and History and Philosophy of Science. My goal is to expand on relevant threads within these fields while contributing novel theory and methods towards Black and Indigenous sciences that transcend discipline and effect change for our communities.

The making and consequences of the human as a category of being fundamentally impact all systems of knowledge, power, and life on earth. Jamaican philosopher Sylvia Wynter has written at length about how integral constructions of race are to hegemonic understandings of what and who is human (Wynter 2003). The natural sciences were foundational to the development of eugenics and the racializing assemblages these theories produced (Weheliye 2014). Prominent natural historians, anthropologists, and geographers theorized that those racialized as non-white were not only less human but evolutionarily closer to apes and monkeys and thus savage and wild. This particular assemblage of the wild and humans relegated as nonhuman primates was especially leveraged against African peoples and the continent of Africa. Eugenics was employed as scientific justification for the colonization of the African continent and the enslavement of millions of Africans in the Americas. In the rise of environmental conservation as an applied science and governing power (West 2006), eugenics

was mobilized to legitimize the neo-colonization of Africa through protected areas and shoot-on-sight poaching policies (Malone 2019). Yet and still, Afro-descendant peoples forge and embody epistemologies that Black Geographies scholarship demonstrates are vital ways of knowing and shaping the earth otherwise (Daley 2020, Noxolo 2024).

My proposed doctoral research is deeply informed by my journey as a scientist and as a woman of the Afro-Caribbean diaspora. From a young age, I was deeply fascinated by monkeys and apes and fiercely determined to become a scientist exploring their lifeways through tropical forests. My passion carried me through the violences of poverty in Brooklyn and “little Guyana” Queens, New York to be the first in my immediate family to complete higher education. For my undergraduate degrees in Zoology and Anthropology, I completed a field study of orangutan ecology in Borneo, Indonesia. Witnessing the extensive impact of industrial oil palm plantations there, I took on a fellowship in a geography lab where I mapped the expansion of these plantations into West and Central Africa.

For my Master’s thesis in Conservation Biology at Columbia University, I crafted a social-ecological systems approach to analyze how oil palm plantations and protected areas shaped interactions between communities and wildlife in southwest Cameroon. With the support of Cameroonian scientists, I interviewed over a hundred farmers across three villages experiencing what the ecology literature defined as “crop raiding” by wildlife. One of the villages I worked with had been forcibly removed from their ancestral lands and relocated into an area elephants actively use as a corridor, all in order to establish a protected area for a U.S. based, global conservation organization. Through the disregard of this community’s stewardship and the creation of human-wildlife conflict, I saw how colonial conservation practice actually reconfigures ecologies in spaces deemed as wild.

When I returned, the murder of Eric Garner and the non-indictment of the NYPD officers who murdered him further shifted my consciousness. I delved into abolitionist organizing for Black liberation. In 2016, I co-chaired the local chapter of a national Black organizing and political education collective. My research oriented towards dismantling the colonial, white supremacist logics that shape natural sciences and, in turn, the world. In my role as Manager of Pacific Programs at the American Museum of Natural History, I supported Indigenous-led environmental stewardship organizations in the Solomon Islands. I also co-founded the Equity, Inclusion, and Diversity Committee at the Society of Conservation Biology, creating space for international scientific discourse, training, and conferences that acknowledged Black and Indigenous epistemologies. I was invited to present my research on the impacts of eugenics and potential of decolonial science internationally, from keynote lectures at Yale and New York University to community forums. On Indigenous People’s Day 2018, I collaborated with Black and Indigenous organizing collectives to lead a demonstration at a natural history museum that continued to memorialize eugenicists and display exhibits that reified depictions of Africans as primitive, ape-like, and wild. In the aftermath, determined to re-engage my passion for primates and forests beyond contesting colonialism, I returned to my roots.

