UC Davis
UC Davis Electronic Theses and Dissertations

Title
Disrupting Homogeneity: Geology’s Living Fossils in Nineteenth-Century Literature

Permalink
https://escholarship.org/uc/item/44z3t878

Author
Krzeminski, Jessica Lynn

Publication Date
2021

Peer reviewed|Thesis/dissertation

eScholarship.org
Powered by the California Digital Library
University of California

Disrupting Homogeneity:
Geology's Living Fossils in Nineteenth-Century Literature

By

JESSICA LYNN KRZEMINSKI
DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

English

in the

OFFICE OF GRADUATE STUDIES

of the

UNIVERSITY OF CALIFORNIA

DAVIS

Approved:

____
Elizabeth Freeman, Co-Chair

____
Elizabeth Miller, Co-Chair

____
Parama Roy

Committee in Charge

2021

Disrupting Homogeneity:

Geology's Living Fossils in Nineteenth-Century Literature

© Copyright by

Jessica Lynn Krzeminski

2021

Abstract

This dissertation, "Disrupting Homogeneity: Geology's Living Fossils in Nineteenth-Century Literature" contends that Charles Darwin's theory of evolution, originated in *On the Origin of Species* (1859), was a culturally disruptive force because it presented all species, including and especially the human, as mutable, unstable, and unfixed. This vision of endless transformation, fluidity, and change was unsettling, especially from a Christian point of view. Within a few decades, however, Darwin's theories were normalized, if not universally accepted; at this point, his concept of the "living fossil"—an organism that closely resembles its ancestors because it has hardly changed at a genomic level—reemerged in scientific texts. Debates about whether genetically unchanged species really exist have followed us to our present. The living fossil has captured the cultural and scientific imagination precisely because it proposes unchangingness in the face of mutability; in other words, where ongoing transformation had once generated fear and unease, unchangingness instead began to appear monstrous once Darwinian theory permeated Victorian culture.

Worries about the mutability of the human form manifest in nineteenth-century novels; while many Victorian novels grapple with beetles, snakes, or other animals disguised as humans, or consider how immorality manifests as visible beastliness in and on the human body, this project instead focuses on female characters that embody the concerns evinced by living fossils. These women emerge from deeper pasts, speak alternate or buried histories, and evade and disrupt developmental, linear time. Moving from stories of mermaids that transform (into) humans, to an inner-Earth women's dystopia that promotes eugenics and thereby stunts and alters natural evolution, to reincarnated queens whose historical knowledge endures even if their bodies die, this project tracks the shift from a cultural fear of mutability to an opposite fear of unchangingness.

The search for living fossils was coterminous with geological and paleontological discoveries during the age of empire building. This project therefore not only focuses on living fossils, but also on the codification of geology as a discipline to suggest that geologists, politicians, and novelists aligned to reify a linear historical narrative. And commitment to a linear progressivist teleology accommodates—in fact often demands—another temporality associated with timelessness and stagnation, qualities often assigned to peoples that history writes out of the record. But where science cannot account for geological unconformities—missing time and information in the rock record—authors of speculative fiction and fantasy move in to write stories into these gaps. Thereby, and often inadvertently, the peoples relegated to history's sidelines reemerge. Excavating living fossils in nineteenth-century literature reveals gaps in the stratigraphic record, gaps that are narrativized in fiction as a queering of the temporalities of civilizational progress.

Acknowledgments

"What day is it?" asked Pooh. "It's today," squeaked Piglet. "My favorite day," said Pooh.
- A.A. Milne

Since I was 13, I have harbored a not-so-secret dream of earning a PhD in English. This is perhaps an odd dream to have at age 13, but somehow I got this bee in my bonnet. That dream started to take shape during my senior year of high school in AP English with the inimitable Becky Knack who made me feel like I was brilliant, and my writing worth reading. She was my first mentor, and to her I am indebted. My second mentor who treated me as a fellow scholar even at age 18, at Carleton College, was Pierre Hecker. While I did not become an early modernist and follow in his footsteps (though I seriously considered it), Pierre encouraged me at every junction. He wrote countless recommendation letters during two rounds of graduate school applications and gave me this advice that has stuck with me and to which I have returned time and again: "You'll get more rejection letters before you're through, but if you can face them, don't give up. 20 years from now the path you took to get there won't matter so much." When I told him I was accepted to UC Davis, he responded, "Glad you didn't let the bastards get you down." I've kept that kernel of support close to my heart these past seven years. Without Pierre Hecker, as well as the outstanding Susan Jaret McKinstry whose Victorian class showed me where my real passion in English literature lies and who also wrote me countless letters and imparted sage advice, I likely would have given up on my PhD dream.

When I received a call from Elizabeth Freeman, I thought I might faint. I had poor cell service and my PhD acceptance call went to voicemail—a voicemail I've kept all this time (thanks iCloud). I had read Beth's first books when I was writing my master's thesis at NYU (thank you to Amber Musser for immersing me in queer theory!), and I googled to see where she

taught. I had never entertained the idea of moving to California until I discovered Beth Freeman and the incomparable faculty at UC Davis. To Beth, to Elizabeth (Liz) Miller, and to Parama Roy especially, who have read many a shitty first draft and brainstormed an idea with me, and who have helped get me through—thank you. You've watched my germ of an idea about Victorian geology and monsters grow and shift and have always kept me centered in the literature and fields I seek to understand and enter while showing me where my ideas fit. Thank you, as well, for not only writing countless recommendation letters, but also giving me research positions when I desperately needed time to write, including when I had a newborn baby after a traumatic birth right before a global pandemic. Your kindness and support during my postpartum period kept me in graduate school. To Hsuan Hsu, who served on my qualifying committee and whose seminar on naturalism I still think about, thank you. Mark Jerng—thank you for introducing me to Octavia Butler, and for supporting me in your capacity as Director of Graduate Studies. To Desirée Martín, who also supported me in myriad ways during my pregnancy and after my birth, thank you. The English faculty at UC Davis are truly outstanding—thank you all, and especially, too, Kathleen Frederickson, Margaret Ferguson (who nearly turned me back into an early modernist), David Simpson (without whom I would not understand semiotics), and Matthew Stratton.

My cohort has also been instrumental in carrying me through the program. Thank you Sophia Bamert, Katherine Buse, Rebecca Hogue, Bethany Qualls, Sally Lochowski Tanaka, Jessica Hanselman Gray, Tom Hintze, and Averyl Dietering. Each of you has supported me in various ways academically and personally over these past seven years, and I am so grateful that we have navigated this program together. Katherine and Matthew, thanks for being so delighted by Max and being your hilarious, brilliant selves. And to Sophia Bamert, my ride or die, my

editor-in-chief and confidante, thank you for reading countless drafts; I owe you a lot of wine and Ethiopian food, and am here for proofreading any and all the things as the years continue to unfold. I hope we can get together in a dance class soon, perhaps in NYC (and ideally hip hop, but a modern class will do).

To Lee Emrich, Samantha Snively, Megan Arkenberg, Clara Barr, Annette Hulbert, Lindsay Baltus, Ranjodh Singh Dhaliwal, Yasmine Hachimi, Ava Bindas, Stacey Sadan, Zoë Aspitz, Elizabeth Grant, Amanda Lindell, Katy Jarvis, and Joan Palmiter Bajorek—I am so grateful for your friendship, mentorship, commiseration, lengthy phone calls, writing and study groups, coffee, wine, day and weekend trips, dance classes, postpartum support…you know who you are. Thank you. Kate Jylkka, thank you for supporting me over the years in so many ways (writing support, teaching support, emotional support, postpartum support, etc.); no matter how near or far from one another we might be physically, I know I can lean on you. I am so grateful we were assigned the same Voorhies office in 2014.

To Amy Sagar, Aron Feingold, Emily Dolan, Katie Driessen, Emily Hartley, Laura Corbin, Brianne Wooldridge, Catherine Gardner Smith, Marla Woodward, Kayla Williams, Katie Broadfoot, and Cece McDonald. Thanks for chasing my dreams with me.

To Sam, Zack, and Violet Davis. Your unwavering support and interest in my work, your surprise birthday mimosas and delivery lattes, your commitment to feeding me while navigating my food allergies, and your being in the newborn trenches with me was a perfectly timed gift from the universe. Thank you for being all in with us.

I can't choose just one person to dedicate this to. This project is for me. It's for my husband, Oakley, and my son, Max, who keep me grounded, make me laugh riotously, and catch me when I fall. For my mom, Mary, whose deep love of reading and Jane Austen sparked this

trajectory. For my dad, Jim, who has always told me that I can do anything and that I am extremely capable. For my sister, Nicki, and her husband/my brother-in-law, Aidan, and for my brother, Jack. Each of you is my rock. This is the support system that got me to the finish line. How lucky I am.

Winnie the Pooh and Piglet too have reminded me countless times to take life, to take writing, to take motherhood day by day. Every day isn't sparkly, but every day can be a favorite day when I release myself from the pressure of the ticking clock and lean in. I'm so happy I've been able to live day to day in a land of mermaids, of bold adventurers, of long-lived women, and of magic and intrigue. Thanks to my 13-year-old self with her wacky idea that you could read and write for a living. I've accomplished her dream.

TABLE OF CONTENTS

Abstract	ii
Acknowledgments	iv
INTRODUCTION:	1
Biological Zombies: Living Fossils in History, Science, and Fiction	
CHAPTER I:	15
Slipping the Bonds of Time and History: The Mutable Mermaid	
CHAPTER II:	54
Racist Refusals of Coevality: The Mythic, White Underground in Hollow Earth Literature	
CHAPTER III:	86
Mind the Gap: Sedimentation, Queer Femininity, and Black Specters	
CODA:	122
"Shadows and Crossings": W.E.B. Du Bois's "The Princess Steel" and the Time of Mourning	
BIBLIOGRAPHY	129

Introduction

Biological Zombies: Living Fossils in History, Science, and Fiction

In 1859, Charles Darwin coined the term "living fossil" and captivated Victorians with the idea of a species existing unchanged for eons. Darwin originally described these "anomalous forms" in terms of natural selection in *The Origin of Species*, writing that living fossils "have endured to the present day, from having inhabited a confined area, and having thus been exposed to less severe competition" (Darwin 68). Or, in contemporary scientist's Nathalie Nagalingum's terms, "Living fossils and evolutionary relicts are surviving representatives of once diverse or abundant groups. They are noteworthy because they originated tens or even hundreds of millions of years ago yet have persisted with little morphological change" (796). To wit, a living fossil is an organism that closely resembles its ancestors because it has lived without much competition in terms of natural selection and has therefore not had to evolve; these organisms resemble their counterparts found in fossils. In this way, they embody "memories which escape from history" in their supposed evasion of evolution and ability to disrupt commonly held scientific ideas (Kristeva, "Women's Time" 14). Excited to reconcile accounts of human history with this geological history, nineteenth-century scientists began a search for these "genetic relics."

The search for living fossils was coterminous with geological and paleontological discoveries during the age of empire building.[1] While living fossils were of particular interest in light of the discovery of dinosaurs' bones as well as the importation of exotic animals from foreign locations, Darwin's texts also more broadly yoked the human and animal together and made the idea of living fossils interesting from an evolutionary biology perspective. In other

---

[1] Elucidating the connection between exotic animals and geographical imagination, Shu-chuan Yan writes that exotic animals generated "spectacular images of imperial outposts for Victorian consumption; these 'other' creatures captivated the Victorian imagination and cultural vision" (Yan 225)

words, in *On the Origin of Species* (1859), Darwin "inaugurated a kinship relation between the traditionally distinct categories of human and animal, engendering new possibilities for cross-species empathy while also provoking anxiety about the bestial potential within the human" (G. Braun 500). The "living fossil" therefore lends itself to theoretical inquiry because it inaugurates a more specific kinship relation between not just human and animal, but also colonizer and colonized, imperialist and encountered other. The "living fossil" becomes synonymous with atavism and evokes debates about missing links in humans' history. Excavating living fossils in nineteenth-century speculative literature reveals gaps in the stratigraphic record, gaps that are narrativized in fiction as a queering of the temporalities of civilizational progress. Indeed, commitment to a linear progressivist teleology accommodates—in fact often demands—another temporality associated with timelessness, stagnation, and the eternally primitive.

This project therefore focuses on geology, its stratigraphic record, and its literal and metaphorical gaps. Tobias Menely and Jesse Oak Taylor are similarly interested in mining the gaps in the geological record; they discuss these gaps, or "absences," using the geological term "unconformity," defined as "a gap or disjunction in the stratigraphic record that marks a period where no deposits were left or where sediment has been removed by erosion" (15). While this is the geological definition, they cite it as a useful theoretical term because this word and its implications for how to read meaning into missing information poses "an alternative to the linearity of periodization" and "gives form to the intersection of multiple temporalities, forces, or media" (15). Most importantly, reading with an eye toward unconformities "provides a model for reading *absence* itself as a site of meaning, a record or archive" (16). These gaps in the stratigraphic record—not only actual geological unconformities, but also incomplete fossil records and even scientific information lost in translation or withheld from the public account of

geological advances and archeological discoveries—enable me to read nineteenth-century speculative, geological fiction as narrative accounts of what can emerge from the moments in the rock record where time seems to be lost or bypassed.

These geological unconformities not only ask their interpreters to consider what was lost, but also reveal the queerness latent in that loss—what or whose stories get told, and what or whose stories are again entombed or erased in favor of perpetuating a particular narrative or history. In reading "absence itself as a site of meaning," I not only build on Menely and Taylor's stratigraphic reading practices, but also follow in the footsteps of queer theorists like Elizabeth Freeman. Freeman writes,

> If we reimagine "queer" as a set of possibilities produced out of temporal and historical difference, or see the manipulation of time as a way to produce both bodies and relationalities (or even nonrelationality), we encounter a more productively porous queer studies…[And] this queer studies meets critical race theory and postcolonial studies in its understanding that what has not entered the historical records, and what is not yet culturally legible, is often encountered in embodied, nonrational forms: as ghosts, scars, gods ("Introduction" 161).

Therefore if, as Jeffrey Jerome Cohen writes, "human history is a segment cut from an overwhelming [geological] story" ("Anarky" 25), I read the speculative fiction analyzed herein as alternate segments of that overwhelming story, as fictional accounts of her/histories that have not entered the historical record. These narratives' histories are important because they trouble the "stories chosen for preservation" that "speak loudest [and] bestow an enduring but flattened shape on history," a form which "comes to seem, through long tradition, an inevitable plot line.

Yet much remains and even flourishes within the billows and whorls surrounding such archives" ("Anarky" 27).

To put it differently, this project explores fragmented history. Ronald Beiner, summarizing Walter Benjamin's "Theses on the Philosophy of History" (1940), writes that the "historical past had always been analyzed in terms of *what is to be*. Benjamin strictly reverses this perspective: historical materialism is not to be defined by a certain relation *to the past*, namely, a redemptive relation" (Beiner 424). However, he then states, "Historical materialism is a way of comporting oneself, not toward the totality of the historical process, but toward certain instants of the historical past: to make the fragments whole again" (424). This summary of Benjamin is contradictory—if Benjamin's historical materialism is not one defined by redemption, then neither is it one that seeks to make the fragments whole, for wholeness is a form of redemption. The fragments cannot be made whole, they can only, as Benjamin states, flash before us in almost the same instance that they are again lost: "to articulate the past historically does not mean to recognize 'the way it really was' ... It means to seize hold of a memory as it flashes up at a moment of danger" (Benjamin 255). I build on Benjamin's notion that history is not linear and cannot be rendered causally. This project thereby probes colonialist adventure fiction to analyze the unconformities—the gaps in the record, the lost deposits—that introduce fissures in the certainties of existing narratives, identities, and received truths. In other words, I look for ghost stories, but only occasionally for those specters that actually float through floorboards.

Nineteenth-century speculative fiction not only addressed science's impact on cultural evolution, but also made space for stories erased by geological accounts. In refusing to fit within straight—both temporally linear and heteronormative—narratives, the stories analyzed herein

demand that their characters appear to emerge from a deeper, asynchronous time. I am invested in the narrative responses and analogues to environmental encounters and am intent on emphasizing that our hegemonic historical narrative is intimately tied up with how queerness and racial alterity are constructed through scientific rhetoric. I redirect Anthropocene readings, however, because I look back to the primal scene of the climate crisis not primarily to trace how we have arrived at our present, but rather how this foundational moment in geology shows us that so-called secular—"homogeneous, empty" (Benjamin 262)—time was always already fissured by lost, repressed, and disavowed events.

The notion of living fossils also gives form to this latent idea in the Victorian psyche that the past can intrude into the present, an idea that was taking shape in the zeitgeist and was verbalized in Sigmund Freud's early work. For example, in *Studies in Hysteria* (1895), Josef Breuer and Freud analyze what we would now call PTSD, which they term "traumatic hysteria."[2] They write that they "are bound to assert that the psychical trauma, or more precisely, the memory of it, operates like a foreign body which must still be regarded as a present and effective agent" (96). The idea that memories of the historical or psychic past can persist was therefore not limited to geological debates about living fossils. Geology and its long durée caused a marked confrontation with deep time, and living fossils, dinosaurs' bones, (mega)fauna, and colonized others were cast as specters of other times and other modes of being that both excited and terrified a Victorian audience desirous of "locat[ing] 'otherness' in an exotic landscape" (Yan 225). Living fossils and missing links mark a prehistory to the Freudian reconceptualization of time, one that similarly intrudes into the present and elucidates the impossibility of not

[2] PTSD/Traumatic hysteria is the physical manifestation of symptoms triggered by an encounter with an event, object, or person who emblematizes a traumatic event from the past. These traumatic encounters often manifest as intrusive memories.

incorporating the other—be it our other selves, specters of the past, or the other we are directly confronted with—into our present.

Geology thus became a method of putting time back in its place. Rather than succumb to the possibility of a history that decenters humans and a future of species extinction, geologists, politicians, and the public sought to control the interpretation of geological time, and, in doing so, preserve class, gender, and race distinctions; this was preferable to allowing the breakdown of those distinctions to potentially alter intra-human interactions. Stratigraphy in particular appealed to Victorian public interest because its emphasis on linearity lent itself nicely to the maintenance of sedimented social hierarchies. James Secord writes that "In 1841 *Punch* made the point ridiculously concrete by compiling a stratigraphical column of social classes, from 'people wearing coronets' at the summit to 'tag-rag and bob-tail in varieties' at the very base" (*Controversy* 34); Secord here highlights how stratigraphy was analogous with social stratification. And the British class hierarchy was not limited to England itself. Shu-chuan Yan writes,

> [T]he British exported their imperial society to the ends of the earth in an ornamental mode during the age of empire-building. Their world vision was largely shaped by cultural norms and ideological forces—all the world was subdivided and graded according to a Western conceptual map. Since the British conceived and understood their metropolis hierarchically, they conceived and understood the periphery in the same way—the Empire in this sense was a hierarchical enterprise (225).

Sedimented social hierarchies were important on both sides of the Atlantic; stratigraphy served myriad purposes, including propping up territory expansion and Manifest Destiny,[3] which was accomplished most often through Indigenous removal. Dana Luciano writes that "scientists sought to correlate each new [geological] discovery with existing stratigraphic knowledge and to systematize each successive era, using deep time to make visible 'one grand line of succession'"—one grand line of *white, "civilized"* succession—since the "'inevitable' processes associated with natural history also propped up such policies as Indian removal and westward expansion" ("Tracking Prehistory" 175, 176). Stratigraphy was thus appropriated by those interested in adapting its hierarchical and linearizing possibilities to maintain the existing race- and gender-based class structures. Mediated by scientists, politicians, and the general public, and focused on stratigraphy, geology lent itself to reifying white supremacy narratives and bolstering social Darwinism.

Geology was not only used to maintain social stratification, but to also keep time linear (or at least have it present as linear via regulated, repetitive cycles of action) so that the rhythms in which people lived their lives be maintained and viewed as normal, internalized "somatic facts" (Freeman, *Time Binds* 3). Stratigraphy contributed to the formation and prioritization of, in Freeman's terms, "chrononormativity," defined as "a mode of implantation, a technique by which institutional forces come to seem like somatic facts. Schedules, calendars, time zones, and even wristwatches inculcate … 'hidden rhythms', forms of temporal experience that seem

[3] The United States' active period of Manifest Destiny is said to have begun with the War of 1812 and "ended" with the acquisition of Alaska in 1867. Manifest Destiny as an ideal, however, lived on in the American consciousness and informed the United States' imperial expansion. Many scholars agree that the United States became an imperial power through and after the War of 1898, which resulted in the annexing of the Philippine Islands, Guam, and Puerto Rico, and soon thereafter (albeit through a different campaign) the addition of Hawai'i. For one thorough history of American imperialism, see Paul T. McCartney's *Power and Progress: American National Identity, the War of 1898, and the Rise of American Imperialism.*

natural to those whom they privilege" (*Time Binds* 3). Freeman highlights how those in a position of privilege in the nineteenth-century became preoccupied with controlling how human bodies responded to and operated within strictly controlled time frames.[4] Living with an internalized, cyclical clock effects historical linearity—if each day one rises, eats, works, sleeps, and repeats, then it is more difficult to recognize how one has been engrouped and how society privileges marching forward rather than turning toward the past. But "even Foucault, the inspiration of social constructionists," writes Carolyn Dinshaw, "connected affectively with the past" (Dinshaw et al. 178). Dinshaw has stated that her work focuses "on the possibility of touching across time, collapsing time through affective contact between marginalized people now and then" and suggests "that with such queer historical touches we could form communities across time" (178). While geologists sought to linearize history, they simultaneously revealed the possibility of collapsing time and of effecting contact between the lost groups "now and then." They unearthed the lost deposits.

In revealing that "set in the context of either solar, geological, or biological time … [humans] are little more than *flickering instants of time*" (Oelschlaeger 110), geology also endangered humans' very method of extracting meaning and purpose from human existence. Luciano writes that "the depth of geological time imperils any narcissistic attachment to the superiority, or even the self-evidence, of given human structures of meaning" ("Geological Fantasies" 276). The desire for scientific and social order points to what Secord, Daniel L. Smail, and others have identified as scientists' intense recoiling from deep time as it became

[4] To quote Max Oelschlaeger, "I must note that there is a fine irony here, for our conceptions of geological, biological, and ecological time themselves exist within a civilizational framework, constituted primarily by professional communities that are themselves subject to the influence of psychological, economic, and political factors. The very notion of geological time, that is, time on the order of millions or tens of millions of years, did not exist as recently as two centuries ago. The nineteenth century is perhaps as much marked by the emergence of the notion of geological as biological time" (109).

commensurate with continuous geological and archeological discoveries. Geologists chose to focus on what felt like more manageable data—"the stratigraphical succession" explained with "maps and sections" (Secord, *Controversy* 4)—rather than engage with the implications of their discoveries.

Even historians tried to define deep time in terms of a human history with a definitive start date: "Over the course of several decades in the mid-nineteenth century, the great historical sciences—geology, biology, paleoanthropology—were made or remade as the bottom dropped out of time, exposing a nearly endless vista. Yet in those early decades, the discipline of history recoiled from that vista, fashioning instead a view of history that begins with the rise of civilization" (Smail 1). Aaron Worth, incorporating Smail's research, claims that historians latched onto the concept of prehistory as a way to justify their attachment to a shallower history, one that managed to fit within the bounds of biblical chronology and separated itself from the nonhuman, or at least "uncivilized," by hinging the definition of the human on writing as a marker of civilization (Worth 218). Historians and scientists alike, therefore, were interested in doubling down on a view of history that could be demarcated as pre- and post-human, focusing on smaller details, and straightening out the timeline rather than leaning into deep time.

The ensuing chapters focus on precisely those gaps in the stratigraphic record where no deposits were left—on geological unconformities. They look to literature as an alternative record of those deposits. As geologists constructed a linear historical timeline that subsumed unconformities, speculative fiction authors, particularly in their "lost world" stories, harnessed the imaginative possibilities of such unconformities. Actual geologic unconformities afford the possibility of discovering stories uncharted, literally and metaphorically, in the rock record; fiction imagines queer and decolonial histories in Victorian geology's gaps. This project,

therefore, tracks the "living fossils" these authors conjured while geological history was still young and malleable: "missing link" mermaids; buried, inner-earth people; and ancient Black civilizations that seem to emerge from the rocks themselves. If not for the gaps deemphasized by geologists in scientific practice, adventure novels in which heroes sally forth to excavate lost treasure or uncover the (supposed) remains of ancient civilizations would not be as tantalizing. It is precisely these holes in the geological record in which fiction best operates, because they can be filled in by the imagination.

I probe the stories written out of the record, or rather the stories hidden underneath the primary narrative. According to R. Lydekker in the 1893 edition of *An Illustrated Magazine of Science*, tales that regale the reader with details of "the survival of ancient types in remote corners of the earth or the abysses of the ocean" pique(d) the most interest. So I focus on the genres that send adventurers to the ends of the world, or to its insides and undersides: nineteenth-century, transatlantic children's literature and adventure novels. This project also enacts its own kind of adventure. Like the characters herein, I travel across time and space to create an archive of characters unbound from linear time and human mortality, characters whose bodies do not register the effects of aging and whose consciousnesses can live beyond their ephemeral corpses. Moving from 1838 to 1913, and roving back and forth across the Atlantic, I gather characters who range much farther afield than their authors. I analyze nineteenth-century novels not only because the "genres of science fiction and fantasy are often said to have originated in the nineteenth century" (Miller 143), but also because speculative fiction authors use gaps in the geologic record as sites for divergent worldbuilding, writing stories that contest dominant, white, progress narratives to imagine what knowledge might become available if remains could speak. However, these authors often are not intentionally deconstructing dominant narratives. Rather,

the narrators act as the voice of stratigraphy; in documenting their travels, the primarily white, male narrators reify colonial narratives and underscore white superiority. Indeed, much of the language in the novels I study is blatantly racist. These racist novels are worth plumbing, however, because ignoring them or "concentrating only on how these fictions reflect already existing racial ideologies destines us to our ongoing participation in the structures of our racial worlds" (Jerng 11). By bringing the white narrator into contact with representatives from other cultures, real and imaginary, the novels inadvertently reveal who and what is left out and disappeared in favor of maintaining progress-oriented linearity; they exhume the ghosts.

I begin with mermaids in children's literature because mermaids reveal human connectedness with the more-than-human world. Mermaid stories register questions and concerns about contagion and national identity through the creatures that geology does not contend with, "animals" real and imagined that cannot be neatly categorized. While the figure of the mermaid is timeless, the Victorian mermaid indexes fears of human permeability, fallibility, and ephemerality—essentially, the fear that each of us will barely, if at all, be remembered in Earth's long history. I then move to peoples of the underground, characters in the hollow earth genre, a subset of adventure fiction that incorporates utopian themes. Hollow earth narratives treat living fossils not as anomalous creatures, but as original, Edenic peoples whose physical and temporal distance from the surface have allowed them to flourish in ways that surface peoples cannot. In hollow earth narratives, the inner-earth civilizations, like living fossils, are safe from outside threats because it is extremely difficult to locate and visit them. Hollow earth narratives allow for analogy in ways that mermaid stories cannot; while mermaids elicit humans' fear of ephemerality and degeneration, long-lived humans make surface dwellers confront the elusive nature of modernity as well as those who are erased in favor of perpetuating a particular

kind of future. Finally, I move to novels that index Black experiences and depict Black characters as arising from the earth itself. These novels prove to be veritable quarries of living fossils: reincarnated and immortal humans that embody deep time, people who refuse to be relegated to history's annals. In these novels, it is as if the rocks that are missing from the unconformity escaped sedimentation in the form of living peoples who can voice the very prehistories geologists were so interested in writing out of the record. Each of these chapters also primarily focuses on female figures, for it is the girls and women in the novels who are set up as the true record keepers and emissaries of deep time, even if it is a male voice that most often narrates the story. Listening to women is another way in which we can fill in the cracks.

My first chapter considers a figure that sits at the intersection of geology, cryptozoology, and myth: the mermaid. She—for rarely is the story of a mermaid in fictional renderings or "real sightings" a male—is a body that transgresses taxonomy and lives at the limits of imagination and on the cusp of science. By positioning the mermaid as a cryptid, I argue that the mermaid is a figure that by definition harbors and is a harbinger of deep time, a creature supposed to be from "the before" and to persist into some "after." Her half-human form prompts Victorian fears of degeneracy, and her ability to break free from a typical human lifespan and exist in a form of female monumental time marks her as definitively other. In other words, by emerging as if from the evolutionary timeline itself, mermaids displace the present moment by forcing whoever interacts with them to face the transience of human existence. This chapter pairs Hans Christian Andersen's *The Little Mermaid* (1843) and Edith Nesbit's *Wet Magic* (1913) and aligns Victorian concerns with moral and bodily contagion with the contemporary environmental (green) humanities and blue humanities, theories that emphasize the individual's bodily permeability and posit water as a conduit of human and environmental interrelation.

My second chapter examines Mary E. Bradley Lane's *Mizora: A Prophecy* (1890), a text that belongs to the hollow earth genre. The hollow earth genre is a subset of adventure fiction—the purview of my third chapter—in which a narrator coded as a scientist seeks an entrance to the center of the earth and relays what s/he finds on the journey toward and into that center. This chapter's argument is two-fold: first, that hollow earth narratives rhetorically subsume Indigenous identities and experiences by rewriting history to cast Indigenous peoples as historical relics—people still living, but somehow unevolved; second, that *Mizora* figures whiteness both as an original form of humanity and the natural outcome of human evolution. Vera, the white, female narrator, enacts what Heidi V. Scott has termed "vertical colonialism," or the act of feminizing and othering native peoples by white imperialists to claim their underground resources. However, while this novel is threaded with nativist worries about racial degeneration, in the end Vera accidentally centers Indigenous existence by returning to and trying to rationalize her experience with and behavior toward the Indigenous people she encounters.

In my third chapter, I build on stratigraphic and queer reading practices to examine two stories as responses to new geological accounts of the nonliving and nonhuman earth. By way of comparison to H. Rider Haggard's *She: A History of Adventure* (1886), in which white adventurers find an Egyptian queen who looks after the preserved bodies of an original, white Africa, I arrive at Pauline Hopkins's *Of One Blood: Or, The Hidden Self* (1902). This project concludes with Hopkins's novel because Hopkins turns the adventure genre on its head: she uses and shifts the novel of imperialism away from a narrative of white progress and toward one of an enlivened, communal African (American) identity and consciousness that is in and of deep time. I argue that each novel's queen is *chronomorphous*; these two queens embody monumental time

and live beyond the typical constraints of the human body and its lifespan. They represent and voice the stories thought lost to the unconformities, and thereby disrupt developmental time.

Analyzing transatlantic nineteenth-century fiction reveals a preoccupation with burying narratives that do align with established institutions within the stadial[5] historical model. Cohen writes that "stone is the foundation of story at every archeological layer of human history … Neither dead matter nor pliant utensil … stone brings story into being, a partner with language (just as inhuman), a material metaphor" (Cohen, *Stone* 4). What remains when the earth shifts and populations change is not just fossilized remnants of what came before, but also absences in the rock record that are rife with possibility. The fossil is entombed in stone, and the living fossil seems to emerge from that stone to disrupt genealogical narratives and linear time. In reading the stories that exist in the hiatus we can consider asynchronous narratives, and while we cannot recover lost deposits in any straightforward way, they nonetheless make themselves felt as pressure upon the present.

---

[5] "Conjectural history was most exhaustively discussed by Scottish Enlightenment philosophers, its most significant form being stadial theory. The idea that different societies or nations achieved varying levels, or stages, of economic and cultural progress was not new. Early precedents for such observations already had been made in antiquity: for example, in the works of Thucydides, and particularly in those of Ammianus Marcellinus. But the elaboration of this type of history analysis in a truly systematic fashion occurred only in the second half of the eighteenth century. Enlightenment stadialism claimed that human societies universally developed according to a generally fixed stadial pattern. The number of stages varied, but the most popular version consisted of four: a hunting stage, which then moved to a shepherding existence, then an agricultural one, finally arriving at the most advanced stage, that of commercially-based civilization" (Wolloch 252-253).

Chapter I

Slipping the Bonds of Time and History: The Mutable Mermaid

Introduction

"Our breath is the heave and pull of the sea on a black night … We are foment, white foam spreading and leaping; we dash against the crag and are dispersed. We are the long briny hiss of tide retreating from the land."

- Imogen Hermes Gowar, *The Mermaid and Mrs. Hancock*, 224

In *The Mermaid and Mrs. Hancock* (2018), Imogen Hermes Gowar recycles and reimagines the Victorian mermaid,[6] characterizing the mermaid as water incarnate, as in the above epigraph. Speaking in the first person plural, the mermaid is simultaneously a singular, physical body that can be caught in a net, and a watery "we" that, like "white foam spreading," dissolves into its surroundings. She is conflated with "the water" that "heaves," and described as many individual atoms or parts that "like a shoal of tiny fish … forms and re-forms" (385). The mermaid laments: "Ay me! Once I was we … I find myself an I. An only. How has this come to be?" (251-252). Even in her singular form she is in and of the water, a flickering sensation and shifting presence. She is a "body" that, in the end, becomes only an illusion and must be taken apart, bucket by bucket, and returned to the sea before she sucks all joy out of the humans in her vicinity. As she dissolves back into the ocean, "rediscovering her atomised self" (Gowar 477), she becomes a stream: "I am here; and here; and here; … Rush, rush, we rush, a sparkling stream through rock and moss, deep in the cold stone of the earth" (480). This final image of the novel underscores the difficulty of maintaining stable, bodily boundaries; the mermaid never coheres. I begin with this contemporary adaptation of the Victorian mermaid because this mermaid makes

[6] *The Mermaid and Mrs. Hancock* is ostensibly set in 1780, but Gowar draws from and her novel resonates with Victorian mermaid stories, and she has said in interviews that she was loosely inspired by the history of the Feejee Mermaid, a "real" mermaid first exhibited in London in 1822.

transparent a latent anxiety that suffused the Victorian period (and has followed us into the twenty-first century): a fear of the transience of human body and soul.

