Beyond the Anthropocene: Multispecies Encounters in Contemporary Latin American Literature, Art, and Film

by

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ABSTRACT

In the face of what many scientists and cultural theorists are calling the Anthropocene, a new era characterized by catastrophic human impact on the planet's geologic, atmospheric, and ecological makeup, Latin American writers, artists, and filmmakers today from various disciplinary and geographical positionalities are engaging in debates about how to respond ethically to this global crisis. From an interdisciplinary perspective that incorporates cutting-edge theories in multispecies ethnography, material ecocriticism, and queer ecology, this study examines multispecies relationships unfolding in three telescoping dimensions—corporealities, companions, and communities—in contemporary Latin American cultural production while uncovering indigenous and other-than-dominant epistemologies about human-nonhuman entanglements. I argue that contemporary cultural expression uncovers long, overlapping histories of social and environmental exploitation and resistance while casting the moment of encounter between individuals of different species as hopeful figurations of human-nonhuman flourishing beyond the Anthropocene. Instead of remaining hopelessly mired in the dire geographies of planetary decline, the works of Uruguayan writer Teresa Porzecanski, Mexican author Daniela Tarazona, Mexican textile sculptor Alejandra Zermeño, Argentine filmmaker Lucía Puenzo, Colombian installation artist María Fernanda Cardoso, Colombian poet Juan Carlos Galeano, Colombian graphic artist Solmi Angarita, and Brazilian poet Astrid Cabral dramatize a multitude of multispecies encounters to imagine the possibility of a better world—one that is already as close as our skin and as present as the nonhuman "others" that constitute our existence. These works imagine the human itself as a product of multispecies interactions through evolutionary time,

multispecies companionships as formed around queer kinships, and biocultural communities as emerging through communicative, ethical encounters.

This study expands the horizons of Latin American environmental criticism by incorporating emerging theories on materiality informed by the biological and physical sciences and by engaging with non-canonical, twenty-first century texts as well as aesthetic modes not often included in Latin American ecocritical debates, in a systematic examination of the dynamics of multispecies encounters in the context of the Anthropocene. These different but overlapping forms of signification reflect the expanding media orientation of contemporary environmentalisms while forging the kinds of interdisciplinary and multicultural connections necessary to confront the global scope of planetary crisis.

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CHAPTER 1

INTRODUCTION: SPECIES, POLITICS, AND ECOCRITICISM IN LATIN AMERICA IN THE AGE OF THE ANTHROPOCENE

> [S]taying alive—for every species—requires livable collaborations. Collaboration means working across difference.... Without collaborations, we all die.
>
> —Anna Lowenhaupt Tsing, *The Mushroom at the End of the World*

The Amazon basin in South America is home to some of the rarest species of freshwater dolphin, *Inia geoffrensis*, *Inia boliviensis*, and *Inia araguaiaensis*, known for their glistening pink skin, charismatic personalities, and privileged place in the indigenous oral traditions of the region. Numerous symbolic narratives depict pink river dolphins that blur species and gender lines by transforming themselves into attractive human men and women, and other stories warn people not to kill or injure dolphins lest they find themselves imprisoned in underwater jails at the bottoms of rivers.[1] Pink river dolphins are among the most threatened species in Colombia, Bolivia, Peru, Brazil, and Ecuador, and biologists document that populations of Bolivian dolphins in the Amazon

[1] See, for example, the short stories "María and the Dolphins" (19-20) and "The City of the Dolphins" (27-29) in the collection *Folktales of the Amazon* (2009) by Juan Carlos Galeano. American ecocritical scholar Joni Adamson analyzes the presence of dolphins in Galeano's writings, in addition to his co-documented film *The Trees Have a Mother* (2008), in her chapter "Environmental Justice, Cosmopolitics and Climate Change" (2013). Literary critic Candace Slater's *Dance of the Dolphin* (1994) delves into Amazonian oral and literary traditions that represent the dolphin as a supernatural entity.

and its tributaries fell 47% in 2010 alone.[2] As freshwater mammals, these dolphins are impacted by climatic and ecological changes including habitat destruction, commercial fishing, pollution, deforestation, climate change, drought, and other far-reaching processes unfolding on local and global scales.[3] These anthropogenic phenomena also have negative repercussions in the human sphere in the areas of public health, local economies, access to food and drinking water and other dwindling natural resources, and the cultural well-being of the diverse ethnic groups that call the Amazon region home. As part of the growing local, national, and international response to these challenges, in 2012 the Plurinational State of Bolivia declared the pink dolphin part of its National Heritage, granting the species constitutional rights and developing an ambitious plan to protect it,[4] a move which marks a growing trend in Latin American political and ecological thought.

While the pink river dolphin is undeniably unique, its situation is not. Countless other species, ecosystems, and human communities across Latin America are facing similar challenges and finding ways to live together in times of crisis. Cases like that of the Amazon river dolphin evoke the ways in which the notion of "species" is inevitably bound up with other questions involving gender, class, ethnicity, the role of indigenous perspectives, and who/what counts as "political" in contemporary Latin America. Whether with pink dolphins in the Amazon, jaguars in the Lacandón Jungle, green sea turtles along the Uruguayan coast, harvestmen insects under an electron microscope, or

[2] Gray, "Pink River Dolphins," n.p.

[3] Ministerio de Medio Ambiente y Agua del Estado Plurinacional de Bolivia, *Plan nacional*, 38-44.

[4] Galindo, "Ley declara al bufeo," n.p.

jellyfish and mollusks in the depths of the ocean, multispecies encounters—which, as I will discuss later in this introduction, can be understood as intimate relationships with our nonhuman "others"—open up a space in which to critically reassess longstanding binary oppositions of culture/nature, language/matter, subject/object, male/female, mind/body, and countless other socially constructed dichotomies which, despite widespread efforts on the part of postmodern theory, remain deeply rooted in Western understandings of the "human" in relation to other forms of life on the planet. Deconstructing these ontologically questionable binaries could not be a more urgent endeavor as we search for more sustainable ways of living and being in a rapidly changing world. Engaging with the nonhuman "other" in a moment of respect and regard cuts across these binary constructions by revealing the extent to which humans and other organisms are mutually-constitutive beings that contain and are contained by each other's past, present, and future existence.

In this study I examine human-nonhuman encounters in twenty-first-century Latin American literature, art, and film from an interdisciplinary perspective that incorporates emerging theories in material ecocriticism, multispecies ethnography, biosemiotics, feminist science studies, and queer ecology, alongside indigenous knowledge systems and Latin American environmental philosophies, thus drawing the kinds of provocative connections between the humanities, the natural sciences, and multicultural perspectives that are necessary for confronting the global scope of ecological crisis. Theoretical approaches involving questions of materiality are gaining considerable ground in the realm of European, Australian, and North American cultural studies of an ecocritical vein, while their application in Latin American cultural studies remains somewhat

limited. While much of Latin American ecocritical scholarship has centered on rereading canonical literary texts and traditions, this study foregrounds twenty-first-century pieces and considers forms of cultural expression such as visual art and film that are seldom included in Latin American ecocriticism.

The works of Uruguayan writer Teresa Porzecanski, Mexican author Daniela Tarazona, Mexican textile sculptor Alejandra Zermeño, Argentine filmmaker Lucía Puenzo, Colombian installation artist María Fernanda Cardoso, Colombian poet Juan Carlos Galeano, Colombian painter Solmi Angarita, and Brazilian poet Astrid Cabral represent a diversity of aesthetic responses to the question of multispecies encounters emerging in contemporary Latin America. Without confining themselves to a single genre, medium, or geographic orientation, the pieces discussed in this study represent perspectives from Mexico to the Southern Cone and assume various aesthetic forms from narrative and poetry to documentary and drama film, painting, textile sculptures, and mixed-media installations. Through their participation in different but overlapping spheres of signification, these textual and visual works offer a fruitful vehicle by which to explore the range of aesthetic representations of multispecies encounters in an era of mounting environmental crisis, whose global reach transcends borders and whose unfathomable scale in space and time reveals the often insufficiency of words alone to capture the reality that all species, human and nonhuman, share the same planetary past, present, and future.

This study extends and complicates current trends in Latin American ecocriticism by illustrating how twenty-first-century cultural artifacts, in addition to examining important themes of ecological destruction and historical violence, also employ images of

multispecies encounters to open up unexpected possibilities for more-than-human flourishing beyond the dire geographies of the past and present. Rather than launching explicit condemnations of environmental degradation and violence, the creative works foregrounded in this study implement other strategies that are no less capable, as Deborah Bird Rose writes, "of shaking up our culture, and awakening us to new and more enlivened understandings of the world, our place in it, and the situated connectivities that bind us into multi-species communities."[5] Instead of remaining hopelessly mired in the violence of environmental collapse, their works take into account diverse epistemologies and movements ranging from the microbiological and the local to the macropolitical and the global, revealing a multitude of multispecies relationships and imagining the possibility of a better world—one that is already as close as our skin and as present as the nonhuman "others" that constitute our existence.

The textual and visual works considered in this study raise awareness of possible ways of existence and flourishing beyond planetary ecological crisis by exploring concrete interactions among humans and other species—everyday creatures such as dogs, fish, and crows; threatened species such as sea turtles, black jaguars, and pink dolphins; beings as strange as harvestmen insects, *Phallomedusa* snails, and larval salamanders; and the supernatural beings that traverse interpenetrating human, nonhuman, and spirit worlds in indigenous cosmologies. The affirmative, often celebratory tone of these works in no way erases dark, violent histories of colonization and ecological destruction, nor does it suggest that these artists, writers, and filmmakers do not seek to redefine what it

[5] Rose, "Introduction," 87.

means to exist in a world marked by environmental crisis. Rather, the multispecies relationships portrayed in these works unfold against a backdrop of deforestation, mass extinctions, environmental violence, the privatization and depletion of natural resources, and the contamination of rivers and bodies, processes that have marked and continue to mark Latin American environmental and human history. However, in the foreground of these works, the encounters—some mundane, others extraordinary—that occur in the spaces and moments of contact between/within individuals of different species generate other ways of theorizing the very category of "species," proposing new ways of engaging politically and ethically with other organisms and imagining differing futures of multispecies flourishing beyond the hopeless geographies of the Anthropocene—a concept which will be discussed in the following section.

Contextualizing Multispecies Encounters in the Anthropocene

The case of the pink river dolphin is symptomatic of what many scientists and cultural scholars are calling the Anthropocene ("the age of humans"), a new geologic era characterized by irrevocable human impact on every planetary sphere and system. First proposed by Dutch atmospheric chemist Paul J. Crutzen and American biologist Eugene F. Stoermer in 2000, this still-controversial concept recognizes how human activity over approximately the last two centuries has fundamentally altered the geologic, atmospheric, and ecological makeup of the planet to such an extent that the term Holocene (the geological epoch beginning after the last Ice Age) is no longer an adequate marker of

Earth's current conditions in relation to the rest of its 4.6-billion-year history.[6] Fossil fuel-based pollution, increasing global temperature averages, rising sea levels, melting ice caps, droughts, floods, contaminated water supplies, deforestation, holes in the ozone layer, exponentially accelerating species extinction rates, carbon layers deposited in regions as remote as the Arctic, and the radioactive particles that began spreading over the planet from atmospheric nuclear weapons tests and bombings during World War II, are only some of the anthropogenic factors that scientists point to as evidence that we have entered a new era. In his introduction to *Ecological Crisis and Cultural Representation in Latin America: Ecocritical Perspectives on Art, Film, and Literature* (2016, co-edited with Zélia Bora), Mark D. Anderson argues that Latin America itself—as a geopolitical region emerging from Spanish imperialism—is in a sense a product of the Anthropocene:

> As natural as it may seem, much of the landscape we know as Latin America today is actually the result of catastrophic land cover changes wrought through the dispossession and genocide of millions of indigenous people and the implementation on a massive scale of extractive colonial land management practices such as large-scale mining, sugarcane monoculture, and cattle ranching.[7]

The Latin American landscape, virtually the entirety of which bears the traces of the Anthropocene, poignantly captures the fact that planetary ecological crisis, as Timothy Morton stresses, is not a future probability, but rather an irreversible process already unfolding with catastrophic consequences for human and nonhuman survival.[8]

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[6] Crutzen and Stoermer, "The 'Anthropocene,'" 17.

[7] Anderson, "Introduction," x.

[8] Morton, "Rethinking Ecology," n.p.

Jan Zalasiewicz, Mark Williams, and Colin N. Waters observe in their essay in *Keywords for Environmental Studies* (2016) that prior to Crutzen and Stoermer's proposal, geologists had largely dismissed anthropogenic impact as paling in comparison to the overwhelming time scale of Earth's history and the pervasive, lasting effects of "natural" forces like mountain building, volcanic eruptions, and meteorite impacts.[9] However, it has become increasingly clear that while human presence may be brief in geological terms, anthropogenic processes are triggering profound, lasting, and likely irreversible planetary changes.[10] Catalan economist Joan Martínez Alier and Madrid geographer Ramón Fernández Durán have directly connected the expansion of global capitalism to the accelerated collapse of living systems on the planet.[11] Similarly, Anderson argues that in the second half of the twentieth century, "Latin America served as the laboratory for the neoliberal economic policies and extractive practices, often implemented violently through military dictatorship in the 1970s and 1980s, that have now taken hold globally," and these global economic dynamics are directly linked to resource depletion and loss of biodiversity.[12] As a corollary to the Anthropocene, many biologists are calling the current acceleration in species loss—some fifty to five hundred times normal background rates—the Sixth Mass Extinction on par with and possibly even

[9] Zalasiewicz, Williams, and Waters, "Anthropocene," 14.

[10] Zalasiewicz, Williams, and Waters, "Anthropocene," 14.

[11] See Ferández Durán's *El antropoceno: la expansión del capitalismo global choca con la biosfera* (The anthropocene: The expansion of global capitalism collides with the biosphere, 2011) and Martínez Alier's *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*, 2002).

[12] Anderson, "Introduction," xi.

exceeding previous extinction events like the demise of the dinosaurs.[13] In the face of the dire geographies of the Anthropocene, age-old binary oppositions between culture and nature become increasingly untenable, because there is no "pristine nature" that remains directly or indirectly altered by *anthropos*, and all species on Earth (including humans) are facing together the possibility of futurelessness.

The Anthropocene presents a completely new set of theoretical and practical challenges not just for the geological, environmental, and biological sciences, but also for the interdisciplinary arts and humanities as it irrevocably transforms social theory, aesthetics, politics, and ethics within and beyond academia. In their introduction to *Environmental Humanities: Voices from the Anthropocene* (2017), European ecocritics Serpil Oppermann and Serenella Iovino contend that the Anthropocene's casting of human agency as an epochal geological force poses one of the greatest conceptual challenges for the arts, humanities, and social sciences in the twenty-first century.[14] American ecocritic Giovanna Di Chiro argues in "Environmental Justice and the Anthropocene Meme" (2015) that while the Anthropocene initially emerged as a keyword in the biological and physical sciences, "its etymological core (Human/Anthropos) signals an important role for the social sciences and the humanities," which are uniquely positioned and equipped to tackle issues of critical discourse, cultural representation, ethics, and aesthetics, and the ways in which these produce, reinforce, and

[13] Heise, "Extinction," 119.

[14] Oppermann and Iovino, "Introduction," 10.

resist certain politics and practices over others.[15] Likewise, Spanish ecocritic José Manuel Marrero Henríquez writes in "Sobre literatura y sostenibilidad en la era del antropoceno" (2011) (On literature and sustainability in the age of the Anthropocene) that literature, criticism, theory, and history have a role more important than ever before in "decir del mundo" (telling the world), since the stories we tell and the ways we tell them inevitably shape the world in its uncertain unfolding.[16] As Australian environmental humanist Kate Rigby puts it in "Writing in the Anthropocene: Idle Chatter or Ecoprophetic Witness?" (2009), the concept of the Anthropocene crystallizes the realization that "the future of the Earth, understood as a diverse collectivity of more-than-human life and the conditions in which such life either thrives or fails, we are told, now lies in our human, all-too-human hands," implicating all of us—natural and social scientists, humanists, activists, and many others—in the need for responsibility in thought, writing, and action.[17] One of the most pressing challenges facing philosophy and social theory in the Anthropocene is rethinking alterity beyond the limits of the human, a theoretical project that necessarily entails the reconfiguration of *anthropos* itself. In her rereading of the "anthropologocentric"[18] writings of Emmanuel Levinas, Kate Rigby critiques Western philosophy's propensity for limiting ethical response and responsibility to the strictly human Other:

> Bringing down the divide that allows certain human groups to be categorised as available for use, abuse and potential annihilation is not

[15] Di Chiro, "Environmental Justice," 363.

[16] Marrero Henríquez, "Sobre literatura y sostenibilidad," 15.

[17] Rigby, "Writing in the Anthropocene," 173.

[18] Benso, *The Face of Things*, 136.

> enough.... [W]e are called to extend our thinking of alterity in the direction of an ecological ethics, in which we are accountable to more than only human others.[19]

Considering Rigby's redefinition of alterity and responsibility beyond the scope of the human and the enormous extent of ecological destruction and species loss entailed in the Anthropocene's grisly unfolding, the examination of the spaces and moments of encounter between species is a profoundly political and ethical endeavor.

While the term Anthropocene has gained considerable ground in international scientific and humanistic communities alike, it has also invited its fair share of controversy. Some have argued that the discursive positioning of the human as an epochal geological force risks reinforcing anthropocentric discourses about human exceptionality and domination, constituting what Di Chiro calls "a triumphant celebration of human power and control over non-human nature"[20] that perpetuates, in Claire Colebrook's terms, "hyper-Cartesianism,"[21] or the absolute ontological separation between culture and nature, human and nonhuman, mind and body, and other age-old dichotomies. Alongside many ecofeminists and environmental justice scholars, Oppermann and Iovino argue that such anthropocentric thinking that obscures the astounding diversity of nonhuman forms of agency is at the core of the extractive, unsustainable industrial economies that have brought us to this present juncture of planetary ecological collapse to begin with.[22]

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[19] Rigby, "Writing in the Anthropocene," 176.0

[20] Di Chiro, "Environmental Justice," 367-68.

[21] Colebrook, "Introduction. Anthropocene Feminisms," 169.

[22] Oppermann and Iovino, "Introduction," 5; Di Chiro, "Environmental Justice," 368.

Critics also point out the ways in which the term Anthropocene, which tends to group all humans together as a homogenous or universal *anthropos,* often overshadows, as Australian environmental humanist Rob Nixon writes in "The Great Acceleration and the Great Divergence: Vulnerability in the Anthropocene" (2014), the "unequal human agency, unequal human impacts, and unequal human vulnerabilities" implicated in the unfolding of planetary ecological crisis.[23] Asking "are *all* humans the problem?" Di Chiro argues through an environmental justice framework that Anthropocene discourses must sufficiently account for "the *disproportionate* impact of the history of fossil-fuel driven, modern industrial development" on poor communities, communities of color, and women around the globe, as well as diverse human histories of resistance and resilience "that are imagining and producing innovative approaches to climate mitigation, adaptation, and sustainability."[24] For her part, Indian environmental activist Vandana Shiva has argued extensively that women and children of the Global South disproportionately bear the burdens of environmental degradation.[25] In this vein, many environmental and social historians critique Crutzen and Stoermer's dating of the beginning of the Anthropocene at the start of the Industrial Revolution. Challenging the association between the Anthropocene's beginnings and the unleashing of fossil fuel energy through the invention of the steam engine (which benefitted only certain groups of people while disproportionately burdening others), American environmental humanist

[23] Nixon, "Great Acceleration," n.p. See also Nixon's *Slow Violence and the Environmentalism of the Poor* (2011).

[24] Di Chiro, "Environmental Justice," 363, 368, 367 (emphasis in original).

[25] See, for example, Shiva's essay "The Impoverishment of the Environment: Women and Children Last" (2005).

Joni Adamson argues in "We Have Never Been *Anthropos*: From Environmental Justice to Cosmopolitics" (2017) that "[a]t no time did the species as a whole vote for a fossil fuel economy or exercise any shared authority over the destiny of Earth systems."[26] Di Chiro joins others in revising Crutzen and Stoermer's timeline by designating fifteenth-century European colonial expansion "as origin points of the takeover of nature and human nature alike."[27] This intimate connection between the Anthropocene and historical processes of colonization continuing into the present positions the Anthropocene as a particularly relevant concept for the study of cultural production and multispecies relationships in Latin America, where entangled processes of colonization and environmental destruction have an over five-hundred-year history.

Among the varied critical responses to the Anthropocene, Australian anthropologist Deborah Bird Rose (2009) calls for new kinds of "writing in the anthropocene" that draw revitalized attention to "the world, our place in it, and the situated connectivities that bind us into multi-species communities."[28] Echoing many of the sentiments expressed in Rose's "manifesto," an interdisciplinary group of scholars began rallying around an emerging field which they termed "multispecies ethnography," gathering up stories about diverse forms of life from animals and plants to fungi and microorganisms—beings conventionally relegated to the margins of anthropological study—and taking seriously their multiple entanglements with human social and political

[26] Adamson, "We Have Never," 160.

[27] Di Chiro, "Environmental Justice," 369.

[28] Rose, "Introduction," 87.

worlds. Drawing on the writings of Donna Haraway, Eduardo Kohn, and others, in "The Emergence of Multispecies Ethnography" (2010) S. Eben Kirksey and Stefan Helmreich define their field as "writing culture in the anthropocene, attending to the remaking of anthropos as well as its companion and stranger species on planet Earth."[29] Acknowledging its roots in the biological sciences (wildlife management, overlapping niches, etc.), Kirksey and Helmreich use the adjective "multispecies" to describe mutually-constitutive human-nonhuman "'becomings'—new kinds of relations emerging from nonhierarchical alliances, symbiotic attachments, and the mingling of creative agents."[30] Their definition of "multispecies," which informs my discussions in this study, is influenced by Haraway's conceptualization of becoming in *When Species Meet* (2008) as an "always becoming *with*—in a contact zone where the outcome, where who is in the world, is at stake."[31] In this sense, multispecies ethnographers work within the muddled, messy spaces created in contact zones between individuals of different species, where the discursive divides between nature and culture disintegrate. As American anthropologist Anna Tsing puts it in "Unruly Edges: Mushrooms as Companion Species" (2012), "[h]uman nature is an interspecies relationship.... [W]e cannot ignore the interspecies interdependencies that give us life on earth."[32] We cannot fully comprehend what it means to be human in the Anthropocene without understanding how the very makeup of "the human" has emerged and continues to evolve through mutually-contingent

[29] Kirksey and Helmreich, "Emergence of Multispecies Ethnography," 549.

[30] Kirksey and Helmreich, "Emergence of Multispecies Ethnography," 546.

[31] Haraway, *When Species Meet*, 244.

[32] Tsing, "Unruly Edges," 141.

relationships with the multiple other species on this planet. Drawing on these ideas in multispecies ethnography, this study explores the ways in which the nonhuman in contemporary Latin American cultural production is deeply entangled with human stories, bodies, partnerships, communities, ethical considerations, political movements, and even semiotic communication.

While Kirksey and Helmreich trace multispecies ethnography's origins back to late-nineteenth-century thinkers such as American anthropologist Lewis Henry Morgan,[33] Adamson identifies much deeper roots in the work of German geographer and naturalist Alexander von Humboldt, who influenced an expansive intellectual genealogy running through early European scholars like Charles Darwin, Franz Boas, Claude Lévi-Strauss, and Gregory Bateson, American writers Ralph Waldo Emerson and Henry David Thoreau (early pioneers in the American environmental movement), all the way to contemporary thinkers across the globe such as Donna Haraway, Debra Bird Rose, Eduardo Viveiros de Castro, Eduardo Kohn, Marisol de la Cadena, and many others.[34] In their introduction to *Ecocriticism and Indigenous Studies: Conversations from Earth to Cosmos* (2017), Adamson and Salma Monani join literary critic Laura Dassow Walls in arguing that Humboldt's extensive interactions with indigenous communities in the Amazon between 1799 and 1804 most directly shaped his understanding of nature as "a planetary interactive causal network operating across multiple-scale levels, temporal and

[33] Kirksey and Helmreich, "Emergence of Multispecies Ethnography," 549.

[34] Adamson, "Environmental Justice," 170.

spatial,"[35] ideas which he later concretized in his five-volume *Cosmos* (1828) and which would influence a wide network of intellectuals from the nineteenth century into the twenty-first.[36] As Adamson and Monani succinctly put it, Latin American "[i]ndigenous cosmovisions influenced Humboldt rather than the other way around."[37] The sophisticated knowledge systems, story cycles, and symbolic narratives of the indigenous groups that Humboldt encountered in Latin America can be seen as pivotal intellectual foundations for what we today know as anthropology, ecocriticism, and more recently, multispecies ethnography. As Rose explains in her contribution to *Keywords for Environmental Studies*, multispecies ethnography is strongly influenced by research with "indigenous people for whom the world is always already made up of multispecies communities" and for whom "kin groups include nonhumans—animals, plants, landforms, winds, and more," and multispecies ethnographers strive to account for "the sociality involved in a world made up of nonhuman persons as well as human persons."[38] With these genealogies in mind, I argue throughout this study that discussions of multispecies relationships in contemporary Latin American cultural expression must remain acutely attentive to indigenous and other-than-dominant epistemologies and narratives about human-nonhuman entanglements, considering them as "theory" no less legitimate than the most cutting-edge ideas emerging from Western academies. Indeed,

[35] Walls, *Passage to Cosmos*, 11.