I first visited Guyana in 2017 - just two years after monumental reserves of crude oil were discovered by Exxon Mobil and unprecedented development began to rapidly unfold. As I began archiving my ancestral lineage across the country, I saw how these changes were impacting critical historical geographies not yet documented beyond oral tradition. As I began researching primates and tropical forests there, I saw drastic alterations to ecosystems that lack accessible baseline data. As I began connecting with the Earth-based cosmologies of my Afro-descendant ancestors and Indigenous relatives, I saw how our traditions hold a hidden archive of environmental science knowledge and history. My scholarship came to center what Black and Indigenous sciences of Guyana reveal about knowing and relating with the wild, wildlife, and the earth differently.

Introduction to Proposed Research

Guyana is one of the most densely forested countries in South America - these highly biodiverse tropical forest systems cover 80% of the country's surface. Forests interweave with savannahs and mineral rich hilly sands through a vast network of rivers and creeks that, in tandem with a multiplicity of beings, bring the land of many waters to life. Guyana's human geographies unfold through Indigenous Amerindians (including the Akawaio, Caribs, Patamona, Lokono, Makushi, Waiwai, Wapishana, and Warao peoples), Afro-Guyanese descendants of trans-Atlantic slavery, and Indo-Guyanese descendants of indentured servitude. Nearly 90% of Guyana's peoples reside on the coastal plain bordering the Atlantic Ocean. From the mid 17th century, these coastal plains were fundamentally transformed through varying regimes of plantation slavery, initially engineered by the Netherlands and later by Britain and Scotland (Daly 1974). The juxtaposition, upheld by popular colonial depictions, of a densely populated, plantation agriculture coast and an untamed, gold-filled interior is central to the imaginaries of the wild explored in this study.

Guyana is an urgently relevant context for untying colonial histories of the wild and expanding decolonial science futures. From British crown commissioned scientific surveys of the interior in pursuit of El Dorado gold (Schomburgk 1922) to the training of Charles Darwin by formerly enslaved Guyanese taxidermist John Edmonstone (Freeman 1978), Guyana has played a foundational role in the history of natural science. Beyond colonial constructions, advancing scientific knowledge and stewardship of Guyana's ecosystems is truly essential to the future of planetary health. As part of the Guiana Shield, Guyana's forests contribute to a carbon sink holding nearly 20% of the world's carbon and shape atmospheric rivers that manage continental-wide moisture and rainfall (Bovololo et. al. 2018). Guyana's monkeys, of which there are nine different species, are critical to the maintenance of these forests through seed dispersal and nutrient cycling (Lehman 2004). These monkeys are uniquely distributed across Guyana's interior and coastal geographies alongside the diverse lineages of science and culture that co-produce these ecosystems.

My research in Guyana thus far has explored primate ecologies, historical geographies of natural science, and autoethnography of my experience tracing my ancestral lineage. I have consulted a variety of archives - familial and formal, metaphysical and physical. I have conducted informal interviews in villages, backdams, and plantation estates. Since my first visit in 2017, I have conducted ecological surveys in collaboration with the Iwokrama International Centre for Rainforest Conservation and Development, Guyana's largest protected area covering nearly 2% of the country's forest. It was here that I first heard the call of the howler monkey, one of earth's loudest terrestrial animals. In my work with Indigenous communities, especially the Makushi whose ancestral homelands are on Iwokrama land, I began to understand the many ways howler monkeys are critical to shaping riparian environments stretching from the interior to the coast. In learning how Black and Indigenous communities shape howler monkey ecologies through their cosmologies, howler monkeys emerged as the ideal focal species for this study.

I will never forget my first visit to a plantation estate where my ancestors would have been enslaved, deeper into the coastal plain. In my mind's eye, I can still see the tall cane standing at the edge of a crossroad of trenches. These trenches are waterways carved from hundreds of thousands of tons of soil dug up in what Walter Rodney, Guyanese historian and revolutionary, referred to as the "humanization" of the coast (Rodney 1981). I was there for archival research around my ancestors and living family members who recall visiting these estates when there were still overseers. While speaking with an Afro-Guyanese woman and farmer currently living at the edge of a plantation estate, we could hear howler monkeys calling near the adjacent river. She began to tell me that these monkeys were her family, sharing biogeographical and eco-cosmological knowledge of how the river, trench, and beings beyond borders created the rhythm of where she called home. I considered the weight of epistemic violence brought to bear on these reflections and my arrival to that moment. I became convinced of the power and necessity of exploring these entangled, evolving relations through doctoral study.