As this chapter argues, the recurring image of the porous mermaid in 1800s ephemera makes visible cultural concerns about humanness, Englishness, and death; her presence registers worries about moral and physical sickness, national character and national superiority that were particularly present with the expansion of empire, and a desire to outwit time and prolong life. The mermaid's physical, visible hybridity speaks to the Victorian "bourgeois subject's obsession with the maintaining of clear and distinct boundaries: boundaries which, despite all efforts to preserve them, are incessantly in danger of collapsing entirely, and worse, in danger of being corroded from some internal disease" (May 16). Unlike other monstrous figures, the mermaid's compositeness is always on display; her body and unclear lifespan defies "clear and distinct boundaries." While the figure of the mermaid is timeless, neither born in nor bound by the Victorian period[7]—as demonstrated by Gowar's contemporary interest in the figure—the Victorian mermaid specifically registers these fears of human permeability and impermanence, which were evinced by the emerging field of geology and humans' confrontation with deep time.

In what follows, I first engage the history of Victorian mermaids as it intersects with the unfolding of geology as a codified discipline, and the cultural concerns mermaids indexed, including questions about the human body and its boundedness. I then look to a fin-de-siècle mermaid, Edith Nesbit's Princess Freia in *Wet Magic* (1913). Freia epitomizes Victorian worries about affectability, but she is unlike her predecessors because she is fallible. Presented as a half-,

[7] Mermaids abound in literature across time, including Homer's *The Odyssey, One Thousand and One Nights* (collected and translated by Antoine Galland from 1704-1717), Herman Melville's *Moby Dick* (1851), H.G. Wells's *The Sea Lady* (1901), J. M. Barrie's *Peter and Wendy* (1911) and L. Frank Baum's *The Sea Fairies* (1911). This is a partial list; the aforementioned are meant to demonstrate both mermaids' persistence across time in literature, and the resurgence of mermaids in Victorian and transatlantic fin-de-siècle literature.

and at times whole, *human* rather than a half-*fish*, she becomes influenceable. This is a fearsome trait because Nesbit's mermaids' self-awareness of their porousness and affectability allows them to manipulate memory and thereby linear time. Additionally, they pass this ability to tamper with time to the human children—the children's status as drowned allows them to operate outside of terrestrial time and speaks directly to porosity's most feared outcomes: a loss of self, and death. These themes are thrown into stark relief in Hans Christian Andersen's *The Little Mermaid* (1843).[8] Andersen's mermaid is contamination made flesh—in a more tragic key, she reveals concerns about the unstable, at-risk human body. Whereas Nesbit's mermaids make light of death and return the children to linear time, Andersen's little mermaid overvaults the temporality of human mortality; by leaving physical traces of herself behind in the water and the earth and transcending her bodies to become an air spirit with an opportunity to obtain immortality, she (re)enters monumental time. Like Gowar's atomized mermaid, Andersen's little mermaid disperses, again becoming a "we," and intimately part of nature. In her physical transformations and relentless pursuit of immortality, she questions and defies death's constraints, exploring for a Victorian audience what it might mean to question and live outside of linear history.

[8] *The Little Mermaid* builds on mermaid canon, and has elements of much earlier mermaid stories. For example, in "The Story of Jullanar of the Sea" from *One Thousand and One Nights*, a beautiful mermaid princess walks out of the sea, is mistaken for a human and enslaved, and eventually makes her way to a king who buys her and forsakes all of his other wives and concubines. The merpeople in this story are more like humans who can live and breathe underwater and are able to emerge onto land and produce offspring with terrestrial humans. Hans Christian Andersen's *The Little Mermaid* has many details reminiscent of "Jullanar of the Sea," including a mermaid who emerges onto land and is able to walk on two human feet, the possible union of a mermaid and human prince, and a mute mermaid. In "Jullanar," the mermaid is willfully mute for a year, mourning the sea and her family that she left behind in a moment of spite for her brother, whereas in *The Little Mermaid*, the mermaid's tongue is cut out.

The Mermaid: Cryptid, Anomaly

While the mermaid only makes it onto some cryptid[9] lists, with both her fishy tale and long, elusive history riddled with sightings, tales of capture, and exhibitions of "real" mermaids, she fits Bernard Heuvelmans's definition of a cryptid, here glossed by Lorenzo Rossi: if "an animal belongs to a potentially unknown species, to a surviving form of a species that is considered extinct, or to a known species living outside its recognized area of distribution, and there is indirect evidence of said animal, then this organism should be situated within the field of cryptozoology, and thus can be considered a cryptid" (Rossi 579). Rossi add that "cryptozoology mainly emphasizes entities whose biology and ethology strongly clash with current scientific knowledge and whose existence is not supported at all" (579). While not technically a living fossil in the same way as documented fauna that have been proven to barely diverge genetically from their historical counterparts, mermaids cast as cryptids, often conflated with missing links,[10] evoke a genealogical debate about human evolution: in many mermaid texts, mermaids pass as human and live in the ocean's depths outside humans' "recognized area of distribution," and what is in part so disturbing about mermaids is that they make two-legged humans question the human-animal boundary and what being human really entails. When it comes to mermaids,

[9] Cryptozoologists research cryptids, creatures like the Loch Ness Monster, Bigfoot, Chupacabra, the Yeti, the Kraken, and more that exist and persist in the imagination and on the cusp of science. Belgian zoologist Bernard Heuvelmans is typically acknowledged as the father of cryptozoology, although his original work does not use that term. He published *Sur la Piste des Bêtes Ignorées* in 1955 and the English translation, *On the Track of Unknown Animals*, in 1958. Though Heuvelmans was writing in the 1950s, he roots his ideas in the nineteenth century; he specifically combats naturalist Georges Cuvier's 1812 claim that no new large animals remained undiscovered (Coleman 16).

[10] Definitions of living fossils and conversations about cryptids overlap with theories of missing links, but living fossils and missing links are not synonymous. Remy Melina explains that the technical term for missing links is "transitional morphologies"—the genetic and evolutionary steps a species took to get to its modern or "mature" form. For a detailed example of a species' transitional morphology, see John B. Scannella's "'*Nedoceratops*': An Example of a Transitional Morphology." A true missing link, however, would possess the "in-between" evolutionary properties of both the ancestors' original traits and the evolved descendants' traits—a genetic hodgepodge—thereby showing a clear biological connection between the two, versus a primarily cosmetic connection.

“evidence” of their existence abounds in nineteenth- and early-twentieth century newspaper and eyewitness reports, while simultaneously their “existence is not supported at all.” Or as little Bernard from *Wet Magic* puts it, “There’s always been Mermaids, of course, only people didn’t know it” (Nesbit 33).

The most famous example of a “real mermaid,” and an example of the popularity of the mermaid in the Victorian period, is the Feejee Mermaid.[11] The Feejee Mermaid—or rather, her corpse—was purchased by a man called Captain Eades from merchants who claimed she came from Japan (Bondeson 40). Captain Eades “did not doubt for a moment that it had been a Maid of the Ocean,” and was obsessed with acquiring her, eventually selling, without the merchant’s authorization, “the ship *Pickering*” and all of its cargo “for 6,000 dollars” in order to buy the mermaid (38). Once he returned to London in 1822, Eades showed the mermaid with great success due to John Philip D. D., a Scots Congregationalist minister who “claimed to have examined Captain Eades’s mermaid and dispatched his description to a number of periodicals” before Eades arrived in London (Laurent). Throughout “the autumn of 1822, the mermaid was London’s greatest scientific sensation: people thronged to see it, and most newspapers had articles about ‘the remarkable stuffed mermaid’” (Bondeson 41). This was not the first mermaid to have been captured, or so the story goes:

> As early as 1403, a living mermaid had been caught off Edam in Holland. It lived on dry land for several years, dressed in women’s apparel, and soon learned to spin. Its religious education was not neglected, and it is recorded that although the mermaid did not speak, it always made devout reverences with its tail each time it passed a crucifix. In 1531, another live mermaid was caught in the Baltic and was

[11] “The mermaid! | now exhibiting at the Turf coffee-house | 39 St. James’s Street” is an 1822 flyer with an artistic rendering of the mermaid that announces her current whereabouts.

> sent as a present to King Sigismund of Poland, where it lived for 3 days and was seen by all the court (41-42).

These predecessors set the stage for Eades's initial success with the Feejee Mermaid, but that success wound down after he had the mermaid examined. Zoologist William Clift proved that the mermaid was a "palpable imposition … The cranium and torso belonged to a female orangutan of full growth [and] … the fish part of the mermaid was the entire body of a large specimen of fish" (44). The Feejee Mermaid nonetheless toured Europe well into 1824 before retreating into obscurity and reemerging in 1842-1843 when P.T. Barnum bought and displayed her in New York City before sending her on a tour of the Southern United States.

One likely reason for the Victorian obsession with mermaids is the emergence of geology: this new field shifted definitions of "evidence" and "expert," in many ways legitimizing the junction where folklore meets science that the mermaid inhabits. In "being open to such a wide range of participants" including, but not limited to, physicians, aristocrats, engineers, and farmers, "geology was in danger of gaining a reputation for philosophical promiscuity" (Secord, *Visions* 140). Although "the configuration of scientific authority at the turn of the century" shifted, as Katja Jylkka writes, "from a more democratic, less specialized set of fields to a professional system," "[t]he beginning and middle of the nineteenth century had seen the creation of a nonspecialist, middle-class audience for scientific ideas through new publications, public lectures, and overall, a novel commitment to public education" (209). As geologists sought to make the field more specialized and define "evidence," they also inadvertently carved space for first-hand reports counting as field evidence, and thereby for the pseudoscientific and mythological to flourish.

The Victorians were eager to be part of the new age of geological discovery, and excited to be able to contribute "evidence," especially to newspapers. A quick search for "mermaids" in the Library of Congress online archives alone produces 1,260 hits in *The New York Tribune* from 1886-1924, 1,070 in *The New York Herald* from 1840 to 1920, and 4,539 hits total in all newspapers from 1900-1949. These numbers are just from American newspapers. The British Newspaper Archive produces 61 pages of results for "mermaids," dated 1700-2020; 60 of these pages cite 20 different newspapers per page, most with hundreds of hits.[12] A significant portion of these are tales of sightings and stories of personal experiences with mermaids ("He Had the Mermaids"). While many of the stories of mermaid sightings are tongue-in-cheek, some are written in earnest. The September 8, 1809 edition of *The Kentish Gazette*, for example, published letters written by Miss Mackay and Mr. Munro. Each reports having seen a mermaid on the coast of Caithness, North Britain (Caithness, Scotland), and neither wants to appear foolish; they hedge their bets by stating that they know their stories sound outlandish and alone could not stand as evidence, but, when combined, they hope their stories corroborate one another and can be considered legitimate evidence for mermaids' existence ("Mermaids, or Sea-Women"). The tone of both letters is meant to convey the seriousness of their reports, and the authors do not speculate about mermaids' existence in general or ask for the reader's opinion. These letters point to a particularly Victorian concern with mermaids' existence, and a desire to approach the possibility scientifically.

[12] These results include any reference to mermaids, such as theater productions of plays like J.M. Barrie's 1904 *Peter Pan: or, the Boy Who Wouldn't Grow Up*, ("Theatrical Gossip"), popular sheet music involving mermaids ("Mermaid's Song"), advertisements for products named after mermaids ("Mermaid Soap"), and comic strips about mermaids (*The Topeka State Journal*), etc. In persisting across time and space in these newspapers, the mermaid hardly ages and remains endlessly fascinating.

The mermaid was, like the Loch Ness Monster, "made possible" by the unearthing of dinosaurs' bones and shifting ideas of what constituted scientific evidence, and her existence was supported by the Loch Ness/sea-serpent narrative[13] and similar "sightings" of dinosaur-like creatures. These non-expert contributions and the general excitement about dinosaurs and other megafauna was driven by a human yearning to understand the past, whether through creationism or Charles Lyell's theory of uniformitarianism—the idea that Earth's surface and its features are produced by physical, chemical, and biological processes and minute changes over long periods of geological time. As a figure that collapses past and present, the cryptid therefore became an ongoing fascination and possibility for Victorian audiences. Jylkka writes of cryptids, here of the Loch Ness Monster,

> Debates about the age of the Earth, how to interpret the significance of that age, and the nature of fossils all opened up space for disagreement about the possibility of dinosaurs' survival, as well as the possibility that the existence of modern dinosaur relatives could explain centuries of sightings of giant, strange creatures in oceans and other large bodies of water. The idea of "persistence," the

---

[13] Nesbit in *Wet Magic* capitalizes on the public's knowledge of "sea-serpent season": "By 1887, 'sea-serpent season' was then not only literally descriptive of a time of increase in sea serpent stories, but also more generally synonymous with an increase in fantastic or ludicrous stories" (Jylkka 222n33). Nesbit's fictional news report heralds, "At this season of the year, which has come to be designated as the silly season, the public is deluged with puerile old-world stories of gigantic gooseberries and enormous sea-serpents. So that it is quite in keeping with the weird traditions of this time of year to find a story of some wonder of the deep, arising even at so well-known a watering-place as Beachfield" (Nesbit 13). This moment in the novel links sea serpents with mermaids, placing them in the same category of "puerile old-world stories." The novel, however, goes on to explore a "real" encounter with a mermaid, thereby engaging the cryptozoological historical imagination by riffing on the many first-hand reports of mermaid sightings and drawing from a deep mermaid literary canon. Nesbit plays with the very idea that keeps the mermaid alive: that even though it seems ridiculous to believe in mermaids, it is hard not to feel excited by and want to pursue the possibility of their existence when they continue to surface in the cultural imagination.

> survival of ancient species ... was both contested and deployed as evidence for the survival of the charismatic megafauna of prehistory (211).

The mermaid as a half-human, however, is markedly different from a giant sea serpent. What linked sea serpents and the mermaid in the Victorian cryptozoological imagination was not only that they both lived in the deep ocean, were hard to come by, and had persisted in living through geological epochs, but also their hybridized nature. Taxonomic language quickly evolved as science and technology accelerated biological discovery, and fossilized remains of newly-discovered dinosaurs were often classified in terms of known species "such as 'fish-lizards' (i.e. ichthyosaurs) and 'almost-lizards' (i.e. plesiosaurs)" (France 97). Cryptozoologists adapted this language used for naming dinosaurs, and cryptids were likewise described as composite versions of known species.[14] The result was that Victorian paleontological discoveries and the hybridized language used to name cryptids "gave a level of scientific legitimacy to sea monsters that had hitherto not existed; nor has it since" (France 97). In other words, the shifting definitions of what constituted geological and paleontological evidence and the use of taxonomic language that

[14] Composite creatures ooze out of the pages of Gothic and early speculative novels. In H.G. Wells's *The Island of Dr. Moreau* (1896), the titular character is run out of England for his gruesome experiments on animals and lands on an island where he continues to try to turn animals into humans through physical transformation. No matter how hard he tries, he always believes he has failed when an animal succumbs to a base instinct, like eating raw flesh, after the physical transformation is complete. Wells's novel begs the question of what it means to be human: is it language, is it a soul, or is it some other essential "it factor" that separates humans from animals? Another famous composite creature made from multiple humans, but always cast as beastly nonetheless, is Dr. Frankenstein's monster in Mary Shelley's *Frankenstein; or, The Modern Prometheus* (1818). Wells's and Shelley's novels directly grapple with what constitutes "humanness" by having ostensible doctors mold composite creatures, whereas Robert Louis Stevenson's *The Strange Case of Dr Jekyll and Mr. Hyde* (1886) and Oscar Wilde's *The Picture of Dorian Gray* (1890) worry questions concerning the psychologically split self. While their characters are not made from other creatures, they analyze what happens when the beast inside a person surfaces; the animal is no less present in their novels, and these stories in particular emphasize the fear that an animal, a monster, or any nonhuman other might be able to inhabit a human body without our knowing; to this end, see, too, Richard Marsh's *The Beetle* (1897). These novels collectively support the supposition that the mermaid in her hybridity is threatening because of her outward, physical presentation as a composite creature that confuses the human/animal divide. Her alterity is always on display.

familiarized the layperson with the creature they were (supposedly) encountering, and gave them words to describe these anomalies, lent more credence to cryptids' existence in the nineteenth century than ever before or after.

As amateur scientists investigated cryptids, they paid particular attention to mermaids' hybridity, both to lend their pursuit authority and scientific legitimacy, and to try to establish what it was about a mermaid that made her less human (other than her fish half). A November 1822 edition of the *Carlisle Patriot* demonstrates that the mermaid's compositeness also begged questions of reproduction and evolutionary significance. The article jokingly begins, "This *composite* lady has got into the Chancery: the proprietors of her half-fish and half-flesh person have quarreled" (Scott). The author then details the mermaid corpse's appearance, but digresses from the facts of the case brought to the Chancery to speculate on how the mermaid, based on her appearance, could reproduce.[15] In doing so, the author tries to decide if the mermaid is more human than animal (without explicitly saying so): "How is the race to be continued? I presume mer-people are not immortal—are they viviparous? Or do they spawn?" (Scott). He seems perturbed by the idea that mermaids could nurse spawned young; he spends quite a bit of time analyzing the mermaid's "dugs," because the act of nursing, it seems, would render the mermaid more human, at least scientifically more mammalian, than fish. What additionally perplexes the author is the idea that a mermaid might have evolutionarily useless breasts, and he hangs his verdict that this particular mermaid must be a fake on this observation: "[W]hen we are told that organs and parts are so combined as to render them useless and cumbersome; then may we safely

[15] This is also interesting if we think of reproduction outside of its biological confines. Neel Ahuja, for example, formulates reproduction as a lateral assemblage of bodies, environments, carbon waste, and more, and thereby recognizes life as "ambiently queer" (372). Perhaps the mermaid is reproduced not by giving live birth or laying eggs, but rather by intersecting cultural understandings of what it means to be human and what it means to be an animal. She is a queer figment of our imagination.

assert that such a production does not exist—that such account is fabulous" (Scott). (This author would not have liked the platypus). While not dissimilar from other accounts of Victorian mermaids in its description of the corpse,[16] this article underscores that it is not the mermaid's compositeness in itself that makes the author decide it is fake, but rather the construction of this particular mermaid. Because the author cannot make evolutionary sense of what he is seeing, and cannot taxonomically classify the corpse, it therefore cannot be real.[17] Descriptions like these in the newspapers were meant to put the question to the reader: do you think this mermaid is the real one? Sometimes the author renders an opinion, and sometimes not. These reports kept the lay audience involved in the conversation, and the mermaid alive in the public imagination.

This emphasis on evolutionary anomalies suggests that the mermaid's alterity emerges, in part, in her relationship to time. Cast as an embryonic form of human life—a missing link—she surfaces in the Victorian present as a figure of a deeper geological past. Béatrice Laurent writes

---

[16] Most descriptions of mermaids detail the fish half's scales, liken the scales to a known species of fish, usually salmon, and then describe how the human half seamlessly or otherwise knits to the fish half. The description of the human half usually describes ape-like features. In the November 1, 1990 edition of *The Showman*, the author writes, "The late Frank Buckland tells us that at three different times he was able to minutely examine three different specimens of alleged mermaids, and that they were chiefly remarkable for the ingenious way in which they were put together. One of these he describes particularly. Its length, or her length, was twenty-five inches and was half fish and half human. The fish part was made of the skin and scales of a fish of the carp family, which was neatly fastened on to a wooden body. The arms were long and scraggy, and the nails were formed of little bits of ivory or bone. The head was about the size of a small orange, the mouth was ugly and displayed a double row of teeth which Mr. Buckland believed to be those of the cat-fish. The ears of this mermaid were pig-like, her nose was decidedly snub, and her touzled hair would have been the better for a brush and comb." This description differs in describing the fish half as a carp and adding in the wooden body, and is similar to other accounts in its description of the mermaid's "ugly" countenance with parts made likely from a monkey or pig.

[17] This *Carlisle Patriot* article also spotlights why the nineteenth century was ripe for the cryptozoological imagination. Even as he renders his personal opinion that this mermaid is not a real one, the author writes, "I grant that we are not authorized in setting bounds to the varieties of form in nature: that by experience alone we can become acquainted with different species; that we are not warranted in disbelieving the existence of any animal, merely because it has not come under our observation" (Scott). This premise is foundational to cryptozoology—we cannot assume an animal does not exist simply because we have not been able to examine one.

that the mermaid, at once proof of creation and evolution, appealed to religious and scientific leaders alike:

> The fixist understanding of the order of the Creation which dominated early nineteenth-century Western thought was governed by taxonomies, and taught men that animals and plants were what they had always been ... The evolutionist theory, on the other hand, proposed that, as missing links, mermaids illustrated the adaptation of animal life from an aquatic to a terrestrial environment ... Phylogeny located the mermaid in the great chain of beings as an embryonic form of human life (Laurent).

In emerging from this embryonic time, the mermaid threatens to dwarf the comparatively short human lifespan with her seeming evasion of evolution and death. The mermaids' status as a creature who seems to evade linear time speaks to the author's question in the *Carlisle Patriot* as well—"I presume mer-people are not immortal … ?" (Scott). The author is not sure. Drawing on H. Brink-Roby's work, which argues that naturalists and lay commentators used evolutionary theory to assert the existence of mythical creatures like mermaids, dragons, and other fabulous beasts, R. L. France too connects evolutionary theory to a resurgence in the Victorian period of a public interest in monsters and humanoids. The mermaid evolved in the Victorian period from myth to missing link, and thereby hovered on the edges of scientific discovery, always just out of reach.

With the emergence of evolutionary theory and the expansion of empire came attendant questions of national identity,[18] or what constituted both humanness and Englishness.[19] The Victorian citizen, that is, used the mermaid to work through the many aspects of identity-formation s/he was contending with. Neither woman nor fish, the mermaid aroused fears of foreign invasion of the national and individual self. The Victorian mermaid's popularity, and merchants' success in peddling and displaying "real mermaids" like the Feejee mermaid, was inextricably linked with a desire born from these anxieties and an interest in putting alterity on display. Part of the Feejee mermaid's allure is demonstrated by her name—she is labeled as being from Fiji, the South Pacific archipelago, an area few Victorians were likely to visit.

[18] Discussions of how a Victorian identity is entwined with national identity speak to contemporary theories positing that the individual is shaped by shared cultural norms from birth. Mel Y. Chen writes that defining one's subjectivity comes "with its attendant danger zones of nationalism, individualism, whiteness, and rather anti-animate preference" (237). Elizabeth Freeman roots her theory of chrononormativity in part in Foucault's works on the formation and regulation of the body politic in the nineteenth century and focuses on how time was collectively shaped: "Naked flesh is bound into socially meaningful embodiment through temporal regulation … And I mean that people are bound to one another, engrouped, made to feel coherently collective, through particular orchestrations of time" (*Time Binds* 3). Chen and Freeman both contend that the body and its identity are bound by easily permeated skin and are necessarily constructed (bio)politically; the body is not impermeable to cultural identity markers, especially temporal regulation that moves the body (politic) toward maximum productivity. We are born into a collective body and shaped by danger zones. Indeed, individuality was and is a construct of capitalist time that embroils us in a narrative of forward-marching progress, and drives us toward collective values, norms, and production.

[19] Before vaccines and germ-eradicating medical knowledge existed and made the body even more of a supposedly bounded, sacred, material entity, a debate about whether the body was self-contained and in what ways the mind could be influenced by outside sensations and environmental factors was at the forefront of philosophies of the self: "Indeed, the western medical tradition has viewed intrusion of this sacred space [of the human body] as a great evil, and this sentiment … has motivated the search for vaccines or other biochemical 'magic bullets' capable of wiping out offending 'germs'" (McMenamin and McMenamin 231). Beginning with John Locke in 1690, the self was one "constantly menaced by fragmentation — so much so that some eighteenth-century philosophers, most notably Hume, wondered whether the sense of having a coherent self might not be illusory" (Daston and Galison 223). So when, "circa 1800, this view of the self as fractious monarchy collided with the new Kantian views of the self unified around the will, the shock of the impact sent heads spinning" (227). The Victorian self was buffeted from all angles: philosophical, moral, scientific, and political. The human body was quickly and decisively rendered permeable even as the idea of what it meant to be oneself cohered in Kantian ethics. Daston and Galison provide a fantastic historical overview of the philosophical debate about what constituted the self. They analyze how conceptions of the self influenced ideas about what constituted "good science" and who could be considered a "good scientist." For more, see *Objectivity* (2007).

Indeed, those Victorians who "discover" mermaids generally do so in foreign waters; this way, whatever it is they bring back can be described as other, fearsome, ugly, and savage.[20] These physical differences as well as ontological liminality—proof of the mermaid's foreignness—is evidenced by her appearance in Victorian illustrations that combine fish tails with what look like "Asian or African or simply simian features, often from non-Western locations" (Cheng, "Sushi, Otters, Mermaids" 79).[21] Mermaids cast as missing links not only brought forth temporality concerns, but also racial and national concerns; the mermaid's explicitly human/animal hybridity and the typical emphasis on her ape-like features and fearsome countenance literalized phobogenic concerns.

The Victorian individual's fear of shifting bodily boundaries was symptomatic of a greater worry about the collapse of the British empire and foreign invasion. Stephen Arata writes that as the empire expanded, Victorians envisioned a "nightmare of reverse colonization" (629), a phenomenon produced not just by geopolitical fears, but also cultural guilt: "In the marauding, invasive Other, British culture sees its own imperial practices mirrored back in monstrous forms" (624). Mermaids' hybridity and atavism, and the human desire to parse her history and identify her evolutionary place, bolster the idea that the British feared decline, both personal and national,

---

[20] At Victorian freak shows "monsters" like Siamese twins or Joseph Merrick, the Elephant Man, were still considered fundamentally human, whereas the mermaid—a "contemporary form of human-animal hybridism"—"raised serious dilemmas about the ontological definition of human nature" (Laurent). Laurent's comment here—that these other "monsters" were still "fundamentally human," which set them apart from the mermaid corpses touring similar routes—underscores that even in discussions of human "others," what mattered most was that they were whole, human bodies devoid of animal(istic) parts. Mermaids in particular threatened the definition of humanness by "blurring human-animal distinctions ... [because in] their improper cross-species corporeality and ontological liminality, mermaids carry the implication that human beings are themselves 'composite creatures,' profoundly intertwined with other entities" (Mortensen 204).

[21] The human/animal divide was made more tenuous by Darwin. In *On the Origin of Species* (1859), "he inaugurated a kinship relation between the traditionally distinct categories of human and animal, engendering new possibilities for cross-species empathy while also provoking anxiety about the bestial potential within the human," and in *The Descent of Man* (1871) "he claims greater distance between a fish and an ape than between an ape and a human" (G. Braun 500-501).

and underscore that part of being "English" was maintaining an identity untouched by others' presence.[22]

The mermaid is not just an alluring, mythical "woman" built time and again in fiction from a long history of folklore, herself always a composite creature. She is a figure of alterity, something/someone both to wonder at and to fear, something therefore to be captured, taxonomized, and displayed. In the March 1888 edition of the *Canterbury Journal,* a sailor reports surviving an encounter with a mermaid during a storm at sea. He describes her song as unearthly and her visage as terrifying: "She seemed to glance up at as she passed with a hard, pitiless stare, as though she knew only too well that never again should any of our crew set foot on shore" ("Adventure with a Mermaid"). The crew survives and decides that they must have mistaken an "old ship's figure-head" for the live mermaid, and the wind through the ropes for her song. But so popular was this story of the mermaid with the pitiless stare that it ran in several newspapers in March 1884, including the *Congleton & Macclesfield Mercury, Cheshire General Advertiser*, *Kentish Times*, and *Lakes Herald*. In this story, the mermaid appears in the moments the crew is most terrified for their lives, a living testament to their seemingly inevitable demise at sea. This story's popularity helps illuminate what was so tantalizing about the mermaid: her presence is symbolic—her appearance is a harbinger of an unforgiving, final death.

---

[22] For more on Victorians' concerns with bodily boundedness and (foreign) contamination, see Gretchen Braun's "Empathy, Anxiety, and the Boundaries of Humanity" and Leila S. May's "Foul Things of the Night." Braun analyzes vivisection practices and Darwin's theories of evolution, arguing that both decentered the human and produced "anxiety regarding humanity's place within a destabilized hierarchy of creatures," yet also prompted "empathetic responses to the similarity and vulnerability of other bodies" (G. Braun 503). May considers moral and physical disease that arises in the British body and spreads outward through practices like sex work. Arata links contamination to empire most explicitly, claiming that "late-Victorian fiction in particular is saturated with the sense that the entire nation—as a race of people, as a political and imperial force, as a social and cultural power—was in irretrievable decline" (622). Arata, Braun, and May each consider how individual identity is entwined with nationality and ask what it means to have a specifically English identity if the definitions of "Englishness" and "humanness" are constantly shifting.

Wet Magic: A Tale of Five Dead Children

Writing in 1913, Edith Nesbit draws on this long history of mermaid folklore, sightings, and showings, and reinvestigates themes of bodily instability, contagion, and (child) death to explore iterations of selfhood that belie linear time. Edith Nesbit's tumultuous tale hinges on her five child characters—the four siblings, Francis, Mavis, Bernard, and Kathleen, and their tagalong friend Reuben whom they meet at the circus—and their earnest desire to see a real mermaid. On the train to their summer vacation, they read a newspaper left behind in their compartment; the story states that a mermaid has been sighted off the coast of the town—Beachfield—to which they are speedily traveling, and they are aglow with excitement. When they arrive, they head to the beach to try to see the mermaid. There, they utter the magical incantation that summons mermaids, which is John Milton's "Sabrina Fair" from his play *Comus* (1634).[23] Upon their uttering the poem, a mermaid appears! She tells the children that another mermaid—Freia, her actual name, is only mentioned once much later in the novel, and she is otherwise called simply merlady or princess—has been captured and will die in captivity. The children spring to the rescue. After the children rescue Freia from the circus with surprising ease, she invites them to meet with her again the next day. When they do, she whisks them away, against their wills, to her magic underwater kingdom. Eventually the children are returned to land, where only a few hours have passed, as opposed to the many weeks the children spent underwater. Though the children are returned and therefore evade true death, their proximity to

[23] *Comus* is a masque that honors chastity. Critics have debated whether it is best characterized as an epic poem, lyrical drama, epic drama, or a suite of soliloquies, among other forms. In this masque, Sabrina is a water sprite who helps save a virgin from rape at the hands of the debauched god of revelry. This moment of intertextuality is a nod to the deep mermaid canon from which Nesbit draws. In referencing a masque, Nesbit also indicates that things are not entirely as they seem, and hints that the events of the story will end well and should not be taken too seriously. It could even be a joke—in a story about mermaids and the ocean, she asks readers to look under the surface.

the mermaid who heralds death enables them to play dead for a time, thereby living outside the constraints of linear, terrestrial time.

Nesbit depicts Freia as a symbol of the permeability of all bodies, human and composite human alike; Freia is highly susceptible to the earth's "atmosphere," which is filled with the worst aspects of human nature. After saving Freia from the circus, the children head to a cave to summon her. The rescued Freia appears, and in much better spirits than when they left her. She explains her previous behavior:

> "I am so sorry I was ungrateful the other night. I'll tell you how it was. It's in your air. You see, coming out of the water we're very susceptible to aerial influences—and that sort of ungratefulness and, what's the word?"
>
> "Snobbishness," said Francis firmly.
>
> "Is that what you call it?—is most frightfully infectious, and your air's absolutely crammed with the germs of it. That's why I was so horrid … But it's all washed off now, in the nice clean sea, and I'm as sorry as if it had been my fault, which it really and truly wasn't" (Nesbit 38).

Here, Nesbit plays with a pun on "air." She references both the real air and the idea of "putting on airs," or what Francis calls "snobbishness"; the mermaid claims that terrestrial air is crammed with moral germs that can lead one to believe in one's inherent superiority, and that it was the air's fault that she acted so ungraciously toward the children. She furthermore states that all mermaids are "very susceptible to aerial influences." She says she is free from such influences once back in the water, but if they linger long she will again be infected, and in the course of this conversation she becomes increasingly annoyed and "snobbish": "'Come, don't be foolish,' she said. 'You'll never have such a chance again. And I feel that this air is full of your horrid human

microbes—distrust, suspicion, fear, anger, resentment—horrid little germs. I don't want to risk catching them. Come'" (39). For Nesbit, who writes much of the novel with tongue in cheek, what seems to be specifically English about the air is its snobbishness, and what seems to be specifically human about it is fear and mistrust.[24] In crafting mermaids who are affectable, Nesbit provides a new twist on the more traditional mermaid-as-siren-temptress character, a creature whose song can invade and turn men's heads, but who cannot herself be easily swayed or changed. Nesbit's mermaid princess is highly susceptible to air and the human temperaments it channels; as we shall see, she is also generally flighty, and is able to easily alter her appearance. Nothing about Nesbit's mermaid princess is solid and dependable.

Nesbit seems attuned to and to be drawing from naturalist literature tropes[25] as well as burgeoning environmentalist concerns about air. Hsuan L. Hsu argues that "atmosphere" is not ancillary to literary naturalism because air reinvigorates the naturalist character otherwise subject to social Darwinism and determinism: "At once animated and animating (or deadening) in its effects, air calls for a reassessment of Georg Lukács's influential dismissal of naturalism as a genre whose overemphasis on describing physical details reifies humans as passive" (789). Air,

[24] Jayne Elizabeth Lewis writes that in the wake of Robert Boyle's experiments, people "tried to decide what might be specifically English about" air and treated air "as if it were a thing" (Lewis 24).