[36] Adamson and Monani, "Introduction," 6. Here Adamson and Monani are drawing on Adamson's earlier discussion of Humboldt's impact in her essay "Environmental Justice, Cosmopolitics and Climate Change" (2013).

[37] Adamson and Monani, "Introduction," 7.

[38] Rose, "Ethnography," 111.

all of the writers, artists, and filmmakers discussed in the following chapters engage with indigenous cosmovisions—some directly and others indirectly, to varying degrees—in their aesthetic treatment of multispecies encounters.

In "Environmental Justice, Cosmopolitics, and Climate Change" (2013), Adamson observes how contemporary multispecies ethnographers acknowledge the sophistication and complexity of indigenous cosmovisions by continuing to record the "oral astronomical, ceremonial, cultural, agroecological, and ethnobotanical knowledges of diverse ethnic groups around the world and treat them as 'archives,' or sophisticated 'cosmographies,' rather than simplistic 'superstitions.'"[39] While they may not necessarily call themselves "multispecies ethnographers," Brazilian anthropologist Eduardo Viveiros de Castro's work with diverse indigenous groups of the Amazon River Basin and Ecuadorian anthropologist Eduardo Kohn's extensive research with the Runa of the Ecuadorian region of Ávila have significantly influenced many intellectuals who identify with what could be considered the "multispecies turn" in anthropology and ecocriticism. Through their interactions with indigenous peoples in Latin America, Kohn and Viveiros de Castro are expanding ethnographic theory and practice beyond the limits of the human by considering the ways in which human cultures are already imbricated in complex relationships with other organisms.

In his pivotal essay "Cosmological Deixis and Amerindian Perspectivism" (1998), Viveiros de Castro describes the Amazonian indigenous philosophy which he terms "perspectival multinaturalism," according to which diverse kinds of beings—humans,

[39] Adamson, "Environmental Justice," 174.

plants, animals, rivers, landforms, and the "spirit masters" of the forest—are sentient, intentional subjects that share analogous spirits grounded in differentiated bodies equipped with particular sensory apparati that account for their unique perspectives. Perspectival multinaturalism turns a number of assumptions of Western thought on their head: while Western philosophy relies on the assumption that bodies and substances are objective and universal and only culture is variable and subjective, perspectival multinaturalist theory "would suppose a spiritual unity and a corporeal diversity. Here, culture or the subject would be the form of the universal, whilst nature or the object would be the form of the particular" and of the multiple—hence the term "multinaturalism."[40] The adjective "perspectival" further breaks down Western notions of subjectivity, agency, and semiosis by recognizing that "the universe is populated by extra-human intentionalities endowed with their own perspectives."[41] As a whole, perspectival multinaturalism characterizes a different ontological understanding of the world not as *the* world, but as a complex composite of partially overlapping *worlds* which are perceived, interpreted, and acted upon by different kinds of organisms that interact with each other across a "common context of intercommunicability."[42] The discussions in this study, particularly in chapters 2 and 4, will deploy perspectival multinaturalist theory and its related concepts in order to illuminate how contemporary Latin American artists, filmmakers, and writers are challenging fundamental Western assumptions about the

[40] Castro, "Cosmological Deixis," 470.

[41] Castro, "Cosmological Deixis," 472.

[42] Castro, "Cosmological Deixis," 471.

relationships between bodies, signs, knowledge, and representation in multispecies contexts.

Drawing on Viveiros de Castro's groundbreaking work as well as the sophisticated cosmovisions and scientific literacies of the indigenous Runa of the Ecuadorian Amazon, in *How Forests Think: Toward an Anthropology Beyond the Human* (2013) Kohn describes human and nonhuman individuals as "waypoints in the lives of signs" and "loci of enchantment" that participate in what Kohn terms an "ecology of selves, ...an emergent and expanding multilayered cacophonous web of mutually constitutive, living, and growing thoughts."[43] Multispecies relationships develop through an understanding of how other organisms *represent* themselves—and how humans are themselves represent*ed* from the point of view of other beings—as agential "selves" that communicate within and across species lines. While Western social theory privileges strictly *human* forms of language and symbolic communication, Kohn argues that human symbolic language constitutes only one among many co-emergent semiotic modalities practiced alongside an astounding range of representational practices in the nonhuman world.[44] As will be discussed at length in chapter 4, the sign processes that permeate the more-than-human world are considered by many humanists and biologists working in the emerging field of biosemiotics to be, in fact, what differentiates living organisms from inanimate matter. As Kohn argues, expanding our understanding of sign processes and representational modes beyond the strictly human realm helps dismantle anthropocentric

[43] Kohn, *How Forests Think*, 90, 79.

[44] Kohn, *How Forests Think*, 50-53.

dichotomies while paving the way for more expansively ethical encounters with nonhuman organisms: "it is through our partially shared semiotic propensities that multispecies relations are possible, and also analytically comprehensible."[45] The artistic, literary, and filmic works discussed in this study engage both seriously and playfully with the myriad ways in which nonhuman organisms as "selves" represent and interpret the world(s) around them and how encounters are communicatively negotiated across species lines.

Working at the intersections of multispecies ethnography, ecocriticism, and indigenous studies, scholars such as Adamson, Juan Carlos Galeano, and Peruvian anthropologist Marisol de la Cadena foreground the ways in which twenty-first-century Latin American indigenous and grassroots movements on national and global scales are redefining the very notions of politics and citizenship beyond the limits of the human by legally recognizing the rights of the Earth and its diverse biotic systems and species. In 2008 and 2009, respectively, the legislative assemblies of Ecuador and Bolivia passed constitutional amendments to protect the rights of nature or "Pacha Mama...a que se respete integralmente su existencia y el mantenimiento y regeneración de sus ciclos vitales, estructura, funciones y procesos evolutivos" (Pacha Mama... to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions, and evolutionary processes).[46] This is the same collection of amendments that designated the Amazonian pink river dolphin in Bolivia as National Patrimony with

[45] Kohn, *How Forests Think*, 9.

[46] Ecuador Const. title II, ch. 7, art. 71.

constitutional rights. Later, in response to failed climates talks in Copenhagen during the 15th United Nations Conference of Parties in December 2009 and insufficient action on the part of first-world nations to address mounting global environmental crisis, in April 2010 over 30,000 representatives of indigenous communities and activist groups, scientists, social scholars, and official delegations from 142 countries met in Cochabamba, Bolivia for the World People's Conference on Climate Change and the Rights of Mother Earth. The delegates drafted a "Universal Declaration" that recognizes the rights of nature to be respected, to be free of contamination and to maintain biodiversity, among other rights. The declaration also stipulates human beings' obligations toward biotic systems and affirms that "para garantizar los derechos humanos es necesario reconocer y defender los derechos de la Madre Tierra y de todos los seres que la componen" (to guarantee human rights it is necessary to recognize and defend the rights of Mother Earth and all beings in her).[47]

These movements, rooted in indigenous cosmovisions and scientific literacies thousands of years in the making, exemplify what Adamson, Cadena, and others are calling "cosmopolitics,"[48] a concept which will be discussed in greater depth in chapter 4. While recent reports by the nonprofit Global Witness have shown Latin America to be the deadliest region in the world for environmental activists, especially those of

[47] "Declaración universal," n.p. This translation is from the English-language version of the declaration found on the World People's Conference's website: https://pwccc.wordpress.com/programa/.

[48] See, for example, Adamson's essay "Environmental Justice, Cosmopolitics and Climate Change" (2013), Adamson and Monani's introduction to *Ecocriticism and Indigenous Studies* (2017), and Cadena's "Indigenous Cosmopolitics in the Andes" (2010).

indigenous descent (with 2015 being the "deadliest year on record"),[49] these recent cosmopolitical movements paint a very different picture of Latin America as a place where indigenous and grassroots organizations are in fact leading the global fight against all kinds of intersecting forms of environmental and social oppression which are increasingly exacerbated by the Anthropocene. By taking seriously the role of nonhuman organisms and landforms as intentional, sentient beings and by bringing nonhuman forms of subjectivity and agency into political debates and public demonstrations, what Cadena describes as "new pluriversal political configuration[s]"[50] emerging from Ecuador, Bolivia, Peru, and elsewhere in Latin America today are succeeding—where many of the political entities of the first world/Global North have failed—in forging paths toward more livable futures beyond the Anthropocene for humans and nonhumans alike.

These cosmopolitical movements emerging from Latin American contexts also suggest the ways in which multispecies engagements offer other modes of tackling the mounting challenges of the Anthropocene without necessarily becoming mired in the hopelessness and alienation of unstoppable environmental destruction and species loss. Rigby argues that literary and cultural production in the Anthropocene should adopt the mode of "ecoprophetic witness" that responds with "biting and stinging" grief to humanity's complicity in extinction and other rapidly unfolding global environmental catastrophes that compel us "to utterance, even though we know that our words, no matter how artfully wrought, are bound to be insufficient either to prevent or to bespeak

[49] Global Witness, *On Dangerous Ground*, 8.

[50] Cadena, "Indigenous Cosmopolitics," 361.

the unprecedented horror of the ecocide."[51] While voices of grief undeniably capture the pressing tragedies of the Anthropocene, the following chapters will demonstrate that not all aesthetic responses to the Anthropocene need depend on "words" (such as the visual arts and the audiovisual semiotics of film) or adopt tones of grief and despair in order to ignite the kinds of discursive and material changes necessary for building more livable futures for humans and nonhumans. Multispecies ethnographers and environmental humanities scholars are formulating other kinds of responses emphasizing dynamics of inclusion, collaboration, respect, and regard for nonhuman "others" and the ways in which their bodies and worlds intersect with—and make possible—our own. In *Multispecies Salon* (2014), Kirksey and his collaborators contend that against the backdrop of the "blasted landscapes" of the Anthropocene, multispecies encounters emerge as a beacon of "biocultural hope" for forging more sustainable and equitable futures for the planet and its diverse inhabitants.[52] In "Arts of Inclusion; or, How to Love a Mushroom" (2011), Tsing advocates for simple acts of "noticing" of the more-than-human entanglements underfoot, surrounding us, and intersecting our bodies as a way to "build modes of wellbeing in which humans and nonhumans alike might thrive."[53] Developing these ideas further in her book *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (2015), Tsing argues that moving forward out of the "ruins" of the Anthropocene requires participating in "transformative encounters"

[51] Rigby, "Writing in the Anthropocene," 184, 175.

[52] Kirksey, Shapiro, and Brodine, "Hope in Blasted Landscapes," 30.

[53] Tsing, "Acts of Inclusion," 14.

with nonhuman beings as a mode of "collaborative survival," stressing that the possibility itself of "staying alive—for every species—requires livable collaborations. Collaboration means working across difference.... Without collaborations, we all die."[54] Along similar lines, Haraway in *Staying with the Trouble: Making Kin in the Chthulucene* (2016) argues against many Anthropocene narratives that resort to "cynicism, defeatism, and self-certain and self-fulfilling predictions" or "'game over, too late'" mindsets, and instead advocates for "stories in which multispecies players, who are enmeshed in partial and flawed translations across difference, redo ways of living and dying attuned to still possible finite flourishing, still possible recuperation."[55] Thus, our "best chance of cultivating conditions for ongoingness" in and beyond the Anthropocene is through small-scale stories of recognition, respect, regard, responsibility, and what Haraway calls *sympoiesis* (together-making) across, within, and through diverse human and nonhuman actors.[56] The diverse multispecies encounters dramatized in the works of Latin American literature, film, and art analyzed in this study constitute precisely the kinds of "sympoietic" stories we need in order to cultivate flourishing and "ongoingness" on a damaged Earth.

[54] Tsing, *Mushroom at the End*, 28.

[55] Haraway, *Staying with the Trouble*, 56, 10.

[56] Haraway, *Staying with the Trouble*, 38, 33.

The Materiality of Multispecies Encounters

To tell stories about multispecies actors engaging in practices of "together-making," it is important to understand not only how members of different species "make" livable worlds together, but also how species *are made* together, how they emerge *as* species through processes of mutual entanglement all the way down. In Western culture the animal has long occupied the position of humanity's "other," a mute screen upon which civilization has projected the drives and tendencies often hidden within the darker side of human nature. As Australian feminist philosopher Elizabeth Grosz observes in *Becoming Undone: Darwinian Reflections on Life, Politics, and Art* (2011), in its very foundation Western culture has insisted on the human's categorical exceptionality in comparison with other species: "These Greek and Cartesian roots have largely structured the ways in which contemporary philosophy functions through the relegation of the animal to man's utter other, an other bereft of humanity."[57] Various scholars identifying with what American ecocritics Stacy Alaimo and Susan Hekman, in their introduction to *Material Feminisms* (2008), call the "material turn" in the humanities of the twenty-first century, are rethinking nonhuman nature as an agential force that actively participates in the material-discursive configuration of the world and that is intimately entwined with the political, ethical, and cultural as well as with constructions of gender, race, and class.[58] Incorporating cutting-edge research emerging from the biological and physical sciences, science and technology studies, and feminist social theory, Alaimo, Haraway, Grosz,

[57] Grosz, *Becoming Undone*, 12.

[58] Alaimo and Hekman, "Introduction," 6.

Karen Barad, and other scholars "are developing theories in which nature is more than a passive social construction but is, rather, an agentic force that interacts with and changes the other elements in the mix, including the human."[59] Expanding on the deconstructionist energy of poststructuralism, material feminism and its corollary, material ecocriticism (both of which have influenced multispecies ethnography), question any discourse founded on binary oppositions, including the largely undebated divides between materiality and discourse, body and word, nature and culture. According to Serenella Iovino and Serpil Oppermann in their introduction to *Material Ecocriticism* (2014), all matter "is a 'storied matter.' It is a material 'mesh' of meanings, properties, and processes, in which human and nonhuman players are interlocked in networks that produce undeniable signifying forces."[60] Informed by the theoretical contributions of material feminism and material ecocriticism, this study considers matter and the nonhuman not only as they are represented in texts, but also as texts in themselves whose chemical interactions, gestures, gazes, and murmurs codify messages that we are only beginning to understand.

In thinking through the material-discursive connections between species, Alaimo's theory of "trans-corporeality" which she lays out in her book *Bodily Natures: Science, Environment, and the Material Self* (2010) rejects the dubious separation between human and nonhuman and, on the contrary, emphasizes their mutual

[59] Alaimo and Hekman, "Introduction," 7.

[60] Iovino and Oppermann, "Introduction," 1. While Iovino and Oppermann do not cite Morton directly, their use of the term "mesh" resonates with ideas set forth in Morton's book *The Ecological Thought* (2012), in which he describes all beings, objects, and discursive constructs on the planet as interconnected via a massive "mesh" of entanglements and interpenetrations.

entanglement via the utter permeability of corporeal boundaries: "Imagining human corporeality as trans-corporeality, in which the human is always intermeshed with the more-than-human world, underlies the extent to which the substance of the human is ultimately inseparable from 'the environment.'"[61] Through infinite chemical interchanges that occur across permeable bodily membranes, the human is irrevocably embedded in a global circulation of material substances and discursive practices. The reconceptualization of the human subject as radically unbounded and inextricable from "the environment" carries profound ethical implications, since "[t]racing these connections discourages us from taking refuge in the fantasies of transcendence and imperviousness that make environmentalism a merely elective and external enterprise."[62] For example, toxic runoff from mining sites and oil spills entering into water systems such as the Amazon River Basin permeate the bodies of pink river dolphins and other species inhabiting the waters, as well as the bodies of human communities that rely on the rivers for drinking water and food sources. The material entanglements of human and nonhuman bodies in the depths of evolutionary time and in the immediacy of the present will be discussed at greater length in chapters 2 and 3.

Material feminist and theoretical physicist Karen Barad offers a robust theorization of the internal relationship between culture and nature, discourse and matter, human and nonhuman. In *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (2007), Barad develops an "agential realist

[61] Alaimo, *Bodily Natures*, 2.

[62] Alaimo, *Bodily Natures*, 477.

ontology" by which primary ontological units are not independent entities, but rather "intra-actions." Through the lens of agential realism, phenomena are not exclusively social or material but rather material-discursive practices, and the concept of agency is understood as the result of the dynamics of intra-action rather than an attribute limited to the exclusively human sphere. Barad explains:

> In an agential realist account, matter does not refer to a fixed substance; rather, *matter is substance in its intra-active becoming—not a thing, but a doing, a congealing of agency. Matter is a stabilizing and destabilizing process of iterative intra-activity.…* Discursive practices and material phenomena do not stand in a relationship of externality to each other; rather, *the material and the discursive are mutually implicated in the dynamics of intra-activity*.[63]

Neither discursive practices nor material phenomena are ontologically separate categories, and neither one exists prior to the other or has priority over the other. This reconfiguration of the concept of agency recognizes matter as active, full of energy and in a constant process of becoming rather than as a set of isolated, inert and passive objects. Matter's dynamism, which in each moment possesses the inherent capacity to change the future, constitutes its agency; therefore, matter can be understood as the accumulation of intra-active, agential phenomena. This new ontology of matter offers an alternative to the dualistic thinking long maintained by Western philosophy and liberates the concept of agency from its humanist cage; instead of remaining confined strictly to human subjectivity and intentionality, the realm of agency expands to include all nonhuman beings that inhabit the planet.

[63] Barad, *Meeting the Universe*, 151-52 (emphasis in original).

Agential realism constitutes a relational ontology because it questions the very idea of separation as an inherent characteristic of the structure of the universe and as the basis for the binary logic that poststructuralist thought has strived to topple. Barad reveals that the primary ontological units are not independent objects with inherent properties and limits that then interact after they emerge.[64] On the contrary, the primary ontological units are *phenomena* generated by the dynamics of "intra-action," a neologism referring to the idea that objects do not exist before their relationships with other objects, but instead emerge from these very relationships.[65] The neologism is crucial because, in contrast to "interaction," which assumes the prior existence of autonomous entities or "relata," "*intra*-action" reveals that there are no independent "relata," but only "relata-within-relations;" in other words, the internal relationship of entities, their mutual ontological dependence, exists prior to differentiated entities.[66] Agential realist ontology does not negate the existence of difference; on the contrary, differentiation between entities emerges from the very dynamics of intra-action. Barad observes: "It is through specific agential intra-actions that the boundaries and properties of the components of the phenomena become determinate and that particular concepts (that is, particular material articulations of the world) become meaningful."[67] The reconceptualization of ontological units as intra-actions instead of individual entities invalidates the idea that separation is

[64] Barad, *Meeting the Universe*, 139.

[65] Barad, *Meeting the Universe*, 33.

[66] Barad, *Meeting the Universe*, 429.

[67] Barad, *Meeting the Universe*, 139.

an inherent characteristic of things and offers a robust theoretical framework for deconstructing all socially constructed dualisms and categories.

Drawing on Barad's relational ontology, Haraway in *When Species Meet* theorizes the mutually constitutive nature of species and explores the unexpected possibilities that emerge from encounters between one organism and another: "To be one is always to *become with* many, ...together in situated histories, situated naturecultures, in which all the actors become who they are in the dance of relating."[68] Through the lens of the dynamics of "becoming with," it is no longer possible to imagine species as autonomous and clearly bounded totalities that *inter*act after their formation. On the contrary, species are indeterminate becomings that reconfigure each other reciprocally through the dynamics of intra-action across contact zones, an idea that questions species boundaries and the very existence of "types" as ontological wholes: "we are in a knot of species coshaping one another in layers of reciprocating complexity all the way down. Response and respect are possible only in those knots, with actual animals and people looking back at each other, sticky with all their muddled histories."[69] The individual is always more than one but less than two, because its very existence is implicated in the dance of relation with the "other."[70] Species that constantly assemble, disassemble and reassemble each other in the space of encounter demand a recognition of the "other" as a subject whose past, present and future are inextricably woven with human and planetary history.

[68] Haraway, *When Species Meet*, 4.

[69] Haraway, *When Species Meet*, 42.

[70] Haraway, *When Species Meet*, 231.

By revealing that the subject already contains—and is itself contained within—the "other," the aesthetic works discussed in this study evoke a relational ethics that recognizes the mutual emergence and shared future of the more-than-human world.

Material ecocritics' and multispecies ethnographers' accounts of the mutual entanglement of species should be taken quite literally. As Tsing argues, "[t]he evolution of our 'selves' is already polluted by histories of encounter; we are mixed up with others before we even begin any new collaboration."[71] For example, recent insights from genetics and microbiology reveal just how blurry the delineations between species—and sexes—truly are. Lateral gene transfers, symbiotic interactions, symbiogenesis, and other strange couplings occur constantly between human cells and the bacterial and fungal microbiota that live within our bodies and facilitate our organ functions.[72] These kinds of multispecies intra-actions and "becomings-with" expose the radical instability of "species" itself as a taxonomic, hierarchical, and regulatory concept while revealing both human and nonhuman nature to be far more queer than previously thought. The messy, promiscuous, cross-species entanglements described by Haraway, Tsing, and others challenge what it means to belong to a "species," a genetically-similar "family," or a particular "sex" while painting a very different picture of reproduction and sexual practice in the more-than-human world. Scholars working in the interdisciplinary field of queer ecologies are studying such queer, multispecies muddles to theorize the connections between sexual diversity and biological diversity and their implications for

[71] Tsing, *Mushroom at the End*, 29.

[72] Haraway, *When Species Meet*, 31.

multispecies flourishing beyond the Anthropocene. In *Queer Ecologies: Sex, Nature, Politics, Desire* (2014, co-edited with Bruce Erickson), Canadian feminist and ecocritic Catriona Sandilands and her collaborators deconstruct master narratives about nature as normatively heterosexual and strictly reproductive while "developing a sexual politics that more clearly includes considerations of the natural world and its biosocial constitution."[73] Uncovering the overwhelming diversity of nondimorphic genders and nonreproductive sexual behaviors found in the more-than-human world, intersecting perspectives from material ecocriticism and queer ecologies will help illuminate, particularly in chapter 3, the ways in which multispecies encounters in Latin American film and art blur the boundaries between genders, sexualities, and orders of life while helping us envision different kinds of multispecies "ongoingness" beyond planetary decline.

Tracing Latin American Ecocriticism

This study builds on a long tradition of Latin American ecocritical scholarship that began gaining international recognition toward the end of the 1990s. As Adamson contends in *American Indian Literature, Environmental Justice, and Ecocriticism: The Middle Place* (2001), environmentalism in the Americas can be traced back at least to the Pueblo Revolt of 1680, when a coalition of Pueblo, Diné, and Apache indigenous people and poor Hispanics rose up against Spanish colonizers who for a century had

[73] Mortimer-Sandilands and Erickson, "Introduction," 5.

dispossessed the people of their lands and forced them into slave labor.[74] In her later essay "Literature-and-Environment Studies and the Influence of the Environmental Justice Movement" (2010), Adamson cautions against dating the advent of environmentalism to the U.S.-based conservation-oriented activism of John Muir, Ralph Waldo Emerson, and other nineteenth-century (white, male) writers and activists[75] while pointing out the irony of Cheryll Glotfelty's assessment in 1996 that ecocriticism "was a predominantly white movement" that would "become a multi-ethnic movement when stronger connections are made between the environment and issues of social justice, and when a diversity of voices are encouraged to contribute to the discussion."[76] In fact, a multitude of multiethnic voices around the world had already been articulating for hundreds of years complex understandings of the intimate relationship between social and environmental concerns. Adamson and other leading environmental humanists urge ecocritics to recognize how indigenous and other-than-dominant peoples around the world have for thousands of years developed and mobilized around sophisticated knowledge systems and story "archives" about the "eco-cultural entanglements of human with nonhuman."[77] By tracing a different genealogy for ecocriticism and uncovering its deep histories in works like the *Popol Vuh* and the Books of the Chilam Balam which emerged in Postclassic Mayan communities,[78] Adamson provocatively situates much of

[74] Adamson, *American Indian Literature*, 52-53.

[75] Adamson, "Literature-and-Environment," 598.

[76] Glotfelty, "Introduction," xxv.

[77] Adamson and Monani, "Introduction," 9.