Building on the research I have been conducting in Guyana since 2017, my proposed doctoral project is primarily concerned with three lines of inquiry:

- How is the border between humans and wildlife, specifically wild primates, constructed and negotiated across Guyana's riparian interior and coastal geographies?
- What are the social-ecological implications of the howler monkey's call across time and space?
- What do Black and Indigenous epistemologies and cosmologies reveal about a decolonial approach to the scientific study and stewardship of wildlife and social-ecological systems?

Methodology

This research employs methodologies from diverse disciplines and ways of knowing that defy disciplinary bounds. In designing my study, it will first be critical to address the ethical considerations of working with communities and ecosystems navigating unprecedented development and neo-colonial frontierism from extractive industries, academia, and tourism. I will connect with faculty and initiatives at the University of Oxford who are actively engaged in equitable, community-centered research methodologies.

In exploring historical geographies of science (Naylor 2005) in Guyana, I will conduct robust archival research. I will continue to access the National Archives of Guyana as well as relevant holdings at branches of the University of the West Indies. Oxford's extensive archival collections, including primary literature and land survey maps of Guyana, at the Bodleian Libraries will be essential to my research. I will also reference archives of Guyana's plantation records held at the British Library. I am in conversation with the Deputy Director of Oxford's History of Science Museum, Dr. J.C. Niala, about specific material collections from Guyana that are relevant to my project. I will work with my proposed supervisor, Dr. Sneha Krishnan, given her extensive background on historical geographies and critical archival practice (Krishnan 2024), to uncover histories and knowledge invisibilized or left out of formal archives.

In conducting the field study component of my research in Guyana, I will build from my long-standing relationships with regional academic, NGO, and community networks. I will identify key sites in the interior and coastal plain that will allow me to most effectively and feasibly explore my research questions within the duration of the DPhil. I will hold interviews with select communities through a critical ethnography approach (Madison 2007, Smith 2012). To explore ecosystems and howler monkey ecologies around selected field sites, I will conduct ecological surveys and targeted remote sensing of forests and rivers. This will include bioacoustic monitoring of howler monkey vocalization patterns across field sites. For this component of my research, I will work closely with the Iwokrama International Centre for Rainforest Conservation and Development. I am already in collaboration with Iwokrama's Research Director, Dr. Raquel Thomas, and the Centre is in support of my proposed doctoral research. I will also connect with Indigenous scientists and organizations, such as the Rupununi Wildlife Research Unit, who have spearheaded research on Makushi and Wapichan ecological knowledge, and the South Rupununi Conservation Society, which also centers Indigenous knowledge and leadership in biodiversity monitoring.

Anticipated Outputs and Impact

The publication of my DPhil dissertation will contribute novel theory on the subject of decolonizing the wild while advancing a new arena of research centering Black and Indigenous ecological sciences. My research on howler monkey ecologies and the co-production of social-ecological systems may also make significant contributions to traditional scientific

disciplines, including primatology and ecosystem science. Howler monkeys have not been extensively studied in Guyana and this research stands to significantly bolster their stewardship. In addition to publication in research journals, I will co-create community forums and media, including a short film, to share the story of this work and those who brought it to life. As a member of the Guyana Women's Artist Association since 2022, I am connected to an incredible network of artists in the country. I plan to incorporate my research into a creative exhibition around the themes of this work. Finally, a core motivation of this research is repair of the epistemic violence that colonial scientific institutions have wrought on Black and Indigenous ecological knowledge systems and our relationships with wildlife. I will share my findings with the reparative justice scholarship and advocacy collectives of which I have been an active participant in the Caribbean.

Why Oxford and the School of Geography and the Environment?