[25] While *Wet Magic* does not fit the normative features of naturalism, the novel with its myriad intertextual references to early modern masques, nineteenth-century children's literature, classic literature, didactic literature, and others, self-consciously explores genre. Naturalism, I argue, is among Nesbit's influences, and it is possible to read meaning into her use of atmosphere through a naturalist lens. We ought to understand *Wet Magic* in relation to naturalism because of the novel's objective narrative perspective that relates the events of the story to readers primarily as facts (though the narrator also breaks the fourth wall by directly addressing the reader to explain decisions to skip over relevant detail or chunks of time). Additionally, George Lukács describes the naturalist novel as a story in which "characters are merely spectators, more or less interested in the events," which "become ... at best, a series of tableaux" (Lukács 116). *Wet Magic* often feels as if it is merely progressing through a series of tableaux with characters that are not particularly nuanced or agentive, while the coherency of the plot declines and everyone seems subject to determinism. The outcome of the inter-ocean world war, too, seems as if it might be particularly bleak. But, in the end, Nesbit pivots back to the genre in which she is ostensibly writing—children's fantasy—and all is wrapped up mostly happily, if not very tidily.

Hsu argues, is an *essential* naturalist character, and states that American naturalist writers such as Frank Norris tend "to vacillate between metaphorical, affective, and material treatments of air—air as a social 'atmosphere,' as an evocative smell, or as a toxic cloud" (789). Nesbit's use of air as a conduit for all types of contamination is aligned with work by contemporaneous naturalist writers on both sides of the Atlantic. By engaging the atmospheric concerns of literary naturalism, Nesbit reframes concerns of nationalism, identity, and the Victorian fear of permeability.

Air and its microbes are not left behind as characters once the children descend into the ocean; the novel continues to explore air's role as a conduit for contamination. Nesbit constructs an underwater atmosphere that "isn't air, and it isn't water. It's something that both water people and air people can breathe" (Nesbit 41); this hybrid atmosphere mimics on a meta level the evolving characterization of the children as neither human nor merpeople, highlighting the novel's exploration of human boundedness, or a lack thereof. As the children walk through a beautiful seaweed garden, Mavis stops suddenly and asks, "Are we in the water or not?" Freia replies, "That depends on what you mean by water. Water's a thing human beings can't breathe isn't it? Well you are breathing. So this can't be water" (42). Nesbit plays with what constitutes the materiality not only of the mermaids' and children's personalities—or rather how those personalities are manifested via affect—as harbored in their physical forms, but also of the very substances in which they live. Water is not water, air is not air, and none of the atmospheres in which any of these creatures live is an inanimate object; air-water becomes an active agent and living force.

In this novel, that is, no one is safe from outside influences. The children, once in the not-water-not-air atmosphere, become literally permeated with knowledge, as if it were air or water

entering their biosystems: they are altered by the oceanic atmosphere just as Freia is altered by the terrestrial atmosphere. Once underwater, as they travel closer to the mermaid kingdom, they begin speaking very wisely about topics they have not studied, and when they look at each other with confusion, Freia explains, "It's only the influence of the place. This is the Cave of Learning … All these rocks are made of books really, and they exude learning from every crack. We cover them up with anemones and seaweed … but the learning will leak out. Let us go through the gate or you'll all be talking Sanskrit before we know where we are" (41). Rocks-made-of-books, themselves a composite of the human and inanimate insofar as they are archives of human thought,[26] here represent a different kind of contagion: namely, knowledge. Talking in Sanskrit would label the children as other, as less English upon arrival in the mermaid kingdom.[27] Despite being mermaids and therefore themselves improper English subjects, Nesbit here jokes that to be properly English, one must not have a vast knowledge of other cultures—the mermaids cover up the books. Once underwater, if infected, there is no fundamental human or English quality that can anchor the children to their human form and feelings.

As the children's adventure progresses, their identities become so unstable that they become copies of the changeable, watery mermaid body and are easily transformed physically. Freia is the first character to transform; she simply sheds her tail to walk with two human feet. This is not described as magic, but as merely a wardrobe change. An ability to easily shed one's tail like clothing is not in keeping with mermaid canon, though it does follow selkie lore. For example, Andersen's little mermaid, as I will discuss shortly, obtains her legs at great personal

[26] In fact, later in the novel the books' fully materialized characters step out of the pages to participate in the inter-ocean war, which constitutes another play on animacy and hybridity in the text. The books with their latent human knowledge become walking, breathing people able to take physical action.
[27] Sanskrit was a classical language, recognized and respected as such by the Victorians. Within a racist linguistic economy, speaking Sanskrit is not the same as speaking, for example, Fijian. Nonetheless, it is here a marker of otherness and Freia eagerly whisks the children away from the books' knowledge.

cost—her tongue, her family, and her dignity—whereas a selkie can temporarily shed her skin on land to reveal her traditionally stunningly beautiful human form. If she is captured and her seal skin is hidden, she can remain in that form against her will, but she will always return to the sea if given her skin back (Hallet and Karasek). Freia's ability to alter her appearance is therefore particularly notable when compared to her fictional predecessors. While on land, Freia has a tail and seems to be stuck with that tail. Underwater, however, she can take her tail off as if it were a skirt: "[S]itting on [the steps] waiting for them … [was] the mermaid. Only now she had no tail. It lay beside her on the marble steps, just as your stockings like when you have taken them off; and there were her white feet sticking out from under a dress of soft feathery red seaweed" (40). Freia discards and dons various tails throughout the story, and her easily changed body marks her presence as dangerous; if she can shift from human to mermaid and back again with a costume change, then she can evade taxonomy and defy phylogenetic classification. Her transformations further destabilize the human/animal divide, and place mermaids firmly on the side of humans.

Freia not only teaches the children about non-linear time, but also transforms the human children into mermaids, effecting an evolutionarily "degenerative" transformation. At the beginning of the inter-ocean war that the children accidentally start, Freia presents them with their uniforms—tails and coats. While before the war it had seemed only mermaids were changeable, as the war begins it becomes clear that anyone, human or fish, can be transformed physically and morally. The children easily become merchildren by donning costumes. And these are not just any costumes: "'By pressing the third button from the top you can render yourself invisible. The third button below that will make you visible again when you wish it, and the last button of all will enable you to become intangible as well as invisible.' 'Intangible?' said Cathay. 'Unfeelable'" (49). In gifting the children these uniforms, Freia demonstrates how easy

it is to render oneself physically different and fundamentally unknowable to oneself and anyone else, to change one's very essence: with the press of one button, the mermaids and now children-cum-merchildren can be invisible, and with another touch of a button, intangible. The children, while underwater, become copies of the affectable mermaid: made of and moving through the ocean's air-water, the children are able to easily change their appearance and alter and amplify their personality traits. Both Nesbit's characterization of Freia and her descriptions of the children's experiences underwater epitomize fears of foreign invasion and the fundamental affectability of the absorbent human body.

We are fearful of contagion not just because it can alter our bodies, but also our minds; it can lead to delirium, which feels like a loss of self, and death. Contamination, too, dramatically affects the ebb and flow of time in foreclosing the futures of poisoned bodies.[28] This is registered in the way that the children become increasingly anxious about how long they have been gone. When Freia flits away, her sister Maia kindly takes the children in hand and explains ocean time: The "first principle of magic is that time spent in other worlds doesn't count in your own home. No, I see you don't understand. In your home it's still the same time as it was when you dived into the well in the cave" (46). Princess Maia reveals that the children are operating in a space where hours are lost entirely as time stands still on land, and months are compressed into hours.

[28] Victorian concerns with contagion and the human body that engage questions of national identity resonate with today's discussions of water pollution, racial capitalism, and slow violence (a term coined by Rob Nixon). The contaminated body begs the questions of who becomes disposable, why, and how—or, as Laura Pulido puts it, contaminated water "is a story of racial capitalism" (4). In contaminated water crises, the individual body becomes a locus for environmental warfare and water becomes a weapon in the war against the marginalized. Stacy Alaimo writes more tangibly about the traces water leaves and how we can track toxicity by attending to the individually poisoned body and the environment from which it came; this "often reveals global networks of social injustice, lax regulations, and environmental degradation" (15). These theorists demonstrate that each of us is part of a web of relations, toxins, and actions that we take and actions that are taken on our behalf—"Water connects the human scale to other scales of life, both unfathomable and imperceptible. We are all bodies *of* water, in the constitutional, the genealogical, and the geographical sense" (Neimanis 87).

Everything the children experience, even war, is suffused with excitement and wonder because they are having an out-of-time and out-of-body experience. In truth, they have died: "'Mother will be awfully frightened if we're not home to tea. She'll think we're drowned.' 'Well, you are drowned,' said Maia brightly. 'At least that's what I believe you land people call it when you come down to us and neglect to arrange to have the spell of return said for you'" (46). Infected by excitement that led them into Freia's not-so-ambivalent clutches, the drowned children have become unbound from terrestrial time—from teatime and bedtime schedules, from growing older, from truly living—as long as they remain in the mermaids' watery milieu. This moment in the novel links contagion with its most-feared outcome: death.

The children exemplify "chronothanatapolitics" by existing in an impermanent death space in which they perform death, but do not internalize or enact it. Chronothanatapolitics builds on Dana Luciano's term "chronobiopolitics," from which Elizabeth Freeman takes "the prefix *chronos* to describe cultural and political arrangements of time that not only designate some lives as long, coherent, and meaningful while cutting others short and/or relegating them to atemporal meaninglessness, but also focus on the feeling body as the key to nonlinear temporalities" (Freeman, *Beside You* 56-57). Different from Michel Foucault's biopolitics, Achille Mbembe's and Jasbir Puar's necropolitics, and Dana Luciano's chronobiopolitics, Freeman's chronothanatapolitics "requires no subject: it is like squaring death, or cubing it. Playing dead does not allegorize physical death as a redemptive release from social death, nor does it portray physical death as a redundant confirmation of social death, nor does it claim a bodily coherence or stable subject that it then goes on to deconstruct" (*Beside You* 56). Rather, Freeman analyzes how some bodies—when figured against or beside particular regimes such as secularity and race, among others—brush up against death or play with and in modes of non-

belonging in such a way that they can envision other or new social worlds outside of these disciplinary regimes. Nesbit's children, therefore, by drowning, enter a nonlinear, oceanic time that exists adjacent to but outside of terrestrial time; they literally "danc[e] on the edge of death" (*Beside You* 57). In becoming copies of the mermaids, physically and emotionally, the children begin to internalize their new identities and live outside of the terrestrial constraints on their time and identity to which they had become inured. They begin to envision a different future.

Once underwater, once dead, the children can no longer claim a bodily coherence or stable sense of self. The mermaids render the children improper British subjects and, in doing so, temporarily foreclose their futures on land. Indeed, the children become so similar to the mermaids and so divorced from their human, English selves that they can be captured, held prisoner by the Underfolk, and utterly alienated from their original selves. For example, the youngest child, Kathleen, cubes death when she willingly swallows the draught of forgetfulness from the cup of oblivion. Whereas before she had been playing dead with her siblings, when she allows her memory to be altered she enters a secondary death space: "Loss of memory implies imprisonment in a state beyond time, in another eternity equal to death" (Nikolajeva, *From Mythic to Linear* 132). Overwhelmed by her experience and desirous of relief, Kathleen pleads with her siblings and Freia to let her memory be wiped from her while the others use defense charms to avoid the same fate: "I don't want to remember. If I didn't remember I should forget to be frightened. Do please let me forget to remember" (Nesbit 65). But the draught of forgetfulness is so much more than an amnesia draught: it wipes from Kathleen her very essence and renders her a shell of herself willing to do the Underfolk royalty's bidding; it also renders her more akin to animals. The narrator describes Kathleen as a dog, a "Rover or Binkie" like "one of Queen Alexandra's Japanese Spaniels" (67). Deep underwater in a kingdom below the merkingdom,

Kathleen becomes a human-merchild-animal hybrid, and in completely forfeiting her human identity embraces a death-like existence even as her body continues to function; but the phrasing of her request implies that she will be restored to herself. She must forget her experience underwater in order to eventually remember who she really is on land, for on land she must reassimilate into linear history and the regimes that mark her as a human, British child.

While time travel is an omnipresent generic tactic that enables fantasy in children's literature, Nesbit's use of time in this novel—specifically, that time *does* pass on land despite Princess Maia's explanation of ocean time—registers the particular threat of the mermaid. Maria Nikolajeva credits Nesbit for creating secondary worlds in children's literature that operate on different timescales; in other words, in the fictional world in which the adventure takes place time operates separately from that of the first or "real" world. However, Nikolajeva does not analyze *Wet Magic*, which does not entirely follow the rules set by Nesbit for timescales in secondary worlds. According to Nikolajeva, a key feature of Nesbit's secondary world construction is that the child protagonist can leave and enter the primary world at the same moment even though s/he has experienced an entire adventure in the secondary world. She writes that this tactic is present in many of Nesbit's novels, but only chooses those in which the children arrive home simultaneously with the moment they left. *Wet Magic* does not adhere to these rules; the children do emerge on the same day, though not in the same moment or in the same location as when they entered the water. Most importantly, the King and Queen of the Underfolk turn out to be stolen humans forced to drink the draught of forgetfulness and rule for decades underwater, and they have terrestrial lost time with their son. Reuben, the orphan friend who travels with the circus, tells a tale of being stolen as a baby. He has lived his entire life to date without his parents. In the end, Reuben is restored to his parents, the King and Queen of the Underfolk. For

them, time did not stand still; their child grew up without them. Nesbit contradicts herself in these final moments of the story. Francis states, “There isn’t any time in the other world. I expect they were swimming and just dived, and all that happened to them just in the minute they were underwater” (Nesbit 82). But Reuben’s early childhood with his parents in the “real” world cannot be restored to him, even if his parents are. While only five or so years (we are not sure of Reuben’s exact age) passed on land versus the decades Reuben’s parents spent underwater, that is an entirely significant period of time; it is certainly not, per Francis, “just” a “minute.” The children and Reuben’s parents may not remember their time underwater, but it was not insignificant or separate from their first world experience. This breaks with the conventions of secondary world time travel in Nesbit’s fantasies, and indicates that, in merging what has come to be known as a secondary world story with a mermaid story, Nesbit creates an aura of uncertainty about the children’s outcome and makes the adventure with mermaids more dangerous than adventures in other worlds or with other villains. The novel implies that the children could have been gone long enough to worry their mother, as they fret early on—indeed, their parents could have thought them lost or dead as time moved on.

In the end, the children re-enter linear time where they have not been missed, but not before each of them is forced to drink a little of the draught of forgetfulness so that they will not remember their time spent drowned and living as merpeople; they experience a mini death as they reenter linear time and are not allowed to remember their time spent in an alternate social world: “It is not well for the Earth People to know too much of the dwellers in the sea ... your hearts will remember us, though your minds must forget” (81). The children rise to the surface and forget their adventures, or so it seems. Nesbit ends her story with Mavis assuring Francis that it is nice to have something to look forward to when they return home from Beachfield; but she

phrases it this way: "It will be something to live for when we come back from the sea" (82). While the children may not remember their time spent drowned, some remnant of their adventure remains with Mavis on land. Death glimmers on the edges of her memory; by having Mavis search for something to live for at the novel's close, Nesbit implies that her temporary death has permanently altered Mavis—she can no longer exist without looking to the future.

The structure of *Wet Magic* with its indecipherable days and twists and turns echoes its themes: time is not linear and (mer)people are easily influenced and changed. Nesbit demonstrates that our physical forms and personalities are easily permeated, and that even our very memories can be contaminated. Time loses meaning as the children exist in a death-world underwater, and only Mavis has the wherewithal to maintain a sense of self and goal of returning to life no matter what buffets her. In the end, however, even she is changed by the cup of oblivion. No body, human or mermaid, is sacred or impermeable. Both Nesbit's characterization of Freia and her descriptions of the children's experiences underwater epitomize fears of foreign invasion, contamination and the fundamental affectability of the absorbent human body, and death. Freia highlights the indistinction of humans and nature; she, and mermaids generally, obscure the human/animal boundary and highlight that, on a geologic time scale, humans are both transient and just another species.

The Little Mermaid: Transformative Mutability

"It seems crucial that the body was understood as being fully penetrable by time before it was understood as being fully penetrable by desire" for timing "is a central part of how subjectivity and personhood come into being."

- Elizabeth Freeman, *Beside You in Time*, 6

In contrast to *Wet Magic*, Hans Christian Andersen's *The Little Mermaid* needs no traveling human children to collapse an us/them boundary and explore the implications of porousness and the death of the self without real consequence. Andersen writes into being a character who is penetrated by both time and desire—a desire for immortality manifested as a longing to marry the prince—in such a way that the two become intertwined and interchangeable. This entanglement leads Andersen's famous little mermaid to unmoor herself from all terrestrial and corporeal constraints. Contrary to popular understanding, the little mermaid's story has nothing to do with love and everything to do with (im)mortality: "I am going to die, become foam on the ocean, and never again hear the music of the waves or see the flowers and the burning red sun. Can I do anything to win an immortal soul?" laments the little mermaid to her grandmother (Andersen 153). Grandmother replies, "Only if a man should fall in love with you that you were dearer to him than his mother and father," and marry you, "then his soul would flow into your body" (153). In gifting the little mermaid this knowledge, Grandmother permanently alters the little mermaid. She plants an idea in the little mermaid's brain: that she need not be bound by the mermaids' 300-year-lifespan. The little mermaid becomes obsessed with acquiring immortality, and in the course of obtaining it forsakes her family and forfeits her "timeless magic … for the love of a callow Prince" (Auerbach 8).

For those only familiar with the Disney version, this is the original story. A little mermaid desperately desires to become human. The youngest sister of six, but the one who loves the tales her grandmother tells of life on land, she is made to wait the longest to swim to the

surface and see what the land and its people are like, for the sisters are only allowed to swim above the water when they are fifteen. By the time the little mermaid is allowed to swim to the surface, she is possessed of a near-desperate desire for knowledge of the land dwellers. Finally, the little mermaid's day comes. On her birthday, she takes it upon herself to save a drowning prince, and in saving him her pent-up desire to feel the earth between her toes and know intimately what it is to be human transfers to him. In nearly the same moment that she kisses him, she looks to the shore and sees the land's natural beauty. Unfortunately, the little mermaid is forced to swim away and hide, because the prince cannot know she saved him since mermaids do not exist. She pines for him as she stalks him, and her depression becomes mirrored in her ocean garden. Finally, despairing, the little mermaid approaches a sea-witch to ask for legs and the ability to breathe on land so that she can be nearer to her prince, win his hand in marriage, and earn a soul. The sea-witch grants her wish, but at a very steep cost: her tongue and voice, and imminent death should she fail to marry the prince. Despite her best efforts, the little mermaid fails to secure the unconditional love of the human prince. Having signed a contract with the sea-witch stating she cannot live as either mermaid or human if the prince marries another, which he does, she throws herself off a boat to relinquish herself to the sea as foam.

The interpretation that the little mermaid's life ends in tragedy is so prevalent that even Anne Anlin Cheng, who otherwise writes a beautiful analysis of *The Little Mermaid* as part of her reading of David Wong Louie's "Sushi Principle," refers only to the tragic ending with which we are most familiar:

> The Little Mermaid's profound self-rejection and ultimately tragic self-erasure (choosing to disappear into sea foam in order for the prince to marry a "real" woman) symbolizes both her lack and her most human aspiration. The mermaid

> thus finally takes on pathos (and eros) when she turns into a sacrificial homage to "proper" and "pure" human kinship ("Sushi, Otters, Mermaids" 80).

Cheng here implies that it is the little mermaid's self-annihilation that renders her most human and most feminine, and endows her with pathos. Nina Auerbach similarly analyzes *The Little Mermaid* as an allegory for the trajectory of the self-effacing Victorian woman. She writes that the little mermaid's choice not to kill the prince and thereby restore "her native magic" "is a guide to a vital Victorian mythology whose lovable woman is a silent and self-disinherited mutilate, the fullness of whose extraordinary and dangerous being might at any moment return through violence" (8). While the self-effacing, self-harming little mermaid does try to sacrifice herself, and chooses not to embrace a return to her mermaid body, to the "fullness" of her "dangerous being," by sacrificing the prince, that is not the end of the story. Instead of dissolving into soulless sea foam, she leaves behind the constraints of her mermaid body and the frailty and pain of her human body, becomes an air spirit, and is finally given explicit directions for obtaining an immortal soul after a period of indenture.

The little mermaid's story is thus not one of redemptive death through martyrdom, nor is it a queer reclamation of subjecthood. Her story does not end with her sacrificial homage to kinship. Rather, the little mermaid severs all kinship ties, transcends both her mermaid and human bodies, and twice performs death without ever dying. The little mermaid's utter lack of "bodily coherence" is key (Freeman, *Beside You* 56). Her death neither re-relegates her to her proper social class among the fish nor simply renders her more human than the humans in her ability to internalize and perform pathos. She is neither placed in the annals of a collectively remembered history, nor is she relegated to atemporal meaninglessness by dissolving, soulless, in the ocean at the tender age of fifteen. Rather, the little mermaid simply evades time altogether

and becomes intimately part of nature as a body dissolved into water itself—she does not even attempt to "claim a bodily coherence or stable subject" (*Beside You* 56). In fact, she destroys her own bodies at every turn.

The little mermaid first plays dead when she forfeits her mermaid life and the collective mermaid history to which she belongs in favor of entering terrestrial time and mooring herself to new identity markers. When the little mermaid emerges from the ocean with two legs, she becomes alien to herself, her merpeople, and the people with whom she hopes to integrate and ingratiate herself. Adrift from her former life and bereft of her ability to speak—the sea witch cuts out her tongue as payment for giving her legs—the little mermaid can only hope to be recognized. But her identity is not easily negotiated in a new land and foreign environment. She rips herself from the pedestal upon which she was placed as the youngest, most beautiful of the merprincesses, only to find herself treated at best like a child—"he loved her as he would have loved a good child, and had no thought of making her his queen" (Andersen 158)—and at worst as a pet "permitted to sleep in front of his door on a velvet pillow" (157). In addition to no longer being a person of status, she is endlessly frustrated with the prince's inability to see her for who she really is; she had been sure that she could somehow communicate to him her importance and their shared history, even without words, but she is wrong: "Oh, he does not know that it was I who saved his life," she cries to herself often (158). And, in her muteness and deference—"I will devote my life to him" (158)—she constantly negates her own presence. This fundamental lack of recognition is the seemingly inevitable outcome of being reborn, discovered naked as a brand new infant on the beach, and made immediately to feel a biblical shame and desire to hide herself. She feels it is the prince's fault for not recognizing her, but it is difficult to communicate her identity when she is not anchored in any fundamental way to who she was as a mermaid.

The little mermaid is doomed from the beginning because she is not and can never truly be human; her alterity is not as obviously on display without her tail, but her lack of identity and communicable history nonetheless renders her an outsider. Even had she had a tongue, the little mermaid would have found herself hard pressed to explain that she had been a mermaid, princess or not, and that despite her former fishiness, she is worthy of marrying the fully human prince. The little mermaid, though described in the story as white—"Her complexion was as fine as the petal of a rose and her eyes as blue as the deepest lake" (Andersen 146)—also cannot take advantage of her white, princess privilege because readers know that she is not who she purports to be: a white, human *woman*. Cheng, to this end, writes that it "would take the master fairy tale weaver Hans Christian Andersen to domesticate and make over the historically (and racially) queer mermaid by giving her the specifically melancholic, human, and, I might add, *mulatto* pathos of mourning her own mixedness" ("Sushi, Otters, Mermaids" 79). In emphasizing the little mermaid's deep mourning of her mixedness and unacknowledged but nonetheless intuitive knowing that she can never really have the prince, Cheng underscores the "deep-seated anxieties about interspecial encounters, worries that survive in modern-day eugenics and antimiscegenation sentiments" (79). Andersen honors these anxieties in writing the little mermaid's ending. Were she truly human, the little mermaid undoubtedly would have landed the prince, for she was "the most beautiful" of the six sisters, and she and her five sisters "had voices far lovelier than any human being" (Andersen 146). She is the perfect mate, if only she had legs (and, we can presume, a vagina); as the little mermaid's grandmother tells her, "For that which we consider beautiful down here in the ocean, your fishtail, they find ugly up above, on earth" (153-4). The little mermaid's sense of self is made unstable by her inability to translate to the

prince through word or action why he should recognize her, and by her intuitive knowledge that she is only passing as human while harboring a secret about her true identity.

As the little mermaid's confidence and self-knowledge slowly disintegrate, so does her body. From the moment she engages the sea witch, she becomes "dependent on and constituted by death" (Freeman, *Beside You* 57). Whereas Nesbit's children play at being dead—their entire experience can be attributed to a game of imagination, and they do not feel themselves drowning—the little mermaid dies physically and violently. When she emerges from the sea witch's cave with the potion that will give her legs, even the greedy polyps eager to catch and kill a mermaid shy away in horror: "you need only spill one drop of the potion on [the polyp] and its arms and fingers will splinter into a thousand pieces," the sea witch informs her witting victim (Andersen 156). The description of her first transformation from mermaid to human is therefore violent and death-like: "The little mermaid drank the potion and it felt as if a sword pierced her little body. She fainted and lay as though she were dead. When the sun's rays touched the sea she woke and felt a burning pain; but the young prince stood in front of her and looked at her with his coal-black eyes. She looked downward and saw then that she no longer had a fishtail" (157). Here, the little mermaid is conflated with the sea itself; when the sun's rays touch the sea, she awakens and feels a burning pain. Originally one with but now ripped from the ocean, she never recovers from the pain of being separated from the water; pain informs her entire human existence.

While Nesbit's *Wet Magic* more deliberately probes airborne contagion, Andersen's *The Little Mermaid* is no less consumed with porousness and waterborne contamination. The text nearly drips off the page as the little mermaid's bodies dissolve. Blood is first used to bind the little mermaid to the sea-witch: "She cut her chest and let her blood drip into the vessel" (156).

As the dream of marrying the prince and thereby obtaining a soul slips further from her grasp, the little mermaid is described as if her body is turning against her; she is constantly seeping blood and exceeding the bounds of her human body. In taking the prince's hand, the little mermaid embraces her human form, but immediately discovers that "every step felt as if she were walking on sharp knives" (157). Being splintered apart once and remade into a human is not enough payment for the little mermaid's trespassing as human. The little mermaid must be reminded each time her human feet rip open and bleed that she is still a mermaid not meant to walk on land. As it becomes clear that she will not be queen, her draining body is less self-contained and more obvious to others: when she and the prince "climbed the high mountains … her feet bled so much that others noticed it" (157). When the little mermaid decides not to use an enchanted dagger to kill the prince and return to her mermaid form, the ocean and the sky bleed: She "threw the weapon out into the sea. The waves turned red where it fell, as if drops of blood were seeping up through the water" (161). As she evaporates, "She could … see the sails of the ships and the blood-red clouds" (161). The little mermaid's constantly bleeding body manifests contagion, and signals that we cannot pretend to be bounded, whole selves even if we wish we were; she leaks herself into the earth, and it reflects her tragedy back to her.

The little mermaid thereby leaves a lasting imprint on the prince, even if it is not the impact she desired. She leaves her blood in the earth where he walks and permeates the air that he breathes with her vaporous essence: "Without being seen, she kissed the bride's forehead and smiled at the prince" (161). She becomes one with nature and inextricably bound with those she left behind, forever part of their bodies in the water they drink and air they breathe. She (dis)embodies porousness in her ability to become water that floats through the air: "[S]he rose together with the other children of the air, up into a pink cloud that was sailing by" (162). In

evaporating, she “coils the line separating” life and death (Freeman, *Beside You* 57), and disappears into the clouds. In the morning after the prince’s wedding, the little mermaid plays dead a second time: “[S]he looked at the prince; her eyes were already glazed in death. She threw herself into the sea and felt her body changing into foam” (Andersen 161). Once again, however, the little mermaid does not die: “[T]he little mermaid did not feel death” (161). She evolves into her next incarnation, a daughter of the air, whose “forms were so fragile and fine that no human eye could see them. So light were they that they glided through the air, though they had no wings. The little mermaid looked down and saw that she had an ethereal body like theirs” (161). She learns that if she earnestly tries to do what is good, she can obtain an eternal soul “and take part in the eternal happiness of man” (161). And this—a soul, a way into an eternal life—is what the little mermaid really seeks; the prince was a means to an end rather than an end in himself. The little mermaid does not become foam on the sea, though her poor sisters as well as the prince and his new wife think she does. She evaporates, becoming more purely water than she was in her mermaid or human body. She returns to her essence, and no longer feels the searing pain of the sun as a constant reminder that she forsook her watery self.

With the air fairies’ emphasis on God as the entity that can bestow a soul, and the little mermaid’s interest in heaven (Andersen 153), one could argue that the mermaid becomes incorporated in the time of Christian redemption. Her life span may be immeasurably longer than a human’s, but insofar as she works towards the acquisition of an immortal soul, her temporal and spiritual trajectory is not so different from theirs. But keeping her species alterity in mind, along with the repeated language in the story that renders her akin to the prince’s slaves, the little mermaid does not become incorporated in the time of Christian redemption. When one plays or mimes death, states Freeman, that person is resisting the narrative and time of Christian

redemption specifically because that theology, with the promise of a better tomorrow, can be and has been used to justify and prolong the suffering of the enslaved and denigrated while they still live—look to the future, this theology promises, look toward death as a release from life's trials. The little mermaid is not socially or morally redeemed by refusing to kill the prince or trying to kill herself. She is no martyr, and is not somehow made whole by choosing to self-annihilate. The daughters of the air, as the fairies call themselves, are highly calculating; they are not passively waiting to enter the afterlife. They tell the little mermaid that "if we find a good child, who makes his parents happy and deserves their love, we smile and God takes a year away from the time of our trial" (162). While the promise of a soul is on the horizon, the little mermaid in the end is still indentured to God for up to 300 years while she performs acts of service, and we are not privy to what her "life" looks like when she is finally granted a soul and allowed to "live," in some capacity, forever. Rather than Christian time, the little mermaid (re)enters monumental time.

Mermaid time, that is, is a form of monumental time. Julia Kristeva writes of monumental time, which she argues is part and parcel of female identity formation, that perhaps as a consequence of repetition and eternity, of cycles and reproduction, "there is the massive presence of a monumental temporality, without cleavage or escape, which has so little to do with linear time (which passes) that the very word 'temporality' hardly fits. [It is] all-encompassing and infinite like imaginary space" (Kristeva, "Women's Time" 16). This monumental "infinite imaginary space," connects discussions of temporality as they relate to (female) identity formation with the "cosmic and profound" nature of geological time (Cohen, "Anarky" 25). If a mermaid is, by dint of popular science, a missing link or a phylogenetically "prior" entity—an avatar of temporal collapse—then the little mermaid's journey is a rediscovery of and journey

back into the time to which she already and always belongs. Fearing death is a particularly human trait, and one that the little mermaid must twice embody, perform, and succumb to. But she is never truly human. In becoming an air fairy indentured for 300 years, she restarts/recycles the mermaid clock, and in leaving bits of herself in the water, the earth, and the air she simultaneously exists in ocean, terrestrial, and atmospheric time.[29]

In her aerial form, the little mermaid slips the bonds of time and history. She becomes vapor, and in being made entirely of water as a daughter of the air, she can finally cry; as a mermaid, she could not cry, and as an imposter human, she could not cry, but as an air fairy she "for the first time … felt a tear" (Andersen 161). Having forfeited the ocean to which she truly belongs and her mermaid body made to breathe water, and having drained her terrestrial human body of its blood, she relinquishes corporeality altogether and returns to the elements. The little mermaid becomes water—as a fairy, her presence is experienced by humans as dew, as mist, as a cool, wet breeze—and readers are left with an image of omnipresent contagion, of aerial influences that flit in and out of children's windows and report to God on their behavior. The little mermaid, in each of her forms, represents the inherent threat mermaids embody: that the human body is not a sacred, impermeable space unequivocally differentiated from other mammals.

[29] Combining the cyclical time of the secondary world in children's literature with Kristeva's monumental time bolsters my argument for Andersen's little mermaid entering monumental time. Cyclical time in which death can be reversed is also a function of the secondary world in children's literature, argues Nikolajeva. She uses time in Narnia, the fictional land in C.S. Lewis's *The Lion, The Witch, and the Wardrobe*, as her primary example, writing, "Entering Narnia, the children leave linear time behind and enter cyclical time. In this time, death is reversible … One of the evil schemes of the White Witch is to stop the flow of time altogether, imposing the eternal winter (= period of nonbeing, death) in Narnia. Aslan's death and resurrection—a performance of the ritual of the returning god, with its pagan rather than Christian meaning—restores cyclical time" (*From Mythic to Linear* 128).

Conclusion

Mermaids are physically composite, and temporally hybrid. By emerging as if from the evolutionary timeline itself, they displace the present moment. The mermaid as cryptid defies time as "proof" of her existence continues to surface through the nineteenth century, and her constant presence in the news exemplifies her status as an avatar of temporal collapse. She persists across time as a symbol on which one can pin hopes, dreams, fears, and uncertainties, and she brings together past and present to reveal our ongoing obsession with boundaries and containment.