[78] Adamson, *American Indian Literature*, 140-41.

the entangled roots of what we now call "ecocriticism" in in the indigenous narratives and cultural production of Latin America. This longer genealogy of ecological literature in Latin America that stretches back to Pre-Columbian traditions complicates the much shorter genealogy proposed by Jorge Paredes and Benjamin McLean in "Hacia una tipología de la literatura ecológica en español" (Toward a typology of ecological literature in Spanish), which introduces their co-edited special issue of *Ixquic* (2000). Paredes and McLean argue that the literary treatment of "las relaciones entre el ser humano y los demás elementos de la Naturaleza" (the relationships between humans and other elements of Nature) did not begin until the 1983 publication of Salvadoran José Rutilio Quesada's novel *Dolor de patria* (Suffering homeland).[79] I concur with Scott M. DeVries's argument in *A History of Ecology and Environmentalism in Spanish American Literature* (2013) that "the tradition of an ecological literature from Mexico to Patagonia and from Puerto Rico to Easter Island has a long history that goes much further back," yet I would also extend DeVries's genealogy to include texts written before the nineteenth century.[80]

In 1996—the same year that Glotfelty lamented the absence of "multi-ethnic" voices in ecocriticism—Chilean historian Fernando Mires argued in his essay "La nueva ecológica: el sentido político de la ecología en América Latina" (New ecology: The political meaning of ecology in Latin America) that intersecting forms of environmental and social oppression and resistance have a longstanding presence in Latin American

[79] Paredes and McLean, "Hacia una tipología," 22.

[80] DeVries, *History of Ecology*, 3-4.

society, literature, and culture spanning over 500 years since the arrival of the first European colonizers to the region.[81] In *¿Callejón sin salida? La crisis ecológica en la poesía hispanoamericana* (Dead-end street? Ecological crisis in Spanish-American Poetry, 2004), a vital reference for many Latin Americanists working with ecocriticism, Niall Binns concurs that Latin American environmentalism is frequently intertwined with resistance to other forms of social oppression, and these dimensions have found themselves jointly expressed in Latin American literature since (at least) the colonial period: "Así, la crisis ecológica es inseparable de la crisis étnica y la historia latinoamericana de la resistencia contra la conquista, la colonia y el neoimperialismo económico ha sido siempre, en el fondo, una larga lucha contra el etnocidio y el ecocidio" (Thus, ecological crisis is inseparable from ethnic crisis, and the Latin American history of resistance to conquest, colonization, and economic neoimperialism has always been, at its core, a long struggle against ethnocide and ecocide).[82] In a similar vein, literary critics Elizabeth M. DeLoughrey, Renée K. Gossom, and George B. Handley, in their introduction to *Caribbean Literature and the Environment: Between Nature and Culture* (2005), draw contrasts between the literary traditions of Caribbean writers and those of their Euro-descendent counterparts precisely in relation to their differential understandings of the relationship between environmental destruction and colonial oppression:

> Unlike the white settler production of nature writing, Caribbean writers refuse to depict the natural world in terms that erase the relationship between landscape and power.... Ultimately, the complex diasporas of

[81] Mires, "Nueva ecológica," 37.

[82] Binns, *¿Callejón sin salida?*, 15.

> plants and peoples in the Caribbean, and these writers in particular, problematize the notion of natural history and its segregation from human agency.[83]

It is clear that from its origins Latin American and Caribbean cultural production has insisted on the mutually-contingent relationship between natural history and human history and between systems of social and ecological violence, as well as the integration of various forms of resistance to ecosocial inequities. These deep trajectories of ecocriticism and environmentalism in Latin America, maintaining since their beginnings the fundamental interconnectivity of the social and the ecological, serve as important contexts for the literary, artistic, and filmic forms of cultural expression examined in the following chapters.

As attested by the writings of Laura Barbas-Rhoden, Gisela Heffes, Roberto Forns Broggi, and many others, the robust contributions of contemporary Latin American scholars are rewriting ecological theory as they apply it to new contexts, revolutionizing the field of environmental humanities and enriching multicultural, transnational, and interdisciplinary debates about literature, cultural expression, and the future of the planet. The majority of ecocritical studies in Latin American contexts center on a single text, author, region, or literary genre. Most of the existing book-length publications in the field are dedicated to rereading canonical Latin American narrative and lyric texts from an ecocritical angle, while fewer ecocritical studies focus on works produced after the year 2000 or consider nonliterary forms of cultural production such as film and visual art. Fewer still are the studies in a Latin American cultural framework that engage with

[83] DeLoughrey, Gosson, and Handley, Introduction, 4.

emerging theories on materiality informed by the biological and physical sciences. With this in mind, I echo and expand DeVries's call for a widespread ecocritical reevaluation of the entirety of Latin American literature within and *beyond* the canon that involves the application of cutting-edge approaches emerging from ecocriticism and critical animal studies.[84] However, to DeVries's list of theoretical perspectives I would add multispecies ethnography, material ecocriticism, and queer ecologies, given the myriad ways in which these fields resonate with the cultural, political, and environmental climate of contemporary Latin America.

Most of the earliest book-length studies of Latin American ecocriticism center on poetry from the twentieth century. Steven F. White's *El mundo más que humano en la poesía de Pablo Antonio Cuadra: un estudio ecocrítico* (The more-than-human world in the poetry of Pablo Antonio Cuadra: An ecocritical study, 2002) is recognized by Binns and others as the first monograph from the Spanish-speaking world to call itself "ecocritical."[85] In this single-author study drawing on early ecocritical perspectives such as topophilia (affective human ties with the material environment) and biophilia (humans' cognitive and aesthetic need for other living things), White explores connections between the Central American landscape, collective memory, indigenous heritage, and national consciousness in the work of Nicaraguan poet and essayist Pablo Antonio Cuadra.[86] In his later book *Arando el aire: la ecología en la poesía y música de*

[84] DeVries, *History of Ecology*, 301.

[85] Binns, *¿Callejón sin salida?*, 35n14.

[86] For more on topophilia see Yi-Fu Tuan's *Topofilia: A Study of Environmental Perception, Attitudes, and Values* (1974); for more on the biophilia hypothesis see Edward O. Wilson's *Biophilia* (1984).

Nicaragua (Plowing the air: Ecology in the poetry and music of Nicaragua, 2011), White expands his ecocritical evaluation beyond Cuadra to include a range of canonical twentieth-century Nicaraguan poets such as Rubén Darío, Gioconda Belli, and others in the first thirteen chapters, with the last two chapters focusing on marginal poets from Nicaragua's culturally diverse Caribbean Coast as well as popular singer-songwriters. In his 2004 monograph Binns argues that the works of twentieth-century poets Vicente Huidobro, Pablo Neruda, Gabriela Mistral, José Emilio Pacheco, and Nicanor Parra, among others, articulate a double resistance to interlocking historical processes of "ethnocide" and "ecocide," organized around varied thematic angles such as urban uprootedness, ecological harmony, ecofeminism, pollution, and apocalyptic futures. George Handley also engages with poetry in *New World Poetics: Nature and the Adamic Imagination of Whitman, Neruda, and Walcott* (2007), a comparative study of representations of nature in the work of nineteenth-century American poet and essayist Walt Whitman, twentieth-century Chilean poet Pablo Neruda, and contemporary Saint Lucia poet and playwright Derek Walcott. Through an analysis that crosses national, linguistic, and chronological borders and that remains attentive to histories of violence and displacement, Handley identifies what he calls a "New World poetics" in which the poet's voice, likened to that of a postlapsarian "Adam," expresses a sense of awe "before the wonders of a New World whose beauty has survived or has even, paradoxically, been nurtured by the wreckage of colonialism."[87] The early studies of White, Binns, and

[87] Handley, *New World Poetics*, 2.

Handley have played a pivotal role in drawing international attention to Latin American ecological criticism.

A second, partially-overlapping cluster of book-length studies focuses primarily on narrative texts, often with the objective of tracing a "canon" for Latin American environmental literature. In *Nature, Neo-Colonialism, and the Spanish American Regional Writers* (2005), Jennifer French examines early twentieth-century novels and short stories by Horacio Quiroga, José Eustasio Rivera, and Benito Lynch, writers associated with the subgenre *novela de la tierra* (novel of the land), and argues for their recognition as compelling ecocritical texts. Through a methodological "fusion of Marxism and environmental approaches," French contends that these "environmentalists *avant la lettre*" condemn the resource extraction, ecological degradation, and labor exploitation implemented by British imperialists in Latin America during the nineteenth century while articulating an "anticolonial and very often anticapitalist politics."[88] Also favoring the narrative genre as well as critique oriented through political ecology and economics, DeVries traces a sweeping ecological literary history from foundational texts of the nineteenth century to novels published at the dawn of the twenty-first century in *A History of Ecology and Environmentalism in Spanish American Literature* (2013). Primarily preoccupied with the "construction of a longer eco-literary history," DeVries argues that the continually-evolving aesthetic representations of nature in texts emerging after Argentine writer and politician Domingo Faustino Sarmiento's *Facundo* (1845) challenge discourses surrounding neoliberal development, the unequal distribution of

[88] French, *Nature, Neo-Colonialism*, 158-59.

wealth, access to natural resources, and environmental degradation.[89] DeVries's and French's studies break crucial ground by discovering ecologically-relevant texts that had been virtually unknown to literary scholars, and by uncovering a nuanced environmental consciousness in well-known texts that formerly had not been studied for their ecological bent.

In a similar vein, in *Ecological Imaginations in Latin American Fiction* (2011) Laura Barbas-Rhoden examines the ecological imaginary of novels published during the second half of the twentieth century, arguing that these texts reread Latin American environmental history in order to indirectly critique the problems of modernization and neoliberalism in the present. Barbas-Rhoden observes that in the final decades of the twentieth century, Latin American writers moved beyond representations of nature as exotic and fertile and instead take on more skeptical, critical, and elegiac attitudes toward the environmental issues of today.[90] For example, the novels *¿En quién piensas cuando haces el amor?* (Who do you think of when you make love?, 1995) by Mexican author Homero Aridjis and *Waslala* (1996) by Nicaraguan writer Gioconda Belli construct future dystopian worlds in order to condemn ecological degradation, political corruption, and economic globalization in the present.[91] The texts that form this dystopic subgenre reveal "an ecological imagination imbued with social justice, and their new story of Latin America represents a real engagement with an imperiled world."[92] The "imperiled world"

[89] DeVries, *History of Ecology*, 2.

[90] Barbas-Rhoden, *Ecological Imaginations*, 167.

[91] Barbas-Rhoden, *Ecological Imaginations*, 16-17.

[92] Barbas-Rhoden, *Ecological Imaginations*, 167.

depicted in these dystopian novels could very well be read as a critique of the global anthropogenic processes that would later be gathered under the term Anthropocene. While the apocalyptic perspectives exemplified in the texts Barbas-Rhoden analyzes focus more on the "blasted landscapes" of the Anthropocene, the literary, filmic, and artistic works I discuss in this study offer another path for approaching our perilous times—through the "biocultural hope" materialized in multispecies relationships.[93]

In *Reading and Writing the Latin American Landscape* (2009), an ambitious diachronic study spanning five hundred years, Beatriz Rivera-Barnes and Jerry Hoeg trace ecological themes in Latin American testimony, novel, and poetry from the early chronicles of Christopher Columbus and Álvar Núñez Cabeza de Vaca to late-twentieth-century texts such as Fernando Contreras Castro's novel *Única mirando al mar* (Única watching the sea, 1993). Rivera-Barnes and Hoeg argue that literary representations of the Latin American landscape have varied drastically, from the "hostile and threatening" portrayals by early explorers and the romantic myth of "endless fertility" that concealed both colonial violence and environmental degradation, to more recent depictions of fragmented forests and polluted environments.[94] Rivera-Barnes and Hoeg draw interdisciplinary connections among the natural sciences, the social sciences, and literary studies; for example, they trace Darwin's and Humboldt's influence on early writers such as Andrés Bello and cite scientific studies documenting groundwater contamination

[93] Kirksey, Shapiro, and Brodine, "Hope in Blasted Landscapes," 30.

[94] Rivera-Barnes and Hoeg, *Reading and Writing*, 2-5.

around a Costa Rican landfill.[95] In contrast to much of the previous ecocritical work in Latin American contexts, *Reading and Writing the Latin American Landscape* includes consideration of Brazilian texts such as Euclides da Cunha's *Os sertões* (*Rebellion in the Backlands*, 1902). In parallel with Rivera-Barnes and Hoeg's efforts, this study also recognizes the importance of including Brazilian voices in any discussion about Latin American cultural production, as I will explore in more detail in chapter 4.

Like Rivera-Barnes and Hoeg's book, the extensive collection *The Natural World in Latin American Literatures: Ecological Essays in Twentieth Century Writing* (2010), edited by Adrian Taylor Kane, transcends national and linguistic borders with studies ranging from Patagonia in southern Argentina to the Chihuahuan Desert on the U.S.-Mexico border, analyzing texts written in Spanish, Portuguese, French, and Quiché Maya. Heavily emphasizing novels, the volume does include studies of other genres such as poetry and songs. Similar to earlier ecocritical efforts like the pioneering special issue of *Hispanic Journal* (1998) co-edited by Patrick D. Murphy and Roberto Forns Broggi, Kane and his collaborators are also driven by the double-edged objective to "help advance the discussion of ecocriticism among Latin Americanists, and to afford ecocritics further insight into the cultural discourses that have informed perceptions of the relation between humans and their environments in Latin America."[96] While, as the title indicates, Kane's collection centers on literary works of the twentieth century, the chapters promote a historically-oriented ecocriticism attentive to the ways in which relationships between

[95] Rivera-Barnes and Hoeg, *Reading and Writing*, 2, 177-78.

[96] Rivera-Barnes and Hoeg, *Reading and Writing*, 1.

nature and culture in Latin America have changed over the centuries.[97] Mark D. Anderson also takes a historical perspective in *Disaster Writing: The Cultural Politics of Catastrophe in Latin America* (2011). In analyzing literary production surrounding a series of "natural" disasters such as the Dominican Republic's 1930 Cyclone San Zenón, persistent drought in northeastern Brazil, volcanic eruptions in Central America, and Mexico's 1985 earthquake, Anderson explores the complex relationship between representations of disasters and national metanarratives, uncovering "the political implications of the process of defining disaster and how textualization is used to negotiate power."[98] While Anderson's study brilliantly elucidates the discursive role that disasters play in nation-building, the impact of anthropogenic "disasters" in the form of environmental contamination, climate change, and resource depletion—in other words, the mounting disaster of the Anthropocene—remains largely outside the scope of his analysis.

A third cluster of book-length studies provides a panoramic appraisal of the field of ecocriticism as it is practiced in Spanish-speaking literary contexts. Costa Rican critic Walter Rojas Pérez's early book *La ecocrítica hoy* (2004) discusses theoretical approaches of José Carlos Mariátegui, Raymond Williams, Néstor García Canclini, Sofia Kearns, Mikhail Bakhtin, and others, alongside Rojas Pérez's own analysis of three Latin American novels: *El hablador* (*The Storyteller*, 1987) by Peruvian Nobel Laureate Mario Vargas Llosa, *Un viejo que leía novelas de amor* (*The Old Man who Read Love Stories*,

[97] Kane, Preface, 2-3.

[98] Anderson, *Disaster Writing*, 2.

1989) by Chilean author Luis Sepúlveda, and *Canal zone* (1935) by Costa Rican writer Demetrio Aguilera-Malta. In his analysis of these texts, Rojas Pérez brings to light their denunciation of interconnected processes of neoliberal economic development, government corruption, resource extraction, destruction of ecosystems, and the ways in which indigenous and rural peoples disproportionately bear the burdens of such economically-driven practices. The introductory reader *Ecocríticas: literatura y medio ambiente* (Ecocriticisms: Literature and environment, 2010), edited by Spanish Peninsular scholars Carmen Flys Junquera, José Manuel Marrero Henríquez, and Julia Barella Vigal, incorporates ecocritical essays on works of literature from Spain and Latin America as well as Spanish-language translations of foundational essays by North American and British ecocritics such as Terry Gifford, Cheryll Glotfelty, and Scott Slovic. Peruvian ecocritic Roberto Forns Broggi's book *Nudos como estrellas: ABC de la imaginación ecológica en nuestras Américas* (*Knots like Stars: The ABC of Ecological Imagination in our Americas,* 2012) fuses intimate lyrical reflection, critical analysis, and theoretical discussion in 42 short essays organized alphabetically around key concepts in ecocriticism and ecology. In entries such as "Acervo de la papa" ("Cultural Heritage of the Potato," a reference to the cultural significance of potato cultivation in Peru), "Amazonía," and "Buen vivir" (good life), Forns Broggi explores uniquely Latin American contributions to global environmental debates, while also engaging with transnational theoretical approaches in sections on ecocriticism, ecofeminism, environmental justice, and others. In his entry on ecocriticism, Forns Broggi calls for increased alliances and collaborations among environmental scholars, artists, and activists of the Global North and Global South, as well as growing collaborations across

the humanities and the natural sciences to develop solutions to global climate crisis, convictions which also guide my explorations in the chapters of this study.[99]

A very recent fourth cluster of book-length publications pushes the boundaries of Latin American ecocriticism beyond its traditional focus on poetry and narrative, while also engaging directly with the question of the Anthropocene in ways that Latin American ecocritical scholarship has scarcely done before. Gisela Heffes's *Políticas de la destrucción, poéticas de la preservación: apuntes para una lectura (eco)crítica del medio ambiente en América Latina* (Politics of destruction, poetics of preservation: Notes toward an (eco)critical reading of the environment in Latin America, 2013) examines three interlocking themes of destruction, sustainability, and preservation in a wide range of Latin American novels, short stories, and plays, as well as films and works of visual art from across the twentieth and twenty-first centuries and from both Spanish-speaking and Lusophone contexts. Heffes argues that literary, filmic, and artistic representations of consumer waste, garbage dumps, and urban environments expose Latin American cultures of consumerism that often render certain groups of people as "disposable," and she shows how these works also denounce the neoliberal restriction of access to urban green spaces only for the economic elite.[100] Similar to Barbas-Rhoden's exploration of the dystopian novels proliferating in the 1980s and 1990s, Heffes interprets Sepúlveda's *Un viejo que leía novelas de amor* as well as Argentine novelist Ana María Shua's *La muerte como efecto secundario* (*Death as a Side Effect,* 1997) as dystopian

[99] Forns Broggi, *Nudos como estrellas*, 116-17.

[100] Heffes, *Políticas de la destrucción*, 79, 304.

prognostications of a collapsed planetary future and representations of "la hecatombe propia de la era del Antropoceno" (the bloodbath that characterizes the age of the Anthropocene).[101] Heffes's analysis demonstrates how the prolific presence of consumer waste and toxic contamination has become a rallying point for contemporary Latin American cultural production to confront the anthropogenic processes driving the current age of global environmental crisis. As I will demonstrate in the following chapters, such dystopic narratives constitute only one of the ways in which contemporary Latin American literature, art, and film are responding to the challenges of the Anthropocene.

Like Heffes's text, Malcolm K. McNee's *The Environmental Imaginary in Brazilian Poetry and Art* (2014) foregrounds contemporary visual and performative forms of cultural expression alongside written texts. His study also breaks new ground by focusing entirely on the cultural production of Brazil, which has generally remained at the margins of Latin American ecological critique. McNee analyzes the two overlapping aesthetic strains of ecopoetry and Earth art to reveal how figurations of the environment are bound up with issues of identity, nationalism, and coloniality in contemporary Brazil. Placing the theories of Timothy Morton, J. Scott Bryson, Silvana Macêdo, and others in dialogue with Viveiros de Castro's work on Amerindian philosophy, McNee understands ecopoetry and Earth art as "expressions of an environmental imaginary that attempt to push past dualistic and idealized conceptions of nature and environment" while making "apparent the truly unsettling strangeness and estrangements of ecological thinking."[102]

[101] Heffes, *Políticas de la destrucción*, 320.

[102] McNee, *Environmental Imaginary*, 7.

McNee demonstrates that while early representations of Brazilian nature perpetuated images of abundant and sublime landscapes while feeding processes of commercial and colonial expansion, contemporary artists and poets confront these traditions by expressing a concern for environmental risks. For instance, in the epilogue McNee examines works of art exhibited in Rio de Janeiro as part of the cultural programming surrounding the 2012 United Nations Summit on Sustainable Development or "Rio+20." As McNee describes, some of these exhibits engage with the concept of the Anthropocene by juxtaposing human technological development with "the consequent erasure of planetary biodiversity."[103] The pieces I analyze in the following chapters also concern themselves with the reality of species loss, but without necessarily foregrounding the ecocidal horror of the Sixth Mass Extinction and instead formulating visions of recovery and more livable multispecies futures.

Like Heffes's and McNee's monographs, the collection *Ecological Crisis and Cultural Representation in Latin America: Ecocritical Perspectives on Art, Film, and Literature* (2016), co-edited by Mark D. Anderson and Brazilian ecocritic Zélia Bora, also showcases a broad range of genres and artistic mediums in both Spanish and Portuguese from contemporary Latin America, while concerning itself with the notion of planetary environmental crisis. While Heffes's and McNee's studies engage only tangentially with the Anthropocene, the introduction to Anderson and Bora's volume situates itself squarely in current debates about cultural production in the Anthropocene, a critical engagement which is also reflected in many of the individual chapters. *Ecological*

[103] McNee, *Environmental Imaginary*, 152.

Crisis and Cultural Representation in Latin America orients itself in relation to the argument that until the 1990s, environmental crises in Latin America were usually understood as isolated events that were easily contained by the forward progress of modernity which counted on an "unlimited, inexhaustible environment."[104] By contrast, contemporary Latin American representations of environmental crises recognize their uncontainability, their possible irreversibility, and their vast global scope, as well as the unlikelihood that modernity will provide any solutions.[105] Anderson contends that nature in the Anthropocene "can only be conceived of through loss, through the optics of ecological crisis, as what remains of a broken whole."[106] In the following chapters, I expand and problematize this contention by proposing that nature in the Anthropocene can also be reconceptualized through the regenerative space of multispecies encounters and collaborations. The contributions of Heffes, McNee, and Anderson and Bora mark a significant broadening of the focus of Latin American ecocriticism beyond the literary canon and beyond the written word itself to encompass visual, sculptural, filmic, and performative forms of cultural expression that are opening up new dimensions of environmental aesthetics and criticism. In a similar vein, in this study I place contemporary textual, filmic, and visual works from across Latin America in dialogue with each other, affirming the power of word and image to envision worlds beyond global environmental collapse.

[104] Anderson, "Introduction," xii.

[105] Anderson, "Introduction," xii.

[106] Anderson, "Introduction," xiii.

In addition to single-author books and edited collections, an increasing number of special journal issues offer a broad and up-to-date perspective on Latin American ecocriticism. Following the publication of the environmentally-focused issues of *Hispanic Journal* and *Ixquic* mentioned above, a 2004 issue of *Anales de la literatura hispanoamericana* (Annals of Hispanic-American literature) edited by Niall Binns, a 2012 issue of *Review: Literature and Arts of the Americas* edited by Steven F. White, and a 2014 issue of *Revista de crítica literaria latinoamericana* (Journal of Latin American literary criticism) edited by Gisela Heffes center on ecocritical approaches in Latin American literary contexts. Furthermore, the multilingual European ecocritical journal *Ecozon@* publishes many articles on Peninsular and Latin American literature and culture, and a forthcoming (spring 2017) special issue edited by Luis I. Prádanos and Mark Anderson will explore transatlantic ecocritical approaches that trace connections throughout the Iberian Peninsula, Latin America, and Lusophone Africa.

Ecocritical studies of Latin American literature and culture incorporate a multitude of theoretical approaches ranging from ecofeminism and ecopoetics to eco-Marxism and postcolonial ecocriticism. As exemplified in the scholarship surveyed above, most of these approaches explore how poetic and narrative texts critique industrial economic development, resource extraction, environmental degradation, waste accumulation, and (neo)colonialism in favor of conservation, preservation, and environmental justice. To this point, very few ecocritical studies in Latin American contexts consider emerging theories on materiality informed by the biological and physical sciences, much less the recent theoretical developments in queer ecologies or multispecies ethnography. This study expands the horizons of Latin American

environmental critique by drawing on these cutting-edge interdisciplinary approaches and by engaging primarily with non-canonical, twenty-first-century texts as well as with aesthetic modes—such as sculpture, painting, and film—not often included in Latin American ecocritical debates, in a direct and systematic examination of the dynamics of multispecies encounters in the context of the Anthropocene. While the relationship between nature and culture has been widely debated in Latin American ecocritical scholarship, this is the first study to focus specifically on multispecies relationships in Latin American literature, film, and art and to explore the ways in which stories of intimate encounters with our nonhuman "others" open up possibilities of collaborative resilience and recovery beyond planetary decline.

Organizing the Study: Corporealities, Companions, and Communities

Taking into account the theoretical approaches offered by material ecocriticism, multispecies ethnography, and queer ecologies, this dissertation explores the following questions. Considering that species emerge from within intra-active relationships, and the nonhuman "other" is always already a constitutive part of humanity and vice versa, how can we theorize what actually occurs in the space and time of encounter between one kind of organism and another? How do these encounters demand a profound rethinking of the very notion of "species" and of the category *anthropos* of which we are a part? How do textual and visual forms of Latin American cultural production imagine multispecies encounters and how do they interrogate categorizations of species, gender, race and class? How do these creative works draw on indigenous and other-than-

dominant knowledge systems to suggest possibilities of multispecies flourishing beyond the Anthropocene?