The University of Oxford's School of Geography and the Environment is the ideal place to carry out such an interdisciplinary doctoral project intent on making novel theoretical contributions with real-world impact. The School's research clusters, from Biodiversity to Political Worlds, host faculty working at the forefront of my research interests. I have been in contact with a number of faculty I would be eager to work with as a DPhil student. Dr. Sneha Krishnan, with her incredible integration of historical geographies, biopolitical realities, and critical archival practice, is an exceptional fit with my research and has agreed to take on a supervisory role. My work is strongly aligned with research at the Environmental Change Institute, in particular the Ecosystems and Biodiversity Programme. As my project incorporates ecological surveys of wildlife and remote sensing of ecosystems, I am in conversation with Dr. Jesús Aguirre-Gutiérrez about joining the Functional Biodiversity and Earth Observation Lab. I have also been in contact with Dr. Patricia Daley, given her ground-breaking work on Black Geographies, Dr. Amber Murrey, given her research on political ecologies and decoloniality, and Dr. Gregory Thaler, given his research on social-ecological governance in neighboring Brazil.

Beyond the School of Geography, the University of Oxford fosters an innovative, global community that would significantly bolster the development of my project and myself as a scholar. The School of Biology holds a number of faculty and initiatives relevant to my project, including the bioacoustics research in the Long Term Ecology Lab. In the School of Anthropology and Museum Ethnography, I have spoken with Dr. Thomas Püschel about primatology research at Oxford. The Centre for History of Science, Medicine, and Technology also has faculty of considerable relevance to my work. In building community, I have been in contact with the Caribbean Studies Network about how students may get involved with events. In terms of University-wide resources, I described in my Methodology section how essential collections at the Bodleian Libraries and History of Science Museum would be to my archival research.

I truly believe that Oxford and the School of Geography and the Environment is an ideal fit for my proposed DPhil research as well as my future trajectory. As I shape and am shaped by this work and the community of scholars in the School, I will deepen my praxis as a scientist and educator decolonizing and expanding scientific knowledge to make more liberatory planetary futures possible. Ultimately, I plan to build a research institute centering revolutionary ecology and stewardship of the wild. I am confident my time at Oxford will serve as a critical incubator for my vision.

Bibliography

- Bovolo, C.I. Wagner, T., Parkin, G., Hein-Griggs, D., Pereira, R., & Jones, R. (2018). The Guiana Shield rainforests – overlooked guardians of South American climate. *Environmental Research Letters*, 13(7): 074029.
- Daley, P. (2020). Lives lived differently: Geography and the study of black women. *Area*, 52 (4): 794-800.
- Daly, V. T. (1974). *The Making of Guyana*. MacMillan Publishing Company.
- Freeman, R. (1978). Darwin's Negro Bird-Stuffer. *Notes and Records of the Royal Society of London*, 33(1), 83–86.
- Krishnan, S. (2024). Towards a historical geography of girlhood. *Geography Compass*, 18(6).
- Lehman, S. (2004). Distribution and Diversity of Primates in Guyana: Species-Area Relationships and Riverine Barriers. *International Journal of Primatology*, 25: 73–95
- Madison, D. S. (2007). Co-performative witnessing. *Cultural Studies*, 21(6): 826-831.
- Malone, C. (2019). Fear of a Black Planet: Scientific Racism and the Making of the Anthropocene. Keynote Presentation. *20th Annual Educating for Sustainability Series*, New York University.
- Naylor, S. (2005). Introduction: Historical Geographies of Science: Places, Contexts, Cartographies. *The British Journal for the History of Science*, 38(1), 1–12.
- Noxolo, P. (2024). Quantum Black creative geographies: embodiment, coherence and transcendence in a time of climate crisis. *Singapore Journal of Tropical Geography*.
- Rodney, W. (1981). *A History of the Guyanese Working People, 1881-1905*. John Hopkins University Press.

Schomburgk, R. (1922). *Richard Schomburgk's Travels in British Guiana, 1840-1844*. Georgetown, British Guiana: "Daily Chronicle" Office.

Smith, L.T. (2012). *Decolonizing methodologies*. Zed Books.

Weheliye, A. (2014). *Habes Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Durham and London: Duke University Press.

West, P. (2006). *Conservation Is Our Government Now: The Politics of Ecology in Papua New Guinea*. Duke University Press.

Wynter, S. (2003). Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation—an Argument. *CR: The New Centennial Review*, 3(3): 257–337.