Both *Wet Magic* and *The Little Mermaid* also evoke questions of contamination entwined with mermaids' bodies and lifespans. While it may seem like an aside, I end this chapter again on a contemporary note to argue that, in persisting across time and resurfacing in moments of national, even global, disruption and uncertainty, the mermaid highlights moments of interpersonal and environmental tension. Operating in a liminal space, the mermaid emblematizes what Neel Ahuja calls "queer inhumanism," or "an account of interspecies entanglement and reproductive displacement, an inquiry into the unrealized lifeworlds that form the background of the everyday" and recognition of "quiet obliterations of histories that could have been" (372). Ahuja contends that each of us, "minerals, mosquitoes, settlers, gases, solar rays, and other bodies" (367), is responsible for who and what is marginalized, eradicated, and forgotten. This conceptualization of space linked by contamination and the histories it precludes speaks to Freeman's formulation of hypersociability; while Ahuja considers the myriad ways we are connected spatially by something as small as a mosquito, Freeman contends that bodies engrouped by time can reach across temporal space—history—to touch one another, to connect, to redefine queer social arrangements. By playing dead, Nesbit's child characters in concert with

the mermaid Freia, and Andersen's little mermaid, move outside of linear time and explore spaces adjacent to developmental history. The mermaid, an unstable, porous, difficult-to-classify, composite body manifests not only Victorian worries about affectability and the clash of the human lifespan with deep time, but also contemporary theories concerning water's role in creating lateral assemblages, i.e., in grouping together seemingly disparate groups of people by disease and its source. That source is hard to trace if it enters and leaves our bodies as water, or permeates the air that fills our lungs, concerns that manifest in these nineteenth-century texts and persist in the wake of the industrial revolution. In this way, it seems we are still Victorian in the world of climate change.

Chapter II

Racist Refusals of Coevality:

The Mythic, White Underground in Hollow Earth Literature

The previous chapter posits that the boundary-transgressing aspect of mermaids links the human body to nature, both in terms of water and climate. That linkage intersects with and is made possible by evolutionary and geological thinking and their temporal implications—the mermaid is at once a figure for the hybridity of bodies and for the hybridity of time. Edith Nesbit's and Hans Christian Andersen's mermaid tales explore universal human questions through their treatment of time and evince evolutionary concerns by focusing on the mutability of the human form. This chapter moves from ocean to land, and from mutability to forced stagnancy: these texts reveal how the underground becomes political, transforming into a tool for racism and oppression. In Mary E. Bradley Lane's *Mizora: A Prophecy* (1880) a narrator descends into the earth and finds peoples who have prolonged their lives in their physical bodies by cultivating "purity." In Lane's novel, the Mizorans have eradicated "impurity" and subsumed racial alterity to obtain their long-lived lives; their purity is both gender-singular and white.

Johannes Fabian outlines how spatio-temporal distancing in ethnographic research ensures that the relationship between anthropologist and native is marked by the denial of temporal coevality; in other words, he marks how time is used in anthropological studies to demarcate an Other by relegating the group being studied to a "there and then" that is temporally different from the researcher's "here and now." Lane's hollow earth novel exemplifies this anthropological practice of spatio-temporal distancing; the dilemma of the always-already-past native living somehow outside of forward-marching modernity is essential to the novel's construction and the alternate history and projected future it unveils. *Mizora* centers whiteness in

a few significant ways. First, at the level of plot, it denigrates and pushes to the margins its Indigenous characters. It also centers whiteness by revealing a white civilization underground, metaphorically writing whiteness into geological history. Nevertheless, the novel's traces of indigeneity are all the more marked for their rarity. In this way, the novel both celebrates and legitimizes whiteness, but also subtly undermines it by highlighting how native peoples have been violently erased. In this chapter, I argue that *Mizora*, as a member of the hollow earth genre, offers a language and narrative for settler colonialism that erases at the same time that it, in doing so, acknowledges the possibility and threat to white colonizers of Indigenous resistance being located underground, both literally and figuratively.

Hollow earth novels have a set of common characteristics: a primary narrator discovers an entrance to the earth's core or relates a friend or family member's account of discovering an entrance; this discovery can be accidental or purposeful. These narrators wonder what people, plants, and animals might be able to thrive at the earth's core and consider whether these people are more or less advanced than the surface dwellers, for the inner-earth people are usually differently (d)evolved from those dwelling on the surface. Often the surface dwellers are lightyears behind in scientific, ethical, or social discoveries and advancements. Finally, these novels are usually concerned with geology and/or mineralogy, theories of evolution, and social Darwinism.

While hollow earth novels have the above and other characteristics unique to them, they share traits with island novels as well, due to the geographic isolation of their settings. In island fiction, the island acts as an enchanted circle circumscribing the narrative's magic, preserving a space just to the side of reality for the story's unfurling; in other words, it functions as a zone of exception. But as Vincente M. Diaz argues, "no island was ever an island to begin with" (90).

Diaz writes that the island cast as a zone of exception is a product of "continental and imperialist thinking" that treats islands as blank spaces rather than nations with their own peoples and histories. He contends that to "continue to treat these as natural, unproblematic categories of existence and being is to also obfuscate [Islands' and Indigenous Islanders'] histories" (101-102). Like islands, the hollow earth space can also become such a zone of exception, a breeding ground for dystopian narratives that reflect the problems of society on the surface.[30] Following Diaz's logic, the island—and the hollow earth society—becomes not only a sandbox for reworking our understanding of surface societies, but also a setting layered with its own histories, inhabitants, and power structures. On islands and in hollow earth civilizations, layers of colonial history are peeled back to reveal hidden and subsumed narratives.

Like an island, the hollow earth setting is a bounded ecological space, but unlike an island, the hollow earth setting insists on reconstructing surface life in a space that does not have oxygen, sunlight, and other natural systems that enable plant and animal life on the earth's surface. Elizabeth Hope Chang writes of the oddity of this construction and contends that moving island ecologies into the earth shows "how narrative setting can produce both spatial movement and temporal progress within the novel form with the purpose of explicating the conditions under which life can exist in the first place" (389). The island-like setting of hollow earth novels, that is, is estranged enough from our surface reality that it can spotlight the

[30] Elizabeth Miller writes a detailed analysis of allegory's role in speculative fiction. She writes that "if allegory is akin to scientific modeling, it is also spatially akin to the idea of the underworld: a hidden world below that parallels and mirrors yet remains separate from the world above" (150). Among others, Miller draws on Mark Jerng's discussion of allegory's role in SF to make the case for why the inner world can be read onto the outer world, even if Darko Suvin rejects "one-to-one correspondence of its elements to elements in the author's reality" (230n17). For more, see Miller's *Extraction Ecologies and the Literature of the Long Exhaustion*.

troubling conditions in which we, the readers, live, including the ongoing project of Indigenous erasure.

Lane's novel not only explores how life in an inner-earth, women-only society can exist in the first place—through parthenogenesis arising from a singular "germ of all Life" (Lane 103)—but also how that inner-earth life acts as a barometer and predictor for life on the surface. By moving the island setting inward, Lane is able to explore a divergent, inner-earth future that unveils an unpalatable future for surface humanity, one that underscores the dark side of capitalism's "progress." In sketching an accelerated historical timeline that first parallels, then diverges from surface-dweller history, Lane projects a future that has taken social Darwinism to an extreme, one that has achieved a certain purity and eliminated moral and environmental pollution by means of a terrible cost: the eradication of most humans and animals and the deletion of their histories.

In what follows, I elucidate the scientific history of the concentric spheres hypothesis, which became the hollow earth theory and led to the literary genre of the same name. I then use this history to consider how, paradoxically, extracting resources from the earth provided a framework for reading whiteness back into the earth and the geological record. In other words, I parse how white superiority figuratively moved into and under the ground. Geologic subterranean mapping and the mining of other countries' natural resources that occurred at the behest of nineteenth-century governments disappeared native peoples from their land, and burying relics became a form of real-life Indigenous resistance. In Lane's novel it is not just relics, but also an entire civilization that moves underground. Lane writes a future in which the downtrodden minority—in her novel, women—wrests power from the male oppressors only to

enact scientific and exacting violence in turn. And her narrator, Vera Zarovitch,[31] does not condemn their tactics; rather, she tries to bring those practices to the surface. Lane, too, encases her subterranean story of eugenic murder in a frame narrative that details Vera's infantilization of Indigenous surface people. In doing so, Lane mirrors in her novel the story that was already being told in reality: that Indigenous peoples, past and present, belong to an (a)historic "before-time"; they exist always and already in the past, and any engagement with "modernity" is a form of mimicry that displaces the Indigenous person from their own "traditional" temporality. *Mizora* shows the capacity of the hollow earth novel, as a generic form, to use science to shore up white power and to narrate the erasure of Indigenous people in both a geographic and temporal sense.

Into the Earth: Magnetism, Moving Poles, and (Pseudo)Science

The history of hollow earth theories coincides with the period of colonial expansion that helped launch the Enlightenment period, often called the Age of Reason, dated to the close of the seventeenth century. The hollow earth theory, originally called the concentric spheres hypothesis, was originated by Edmond Halley (of Halley's comet fame) in his 1692 paper addressed to the Royal Society. Halley proposed that Earth was composed of an outer shell or cortex—the layer on which we live—and an inner nucleus that rotated on its own axis and at a different speed, not unlike Saturn and its rings (Halley 570-572). Halley hypothesized that two

---

[31] In choosing to name her narrator Vera Zarovitch, Lane is undoubtedly trading on the celebrity name and story of the real Vera Zasulich. In 1878, Zasulich tried to assassinate General Trepov, the governor of St. Petersburg. General Trepov had unlawfully ordered Arkhip Bogolubov, a political prisoner, whipped for failing to doff his cap in the general's presence. This was the final straw for Zasulich, a political activist. Oscar Wilde wrote a play called *Vera; Or, the Nihilists*, inspired by this would-be female assassin. The real Vera was acquitted, unlike the fictional Vera who must flee Russia or spend her remaining life in the Siberian mines. In *Mizora*, Vera is from Russia where she was "born to a family of nobility, wealth, and political power" (Lane 8). After speaking out against the Russian government, she is "arrested, tried, and condemned to the mines of Siberia for life" (9). Despite their noble influence, her husband and father are unable to have her sentence erased or commuted, and instead bribe a guard to secret Vera out of prison. For a full account of Zasulich's crime and sensational trial, see Samuel Kucherov's "The Case of Vera Zasulich."

embedded, stationary poles anchored the cortex and two inner, moving poles shifted westward with the slow-moving nucleus. Incidentally, his hypothesis was the first to thoroughly address Earth's magnetism. But it is the possibility of further spheres hidden within the sphere "whose existence had hitherto been unsuspected" that led to the most interesting part of Halley's theory: habitable layers in the space between each of those spheres.

While Halley's theory may seem purely geophysical in nature, even in its infancy the hollow earth theory was bound up in geopolitical and social issues. Halley first sought to explain Earth's magnetism, but as he researched and conducted experiments to parse that magnetism, he became interested in resource extraction and human population concerns. Halley suggested that the layer between the cortex and nucleus could be occupied by humans. While not directly proposing a new direction for colonial settlement, his writing is laced with language of proto-frontier ideology and settler colonial implications: Earth, he writes, "is so disposed by the Almighty Wisdom as to yield as great a Surface for the use of living Creatures as can consist with the conveniency and security of the whole" (Halley 575). It is only reasonable, Halley claims, to assume that God would have created enough space for the ever-expanding human population. If that is the case, he states, "Thus I have shown a possibility of a much more ample creation, than has hitherto been imagined … I have adventured to make these Subterranean orbs capable of being inhabited (577). By writing in the first person—language in his manuscript like "I have shown" and "I have adventured" departs from his earlier matter-of-fact exposition of his mathematical calculations—Halley centers himself in the research as if he is the nucleus out of which exploration radiates. This rhetorical move not only underscores his settler colonial

language—Halley takes credit for discovering a new frontier[32]—it also lends legitimacy to his theory by giving the appearance of first-hand knowledge of these spaces.

Despite Halley's confidence, his concentric spheres hypothesis was soon disproven. Pierre Bouguer first disproved Halley's theory regarding Earth's magnetism. Bouguer commissioned experiments to determine the density of the Chimborazo mountain in the Ecuadorian Andes after returning from his initial expedition to Peru where he and a team "from their arrival in Quito in 1736 until 1743 … set about determining a degree of meridian in the vicinity of the line of equinox" (González 519). Bouguer was not explicitly working to prove or disprove Halley, but his experiments to determine local mass anomalies' effect on gravitational pull, the results of which he used to propose a new shape of the Earth, tentatively showed that Halley's theory of four magnetic poles was likely inaccurate. Charles Hutton is most often credited with definitively discrediting Halley's initial proposal in his (Hutton's) 1778 paper, "An Account of the Calculations made from the Survey and Measures at Schehallien, in order to ascertain the mean Density of the Earth." In this paper, Hutton records the results of his measurements taken from 1774-1776 of the mountain Schehallien in Perthshire (now

[32] Halley predicted that the Royal Society's interest would be piqued and that a debate would likely focus on whether life could exist in between Earth's layers, and he therefore addresses possible counterarguments in the paper. For example, he asks how a person could live under the ocean and not be subjected to a perpetually leaky ceiling. Wouldn't "the Water of the Sea ... perpetually leak through, unless we suppose the Cavity full of Water" (572)? In answer to his question, Halley writes, "[W]hen we consider how tightly great beds of Chalk or Clay, and much more Stone do hold water, and even Caves arch'd with Sand ... no man can doubt but that the Wisdom of the Creator has provided for the Macrocosm by many more ways than I can even imagine or express" (573). Throughout his paper, Halley promises that "the Creator" has provided solutions—like "tightly great beds of Chalk" that will hold water at bay—and draws heavily on religion to support his proposed counterarguments. This intermixing of science and religion is not atypical of 17th-century science. The first half of the paper is based in large part on Halley's extensive astronomical knowledge; for example, Halley calculates the diameter of the inner nucleus based on the likely diameter of the Earth, the distance between the two being "likewise from Mars to Mercury" (Halley 577). Michael E. Evans suggests that Halley's references to God were meant to appease authorities investigating him for heresy. Evans' analysis supposing that Halley was appeasing religious authorities makes sense considering that the second half of the paper with its nearly-fantastical language that relies on religion is a striking divergence from the heavily scientific first half.

Schiehallion in Perth and Kinross, Scotland). His findings disprove Halley's because they show that the earth is much too dense to support life underneath its surface layer—"With extraordinary insight, he predicted that the bulk of the earth comprised metals having densities ten times that of water" (Danson 154). By 1778, the idea that Earth was formed of at least two and possibly more concentric circles, with space in between each layer that would allow for conditions in which human civilizations could flourish, was scientifically invalidated.

Regardless of being disproved, the idea of an habitable inner earth spawned a far-fetched, far-reaching, long-lived, and less-scientifically-sound theory: the hollow earth theory. In 1818, a full forty years after Hutton's experiments, John Cleves Symmes Jr., a devoted American follower of Halley's model, became obsessed with proving that humans could live not just between Earth's layers, but also and even more likely at Earth's core. Symmes's hollow earth theory was driven by the idea of discovering profoundly racially "other" populations, as opposed to the pursuit of natural resources. He revived Halley's concentric spheres hypothesis and expanded upon it without scientific evidence. Symmes's "theory" is based in fantasy;[33] in Symmes's version, explorers would find at a pole, ideally the North Pole, an entrance to Earth's core and thereby access ancient civilizations. His interest in the subject was shaped by the burgeoning American expansionist zeitgeist. For example, in 1818 when Symmes was writing, the United States and Britain signed the "Convention respecting fisheries, boundary and the restoration of slaves," or most simply the Treaty of 1818. This treaty changed the boundary of the US territories and established joint use of the Oregon Country by the English and Americans while erasing Indigenous claims on the territory. Symmes was a little ahead of his time in

[33] Some claim he drew on the work of famous mathematician Leonhard Euler, but this has been disproved by Edward C. Sandifer, who approaches the hollow earth theory through an historical mathematical lens.

focusing his energy on the "new world" exploration of the North and South Poles versus westward expansion, but his interest was nonetheless an extension of Manifest Destiny.[34]

Symmes's first published work was "No. 1 Circular."[35] In this publication, Symmes asks for "one hundred brave companions" to travel with him to "find warm and rich land, stocked with thrifty vegetables and animals if not men" (Symmes). As Hans-Joachim Lang and Benjamin Lease write, the fact that "Symmes was in deadly earnest was demonstrated by the numerous circulars that followed in 1818-1819 (including an 'Arctic Memoir'), his widely publicized lectures—in 1820 he spoke in Cincinnati, Lexington, Frankfort, Hamilton, and Zanesville—and his petitions to Congress for assistance" (241). Despite his being made fun of more often than not—"The newspaper scribblers, who have noticed the theory at all, have almost uniformly appeared to consider it as a fit subject on which to indulge their wit" ("A Citizen")[36]—Symmes was not deterred. He and a few devoted followers—namely James McBride, who wrote and published the most coherent version of Symmes's theories, *Symmes's Theory Of Concentric*

[34] "Almost all historians would accept that the United States had an 'imperialist moment' at the end of the nineteenth century when, in the wake of the Spanish-American War of 1898, it annexed far-flung territories but withheld full admission to the union. However, agreement beyond this is difficult to find. Some trace US imperialism all the way back to the earliest continental expansion, the subjugation of native Americans and the ideology of Manifest Destiny which spoke of a divinely mandated mission for the United States in expanding the Atlantic to the Pacific. Others trace it forward to the present day, including the proliferation of US military bases overseas and the United States' still unequal relationship with many of its insular possessions" (Burns 1).

[35] This self-published and circulated pamphlet announced "To All The World! I declare the earth is hollow, and habitable within; containing a number of solid and concentrick spheres, one within the other, and that it is open at the poles 12 or 16 degrees" (Symmes).

[36] Hollow earth theory generally was a "fit subject on which to indulge" wit. Hollow earth conspiracy theories run the gamut and range from among the following: religious beliefs that debate whether subterranean worlds like Hades and Hell are wholly allegorical or could be real; an account of a WWII pilot who claimed to encounter a warm climate, living mammoths, and advanced peoples concerned about nuclear bombs when he flew over and was intercepted by these North Pole people; the story that Hitler might have escaped to Earth's center when he "ostensibly" committed suicide; etc. These "theories" span a range of genres and time periods, and do not seem to be connected to one another except by their location. Hollow earth conspiracy theories are not limited to contemporary websites like gaia.com; they are also detailed in 1800s newspapers.

Spheres (1826)[37]—continued to advocate for the hollow earth theory and attempted to travel to the inner earth to discover its riches.

While none of the expeditions of the nineteenth-century uncovered evidence of Earth's hollowness, they did sometimes prove useful in other ways. Ellen Chu briefly credits Symmes for helping to get the United States South Seas Exploring Expedition (1838-1842) off the ground: "Part of the impetus for this expedition came from one John Cleves Symmes, Jr., who believed the earth was a hollow sphere that could be entered at the poles. Although this 'Holes-in-the-Poles Theory' was not taken very seriously even then, merchants eager to chart the South Seas allied themselves with Symmes" (222). These lobbyists were, eventually, successful and on January 19, 1840, the Exploring Expedition made landfall in Antarctica.[38] This occurred nearly ten years after Symmes died, so he did not live to see a successful expedition to the Arctic or Antarctic, the trip that pervaded his fantasies and drove his life's work.

Symmes and his career represents one small part of a much greater public fascination with the inner earth and its riches, real and imagined. In the 1890s, the American press,

---

[37] Symmes was not known for his writing skills; without McBride's account of Symmes's theory, it would be difficult to understand the full scope of Symmes's work and beliefs.

[38] There is an ongoing dispute about which country and which expedition can most rightfully claim to have first made a successful journey and definitive landfall on the Antarctic continent. This is because one can conceptualize the race to the poles much like the race to the moon: once the idea was heralded as a good one, possibly yielding new plant, animal, and mineral resources, many countries tried to quickly fund an expedition and claim credit for "opening" this newest frontier. Chu admits that "disputes over who should receive credit for this discovery raged for more than a century," but claims in a sweeping move that "it is now acknowledged that the little-remembered United States South Seas Exploring Expedition … first proved definitively that a seventh continent existed" (Chu 222). This is at odds with T.H. Baughman's meticulous account of the British Discovery Expedition (1901-1904) led by Robert Falcon. He writes, "The early nineteenth century saw three waves of exploration in the South. Three explorers – Nathaniel Palmer (1799-1897), William Bransfield (1795-1852), and Thaddeus von Bellingshausen (1778-1852) – have been declared the discoverer of the continent in the period 1819-21. Bellingshausen's claim is the strongest, but given the international nature of contemporary Antarctica, credit may be shared among three nations: the United States, Great Britain, and Russia" (1). He makes no mention of Lieutenant Wilkes. The general consensus is that one of the "big three" "opened" the South Pole—as Baughman writes, the US, Great Britain, or Russia—regardless of which captain should be most lauded.

especially *The New York Journal*, was heavily invested in the international race to the poles; sensational headlines included "A Record-Breaking Year for Arctic and Antarctic Expeditions: 1897" and "Think the Earth is Hollow," as well as those detailing tangible results of these forays into the unknown like "Our Interesting Little Esquimau Visitors from the Arctic."[39] A reader might pick up the paper and find out in the course of his or her browsing that "an expedition of scientists is about to leave Chicago and take up its position on the Gulf coast, near Estora, Florida, for the purpose of demonstrating that the earth, instead of being convex, is concave and that, as a matter of fact, we live on the inside and not on the outside of it" ("Think the Earth"). This particular expedition, meant to prove that we, the existing surface earthlings, are actually the inner-earth dwellers, did not get a full page spread like the accounts of the scientifically verified and funded international expeditions. But neither did the paper ridicule nor dismiss astronomer and geologist Ulysses S. Morrow and his crew's project to prove that the world is concave.

[39] In 1899, *The New York Journal* published "Our Interesting Little Esquimau Visitors from the Arctic." This story is about orphaned twins named Zaksriner and Artmahike who "were born in September, 1890, in an underground hut in an Esquimau settlement." Mr. Miner Bruce, "superintendent of the Alaskan station" adopted the twins after their parents' deaths and brought them to Seattle. In the course of the article, the author dehumanizes the children by first likening them to birds—the children were "small and brown and plump, not at all unlike well-fed partridges"—and reports that they had been called "Brownies," which, with the capital "B," is most likely a reference to the brown temperamental fairies that act as domestic servants in Scottish and Irish folklore. We learn, too, that the children traveled to New York City to be catalogued as anthropological specimens at the Museum of Natural Sciences, and the girls' story is included on a page devoted to geological and anthropological discoveries and speculations. The page's headliner is "Tomb of the Immortal Romulus of Rome Unearthed" and next to the girls' story is the headline, "Are Columbus's Bones Really in America After All?" By placing the twins' story in the newspaper, their indigeneity becomes twice removed from the present: they are stuck in time as "Indians" recorded in an anthropological study, while simultaneously their experience in New York as detailed in the paper forever lives beyond them. They are representatives of the past while alive in their present, and ever-present in the future; the girls are "discovered" and made into actual relics for the museum in the course of the article, relegated to history, their story tucked among tales of unearthed tombs and bones, and unearthed repeatedly in archival study. This story is representative of Indigenous erasure tactics built by politics and science, as well as rhetoric that simultaneously glorifies and undermines native peoples as "exotic."

These archival examples demonstrate the people's fascination, fueled by the press, with these Arctic and Antarctic expeditions[40] and their discoveries, real and fantastic. The race to the poles to discover who might live inside the earth was concurrent with the aftermath of the Industrial Revolution and the resource mining it generated. The question of w*ho* might be in the earth coincided with the more practical one of *what* might be in the earth—in other words, if we dig down far enough, what resources might be taken from the earth for human benefit and consumption? Halley suggested the "what" might be a habitable space for the growing human population, and Symmes suggested the "who" was an advanced race of humans. But *Mizora* as a novel demonstrates that the "what" and the "who" are perhaps not such distinct questions after all: that what one might find deep inside the earth is the idea of a people. Nineteenth-century geologic and colonial imaginatives were intimately entwined, and hollow earth novels explore the power struggle inherent to frontier ideology as it moves underground.

[40] What made these spaces that Siobhan Carroll calls "atopias"—the poles, the ocean, the atmosphere, and the subterranean—so desirable to the State and so interesting to the literary imagination was precisely the tension she identifies between the known and the unknown, and the governable and the ungovernable. "Atopias"—inaccessible or inhospitable "blank spaces" like the subterranean—were the places and "spaces" (like the ocean) in the eighteenth and nineteenth centuries that existed beyond the boundaries and maps of "known" places. Carroll argues that as these atopic spaces started to become known entities, authors explored how British identity was shifting in an era of increased globalization. Atopias became areas that could "at a stroke, undo, arrest, deviate, or destroy the human systems of global circulation" (7). In this vein, the subterranean became a threatening space in its ability to simultaneously reify and undo Colonial "progress," both in reality through practices like the underground native resistance, and in hollow earth novels with the depiction of civilizations that reflect the problematic nature of colonialism on the earth's surface.

Living in the Before-Time: Vertical Colonialism, Indigenous Identity, and the Violence of Temporal In/Exclusion

The hidden treasures of the subterranean—real and imagined, mineral and people—amplified colonialists' fervor for resource extraction, and mapping of the subterranean aided in the erasure of the peoples whose resources were being extracted. Heidi V. Scott's study reveals the multifaceted nature of the nineteenth-century subterranean imaginary. She demonstrates that nineteenth-century colonizers were fearful of the underground because they could not fully control what they could not see. This fear of the unseen arose from the perceived threat of a native "underground," a resistance to colonization and conversion enacted by Indigenous peoples by literally burying their resources. Scott's case study focuses on the Spanish colonization and conversion of the Peruvians to Catholicism. Indigenous Peruvians buried their relics and other sacred objects sometimes directly under Catholic monuments: "The attention of Peru's colonial authorities was therefore drawn into the realms of the subterranean, not simply … with a view to extending the productive use of space below the surface of the land, but also in an attempt to eliminate the threat that the underground was believed to pose" (Scott 1863). The Spanish were determined to eradicate any "threat," real or perceived, above ground or underground, to their newfound wealth from mining.

Methods of Indigenous resistance, in Peru and beyond, thereby took on an imaginative life of their own. Scott writes that the "extent to which the existence of subterranean sacred geographies actually represented a substantial challenge to colonial rule is largely beside the point here: instead, I … highlight the complex and often contested imaginative intersections between colonial Peru's surface landscapes and the subterranean" (1863). Imaginative constructions of subterranean space existed in complicated relationships with colonizer and

colonized, treasure and threat. At the same time that underground spaces became figured as places of Indigenous resistance, they were also imagined as places of great promise. Promoters of colonial mines would sometimes exaggerate their capacity or productivity, or, as Elizabeth Miller writes, "mine speculation thrived in estranged settings, and distance sometimes seemed to make the mine grow richer" (148). Scott articulates the same point, and links the exaggeration of a mine's productivity to erasure of Indigenous power; in other words, the more exaggerated a mine's productivity, the greater the threat and power of Indigenous people to take it away.[41] Scott depicts the subterranean as a space with imaginative possibilities beyond resource extraction, particularly as an area of resistance to colonization. But hers is not a literary study of hollow earth fiction. When we do apply Scott's way of thinking about imaginative underground resistance in the colonial context to literature, we find an interesting inversion of the typical hollow earth narrative: Earth's layers can reveal the history of preserved, or eradicated, indigeneity rather than a progress-oriented, white, Western future.

The Peruvian underground resistance is one response to a practice that Scott names vertical colonialism. Scott defines vertical colonialism two-fold: first, it is the act of the Western colonizer claiming underground resources in a country that is not his; second, it is the simultaneous act of feminizing and infantilizing the local Indigenous population in order to justify extracting their resources, often by using their (forced) labor without remuneration (Scott 1855-56). Vertical colonialism has both spatial and temporal implications. Spatially, vertical

[41] The underground riches in Peru were not limited to natural resources: "Although the indigenous concealment of subterranean knowledge was a particular focus of royal and vice-regal concern, the authorities had a good reason to suspect all members of colonial society in Peru of concealing knowledge about the underground and the goods that were extracted from it. Secret grave looting and the concealment of goods in order to evade royal taxation was a common practice among Spaniards in Peru" (Scott 1861). Indigenous Peruvian graves were a source of metals, even gold, and other valuables alongside the ground's natural resources, and the government suspected the Peruvians and Spaniards alike of withholding information and treasure.

colonialism enacts a vertical version of frontier ideology; whether it was Spain colonizing Peru, or Canada and the United States pushing national boundaries into native territory, each used geology and mining to further define a national identity bound by concerns with mineral wealth and the exclusion of groups cast as minorities. The temporality crafted by nineteenth-century geologists as they dug into and mapped Earth's layers was not just instrumental in but also constitutive of political rationality. Mining became a method of writing white superiority into the earth's stratigraphic timeline, of digging for and creating a past that reified present social hierarchies and supported social Darwinism. Moving backward in geological space became analogous with moving backward in geological time to justify the feminization, infantilization, and erasure of Indigenous peoples in the present.

The underground thus offers a double-edged sword for Indigenous representation. On the one hand, it promises a space for preserving Indigenous culture under threat of erasure, but on the other, in the hands of colonial media, it can provide the backdrop for transforming Indigeneity into a relic of the human past. The process of temporally removing Indigenous peoples from the present and/or bringing them forward into the present and thereby "endowing" them with humanity is a circular, problematic project, and one that native studies continuously grapples with. Anne McClintock writes that native peoples were treated "not as socially or geographically different from Europe and thus equally valid, but as *temporally* different and thus as irrevocably superannuated by history" (*Imperial Leather* 40). Like Mark Rifkin, who theorizes how native identity is circumscribed by temporal in- and exclusion, McClintock sketches how time serves the project of dehumanizing Indigenous peoples and all colonized "others."

This settler colonial rhetoric of temporal removal also has roots in fin-de-siècle worries about the degeneration of the white race. Indigenous peoples were pseudo-scientifically

designated as a racial variant, a subspecies of the white human; native Americans in particular were viewed as an entirely different order of people, a genetic steppingstone on the way to whiteness. At the 1893 World's Columbian Exposition in Chicago, a fair held to commemorate the 400th anniversary of Christopher Columbus's American voyage, native American people were displayed "to signify a past stage in the evolution of mankind, the stage of 'savagery' … out of place in the modern world" (Domosh 187). Native Americans and their traditions were put on display at the Columbian Exposition and made to seem as if they were emerging from a distant past, even though the removal of native Americans from their homes to reservations was (is) an ongoing endeavor.

Vertical colonialism brings into the earth a long history of wiping from the map literally and figuratively anyone who could lay claim to land imagined as empty and explorable by colonial adventurers.[42] Bruce Braun writes that "one cannot understand 'governmentality' [per Foucault] apart from how the territory of the state is brought into being as a state of *difference*"

---

[42] In Jules Verne's *Journey to the Center of the Earth* (*Voyage au centre de la Terre*) (1864), narrator Axel Lidenbrock and his uncle, Professor Otto Lidenbrock—"a selfish savant—a well of science," "a miser," and a mineralogist (Verne 2)—travel to Iceland after discovering a Runic inscription detailing the entrance to the earth's core. While underground, the Lidenbrocks act as colonizers by naming their discoveries for themselves. Upon finding a prehistoric sea, they dub it the sea of Lidenbrock. Before they set sail on this inner-earth ocean, Axel proposes to name their launching point "Gräuben," the last name of Professor Lidenbrock's female ward and Axel Lidenbrock's love interest. Axel says to his uncle, "Port Gräuben would look very well upon a map … And thus it was that the name of my beloved Virlandaise came to be connected with our darling adventure" (107). Verne's story literalizes vertical colonialism: the Lidenbrocks descend backward in time as they move closer to the earth's center, and claim the riches as they go. Eventually they travel far enough back in time to discover a sea with prehistoric sea monsters and a hominid/human(oid). Axel believes what he is seeing when he is underground, but once he is home he must lean fully into his uncle's scientific accounting and rationalize his memory to fit with a narrative that will allow the Lidenbrocks to hold onto their discoveries as rightfully theirs. In this way, Verne comments on other novels in the hollow earth genre and their imagined inhabitants; he pokes fun at the idea that anyone could actually live in the earth, claiming that believing such a thing is "the height of madness." Axel's self-doubt and re-narrativizing of his experience is not just a way for Verne to insert tongue-in-cheek commentary on the hollow earth theory, however. Axel's disbelief at having seen an inner-earth human(oid) is also a form of Indigenous erasure enacted through double colonialism: erasure on the surface through dehumanization, and erasure of the underground through vertical colonialism.

(13). A primary way that the state or nation is brought into being and differentiated from other imagined communities is, according to Benedict Andersen, through print capitalism. Cartography, as one form of print capitalism, has been used to construct “blank,” explorable spaces in fiction and fact, as Braun explains in his work on geological mapping of the subterranean in nineteenth-century Canada.[43] Mass-produced maps render(ed) the world blank and ripe for exploration, and geological surveys enacted the same erasure vertically. The timing of subterranean mapping and mining overlapped with hollow earth theory and expeditions to discover relics of original peoples inside of the earth.