To address these questions, this study explores multispecies relationships in three telescoping dimensions—corporeality, companionship, and community—corresponding to each of the following three chapters. These dimensions are inevitably interwoven; while they build on each other horizontally, each one contains within itself traces of the other dimensions and cannot exist without them. As Haraway affirms, "[i]ndividuals and kinds at whatever scale of time and space are not autopoietic wholes; they are sticky dynamic openings and closures in finite, mortal, world-making, ontological play."[107] While these telescoping dimensions frame the analysis carried out in each of the chapters, the dimensions are themselves under question through the lens of multispecies dynamics as a relational ontology. The first dimension centers on *corporeal* space as a multispecies relationship in itself whose immediate materiality carries the traces of other species that are mutually constituted across evolutionary time and space. Following a telescoping pattern, the second dimension expands from individuals to *companions* to encompass queer multispecies families based on relationships of mutual respect and responsibility among human and nonhuman subjects. The third dimension considers multispecies relationships on an even broader scale, delving into the complex web of intra-actions that constitute entire biocultural *communities*. Examining multispecies encounters along these three telescoping dimensions reveals the profound depth and astonishing extent of

[107] Haraway, *When Species Meet*, 88.

human-nonhuman entanglement, from the vastness of bioregions to the closeness of our skin.

The artists, filmmakers, and writers whose works are analyzed in the following chapters explore relationships among human beings and their "others" from multiple perspectives, aesthetic forms, and geographic positions, revealing the impressive diversity of Latin American cultural production that takes up the question of multispecies encounters in the era of the Anthropocene. In chapter 2, "Teresa Porzecanski, Daniela Tarazona, and Alejandra Zermeño: Corporealities of the (More-than-)Human," I consider the concept of multispecies relationships in its corporeal and evolutionary dimensions. The human body, understood as a material-discursive phenomenon with historical specificity, constitutes the most tangible and immediate link between the human and other species. In dialogue with traditions surrounding transformational beings in indigenous and Afro-diasporic cultures of Latin America, as well as Elizabeth Grosz's and Stacy Alaimo's theories about the mutually constitutive relationship between human beings and other organisms across evolutionary time and the spatial permeability of bodily boundaries, I propose the concept of *transspecies beings*, organisms that appear as hybrid or transitional conjunctions of human and nonhuman corporeal characteristics. These ideas are developed through an analysis of the novels *Felicidades fugaces* (Fleeting joys, 2002) by Uruguayan author Teresa Porzecanski and *El animal sobre la piedra* (The animal on the rock, 2008) by Mexican writer Daniela Tarazona, as well as the exhibit *BiDA: biología interna de los animales* (BiDA: Internal biology of animals, 2012) by Mexican sculptor Alejandra Zermeño. Porzecanski's and Tarazona's novels feature characters that acquire nonhuman traits—specifically amphibian, fishlike,

molluscan, and reptilian—through the gradual transformation of their bodies, performatively reenacting the history of biological life back to its aquatic origins. In Zermeño's exhibit, humanoid sculptures that reveal nonhuman characteristics evoke the symbiotic relationships so prevalent in nature as well as the hybridity of the human body as it emerges through a contingent relationship with other species. In these creative works, the representation of hybrid bodies as exuberant rather than monstrous casts new light on the relationship between the human and the animal. These transspecies beings reflect humanity's insertion in what Darwin terms an immense "community of descent"[108] that constantly transforms itself through the vast expanses of evolutionary time and space, and challenge Western ideas of the animal by casting it as the past, present, and future of humanity in its becoming. By revealing the fundamental continuity of the human with the entirety of biological life, transspecies beings subvert teleological and anthropocentric discourses while evoking a new concept of *anthropos* as a constant process of transformation in relation to its intimate nonhuman "others" with which we share the same uncertain planetary future.

Chapter 3, "Lucía Puenzo and María Fernanda Cardoso: Strange Companions, Queer Futures," expands the multispecies frame from the material entanglement of individual bodies to interspecies relationships and "families" that proliferate across dynamics of companionship. Taking into account Catriona Sandilands's and Donna Haraway's work in queer ecologies as well as indigenous theories about gender, sexuality, and species that challenge Western frameworks, I suggest that multispecies

[108] Darwin, *Descent of Man*, 1: 30.

families are queer configurations that simultaneously deconstruct the taxonomic notion of "species" as well as socially constructed categories of gender, sexuality, identity, and desire while envisioning different futures of multispecies flourishing beyond the Anthropocene. These concepts are explored through an analysis of the films *XXY* (2007) and *El niño pez* (*The Fish Child*, 2009) directed by Argentine director, screenwriter, and novelist Lucía Puenzo, as well as the sculptural installations *Corona para una princesa chibcha* (Crown for a Chibcha princess, 1990) and *Museum of Copulatory Organs* (2008-) by Colombian artist María Fernanda Cardoso. Cardoso's installations explore expressions of nonreproductive sexuality and desire in nature and lay the groundwork for intimate encounters among humans, amphibians, insects, and mollusks in both domestic and public spaces. The transgressive characters and multispecies families in Puenzo's films evoke the multiple sexual configurations and kinds of social interaction that permeate the more-than-human world, recodifying the idea of family as a relationship of mutual respect and caring that traverses the limits of the human. Puenzo's and Cardoso's works craft a multispecies frame that presents biological diversity as parallel to sexual diversity and that unveils the destructive connections between taxonomic categorization, colonial oppression, homophobia, and species extinction. By illustrating diverse forms of nonhuman sexuality that go beyond reproduction and cross over into the realm of exuberance and excess, Cardoso's and Puenzo's pieces question the privileged status of reproductive sexuality that underpins heterosexist and homophobic discourses about what counts as "natural." Nature in Lucía Puenzo's films and Cardoso's installations denaturalizes gender categories as well as heteronormative, anthropocentric notions of

kinship while generating new possible worlds and other ways of engaging with human and nonhuman "others."

Chapter 4, "Juan Carlos Galeano, Solmi Angarita, and Astrid Cabral: Cosmopolitics, Semiosis, and Resistance in the Amazon," continues expanding this study's multispecies frame to encompass the complex web of relationships that form more-than-human communities in the context of the Amazon River Basin. In light of the anthropological perspectives of Eduardo Kohn, Eduardo Viveiros de Castro, and Marisol de la Cadena, as well as research in the emerging field of biosemiotics, this chapter explores the idea of "community" as a vast fabric of mutually contingent and communicative relationships among humans, plants, animals, and mythical beings. I analyze the poetry collections *Amazonía* (2012) and *Yakumama* (2014) by Colombian poet Juan Carlos Galeano and the accompanying series of illustrations by Colombian graphic artist Solmi Angarita, as well as the poetry collection *Jaula* (*Cage*, 2006) by Brazilian poet Astrid Cabral. Drawing on images and narratives of the diverse indigenous and mestizo oral traditions emerging from the Amazon basin, these works of poetic and visual expression reveal how multispecies communities are constructed and maintained through stories embedded with the ethical terms of encounter. Reconfiguring the notions of rights, subjectivity, and semiosis beyond the scope of the human and beyond the confines of the individual, the works of Galeano, Angarita, and Cabral conceive of community as a constant, communicative negotiation of ethical encounters among individuals of different species collaboratively working toward more sustainable and livable futures. Furthermore, by bringing to the forefront concepts of rights codified in indigenous epistemologies and ecopolitical movements, the works of Galeano, Angarita,

and Cabral resist institutional narratives predicated on colonial and commercial interests, affirming the politicity of nonhuman and human agents as well as the transformative power of multispecies communities.

The exploration of these works of literature, film, and art will help facilitate a far from exhaustive study of the potential of aesthetic representations of multiespecies encounters to uncover worlds beyond the Anthropocene. Instead of becoming mired in the dire reality of ecological collapse—made tangible in the systematic degradation of the environment through deforestation, contamination, depletion of basic resources, mass extinctions, and other biosocial catastrophes—the visual and textual works studied here present multispecies encounters as figures of "biocultural hope" and imagine worlds in which diverse species flourish together, a world whose potentiality is already rooted in the present. Against the backdrop of the "blasted landscapes" throughout Latin America and the world, these works offer an optimistic vision of human-nonhuman interactions while suggesting the possibility of multispecies flourishing within and beyond the Anthropocene. By crafting alternative narratives about our planetary situation and exploring the spaces where species meet, these works bring to light other modes of existing and relating with the self, with the other, and with the planet which we all call home.

CHAPTER 2

TERESA PORZECANSKI, DANIELA TARAZONA, AND ALEJANDRA ZERMEÑO: CORPOREALITIES OF THE (MORE-THAN-)HUMAN

> Species, like the body, are internally oxymoronic, full of their own others, full of messmates.... Every species is a multispecies crowd.
>
> —Donna Haraway, *When Species Meet*

Exuberant Hybridities

As amalgams of human and nonhuman characteristics, the hybrid creatures that permeate world literatures and cosmologies embody millennial preoccupations with the shifting boundaries of human corporeality and subjectivity as well as humanity's ambiguous relationship with animality. Elizabeth Grosz contends that Western thought, rooted in Greek and Cartesian traditions, has long insisted on the fundamental exceptionality of the human above other species and the "relegation of the animal to man's utter other, an other bereft of humanity."[109] Throughout history, colonial, patriarchal, and heterosexist power systems have crafted essentialist discourses of "animalization" to justify the subordination of entire groups of people based on race, gender, and sexuality. The vehement rejection of the animal peripheries of the human has infiltrated our cultural and literary imaginations, in which hybrid creatures often symbolize the monstrous impulses that reside within human nature. One need look no

[109] Grosz, *Becoming Undone*, 12.

further than the likes of sirens, harpies, and minotaurs of Greek mythology and medieval bestiaries or the grotesque human-animal hybrid in Mary Shelly's *Frankenstein* (1818), whose utter otherness unintentionally brings out the worst tendencies in the humans that cross his path.[110] Other examples abound in contemporary science fiction cinema, in which "border creatures" are contained, expelled, or destroyed in order to police species lines and shore up the bounds of human subjectivity.[111] Since they embody what Julia Kristeva calls "the abject"—that which "disturbs identity, system, order,"[112] these ambiguous creatures pose a serious epistemological and ontological threat to the hierarchical containment of species.

Contrary to what these examples may suggest, some representations of physical similarity between humans and other organisms may in fact "provoke a rich ethical sense of kinship"[113] that challenges humanity's ostensibly privileged position with respect to the multispecies communities whose past, present, and uncertain future are always

[110] The perennial anxiety provoked by images of human-nonhuman hybridity is exemplified in the *Apologia* of 12th-century Cistercian monk St. Bernard of Clairvaux, who scorned the "ridiculous monstrosity" of the "creatures, part man and part beast" and other cross-species hybrids that roamed bestiaries' illuminated pages: "You may see many bodies under one head, and conversely many heads on one body. On one side the tail of a serpent is seen on a quadruped, on the other side the head of a quadruped is on the body of a fish" (cited in Rudolph, *"Things of Greater Importance,"* 11-12). The medieval bestiary genre has been reinterpreted by various Latin American writers, such as Jorge Luis Borges and Margarita Guerrero, Juan José Arreola, and, more recently, Cecilia Eudave. For their part, Borges and Guerrero bring together diverse traditions from the ancient Far East to contemporary North America in *El libro de los seres imaginarios* (*Book of Imaginary Beings*, 1967). While their text curiously omits Pre-Colombian references, Roldán Peniche Barrera's *Bestiario mexicano* (Mexican bestiary, 1987) recovers precisely the mythical beings in indigenous traditions in Mexico. For more on the bestiary in twentieth-century Latin American literature, see Bernard Schulz-Cruz, "Cuatro bestiarios, cuatro visiones" (Four bestiaries, four visions, 1992).

[111] Alaimo, "Discomforting," 280-84.

[112] Kristeva, *Powers*, 4.

[113] Alaimo, "States," 480.

already interlaced with our own. The hybrid beings that abound in the oral, literary, and visual traditions of Latin America pose a challenge to Western culture's propensity to relegate the nonhuman to the status of abject other—and to use animalization as a way to subjugate human "others." Instead, these hybrid beings explore the interstitial spaces that link humans with other organisms. In María Luisa Bombal's short story "Las islas nuevas" (New islands, 1939), the female protagonist conceals a wing-like protrusion emerging from her shoulder—a corporeal vestige of humanity's nonhuman origins—and enters a dream-world populated by prehistoric flora and fauna.[114] Fascinated by the Mexican salamanders on display at a Parisian aquarium, the male narrator in Julio Cortázar's enigmatic short story "Axolotl" (1952) suddenly finds himself on the other side of the glass, transformed into one of the gilled amphibians. Clarice Lispector's *A paixão segundo G.H.* (*The Passion According to G.H.*, 1964) dramatizes an upper-middle-class woman's psychic and physical mutation upon consuming the white secretions of a squashed cockroach. Novels such as Alejo Carpentier's *El reino de este mundo* (*Kingdom of this World,* 1949) and Gioconda Belli's *La mujer habitada* (*The Inhabited Woman,* 1988) uncover human-nonhuman hybridity as represented in Afro-Caribbean and indigenous traditions. Carpentier's Haitian Voodoo priest and revolutionary leader Mackandal habitually transforms himself into mammals, fish, and insects, and after each transformation his human "clothing" remains marked by scales, bristles, and an elongated, feline beard.[115] In Belli's novel, an indigenous woman who

[114] See Coleman, "Becoming a Fish" (2016).

[115] Carpentier, *El reino de este mundo,* 37-38.

dies fighting Spanish invaders during the Colonial period reawakens centuries later in the form of an orange tree, transmitting her human memories through the juice of her fruit and the fragrance of her flowers.[116]

This chapter considers two contemporary works of narrative fiction and one sculpture series in which the representation of hybrid bodies as exuberant rather than monstrous casts new light on the relationship between the human and the animal stretching back into the depths of evolutionary time. The experimental novels *Felicidades fugaces* (Fleeting joys, 2002), by Uruguayan writer and anthropologist Teresa Porzecanski (1945-), and *El animal sobre la piedra* (The animal on the rock, 2008), by Mexican writer Daniela Tarazona (1975-), represent significant efforts on the part of women writing from the margins of the literary canon to rethink the complex relationship between nature and culture. While their work is increasingly discussed in feminist debates, neither *Felicidades fugaces* nor *El animal sobre la piedra* have received much attention from ecocritics, as is the case with the mixed-media sculpture series *BiDA: Biología interna de los animales* (Internal biology of animals, 2012) by Mexican artist Alejandra Zermeño (1978-). Nonetheless, these textual and visual works undo the status of humans as superior to and separate from the rest of biological life—one of the central aims of ecological critique in the age of the Anthropocene.

Porzecanski's novel features a female character who gradually transforms into a hermaphroditic fish-human hybrid, enacting a ritual return to life's watery origins. Similarly, Tarazona's text traces the corporeal transformation of the female protagonist

[116] Belli, *La mujer habitada*, 121.

into a hybrid creature that is not quite human yet not fully reptilian and whose sexuality crosses species lines. The nonhuman "clothing" of Zermeño's anthropomorphic figures makes tangible the invisible genetic threads that link humans to all other organisms in the evolutionary dance of becoming. As organisms that appear as hybrid or transitional conjunctions of human and nonhuman characteristics, these *transspecies beings* reflect humanity's insertion in an immense biological community that constantly transforms itself through the vast expanses of evolutionary time and space. As Donna Haraway argues, "[i]ndividuals and kinds at whatever scale of time and space are not autopoietic wholes; they are sticky dynamic openings and closures in finite, mortal, world-making, ontological play."[117] These transgressive beings subvert teleological humanist discourses, evoke a new concept of humanity as undergoing a constant process of reconfiguration, and prompt readers and viewers to envision the nonhuman as the past, present, and future of humanity in its becoming.

While one of the goals of this chapter and this study as a whole is to highlight the work of women, whose contributions remain underrepresented in the field of cultural studies, I am in no way suggesting that women writers, artists, or the female characters they portray are somehow "closer to nature," to the body, or to materiality than their male counterparts. As attested by Cortázar's short story and Carpentier's novel, among many other literary and cultural examples, male subjects as well as female ones are often portrayed as blurring the lines between human and nonhuman corporeality. Similarly, as we shall see later on in this chapter, the transspecies sculptures in Zermeño's series take

[117] Haraway, *When Species Meet*, 88.

on feminine, masculine, and androgynous forms, destabilizing age-old notions of women as somehow "less human" than men. Tracing the evolutionary connections of *all* humans with nonhuman organisms helps us deconstruct longstanding anthropocentric binaries of human/nonhuman, language/matter, nature/culture, etc. which, as material feminists and feminist science studies scholars such as Donna Haraway, Stacy Alaimo, and Catriona Sandilands have argued at length, are deeply entangled with sexist dichotomies of male/female, subject/object, mind/body, etc.[118] The ways in which multispecies encounters help us dismantle the naturalization of these tenuous oppositions will be discussed in more depth in chapter 3.

The Evolutionary Dance of Becoming

Transspecies beings emerge out of a long tradition of border-crossing creatures in indigenous cosmologies and story cycles that have informed longstanding knowledge systems about human-nonhuman relationships around the globe. Generally speaking, these hybrid creatures have the capacity to mediate between worlds, traversing the limits between the material and the spiritual, the human and the nonhuman, and the past, the present, and the future. Building on the work of the likes of Alexander von Humboldt, Franz Boas, and Claude Lévi-Strauss, symbolic anthropologists, ethnographers, and cultural scholars have long argued that "transformational entities" are "good to think" because their "coincidence of opposite processes and notions in a single representation characterizes the peculiar unity of the liminal: that which is neither this nor that and yet

[118] See, for example, Stacy Alaimo and Susan Hekman's introduction to the collection *Material Feminisms* (2008).

both."[119] In this vein, what Brazilian anthropologist Eduardo Viveiros de Castro calls "perspectival multinaturalism" crystallizes the Amerindian ontology in which organisms differ not through the presence of a mind or soul, but rather through their specific, sentient points of view grounded in differentiated bodies—bodies that for some (such as shamans and other "shape-shifters" who can take the form of animals such as jaguars) can be interchanged as easily as clothing.[120] Indeed, many indigenous communities of the Amazon tell stories about river dolphins that change into seductive human men, a narrative explored in the Brazilian film *Ele, o Boto* (*The Dolphin*, 1987) and the work of Colombian poet and filmmaker Juan Carlos Galeano, which will be discussed at length in chapter 4.[121] In Mesoamerican indigenous traditions, the crossing of bodily boundaries—represented in the iconography of deities such as the snake-human hybrid Coatlicue—is not only considered sacred, but also suggests models of corporeality that blur the boundaries of individuals and species.[122] In these manifestations of Latin American textual and visual culture, and the other-than-dominant epistemologies that inform them, the Western binary distinction between human culture and nonhuman nature finds itself on unsteady terrain.

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[119] Turner, *Forest of Symbols*, 99. See also Barbara Babcock-Abrahams's discussion of Claude Lévi-Strauss's famous contention in *La pensée sauvage* (*The Savage Mind*, 1962) that symbolic and transformational animals in indigenous traditions are "good to think" precisely because they blur categories and distinctions between nature and culture (Babcock-Abrahams, "Why Frogs," 167-68).

[120] Castro, "Cosmological Deixis," 469-72.

[121] In her co-authored essay in *Ecocriticism and Indigenous Studies*, Adamson explores "transformational beings" in Galeano's poetry, such as Yakumama and Curupira, that take the form of anacondas, trees, dolphins, birds, or clouds, or that sometimes transform themselves into the shape of humans" (Adamson and Galeano, "Why Bears," n.p.).

[122] Bost, "From Race/Sex/etc.," 346-49.

In her early essay "Why Bears are Good to Think" (1992), Adamson begins to untangle the reasons why transformational beings in indigenous oral narratives and literatures should be taken seriously by those working in the emerging field of environmental cultural critique, since they offer sophisticated theorizations of human-nonhuman interactions in "cosmic, rather than mundane, dimensions."[123] In her later work, Adamson contends that transformational beings and the oral and written narratives surrounding them—such as the *Popol Vuh* and the Books of the Chilam Balam which emerged in Postclassic Mayan communities—serve as "seeing instruments," complex imaginative tools developed over millennia for "understanding human relation to the stars, animals, soils, and planting cycles."[124] Rather than being relegated to some "mythical past," seeing instruments function as a kind of community-generated "theory" that continues to "offer explanatory power to contemporary indigenous and ethnic minority groups throughout the contemporary world."[125] Similarly, the transspecies beings in Porzecanski's and Tarazona's novels and Zermeño's installations help us understand the complex relationships that make up the more-than-human world while bringing into question Western notions of the "human."

[123] Adamson, "Why Bears," 45n11.

[124] Adamson, "Environmental Justice," 173. Adamson's notion of "seeing instrument," which she first articulates in her book *American Indian Literature, Environmental Justice, and Ecocriticism* (2001), builds on Dennis Tedlock's discussion of transformational deities and their generative activities in the *Popol Vuh*. Tedlock, in turn, adapts the term from the Quiché Maya term *ilb'al* (seeing instrument / place to see). As Tedlock argues, the Quiché Maya consider the *Popol Vuh* to be "a complex navigational system for those who wish to see and move beyond the present," a way of lighting up the cosmic connections throughout the world or "sky-earth," as well as a form of resistance to hundreds of years of oppression and cultural obliteration by Spanish colonizers (21-29).

[125] Adamson, "Environmental," 173.

Like new species evolving from old ones, transspecies beings both emerge out of and differentiate themselves from this rich context of transformational entities and seeing instruments. While transformational beings often emphasize a shifting back and forth between distinct bodily forms and perspectives—such as when a human shaman's consciousness inhabits the body of a jaguar—transspecies beings embody multiple corporealities and perceptual experiences simultaneously, never fully shedding their human form and condensing the incomprehensible expanse of evolutionary space and time into a single, hybrid body. In other words, in the very fabric of their being transspecies beings bring together multiple species in a single bodily and perceptual reality, materializing the invisible genealogies and genetic codes that intertwine all biological life. In the works of Porzecanski, Tarazona, and Zermeño in particular, transspecies beings forge suggestive connections between Mesoamerican and Afro-Caribbean traditions and evolutionary theory, revealing how the dynamic and longstanding indigenous knowledges of Latin America and the African diaspora resonate with scientific discoveries made relatively recently in the Western world.

Along the lines of what Stacy Alaimo and Susan Hekman designate as the "material turn" in the humanities of the twenty-first century,[126] a growing number of theorists, drawing on discoveries in the biological and physical sciences, are questioning the humanist imperative to relegate nature to the margins of culture and history. On the contrary, they consider nature as an agential force that actively participates in the material-discursive configuration of the world with far-reaching political, ethical, and

[126] Alaimo and Hekman, "Introduction," 6.

ecological implications. In their recent work, Alaimo and Grosz reconsider the revolutionary contributions of British naturalist Charles Darwin in reexamining the entangled relationships that make up the more-than-human world. In *Becoming Undone: Darwinian Reflections on Life, Politics and Art* (2011), Grosz explores the evolutionary dance of difference and the mutually constitutive relationship between humans and other organisms. She contends that what separates one species from another are not differences in kind but rather of degree, variables that proliferate without hierarchical order or fixed value. As "the origin and the end of humanity," the animal encloses the human on all sides, forming at once the point from which humanity emerges as an unstable category, and the nonhuman future toward which the human incessantly drifts.[127]

Alaimo's theory of trans-corporeality rejects the tenuous boundaries between human and nonhuman and, on the contrary, emphasizes their mutual entanglement through the spatial and temporal permeability of corporeal boundaries. Tracing these interactions and exchanges "discourages us from taking refuge in the fantasies of transcendence and imperviousness that make environmentalism a merely elective and external enterprise."[128] In the essay "States of Suspension: Trans-Corporeality at Sea" (2012), Alaimo affirms that the human body is connected with the rest of the biosphere through a common genealogy inscribed in the very organs, functions, and practices that constitute the human. In what Darwin terms a "community of descent," even the most seemingly disparate species find themselves linked through "numberless gradations,"

[127] Grosz, *Becoming Undone,* 12.

[128] Alaimo, "States of Suspension," 477.

minute changes accumulated gradually as a result of incessant evolutionary processes.[129] In *The Descent of Man* (1871), Darwin contends that humans are far from immune to the workings of evolutionary change:

> It is notorious that man is constructed on the same general type or model as other mammals. All the bones in his skeleton can be compared with corresponding bones in a monkey, bat, or seal. So it is with his muscles, nerves, blood-vessels and internal viscera. The brain, the most important of all the organs, follows the same law.[130]

In other words, the conditions for the emergence of all the capacities considered at one point or another to set humans apart—consciousness, language, reason, etc.—are already present in the more-than-human world. As Alaimo puts it, in the very flesh of its being the human body "crystallizes the vast expanses of evolutionary time and space...into a form that is already at hand: a form that is in fact ourselves."[131] As I discuss in the remainder of this chapter, in the works of Porzecanski, Tarazona, and Zermeño, evolutionary theory comes together with other-than-dominant epistemologies in the form of transspecies beings that reveal the precarious standing of the "human" as an ontological category whose past, present, and future are enveloped in what is already other-than-human.