Mapping Ecofascism: Digging for Purity

Mizora: A Prophecy is a story of social Darwinism and eugenics in which everyone who is not an “ideal” Aryan woman has been rooted out from the inner-earth civilization of Mizora. In her quest to discover where the Mizorans have hidden the men, narrator Vera Zarovitch learns of the society’s systematic and longstanding use of targeted and scientific murder. After many months of sleuthing, when Vera finally asks the Preceptress, an elder and keeper of knowledge, about Mizora’s past, she is led into a secret gallery housing old portraits of bygone generations. Here, Vera sees portraits of men and discovers their fate: in order to end war and give women equal rights, “a prominent scientist proposed to let the race die out” (Lane 103). Agreeing that this was the only way to create lasting progress and change, the women had discovered how to reproduce without men and birth only girl children; thereby, the men, confined to their homes and to prisons, and denied sex, had slowly died out until none were left. Emboldened by their

---

[43] Bruce Braun discusses the erasure of the local Indigenous Haida populations in the physical mapping of the terrain by geologist George Dawson: in “restaging the landscape as a solely geological artefact … the presence of the Haida was recognized only obliquely through the siting of ‘Skidegate Village’ in the upper-right hand corner of the map” (15). The allure of unexplored “blank spaces” drew prospectors and scientists with varying interests, but only if no one could *legally* lay claim to that space once the prospectors arrived.

success, the Mizorans had determined to eradicate people of color, disabled people, "criminals" with "undesirable" moral traits that they might pass on hereditarily, and other non-human mammals.[44]

The first mechanism of Indigenous erasure is the very narrative structure of the novel itself. The hollow earth plot of Lane's novel is framed by a surface travel narrative: after fleeing Russia and being abandoned by the crew of the whaling vessel whom she had trusted to convey her to France, Vera spends many months living with the hospitable Indigenous Arctic people. Despite their charity, Vera characterizes the Arctic people as "the poor children of the North," and takes credit for her own survival, claiming, "Acclimated by birth to the coldest region of the temperate zone, and naturally of a hardy constitution, I found it not so difficult to endure the rigors of the Arctic temperature as I had supposed" (Lane 11). Vera not only infantilizes her Indigenous hosts, but also erases their lived experience by imposing her supposedly superior technological knowledge—"I secured the esteem of the Esquimaux by using the compass to conduct a hunting party" (11). She does not admit that she would be dead if these people had not

[44] *Mizora* draws from and can be classified as belonging to multiple genres: the women's utopia, including Rokeya Sakhawat Hossain's *Sultana's Dream* (1905) and Charlotte Perkins Gilman's *Herland* (1915), which detail waking dreams and mythic civilizations that center women's experiences in male-dominated societies; early speculative SF, including H.G. Wells's *The Time Machine* (1895), which projects a future in which a Victorian fear that the human race will degenerate physically and morally is realized; and the adventure novel, like those I will explore in this project's third chapter, including H. Rider Haggard's *She: A History of Adventure* (1887) and Pauline Hopkins's *Of One Blood*: *Or, The Hidden Self* (1902), which unearth parallel historical timelines. Most significantly, *Mizora* belongs to the genre of hollow earth fiction, which was prolific in the nineteenth century. A partial list of hollow earth novels, often co-classified as adventure fiction and "lost world" novels, includes the anonymously-published *Symzonia: A Voyage of Discovery* (1820); Jules Verne's *Journey to the Center of the Earth* (1864); Edward Bulwer-Lyttona's *The Coming Race* (1871); James De Mille's *A Strange Manuscript Found in a Copper Cylinder* (1888); Willis George Emerson's *The Smoky God Or, A Voyage to the Inner World* (1908); and Edgar Rice Burroughs's *At the Earth's Core* (1914). George Sand's *Laura: A Journey Into the Crystal* (1864) riffs on the hollow earth genre, taking it to a microscopic level—her characters travel into a geode. Among these, *Mizora* is generically interesting both because of its female narrator—the genre is dominated by male narrators—and for its treatment of moral "progress" intimately bound with concerns regarding technology, extractivism and climate sustainability, and eugenics.

given her furs, an igloo, and food, and takes their generosity as her due; she states, "I soon discovered the necessity of being an assistance to my new friends," implying that she had been letting them feed and clothe her without trading her labor or otherwise helping (11). By flaunting her technological prowess and accepting her hosts' hospitality without grace, Vera treats the Indigenous people as though they have emerged from a primitive history—she points out that "raw flesh and fat … form their principal food" and "life is a continual struggle with cold and starvation" (11)—and miraculously remain alive in her present without having acclimated to nineteenth-century Western technology and practices.

The novel implies that Vera is innately superior to the Arctic people due to her white skin and finely-tuned instincts; this belief is emphasized by Vera's discovery of Mizora. Having survived the winter and traveled with her companions "farther north," Vera notes the difference in flora and fauna and has a gut feeling that the vegetation and wildlife is not only due to a seasonal shift: "Across this sea I instantly felt a strong desire to sail. I believed it must contain an island of richer vegetation than the shore we occupied" (12). Pulled by intuition, she blithely ignores her hosts' admonishments against sailing the Arctic Ocean by herself: "No one encouraged me or would agree to be my companion … My resolution, however, was not shaken … I launched into an unknown sea" (12). The Arctic people live near the entrance to Mizora, but it seems they have never found it: "My friend smiled, and pointing to the South, said, as he designated an imaginary boundary, 'Across *that* no white man's foot has ever stepped'" (12). This emphasis on the "white man" implies that a non-white, likely Indigenous foot had "stepped" (rowed) beyond the imaginary boundary. If someone had found Mizora, however, that adventurer did not return to tell the tale—one must be a white woman to unlock Mizora's door. Vera's characterization of this Indigenous community as child-like and the way the narrative

instrumentalizes that community, but then disavows their usefulness, are both ways in which Mizora as a novel erases Indigenous people.

Noting a change in temperature, vegetation, wind patterns, and/or a shift from saltwater to fresh water is a narrative device in hollow earth and adventure fiction that marks the narrator's crossing into a utopic space at the ends of or inside the earth. For example, in Edgar Allan Poe's *The Narrative of Arthur Gordon Pym of Nantucket* (1838), the protagonist Arthur Gordon Pym and the crew he had joined seek the South Pole. After many months, they emerge from a gridlock of ice and freezing temperatures into a drastically improved atmosphere: "This morning we reached the Western extremity of the field which had impeded us, and, weathering it, came to an open sea, without a particle of ice … [T]he temperature of the air was mild and pleasant" (158). Here, ice is figured as the door to a fantasy world; once inside, the crew hunts very large birds and a 15-foot-long Arctic bear, and soon discovers a race of jet-black people who have never encountered outsiders. Similarly, in Willis George Emerson's *The Smoky God*, Olaf Jansen and his father note that the tempestuous saltwater sea turns into peaceful freshwater as they near the entrance to the earth's core: "We had fortunately attained a distance inland where … the water … had become fresh" (36). In fact, they are not inland, but inside; this is signaled by a shift in vegetation: "Along the banks great forests miles in extent could be seen … The trees were of enormous size" (36). Shortly thereafter, they discover inner-earth giants. These are not the only examples of this narrative device. *Mizora* makes subtle use of this signal: only Vera notices that the vegetation seems to be more bountiful than the frigid climate should allow.

Vera's ability to detect the shifts in her surroundings and wayfinding is indicative of the novel's hollow earth genre, but also speaks to the importance of her gender. Vera's ability to find the entrance to the inner earth bolsters her own ideas about social Darwinism by implying that

there is something special about her that prompts Mizora to reveal itself: first and foremost, her whiteness, and secondarily, her gender (for no *man* had stepped across the imaginary boundary). Vera reports with tongue in cheek and in a tone laced with hubris, "It does seem a little astonishing that a woman should have fallen by accident, and without intention or desire, upon a discovery that explorers and scientists had for years searched for in vain" (Lane 19). It seems Mizora's entrance can only be revealed to a worthy, white *woman* adventurer ready to learn about Mizora's "advanced" ways. The novel, in this moment, both enacts vertical colonialism and starts to craft the parameters of the nation that Vera enters. McClintock argues:

> Nations are elaborate social practices enacted through time, laboriously fabricated … [and n]ationalism both invents and performs social difference, enacting it ritualistically … For this reason, nationalisms are dangerous … in the sense that they represent relations to political power and to the technologies of violence … All nationalisms, moreover, are gendered ("No Longer" 104-105).

In focusing on women only, *Mizora* departs from many of its generic predecessors. Based on the synopses Darby Lewes provides, the fifteen women's utopia novels that predate *Mizora* center egalitarianism, ironically by inverting men's and women's social roles—men stay at home, and women run the world. But in Mizora, the women eliminate men altogether.[45] As I will discuss in more detail later, Mizora conflates gender and race in complex ways, and womanhood becomes inextricably bound to "white womanhood."[46] Therefore, when Vera moves into the earth to learn

---

[45] Lane's inner-earth setting is also an original choice in the context of other women's utopia novels; the other authors of the women's utopias have characters travel to space, enter dreamlands, or wake up in distant futures.

[46] Charlotte Perkins Gilman's *Herland* (1915), written after Lane's *Mizora*, also details a society in which women have managed to reproduce without men. However, *Herland* outlines a less violent cultural history that led to a gender-singular society: the men of the society named Herland were mostly killed in war, and the women were then segregated from the remaining men and the outside world by a landslide. The women of Herland also accept and elevate all women regardless of skin color, whereas Mizora only

more about the Mizoran society, she also seeks to be reunited with whiteness—she finds, as she puts it, her "own race" (Lane 12).

While Vera identifies as a white woman, natural and cultural differences continuously mark her as other upon her arrival in Mizora. Vera's borrowed Indigenous clothes and her voice are two such markers. Vera recalls, "I stood apart from the beautiful creatures like the genus of another race, enveloped in garments of fur that had seen much service. I presented a marked contrast" (16). The fur makes her seem animalistic and lower down the chain of being.[47] It is imperative that she immediately reassume her white privilege by performatively assimilating. Before any of the Mizorans attempt to ascertain who she is, where she has come from, or whether she could pose a threat, she is led into a private chamber and presented with clean

---

allows white women to live. Gilman's women conceive miraculously rather than through careful science. In *Herland*, too, when the three male narrators arrive the women teach them their ways and rejoice that they will choose mates and add to Herland's population through reproductive sex. In Mizora, the women would have killed any male interlopers.

[47] Nineteenth- and early-twentieth century descriptions of Indigenous peoples by colonizers, in fact and fiction, often make comparisons that mark Indigenous people as animalistic and thereby less evolved than their white contemporaries. For example, in Verne's *Journey*, the Lidenbrocks stay with the local rector and his wife upon their arrival in Iceland as they approach the Snæfellsjökullas Volcano, the ostensible entrance to the earth's core. Their brief stay with this Icelandic family convinces Axel that these people, while of similar Germanic heritage, are lesser and other; they are not like him. He compares them to animals: "[The rector] left off his work, and gave a sort of cry, no doubt in common use among horses and jockeys. A tall vixenish-looking shrew instantly made her appearance. If she did not measure six feet high she certainly was not much less. I was afraid she would offer me the Icelandic kiss, but I need not have alarmed myself, for her manner was too ungracious for any such politeness (Verne 52). With their large statures and animalistic method of conversing with cries and grunts, the rector and his wife become "savage" in comparison to the "civilized" Germans of Hamburg. Neither of the Lidenbrocks can leave their hosts behind quickly enough: "My uncle quickly understood his man. Instead of a good and honourable man of learning, this was a coarse, lumpish peasant. He therefore resolved to commence his great expedition with the least possible delay" (52). This short stay and speedy exodus leave the Lidenbrocks with no qualms about claiming any fortune and fame that might arise from their epic journey into the earth. This is one literary example of the colonialist tactic of erasing Indigenous peoples by employing social Darwinist rhetoric, i.e. depicting an Other as already degenerated, or unevolved in the first place—as animal-like.

clothes: “She placed before me a complete outfit of female wearing apparel, and informed me by signs that I was to put it on” (17). Vera sheds the clothes that mark her as Indigenous and indicate that she has performed manual labor, and, in donning the Mizoran “attractive costumes … of extreme elegance” (20), immediately feels relieved. But by virtue of being a brunette surface dweller in a land of long-lived, ethereal blondes with melodic voices, nonetheless—and for the first time in her life—Vera feels inferior: “Accustomed to the harsh dialect of the North, my voice was almost intractable in obtaining their melodious accentuation … In my own land the voice of flattery had whispered in my ear praises of face and figure, but I felt ill-formed and uncouth beside the perfect symmetry and grace of these lovely beings” (19, 21). Lane herein depicts the Mizorans not only as superior to the Indigenous people with whom Vera had been living, but also to Vera herself. There may be two levels of racial thinking at work in this initial encounter between Vera and the Mizorans. Not only has she been marked as other by her Indigenous clothing, Vera is also Russian. She is outside the privileged Anglo-Saxon racial imaginary that presumably many of the stories’ readers would have believed; there is an Anglocentric, anti-Russian element to Vera’s perceived inferiority. The Mizorans present a marked contrast to *any* surface dweller, and in a surprising change of pace it is the surface-dwelling Westerners who are soon depicted by the Mizorans as “savage” as Vera reveals to them what her life was like on the surface.

While the Mizorans think Vera and life on the surface are savage, the modern, surface-dwelling reader of the novel knows that violence on the surface and the violence underground are not so different after all. Mizora’s troubled past reveals layers of oppressed peoples and erased histories. Lane crafts a tale of women overtaking society, supposedly for the better: “Many ages ago this country was peopled by two races — male and female. The male race were

rulers … Their supremacy had come down from pre-historic time" (95). But after years of war that caused women to step into traditionally male roles, the women had had a taste of equality and power and were loath to relinquish it. At the end of the war, a male dictator was "elected," but the women would not stand to again be dominated. So they staged a coup: "To secure strength and avoid confusion was the aim of the founders of the new Government. The Constitution of the National Government provided for the exclusion of the male sex from all affairs and privileges for a period of one hundred years. *At the end of that time not a representative of the sex was in existence"* (101). The Preceptress justifies the women's decision to eradicate men by labeling the latter as "pre-historic"; she also says their role as the head of the family is outmoded because it was assigned "when strength of muscle was the only master" (95). In this way, the Preceptress normalizes in Mizora what Vera practices with the Indigenous Arctic peoples: by employing temporal stasis as a marker of savagery and rhetoric associated with native erasure, she rationalizes the subjugation and extermination of the Mizoran men. The Mizoran women's justification for this act is that the men were unable to evolve past a hunter-gatherer paradigm and unwilling to treat women as equals. McClintock writes that "male political power" in any nation "is heavily dependent on a naturalized, and none too 'accidental,' ideology of gender difference. Nationalism is constituted from the very beginning as a gendered discourse, and cannot be understood without a theory of gender power" (McClintock 105). Lane gives a nod to the real-life history of gender difference and male oppression in writing Mizora's past, but uses Mizora's present to explore a divergence from that real history; the only way forward and out of the naturalized ideology of gender difference foundational to their nation was the eradication of the offenders.

Not only does the Preceptress relay the story of Mizorans' extermination of men, she also proudly reveals Mizora's dystopian conditions to the reader: it is a world whose perfection is built on exclusionary violence. It is Vera's search for men that leads her to the gallery of portraits of bygone generations and prompts the Preceptress to reveal that the men were eradicated. Vera also sees in these portraits people with dark hair, dark eyes, and a wide variety of nonwhite complexions: "And were the people of this country once of mixed complexions? … And what became of the dark complexions?" (92). She learns that the Mizorans eliminated them, as well, to create their utopia: "The highest excellence of moral and mental character is alone attainable by a fair race. The elements of evil belong to the dark race" (92). The Preceptress's story highlights a conflation of masculinity and people of color and makes it clear that neither is considered desirable in the Mizorans' purified society. Virinder S. Kalra writes that "the idea of hegemonic masculinities means that racialized minorities are always produced in a dialogue with the dominant … In bringing a minority racial or demonized religious identity into conjunction with masculinity, normative and hegemonic notions of the masculine are always rendered impossible" (119). Kalra writes that non-white British men are defined in contrast to the white British male, hegemonic norm; to simplify his detailed analysis, he writes that these non-white men are rendered either as either hypermasculine or hyperfeminine (in other words, emasculated), and describes how hypermasculinity often becomes synonymous with deviancy. In Lane's novel, hypermasculinity is also a form of racialization, and is applied to all of the men, not just the non-white men. Cast as a characteristic of every male, hypermasculinization becomes an excuse for eradication.

The Mizoran women were not content with racial purity; in a proto-Nazi move, they decided to eradicate all "impurity." Emboldened by their success in eliminating men and people

of color, the Mizoran women also outlawed “the perpetuity of diseased offspring” (Lane 108). They decided that “crime in its grossest form is an ineradicable hereditary taint” and “the only remedy was annihilation” (109). Vera realizes that the Mizoran women, under the guise of peacekeeping, killed everyone who did not fit their idea of a perfect society. And they are proud of what they have accomplished. As the Preceptress says to Vera, “What do you do with the useless weeds in your garden?” (61). The implied answer: root them out. As the Preceptress details Mizora’s history, it becomes apparent that Vera is more mortified by her ignorance of their history, and how it reflects on her own surface people and experience, than horrified by the Mizorans’ eugenic methods: “I did not tell the Preceptress that she had been giving me a history of my own ancestry” (135). Her feelings are hurt, for example, when she discloses to the Preceptress that she had had a husband and son on the surface: “The Preceptress started back with a look of loathing and abhorrence” (90). This is the first time in her life that Vera is made to feel truly inferior, and is looked at with utter revulsion and treated with pity for subjecting herself to a man and giving birth to a son. Vera continuously grapples with her inferior knowledge and bruised ego as she learns the Mizorans’ customs and history. For instance, Vera explains, “The cook was asked to sing, for, with the exception of myself—and I tried to conceal it—no one appeared to take umbrage at her presence” (35), while at a dinner party at which all of the women are treated with equal respect regardless of their occupations. Rather than reflect on how she has treated others as she time and again is faced with her own biases, she instead works hard to become like her white “saviors” and learn their ways—specifically, their eugenic methods—to bring back to shape the surface and its future.

Lane’s novel is not a singular piece of proto-Nazi propaganda, but was rather produced in and by a cultural zeitgeist. The August 17, 1896 edition of the *New York Journal* reinforces the

idea that a "purer," i.e. white, society free of vice was located at the poles and underneath the earth.[48] This edition of *The New York Journal* features a column titled "Garden of Eve May Be There." The article states, "To be sure, there are those who claim that the garden of Eden was located at what is now the North Pole … and that there still exist there the descendants of some of the children of Adam and Eve" ("Garden of Eve"). Mizora is Edenic—"It seemed a land of enchantment … [W]herever the eye turned it met something charming in cloud, or sky, or water, or vegetation. Everything had felt the magical touch of beauty" (Lane 14-15)—but it is not explicitly called or directly analogous to the biblical Eden. Emerson's *The Smoky God* is much less subtle: "[The people] had mild and beautiful faces, exceedingly fair, with ruddy complexions… [A]nd both men and women live to be from six to eight hundred years old … We heard much of a city called Eden" (Emerson 38, 39, 42). Writing 28 years after Lane, Emerson continues to probe the idea that an Edenic people would be white, and a preserved people living in ideal atmospheric conditions could live extremely long lives.

In Mizora, science in the form of eugenics is used to eradicate the masses, and the scientific exploration of clean energy becomes the primary, ongoing justification for the women's past violence and continued cultivation of "purity"—they enact a sort of energy-eugenics.[49] "Purity" is not only gender-singular and white, but also linked to energy production.

[48] With the goal of keeping the "American race" "pure," in 1910 the Eugenics Record Office (ERO) was founded. ERO was a research institute tasked with gathering hereditary, genealogical, and social information about Americans and devoted to educating the public about "genetic fitness." Harry H. Laughlin acted as Superintendent of ERO from 1910 until its closing in 1939. He lobbied to implement mandatory sterilization laws, which were eventually passed in 27 states and led to the subsequent coerced sterilization of at least 60,000 Americans. In 1924, Laughlin testified to the House Immigration Committee that an American race existed, and that this new race, while "created by 'a transplanted people,'" was nonetheless "a race of white people" "established by its [white] founders" (Black 555).
[49] Fossil fuels are intimately tied to not only mining endeavors, which engender practices like vertical colonialism, but also the concept of "modernity," which is a keyword in the rhetorical, temporal erasure of native identity. Bob Johnson connects fossil fuels to our very formation, understanding of, and "affective attachment" to modernity (1). He writes that the fossil fuel paradox "runs something like this": "Fossil fuels are the source of health and opportunity, fertility and reproduction, in the modern world, and

Having chosen from the masses a population supposedly of the highest moral fiber and intellectual capability, the Mizorans of the past turned their attention to environmentally-responsible resource management and clean (non-polluted and non-polluting) eating to sustain the world for the chosen who remain. Of the specter of a fossil-fuel deficient future, Miller writes that "[e]nergy extraction and the imminence of coal exhaustion haunt nineteenth- and early-twentieth-century imaginings of worlds otherwise and worlds to come," which "invited speculation on what a new energy base might look like" (141). In keeping, therefore, with hollow earth and early SF novels' exploration of energy resources, Lane crafts a land where hydrogen, not coal, provides energy: "Their coal mines had long been exhausted, as had many other of nature's resources" (Lane 58). Meat and dairy products are created by scientists, so citizens will not be sullied with "deleterious earthy matter" and their production processes will not squander Mizora's remaining natural resources (45). As if predicting one current argument against industrial-scale animal agriculture, they tell Vera that her own nation's habit of raising livestock wastes both land and food that could be put to better use: "Fully four-fifths that you raise on your farms is required to feed your domestic animals" (113). The Mizoran diet is not, however, a product of their commitment to animal rights.[50] In fact, there is no nonhuman life at all in

---

they prop up the rich emancipatory qualities that many of us ... expect from modern life in the West. .... But they are also and simultaneously the fuel for widespread social injury and limited horizons" (2). The Mizorans have crafted a clean-energy future that does not require fossil fuels, a future that "prop[s] up the rich emancipatory qualities" that the Mizorans have come to take for granted in the absence of any glaring class stratification or visible poverty (some Mizorans do have smaller houses than others, but no one is wanting for anything vital). That "pure" future was built with a particular vision of modernity in mind, a modernity free from all pollution.

[50] As nineteenth-century researchers were trying to scientifically prove the inferiority of non-white races, simultaneous conversations concerning nutrition, morality, and bodily integrity were taking place. The popular health reform movement of the 1830s and 40s, which was launched by Sylvester Graham of the graham cracker, "took a vegetable diet as its cardinal principle" and endeavored to link vegetarianism to cultivating a purity of spirit and intention: "It was from food that the body's very substance was derived; construct a body from inferior components, and all the exercise, pure air, and sexual restraint in the world would be of no avail" (Whorton 1104s-1105s). In the 1890s, John Harvey Kellogg of Kellogg's Corn Flakes cereal took up a similar line of thinking. For Kellogg, who also owned the Battle Creek Sanitarium

Mizora. Upon her arrival, Vera first notices that “no animals were visible, nor sound of any,” and later learns the animals were “pulled” from the world like men and non-white, non-blonde “weeds” once their products could be imitated (15). Due to an abundance of “clean” food as well as pure air—“there was neither smoke, nor soot, nor dust” (59)—and water, the Mizorans live extraordinarily long lives, experience no disease, and make advanced scientific discoveries almost daily because they need not worry about any aspect of survival.

The Mizoran elders ensure that a pure culture devoid of all deleterious matter, earthly or moral, is the only history that the younger Mizorans inherit. They purify the historical records and expunge all stories of a diverse Mizoran past: for all of their advanced education practices, they do not teach their daughters about the lost, murdered Mizorans, the ones who were not brought into this clean future. Wauna, Vera’s friend and guide, tells her, “We have so many new things to study and investigate, that we pay but little attention to ancient history” (29). Wauna cannot help Vera unearth the Mizorans’ history of eugenic eradication, because she has never heard of men, let alone of Indigenous Mizorans or Mizorans of color. Only the Preceptress, the elder, can give Vera the history she desperately seeks throughout the novel: “It is to be wondered at that the first inquiry I made, was: ‘Where are the men?’” (22). The eradicated others have been wiped from the annals, taken out of the classroom literally and figuratively, and left wholly in the past in the name of “modernity” and “progress.”

Lane not only writes a story of white supremacy moving into the ground, but also a scenario in which the threat of native resistance comes surging out of the ground. Vera brings Wauna out of Mizora and to the surface to spread the word about eugenics’ success under the

---

in Michigan, the desire for bodily purity intersected easily with a commitment to eugenics in which the “American race” would be as free from “inferior components” as the (white) American body (Whorton 1106s).

guise of promoting equality and equity for all. But even in this moment of a profoundly different Other coming out of the earth, actual indigeneity is again erased. The novel ends as it began: denigrating the Indigenous Arctic people. Vera records, "The Esquimaux [Wauna] presumed were animals" (143), and, as in the beginning, she details the technological advancements that set them above the natives and enable the women to remain comfortable despite the freezing climate: "The journey over fields of ice and snow was monotonous, but, owing to the skill and knowledge of Mizora displayed in our accoutrements, it was deprived of its severities" (143). When Vera and Wauna are unsuccessful in changing the minds of Vera's contemporaries above ground, they attempt to return to Mizora and thereby again encounter the Indigenous peoples of the Arctic. For all of her supposed innate superiority, nothing can keep Wauna from perishing on her return journey; Vera recounts, "In a miserable Esquimaux hut, on a pile of furs, I saw the flame of a beautiful and grandly noble life die out" (146). Among Indigenous people similar to those the Mizorans had rooted out, Wauna dies on the earth's surface. Once again, rather than thank them for making her friend comfortable, Vera blames her hosts for not being able to navigate Wauna back to Mizora in time; she says the Indigenous people are "intensely selfish" liars bent on resisting their colonizers even if it means the colonizers' death (146). Regardless of Vera's opinion, in the final moments of the novel it is the Arctic peoples who are centered and whiteness that perishes, even if this encounter is depicted in highly racist terms. This story of whiteness written vertically into the earth never quite moves away from the threat of the native underground; it only seeks to contain it through any means necessary, even the long-term application of eugenics.

Conclusion

Nineteenth-century subterranean and colonial imaginings were intimately entwined, and hollow earth novels explore the power struggle inherent to frontier ideology as it moves underground. Katherine Broad puts it most simply when she writes that *Mizora* "vocalizes white nativist anxieties over perceived threats to racial and social purity" (Broad 248). But while apt, it is not that simple. Mary Bradley Lane's *Mizora: A Prophecy* is in dialogue with practices of vertical colonialism and indigenous erasure that the specter of wealth and resource scarcity generates. Building on and tying together cultural conversations regarding racial purity and energy-deficient-futures, Lane writes whiteness into the ground, but she does not quite contain the Indigenous threat.

Andrea Smith brings the many threads of native identity erasure together when she relates indigenous identity-formation to Lee Edelman's take on the death drive: "Fighting for the future can impel us to reproduce the current social order as it is," she writes (46). Time ironically becomes stagnant when the goal is to reproduce the present, and that stasis is harmful because "the social order as it is" continues the exclusion of certain groups, including Indigenous peoples, from this mythic notion of modernity to which we have become attached. Nineteenth-century hollow earth novels map human geopolitics into the earth's core to attempt to not only recreate the homogenous present, but also rewrite the past to be one that centers whiteness. But in acknowledging the Indigenous peoples near the entrance, *Mizora* accidentally treats these populations as co-evals in time.

Finally, *Mizora* does not fully explain how the Mizorans have prolonged their lives. It is implied that eating cleanly and rigorously maintaining good air quality are the primary methods through which corporeal life can be extended. But the long-lived nature of populations in hollow

earth novels, like Lane's Mizorans and also Emerson's inner-earth giants, becomes secondary to the narratives of an original white people existing near the center of the earth. Hollow earth novels, and *Mizora* in particular, document a form of sedimentary evolutionism that implies that if one reaches back far enough or digs down deep enough, whiteness will out as the original people from which current society evolves. In the following chapter, this project unearths Blackness instead. The imperialist adventure novel, like the hollow earth novel, seeks to project whiteness backward in history, but also like the hollow earth novel, cannot quite write Blackness or Indigeneity out of the record. Pauline Hopkins takes the novel of imperialism and inverts it. She enacts reverse vertical colonialism by sending her Black characters to African to discover an underground Black Eden. Whereas Lane writes a novel that simultaneously preserves women in their corporeal forms—thereby rendering them like living fossils in their physical stagnancy—while insisting that they nonetheless are constantly culturally evolving, Hopkins embraces deep history and the power of the living fossil's unchangingness to disrupt developmental time and these narratives of original whiteness.

Chapter III

Mind the Gap: Sedimentation, Queer Femininity, and Black Specters

Introduction

In studying geology and its attendant theories including aslant sciences like cryptozoology and the hollow earth theory, this project has demonstrated how nineteenth-century fiction not only addresses science's impact on cultural evolution, but also makes space for stories that challenge the geological, biological, and cultural linearizing of history. In refusing to fit within "straight" narratives, the characters analyzed so far demonstrate that "the living present is scarcely as self-sufficient as it claims to be" (Jameson 39). These "living fossil" narratives—stories of mermaids, their infectious songs, and their leaky bodies, as well as tales of inner-Earth societies that trace divergent timelines—are models for thinking the historical "otherwise," for attending to mechanisms of repression. They thereby contain the power to make contemporary theoretical insights into otherness, queer time, and racial alterity more concrete. This chapter therefore turns to the final "living fossils" that this project attends to: Black specters. Theirs are stories of African (American) power and magic woven into the fabric of the world, narratives that refuse to be buried and erupt into the present when they are discovered or excavated by the stories' narrators.

It is not my intention to suggest that the stories analyzed herein—H. Rider Haggard's *She: A History of Adventure* (1886) and Pauline Hopkins's *Of One Blood: Or, The Hidden Self* (1902)—can recuperate a totalizing Black history. As Roderick A. Ferguson writes, this chapter attends to that "identitarian expectation," that "queer of color critique and the analysis of black nonheteronormative formations be a 'history of a people'" (Dinshaw et al. 180). Indeed, "to articulate the past historically" whether the history is the one we know or the ones we seek to

know "does not mean to recognize 'the way it really was'" (Benjamin 255). This is neither a chapter about recuperation, nor an effort to write a particular people back into the present.

Rather, in this chapter I explore the generic constraints of the colonialist adventure genre and how it writes race into being, as well as how race writes genre into being. I turn to Haggard and Hopkins in particular because their novels tell two versions of the same story, but Hopkins's inverts Haggard's. Very few critics[51] have paired Haggard's *She: A History of Adventure*[52] and Hopkins's *Of One Blood: Or, The Hidden Self*,[53] though similarities abound: a reincarnated king

---

[51] Hannah Wallinger's "Racial Context: Pauline E. Hopkins's *Of One Blood* and Henry Rider Haggard's *She*," published in 1998, as well as Sarah Ficke's 2011 dissertation *Pirates, Runaways, and Long-Lost Princes: Race and National Identity in Transatlantic Adventure Fiction* comprise the oeuvre of texts that conduct significant analytical comparisons of these two novels. Both authors similarly analyze how Hopkins uses and shifts the imperialist adventure novel away from a narrative of white progress. Wallinger also provides useful context for how Hopkins likely came to read Haggard's *King Solomon's Mines*—thirteen pirated editions circulated the United States, and the novel was wildly popular (Wallinger 41)—if not also *She* before embarking on her final magazine novel project that resulted in *Of One Blood*, published serially in *Colored American Magazine*. Hopkins served as editor-in-chief of *Colored American Magazine*. Jill Bergman in *The Motherless Child* compares Hopkins's *Contending Forces* (1900) to Haggard's novels, and Geoffrey Sanborn mentions *She* in "The Wind of Words: Plagiarism and Intertextuality in *Of One Blood*," claiming that Hopkins lifted and reused a phrase from *She*; neither Bergman nor Sanborn conducts a significant analysis of *She* compared to or in conjunction with *Of One Blood*. I build on Wallinger and Ficke's analysis, primarily on their discussion of Hopkins's use and reconstruction of the adventure genre.

[52] This is a story of three men's adventure into Africa to find a mountain shaped like a monkey's head, and the long-lived sorceress who resides there. A young Cambridge University professor, Horace Holly, is visited one night by his friend and colleague, Vincey. Vincey reveals that he will soon die, and asks Holly to raise his son, Leo. He gives Holly a locked box with instructions that Leo should open it when he turns 25. Holly agrees. When, as directed, Leo and Holly open the box on Leo's 25th birthday, they discover the "Sherd of Amenartas," which discloses an elaborate history and tasks Leo with revenge. Holly, Leo, and their servant, Job, travel to eastern Africa where they are captured by the Amahagger people. Billali, the chief elder of the Amahagger, takes charge of the three men. Leo is injured in a scuffle with the Amahagger, and nearly dies, but Ustane, his love interest, nurses him to health. Meanwhile, Holly meets Ayesha, the sorceress and self-proclaimed queen of Kôr, who reveals that she has learned the secret of immortality. She tells Holly that she has lived in Kôr for more than two millennia, awaiting the return of her reincarnated lover, Kallikrates. The next evening Ayesha visits Leo to heal him. Upon seeing his face, she realizes he is Kallikrates. She heals him and kills Ustane. Ayesha takes Holly and Leo to see the Pillar of Fire, determined that Leo should bathe in the fire to become immortal and remain with her forever. There, she perishes. Job dies of fright, and Holly and Leo make their way out of the African wilderness after some trials and tribulation. Ayesha promises she will return, and the novel closes with Holly ruminating on when her return or reincarnation will occur.

[53] The novel begins by describing Reuel Briggs, the protagonist, in his apartment in Boston. As Reuel is thinking about mesmerism and psychology, he sees a vision of a beautiful woman. He is roused from his

discovers an African civilization untouched by time, characters embody little known histories, and subplots explore excavation, magic, technology, and knowledge-production. Haggard's hidden city reveals a thousands-year-old queen—Ayesha, also known as She-who-must-be-obeyed—protecting mummies from an original, white Africa since supplanted by the "degenerated" colored bodies of the Amahagger people. Hopkins's city reveals a Black queen, Candace, whose body succumbs to time but houses an immortal, transferable deep consciousness. Candace is the record-keeper of an Ethiopia that was once, and, the text suggests, will again be, the epicenter of knowledge and culture. Both stories also explore the life-death continuum to consider how alternate prehistories come to light when particular bodies refuse to die, along with the supposed dangers that emerge from excavating and reinvigorating those bodies and histories.

---

trance by his friend, Aubrey Livingston. Soon thereafter, Reuel and his friends attend a concert. There, he sees the woman from his vision in the flesh: Dianthe Lusk. He becomes infatuated. At a party hosted by Molly Vance, Aubrey's fiancé, and her brother, Charlie Vance, Reuel is dared to visit the neighboring haunted property. There, he again encounters Dianthe's specter. That next morning, Reuel, who is a doctor, is called in to treat the victims of a train accident. Among them is Dianthe, seemingly dead, but he revives her using mesmerism; she awakens, however, with amnesia. Reuel and Aubrey persuade Dianthe to live with the Vance family under another name until she recovers and relearns her identity. Reuel falls in love with Dianthe and proposes to her. She accepts. Wanting to provide financially for his fiancée, but suddenly and inexplicably barred from positions to which he applies, he approaches Aubrey for help. Aubrey is secretly in love with Dianthe too; when Reuel approaches him, he reveals that he knows Reuel is a Black man passing as white and uses this leverage to blackmail Reuel into participating in an archaeological expedition to Ethiopia. Soon after Reuel arrives in Ethiopia, he learns that Molly and Dianthe have drowned in a boating accident; in truth, Aubrey drowned Molly and stole Dianthe. Grief-stricken, Reuel wanders into the city of Meroe's ruins. There, he discovers an underground civilization that is certainly not in tatters, and is very much populated and advanced—the city of Telassar. He learns that he is the reincarnated King Ergamenes who the Telassarian people have long awaited, and becomes engaged to Queen Candace. He finds out, though, that Dianthe is not dead, and travels home to find her; unfortunately, he arrives after Aubrey has poisoned her. Ai, the Telassarian elder who accompanies Reuel to America, uses magic to convince Aubrey to drown himself—it turns out that Aubrey is Reuel's half-brother, and Dianthe their half-sister, and the incest plot can only be resolved and the integrity of the royal family restored by Aubrey taking his own life. Reuel returns to Africa, marries Candace, and inaugurates a new dynasty.

In what follows, I explore the importance of the living fossil as a historical concept to the adventure genre. I then position the immortal queens in these novels as living fossils that disrupt sedimented narratives to argue that, in manifesting asynchronous time and emerging as speaking specters of the past, they embody a prehistoric monstrosity best characterized as *chronomorphous.* Dana Luciano explicitly links monstrosity with archaeological discovery; she explains that "the monster"—in this case, the dinosaur fossil—is threatening because it "displaces the moment it embodies, exposing its not-one-ness" ("Tracking Prehistory" 174). Like the dinosaur bone, Queens Ayesha and Candace function as living fossils and displace the present by exposing its not-one-ness; their inner clocks do not align with a developmental historical model.

Living Fossils in Fact & Fiction

I analyze these fictional queens whose bodies present as human but evade biological constraints—queens who emerge from a deep history—and who sit at the intersection of science and literature by turning to Charles Darwin's "living fossil." Darwin coined this term in *On the Origin of Species* (1859); for Darwin, a "living fossil" is an extant creature that cosmetically resembles a species otherwise known only from the fossil record (Darwin 68). Scientists have debated whether or not Darwin meant for this term to be used synonymously with what we now call bradytely,[54] which means chromosomal stasis or arrested evolution; current science has repeatedly shown that "living fossils" have, in fact, genetically diversified from their fossil counterparts.[55] While contemporary scientists Didier Casane and Patrick Laurenti claim that

---

[54] G.G. Simpson coined this word in 1944. For more on Simpson and bradytely, see Steven M. Stanley's "Does Bradytely Exist?" in *Living Fossils* edited by Stanley and Niles Eldredge (1984).
[55] In addition to Didier Casane and Patrick Laurenti's study, see Thomas C. Mathers's "Multiple global radiations in tadpole shrimps challenge the concept of 'living fossils,'" as well as Philippe Grandcolas's "Relict species: a relict concept?" Marguerite A. Butlers's "Phylogenetic Comparative Analysis: A Modeling Approach for Adaptive Evolution" does not directly address living fossils, but, in proposing a

Darwin's term did not become popularized until eighty years after Darwin initially coined it (Casane 332), nineteenth-century journals show that the idea of "living fossils" was very popular in the wake of both Darwin's publication and the ensuing upswing in archaeological expeditions and discoveries. In fact, the concept of the "living fossil" can be found in scientific descriptions within twenty years of Darwin's first usage. In 1873, Frederick McCoy published *Prodromus of the paleontology of Victoria: or, Figures and descriptions of Victorian organic remains* because "the publications of a Geological Survey cannot properly be limited to the maps and sections" and "would be incomplete without figures and descriptions of the fossil organic remains" (3). In this "prodromus" or "preview," McCoy focuses on trying to connect living species to his fossil finds, primarily based on what remains came from which rock strata, and speculates on such topics as the origin of the domestic dog based on fossils of what he claims to be a dingo found in Colac, Victoria in Australia. He writes, for example, "Our present [dingo] species, although still living in great numbers, I have no doubt dates from the Pliocene Tertiary time, and I find, on the most minute comparison and measurements, no difference between the fossil and the recent individuals" (9). McCoy does not explicitly use the term "living fossil," but he is certainly interested in tying past to present by looking for proof of a lack of evolution in particular species.

McCoy is not alone is his preoccupation with linking living species to similar fossil remains. It is in the 1893, sixteenth volume of *Knowledge; a monthly record of science*, that "living fossil" emerges again as a specific term. R. Lydekker writes, "Since the subject of the survival of ancient types in remote corners of the earth or the abysses of the ocean is one of wide

---

different model of adaptive evolution, Butlers is similarly interested in finding ways to model genetic diversification, or a seeming lack thereof. For more on Darwin's use of the living fossil, see this project's introduction.

interest, we propose to consider it in some detail in the present article. For such survivors from a distant past we venture to suggest the title of 'living fossils,' seeing that … their alliance with extinct types is of the most intimate kind" (55). Lydekker details shells, plants, fish, reptiles, and even mammals that are supposedly living versions of their ancestors that have hardly diverged from the original model. Most interesting about Lydekker's short article is his claim that "the survival of ancient types … is one of wide interest" and that "the progress of research has been gradually tending to connect the past more intimately with the present than was originally supposed to have been the case" (55). Lydekker's article demonstrates the growing public and scientific interest in the ways that the past could live on, unaltered, in the present.

The notion of a living fossil not only gripped the imagination of the late-nineteenth-century scientific community, but also persists in contemporary debates; in fact, it has become a divisive concept in niches of the biology community that study evolution and genetics. Scientists are bothered by the idea that evolution ever stops or slows, and that a species could be genetically static over centuries. The aforementioned Casane and Laurenti are adamant that a fish called the "coelacanth," (re)discovered in 1938, is not a living fossil even though many scientists believe it is. After analyzing the same data of the coelacanth's DNA as two other studies, they conclude that because the fish[56] group is so small in population size, it follows that samples would show a lower level of genetic diversity; they also do not subscribe to the popular idea that the coelacanth has a more slowly evolving genome that points toward some kind of evolutionary stasis (333). What is perhaps most relevant here, however, is their forceful rejection of the living

[56] "Fish" is a bit of a misnomer. According to National Geographic, a coelacanth can be "huge, reaching 6.5 feet or more and weighing 198 pounds. Scientists estimate they can live up to 60 years or more." The presence of a deep sea creature of this size, and one that seems to live beyond a normal fish lifespan, conjures images of dinosaurs that somehow evaded extinction, including sea creatures like the Loch Ness Monster.

fossil concept: “Although Darwin coined the term ‘living fossil,’ it is unlikely that he actually thought that an extant species would be identical to an ancestral species … We hope that this review will contribute to dispelling the myth of the coelacanth as a ‘living fossil’ and help biologists keep in mind that actual fossils are dead” (336, 337). The debate about the coelacanth is not really or not specifically about this very large, possibly prehistoric fish. Rather, as a genetically “stagnant” entity, this fish both legitimizes and undermines linear historical narratives—it has been used by creationists as evidence against evolution, and by evolutionists as evidence of progressive teleology.

The coelacanth is thus an illustrative example of the power that Darwin’s somewhat throwaway term holds for scientists, pseudoscientists, and science-deniers. The concept of a “living fossil” is a problem specifically for the forms of science that arose from the Victorian period and the formalizing of geology as a discipline. It is so fascinating to scientists and the general public alike in part because of the promise and terror of geological unconformities, places in the stratigraphical record where deposits, and consequently time, has been lost. Laurie R. Godfrey writes that even “Darwin bemoaned the data missing from the fossil record. He borrowed a metaphor from Charles Lyell and described the scarred surface of the earth as the lone remaining volume of a several volume set. And in that volume, only a few chapters remain. In those chapters, only a few lines remain, and these are written in a language that has been modified with the slow passage of time” (197). If an unconformity represents a break in time, and a hiatus, or the contact point between the older and new rock strata, a span of missing time in the rock record, then what is so exciting about unconformities is that “missing links” could exist in the absence of information; they could simultaneously be lost from time and, at any moment, emerge into our present.

This intermingling of past and present could not only occur through the possibility of living fossils, but also by the archaeological excavation of the past. People wanted to know *how* fossils (living and dead) were found, and newspapers provided imaginative stories presented as factual accounts. A sampling of articles spanning twenty-seven years (1887-1914) from both sides of the Atlantic reveals a public fascination with excavation tales and a concomitant desire to find hidden civilizations and ancient peoples. Haggard published his novel *King Solomon's Mines* in 1885, a fictionalized account of a team of men led by Allan Quatermain that finds the mines of King Solomon, a famously wealthy and wise biblical figure. After this novel's popularity exploded, many newspaper accounts emerged of excavators claiming to have followed in Quatermain's fictional footsteps. In 1887, Alex Del Mar wrote "Haggard's Stories *King Solomon's Mines* and *She*: A Basis of Solid Facts, The Mysterious Ruins a Reality" for the *San Francisco Chronicle*. Herein he claims that Haggard drew his "strange accounts" from ancient wayfarers' true reports of "repeatedly circumnavigat[ing]" Africa. These explorers documented "archaeological remains of some ancient civilized race in South Africa" (10). Del Mar attempts to find evidence of prehistoric civilizations in Africa that would verify Haggard's fictional stories of ancient peoples and an originally white Africa; in doing so, he contributes evidence that both supports social Darwinism and, similarly, racist doubts that a Black civilization could have produced Great Zimbabwe.[57] In 1904, the *Chicago Daily Tribune* published the article "King Solomon's Mines and the Queen of Sheba's Domain Found," which

[57] Lindy Stiebel writes, "By attributing the ruins and stone carvings in *King Solomon's Mines* and the ancient city of Kôr to the work of ancient white civilisations, probably of Phoenician origin, Haggard contributed to a powerful part of the myth about Africa in the nineteenth century, as had [Thomas] Baines with his tantalising map inscription. This myth was linked to race theories of the nineteenth century, which held that African cultures were inevitably less sophisticated than European ones. The discovery of ancient stone-walled cities and gold mines in Africa posed a problem for these were unknown in comparable European Iron Age sites—hence the theory that other, European races must have built them in some far distant age" (127-128).

declares, “The mines of King Solomon, sung and told of in psalm and story, have been found at last … if the generally accredited reports of R. W. Hall, F.R.G.S, an English archaeologist, are to be taken as true” (G1). This article similarly tries to substantiate Haggard’s fictionalized events, as does “King Solomon’s Mines” published in the British newspaper *Review of Reviews* in 1914. The hunt for hidden treasure and strange peoples was a ubiquitous fantasy, and fictional novels and newspaper stories aided one another in perpetuating public fascination with stories of a deeper past.

A fascination with “strange” or “unevolved” peoples and how they might function as “missing links”—or might provide insight into how white people managed to “evolve” from a “savage” past—was not limited to the literary sphere. Black and other colored bodies were held up as “evidence” of a genetic and cultural prehistory from which the civilized white race purportedly evolved. For example, a slave named Joice Heth sold by R.W. Lindsay to P.T. Barnum in 1835 was exhibited “across the Northeast for a period of seven months, until her death,” and made a spectacle of after her death with a public autopsy (Reiss 78-80). While alive and touring, Heth was advertised as weighing a meager 46 pounds, was blind, toothless, and suffered paralysis in one arm and two legs; her nails were purportedly curled like talons, and her skin shriveled (80). These details were included on fliers and in newspapers and were imparted to audiences to make Heth seem like a decrepit zombie who had somehow lived an extended life, likely through means of African magic. But the real draw was the history Heth could apparently speak to: audiences were not just seeing a very old woman, but were also (supposedly) in the presence of George Washington’s 161-year-old nursemaid. What it was exactly about her that drew audiences in droves is a subject of debate. Benjamin Reiss writes,

> Throughout her travels with Barnum and Lyman, a curious multivalence marked the exhibit of Joice Heth. Did her decrepitude mark her as a human oddity, to be marketed like the Chinese woman with "disgustingly deformed" bound feet, the Virginia dwarves, and the Siamese twins whose paths she often crossed on the touring circuit? Was it her scientific value as an embodiment of the different aging processes of the different races that merited her display? Was she an attraction because of her patriotic value as a living repository of memories of a glorious past? Because she was a storehouse of ancient religious practices? Or simply because she was a good performer? (81)

Reiss offers several possible reasons for her short-lived fame, but most of these point to a common allure of a deeper past. Heth is decrepit; she embodies proof that Black and white people age differently, perhaps through means of a non-Christian religious practice; and she is a "living repository" of history. Each of these identity markers paint Heth as a fossil that has lived beyond the normal bounds of mortal existence and can speak stories that will, in this instance, uphold the image of the United States as a glorious country progressing ever forward toward liberty and justice for all. Therefore, the masses were displeased to learn after Heth's death that she was estimated to be 80-years-old, not 161-years-old. The myth that the body autopsied was not hers, and that she was instead alive and seemingly immortal, was perpetuated by various newspapers across the country.

America's fascination with and desire to create links to the past was not limited to adventure fiction and newspaper stories of excavation, but also made the Black body into a sort of living fossil, demarcating the races along temporal as well as biological lines. The public fascination with Joice Heth was part of a much broader and pervasive desire to genetically

differentiate Black and white people, an effort that we can also see in Dr. Louis Agassiz's attempt to identify the differences between the races. Agassiz's letter to Samuel G. Howe, who was tasked with determining whether and how African Americans could be assimilated into an emancipated America, reveals that African Americans were often treated as relics of the past:

> We know of the existence of the negro race, with all its physical peculiarities, from the Egyptian monuments, several thousand years before the Christian era. Upon these monuments the negroes are so represented as to show that in natural propensities and mental abilities they were pretty much what we find them at the present day (Agassiz qtd. in Wilson 95-96).

Agassiz equates what he sees as biological stagnation with cultural stagnation and asserts that Black people have only managed to assimilate by imitating white practices.[58] According to Agassiz, imitation is not a sign of progress or assimilation, only of a childlike, limited intellect. As Kirt H. Wilson writes, "The nineteenth century's white majority chose to interpret black imitation as a sign of difference rather than similarity. William H. Holcombe represented this consensus when he said, 'The Negro is not a white man with a black skin, but, if not a distinct species, at least a permanent variety of the human race'" (Wilson 99). Primitivism in the United States was (is) alive and well.

[58] For more on racialized spectacles in America, particularly regarding minstrelsy, see Eric Lott's "Love and Theft: The Racial Unconscious of Blackface Minstrelsy" and Robert Nowatzki's "Paddy Jumps Jim Crow: Irish-Americans and Blackface Minstrelsy." These articles help scratch the surface of the plethora of material on minstrelsy and the spectacle of the black body in nineteenth-century America.

Genre Bending: Rewriting the Colonial Script

"Who would believe … that at this stage of the world's progress one's identity could be so easily lost and one still be living. It is like a page from an exciting novel."

- Pauline Hopkins, *Of One Blood*, 54

Haggard capitalized on the public's craze for archeology, desire for spectacle, and belief in a world-order that remained in line with existing notions of white human superiority and civilizational progress. Rebecca Stott writes of Haggard's most popular adventure novels *She*, *King Solomon's Mines*, and *Allan Quatermain* that by "setting his major 'romances' in Africa, Haggard was able to tap into a growing market: the genre of colonial and imperialist fiction" (69). Hopkins also tapped into the market for colonial and imperialist fiction, but she inverted the narrative.[59] Sarah Ficke writes,

> Pauline Hopkins's novel *Of One Blood* was clearly meant as a rebuttal of Haggard's imperialist lost-race African fictions … Hopkins uses two complexly interwoven plots in her novel, an adventure plot and a domestic plot, to simultaneously construct an affirmative Pan-African adventure while deconstructing some of the foundational and problematic elements of the adventure genre (235).

Whereas typically a white hero sallies forth to Africa or a similarly distant continent with Indigenous people (supposedly) in need of civilizing, in Hopkins's novel a Black hero goes to Africa under financial duress with no colonizing intent, and, once there, finds his origins and is

[59] Dana Luciano most explicitly ties Hopkins's use of the adventure novel to archeological language: "Representing the cultural labor of African Americans as buried alive … the editors [of *Colored American Magazine*] saw their readers as participants in the task of helping to unearth it … This rendition of African American community as an exploration narrative parallels Hopkins's attraction to the adventure plot and her preference for stories devoted to uncovering 'hidden' pasts, histories, and civilizations" ("Passing Shadows" 150-151).

able to resolve his double consciousness.[60] Hopkins's overarching project across her novels and in her capacity as editor of *Colored American Magazine* was, as Deborah McDowell puts it, "namely to resurrect an obscured African past the supposed glory of which would restore a damaged collective African-American consciousness" (xv).[61] In *Of One Blood*, Hopkins molds the adventure novel into a psychological exploration of "passing" and the split self.

Both Haggard's and Hopkins's novels have three primary character archetypes: a queen housing an immortal consciousness; an official male record keeper; and a reincarnated king. In *She*, Ayesha long ago declared herself queen of the African Amahagger people (a fictional tribe); she squats in Kôr, practices sorcery, and watches over the mummified body of her love, the Priest Kallikrates whom she murdered, as well as the mummified remains of people from an ancient, white population that predated the Amahagger tribe and is extinct. Horace Holly, the protagonist's surrogate father and the novel's primary narrator,[62] fashions himself the record keeper. Leo Vincey, the apparent protagonist, is the reincarnated king; when he arrives in Kôr,

---

[60] In "Strivings of the Negro people," Du Bois writes of double consciousness, "It is a peculiar sensation, this double-consciousness, this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity. One feels his two-ness, — an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder" (Du Bois). Hopkins does not specifically reference W.E.B. Du Bois's term "double consciousness," but in Hopkins's novel the hidden self that lives in every soul is a shared history of slavery and, before that, of African histories and origin stories. Hopkins implies that if a person can only tap into this shared consciousness, s/he will be healed of the double bind of existing as Black in a whitewashed world, in this case in Jim Crow America.

[61] Alisha R. Knight in *Pauline Hopkins and the American Dream* similarly writes, "For Hopkins, true American democracy and the civility of its entire citizenry could be achieved only when people of color were no longer prevented from contributing to, and fully benefiting from, the nation's prosperity. Indeed, Hopkins's concern for the progress and success of the American people, especially of African Americans, was not isolated to the subject of this single article; rather, it occupied her literary imagination throughout her career" (ix).

[62] The novel has two narrators. The first is a friend who receives Holly's letters of his adventures and promises to publish the story as he has received it. Holly, however, is the novel's primary narrator, and it is his voice, communicated through his letters, that the novel ends with. Anti-realist narratives often use a frame that sets up the story as a true accounting of events communicated by letter, an ancient scroll passed down through generations, or similar narrative devices.

he is reborn as the slain Kallikrates, his ancestor who "broke his vows of celibacy and fled from Egypt with a princess of the royal blood" (13). Leo is the lone "representative of one of the most ancient families in the world" (12). Though Leo is the reincarnated king and ostensible protagonist, he has very little character development or agency in the novel—he decides the party will follow in the footsteps of every male Vincey ancestor and try to find Ayesha, but thereafter his actions are limited. He first suffers from debilitating motion sickness during the journey; then he almost drowns, is injured, and can only be healed in a comatose state; when he finally recovers, his love interest, Ustane of the Amahagger tribe, is killed by Ayesha, whereby history comes full circle.[63] Even faced with this tragedy, Leo cannot maintain any anger or act on his revenge task because he is enchanted—"I am in thy power, and a very slave to thee" (251). After Ayesha's seeming demise, Holly and Leo take a harrowing journey into the African wild and arrive back in London "exactly two years from the date of our departure upon our wild and seemingly ridiculous quest" (312). Throughout, Holly, who desires to linearize history, narrates their journey.

Hopkins uses Haggard's archetypes, but begins her exploration and inversion of the colonial narrative in how she frames each of the archetypes. In *Of One Blood,* Candace is the reincarnated queen. She is described as "grave, tranquil, and majestic … Her loveliness was

[63] Ustane's speech to Ayesha before she is murdered indicates that the Amahagger believe in an afterlife that prolongs time and allows a spirit to live outside the body until it can return. Ustane is positioned as the reincarnated Amenartas, Leo's ancestress and Kallikrates's wife who escaped Ayesha and passed down the family's history and revenge task. Ustane is possessed of foresight, and can see into the future: "'There is a light shining in my breast, and by that light, as by a lamp, I see the truth, and the future that I shall not share, unroll itself before me like a scroll … Never here in this life shall [Leo] look thee in the eyes and call thee spouse. Thou too art doomed, I see'—and her voice rose like the cry of an inspired prophetess, 'ah, I see—'" (225). Before she can finish her prophecy, Ayesha strikes her dead. Leo is furious and flies at her, but she flings him back and he feels "utterly cowed" (225). She unveils, and "her eyes drew him more strongly than iron bonds, and the magic of her beauty and concentrated will and passion entered into him and overpowered him" (227).

absolutely and ideally perfect" (Hopkins 137). Whereas Ayesha is always cast as threatening, Candace is the epitome of grace, charm, and deference (or so she would have us believe; as we shall see, her power is even greater than Ayesha's). Ai is the record keeper of the Telassarian people. The Telassarian people are an original Ethiopian people who have hidden their stunning city, a place filled with advanced technology and ancient knowledge, underground. Ai speaks "in a rich voice, commanding, but with all the benevolence of a father" (113), has a "kingly countenance, combining force, sweetness, and dignity in every feature" (114), and is depicted as an example of the consummate educated gentleman and wisdom-keeper. Ai is also a spy; he acts the part of local guide for the excavation expedition that brings Reuel to Africa so that he can keep an eye on Reuel and help him find his way home to Telassar. Reuel Briggs, whose name phonetically sounds like "rule," is the reincarnated king. In America, he has passed as white and obtained his MD. In contrast to Leo who is comatose for much of *She*, Reuel specializes in psychological experiments that deal with mesmerism and comatose revival. Just as Leo is the last of his line in *She*, Reuel is among the few remaining "direct descendants of the inhabitants of Meroe" (114). When Reuel discovers and embraces Telassar and his predestined role as king, he is reborn as King Ergamenes.[64]

---

[64] Hopkins writes a story of an internalized otherness and an awareness of difference, of double consciousness; Hopkins's characters work through what Anne Anlin Cheng calls racial melancholia. Racial melancholia is defined as the "return of the object demanding to be a person of its own" (Cheng, *The Melancholy of Race* 200), or a "way to think about haunting ... [because] for that object to demand, to become (a ghost), somehow to materialize, it must have a subjectivity of its own" (Freccero 348). Hopkins's characters are doggedly followed by their deep pasts and racial origins, as well as by actual specters. Thomas J. Otten writes, "Hopkins's use of this protoanalytic structure is important, for if race can be seen as a pathologically hidden side of the self, then it can also be therapeutically brought to the surface and refigured; through the sort of analytical plot that we now think of as Freudian (but that is also present in the works of James and others at the century's end), racial difference can be acknowledged" (Otten 229). Hopkins self-consciously explores not just the adventure novel, but also contemporary psychological theories and studies of mesmerism.

Hopkins's adaptation of Haggard's novel and inversion of his archetypes registers an awareness of literature's ability to instruct our everyday encounters with race. Mark Jerng's *Racial Worldmaking* argues that we do not automatically see race and intuitively understand or automatically construct difference/otherness; rather, narrative and interpretive strategies that we are taught show us how to notice race. Jerng writes that these interpretive strategies are most visible in science fiction, romance, and fantasy because these genres write other worlds into being, worlds that must be adjacent to our modes of understanding so that we can interact with them even as these worlds self-consciously diverge from our reality. These genres make visible the histories and narratives that inform our own present:

> Genres activate certain ways in which racial meaning will be used in the composition of a world—establishing situations and justifying actions while making others seem less possible or realizable. At the same time, race shapes genre. As a possible set of referents, as narrative anticipations, and as the social structuring of meanings, race composes expectations for what the world might look like and activates rules for knowing the world … both [genre and race] have the capacity to frame situations and channel responses (Jerng 48-49).

Hopkins writes race into being in ways that push against the generic conventions of the adventure novel. In doing so, she asks readers to reconsider not only the inherent racism of the adventure novel, but also to question how we interact with Blackness in our everyday present. Unlike Haggard's novel in which Black characters are killed, buried, and rhetorically subsumed, Hopkins's excavates Blackness.

Hopkins teases her white character, Molly Vance, by having her voice this section's epigraph: "Who would believe … that at this stage of the world's progress one's identity could

be so easily lost and one still be living. It is like a page from an exciting novel" (54). Molly here is discussing the character Dianthe Lusk's amnesia after her accident and revival through mesmerism effected by Reuel. But what Molly does not know is that Dianthe's identity is doubly lost. When she awakens from her near-death experience without memories or self-knowledge—"Look, gentleman, she breathes! *She is alive*!" (34)—Reuel, aided by his friend, Aubrey Livingston, makes the decision to recast her as white and help her pass: "'I would preserve her incognito indefinitely.'… [W]earing the name of Felice Adams, Dianthe was domiciled under the roof of the palatial Vance hall" (36, 53). Molly's single, naive statement is about so much more than Dianthe's amnesia. Molly speaks the theme of Hopkins's novel and voices the double bind of navigating an identity in Jim Crow America—how could one's identity, one's origins, one's family history be "so easily lost" and "one still be living?" Indeed, African origins were not "easily lost," but forcibly erased, and this novel explores the violence done to Black families in America.

In this version of what has been called a back-to-Africa novel, Hopkins demonstrates that there is no such thing as going "back"; rather, as her characters rediscover their origins and merge their split selves, the past and present become coterminous. Eric J. Sundquist speaks to the parallel timelines that Hopkins crafts:

> What her protagonist, Reuel Briggs, finds in his journey back to Africa is not so much a geographic locale and a material history as a spiritual dimension of contemporary life, an African temporal frame that, like the glorious Ethiopian city of Meroe he rediscovers, is at once buried deep in history and at the same time coexistent with the melodrama of his current life in Jim Crow America (570).

Sundquist hits upon a central premise of *Of One Blood*: that time is not linear, and Blackness cannot be written out of or subsumed by a model of progressive teleology. Whereas Sundquist center's Reuel's experience, in what follows, I turn to the Queens Ayesha and Candace whose abilities to live beyond time and travel outside the bounds of the human body demonstrate that the specters of other pasts and presents are always lingering on the edges of any given timeline.

Chronomorphous Queens (or, Oh, the Abhumanity!)

Sedimentation is a queer theoretical term that overlaps with geological terminology. In geology, sedimentation simply means, "Earthly or detrital matter deposited by aqueous agency" ("sediment," *OED*). In queer theory, "sedimentation" means, for both Sara Ahmed and Judith Butler, that particular patterns that come to be considered "normal" and behaviors associated with different groups usually based on gender and race are actually effected by repeated actions. Considering how behavior becomes sedimented is one way we can peel back layers of action and consider how bodies—individuals or groups—can move differently or interpret themselves rather than succumb to preconceived notions of what they should be or do. More specifically, "What bodies 'tend to do' are effects of histories rather than being originary" (Ahmed 56). These theoretical constructs of sedimentation help us see how the queens in these novels become unbound from existing societal structures of gender and power, structures that are linked to progressive time, and why they are therefore threatening to their discoverers: they are not readable in the record[65]—their bodies, their civilizations, and their histories exist in the absence

[65] Having a history that is not readable in the primary record is different from not having a documented history that is discoverable. I am not arguing that these stories exist in the absence of any written record. In *She*, there is an historical record that extends over two thousand years, written in multiple languages (Egyptian hieroglyphs, Greek, Latin, and English) and encompassing the history of western civilization itself, with Ayesha at its unacknowledged center. Ayesha and the stories of her power frame *She*; Ayesha first lives beyond her physical body in the written records passed down through generations of the Vincey family. She is described in the potsherd as "having a knowledge of all things, and life and loveliness that does not die" (34). Her reputation precedes her. *Of One Blood* similarly explores written records and the

of stratigraphical data—and they are not subject to the effects of an established history. They are representatives of encrypted histories. Focusing on these characters helps accomplish what Ahmed suggests we do—challenge habituation and see what occurs in the fissures.

Sedimentation not only elucidates how repeated bodily and societal actions come to be viewed as "proper" or "normal"; it is also inherently tied up with questions of cyclical temporality precisely because cultural sedimentation occurs through repetition. Julia Kristeva's seminal work "Women's Time" engages the metaphor of sedimentation and connects the idea of sedimented identities to the ways in which non-normative forms of time disrupt those identities. Kristeva writes that "with sociocultural ensembles … we are constantly faced with a double problematic: that of their *identity* constituted by historical sedimentation, and that of their *loss of identity* which is produced by this connection of memories which escape from history only to encounter anthropology" ("Women's Time" 14). Here, she uses "sedimentation" in the same way that Ahmed and Butler do—to theorize how identity is a construct. These "memories" that Kristeva references are more often than not from a female history that has been excluded from or at least made less legible by the (male) symbolic order (i.e. language and its phallocentric nature). Kristeva writes that women's time exists adjacent to, but works in tandem with, linear time, which is coded as male: "These two types of temporality (cyclical and monumental) are traditionally linked to female subjectivity … [and] female subjectivity as it gives itself up to intuition becomes a problem with respect to a certain conception of time: time as project, teleology, linear and prospective unfolding; time as departure, progression, and arrival—in other

---

ways in which they write particular histories into being. Candace, the Black Telassarian queen, is herself an historical archive—she lives beyond any individual body so she can relay Telassarian history to whomever needs to hear it. However, these histories are entombed at the outset. Leo inherits his family history that tasks him with revenge only when he comes of age. Ayesha's is not a story available for general consumption. Nor is Reuel's story readily available; it is essential that Reuel write his own story as he pieces together his family's history.

words, the time of history" ("Women's Time" 17). In other words, monumental time emerges to threaten the sedimentation of history—literally and figuratively—that has produced society's dependence on a narrative of ever-progressing linear time. In refusing to fit within linear narratives, these stories almost demand that their female characters be read as emerging from a queer time existing somehow outside of a progressive human history.

Therefore, in Haggard's and Hopkins's novels what is discovered in the heart of Africa is women who embody monumental time. These women house civilization's secrets in their bodies: they are the lost deposits; they are the specters of deep time who haunt the other characters and unravel the idea of a stable present. They are *chronomorphous.* The idea of the morphing Victorian body is derived from Kelly Hurley's formulation of the abhuman, "a not-quite human subject characterized by its morphic variability" (Hurley 3). I propose *chronomorphous* rather than amorphous as a primary descriptor because these characters do not lack shape, but they do shift forms. *Chrono-* comes from the Greek *chrónos*, which means "time." The adjective *chronic* is derived from *chrónos* and means "constant" or "habitual." Hurley writes that the fin-de-siècle Gothic novel is "convulsed by nostalgia for the 'fully' human subject whose undoing it accomplishes so resolutely … [T]he human body collapses and is reshapen across an astonishing range of morphic possibilities: into slug-men, snake-women, ape-men, beast-people, octopus-seal-men, beetle-women, dog-men, fungus-people" (4). I have similarly argued in this project that fin-de-siècle speculative adventure fiction in conjunction with the codification of geology and its elongation of the earth's timeline threw humanness into relief, particularly the ephemerality and permeability of the human form. I move beyond Hurley's formulation of the abhuman[66] because the queens in these adventure novels are not

[66] I also move away from the prefix "ab" because "ab" recalls Kristeva's formulation of "abjection," which is a psychoanalytic concept that describes a fundamental fracture within the self. Kristeva writes,

outwardly monstrous. They are not secretly snakes or beetles. These queens live chronically; they embody cyclical time, and their shapes shift as needed to accommodate an enduring consciousness that lives even beyond their bodies.

Not only are these women *chronomorphous* in their capacity to evade teleology, but also "abnatural" in their ability to circumvent nature by operating outside of normal biological imperatives. Jesse Oak Taylor writes, "While dubbing something 'unnatural' solidifies the idea of nature as a stable entity, abnatural reminds us that what we call nature is replete with exceptions, always eluding definition. Abnatural characterizes those moments in which nature appears other to itself, beside or outside itself" (5). These queens are examples of one of Taylor's "exceptions" that are "always eluding definition" because they harbor and speak secrets of nature that upend their discoverers' conceptions of some kind of stable nature that can be controlled or at least interpreted and made to fit particular scientific accounts. Together, *chronomorphous* and abnatural point to what is frightening about Ayesha and Candace: as living fossils, these queens and their origin stories endure to the present and, in speaking their stories, they disrupt models of developmental time. But they pose a double threat: their historical knowledge cannot be excised or reburied even if their corporeal forms are killed. They are reincarnated and their new bodies resemble those they relinquish—even in a new body, they are recognizable and their stories

---

"The abject is not an ob-ject facing me, which I name or imagine. Nor is it an ob-jest, an otherness ceaselessly fleeing in a systematic quest of desire … The abject has only one quality of the object—that of being opposed to I" (Kristeva, "Approaching Abjection" 1). Hurley glosses Kristevan abjection as "the ambivalent status of a human subject who, on the one hand, labors to maintain (the illusion of) an autonomous and discrete self-identity … and who on the other hand welcomes the event or confrontation that breaches the boundaries of the ego" (4). The queens in these novels are neither fractured and turning inward, nor chasing desire. They do not experience a vertiginous drop into jouissance when the ego and superego realign. Rather, the opposition the queens experience is from the outside world, from the characters like Horace Holly and Aubrey Livingston unable to reconcile nonlinear histories with chrononormativity. While many of Hopkins's characters have to reconcile their split-selves, Candace does not; it is her role to help knit the others' stories back together.

remain constant. These characters become threatening because they are living, breathing, walking proof of a potentially monstrous prehistory.