[129] Darwin, *Descent of Man*, 1: 30, 70.

[130] Darwin, *Descent of Man*, 1: 11.

[131] Alaimo, "States of Suspension," 482.

The "primordial vortex" of Life's Watery Origins: Teresa Porzecanski

The transformative capacity of material corporeality constitutes the driving force of Porzacanski's *Felicidades fugaces*, a bildungsroman told from the perspective of Celeste who looks back on one pivotal year of her adolescence in 1950s Montevideo, Uruguay. Celeste candidly relates the everyday struggles, joys, memories, and rituals of the women living in her building on Isla de Flores Street, which becomes an almost exclusively feminine space. Celeste's father, a traveling fabric salesman, suddenly leaves to tour the world as a singer, leaving Celeste and her dark-skinned stepmother Palmira behind "como a un par de menudencias queridas pero no ya necesarias" (like some loved but no longer necessary odds and ends).[132] The Perotti sisters, eccentric, elderly spinsters obsessed with locating their great-grandfather Gidia's fortune buried in the Central Cemetery, spend their days reading geography, history, and oceanography books aloud to each other, a task which they later encourage Celeste to do because of their failing eyesight. Violeta Estrugo, another neighbor, "accidentally" spills boiling-hot coffee on her husband's hands, a small aggression she finds herself repeating in order to cope with an unhappy marriage and reclaim a sense of control in a life that seems less and less her own.[133] Through her interactions with the women around her, Celeste learns that "detrás de cada rostro hay otros, seres dormidos, ignotos, esperando por su oportunidad para emerger, y celebrar, quizá con un acto diminuto, inadvertido, una oculta conexión con la grandeza" (behind every face there are others, sleeping, unaware, waiting for the

[132] Porzecanski, *Felicidades fugaces*, 16.

[133] Porzecanski, *Felicidades fugaces*, 53-56.

opportunity to emerge and celebrate, perhaps through a small and unnoticeable act, a secret connection with grandeur).[134]

Porzecanski's novels, short stories, and poems, as well as her anthropological studies on Uruguayan culture and religion, uncover alternative epistemologies and experiences of otherness, particularly of communities of Jewish and African descent and their impact on Uruguayan culture.[135] In *Felicidades fugaces*, Afro-Latin traditions take center stage as Palmira teaches Celeste about the beliefs, rituals, and deities of Umbanda, one of the numerous syncretic religions of African origin that emerged in Latin America as African slaves came in contact with indigenous peoples and Europeans. Celeste soon finds that the calendar year is marked by prayers, ceremonies, and offerings to the Orishas or gods, and Palmira teaches her how to pray to the Orishas for the well-being of the other women in their building on Isla de Flores Street.[136]

While the Orishas are forms of vital, divine energy, they are also believed to materially embody the forces of nature with which they are associated.[137] As Lizabeth Paravisini-Gebert contends, the connection between humans and the natural environment constitutes the most important relationship in African-derived religiosities.[138] Of the vast

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[134] Porzecanski, *Felicidades fugaces*, 16-17.

[135] Consider, for example, the first section of *Rituales: ensayos antropológicos sobre Umbanda, ciencias sociales y mitología* (Rituals: Anthropological essays on Umbanda, the social sciences, and mythology, 1991), which examines African-derived religious practices in Uruguay, and *Historias de exclusión: afrodescendientes en el Uruguay* (Histories of exclusion: Afro-descendants in Uruguay, 2006), a collection of oral histories told by Uruguayans of African descent compiled by Porzecanski and Beatriz Santos.

[136] Porzecanski, *Felicidades fugaces*, 33.

[137] Méndez, "Transcending Dimorphism," 108.

[138] Paravisini-Gebert, "'He of the Trees,'" 182-83.

pantheon, Palmira has a particular affinity for the deities associated with water: Iemanjá, sea goddess whose "cabellos interminables flotaban entre los sargazos salados, anudándose y desanudándose como anguilas aceitadas" (unending hair floats among the seaweed, winding and unwinding itself like slick eels), and Oxum, the goddess of fresh water, who in February begins to "mirarse en su espejo de madreperlas y a peinar sus cabellos gelatinosos...bajo sus velos coralinos" (gaze at herself in a mother of pearl mirror and brush her gelatinous hair...behind a coralline veil).[139]

Set in a part of Montevideo that is less than half a mile from where the fresh waters of the Río de la Plata flow into the Atlantic Ocean, Porzecanski's novel explores the largely unknown world of the deep sea and its relationship with human origins. As Stacy Alaimo contends, while "the open seas and the deep seas are so terribly distant, so unspeakably different from our habitats," trans-corporeality may help us recognize "the connections and interchanges between bodies and environments" that "extend both spatially, across the wide expanses of aquatic habitats, and temporally, back to these aquatic origins."[140] While bizarre deep-sea creatures such as giant squid, anglerfish, and giant tube worms may not immediately evoke an "ethical sense of kinship,"[141] evolutionary theory maintains that all biodiversity—including human beings—derives from the same unicellular organisms that formed in the depths of Earth's primordial oceans.

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[139] Porzecanski, *Felicidades fugaces*, 27-28.

[140] Alaimo, "States of Suspension," 480.

[141] Alaimo, "States of Suspension," 480.

Rather than representing deep-sea organisms, ecosystems, and terrain as unspeakably alien, Porzecanski reveals an exuberant world below the waves that possesses an irresistible allure for the novel's characters. Impelled by a desire to "leer...el mundo" (read...the world),[142] Zulma Perotti and her sister Clelia voraciously devour seafaring accounts and oceanography texts, such as the *Guía orográfica de Asia Oriental* (Orographic guide to East Asia) by fictitious explorer Wilhelm Bron, uncovering ocean currents, underwater mountain ranges and trenches, and the astonishing diversity of organisms that proliferate in the deep seas. Devoid of the monstrous and terrifying descriptions often associated with tales of the oceans and early maritime explorers' accounts, the "Liquid Paradise" that Zulma imagines in the depths of the world's oceans is teeming with dazzling, bioluminescent creatures that swim elegantly "como si danzaran" (as if dancing), "medusas, absolutamente tranquilas, abanicándose a sí mismas" (jellyfish, absolutely serene, fanning themselves) in the darkness, and "plantas, que no son plantas sino peces, y...peces que no son peces sino plantas (plants that aren't plants but fish, and...fish that aren't fish but are actually plants).[143] This appealing imagery that highlights the exuberant diversity of ocean life opens a space for contemplating the intimate yet unseen relationship between the deep seas and the origin of humanity. The "plants that aren't plants but fish" evoke sea sponges, the earliest forms of animal life on Earth whose undifferentiated tissues and tubular bodies anchored to the

[142] Porzecanski, *Felicidades fugaces*, 99.

[143] Porzecanski, *Felicidades fugaces*, 158-59.

ocean floor resemble plants much more than their animal relatives.[144] Zulma's semantic vacillation between plant and fish highlights the extent to which the common ancestor of all animals, including humans, at once emerges from and tends toward that which is already beyond the limits of the animal.

In addition to the richness of marine imagery, the novel delves into human origins by virtue of a transspecies being who, through the gradual transformation of her body, ritually and performatively reenacts the history of biological life back to its watery origins. Shortly after her husband leaves her, Violeta Estrugo begins to transform into a different version of herself. During various weeks, her skin like "la de un anfibio" (that of an amphibian) becomes completely covered with "delicadas escamas perladas" (delicate, pearly scales), while "membranas flexibles, casi transparentes" (flexible, nearly transparent membranes) begin to grow between her fingers and toes.[145] However, rather than becoming frightened at the latent corporeal animality bursting forth from her pores, Violeta feels "más bella, y se preguntaba por el origen de esa nueva e insólita felicidad" (even more beautiful and wonder(s) about the origin of this new and inexplicable joy).[146]

Violeta's corporeal transformation reveals the vestiges of humanity's aquatic origins that manifest themselves in the materiality of all living things. In *The Sea Around Us* (1961), Rachel Carson explains that all organisms carry within their flesh and "lime-hardened" bones the same chemical composition of the calcium-rich Cambrian seas

[144] Gold et al., "Sterol and Genomic Analyses," 2684.

[145] Porzecanski, *Felicidades fugaces*, 153.

[146] Porzecanski, *Felicidades fugaces*, 154.

where the first living cells formed approximately 3.5 billion years ago.[147] During the early stages of her transformation, Violeta feels as though "su esqueleto mismo, oculto y elusivo, se hiciera piedra" (her skeleton itself, invisible and elusive, were hardening into stone) with the lime of the Cambrian ocean, while "su cuerpo generaba un cierto olor a mar...y un sabor salobre le invadía el paladar y la garganta" (her body generated a certain marine odor...and a saline taste invaded her palate and throat).[148] These physiological and chemical changes reflect the caving-in of exterior and interior, human and nonhuman, past and present within the materiality of the body. Even Violeta's eyes, which have "redondeado y corrido hacia las sienes" (rounded and shifted toward her temples) like those of a fish, allow her to see "al mismo tiempo y de manera hipnótica, presente, pasado y futuro" (simultaneously and hypnotically, present, past, and future).[149] The collapse of time in the potentiality of living matter reveals the historicity of bodies and the material interconnections that link all species in the same dance of becoming.

The dazzling dancing creatures of Zulma Perotti's deep sea paradise begin to populate Violeta's dreams, in which "gigantescas medusas flotaban por encima de su cuerpo y sus gelatinosos filamentos le tocaban el pelo ondulante en una suerte de vaivén silencioso y seductor" (enormous jellyfish floated above her body and their gelatinous tentacles touched her undulating hair in a kind of silent and seductive swaying motion).[150] Jellyfish, which emerged over 500 million years ago, mark a pivotal moment in the

[147] Carson, *Sea Around Us*, 13.

[148] Porzecanski, *Felicidades fugaces*, 94-95.

[149] Porzecanski, *Felicidades fugaces*, 153.

[150] Porzecanski, *Felicidades fugaces*, 95.

evolution of humans and other animals, as they are the first to exhibit organized tissue structures and a nervous system.[151] In Violeta's dreams, tentacle and hair—loci in a vast web of relatedness—become entangled in the meeting of species across evolutionary time and space.

As part of her transformation into something not quite human and not quite fish, Violeta experiences an irresistible magnetism that draws her to the seashore:

> Y el mar la llamaba…con una voz agitada por oleajes salados…que provenía del vórtice primario de donde habían desanclado, una a una, las especies, uno a uno, los moluscos abisales. Entonces, se despertaba ansiosa, escuchando mensajes…que le decían de regresar al principio, de entregarse, licuarse, diluirse, y formar parte por fin de todo lo demás.
>
> (And the sea called her...with a voice, turbulent with salty swells, ...that came out of the primordial vortex from which sprang all species one by one, all abyssal mollusks one by one. Then she woke up anxious, hearing messages...that told her to return to the beginning, surrender herself, liquefy and dissolve, at last becoming part of everything else.)[152]

Overcome by the desire to "return to the beginning," Violeta embarks on a journey that allegorically reconstructs in reverse the transition of life from water to land. Like *Tiktaalik*, the first known intermediate species whose modified fins allowed it to emerge from the water and ambulate on land approximately 375 million years ago,[153] Violeta cautiously and deliberately articulates each step as if she were "aprendiendo nuevamente a caminar" (learning to walk anew).[154] As she dives deeper into the "primordial vortex from which sprang" all biological life, she feels herself "liquefy and dissolve, at last

[151] Collins, "Jellyfish and Comb Jellies," n.p.

[152] Porzecanski, *Felicidades fugaces*, 153-54.

[153] Shubin, *Your Inner Fish*, 22-24.

[154] Porzacanski, *Felicidades fugaces*, 36.

becoming part of everything else" as bodily boundaries and membranes give way to the primordial soup that yielded the first organic molecules and living cells on Earth.

Violeta's inability to "recordar su nombre" (remember her name), the shedding of "esa carga de datos acumulados que suele llamarse biografía" (this weight of accumulated data we call biography), and the indeterminate gender of the "otra u otro...anterior a sí misma" (other, female or male...prior to herself)[155] reflect the hermaphroditic sexuality of our distant ancestors and that of a significant portion of extant plants and invertebrates. As Darwin enthusiastically admits in a letter to Thomas Huxley, "[o]ur ancestor was an animal which breathed water, had a swim bladder, a great swimming tail, an imperfect skull, and undoubtedly was a hermaphrodite! Here is a pleasant genealogy for mankind."[156] Estela Valverde notes that a strong urge to trace genealogies and uncover roots impels Porzecanski's work, which remains highly conscious of the "corrientes ancestrales que pujan en sus entrañas" (ancestral currents that clamor in her flesh).[157] In this vein, Violeta's allegorical return to the aquatic and hermaphroditic origins of the human materializes "invisible genealogies...that disclose connections between humans and the sea" and reveals humanity's mutually contingent relationship with other seemingly distant species.[158]

Violeta's complete return to the dawn of biological life is realized near the end of the novel during a celebration in honor of Iemanjá and Oxum at Ramírez Beach where

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[155] Porzecanski, *Felicidades fugaces*, 37.

[156] Quoted in Zimmer, *At the Water's Edge*, 23.

[157] Valverde, "*Erocentrismo* en la narrativa," 71-72.

[158] Alaimo, "States of Suspension," 478.

the Río de la Plata, rich with sediment, pours into the ocean. Suddenly and in full view of Celeste, Palmira, and the other revelers, a strange figure appears in the water silhouetted against the brilliant sun:

> Parecía la [figura] de una mujer desnuda, pero las líneas de su contorno eran dentadas como si tuviera una piel escamosa… El cuerpo, de escamas iridiscentes, reverberó por un segundo bajo la luz bermeja, sus cabellos de algas tentaculares se movieron con el viento. Pero su rostro, ay su rostro, que un haz de luz anaranjado iluminó por un segundo: su rostro era apenas un molusco sin rasgos, una baba gelatinosa.
>
> (It looked like the figure of a nude woman, but the contours of her body were perforated as if covered by scaly skin.... Her body of iridescent scales reverberated for a moment under the auburn light, her tentacular algae hair swaying in the breeze. But her face, oh, her face, illuminated for a second by a beam of orange light, was no more than gelatinous slime, a featureless mollusk.)[159]

Rather than obliterating the human form altogether, this mysterious figure integrates traits from across species lines, mixing the "figure of a "nude woman" with "scaly skin" and "tentacular algae hair." Although the exact identity of this transspecies being remains undetermined in the novel, various textual indications suggest that it is Violeta herself: she sold all her belongings and had not been seen near Isla de Flores Street for some time.[160] Indeed, Celeste later imagines Violeta finding her way to the candle-covered beach, shedding her heavy clothes and raising her arms to the sky as she drifts into the waves, "ya pez, ya nereida, ya reptil, ya diosa de las aguas, algo que ni Violeta misma puede describir porque ella ya no es ella misma, ni aquella que estuvo parada sobre sus pies" (already a fish, already a sea nymph, already a reptile, already a goddess of the

[159] Porzecanski, *Felicidades fugaces*, 172.

[160] Porzecanski, *Felicidades fugaces*, 162, 183.

water, something that not even Violeta can describe because she is already other than herself, other than the person who was just standing on two feet).[161] As a "goddess of the water" like Oxum and Iemanjá, Violeta's transformation evokes beliefs in African-derived religions that deities are "fluid, plural, multiplicitous, and polymorphic," shifting easily among many different human and nonhuman corporeal forms and often defying Western binary notions of gender and sexuality.[162] Similarly, Violeta's unidentifiable face, transformed into the "gelatinous slime" of a hermaphroditic mollusk reflects her return to the primordial indetermination of that "other, female or male...prior to herself."[163]

Violeta returns to the ocean, enacting the final phase of her journey to life's watery origins and closing the circle that opened when the first iridescent scales sprang from her skin. Biological life is hardly a stranger to monumental changes throughout evolutionary time: "From water to land, and from land back to water: in the history of life, organisms have crossed such seemingly impenetrable boundaries many times."[164] Like *Tiktaalik*, the first aquatic animal that walked on land, and *Pakietus*, terrestrial ancestor of whales that returned to the sea,[165] Violeta represents yet another prodigious

[161] Porzecanski, *Felicidades fugaces*, 176.

[162] Méndez, "Transcending Dimorphism," 106-108.

[163] Porzecanski, *Felicidades fugaces*, 172, 37. While this chapter touches on issues of gender and sexuality in Porzecanski's text, it is ripe for discussion in light of queer ecologies and other approaches that explore the relationship between gender, animality, and the environment. The mutual queering of nature and sexuality will be discussed in greater depth in chapter 3.

[164] Zimmer, *At the Water's Edge*, 6.

[165] Zimmer, *At the Water's Edge*, 164.

transgression of the precarious boundaries separating water and land, bodies and membranes, humans and other organisms. Violeta's transspecies body represents simultaneously a return to the deep-sea origins of the human and the web of relatedness that connects humanity with the rest of biological life.

Narrating from the Margins: Daniela Tarazona

With her experimental debut novel, *El animal sobre la piedra,* Daniela Tarazona explores the mutually contingent relationship between humans and other species through a strange corporeal transformation not unlike the one experienced by Violeta Estrugo in *Felicidades fugaces.* Tarazona and other contemporary Mexican writers such as Guadalupe Nettel and Cecilia Eudave are pushing narrative ambiguity in new directions while resignifying themes habitually associated with women's literature, such as violence, gender, writing, and the body.[166] In her own critical writings such as the 2013 essay "El cuerpo insólito en tres novelas de escritoras mexicanas contemporáneas," Tarazona traces an aesthetics of "lo insólito" (the unusual) in contemporary Mexican women's fiction that centers on the body as an amorphous, mutant, and unbounded space.[167] Critics often compare Tarazona's prose with that of Clarice Lispector in its treatment of feminine corporeal and psychological experience with poetics bordering on

[166] Castro Ricalde, "Cuerpo y violencia," 67-69.

[167] Tarazona, "El cuerpo insólito," 195.

the bizarre, the inexplicable, and the supernatural, a style which Tarazona develops further in her subsequent novel, *El beso de la liebre* (The kiss of the hare, 2012).[168]

In contrast to *Felicidades fugaces*, in which an account of Violeta's transformation arrives indirectly via Celeste's retrospective narration, Tarazona's novel is narrated by the protagonist herself who describes in intimate, precise detail her own anatomical, physiological, and sensory experience of becoming a human-reptilian hybrid. As Alejandro Lambarry observes, the novel's narrative structure resembles a winding network of narrow alleyways, with short, loosely organized, nonlinear fragments that are demarcated by large blank spaces that evoke the gaps and fissures of memory and the precariousness of the signifier.[169] In her autobiographical essay "Membranas," Tarazona describes how her narrative style reflects the fragmented experience of life itself: "Narrar es unir pedazos. La narración, o la escritura en sí, está hecha de fragmentos. Los hechos importantes de la vida se dan de cuando en cuando, pero no de modo continuo" (To narrate is to connect pieces together. Narration, or writing itself, is made up of fragments. Life's important events happen from time to time, but not continuously).[170] Through recurring references to writing and witnessing, the novel becomes Irma's diary, her own real-time testimony as she connects the disparate pieces of her corporeal transformation.

[168] See the article "El devenir animal del sujeto femenino" (The becoming-animal of the feminine subject) by Francisco Serratos, and the review "El animal sobre la piedra" (The animal on the rock) by Oliverio Coelho. Tarazona's interest in the Brazilian author is also reflected in her collection of essays, *Clarice Lispector* (2009).

[169] Lambarry, "Estudios animales," 24-28.

[170] Tarazona, "Membranas," 289.

After the trauma of her mother's death, the first signs of Irma's changing body appear in her enlarged eyes: "mis globos redondos, de color rarísimo, ...combinan el verde y el rojo. Restriego mis párpados y descubro que he perdido las pestañas" (my round globes, strangely colored, …combine green with red. I rub my eyelids to discover that my lashes are gone).[171] Irma takes a long flight to an unnamed location, making her way to a deserted beach surrounded by trees where she spends countless hours sleeping on the rocks and sand, soaking up the sun's warm rays like a cold-blooded creature.[172] An eccentric yet empathetic man, who becomes known only as her "compañero" (partner), and his pet anteater Lisandro take Irma into their care and become external "witnesses" to her corporeal journey.[173]

As in *Felicidades fugaces*, the textures and contours of the skin serve as the primary loci of Irma's transspecies metamorphosis. Her human genitals soon disappear beneath a thick layer of rough skin while a new orifice opens in another part of her body.[174] Scales and spines grow from her extremities and head; she begins to molt and secrete venom; her skin emits a bioluminescent glow; and she begins to grow a tail.[175] As in Porzecanski's novel, Irma's anatomical alterations are complemented by physiological changes that impact how she experiences her own embodiment. However, the homodiegetic and real-time narration, as well as the scientific level of detail, render

[171] Tarazona, *El animal*, 51.

[172] Tarazona, *El animal*, 31, 45.

[173] Tarazona, *El animal*, 53, 64.

[174] Tarazona, *El animal*, 63.

[175] Tarazona, *El animal*, 73, 79; 39, 64, 118; 103; 125.

Irma's account particularly vivid: "Respiro de otra manera. Mi caja torácica no se hincha como antes y ese movimiento ha cambiado de ritmo" (I'm breathing differently. My thorax doesn't expand like it did before and the rhythm of its movement has changed).[176] Irma develops a taste for the insects inside her partner's home and later for raw meat.[177] The final phase of her metamorphosis occurs when she begins walking on four legs like a quadrupedal dinosaur.[178] To lend veracity to her descriptions, the author consulted herpetologists at the National Autonomous University of Mexico (UNAM) to clarify important details regarding reptile physiology and reproduction.[179] Furthermore, the novel's textual fragments are occasionally interspersed with rough anatomical sketches resembling the drawings in a biologist's field notebook, and the direct, often telegraphic prose evokes the cadence of scientific writing as Irma records her observations.[180]

Critics have interpreted Irma's transformation from a variety of angles: as a metaphor for the protagonist's spiritual regeneration in response to loss (Cándida Vivero Marín), as a Deleuzian "becoming-animal" that uproots ideological state apparatuses (Scott Kissick) or that deconstructs feminine gender norms (Francisco Serratos), or as a Biblical allusion to the serpent's temptation of Eve (Scott Kissick).[181] For his part,

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[176] Tarazona, *El animal*, 65.

[177] Tarazona, *El animal*, 87, 148.

[178] Tarazona, *El animal*, 119.

[179] Kissick, "El bestiario de Kafka," 29.

[180] Some of the drawings document Irma's molted skin (40), Lisandro's tongue (74), the vomeronasal organs on Irma's palate (86), and the bony protrusions on her head (108).

[181] Vivero Marín, "Los roles de género," 78; Kissick, "El bestiario de Kafka," 26, 29; Serratos, "El devenir animal," 105.

Lambarry reads Irma's metamorphosis as a mystical experience that allows her to transcend material reality.[182] However, rather than a process of transcendence, I argue that the narrator's transformation, deeply rooted in materiality, follows a *descending* trajectory in space and time as it returns to the prehistoric origins of biological life. Irma discovers with enthusiasm a crown of hardened protrusions emerging from her head[183] like the bony knobs edging the domed head of a *Pachycephalosaurus* dinosaur.[184] As "un animal prehistórico" (a prehistoric animal), Irma finds that when contemplating the sea and the beach, "entendí mi destino" (I understood my destiny), knowing in the very fiber of her being that "en la mutación que vivo interviene mi origen" (my origins intervene in the mutation that I am living).[185] In other words, her destiny is to return to point zero on the evolutionary timeline, rekindling the animality from which the human emerges. The radical hybridity of Irma's corporeality is far more suggestive of Mesoamerican images of Coatlicue than any Biblical reference to reptilian "creeping things" of Genesis or the "terrible wilderness" swarming with "poisonous snakes" of Deuteronomy, which only reassert humanity's categorical separation from and "dominion" over nature.[186]

Irma's dreams, like Violeta's, dramatize the meeting of species across evolutionary time and space. Early on in her transformation, Irma's dreams take her to a dense mangrove swamp, where she walks "a nivel del suelo" (at ground level) like a

[182] Lambarry, "Estudios animales," 29.

[183] Tarazona, *El animal*, 107.

[184] Carpenter, "Agonistic Behavior," 19.

[185] Tarazona, *El animal*, 66, 119-20.