Haggard's Queen Ayesha is not allowed her chronomorphous life, as the hegemonic pressures of historical time are great. In *She*, Holly, as record-keeper, tasks himself with reimposing order. Holly retroactively describes Ayesha as passive and stagnant; in the sequel, *Ayesha, The Return of She* (1905), he describes her as a woman "who from century to century sat alone, clothed with unchanging loveliness in the sepulchres of Kôr, waiting till her lost love was born again" (Haggard, *Ayesha*). This accounting of Ayesha's history attempts to recast her story in a linear historical narrative. While Ayesha does live in the sepulchres of Kôr, awaits her lover, and maintains her youth through sorcery, she does not passively wait. She practices chemistry—"chemistry appears to have been her only amusement and occupation" (Haggard, *She* 194)—and eugenics; keeps the native Amahagger people subdued with occasional violence when her wrath erupts—"How thinkest thou that I rule this people? … It is by terror" (177); and considers moving from the sidelines of history to its center by supplanting Queen Victoria—"'For thou [Kallikrates] shalt rule this England—' 'But we have a queen already,' interrupted Leo hastily" (251). While her story is limited to her mind and the few written accounts of her mythic appearances, Ayesha is nonetheless *chronomorphous.*

The language with which Holly recounts the novel's events conjures death, excavation, and a fear of discovery. Holly's descriptions evoke Darwin's living fossils and reify the collapse of past and present as monstrous. When we first meet Ayesha, she is entombed in a series of caves described as "a land of swamps and evil things and dead old shadows of the dead" (143). In the innermost cave, Holly encounters Ayesha: "The place was a strange one, it is true, and looked lonely, notwithstanding its rich hanging and the soft glow of the lamps … At length the

curtain began to stir. Who could be behind it?—some naked savage queen, a languishing Oriental beauty, or a nineteenth-century young lady, drinking afternoon tea?" (142). Holly reports that Ayesha, whose hand is "white as snow" is "wrapped in gauzy material in such a way as at first sight to remind me most forcibly of a corpse in its grave-clothes … and the hair began to rise upon my head as a certainty crept over me that I was in the presence of something that was not canny" (142-143). She is clothed as a mummy and surrounded by people who cannot hear or speak her secrets, people she has bred to be mute and deaf. Even the name of the tribe Ayesha despises but nonetheless rules over, "Amahagger," evokes an emergent geological history: in the fictional African language spoken by the Amahagger, it means "People of the Rocks," (80) and we are informed that "as to the origin, they had none" (90)—they are a people lost to the unconformity.

Ayesha is the living embodiment, the specter, of a longue durée that Holly cannot turn away from or reject, though he is at first terrified that She has lived so long. During their first meeting, Ayesha is delighted to discover that Holly "growest the fruits of wisdom" (148) and is able to speak several languages and answer her questions about historical happenings that have occurred since she has entombed herself. Holly is frightened by her deep knowledge and her questions about history that date her birth to a time before Christ's arrival: "'Pardon me, O Queen,' I said, 'but I am bewildered ... How, then, canst thou have taught thy philosophy to the Jews before He was? .. How can a woman live two thousand years? Why dost thou befool me, O Queen?'" (149). She responds, "Dost thou still believe that all creations die … ? I tell thee that naught dies. There is no such thing as Death, although there be a thing called Change" (150). Here and in her ensuing explanation, Ayesha speaks to geological time and its forces that shape

and change the earth, and reinforces the idea that nature is defined not by linearity but by cyclical time:

> "Three times two thousand years have passed since the last of the great race that hewed those pictures [on the rock wall] fell before the breath of the pestilence which destroyed them, yet they are not dead. Even now they live; perchance their spirits are drawn toward us at this very hour," and she glanced round. "Of a surety it sometimes seems to me that my eyes can see them."
>
> "Yes, but to this world they are dead."
>
> "Ay, for a time; but even to the world they are born again and yet again" (150).

In the form of cyclical, monumental time in which Ayesha lives, reincarnation is expected; Ayesha does not believe that any entity is permanently gone, even when its body perishes. She speaks here to the baseline of *chronomorphousness*: that an enduring spirit, even an enduring consciousness, lives beyond the constraints of any one human body. Geological time and a spirituality that centers reincarnation are intimately entwined in this formulation of death, or as Ayesha calls it, change.

In her unchanging youth and beauty, as well as her lack of access to historical knowledge, Ayesha resembles a living fossil—she is barely physically changed from the original version of herself even after two thousand years. Unlike a true fossil, though, Ayesha is reinvigorated once (re)discovered. She had been wrapped like a mummy and living among the dead and their lingering spirits. But when Holly arrives,[67] Ayesha relinquishes her burial shroud:

---

[67] Holly is allowed to look upon and love Ayesha—a boon not granted to any of the Amahagger—because he is cast as a phylogenetically prior entity. Holly is figured as a genetic steppingstone between apes and humans. He is described as a gorilla with a face covered in hair: Holly "was short, rather bow-legged, very deep chested, with unusually long arms … Altogether he reminded me forcibly of a gorilla" (4). When Holly arrives in Kôr, the elder of the Amahagger tribe, Billali, names him "Baboon." In his whiteness, however, he is still characterized as superior to the Amahagger people—"I am an Englishman,

"of a sudden the long, corpse-like wrappings fell from her to the ground, and my eyes travelled up her form … instinct with a life that was more than life, and with a certain serpent-like grace which was *more than human*" (156, my emphasis). Haggard here evokes not just geological time, but also the time of Christian creation. Ayesha is "serpent-like"—her ethereal beauty and deep knowledge render her akin to Eve, the first human woman created by God, and one who was tempted by a serpent to lure Adam out of innocence. This description is reinforced when Ayesha shows herself to Leo; Holly writes that "with a sudden motion she shook her gauzy covering from her and, … rising from her wrappings, as it were, like Venus from the wave, or Galatea from her marble, or a beatified spirit from the tomb[, s]he stood forth" (226); like a snake, she sheds her skin. Ayesha is threatening because she is not only from a deep past that she can voice, she also exceeds the normal bounds of humanness and her stunning beauty lures men to her. Unlike the supposedly regretful Eve, Ayesha refuses to let herself be interpreted or defined by history. Holly, troped as a geologist by his use of analytical language and desire to explicate his surroundings, cannot impose on Ayesha an interpretation of her knowledge that would uphold his social order. Ayesha has no interest in falling in line with the present or letting herself be classified stratigraphically—"In the end, I had little doubt, she would assume absolute rule over the British dominions, and probably over the whole earth" (254). She is present to tell her own story.

Ayesha is revealed to be *chronomorphous* and abnatural—not in danger of becoming, but already, "other" (Hurley 3)—because she taps into and mutates the laws of nature and uses them to prolong her life. Terrifying for Holly, Ayesha knows and articulates "the secrets of the earth

---

and why, I asked myself, should I creep into the presence of some savage woman as though I were a monkey in fact as well as in name?" (140). Ayesha appreciates his boldness, and because his in-between evolutionary status marks him as non-threatening, she allows him privileges she intended only for Leo reborn as Kallikrates.

and its riches" and claims she can "turn all things to [her] uses" (150). Ayesha tantalizes Holly with just a few details of how she has tapped into nature's secrets to become immortal (or, as she says, "not immortal … but so cased and hardened against the attacks of Time" (247)): "Life is wonderful, ay, but that it should be a little lengthened is not wonderful. Nature hath her animating spirit as well as man, who is Nature's child, and he who can find that spirit, and let it breathe upon him, shall live with her life" (151). Here Ayesha leans away from Christianity and into evolutionary time and natural sciences. Man (which is a stand-in for "human"), she says, is Nature's child if only s/he can recognize that "what we call nature is replete with exceptions" (Taylor 5). In divulging that she has studied and tapped into nature's exceptions, Ayesha confirms the report at the novel's beginning that describes her as "a mortal who yet drew her strength from Earth, and in whose human bosom passions yet rose and fell and beat as in the undying world around her as the winds and the tides rise and fall and beat unceasingly" (Haggard 7). Ayesha is conflated with nature and its unending, cyclical seasons, and is simultaneously differentiated as one of nature's exceptions; as long as she can access the immortal fire that acts as a fountain of youth—"an awful cloud or pillar of fire, like a rainbow many-coloured, and like the lightning bright" (284)—she remains physically unchanged.

Ayesha's *chronomorphous* nature is confirmed by her "death." She and her desire to rule the world with Kallikrates at her side is supposedly "conquered" by the novel's end, and it seems Haggard's novel reifies linear time by removing the threat of a long-lived sorceress from the earth. Holly reasons with himself, "Ayesha locked up in her living tomb … worked a small change in the order of the World. But Ayesha … would have revolutionized society … Thus she opposed herself to eternal law, and … was swept by it back into nothingness" (293). Holly believes that nature or "eternal law," which is here analogous with society and civilizational

progress, righted itself by expunging the exception. Ayesha is "killed" by the very secrets of nature that she uses to give herself eternal life. She desires to show Holly and Leo how she maintains her youth and immortality and wishes for them to also become immortal, but this time when she enters the fire tornado that bestows youth, she is betrayed by that same fire that had previously granted her immunity from corporeal death: "Smaller she grew, and smaller yet, till she was no larger than a monkey. Now the skin had puckered into a million wrinkles, and on her shapeless face was the stamp of unutterable age … thus, on the very spot where more than twenty centuries before she had slain Kaillkrates the priest, Ayesha herself fell down and died" (292). Because she brought the reincarnated form of the man she had murdered with her to the flames, the story comes full circle and Ayesha pays for that original murder. She promises, however, "I die not. I shall come again" (292). Though her human body is reduced first to a monkey's in an evolutionarily degenerative transformation, and then to dust, the inimitable Ayesha cannot be killed.

The novel of imperialism typically plays out according to an inexorable script, for "the colonial journey 'cannot be an exploration in the strict sense of the word but only discovery, retrieval of a knowledge already complete'" (McClintock, *Imperial Leather* 243). But what makes Haggard's version of this script so exciting for readers, then and now, is that the story and knowledge are not complete. Ayesha's demise is temporary; she promises she will return, and she does in the aptly named sequel. *She* foreshadows that her knowledge of the cyclical nature of time and her belief in reincarnation will endow her spirit with another body. Even Holly, who throughout the adventure tries to reconcile Ayesha and her long-lived life with both science and the time of Christian redemption, comes to doubt the history he supposedly knows and the present in which he currently lives: "Often I sit alone at night, staring with the eyes of my mind

into the blackness of unborn time, and wondering in what shape and form the great drama will finally be developed … I have no doubt it must and will occur" (Haggard 313). Ayesha is more than a singular spirit beholden to one body; she is an ideal, a lost and found love, a terrifying fount of history and harbinger of a changed world order. And she is unconquerable. Her form changes, but her essence remains.

Hopkins uses parts of Ayesha to craft Candace, her version of the *chronomorphous* queen. Whereas Ayesha seems to emerge as if from legend and her story and soul live beyond her physical form, Candace lives simultaneously in many bodies. When Reuel discovers Telassar and Ai is acclimating him to its history and traditions, Ai tells Reuel, "We are a singular people, governed by a female monarch, all having the same name, Candace … Queen Candace is a virgin queen who waits the coming of Ergamenes to inaugurate a dynasty of kings. Our virgins live within the inner city, and from among them Candace chooses her successor at intervals of fifteen years" (Hopkins 130). Though not immortal, or unchanged, in the same way that Ayesha is immortal—Candace has not unlocked and internalized the secrets of nature and she does not live in one primary body—she is a transferable spirit. This notion of a soul's transferability is a spiritual reality created and accepted by the (fictional) Telassarian religion. Ai explains, "The Ego" (read: soul) "preserves its individuality after the dissolution of the body" and sometimes "is re-associated with another body" (131). This re-association typically happens when "a good man or woman dies, and the Ego is not sufficiently fitted for the higher condition of another world" (131). While anyone in Telassar might linger as a ghost or be reincarnated in a body, in Candace's case her spirit is transferred while the previous "Candace" still lives. Candace is not a particular person, but an ongoing ideal embodied by successive virgins until Ergamenes finally returns. Candace, like Ayesha, evades time and death—but unlike the white queen, she

epitomizes morphic variability, a soul/ego not even beholden to a particular body. Each new body carries the secrets of Telassar's history, a history that places Ethiopia and its Black inhabitants at the top of the world's social order. An ever-present voice that is transferable between bodies, Candace would fly to a new body even if she were to be killed before the next Candace was chosen from among the virgins. As a vessel of a transportable deep history, Candace is a living threat to the narrative of forward-marching progress and white superiority.

Whereas Ayesha is a living mummy, Hopkins's Candace is an enlivened statue, a different kind of speaking fossil. When Reuel first meets Candace in person, he describes her to the reader as "a Venus, a superb status of bronze, moulded by a great sculptor; but an animated statue, in which one saw the blood circulate, and from which life flowed" (Hopkins 137). This description of her beauty in itself evokes a deeper time. Like Ayesha whose face, though young, bears "the stamp of unutterable age" (Haggard 292), Candace's perfect body, described as the beautiful statue Venus crafted by the Greeks, indicates that her youth is but an appearance. While her body is likely young in actuality since Candace transfers her spirit "at intervals of fifteen years," her consciousness bears the stamp of a long durée (130). She carries within her an entire history. She is a much more threatening living fossil than Ayesha because she is a speaking "track"—her exact history and therefore Telassar's history can be traced through her successive bodies—that unsettles time "through its intrusion into our own" (Luciano "Tracking Prehistory" 173).

Like Ayesha, Candace is also first described as passive: Reuel "would have placed her beside him, but she, with a gesture of dissent, sank upon the cushions at his feet that had served her for footstools" (Hopkins 137). This, too, is misleading. Candace sinks into the cushions in relief rather than deference, having accomplished her mission of bringing the king home. For not

only can Candace move her consciousness between bodies, she can also travel outside her body and appear in a ghostly form. At the novel's outset, Candace visits Reuel. As Reuel stares contemplatively into the rain, he suddenly sees a vision through its veil: "Silhouetted against the background of lowering sky and waving branches, he saw distinctly outlined a fair face framed in golden hair, soft brown eyes, deep and earnest … rose-tinged baby lips, and an expression of wistful entreaty. Oh how real, how very real did the passing shadow appear to the gazer!" (5). A believer in mysticism and mesmerism who seeks to incorporate "what might be termed 'absurdities' of supernatural phenomena" (2), Reuel is not frightened or confused by his vision. This is the first glance Reuel has of Candace, and he is spellbound: "He tried to move … but he was powerless" (5). The tables are turned on Reuel and he is mesmerised by Candace's apparition. Candace may appear passive when she finally accomplishes her work of bringing Reuel home, yet she is anything but.

Candace can install her spirit in another body, appear as a specter, and speak through her doppelgänger and descendent, Dianthe. When Reuel first lays eyes upon Dianthe, he thinks it is she that he saw in his vision in the rain. Though similar, Hopkins does not describe Candace and Dianthe in exactly the same terms: "She was not in any way the preconceived idea of a Negro. Fair as the fairest woman in the hall, with wavy bands of chestnut hair, and great, melting eyes of brown" (14). The differences are miniscule, but Dianthe has chestnut rather than golden hair, and her eyes are "melting" rather than already "soft." This time, Reuel does "grow cold with terror and fear," for it is one thing to see an apparition and another to see that apparition embodied before him: "Surely it could not be—he must be dreaming! … [T]here before him in the blaze of light—like a lovely phantom—stood a woman wearing the face of his vision" (15). This singer is the real Dianthe, but it is as if Candace's voice "in celestial showers of silver" sings through her

to enthrall Reuel, who is "dazed, thrilled" (14). Hopkins ends the scene with Reuel's realization that his previous vision is a real woman (indeed, though he does not yet know it, his vision is two flesh-and-blood women), and cuts to his next encounter with the ghost version of Dianthe/Candace.

Not long after the concert during which he spots Dianthe, Reuel is dared by Molly Vance to visit the haunted neighboring property during the witching hour. He does so, and there again encounters Candace's/Dianthe's specter: "He turned his head and saw a female figure just ahead of him in the path, coming toward him. He could not see her features distinctly, only the eyes … gazing straightforward, as if they saw nothing … Slowly the hands were removed from the face and the moon gave a distinct view of the lovely features of the jubilee singer—Dianthe Lusk" (24). She asks him for help, and the next day the corporeal Dianthe is wheeled into Reuel's hospital and pronounced dead. Only Reuel's mysticism can revive her body, but her mind remains blank. Candace needs Dianthe's mind to remain moldable so that she can parlay her messages of homecoming. Indeed, when Candace appears a third time, Reuel assumes it is Dianthe speaking from a trance about her own brush with death, but it is Candace's voice luring Reuel home to Ethiopia:

> I know much but as yet have not the power to express it: I see much clearly, much dimly, of the powers and influences behind the Veil, and yet I cannot name them. Some time the full power will be mine; and mine shall be thine. In seven months the sick will be restored—she will awake to worldly cares once more (40).

Only when Reuel accepts his destiny—"It was a tradition among those who had known him in childhood that he was descended from a race of African kings" (125)—can Candace and Reuel be reunited, the monarchy restored, and the king and queen vested with their full power. Even so,

the power that Candace exercises on her own is formidable; it travels beyond her physical form. Unlike Ayesha's story that will continue to play out in "unborn time" (Haggard 313), Candace restores order to her Kingdom and retreats back into her own body to help shape her people's present and future.

While Candance is the embodiment of Telassarian history, Dianthe's death illustrates that Candace is only one player in a series of ancestors able to rend the veil and speak through time. When Dianthe dies an early death, her ancestors bring her home: "Welcome great masters of the world's first birth! All hail, my royal ancestors—Candace, Semiramis, Dido, Solomon, David and the great kings of early days" (Hopkins 187); she receives "the welcome of ancient Ethiopia to her dying daughter of the royal line" (186). Candace is the vessel of past, present, and future and Dianthe her mouthpiece, and both are players in a larger tableau that dates back to biblical time and will continue into time immemorial. By capitalizing on the fear of social disruption that accompanied geology and archeology and rewriting the adventure novel to center a Black origin story, Hopkins creates the biggest threat of all: an enduring, shared Black consciousness that emerges from an alternate history and is transferable between Black bodies.

Therefore, if the "nonrational form[s]" of these immortal queen goddesses are threatening (Freeman, "Introduction" 161), it is because they have escaped historical sedimentation. These queens from a before-time manage to embody a deep, monumental, geological time even as they inhabit their supposedly ephemeral forms: their bodies register as human but refuse the effects and pressures of time like age and death.[68] Both Haggard's and Hopkins's novels center

[68] In this way, they threaten not only the concept of what it means to be human, but also the notion of what Jennifer Fleissner calls "the woman of the future" whose "capacity to embody the most salient features of post-Darwinian, technologized modernity … made her life story a site across which to map the potential future shape of history itself" (5). At the turn of the century, as modernization took hold and the birth rate declined due to women working outside the home, men in power like Theodore Roosevelt and Henry Adams marketed women as the key to America's wholesome, progressive future (the future of a

powerful, long-lived women whose continued existence, eschewal of sedimented narratives, and embodiment of monumental time undermines the heteropatriarchy and its progress narrative. These women are living fossils who speak stories from a deeper prehistory. In adapting Haggard's white queen to write the story of an African queen whose consciousness and history of her people can live beyond her body, Hopkins writes a hope for a different future that cannot be neatly stratified.

Conclusion

Haggard's and Hopkins's novels figure Ayesha and Candace as anomalies—terrible and awesome in their uniqueness. But other texts show that the patterns I explore here are present elsewhere. At the end of *She: A History of Adventure*, Haggard makes a passing reference to an African tribe that holds Holly and Leo hostage on their passage out of Africa. He writes, "[F]or six months we were imprisoned by a savage tribe, who believed us to be supernatural beings, chiefly on account of Leo's youthful face and snow-white hair" (312). This seems to be an intertextual reference to Edgar Allan Poe's *The Narrative of Arthur Gordon Pym of Nantucket* (1838). In Poe's novel, his character Arthur Gordon Pym stows away on a ship. He nearly dies of starvation and thirst, resorts to cannibalism, and is rescued by a crew with whom he travels to the South Pole. There he encounters the Tsalal tribe. This tribe is terrified of the color white. Pym thinks the tribe is terrified of white people specifically, despite describing the people's fearful reactions to an albino bear-like creature and white birds: "It was quite evident that they had never

---

white, middle-class, non-immigrant America) (Fleissner 3-4). Angelique Richardson and Chris Willis similarly discuss a Victorian public interest in stopping time, in maintaining the status quo as they were confronted by the New Woman, described by Lyn Pykett as "the agent of social and/or racial regeneration, or symptom and agent of decline'" (Pykett xii). Queens Candace and Ayesha are worse than the "New Woman" because they are very old women who bring with them a "potential future shape of history" that is not compatible with existing Euro-American notions of (white) progress. Instead of the "woman of the future" envisioned by the men promoting "progress," they are queer women of the past.

before seen any of the white race—from whose complexions, indeed, they appeared to recoil" (165). Just as the tribe in Haggard's novel believes Leo to be a supernatural being due to his white hair, the Tsalal tribe appears to be fearful and respectful of Pym and his companions. This respect for Pym and the crew is a ruse, however. Unlike Holly and Leo who escape the African tribe, Pym's companions are killed by the Tsalal in a premeditated landslide.

Characters like the Tsalal, thought as living fossils, productively disrupt genealogical narratives and linear time; cast as Earth's original people carved from the rocks themselves, the Tsalal embody this disruption as specters of alternate timelines and lived possibilities. Pym details the geological terrain of the Tsalal people's island, noting "the singular stratification of these soapstone hills" (188). This uniquely stratified earth "was such that almost every natural convulsion would be sure to split the soil into perpendicular layers or ridges" (188). The Tsalal use their knowledge of the island's composition to bury the Europeans. And the Tsalal not only have scientific knowledge of their land that they are able to utilize to entomb the white characters, they are also depicted as one with and emerging from the earth's soil. After Pym and his friend Peters survive the rockslide and believe themselves to be buried alive, they search through underground tunnels for a way out. In their searches, they find "singular-looking indentures in the surface of the marl … With a very slight exertion of the imagination, the left … might have been taken for the intentional … representation of a human standing erect" (202). Pym attributes this carving and the markings next to it that look like an alphabet to nature, a move that demotes the Tsalal from civilized to savage by wresting from them proof of a written language. But the novel implies that Pym has stumbled upon the Tsalal people's origin story. The Tsalal are jet black; even their teeth are black. It is as if they were carved from the island itself and stepped out of the black granite rock. Poe's Tsalal tribe, like Haggard's Amahagger

tribe, are "People of the Rocks," but unlike the Amahagger who are said to have no origin, the Tsalal seem to be born from the earth (Haggard 80).

In this chapter, I have probed the underside of the novel of imperialism to see what exists in the fissures. Jeffrey Jerome Cohen writes, "Whether deep, close, surface, or distant, contemporary reading strategies love the linear: definitive beginnings, vexed middles, smoothly inescapable ends. Through lines and strata, the progress of narrative and time becomes legible" (26). Cohen proposes that we instead think of "time itself not as a laminar flow but as a spiral of unforeseen propinquity" (27). Hopkins's novel brings stories like those of the Amahagger, Telassar, and Tsalal peoples out of the cracks, and engages the language of burial and excavation by exploring identities buried within the psyche and the histories entombed in the earth. She writes the Black narratives back into the record—literally. Toward the beginning of *Of One Blood*, Mira, who is Reuel's, Dianthe's, and Aubrey's dead mother, appears as a ghost and writes her name in the Livingston family bible, the family who enslaved her and tried to erase her history. When Mira rises through the floorboards, she underlines in the bible, a "quotation from the twelfth chapter of Luke: 'For there is nothing covered that shall not be revealed'" (Hopkins 73). *Of One Blood* is rife with language concerning burial and sedimentation; it riffs on the geological adventure novel to uncover origin stories in Jim Crow America and Ethiopia—one need not travel far, this moment implies, to find the truth. Reuel travels to Africa to find his roots, but Dianthe discovers her family's origins on the land that was the Livingston plantation where her maternal grandmother still resides. Knowledge is available if only one can excavate it, Hopkins implies.

The queens Ayesha and Candace both embody spectrality and each figures a historical haunting that simultaneously reaches into and reshapes the past, disfigures the present, and

suggests that the future will diverge from linearity. Elizabeth Freeman writes that "the fantasy of feeling history with, on, and even as the body is a powerful alternative to disciplinary histories" (Freeman, *Beside You* 122). The *chronomorphous* character that lives beyond any one corporeal form suggests that the past, present, and future are always already happening simultaneously, especially as stories of alterity are made legible and otherness is rewritten time and again.

CODA

"Shadows and Crossings":

W.E.B. Du Bois's "The Princess Steel" and the Time of Mourning

W.E.B. Du Bois's story, "The Princess Steel" (1908-1910), pairs sociology—a field that studies the human development of social order—with Black history and fantasy to highlight stories that cannot be written out of the record. This story, written after Pauline Hopkins's *Of One Blood*, presents "romance as a tactic of imagining historical change, a creative mode ready to be used in the present" (Du Bois et al. 820). Du Bois uses the constraints of medieval romance—knights, magic, violence, and love at first sight—but nuances the genre by layering it with the history of slavery. Thereby, Du Bois centers Black female labor by connecting it to a deeper past and, by entwining the Princess Steel's hair with the earth itself, demonstrates that Black female labor is foundational to America's present.

I end this project with Du Bois's story because, like Hopkins's narratives, "The Princess Steel" reaches into and tries to make sense of the past in order to inform a Black political present and craft a future—an actual alternate, better world—that does not erase racial politics, but embraces them. Reynaldo Anderson writes "that science fiction and black speculative thought have been intertwined since roughly the 19th century … [Afrofuturism] is a decolonization project, a pan-African project, and it goes beyond literature and aesthetics … especially if it's highlighting a gap or a direction where you *should* be looking" (Barber et al. 138, 140). He contends that despite the "future" in "Afrofuturism," this genre of speculative fiction looks backward as much as it looks forward: "Afrofuturism combines science fiction elements to imagine alternate worlds with regard to racial politics and belonging. In so doing, it is seen as a way to make sense of the past and its relevance to our black political present" (137). Both

Hopkins and Du Bois turn us toward gaps "where we should be looking," which has also been the primary goal of this project.

In "The Princess Steel," Du Bois weaves into the fabric of the world a story of Black magic and stolen labor, of layered histories and time unhinged. Newly arrived in New York City on their honeymoon, a young white man and his wife, both recently graduated from college with degrees in sociology, arrive "on the top story of the new Whistler building, or rather tower, on Broadway, New York" (Du Bois et al. 822). There, they meet an established, Black sociologist, Professor Johnson, who teaches them how to see the Great Curve of life. He explains the Great Curve, his greatest discovery, as follows:

> "A dot measured by height and breadth on a plane surface like this may measure a single human deed in two dimensions. Now place plane on plane, dot over dot and you have a history of these deeds in days and months and years; so far man has gone … but I go further: If now these planes be curved about one center and reflected to and fro we get a curve of infinite curvings which is … the Law of Life" (823).

Professor Johnson reveals that as he attempted to plot a historical trajectory using the Great Chronicle—"just the everyday facts of life but kept with surprising accuracy by a Silent Brotherhood for 200 years" (822-823)—he not only realized that history cannot be plotted linearly and is, in fact, a series of infinite curves, but also that ours is not the only history: "[W]hen I would cast the great lines of this Curve I was continually hampered by curious counter-curves and shadows and crossings—which all my calculations could not eliminate" (823). Over time, these shadows and crossings have revealed to the Professor that "human life is not alone on earth—there is an Over-life—a life of Over-men, Super-men … marshalls of the

Zeit-geist … It is a Life so near ourselves that we think it is ourselves" (823). Professor Johnson divulges that society's historical trajectory is not so easily plotted; while each of us may think we exist independently and act according to individual moral codes, we are in fact affected by the cultural moment, the *zeitgeist*, in which we live, as well as the many cultural moments that predate our present. In this explanation we see an articulation of Walter Benjamin's claims that the "true picture of the past flits by" and "[n]othing that has ever happened should be regarded as lost for history" (Benjamin 255, 254). Rather than present history as something we have moved on from or evolved past, the professor depicts time as something that is layered and demonstrates that the specters of past misdeeds and tragedies can intrude into the present at any moment.

The irruption of the past into the present is literal in this story—natural disasters are metaphorically rendered as direct effects of Black grief. What is revealed by the "shadows and crossings" layered over the lived present is the history of the Princess Steel, a woman hidden in the steel mines of Pittsburgh. Her mother is the "captive … dark Queen of the Iron Isles—she that of old came out of Africa" and hid her daughter inside of her arm so that she would not be separated from her child (Du Bois et al. 825). Two greedy knights release the Princess; when the mother's arm is struck off and her daughter stolen, the very bowels of the earth shake: "Down shot the wounded woman with a great gasping cry that set the ocean twanging and hill a-trembling; up flew the fires of Hell" (827). The knights fight and the greedier of the two live, and while the Princess grieves for the other, her lover, the victor steals thread after thread of her steel hair, spins it, and sells it. Inert, the princess continuously weeps, but as long as she lives she is able to wreak havoc with a single action because her hair-turned-commodity, still attached to her body, is threaded through the earth: "One hand lashed up and with a quick sharp grasp she pulled a single curl ... and suddenly the world whirled in San Francisco. The fire burst, the earth

trembled, buildings fell, great cries rang round the world" (829). With another tug of her hair, she causes a shipwreck in the Isles of the Sea (829). These women represent the Black body-turned-commodity; both mother and daughter are depicted as physical, terrestrial resources with their bodies, labor, and grief tied into the earth itself. The natural elements respond to and embody their pain, sadness, and rage.

Professor Johnson does not relay the story of the Queen and Princess as fantasy or a found narrative of bygone times. The women's stories are presented as a sociological discovery—it is they who control the unfolding of human civilization, and it is their experiences that can save or wreck the world as we know it. The frame narrative of the sociological experiment is a secondary commentary on linearity and the conditions that inform Professor Johnson's present. Adrienne Brown and Britt Rusert analyze Du Bois's frame narrative as a commentary on sociology's insufficiency and its inability to truly capture the human experience: "the traditional tools of sociology were ultimately unable to grasp the scale of the 'Great Near,' which in the story refers to the epic timescale of capitalism—and its global imperialist methods—shaping the conditions of the present" (Du Bois et al. 820). Professor Johnson, a Black man who daily experiences racism, is able to shift the field of sociology to take control of its imperialist methods. He can fine tune his instruments to take into account the untold stories and the sadness that capitalism and imperialism leave in their wake. If Professor Johnson's megascope—a fictional scientific instrument—is tuned correctly, anyone can witness this "Over-life," this simultaneous narrative that is both in and out of our time.

Du Bois implies that shifting the historical narrative—past, present, and future—to encompass Black experiences can be accomplished by teaching one person at a time. While the white male sociologist can see the "Over-life," his "little Southern wife" cannot (822). Upon

arrival, both are startled to discover that the esteemed Professor Johnson is Black, and each has an inherently racist response by assuming that Professor Johnson's research is somehow less rigorous and less worthy because of his skin color: "One would not for a moment have hesitated to call him a gentleman had it not been for his color. His voice, his manner, everything showed training and refinement. Naturally my wife stiffened and drew back and yet she felt me smiling and hated to acknowledge the failure of our expedition" (822). It is the wife, however, who assumes Professor Johnson is "aught but a servant" and greets him with, "Well, uncle, where is professor?" (822). In the end, after witnessing Princess Steel's story, the husband peels himself away from the megascope in dread and awe only to discover that his wife has not seen any of what he has seen, has not seen the pictures of the past flit by or felt their intrusion into the present. Professor Johnson's only explanation is that "it was not tuned delicately enough for her" (829), but the story implies that she was not ready to receive the tragedy of stolen Black labor and sundered families, or the knowledge that her present is not the only truth and timeline. In this way, she embodies Anne McClintock's claim that "[w]hite women are both colonized and colonizers, ambiguously complicit in the history of African dispossession" ("No Longer" 110). Unable to accept Professor Johnson's labor and discoveries as valid because of his skin color, she undermines her ability to grasp the significance of the Over-life's implications and limits herself to the imperialist present.

Du Bois both writes into being a cultural consciousness of Black history and labor that is threaded into the earth and overlays the present, and critiques sociology and its methods that reinforce a progressive teleology. In other words, he throws out time's constraints altogether. Horrified by the natural disasters he witnesses, the white sociologist asks how Princess Steel's tragedy will end—implying that he fears the answer is the end of the world itself—to which

Professor Johnson replies, “I know not nor shall we know in many hundred years. For a day to the Over-World is a thousand years to us” (829). By becoming attuned to a history and timeline beside the one in which he has been living, the white sociologist becomes part of the time of mourning and lament as described by Geeta Patel: “Anyone who has mourned knows well the feeling of ... realizing that what the clock tells you will never come close to what you experienced. The incredible suffusion of feeling so necessary to mourning ... transforms space-time, renders it thinner or thicker. The full space-time of mourning is not particularly linear” (280). The Over-life is another word for mourning: Du Bois depicts a deeper time, a longer time, a time of grief and lives lived beyond and beside ours that nonetheless affect us.

In crafting “The Princess Steel,” Du Bois draws from his own zeitgeist, a cultural moment in America in which authors rewrote and combined genres to explore identity and alternate historical timelines. Brown and Rusert contextualize this story in Du Bois’s life and oeuvre, writing, “‘The Princess Steel’ also telegraphs Du Bois’s affinity for reading and writing popular fiction … Indebted to the serial romances and weird gothic magazine fiction of the early twentieth century, ‘The Princess Steel,’ like the serial fiction of Pauline Hopkins, begs to be placed in a broader landscape of genre fiction” (820). Du Bois’s story perfectly encapsulates themes explored in *Of One Blood*, themes of mourning, of histories lost and found, and of connections made across collapsed time. Du Bois, however, centers grief and its visceral nature, and explicitly reifies capitalism’s exploitation of Black labor. Du Bois’s African Queen and Princess are split from one another, and their anger resonates through the world. They are not *chronomorphous* in the same way as the queens Ayesha and Candace, because they do not shift forms or travel outside of their bodies; rather, the Princess Steel lives in an Over-World in which time stretches infinitely, and she need not travel outside of her body to effect change—she need

only tug on her hair, and the ripple effects will be felt around the globe. Her present informs and changes ours, and her story cannot be written out of the record.

While each of the figures analyzed in this project does not necessarily have a one-to-one correlation with real peoples in our lived present—mermaids, for example, reflect phobogenic concerns about humanness back to us, but are not themselves living figures (insofar as we can prove)—each one is in conversation with and highlights nineteenth-century politics and racism. Stories of mermaids, long-lived inner-earth women and the Indigenous people they erase, *chronomorphous* queens, and commodified Black bodies prompt us to turn away from developmental history and progress-oriented linearity in favor of a model that zigzags or, per Du Bois, curves. Geological unconformities and living fossils ask their interpreters to consider what was lost to time and reveal the queerness latent in that loss. In this project, I have plumbed the fissures to see what might emerge from the hiatus, from the time written out of the record.

BIBLIOGRAPHY

"Adventure with a Mermaid." *Canterbury Journal, Kentish Times and Farmers' Gazette*. Saturday 24 March 1888. British Newspaper Archives, The British Library, St Pancras and Boston Spa, UK. www.britishnewspaperarchive.co.uk/viewer/bl/0001404/18880324/092/0007. 20 April 2021.

Ahmed, Sara. *Queer Phenomenology: Orientations, Objects, Others*. Durham, Duke University Press, 2006.

Ahuja, Neel. "Intimate Atmospheres: Queer Theory in a Time of Extinctions." *GLQ*, vol 21, no. 2-3, 2015, pp. 365-385. doi.org/10.1215/10642684-2843227

Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self.* Bloomington, Indiana University Press, 2010.

Andersen, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. New York, Verso, 2016.

Andersen, Hans Christian. "The Little Mermaid." *Folk and Fairy Tales, 5th edition,* edited by Martin Hallett and Barbara Karasek, Broadview Press, 2018, pp. 146-164.

Arata, Stephen D. "The Occidental Tourist: 'Dracula' and the Anxiety of Reverse Colonization." *Victorian Studies*, vol. 33, no. 4, 1990, pp. 621-645. www.jstor.org/stable/3827794

Auerbach, Nina. *Woman and the Demon: The Life of a Victorian Myth.* Cambridge, Harvard University Press, 1982.

Barber, Tiffany E., Reynaldo Anderson, Mark Dery, and Sheree Renée Thomas. "25 Years of Afrofuturism and Black Speculative Thought: Roundtable with Tiffany E. Barber, Reynaldo Anderson, Mark Dery, and Sheree Renée Thomas." *TOPIA: Canadian Journal of Cultural Studies*, no. 39, 2018, pp. 136-144. muse.jhu.edu/article/706962

Barrie, J.M. *Peter Pan: Peter and Wendy and Peter Pan in Kensington Gardens*. London, Penguin Classics, 2004.

Baughman, T.H. *Pilgrims on the ice: Robert Falcon Scott's First Antarctic Expedition*. Lincoln, University of Nebraska Press, 1999.

Baum, L. Frank. *The Sea Fairies.* Orinda, CA, SeaWolf Press, 2020.

Beiner, Ronald. "Walter Benjamin's Philosophy of History." *Political Theory*, vol. 12, no. 3, August 1984, pp. 423-434. doi.org/10.1177/0090591784012003005

Benjamin, Walter. *Illuminations*. New York, Schocken Books, 1969.

Bergman, Jill. *The Motherless Child in the Novels of Pauline Hopkins*. Baton Rouge, Louisiana State University Press, 2012.

Black, Edwin. *War Against the Weak: Eugenics and America's Campaign to Create a Master Race, Expanded Edition*. Washington, DC, Dialog Press, 2012.

Blum, Heather. *The News at the Ends of the Earth: The Print Culture of Polar Exploration.* Durham, Duke University Press, 2019.

Bondeson, Jan. *The Feejee Mermaid and Other Essays in Natural and Unnatural History*. Ithaca, Cornell University Press, 1999.

Braun, Bruce. "Producing Vertical Territory. Geology and Governmentality in Late Victorian Canada." *Cultural Geographies*, vol. 7, no. 1, 2000, pp. 7-46. doi.org/10.1177/096746080000700102

Braun, Gretchen. "Empathy, Anxiety, and the Boundaries of Humanity: Vivisection Discourse and The Island of Doctor Moreau." *Studies in the Novel*, vol. 51, no. 4, Winter 2019, pp. 499-522. doi.org/10.1353/sdn.2019.0052

Brink-Roby, H. "Siren canora: the mermaid and the mythical in late nineteenth-century science." *Archives of Natural History*, vol. 35, no. 1, pp. 1-14. doi.org/10.3366/E0260954108000041

Broad, Katherine. "Race, Reproduction, and the Failures of Feminism." *Tulsa Studies in Women's Literature*, vol. 28, no. 2, 2009, pp. 247-266. www.jstor.org/stable/40783419

Bulwer-Lytton, Edward. *The Coming Race*. Sunnyvale, CA, Loki's Publishing, 2017.

Burns, Adam. *American Imperialism: The Territorial Expansion of the United States, 1783-2013*. Edinburgh, Edinburgh University Press, 2017.

Burroughs, Edgar Rice. *At the Earth's Core*. New York, Illustrated Classics, 2021.

Butler, Marguerite A. and Aaron A. King. "Phylogenetic Comparative Analysis: A Modeling Approach for Adaptive Evolution." *The American Naturalist*, vol. 164, no. 6, 2004, pp. 683-695. doi.org/10.1086/426002

Carroll, Siobhan. *An Empire of Air and Water: Uncolonizable Space in the British Imagination 1750-1850*. Philadelphia, University of Pennsylvania Press, 2015.

Casane, Didier and Patrick Laurenti, "Why Coelacanths Are Not 'Living Fossils.'" *Bioessays,* vol. 35, no 4, 2013, pp. 332-338. doi.org/10.1002/bies.201200145

Chang, Elizabeth Hope. "Hollow Earth Fiction and Environmental Form in the Late Nineteenth Century." *Nineteenth Century Contexts*, vol. 38, no. 5, 2016, pp. 387-397. doi.org/10.1080/08905495.2016.1219190

Chen, Mel Y. *Animacies: Biopolitics, Racial Mattering, and Queer Affect*. Durham, Duke University Press, 2012.

Cheng, Anne Anlin. *The Melancholy of Race: Psychoanalysis, Assimilation, and Hidden Grief.* Oxford, Oxford University Press, 2000.

Cheng, Anne Anlin. "Sushi, Otters, Mermaids: Race at the Intersection of Food and Animal; or, David Wong Louie's Sushi Principle." *Resilience: A Journal of the Environmental Humanities*, vol. 2, no. 1, 2014, pp. 66-95. muse.jhu.edu/article/583709

A Citizen of the United States. *Symmes's Theory of Concentric Spheres Demonstrating that the Earth is Hollow, Habitable Within, and Widely Open About the Poles.* Atlanta, Old South Books, 2019.

Chu, Ellen W. "Magnificent voyage: The US Exploring Expedition confirmed the existence of Antarctica and helped establish science as a profession" *BioScience*, vol. 36, no. 4, 1986, pp. 222-225. doi.org/10.2307/1310208

"Coelacanths." *National Geographic*, 2018, www.nationalgeographic.com/animals/fish/group/coelacanths. 2 April 2018.

Cohen, Jeffrey Jerome. "Anarky." *Anthropocene Reading: Literary History in Geologic Times*, edited by Tobias Menely and Jesse Oak Taylor, Penn State University Press, 2017, pp. 25-42.

Cohen, Jeffrey Jerome. *Stone*. Minneapolis, University of Minnesota Press, 2015.

Coleman, Loren and Jerome Clark. *Cryptozoology A to Z: The Encyclopedia of Loch Monsters, Sasquatch, Chupacabras and Other Authentic Mysteries of Nature*. New York, Fireside, 1999.

Danson, Edwin. *Weighing the World: The Quest to Measure the Earth*. Oxford, Oxford University Press, 2009.

Darwin, Charles. *On The Origin of Species By Means of Natural Selection*. Mineola, NY, Dover Publications, 2006.

Daston, Lorraine and Peter Galison. *Objectivity*. New York, Zone Books, 2007.

Davis, Jim. "Glad You Asked: What is an Unconformity?" *Utah Geological Survey*, 2018. tinyurl.com/utahgeologicalsurvey. 1 April 2021.

De Mille, James. *A Strange Manuscript Found in a Copper Cylinder*. Scotts Valley, CA, CreateSpace Independent Publishing Platform, 1888 (facsimile).

Del Mar, Alex. "Haggard's Stories: 'King Solomon's Mines' and 'She.' A Basis of Solid Facts. *The Mysterious Ruins a Reality*—The Negro Head Point of 'She.'" *San Francisco Chronicle,* 1887. ProQuest Historical Newspapers. 17 January 2018.

Diaz, Vincente M. “No Island is an Island.” *Native Studies Keywords*, edited by Stephanie Nohelani, Andrea Smith, and Michelle H. Raheja, University of Arizona Press, 2015, pp. 90-108.

Dinshaw, Carolyn, Lee Edelman, Roderick A. Ferguson, Carla Freccero, Elizabeth Freeman, Judith Halberstam, Anamarie Jagose, Christopher Nealon, and Nguyen Tan Hoang. “Theorizing Queer Temporalities: A Roundtable Discussion.” *GLQ: A Journal of Lesbian and Gay Studies*, vol. 13, no. 2-3, pp. 177-195. doi.org/10.1215/10642684-2006-030

The District News, Friday, October 10, 1980. Todmorden & District News Collection. British Newspaper Archives, The British Library, St Pancras and Boston Spa, UK. www.britishnewspaperarchive.co.uk/viewer/bl/0001940/18901010/076/0003. 6 October 2020.

Domosh, Mona. “A ‘civilized’ commerce: gender, ‘race,’ and empire at the 1893 Chicago Exposition.” *Cultural Geographies*, vol. 9, 2002, pp. 181-201. doi.org/10.1191/1474474002eu242oa. 20 December 2018.

Du Bois, W.E.B., et al. “The Princess Steel.” *PMLA*, vol. 130, no. 3, 2015, pp. 819–829, www.jstor.org/stable/44015770.

Du Bois, W.E.B., “The Strivings of the Negro People.” *The Atlantic*, August 1897, www.theatlantic.com/magazine/archive/1897/08/strivings-of-the-negro-people/305446/. 18 June 2021.

Dyke, Gareth and Gary Kaiser. *Living Dinosaurs: The Evolutionary History of Modern Birds*. Hoboken, NJ, Wiley-Blackwell, 2011.

Edelman, Lee. *No Future: Queer Theory and the Death Drive*. Durham, Duke University Press, 2004.

Emerson, Willis George. *The Smoky God Or, A Voyage to the Inner World*. Scotts Valley, CA, CreateSpace Independent Publishing Platform, 2016.

Evans, Michael E. “Edmond Halley, Geophysicist.” Physics Today, vol. 41, no. 2, 1988, pp. 41-45. doi.org/10.1063/1.881144

Fabian, Johannes. *Time and the Other: How Anthropology Makes Its Object*. New York, Columbia University Press, 2014.

Ficke, Sarah. *Pirates, Runaways, and Long-Lost Princes: Race and National Identity in Transatlantic Adventure Fiction*. Dissertation, University of North Carolina, 2011.

Ferguson, Roderick A. *Aberrations in Black: Toward a Queer of Color Critique*. Kindle. Minneapolis, University of Minnesota Press, 2004.

Fleissner, Jennifer L. *Women, Compulsion, Modernity: The Moment of American Naturalism*. Chicago, University of Chicago, 2004.

France, R.L. “Imaginary Sea Monsters and Real Environmental Threats: Reconsidering the Famous Osborne, ‘Moha-Moha’, Valhalla, and ‘Soay Beast’ Sightings of Unidentified Marine Objects.” *International Review of Environmental History*, vol. 3, no. 1, 2017, pp. 63-100. doi.org/10.22459/IREH.03.01.2017.07

Freccero, Carla. “Queer Spectrality: Haunting the Past.” *The Spectralities Reader: Ghosts and Haunting in Contemporary Cultural Theory*, edited by María del Pilar Blanco and Esther Peeren, Bloomsbury Publishing, 2013, pp. 335-359.

Freeman, Elizabeth. *Beside You in Time: Sense Methods & Queer Sociabilities in the American 19th Century*. Durham, Duke University Press, 2019.

Freeman, Elizabeth. “Introduction.” *GLQ: A Journal of Lesbian and Gay Studies*, vol. 13, no. 2-3, 2007, pp, 159-176. doi.org/10.1215/10642684-2006-029

Freeman, Elizabeth. *Time Binds: Queer Temporalities, Queer Histories*. Durham, Duke University Press, 2010.

Freud, Sigmund and Josef Breuer. *Studies in Hysteria*. Translated by Nicola Luckhurst, Penguin Books, 2004.

“Garden of Eve May Be There.” *The New York Journal*, 17 August 1896. Library of Congress, Washington, DC. 16 January 2019.

Godfrey, Laurie R. *Scientists Confront Creationism*. New York, W.W. Norton and Company, 1984.

González, Antonia Moreno. “‘Weighing’ the Earth: A Newtonian Test and the Origin of an Anachronism.” *Science and Education*, vol. 10, 2001, pp. 515-543. doi.org/10.1023/A:1017564316425

Gowar, Imogen Hermes. *The Mermaid and Mrs. Hancock*. London, Harper Perennial, 2019.

Grandcolas, Philippe, Romain Nattier, and Steve Trewick. “Relict species: a relict concept?” *Trends in Ecology and Evolution*, vol. 29, no. 12, 2014, pp. 655-663. doi.org/10.1016/j.tree.2014.10.002

Haggard, H. Rider. *Ayesha, The Return of She.* Kindle ed., Public Domain, 2015.

Haggard, H. Rider. *She: A History of Adventure*. New York, Penguin Classics, 2001.

Halley, Edmond. “An account of the cause of the change of the variation of the magnetical needle with an hypothesis of the structure of the internal parts of the earth: as it was proposed to the Royal Society in one of their late meetings.” *Philosophical Transactions of the Royal Society of London,* vol. 17, 1997. doi.org/10.1098/rstl.1686.0107

"He Had the Mermaids: The Tramp Had Experienced a Large Variety of Things." *The Sunday Herald and weekly national intelligencer.* 13 Sep. 1891. Sn82016373. Library of Congress, Washington, DC. www.loc.gov/item/sn82016373/1891-09-13/ed-1/. 6 October 2020.

Hurley, Kelly. *The Gothic Body: Sexuality, materialism, and degeneration at the fin de siècle.* Cambridge, Cambridge University Press, 1996.

Hutton, Charles. "An account of the calculations made from the survey and measures taken at Schehallien, in order to ascertain the mean density of the Earth." *Philosophical Transactions of the Royal Society of London,* vol. 68, 1997. doi.org/10.1098/rstl.1778.0034

Homer. *The Odyssey*. Translated by Robert Fagles, Penguin Classics, 2006.

Hopkins, Pauline. *Of One Blood: Or, the Hidden Self*. New York, Washington Square Press, 2004.

Hossain, Rokeya Sakhawat. *Sultana's Dream: A Feminist Utopia*. New York, The Feminist Press, 1988.

Hsu, Hsuan L. "Naturalist Smellscapes and Environmental Justice." *American Literature*, vol.88, no. 4, December 2016, pp. 787-814. doi.org/10.1215/00029831-3711126

Jameson, Frederick. *Ghostly Demarcations: A Symposium on Jacques Derrida's Specters of Marx*. New York, Verso, 2008.

Jerng, Mark C. *Racial Worldmaking: The Power of Popular Fiction.* New York, Fordham University Press, 2018.

Johnson, Bob. *Mineral Rites: An Archaeology of the Fossil Economy*. Baltimore, Johns Hopkins University Press, 2019.

Jylkka, Katja. "'Witness the Plesiosaurus': Geological Traces and the Loch Ness Monster Narrative." *Configurations,* vol, 26, no. 2, Spring 2018, pp. 207-234. doi.org/10.1353/con.2018.0012

Kalra, Virinder. "Between emasculation and hypermasculinity: Theorizing British South Asian masculinities." *South Asian Popular Culture*, vol. 7, no. 2, 2009, pp. 113-125. doi.org/10.1080/14746680902920874.

"King Solomon's Mines and the Queen of Sheba's Domain Found." *Chicago Daily Tribune*, 1904, p. G1. ProQuest Historical Newspapers. 17 January 2018.
"King Solomon's Mines." *The Review of Reviews*, vol. 50, 1914, pp. 48. British Periodicals. 17 January 2018.

Knight, Alisha R. *Pauline Hopkins and the American Dream: An African American Writer's (Re)Visionary Gospel of Success*. Knoxville, University of Tennessee Press, 2012.

Kristeva, Julia and John Lechte. “Approaching Abjection.” *Oxford Literary Review*, vol. 5, no. 1, 1982, pp. 125-149. www.jstor.org/stable/43973647

Kristeva, Julia, Alice Jardine, and Harry Blake. “Women’s Time.” *Signs*, vol. 7, no. 1, 1981, pp. 13-35. www.jstor.org/stable/3173503

Kucherov, Samuel. “The Case of Vera Zasulich.” *The Russian Review*, vol. 11, no. 2, 1952, pp. 86-96. doi.org/10.2307/125658

Lane, Mary E. Bradley. *Mizora: A Prophecy*. Syracuse, NY, Syracuse University Press, 2000.

Lang, Hans-Joachim and Benjamin Lease. “The Authorship of Symzonia: The Case for Nathaniel Ames.” *The New England Quarterly*, vol. 48, no. 2, 1975, pp. 241-252. doi.org/10.2307/364661

Laurent, Béatrice. “Monster or Missing Link? The Mermaid and the Victorian Imagination.” *Cahiers victoriens et édouardiens*, vol. 85, Spring 2017. doi.org/10.4000/cve.3188

Lewes, Darby. “GYNOTOPIA: A Checklist of Nineteenth-Century Utopias by American Women.” *Legacy*, vol. 6, no. 2, 1989, pp. 29-41. www.jstor.org/stable/25679064

Lewis, Jayne Elizabeth. *Air’s Appearance: Literary Atmosphere in British Fiction, 1660-1794*. Chicago, The University of Chicago Press, 2012.

Lott, Eric. “Love and Theft: The Racial Unconscious of Blackface Minstrelsy.” *Representations*, vol. 39, 1992, pp. 23-50. doi.org/10.2307/2928593

Luciano, Dana. “Geological Fantasies, Haunting Anachronies: Eros, Time and History in Harriet Prescott Spofford’s ‘The Amber Gods.’” *ESQ: A Journal of American Renaissance*, vol. 55, no. 3-4, 2009, pp. 269-303. doi:10.1353/esq.0.0041

Luciano, Dana. “Passing Shadows: Melancholic Nationality and Black Critical Publicity in Pauline E. Hopkins’s *Of One Blood*.” *Loss: The Politics of Mourning*, edited by David L. Eng and David Kazanjian, University of California Press, 2003, pp. 148-187.

Luciano, Dana. “Tracking Prehistory.” *The Journal of Nineteenth-Century Americanists*, vol. 3, no. 1, 2015, pp. 173-181. doi.org/10.1353/jnc.2015.0019

Lukács, Georg. “Narrate or Describe?” *Writer and Critic and Other Essays*, translated by Arthur Kahn, Merlin Press, 1978, pp. 110-148.

Lydekker, R. “Living Fossils.” *Knowledge: An Illustrated Magazine of Science Simply Worded Exactly Described,* vol. 16, 1893. University of California Libraries. 10 April 2018.

Lyell, Charles. *Principles of Geology*. New York, Penguin Classics, 1998.

Marsh, Richard. *The Beetle*. Peterborough, Canada, Broadview Press, 2004.

Mathers, Thomas C., R.L. Hammond, R. A. Jenner, B. Hänfling, A. Gómez. "Multiple global radiations in tadpole shrimps challenge the concept of 'living fossils.'" *PeerJ*, vol. 1, no. 62, 2013, pp. 1-12. doi.org/10.7717/peerj.62

May, Leila S. "'Foul Things of the Night': Dread in the Victorian Body." *The Modern Language Review*, vol. 93, no. 1, 1998, pp. 16-22. www.jstor.org/stable/3733619

McCartney, Paul T. *Power and Progress: American National Identity, the War of 1898, and the Rise of American Imperialism*. Baton Rouge, Louisiana State University Press, 2006.

McClintock, Anne. *Imperial Leather*: *Race, Gender, and Sexuality in the Colonial Contest.* Oxfordshire, Routledge, 1995.

McClintock, Anne. "'*No Longer in a Future Heaven*': Women and Nationalism in South Africa." *Transition*, no. 51, 1991, pp. 104-123. doi.org/10.2307/2935081

McCoy, Frederick. *Prodromus of the paleontology of Victoria, or, Figures and descriptions of Victorian organic remains*. J. Ferres,1874-1882. FICHE 3692D7-3696G7. Plant taxonomic literature microfiche collection. Biodiversity Heritage Library, University of California Libraries. 10 April 2018.

McDowell, Deborah. "Introduction." *Of One Blood: Or, the Hidden Self*, by Pauline Hopkins, Washington Square Press, 2004, pp. v-xx.

McMenamin, Mark A.S. and Dianna L.S. McMenamin. *Hypersea: Life on Land.* New York, Columbia University Press, 1996.

Melina, Remy. "What's the Missing Link?" *Live Science*, 2010. www.livescience.com/32530-what-is-the-missing-link.html. 8 July 2021.

Melville, Herman. *Moby Dick*. Oxford, Oxford University Press, 1998.

Menely, Tobias and Jesse Oak Taylor. "Introduction." *Anthropocene Reading: Literary History in Geologic Times*, edited by Tobias Menely and Jesse Oak Taylor, Penn State University Press, 2017, pp. 1-24.

"The mermaid! | now exhibiting at the Turf coffee-house | 39 St. James's Street." 1822. 1859,0316.169. Prints and Drawings. The British Museum. London, England. www.britishmuseum.org/collection/object/P_1859-0316-169. 2 July 2020.
"Mermaid—Mermaids exhibited successively in the Years 1758, 1775, & 1794 / J. Pass, sc." 1817. LOT 4246. Prints and Photographs Division. Library of Congress, Washington, DC. www.loc.gov/resource/cph.3g08271/. 10 Nov 2020

"Mermaids, or Sea-Women." *The Kentish Gazette*. Friday 08 September 1809. British Newspaper Archives, The British Library, St Pancras and Boston Spa, UK. www.britishnewspaperarchive.co.uk/viewer/bl/0000235/18090908/004/0002. 1 October 2020.

"Mermaid's Song." 1884. M 3500, M2.3.U6A44. Music Copyright Deposits, 1870-1885. Library of Congress, Washington, DC. www.loc.gov/item/sm1884.09405/. 8 Nov 2020.

Miller, Elizabeth Carolyn. *Extraction Ecologies and the Literature of the Long Exhaustion*. Princeton, Princeton University Press, 2021.

Mortensen, Peter. "'Half Fish, Half Woman: Annette Kellerman, Mermaids, and Eco-Aquatic Revisioning." *Journal of the Fantastic in the Arts*, vol. 29, no. 2, 2018, pp. 201–21. www.proquest.com/scholarly-journals/half-fish-woman-annette-kellerman-mermaids-eco/docview/2202731054/se-2?accountid=14505

Nagalingum, N.S, C.R. Marshall, T.B. Quental, H.S. Rai, D.P. Little, and S. Matthews. "Recent Synchronous Radiation of a Living Fossil." *Science*, vol. 334, 2011, pp. 796-799. 10.1126/science.1209926

Neimanis, Astrida. "Hydrofeminism: Or, On Becoming a Body of Water." *Undutiful daughters: new directions in feminist thought and practice,* edited by Henriette Gunkel, Chrysanthi Nigianni, and Fanny Söderbäck, Palgrave MacMillan, 2012, pp. 85–99.

Nesbit, Edith. *Wet Magic*. 1913. Scotts Valley, CA, CreateSpace Independent Publishing Platform, 2016.

"Nights 738-756: The Story of Jullanar of the Sea." *Bartleby*, 1993-2020, www.bartleby.com/16/801.html. 1 Nov 2020.

Nikolajeva, Maria. "Edith Nesbit—The Maker of Modern Fairy Tales." *Merveilles & contes*, vol. 1, no. 1, 1987, pp. 31-44. www.jstor.org/stable/41389934

Nikolajeva, Maria. *From Mythic to Linear: Time in Children's Literature*. Lanham, MD, Scarecrow Press, 1991.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor.* Cambridge, Harvard University Press, 2011.

Oelschlaeger, Max. "Natural Aliens Reconsidered: Causes, Consequences, and Cures." *Earth Matters: The Earth Sciences, Philosophy, and the Claims of Community*, edited by Robert Frodeman, Prentice-Hall Inc., 2000, pp. 107-118.

Otten, Thomas J. "Pauline Hopkins and the Hidden Self of Race." *The Johns Hopkins University Press*, vol. 59, no. 1, 1992, pp 227-256. doi.org/10.2307/2873425

"Our Interesting Little Esquimau Visitors from the Arctic." *The New York Journal and Advertiser,* 1899. Library of Congress, Washington, DC. 16 January 2019.

Patel, Geeta. "Time to Tell: How to Tell the Proper Time? Finance and Cinema." *GLQ: A Journal of Lesbian and Gay Studies*, vol. 13, no. 2-3, 2007, pp. 273-300. doi: muse.jhu.edu/article/215008

Poe, Edgar Allan. *The Narrative of Arthur Gordon Pym of Nantucket*. New York, Penguin Books, 1999.

Pulido, Laura. "Flint, Environmental Racism, and Racial Capitalism." *Capitalism Nature Socialism*, vol. 27, no. 3, 2016, pp 1-16. doi.org/10.1080/10455752.2016.1213013

Pykett, Lyn. "Foreword." *The New Woman in Fact and Fiction*, edited by Angelique Richardson and Chris Willis, Palgrave Publishers Limited, 2001, pp. xi-xii.

Ranalli, G. "An Early Geophysical Estimate of the Mean Density of the Earth: Schehallien, 1774." *Earth Sciences History*, vol. 3, no. 2, 1984, pp. 149-152. doi.org/10.17704/eshi.3.2.k43q522gtt440172

"A Record-Breaking Year for Arctic and Antarctic Expeditions: 1897." *The New York Journal*, 3 January 1897. Library of Congress, Washington, DC. 16 January 2019.

Reiss, Benjamin. "P. T. Barnum, Joice Heth and Antebellum Spectacles of Race." *American Quarterly*, vol. 51, no. 1, 1999, pp. 78-107. www.jstor.org/stable/30041634

Rifkin, Mark. *Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination*. Durham, Duke University Press, 2017.

Rossi, Lorenzo. "A Review of Cryptozoology: Towards a Scientific Approach to the Study of 'Hidden Animals.'" *Problematic Wildlife*, edited by Francesco M. Angelici, Springer, Cham, 2016, pp. 573-588. doi.org/10.1007/978-3-319-22246-2_26

Sanborn, Geoffrey. "The Wind of Words: Plagiarism and Intertextuality in *Of One Blood*," *The Journal of Nineteenth Century Americanists*, vol. 3, no. 1, 2015, pp. 67-87. doi: 10.1353/jnc.2015.0010

Sand, George. *Laura: A Journey into the Crystal*. London, Pushkin Press, 2018.

Sandifer, Edward C. *How Euler Did Even More*. Providence, RI, American Mathematical Society, 2015.

Scanella, John B. and John R. Horner. "'*Nedoceratops*': An Example of a Transitional Morphology." *Plos One*, vol. 6, no. 12, 2011, pp. e28705. doi:10.1371/journal.pone.0028705

Scott, Heidi V. "Colonialism, Landscape, and the Subterranean." *Geography Compass*, vol. 2, no. 6, 2008, pp. 1853-1896. doi.org/10.1111/j.1749-8198.2008.00164.x

Scott. “The Mermaid.” *The Carlisle Patriot*. Saturday 30 November 1822. British Newspaper Archives, The British Library, St Pancras and Boston Spa, UK. www.britishnewspaperarchive.co.uk/viewer/bl/0000365/18221130/019/0004. 22 April 2021.

Seaborn, Adam. *Symnzonia: Voyage of Discovery*. Waterville, ME, Wilder Publications, 2009.

Secord, James A. *Controversy in Victorian Geology: The Cambrian-Silurian Dispute*. Princeton, Princeton University Press, 1986.

Secord, James A. *Visions of Science: Books and Readers in the Dawn of the Victorian Age*. Chicago, The University of Chicago Press, 2014.

“Sediment, n.” *OED Online*, Oxford University Press, January 2018, www.oed.com/view/Entry/174699. 22 March 2018.

Shelley, Mary. *Frankenstein; or, The Modern Prometheus*. Oxford, Oxford University Press, 2008.

Smail, Daniel Lord. *On Deep History and the Brain*. University of California Press, 2007.

Stanley, Steven M. “Does Bradytely Exist?” *Living Fossils,* edited by Niles Eldredge and Steven M. Stanley, New York, Springer Publishing, 1984, pp. 278-280.

Stevenson, Robert Louis. *The Strange Case of Dr Jekyll and Mr. Hyde.* London, Penguin Classics, 2002.

Stiebel, Lindy. “Creating a Landscape of Africa: Baines, Haggard and Great Zimbabwe.” *English in Africa*, vol. 28, no. 2, 2001, pp. 123-133. www.jstor.org/stable/40238934

Stott, Rebecca. “The Dark Continent: Africa as Female Body in Haggard’s Adventure Fiction.” *Feminist Review,* vol. 32, 1989, pp. 69-89. doi.org/10.1057/fr.1989.20

Suvin, Darko. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre.* Bern, Switzerland, Peter Lang Publishing, 2016.

Symmes, John Cleves, *No. 1 Circular*, 1818. Accessed February 22, 2019 from commons.wikimedia.org/wiki/File:Symmes_Circular.jpg.

Taylor, Jesse Oak. *The Sky of Our Manufacture: The London Fog in British Fiction from Dickens to Woolf*. Charlottesville, VA, University of Virginia Press, 2016.

“Theatrical Gossip.” *The Era*, 8 April 1905. British Newspaper Archives, The British Library, St. Pancras and Boston Spa, UK. www.britishnewspaperarchive.co.uk/viewer/bl/0000053/19050408/098/0014. 15 October 2020.

“Think the Earth is Hollow.” *The New York Journal*, 27 December 1896. Library of Congress, Washington, DC. 16 January 2019.

The Topeka State Journal. 28 March 1912, p. 12. Sn82016014. Library of Congress, Washington, DC. www.loc.gov/item/sn82016014/1912-03-28/ed-1/. 6 October 2020.

Verne, Jules. *Journey to the Center of the Earth*. Mineola, NY, Dover Publications, 2005.

Wallinger, Hannah. "Racial Context: Pauline E. Hopkins's *Of One Blood* and Henry Rider Haggard's *She*." *Text and context: essays in English and American studies in honour of Holger M. Klein*, edited by Sabine Coelsch-Foisner & Wolfgang Görtschacher, Schäuble Verlag Rheinfelden, 1998, pp. 43-52.

"Wanted: A Mermaid." *The Showman*. Thursday 01 November 1900. British Newspaper Archives, The British Library, St. Pancras and Boston Spa, UK. www.britishnewspaperarchive.co.uk/viewer/bl/0002340/19001101/107/0020. 19 April 2021.

Wells, H.G. *The Island of Dr. Moreau.* London, Penguin Classics, 2005.

Wells, H.G. *The Sea Lady: A Tissue of Moonshine*. 1901. CreateSpace Independent Publishing Platform, 2018.

Wells, H.G. *The Time Machine*. New York, Penguin Classics, 2007.

Whorton, J.C. "Historical development of vegetarianism." *The American Journal of Clinical Nutrition*, vol. 55, no. 5, 1994, pp. 1103s-1109s. doi.org/10.1093/ajcn/59.5.1103S

Wilde, Oscar. *The Picture of Dorian Gray.* Mineola, New York, Dover Publications, 2012.

Wilson, Kirt. H. "The Racial Politics of Imitation in the Nineteenth Century." *Quarterly Journal of Speech*, vol. 89, no. 2, 2003, pp. 89-108. doi.org/10.1080/00335630308178

Wolloch, Nathaniel. "The Civilizing Process, Nature, and Stadial Theory." *Eighteenth-Century Studies*, vol. 44, no. 2, 2011, pp. 245-259. www.jstor.org/stable/41057331

Worth, Aaron. "Arthur Machen and the Horrors of Deep History." *Victorian Literature and Culture*, vol. 40, no. 1, 2012, pp. 215-227. www.jstor.org/stable/41413829

Yan, Shu-chuan. "Between Fact and Myth: The Kingdom of the Non-Human in the Victorian Literary Imagination." *Concentric: Literary and Cultural Studies*, vol. 33., no. 1, 2007, pp. 223-251. doi.org/ 10.6240/concentric.lit.200701_33(1).0009