[186] *New Oxford Annotated Bible*, Gen. 1.24-28; Deut. 8.15.

quadruped, crawling on all fours "entre las varas, las hojas y el lodo del suelo" (in the sticks, leaves, and mud) with a speed and rhythm unfamiliar to her human form.[187] From her perspective close to the ground, like that of *Homo sapiens*'s quadrupedal ancestors, the trees seem to her immense, their endless tops stretching beyond her line of vision.[188] As Irma enjoys the jungle's panoramas, the trees' brackish odor fills her nostrils and she awakens to find that her arm "era el de otro ser, el de un animal de otra especie" (belonged to another creature, an animal of another species).[189] An indescribable satisfaction fills her as she recalls the mangrove forest of her dreams, "el lugar donde yo fui feliz alguna vez" (the place where I was happy once), a place that harkens back to humanity's deep evolutionary past.[190]

As Irma (re)acquires reptilian corporeal traits, vestiges from a former existence, she never entirely sheds the traces of her human form: "Mi ombligo está seco, lo veo tal como lo he conocido siempre, …la más clara señal de mi pasado... Mi compañero dice que nunca ha visto un reptil con ombligo" (My belly button is dry, it looks like it always has, ...the clearest sign of my past.... My partner says he has never seen a reptile with a belly button).[191] While initially Irma's changes alienate her from her own body—"miré mi cuerpo y lo desconocí" (I saw my body and no longer recognized it)—soon Irma realizes that she is becoming a more complete version of herself: "Estoy hecha para esto,

[187] Tarazona, *El animal*, 26.

[188] Tarazona, *El animal*, 26.

[189] Tarazona, *El animal*, 26.

[190] Tarazona, *El animal*, 27.

[191] Tarazona, *El animal*, 124.

como un animal del principio de los tiempos: me encuentro adecuada y perfecta, he sido hecha para convertirme en mí" (I am made for this, like an animal from the beginning of time: I feel capable and perfect, I have been made to become myself).[192] Irma experiences a profound sense of satisfaction and pride upon contemplating the beauty of her transformed body.[193] As in Porzecanski's novel, the irruption of animality in Irma's flesh resists the reification of the animal as humanity's abject, grotesque other and instead reveals the biological otherness that resides in the very materiality of the human, celebrating the exuberant differences that continually open up bodies and beings to the transformative potential of each moment.

As in *Felicidades fugaces,* in Tarazona's novel the beach with its irresistible magnetism represents a pivotal site of transformation while highlighting the deep-sea origins of biological life. As a fluid space of constant negotiation between water and sand, the beach is in Scott Kissick's Deleuzian reading a significant site for the deterritorialization of Irma's nomadic identity.[194] I contend that littoral spaces in Porzecanski's and Tarazona's novels also symbolize the permeable limits between species as well as the constant crossing of boundaries throughout evolutionary time (in the form of *Tiktaalik* and *Pakietus,* for example). During one of her long and frequent visits to the beach, Irma dives into the waves and listens to "el estruendo marino" (the ocean's roar) while a fish "esquiva [sus] piernas, reconociéndo[la]" (dodges around [her]

[192] Tarazona, *El animal,* 40, 126.

[193] Tarazona, *El animal,* 146.

[194] Kissick, "El bestiario," 29.

legs, recognizing [her]).[195] Irma resurfaces to find that her knees bear the imprint of "las piedras del fondo: los caracoles de alguna vez" (the stones of the deep: snails of sometime).[196] As some of the first animals exhibiting bilateral symmetry, sea snails and other marine gastropods share with humans a distant common ancestor that lived 600 million years ago.[197] As with the "featureless mollusk" that replaces Violeta's face in *Felicidades fugaces,*[198] the immensity of evolutionary time implodes, condensing itself in the indentations on Irma's knees from the snails that "sometime" populated prehistoric seas and whose fossilized remains now form "the stones of the deep." Tarazona's own fascination with the deep seas surfaces in "Membranas," in which she describes the unusual membranes she was born with between her fingers, which inspire her to imagine that "algún día nadaré en altamar como un habitante natural de las profundidades" (one day I will swim the high seas like a natural inhabitant of the deep).[199]

As a transspecies being, Irma preserves all of her human cognitive capabilities which permit her to continue narrating in detail the testimony of her lengthy transformation. Nonetheless, Irma's sensorial changes allow her to perceive the world differently and lend a hybrid focalization to her first-person account: "La incomprensible naturaleza es generosa conmigo aunque pueda pensar lo contrario. Lejos de minimizar mi fuerza orgánica, ella ha preferido otorgarme nuevos talentos. En silencio, dando un paso

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[195] Tarazona, *El animal*, 66-67.

[196] Tarazona, *El animal*, 66.

[197] Myers, "Lopsided Gene," n.p.

[198] Porzecanski, *Felicidades fugaces*, 172.

[199] Tarazona, "Membranas," 292.

tras otro, le agradezco sus consideraciones" (Nature in its inscrutable ways is generous with me even if I might think the opposite. Far from reducing my organic strength, it has preferred to grant me new talents. In silence, putting one foot in front of the other, I give thanks for nature's considerations).[200] Not only do Irma's reptilian eyes look different, but these "strange globes" also allow her to discern minute gradations in colors that once seemed uniform: "el negro no es uno solo, sino que se encuentra contenido en el rojo, el azul y en todos los tonos de la naturaleza" (black is not just one color—it is contained within red, blue, and all of nature's tones).[201] Even when she closes her eyes she can see the shapes of objects through translucent eyelids, an adaptation that allows many reptiles and amphibians to protect their eyes while maintaining visibility.[202] Irma develops a keen sense of smell that allows her to detect people's age, digestive processes, and sexual prowess, as two symmetrical protrusions appear on her soft palate like the highly sensitive vomeronasal organs of snakes and other reptiles.[203]

In addition to her physiological and sensorial changes, Irma's evolving form helps her become more finely attuned to the vibrant semiotics of biological matter. While the physical task of writing her testimony becomes somewhat complicated as fingers morph into claws, the oral and written linguistic faculties of Irma's human form become complemented by new communicative possibilities, such as understanding Lisandro's

[200] Tarazona, *El animal*, 96.

[201] Tarazona, *El animal*, 51, 132.

[202] Tarazona, *El animal*, 58; "Nictitating membrane," n.p.

[203] Tarazona, *El animal*, 86, 146; "Jacobson's organ," n.p.

gestures and signs as their multispecies relationship becomes more nuanced.[204] Irma later interprets and transcribes the groans of the embryo now growing inside her: "ayhugrrrrrruiiuogrrrr."[205] Similar to Julia Kristeva's "echolalia," the animal sounds clamoring in Irma's abdomen represent the semiotic capabilities of material corporeality that subvert the hegemony of the symbolic order and that blur the boundaries between matter and meaning, nature and culture.[206]

Irma's transspecies body and the offspring she produces simultaneously represent a return to the watery origins of the human as well as the animal futures toward which humanity endlessly tends. Evolutionary theory not only accounts for the origin of species—that is, the lines of descent through which contemporary organisms emerged from previous ones—but also, and perhaps more importantly, it emphasizes how the dance of difference within existing species impels the emergence of new life forms. In other words, *Homo sapiens* is and always has been in the process of self-overcoming, becoming nonhuman through the force of difference that "stretches, transforms, and opens up any identity to its provisional vicissitudes, its shimmering self-variations that enable it to become other than what it is."[207] The human emerges as an unstable category not only in relation to the life forms that came before it, but also with respect to the animal forces that come after it.

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[204] Tarazona, *El animal*, 123, 64.

[205] Tarazona, *El animal*, 151.

[206] Kristeva, *Desire in Language*, 65.

[207] Grosz, *Becoming Undone*, 91.

Irma's egg represents the emergence of a new species—not simply human yet not fully reptilian—along an evolutionary line of descent that extends into the future, pushing the bounds of the human beyond its present form. Through a performative sexuality that crosses species lines, Irma becomes impregnated when she positions herself over the patch of sand where her partner had masturbated moments before.[208] The embryo, which is nourished simultaneously by the fluid-filled egg that surrounds it and by a placenta, demonstrates an embryonic development that blurs the boundaries between mammal and reptile, human and nonhuman.[209] As the embryo squirms within her, Irma imagines it going through distinct stages of development, first having lungs, then growing wings, then becoming an amphibian, then growing fins which later turn into ribs.[210] As a species that, like Irma, "es todas las bestias de la creación, [cuyos] cambios suman la historia animal" (is all of the beasts of creation, [whose] changes sum up animal history), Irma's progeny accumulates within its body what Grosz calls the "shimmering self-variations," the dynamic differences that impel the entire history of biological life.[211] While the embryo emerges from Irma's own transspecies corporeality, this next generation already exhibits traits that move beyond its mother's human hybrid form: "Ella tiene una glándula que yo no he desarrollado. La lleva entre los dos ojos y por allí recibirá los detalles de la luz. Es un tercer ojo que distingue la luminosidad pero no los colores" (She has a gland that I haven't developed. Situated between her two eyes, it catches details of

[208]. Tarazona, *El animal*, 69.

[209] Tarazona, *El animal*, 149.

[210] Tarazona, *El animal*, 145-52.

[211] Tarazona, *El animal*, 145-52; Grosz, *Becoming Undone*, 91.

light. It is a third eye that senses brightness but not colors).[212] While performing lines of descent leading up to the present, the embryo also embodies the nonhuman future toward which humanity incessantly leans, the animality to which it inevitably returns.

In contrast to Irma's comprehensive and minutely precise account of her corporeal metamorphosis, other details of her life remain cloudy at best and temporal twists and turns complicate the process of reconstructing a timeline. At one point Irma wakes up in a hospital where the nursing staff keep her heavily medicated and provide few details pertaining to her location or the reason for her hospitalization.[213] After a visit from a doctor who is pleased with her "recovery," Irma packs her suitcase and leaves the hospital unseen, concealing her clawed hands in her pockets while heading straight for the beach to meet her partner.[214] While some critics claim that this incongruous episode puts Irma's mental health into question and therefore casts doubt on her entire testimony,[215] I concur with Maricruz Castro Ricalde that reducing Irma's metamorphosis to the musings of a mentally unstable narrator strip Irma of her position as a political subject and feed into normalizing discourses.[216] Furthermore, I contend that the broken,

[212] Tarazona, *El animal*, 153.

[213] Tarazona, *El animal*, 91-92.

[214] Tarazona, *El animal*, 92-93.

[215] See, for instance, Cándida Vivero Marín: "el proyecto feminista planteado a lo largo de la historia es anulado dando paso a una visión de lo femenino tradicional al colocar todo el suceso en el ámbito de la locura o la sinrazón" (the feminist project proposed throughout the story is nullified, giving way to a traditional feminist vision by situating the entire episode in the realm of madness and irrationality) ("Roles de género," 79).

[216] Castro Ricalde, "Cuerpo y violencia," 77.

empty egg that Irma finds under her hospital bed serves as material "proof" of her metamorphosis and the more-than-human progeny she creates as a result.[217]

As I suggest above, Irma's human-reptilian transformation shares far more similarities with Mesoamerican traditions surrounding Coatlicue than with anthropocentric Judeo-Christian narratives. Mexican poet and classical scholar Rubén Bonifaz Nuño, who has published extensively on ancient Mesoamerican art, iconography, and epistemology, dedicates an entire volume, *Cosmogonía antigua de México* (Ancient Mexican cosmogony, 2005), to the nine-foot-tall statue of Coatlicue on display at the National Museum of Anthropology in Mexico City.[218] In terms that seem to echo in Irma's account of her own reptilian-human corporeality, Bonifaz Nuño describes Coatlicue as "la figura de un ser humano, una mujer, varias de cuyas partes se ven sustituidas por otras propias de la serpiente" (the figure of a human being, a woman, whose various parts are substituted by those of a snake).[219] Indeed, the goddess's human figure not only boasts a "skirt of snakes"—from which her name derives—but serpentine scales, eyes, and undulating tails make up her joints and appendages, and in place of her head emerge those of two large snakes.[220] Unearthed by indigenous slaves during the construction of Mexico City's Plaza Mayor in 1790, Spanish colonizers quickly had the statue reburied when they understood Coatlicue's deep cosmological significance to

[217] Tarazona, *El animal*, 170.

[218] Bonifaz Nuño, *Cosmogonía antigua*, 7.

[219] Bonifaz Nuño, *Cosmogonía antigua*, 12.

[220] Bonifaz Nuño, *Cosmogonía antigua*, 12-13.

indigenous peoples, who nonetheless continued venerating the monument in secret.[221] It is without a doubt, as Bonifaz Nuño defends, the most significant monument of ancient Mexico because it represents the creation of the universe when Coatlicue's body was violently split apart to form the earth and the sky. Drawing connections between Mesoamerican story cycles and modern Big Bang theory, the Mexican poet explains that "en términos modernos: este monumento es la representación de la materia sometida a la infinita condensación de la masa a temperatura infinita. En tales condiciones la materia se vio obligada a explotar, y explotó, y de esa manera el universo comenzó a ser creado" (in modern terms, this monument represents what happens when matter reaches infinite density at infinite temperatures. In these conditions, matter is pushed to the point of explosion, and indeed it exploded, giving rise to the creation of the universe).[222] In the same way that astrophysicists calculate that our universe is still expanding—or that biologists trace the emergence of new species along evolutionary lines—indigenous peoples of Mesoamerica understand creation to be "no un hecho único, sino un proceso interminable" (not a single event, but rather a process without end).[223] Irma's transformation into "an animal from the beginning of time" as well as her transspecies

[221] The statue was again unearthed in the 19th century when Alexander von Humboldt petitioned to study it but was reburied shortly thereafter. Finally in 1892 it was permanently recovered to be displayed in Madrid during celebrations of the 400-year anniversary of the "discovery" of the Americas, afterward making its way to Mexico City's National Museum of Anthropology where it stands today (Bonifaz Nuño, *Cosmogonía antigua*, 16-17).

[222] Bonifaz Nuño, *Cosmogonía antigua*, 7-8.

[223] Bonifaz Nuño, *Cosmogonía antigua*, 10.

progeny link her to the explosive and unending generative force embodied in the snake goddess Coatlicue.[224]

Irma's transformation into a dinosaur or reptilian goddess at the beginning of time not only highlights the origins of biological life and the universe, but it also materializes the "shimmering self-variations" that are the driving force of evolution, generating the species that exist today while pushing them to become more than what they are.[225] Revealing the extent to which the animal dwells in the spaces that surround and permeate the human, Irma's mysterious hybrid embryo embodies the nonhuman future toward which humanity always already tends. Far from the categorically demarcated and bounded human subject in Western thought, what emerges is a humanity more clearly defined by fluidity and multiplicity than by fixed, impenetrable boundaries.

The Fiber of Our Being: Alejandra Zermeño

Fluidity, multiplicity, and plurality are also the defining characteristics of the human and not-so-human corporeality portrayed in the work of Mexican artist Alejandra Zermeño. After completing graduate work at UNAM's Faculty of Arts and Design, Zermeño has quickly gained international recognition with pieces exhibited in museums in Mexico, Japan, Germany, Spain, Canada, and the United States. Through combinations of diverse techniques ranging from casting and laser-cutting to painting and embroidery, her mixed-media sculptures constantly push the boundaries of the human body,

[224] Tarazona, *El animal*, 126.

[225] Grosz, *Becoming Undone*, 91.

emphasizing its radical openness and mutually-constitutive relationship with its intimate others. While Zermeño favors the human form as the starting point for her sculptures since it establishes a level of familiarity for the viewer to identify with the other, the decidedly nonhuman characteristics of her anthropomorphic figures point toward humanity as what Anna Tsing calls "an interspecies relationship," entangled in a vast web of relations that traverses the depths of evolutionary time and space.[226]

In series such as *Sinfonía celular* (Cellular symphony, 2014) and *Célula madre* (Stem cell, 2014; Fig. 2.1), intricate reliefs cut in wood, Japanese washi tape, handmade paper, and embroidered fabrics symbolically represent, in Zermeño's words, "un cuerpo humano abierto, amplificado y visto por el microscopio" (a human body opened up, enlarged, and looked at under the microscope) to reveal the "células y tejidos de nuestros cuerpos" (cells and woven textures of our bodies).[227] The parallel lines of brightly colored washi tape that form the backgrounds of *Sinfonía celular en rojo* (Cellular symphony in red; Fig. 2.2) and *Sinfonía celular en naranja* (Cellular symphony in orange) resemble the streaking patterns of bacterial colonies growing in a Petri dish. Not only did humans and all other life forms on Earth evolve from unicellular organisms, but a vast assortment of symbiotic microbes populate the surfaces and interiors of the human body, performing metabolic and immunological functions vital to human survival.[228] As Alaimo states, the constant interchanges occurring across bodies, boundaries and

[226] Zermeño, "Bida Alejandra," n.p.; Tsing, "Unruly Edges," 144.

[227] Zermeño, "¿De qué trata?," n.p.

[228] Stein, "Finally, A Map," n.p.

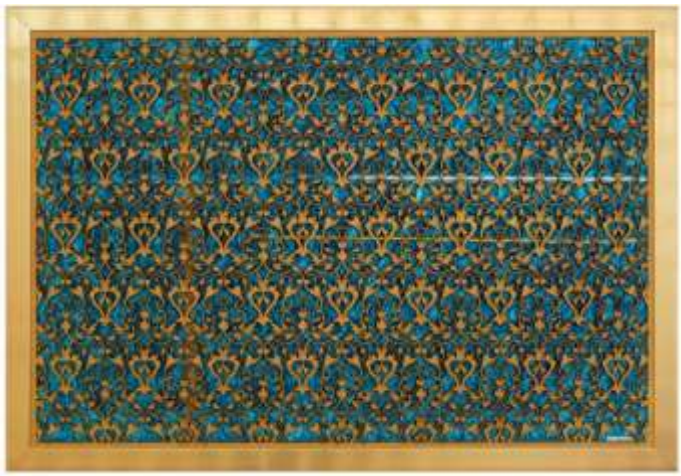


Figure 2.1. *Célula madre, horizontal*. Courtesy of Alejandra Zermeño



Figure 2.2. *Sinfonía celular en rojo*. Courtesy of Alejandra Zermeño

membranes generate a "sense of enfolding, in which the 'outside' is always already within, inhabiting and transforming what may or may not be still 'human.'"[229] The fact that microbial cells in our bodies outnumber human cells ten to one reveals humanity's inextricable relationship with its deep evolutionary past, as well as the extent to which the human already tends toward something other than itself.

Transspecies beings flourish in Zermeño's series *BiDA: Biología interna de los animales* (Internal biology of animals), which debuted with eleven sculptures at UNAM's

[229] Alaimo, *Bodily Natures*, 154.

Museo Universitario del Chopo in 2012 and was subsequently exhibited with twenty more pieces at the Galería X-Espacio de Arte, also in Mexico City, in 2013. A play on *vida* (life), *BiDA* pays homage to Zermeño's late mother who died of cancer while celebrating humanity's immersion within the vast diversity of biological life.[230] The sculptures consist of life-sized resin casts of female, male, and androgynous human bodies covered with woven, embroidered, and knitted fabrics that suggest the fur, plumage, and spines of other organisms. Some of the sculptures are dedicated to everyday creatures found in many backyards—blackbirds, ants, and porcupines—while others represent more elusive species or those threatened by extinction such as jaguars, orangutans, and birds-of-paradise. A global ecological consciousness emerges as animals native to the Americas appear alongside those found in Indonesia, South Asia, and Sub-Saharan Africa. By "clothing" the human shape with colors, textures, and tissues reminiscent of animals near and far, Zermeño foregrounds how humans are points of intersection in an immense "community of descent" that encompasses all species on the planet.[231]

As in *Sinfonía celular* and *Célula madre*, the internal biology of human and nonhuman bodies takes center stage in *BiDA*, in which Zermeño's use of textiles makes tangible the often invisible threads that entwine the entirety of biological life. As Grosz explains, there is "an inner force that life shares with the forms of life that come before it, linking it to a vast chain of life that no living being, including man, may be conscious of,

[230] Riveroll, "Encara Zermeño," 16.

[231] Darwin, *Descent of Man*, 1: 30.

yet which produces life interconnected in its every detail to all other living forms."[232] In *Biología interna de un macaco Rhesus* (Internal biology of a rhesus macaque; Fig. 2.3), a pair of human busts, elevated on poles and facing away from each other, are covered in fine black and green nylon strings interspersed with black beads and sequins that drape to the floor and join the two heads. According to Zermeño, the double busts symbolize "la evolución del ser humano en la tierra" (human evolution on Earth), specifically in relation to the rhesus macaque with whom humans, among other primates, share a relatively recent common ancestor.[233]

Zermeño goes on to explain that the threads suspended across the space separating the two figures represent "los lazos emocionales, físicos o genéticos que tenemos con



Figure 2.3. *Biología interna de un macaco Rhesus.* Courtesy of Alejandra Zermeño

[232] Grosz, *Becoming Undone*, 19.

[233] Zermeño, "Biología interna," n.p.

cada una de las especies que habitan en el planeta" (the emotional, physical, or genetic ties we have with each species inhabiting the planet).[234] As I argue elsewhere, material and figurative threads can serve as metaphors of the microscopic and cosmic interconnectedness of biological life through genetic material, as in the installations and visual poetry of Chilean artist Cecilia Vicuña.[235] In fact, the Latin roots of the Spanish word *hilo* (thread)—namely, the noun *filum* (thread, filament) and the verb *filare* (spin)—suggest an intimate connection between thread, helix, and the spiraling energy channeled in the fiber arts. In Zermeño's *Biología interna de un macaco Rhesus,* the strings composed of one green and one black thread twisted together mimic DNA's double helix, while the beads and sequins evoke the individual nucleotides that bond the strands together, forming a single chromosome at the heart of our cells.

In other sculptures in the *BiDA* series, suspended or draped threads suggest the genetic codes that link humans to species far-removed from our close mammalian relatives. In *Biología interna de un colibrí* (Internal biology of a hummingbird; Fig. 2.4), three busts covered in knitted blue and magenta yarn are joined together by suspended beaded threads, symbolically forming at once a chain of relatedness across species lines and a line of descent through evolutionary time. The beaded thread motif continues in *Biología interna de un camaleón* (Internal biology of a chameleon; Fig. 2.5), in which bright red tassels drape down from a single bust, while the twists and knots of a macramé rope crossing over the human face mimic the bunched-up strands of a chromosome,

[234] Zermeño, "Biología interna," n.p,

[235] Coleman, "El huso," 90.



Figure 2.4. *Biología interna de un colibrí.* Courtesy of Alejandra Zermeño



Figure 2.5. *Biología interna de un camaleón.* Detail (*right*). Courtesy of Alejandra Zermeño

pointing toward the fact that even reptiles share a common evolutionary history with humans. Henri Bergson, one of Darwin's philosophical followers, explains that "[t]o create the future requires preparatory action in the present, to prepare what will be is to utilize what has been; life therefore is duration in which past, present and future tread one

on another."[236] In other words, past, present and future converge within corporeal materiality to form an "indivisible continuity."[237] Claes Oldenburg, Swedish-American artist and major proponent of the "soft sculpture" movement of the 1960s, speaks of the inherent temporality of fibers and textiles, affirming that their fluidity and resistance to fixity give them a kind of "life" that runs along the axes of space as well as time.[238] The threads in Zermeño's sculptures that make visible the animality already latent within human corporeality suggest the dynamic historicity of biological matter as it changes through evolutionary time.

Zermeño's soft sculpture methods using threads and yarns draw connections between contemporary art practice and Mesoamerican indigenous aesthetics, revealing the alternative epistemologies and corporeal ontologies that inform her work. The artist describes in an interview a trip she took as a teenager to the Chihuahuan Desert where she became captivated by the yarn paintings of the Huichol people who live in the Mexican states of Jalisco, Nayarit, and Durango.[239] Made by pressing brightly-colored yarn into beeswax or resin spread on a flat board, Huichol yarn paintings depict important deities, stories, and ceremonies emphasizing the people's relationship with nature and the cosmos.[240] While the large and elaborate yarn paintings internationally popularized in the 1970s by Huichol artists such as José Benítez Sánchez and Guadalupe de la Cruz Ríos

[236] Bergson, *Mind-Energy*, 13.

[237] Bergson, *Mind-Energy*, 13.

[238] Quoted in Scott, *Textile Perspectives*, 10.

[239] Zermeño, Interview, n.p.

[240] MacLean, "The Origins," 65-66.

serve a primarily decorative purpose, they evolved from *neirika*, small ceremonial boards believed to possess the power to materialize the wishes of their creators.[241]

Huichol art and spirituality emphasize the intimate relationship between story, thread, and the origin and evolution of the universe. As Johannes Neurath explains in *La vida de las imágenes: arte huichol* (The life of images: Huichol art, 2013), "[p]ara apreciar el arte huichol es importante tomar en cuenta [los] símbolos textiles, los hilos como rutas y narraciones, el mundo como tejido, la creación artística como actividad cosmogónica" ([t]o appreciate Huichol art it is important to take into account textile symbols, threads as paths and narrations, the world as a woven fabric, and artistic creation as a cosmogonic activity).[242] Anthropologist Robert Mowry Zingg describes one Huichol story in which Elder Brother Deer or *Kauyumari* created all the animals as well as a human "singing shaman" by depicting them in a sacred yarn painting.[243] Some Huicholes believe that humans are descended from wolf ancestors whom the gods taught to perform ceremonies and cultivate crops.[244] As in Zermeño's sculptures, Huichol stories and their visual representations highlight the extent to which human origins are intimately tied up with the evolution of other species.

Zermeño describes the multispecies textile coverings of her sculptures as a kind of "second skin" that "clothes" the anthropomorphic resin casts, generating the

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[241] MacLean, "The Origins," 73, 66. There is some debate concerning the appropriate term for traditional Huichol votive yarn paintings. Hope MacLean notes that while anthropologist Robert Mowry Zingg preferred *itali*, most modern Huichol artists use *neirika* (*The Huichols*, 66).

[242] Neurath, *Vida de las imágenes*, 81.

[243] Zingg, *The Huichols*, 629.

[244] MacLean, "Origins of Huichol," 76.

differentiation and specificity that is projected onto *BiDA*'s largely uniform human shapes.[245] Many indigenous groups in Latin America employ the metaphor of clothing to reveal the deep ontological connections between humans and other organisms. As Viveiros de Castro observes, in Amerindian philosophy bodies are conceived of as a kind of "clothing" that covers a common spiritual "essence" or subjectivity that is shared by all species. Rather than a disguise, this corporeal fabric constitutes "distinctive equipment, endowed with the affects and capacities which define each animal" and which account for their specific points of view as sentient beings.[246] While in Amazonian indigenous cultures shamans and other "trans-specific beings" can assume the point of view of other species, temporarily leaving their own bodily "clothing" behind, in Huichol and other Mesoamerican traditions shamans have the capacity to assume multiple perspectives and bodily forms simultaneously through "multiempatía" (multiempathy).[247] Similarly, in the "multiempathic" transspecies sculptures that make up *BiDA*, human and nonhuman corporeal characteristics overlap and intertwine as the contours of the human body remain visible through its nonhuman clothing, embodying multiple perspectives and corporealities at once. Likewise, the transspecies beings in Porzecanski's and Tarazona's novels gradually acquire nonhuman anatomical and physiological characteristics without shedding their human form altogether, revealing human corporeality as a space in which multiple genealogies and perspectives converge.

[245] Zermeño, Interview, n.p.

[246] Castro, "Cosmological Deixis," 482.

[247] Castro, "Cosmological Deixis," 471-72; Neurath, *Vida de las imágenes*, 98.

These shifting delineations between human and nonhuman in the same bodily form recognize the inherent risks that shamans and other "trans-specific beings" undertake when entering the corporeal and perceptual worlds of other species. Many symbolic anthropologists and multispecies ethnographers describe the importance of maintaining the material differences that allow species to engage with each other as sentient, intentional members of what Eduardo Kohn, drawing on Viveiros de Castro's concept of "perspectival naturalism," terms an "ecology of selves," a complex web of multispecies interactions grounded in the recognition that "all beings, and not just humans, engage with the world and with each other as selves—that is, as beings that have a point of view" and that recognize, represent, and communicate with each other through sign processes emerging from differentiated worlds.[248] Losing sight of such differences by failing to see other living beings as "selves"—or by allowing oneself to become swallowed up in the self-ness of another being—has catastrophic consequences, rendering an individual "soul-blind" (a kind of death within life) and severing him/her from the web of relations that make up multinatural communities.[249] In this context, the hybrid yet differentiated corporealities represented in Zermeño's sculptures, as well as the transformational characters in Porzecanski's and Tarazona's novels which cross species boundaries without dissolving their human form, represent this preservation of "self-ness" crucial to sustaining human and nonhuman ways of life in biosocial communities.

[248] Kohn, "How Dogs Dream," 4-5.

[249] Kohn, *How Forests Think,* 116-17.

The question of multiple, simultaneous, yet differentiated perspectives in Zermeño's work finds its most vivid expression in *Biología interna de una cigüeña* (Internal biology of a stork; Fig. 2.6) and *Biología interna de un jaguar negro* (Internal biology of a black jaguar; Fig. 2.7). While in most of the *BiDA* sculptures only a thin layer of fabric or yarn covers the face, following and highlighting the contours of the nose, mouth, eyes, and other features, in these two sculptures the humanoid faces become nearly unrecognizable as such through the use of three-dimensional textiles that create depth beyond the surface of the resin cast. In the stork sculpture, avian features encase human ones in the form of a yellow and black bill-like protrusion appearing below a cluster of wispy white feathers. The human legs, cut off at the knees, stand on two narrow poles like the legs of a stork standing in water. In place of human arms, knitted black panels wrap around the human torso like wings. As an example of "multiempathy," the sculpture maintains its rudimentary human form and focalization while donning the "distinctive equipment" that allows the stork to perceive and thrive in its wetland habitat.[250]

Another "multiempathic" being, the jaguar sculpture depicts a human body entirely covered in black knitted yarn with feet on the floor, hunched over in a seated position. However, the sculpture's elongated nose laying low on the face suggests a jaguar's heightened sense of smell, and the large yellow discs of stiff felt protruding from the eyes mimic the cat's incandescent stare that enables it to pierce the darkness in the depths of a forest. As perceptual apparatus forming part of the animal's bodily "clothing"

[250] Neurath, *Vida de las imágenes*, 98; Castro, "Cosmological Deixis," 482.



Figure 2.6. *Biología interna de una cigüeña*: detail (*left*), backside (*right*). Courtesy of Alejandra Zermeño

that, as Viveiros de Castro explains, allows it to experience and transform reality, the feline eyes and nose combine with the human sculptural form, which embodies simultaneously multiple perspectives and corporealities reaching across species lines.[251] Indeed, it is the figure of the jaguar which Viveiros de Castro employs to poignangly illustrate his discussion of perspectival multinaturalism and which Kohn subsequently utilizes to ilustrate what he terms "soul-blindness," since those who fail to recognize jaguars as "selves" run the risk of losing their own "self-ness" in becoming the jaguar's prey.[252]

The hunched figure of Zermeño's black jaguar sits on a small pedestal whose nodular surface and widened base resemble the rough texture and shape of a tree trunk. This stump of a severed tree metaphorically represents the rapid destruction of jaguar habitat through deforestation, agricultural and industrial development, petroleum

[251] Castro, "Cosmological Deixis," 482.

[252] Kohn, *How Forests Think,* 1. Castro, "Cosmological Deixis," 470, 477-78.



Figure 2.7. *Biología interna de un jaguar negro*. Detail (*right*). Courtesy of Alejandra Zermeño

extraction, and other global economic forces contributing to the threatened status of *Panthera onca*, whose historic range from the southern United States to central Argentina has decreased dramatically by nearly 50% over the past century.[253] A species sacred to ancient and contemporary indigenous groups across Latin America, the jaguar's future entwines with our own as the loss of photosynthesizing plants in the Lacandón Jungle, Amazon rainforest, and other stretches of jaguar habitat contributes to increased concentrations of carbon in the Earth's atmosphere, endangering the future of all species including humans. Furthermore, as more and more of the jaguar's forested range is razed, so too the lands and countless other species that indigenous Maya and other ethnic minority groups rely on for their material and cultural survival are becoming increasingly threatened. The intimate linkages between jaguar and human flourishing burst onto the international stage with the 1994 Zapatista uprising in Chiapas, Mexico, whose largely

[253] Swank and Teer, "Status of the Jaguar," 14; Sanderson et al., "Planning to Save," 58.

indigenous participants demand fair access to ancestral territories and natural resources which have been systematically funneled out of Chiapas by the Mexican government and multinational corporate interests.[254] As the region most closely associated with the Zapatistas' movement for ecosocial justice, the Lacandón Jungle is one of the last remaining North American rainforests large enough to support jaguars.[255]

Two other sculptures in Zermeño's collection explore humans' relationship with emblematic rainforest-dwelling species as well as the evolutionary continuum linking human language with semiotic and aesthetic processes in nature. The brightly colored and highly glossy figures of *Biología interna de un ave del paraíso* (Internal biology of a bird-of-paradise; Fig. 2.8) and *Biología interna de un capulinero de Vogelkop* (Internal biology of a Vogelkop bowerbird; Fig. 2.9) depict human forms with large bunches of resin flowers sprouting from their mouths. Found in the dense tropical forests of Indonesia, Papua New Guinea, and eastern Australia, bowerbirds, birds-of-paradise, and lyrebirds are increasingly threatened by hunting and loss of habitat. Julieta Riveroll argues that while the flowers allude to "la destreza del animal para imitar los sonidos del

[254] In their titles (i.e. "Declaración de la Selva Lacandona" ["Declaration of the Lacandón Jungle"]) as well as in their constant reiteration of "tierra" (land / earth) as one of the eleven axes of their platform, all six manifestos issued thus far from by Zapatista movement foreground the pivotal role of the Lacandón Jungle and its "habitantes originales" (original inhabitants) in their struggle for justice ("Tercera declaración," n.p.). Victor M. Toledo, Mexican political ecologist and regular columnist for the Mexico City newspaper *La jornada*, has written extensively on Zapatismo as an ecological, land-based movement that aims to construct "alternative modernities" based on both traditional and modern sustainable practices. As he argues in "Zapata ecológico" (Ecological Zapata), the Zapatista uprising "ha sido probablemente provocada por las voces antiguas y profundas de los seres de la Selva Lacandona, pero es también la consecuencia de una extraordinaria imaginación política y una aguda percepción de los fenómenos nacionales, internacionales y globales del mundo contemporáneo" (has likely been impelled by the ancient and profound voices of the beings inhabiting the Lacandón Jungle, but it is also the consequence of an extraordinary political imagination and a keen perception of national, international, and global phenomena shaping the contemporary world) (40).

[255] Stevenson, "Unusual Battle Lines," n.p.



Figure 2.8. *Biología interna de un ave del paraíso.* Courtesy of Alejandra Zermeño



Figure 2.9. *Biología interna de un capulinero de Vogelkop*. Detail (*right*). Courtesy of Alejandra Zermeño

bosque" (the animal's skill at imitating the sounds of the forest), the gold and red jewel-like incrustations adorning the figures' bodies "simbolizan su propensión al coleccionismo" (symbolize its propensity for collecting).[256] In an episode of *The Life of Birds*, English naturalist David Attenborough showed that these species possess highly

[256] Riveroll, "Encara Zermeño," 16.

sophisticated capacities for vocal mimicry that enable them to imitate nearly any sound from the calls of other animals to anthropogenic noises such as car engines and chainsaws.[257]

In contrast to Herbert Spencer's claim that music derived from language, Darwin contends that the human capacity for speech actually evolved from the musical cadences and rhythms found in nature.[258] Furthermore, male bowerbirds are known to construct elaborate bowers, spending hours arranging brightly colored objects such as flowers, leaves, feathers, and even discarded bits of plastic and metal, in hopes of attracting a female. Grosz contends that the visual displays and sonorous performances in animal courtship practices constitute a genuine repurposing and recontextualization of materiality, expanding life beyond the instinctual struggle for survival and giving rise to nature's artistry.[259] Thus, animal courtship is directly tied up with the evolutionary origins of aesthetics, communication, and cognition—capacities once considered exclusive to the human sphere. Zermeño's sculptures not only reveal *Homo sapiens*'s immersion within a vast web of evolutionary continuities, but they also challenge teleological discourses that draw categorical distinctions between capacities that purport to set humans apart.

[257] "Signals and Songs," n.p.

[258] Darwin, *Descent of Man*, 2: 596-7.

[259] Grosz, *Becoming Undone*, 172.

Conclusion: We Have Never Been Human[260]

As significant expressions of a vibrant debate concerning the nonhuman in Latin American literature and art, *Felicidades fugaces*, *El animal sobre la piedra*, and *BiDA* evoke a new sense of humanity as a constant process of configuration and reconfiguration in relation to its innate animality. These textual and visual forms of cultural expression suggest that anthropomorphic representations of nonhuman creatures can actually subvert the anthropocentric ideologies that underpin Western notions of human superiority and exceptionality in relation to other species and the environment. Jane Bennett contends in *Vibrant Matter: A Political Ecology of Things* (2010) that this kind of "strategic anthropomorphism" can "catalyze a sensibility that finds a world filled not with ontologically distinct categories of beings (subjects and objects) but with variously composed materialities that form confederations."[261] By emphasizing the similarities that cross bodily boundaries and species lines, differences can be reconceptualized as non-hierarchical manifestations of biological exuberance. In other words, anthropomorphic representations such as the human-animal hybrids in Porzecanski's, Tarazona's, and Zermeño's works, like the Huichol people's storied yarn paintings, serve as cosmological "seeing instruments" that make visible humanity's place within a broader biocultural fabric, allowing us to enter the world of the other to experience reality through

[260] Here I am borrowing Donna Haraway's evocative section heading in *When Species Meet*, a play on the title of Bruno Latour's pivotal text, *We Have Never Been Modern* (1991). Just as Latour traces an anthropology of science that challenges the dualistic separation modernity draws between nature and society, Haraway contends that "we have never been the philosopher's human, we are bodies in braided, ontic, and antic relatings" (165). Similarly, transspecies beings reveal the mutual contingency of human and nonhuman bodies across evolutionary time and space, making it difficult to maintain "the human" itself as a stable ontological category.

[261] Bennett, *Vibrant Matter*, 99.

perspectives that are at once intimately similar to and unspeakably different from our own.[262]

While Violeta's corporeal transformation and return to the generative depths of the sea highlight the abyssal origins of the human, Irma's metamorphosis and the progeny she bears represent the exuberance of difference that impels species to become more than what they are. In Zermeño's sculptures, threads and fabrics cross species boundaries like the genetic material linking humans to all biological life in the same "community of descent." What emerges is a humanity that, in Grosz's words, "no longer knows or masters itself, ...but that becomes other in spite of itself, that returns to those animal forces that enable all of life to ceaselessly become."[263] The transspecies beings in these contemporary novels and sculptural installations propose a new concept of humanity as a species already transforming into something other than itself—an "other" that it has in fact always been since the beginning. These figures evoke humanity's fundamental continuity with all biological life and subvert humanist discourses of superiority with decisive ethical implications for the precarious future of our shared planet.

[262] Adamson, *American Indian Literature*, 141.

[263] Grosz, *Becoming Undone*, 24.

CHAPTER 3

LUCÍA PUENZO AND MARÍA FERNANDA CARDOSO: STRANGE COMPANIONS, QUEER FUTURES

> [G]ender is kaleidoscopic, sexualities are multiple, and the categories of male and female are fluid and transmutable.
>
> -Bruce Bagemihl, *Biological Exuberance*

In the previous chapter, I discussed the ways in which transspecies beings in the work of Teresa Porzecanski, Daniela Tarazona, and Alejandra Zermeño materialize the genetic connections that traverse the incomprehensible expanses of evolutionary time and space, linking humans to the vast diversity of life on the planet and revealing our co-constitutive entanglements with the nonhuman others that entail the past, present, and future of humanity in its becoming. I also discussed how transspecies beings, which interrogate the boundaries between different orders of life, crystallize both modern biological and evolutionary understandings of human-nonhuman relationships as well as indigenous and other-than-dominant peoples' sophisticated knowledge systems about multispecies entanglements thousands of years in the making. From the boundary-crossing deities and shamanic rituals in Uruguayan Umbanda and other African-derived religions to the multiespecies origin stories embodied in the ancient Mesoamerican snake-human goddess Coatlicue and Huichol cosmic yarn paintings, transspecies beings tell key stories about where we came from, where we are now, and where we are going in connection with all of the nonhuman others with whom we share the same planet at risk.

Transspecies beings are also deeply unsettling in the context of Western, Cartesian, Judeo-Christian humanist traditions, because they bring humanity's utter others into a proximity and intimacy that are far too close for comfort, destabilizing Cartesian philosophical accounts of (certain) human individuals as rational, neatly bounded subjects that are categorically separate from and superior to all other creatures. In this vein, colonial, patriarchal, and heterosexist projects throughout history have repeatedly predicated themselves on the essentialist "animalization" of entire groups of people based on race, class, gender, and sexuality in order to rationalize cultural obliteration, mass enslavement, and genocide, events which are tightly bound up in environmental justice issues of displacement, resource extraction, and destruction of human and nonhuman multinatural communities. Western traditions that demonize that which is deviant or unfamiliar as "monstrous" and "grotesque" (read: "unnatural") are also tied up in the vilification of sexualities and gender performativities that resist heterosexist categorizations. In other words, "monstrous" and "grotesque" can be considered homophobic euphemisms for "queer," and thus the policing of species boundaries and the policing of gender lines form two sides of the same coin.

However, as I suggested in the previous chapter, the modern biological sciences have long engaged—if often problematically—with questions of species, classification, origins, and sexual diversity, as expressed for example in Darwin's "pleasant genealogy" connecting *Homo sapiens* to a hermaphroditic ancestor.[264] For their part, indigenous and other-than-dominant cultures of Latin America and around the world have for thousands

[264] Quoted in Zimmer, *At the Water's Edge*, 23.

of years developed sophisticated understandings of sexual diversity and gender performativity that resist Western categorizational regimes, and ritual shape-shifting practices that traverse species lines are often associated with fluid, amorphous corporealities and sexualities. For example, in Gloria Anzaldúa's groundbreaking work of Chicana feminism, *Borderlands/La Frontera* (1987), Coatlicue's explosive more-than-human hybridity resists fixity and implodes binary logic of all kinds, becoming a powerful force for challenging hegemonic discourses of gender within and beyond Chicano nationalist movements while forging a space for queer becomings and inclusive coalitionist politics.[265] In light of epistemological connections between the modern biological sciences and indigenous theories about biological and sexual diversity, in this chapter I will explore the ways in which multispecies relationships that blur the boundaries between genders, sexualities, and orders of life can help us dismantle patriarchal, anthropocentric discourses about what constitutes the "natural." With particular attention to the Argentine films *XXY* (2007) and *El niño pez* (*The Fish Child*) (2009) directed by Lucía Puenzo (1976-) and the sculptural installations of Colombian artist María Fernanda Cardoso (1963-), I argue that queer performativities both within and beyond the scope of the human help us imagine differing futurities of multispecies flourishing beyond the planetary ecological crisis of the Anthropocene.

[265] Various scholars have discussed Anzaldúa's queer reading of Coatlicue in *Borderlands/La Frontera*. See, for example, Suzanne Bost, "From Race/Sex/etc. to Glucose, Feeding Tube, and Mourning" (2008), and chapter 4 of Lee Bebout's *Mythohistorical Interventions* (2011). In "¡Todos Somos Indios! Revolutionary Imagination, Alternative Modernity, and Transnational Organizing in the Work of Silko, Tamez, and Anzaldúa" (2012), Adamson draws on Bost's essay to argue that that Anzaldúa's lifelong struggle with illnesses linked to environmental toxins helped her move past identity politics and instead formulate a coalitional politics that crosses bodies and borders, revealing the "points of interconnections between various revolutionary movements" and making "new possibilities for alliance visible" (19).

Constructing the "Natural:" Heterosexism, Repro-centrism, and Classificatory Regimes

In the first volume of *The History of Sexuality* (1976), Michel Foucault documents how modern concepts of sexuality in Western culture became consolidated in the sociohistorical context of nineteenth-century European bourgeois society. Once understood in performative terms as an accumulation of (often heterogeneous) sexual acts, sexuality came to be conceptualized as an inherent condition that constituted the essential totality of an individual. In other words, while "[t]he sodomite had been a temporary aberration; the homosexual was now a species."[266] The categorization of homosexuality as a new kind of "species," a perversion of "natural order," becomes inextricably tied up with biological and medical discourses that characterize nonreproductive sexualities as pathological, unnatural, or at best, nonexistent: "Imbedded in bodies, becoming deeply characteristic of individuals, the oddities of sex relied on a technology of health and pathology."[267] In the context of the military dictatorships that swept Argentina and many other Latin American nations during the twentieth century, Flavio Rapisardi notes that the "maquinaria monstruosa" (monstrous machinery) of these homophobic dictatorial regimes classified any individual who was seen as sexually deviant as categorically inhuman, a threat to society, and "[un] mal a erradicar" (a sickness to be eradicated) through containment, punishment, and torture.[268]

[266] Foucault, *History of Sexuality*, 43.

[267] Foucault, *History of Sexuality*, 44.

[268] Rapisardi, "Escritura y lucha," 986.

The practice of medicine and clinical psychology in Latin America historically have had a long and problematic relationship with sexual diversity. After performing experiments on prisoners in Nazi concentration camps in an effort to develop a hormonal "cure" for homosexuality, Danish physician Carl Værnet fled to Argentina where he continued his work in collaboration with President Juan Domingo Perón's Ministry of Health and was never prosecuted for war crimes.[269] More recently, while many Latin American countries such as Mexico, Argentina, Brazil, and Colombia have passed constitutional amendments prohibiting the pathologization and "treatment" of sexual deviance by mental health professionals, invasive "conversion therapies" are still practiced legally or illegally in many countries. This is exemplified, for example, by the proliferation of "centros de deshomosexualismo" (conversion centers) in Ecuador that present themselves as drug rehabilitation clinics while secretly providing "therapy"—in the form of confinement, starvation, electroshock, and rape—targeted primarily at young lesbian women and their families.[270] The criminalization and pathologization of sexual diversity—which still persist globally over seventy years after the closure of the last Nazi concentration camps—reflect the extent to which heteronormativity and restrictive notions of "the natural" remain inextricably linked, as well as the urgency of dismantling this relentless conjunction.

[269] Goñi, *Real Odessa*, 133.

[270] "El maltrato reina," n.p. While the Ecuadorian Ministry of Public Health closed down dozens of these centers in 2011, an estimated 200 still operate clandestinely in the country with countless more throughout the Americas, often with close ties to evangelical organizations

As it turns out, the ties between heteronormativity and the classification of nature run deep. Lynda Birke and Luciana Parisi observe that classification system developed by Swedish botanist and zoologist Carl Linnaeus in the eighteenth century, and which prevails in the modern biological sciences, relied heavily on patriarchal concepts of gender and sexuality prevalent during his time while simultaneously reinforcing anthropocentric notions of (certain) humans as superior to other beings.[271] In addition, the entire taxonomic rank of "species"—the linchpin of biological classificatory systems—is also predicated on particular historically- and culturally-situated notions of sexuality. Drawing on definitions of species based on reproductive isolation that had circulated since the eighteenth century, German evolutionary biologist Ernst Mayr argued for what he termed the "biological species concept" in *Systematics and the Origin of Species from the Viewpoint of a Zoologist* (1942). His definition of "species" as a group of individuals capable of interbreeding and producing fertile offspring has become, while widely criticized, the most commonly accepted and influential rubric in the biological sciences.[272] Mayr's model privileges sexual mechanisms of reproduction while excluding organisms that reproduce asexually—bacteria, many plants and fungi, and even some reptiles and insects, which, according to Mayr's schema, do not even meet the basic criteria of "species" and are therefore unclassifiable. Most importantly, the biological species concept reveals the extent to which the assumption that all sexual acts must be

[271] Birke and Parisi, "Animals, Becoming," 57. Burke and Parisi draw on the work of ecofeminists and feminist historians of science such as Val Plumwood, Donna Haraway, and Londa Schiebinger.

[272] Haveman, "Freakish Patterns," 257. In the last decades biologists have proposed as many as 27 different "species concepts" or functional definitions of what constitutes a species, and many others have questioned the validity of taxonomy altogether by suggesting that there are no fundamental, material cut-off points differentiating one species from another.

procreative lies at the very heart of how modern biology organizes bodies of knowledge about the vast diversity of life on the planet.

The question of how to define "species" continues to be fervently debated by biologists and cultural theorists alike who remain unsatisfied with the biological species concept's heteronormative and reproductive imperatives. Catriona Sandilands, Stacy Alaimo, Donna Haraway, and other theorists working in the fields of ecocriticism, feminist science studies, and queer ecologies have traced the ways in which power relations intersecting nature and sexuality have destructive consequences for LGBTQIA communities as well as the environment.[273] As Sandilands contends, "there is an ideologically reinforcing relationship among the normalization of heterosexuality, the devaluation of the erotic, and the understanding of the supremacy of human culture over nonhuman nature."[274] The regime of what Sandilands and Bruce Erickson call "repro-centrism" in their introduction to *Queer Ecologies: Sex, Nature, Politics, Desire* (2010), has enacted a series of "sleights of narrative hand by which nonreproductive sexual acts are rendered necessarily irrelevant, secondary, or degenerate in relation to reproductive sex," and gender dimorphic heterosexuality takes precedence as the only "natural" sexual possibility.[275] Indeed, Jennifer Terry discusses how repro-centric biases have often impelled even well-meaning scientists to go to great lengths to rationalize instances of

[273] Mortimer-Sandilands, "Unnatural Passions," n.p.

[274] Sandilands, "Desiring Nature," 177.

[275] Mortimer-Sandilands and Erickson, "Introduction," 11.

nonreproductive sexual behavior as mere supplements to reproductive acts and not as legitimate expressions of pleasure and desire in their own right.[276]

Sandilands and Erickson also explore how repro-centrism's pathologization of nonreproductive sexual behavior in the natural world has shaped much of environmental thought. In a similar way that "species" as a taxonomic category is predicated on the assumption that all sexual acts serve a reproductive function, the statistical models utilized to measure the "health" of ecosystems also rely on reproductive criteria. While humanists and social scientists often discuss "fitness" as an individual's degree of adaptation or suitedness to a given environment, in the biological sciences "fitness" actually denotes an average individual's probability of reproductive success during a lifetime.[277] In other words, the formulas conservation biologists and population ecologists often use to estimate the optimal size and distribution of a species population in a given ecosystem, as well as the threshold at which a species becomes classified as "threatened" or "endangered," relies on a repro-centric understanding of population survival that suggests that individuals with low reproductive performance—and, implicitly, those engaging in nonreproductive same-sex behavior—endanger the population's "health." Once again, we are confronted with the pathologization of forms of sexual expression that deviate from repro-centric and heterosexist norms. Sandilands and Erickson note that the observation of homoerotic behavior in seagulls and other organisms has even in many cases alarmed ecologists as (false) evidence of environmental contamination or collapse,

[276] Terry, "Unnatural Acts," 154.

[277] Coulson et al., "Estimating Individual Contributions," 547.

a propensity that illustrates environmentalism's anxieties surrounding sexual diversity in the natural world.[278] This blind assumption that dimorphic heterosexuality constitutes the only "natural" sexual model "demonstrates that the paradigm of natural heterosexuality overrides the obvious existence of plenty of nonreproductive sexual options that might be more ecologically appropriate under the circumstances."[279]

The ways in which we understand the diversity of species and the robustness of populations is more critical than ever as we find ourselves in the midst of what many biologists and ecocritics are calling the sixth mass extinction, the fastest rate of species destruction since the loss of the dinosaurs 65 million years ago. While earlier extinction waves occurred as a result of asteroids, natural climate shifts, and volcanic eruptions, the current extinction crisis forms an inextricable dimension of the Anthropocene, since its accelerated pace is a direct consequence of human activity on the planet in the form of anthropogenic climate change, toxic contamination, introduction of invasive species, destruction of habitat, and resource extraction.[280] In order to confront the global scope of species loss, we need new ways of understanding species diversity *and* sexual diversity within and beyond the scope of the human that get beyond pathologizing and homophobic discourses about what counts as "natural."

[278] Mortimer-Sandilands and Erickson, "Introduction," 11.

[279] Mortimer-Sandilands and Erickson, "Introduction," 11.

[280] Barnosky et al., "Has the Earth's," 52.

Queer Ecologies of the Animal/Vegetal/Fungal/Microbial

Biologists and cultural theorists working in the intersections of ecology, environmental criticism, and queer theory have made significant strides during the last two decades to understand the connections between sexual diversity and biological diversity and their implications for multispecies flourishing beyond the Anthropocene. In *Queer Ecologies*, Sandilands, Erickson, and their collaborators deconstruct master narratives about nature in relation to specific productions of sexuality while "developing a sexual politics that more clearly includes considerations of the natural world and its biosocial constitution."[281] Biologists and science studies scholars such as Myra J. Hird, Karen Barad, Joan Roughgarden, and Bruce Bagemihl challenge repro-centric constructions of biological life by painstakingly documenting the vast diversity of nondimorphic genders and nonreproductive sexual behaviors found in the natural world, from four-gendered shorebirds and queer brittlestars to homosexual bighorn sheep and fungi with 28,000 sexes. Citing over 190 species in which scientific researchers have observed nonreproductive sexual behavior, biologist Bruce Bagemihl contends in *Biological Exuberance: Animal Homosexuality and Sexual Diversity* (1999) that natural systems are propelled as much by abundance and excess as by pragmatism and survival, and that all possible forms of sexual behavior—reproductive, nonreproductive, homoerotic, heteroerotic, or otherwise—should be considered expressions of the very extravagance inherent in all biological forms as well as signals of the infinite possibilities

[281] Mortimer-Sandilands and Erickson, "Introduction," 5.

embodied in organic life.[282] Seen through the lens of biological exuberance, "[t]he animal world—right now, here on earth—is brimming with countless gender variations and shimmering sexual possibilities."[283]

Feminist scholar Elizabeth Grosz further develops the notion of exuberance in *Becoming Undone: Darwinian Reflections on Life, Politics, and Art* (2010), in which she interprets sexual difference as the condition for the emergence of all other existing differences, including those which are not directly linked to sexual dimorphism (or polymorphism). Since the processes of sexual selection enact the exuberance and indeterminacy of individual taste, attraction, and pleasure, its irrational operations are irreducible to the adaptive and functional mechanisms of natural selection. Through her analysis of Darwin's writings, Grosz elaborates a sophisticated account of sexual selection that emphasizes its complementary strategies of competition and choice and affirms that nonreproductive heterosexual and homosexual encounters, as well as diverse sexual desires and bodily forms, are themselves an integral part of the variation-maximizing operations of sexual selection.[284]

The emphasis that Grosz and others have placed on desire and pleasure (rather than competition and fitness) as the impetus for all manner of sexual encounters resonates with arguments articulated by Néstor Perlongher, Argentine sociologist and activist affiliated with the Frente de Liberación Homosexual (Homosexual Liberation Front).

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[282] Bagemihl, *Biological Exuberance*, 215.

[283] Bagemihl, *Biological Exuberance*, 260-61.

[284] Grosz, *Becoming Undone*, 126-30.

Anticipating some of Butler's formulations on gender performativity and parody in his 1984 essay "El sexo de las locas" (Sex of screaming queens), Perlongher describes sexual orientations "no como identidades sino como devenires" (not as identities but rather as becomings), and instead proposes the exuberant, over-the-top, highly visible "sex of screaming queens" as a form of performative protest and parodic subversion of heteronormativity: "El sexo de las locas...sería entonces la sexualidad loca, la sexualidad que es una fuga de la normalidad, que la desafía y la subvierte... Que cada cual pueda encontrar más allá de las clasificaciones, el punto de su goce" (Sex of screaming queens...would thus be a wild sexuality, a flight from normality that both challenges and subverts it.... Everyone should be free to discover, beyond classification, the peak of their pleasure).[285] While Perlongher's arguments operate within a strictly human realm, when read in a queer ecological frame his theorizations of sexuality as a performative expression of individual desire help us dismantle classificatory systems regimenting sexualities and species while disentangling sexual activity from reproductive imperatives.

In *Evolution's Rainbow: Diversity, Gender and Sexuality in Nature and People* (2004), evolutionary biologist Joan Roughgarden contends that the persistent prevalence of sexual and behavioral variation in the natural world renders nearly impossible their classification as deleterious "mutations." For instance, among the many examples

[285] Perlongher, *Prosa plebeya*, 33. Similarly, Butler postulates that while sexual "identity" is ontologically inexistent as such, an individual's stylized and iterative *acts*—which are themselves socially and discursively conditioned—produce the illusion of a stable gender identity: "No longer believable as an interior 'truth' of dispositions and identity," sexuality must be understood as "a performatively enacted interior 'truth' of dispositions and identity," sexuality becomes "a performatively enacted signification (and hence not 'to be'), one that, released from its naturalized interiority and surface, can occasion the parodic proliferation and subversive play of gendered meanings" (*Gender Trouble*, 33). We can see the resonances between Perlongher's and Butler's concepts of gender and sexuality as performative constructions as well as powerful sites of political resistance, since parodic play opens a space for contesting gender categories.

explored in her book, Roughgarden describes the elaborate "homosexual courtship and copulation" behaviors of male bighorn sheep that function as a biologically necessary prelude to reproductive sex.[286] As Roughgarden explains, perhaps what is most startling about this example is that a species which has been associated with hyper-masculine constructions of wilderness actually *requires* homosexual activity for the continuation of the species, thus turning the pathological/healthy binary on its head. In her keynote address at the 2008 Annual Conference of the Lesbian and Gay Veterinary Medical Association, Roughgarden argues that, given that the vast majority of organisms exhibit various forms of hermaphroditism and asexuality, scientists and cultural theorists must come to terms with the fact that male/female sexual and/or gender dimorphism constitutes, in fact, a small minority of all possible sexual configurations:

> One is not entitled to interpret homosexuality or other variance in human gender and sexuality in terms of a kind of disability or genetic defect argument and thereby leverage that into some kind of argument of 'deserving our rights anyway.' The fact is that these traits are so common that they have to be viewed as part of our natural diversity.... You get the sense that the recognition of homosexuality in the animal kingdom is the tip of an iceberg and that the whole story of nature is being mistold.[287]

As an alternative to heterosexist evolutionary narratives surrounding sexual selection, Roughgarden proposes the concept of "social selection" whereby social relationships within and beyond species lines emerge within a paradigm of *cooperation* rather than competition. In this context, Roughgarden articulates an understanding of homosexuality not as a fixed trait but rather as one among many adaptive expressions of physical

[286] Roughgarden, *Evolution's Rainbow*, 137-38.

[287] Roughgarden, "Sexual Diversity," n.p.

intimacy that contribute to the formation of collaborative relationships. The conceptual framework of social selection considers nonreproductive sexual intimacy not as a degenerate aberration signaling environmental collapse or the extinction of a species, but rather as an evolutionary advantageous and remarkably prevalent range of behaviors that nourishes the social interactions which are critical to the survival of individuals, populations, and multispecies communities. In this sense, measures of reproductive fitness alone cannot fully account for the ways in which the entire range of sexual interactions among organisms contributes to the flourishing of populations and ecosystems in the face of the sixth mass extinction.

Considering the incomprehensible diversity of sexual configurations and behaviors in nature, one develops a sense that what Sandilands calls "polymorphous sexualities and multiple natures"[288] are in fact the name of the biological game and have been since the beginning. Citing theorists' efforts during recent decades to formulate postmodern understandings of gender and sexuality, Bagemihl remarks that "human beings are simply catching up with the species that have preceded us in evolving sexual and gender diversity."[289] Of course, what Bagemihl and other science studies scholars and ecocritics often overlook is the fact that many groups of human beings around the globe have for millennia developed sophisticated knowledge systems about gender and sexuality within and beyond the limits of the human. What many Native American intellectuals and indigenous studies scholars refer to as "two-spirit people" encompasses

[288] Sandilands, "Sex at the Limits," 92-93.

[289] Bagemihl, *Biological Exuberance*, 260-61.

multiple forms of sexual and gender variance, as well as concepts of gender and sexuality for which binary oppositions are irrelevant. For many indigenous cultures, two-spirit individuals traditionally hold important positions in their communities as political figures, conveyors of knowledge and oral tradition, producers of art, and spiritual leaders capable of seeing into the future.[290] In their introduction to *Queer Indigenous Studies: Critical Interventions in Theory, Politics, and Literature* (2011), Qwo-Li Driskill, Chris Finley, Brian Joseph Gilley, and Scott Lauria Morgensen document how contemporary activists, writers, artists, and scholars mobilize two-spiritedness as a politically-positioned identity drawing on historical traditions and contemporary movements in the production of contestatory theory and politics.[291]

Similarly, in Mexico and Central and South America, the prevalence of alternative systems of gender—such as *biza'ah* and *muxe*, "third gender" roles in Zapotec society of southern Mexico—suggests "the continued importance of indigenous gender systems that allow for more flexible models not attached to specific sexual identities."[292] Ana Mariella Bacigalupo discusses how in southern Chile, the fluid gender performativities of Mapuche shamans or *machi*—women and men who "assume masculine, feminine, and cogender identities...for the purpose of healing" while drawing on heterogeneous epistemologies—become sites of resistance to environmental injustices as well as ethnic and gender stereotypes reinforced by the Chilean state.[293] In relation to

[290] Lang, *Men as Women*, 21.

[291] Driskill, Finley, Gilley, and Morgensen, Introduction, 18.

[292] Stephen, "Sexualities and Genders," 44-46.

[293] Bacigalupo, "Mapuche Shamanic Bodies," 322-23. While the majority of machi are female, many of them are male. Regardless of whether they are male or female, machi perform masculine, feminine, and

Amazonian cultures, Françoise Barbira Freedman links the prevalence of shamanic transgressions of gender boundaries to the transformational character of Amazonian ontologies,[294] which as Eduardo Viveiros de Castro and other anthropologists have discussed at length, is also crystallized in shamans' abilities to traverse species lines, assuming multiple points of view embodied in nonhuman organisms and spirit beings.[295] These conceptions of species and gender boundaries as fluid, polymorphous, and highly transformational constitute sophisticated theorizations to which "postmodern" ecocritical theory and gender studies must remain attentive and responsible.

A material feminist who has also written about the fluid boundaries of bodies and beings, Stacy Alaimo draws connections between queer science studies and environmental ethics in her suggestion that the incalculable scope of nature's exuberance generated by mutually-constitutive networks of biological and sexual diversity "encourages an epistemological-ethical stance"[296] that helps us rethink queerness as a

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hybrid gender identities in order to perform diverse ritual, healing, and regenerative acts and to embody the boundary-crossing deity Ngünechen (Bacigalupo 322). Bacigalupo explains how dominant discourses portray machi (and Mapuche people in general) as effeminate and/or sexually degenerate: while female machi are constructed as "apolitical fertile earth mothers" or as dangerous "sexual deviants and perverse witches," male machi are often viewed as "effeminate homosexuals who threaten the masculinity of Chilean men" (326). Both female and male machi regularly face beatings and arrests by police in response to public ritual performances, and the Chilean government has repeatedly violated Mapuche indigenous rights and sovereignty by authorizing the exploitive activities of forestry companies and the construction of bypasses and hydroelectric dams in Mapuche territory (323-26).

[294] Barbira Freedman, "Shamanic Plants," 146-7.

[295] Castro, "Cosmological Deixis," 471-72.

[296] Alaimo, "Eluding Capture," 67. Alaimo draws on Karen Barad's theory of agential realism, which in turn brings Judith Butler's theories of performativity into a more-than-human, material frame. Barad liberates queer performativity from its humanist orbit by demonstrating how all material-discursive phenomena, from quantum-jumping electrons and species-bending dinoflagellates to queer brittlestars and stingrays, agentially enact their differentiation from other beings from within mutually-constitutive relationships ("Nature's Queer Performativity," 125-27). Matter's agential performativity constantly queers

performative form of agency rather than any predetermined "identity" while deconstructing categories and identities cemented by heteronormative and anthropocentric classificatory regimes. Through the queering of all manner of categories, we begin to recognize that human and nonhuman organisms mutually constitute each other as what Donna Haraway calls "companion species," emerging together:

> in situated histories, situated naturecultures, in which all the actors become who they are *in the dance of relating*, not from scratch, not ex nihilo, but full of the patterns of their sometimes-joined, sometimes-separate heritages both before and lateral to *this* encounter. All the dancers are redone through the patterns they enact.[297]

Through the dynamics of "becoming with," the partners of multispecies relationships do not preexist their relating but rather emerge co-constitutively, blurring the lines between inside and outside, self and other while relentlessly reconfiguring the tenuous boundaries between species and questioning the very existence of "kinds" as ontological categories. This web of multispecies relatings and shared becomings calls for ethical forms of response and regard that are attentive to the ways in which all organisms are mutually implicated in the dynamics of life and death, extinction and survival within and beyond the Anthropocene.

As scholars working in the sciences and the humanities continue to tease out the convergences of gender, sexuality, biological diversity, and multispecies survival in an age of global ecological crisis, various writers, artists, and filmmakers are challenging "the destructive pairing of heterosexuality and nature: by developing 'reverse discourses'

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the lines between culture and nature, human and nonhuman, and even organic and inorganic, in addition to the limits of socially-constructed gender categories, all of which become increasingly difficult to police.

[297] Haraway, *When Species Meet*, 25.

oriented to challenging dominant understandings of our 'unnatural passions'; by borrowing ecological thinking to develop radically transformative gay and lesbian politics."[298] In the remainder of this chapter, I explore how the filmic, sculptural, and poetic works of Lucía Puenzo and María Fernanda Cardoso dismantle heterosexist and anthropocentric discourses policing the "natural." By integrating indigenous and subterranean knowledge systems with insights from the biological sciences, their aesthetic contributions not only constellate new ways of understanding species and sexuality within and beyond the scope of the human, but also suggest alternative models of multispecies flourishing beyond the Anthropocene.

Multiple Natures, Polymorphous Sexualities: Lucía Puenzo

As one of the most celebrated contemporary Argentine filmmakers, Lucía Puenzo's cinematic production is replete with transgressive figures that blur tenuous boundaries between nature and culture, masculine and feminine, human and nonhuman. David William Foster observes that the proliferation and legitimization of representations of sexual difference in Argentine literary, filmic, and cultural production of the last three decades work to dismantle homophobic systems of repression established during the military dictatorships of 1966-1983, and increased visibility of queer performativities has blossomed especially in cinema and other public cultural modes.[299] The affirmative representations of sexual diversity in Puenzo's films draw connections with these

[298] Mortimer-Sandilands, "Unnatural Passions," n.p.

[299] Foster, *Producción cultural*, 172-77.

movements of redemocratization that have reshaped the contours of human rights and gender politics in post-military Argentina while contributing to the formation of what Foster calls "a firmly entrenched gay and lesbian life with its attendant cultural production."[300] In this context, Puenzo's screenplays and directed films bring to the forefront the varying and often underrepresented dimensions of otherness in South American society along the lines of gender, sexuality, class, race, ethnicity, and more recently, disability in her latest film *Wakolda* (*The German Doctor*, 2013). As Lourdes Estrada-López argues, Puenzo's films have made crucial contributions to social movements in Argentina as well as the passage of some of the most progressive LGBTQIA rights legislation in the world.[301]

The queer figures in Puenzo's films deconstruct normative gender categories that dictate which bodies and practices are considered acceptable and which are vilified as "monstrous" and "unnatural" within and beyond the scope of the human. Based on the short story "Cinismo" (Cynicism, 2006) by Sergio Bizzio, *XXY* (2007) centers on the turbulent experiences of Alex (Inés Efron), a biologically intersex subject who resists societal and familial demands to "choose" one sex over another and undergo invasive pharmaceutical and surgical treatments to "correct" her/his "unnatural" body. Like the endangered sea turtles and other organisms found on the Uruguayan island where the film takes place, Alex flourishes in interstitial spaces—sandy beaches, rocky shorelines,

[300] Foster, "Intellectuals, Queer Culture," 228.

[301] Estrada-López, "Deconstrucción sexual," 422. Estrada-López cites the 2012 ratification of Argentina's Gender Identity Act (26.743), which legalizes sex reassignment surgery as well as the modification of personal information (name, sex, photo) in official state records. Earlier examples of LGBTQIA rights legislation in Argentina include Buenos Aires's 1996 municipal constitution prohibiting discrimination based on sexual orientation, and the country's 2010 legalization of gay marriage and adoption.

crystalline tide pools—that emphasize not only the blurry contact zones between species of many kinds, but also the amphibian natures of creatures that are not quite aquatic, not quite terrestrial, not quite animal, not quite vegetal, as in Porzecanski's "Liquid Paradise." As Patricia Carbonari points out, Puenzo's second directed film, *El niño pez* (2009), which is based on a novel of the same title by Puenzo herself (2004), combines various genres including road movie, crime drama, thriller, and romance.[302] The film dramatizes the romantic involvement between Ailín, a bisexual Guaraní domestic worker from Ypacaraí, Paraguay (Mariela Vitale), and Lala Brontë (Inés Efron), the daughter of her bourgeois Buenos Aires employers. The semi-mythical transspecies figure that gives the film its name (*mitay pyra* in Guaraní) and that dwells in the depths of Lake Ypoá confounds the fluid lines between human and nonhuman while suggesting non-normative familial configurations untethered to species or gender categories. Rather than reinforcing heterosexist discourses about the "natural," the rich biological diversity depicted in both films evokes multiple sexual configurations and social interactions throughout the nonhuman world and function to denaturalize gender categories and monolithic heteronormative constructions of kinship while vindicating alternative modes of existence.

El niño pez and *XXY* craft a multispecies frame that presents biological diversity as parallel to sexual diversity. Zoila Clark interprets the aquatic spaces in both films, the Paraguayan Lake Ypoá in *El niño pez* and the Atlantic Ocean in *XXY*—as mythical

[302] Carbonari, "Entre la pluma," 83. For an in-depth discussion of the unconventional uses of road movie and bildungsroman genres in Puenzo's films, see Blanco and Petrus, "Argentinian Queer Mater" (2011).

spaces that metaphorically represent the unconscious and the maternal womb.[303] For her part, Margaret Frohlich considers nature in both films to be a moralizing framework that limits individual freedom and that is diametrically opposed to the realm of culture: "Any protection that nature might offer is questionable, as are the motives that prompt its protection.... [T]he morally loaded framework of nature is suspect ground for the freedom we might, if nothing else, imagine."[304] In contrast with Clark and Frohlich's proposals—the feminization and moral condemnation of nature—I contend that the hybrid figures and multispecies encounters in Puenzo's films do not transgress a "natural order" (which does not exist as such), but instead perform important work to dismantle the restrictive categories which are constructed and regulated by heterosexist and patriarchal societies and tenuously projected onto the shifting terrain of multinatural worlds.

Certain (predominantly masculine) characters in both films exemplify the tendency to pathologize and criminalize practices and "identities" that resist categorizational regimes. In *El niño pez,* we discover through one of the many flashbacks that Ailín, the Guaraní domestic worker, was impregnated by her father Sócrates Espina (Arnaldo André) and gave birth to a fishlike child who could only breathe underwater: "Estaba asfixiando. Volví a ponerlo en el agua,…todo el cuerpito hasta que abrió los ojos, la boca, y respiró" (He was suffocating. I put him in the water again,...his whole little body until he opened his eyes, his mouth, and breathed). Ailín's neighbors accuse her of keeping "un monstruo encerrado en la casa" (a monster shut away in the house),

[303] Clark, "Our Monstrous Humanimality," 18-20.

[304] Frohlich, "What of Unnatural Bodies," 172.

preferring to circulate pernicious gossip rather than lifting a finger to help the abandoned adolescent girl care for her baby. The precise source of the neighbors' prejudicial accusations remains unresolved in the film. While I would in no way suggest that incest or statutory rape are acceptable under any circumstances, the ambiguous source of the neighbors' ridicule suggests an interesting connection between the social unacceptability of certain sexual acts and the condemnation of species-bending materialities. In other words, Ailín's community reproduces naturalizing discourses that render pathological and antinatural anything that transgresses normative sexual schemes and rigid species lines.

Similarly, in *XXY* when Alex's classmates and local fishermen discover that she/he is intersex, they react with physical and verbal violence, complaining that "hay demasiadas especies en extinción acá" (there are too many threatened species here) and later, pinning Alex against the beach while forcibly exposing her/his genitals. The fishermen's complaint reproduces the categorization of differing sexualities as a kind of monstrous "species," while also revealing their dissatisfaction with conservation efforts, led by Alex's marine biologist father Néstor Kraken (Ricardo Darín), to protect the various species of endangered sea turtle from incidental capture in their gill nets, measures which the fishermen see as obstacles to their livelihood.[305] Later, the fishermen

[305] In addition to small-scale fishing, the use of industrial trawls and longlines, the illegal trade in shells and meat, and the reduction and degradation of nesting and foraging sites are key factors in sea turtle population decline (Laporta and Miller, "Sea Turtles in Uruguay," 65). In addition, the vast majority of Uruguayans are completely uninformed about the existence of sea turtles in Uruguayan waters, the factors putting them in danger, and their protection under national and international law (65). However, research and conservation groups like Karumbé (which means "turtle" in Guaraní) are collaborating successfully with local fishermen and coastal communities in Uruguay to increase awareness about sea turtle ecology and to implement conservation programs protecting the animals from incidental capture (65-67). Fortunately, these success stories paint a very different picture than the animosity depicted in *XXY*, a film

leave on Kraken's doorstep a pile of shells cut from turtles they had killed, an act of violence not only in response to the conservationists' efforts, but also as a symbol of homophobic prejudice against Alex's recently-unveiled intersexuality. After Alex decides to stop taking hormonal treatments designed to halt the development of male traits, in desperation her mother Suli (Valeria Bertuccelli) invites a surgeon friend (Germán Palacios) and his family to their home in order to discuss possible surgical treatments. When Alex asks Álvaro (Martín Piroyansky) if his father enjoys slicing up bodies, Álvaro replies: "No rebana cuerpos, los arregla. Mi papá hace tetas y narices por plata pero a él en realidad le interesan otras cosas, …deformidades, como estos tipos que nacen con once dedos, bueno, mi papá les saca uno" (He doesn't slice up bodies, he repairs them. My dad does boob jobs and nose jobs for the money, but he's really interested in other things, ...deformities, like guys born with eleven fingers, my dad cuts one off for them). Like the abusive fishermen, Álvaro's father perceives Alex through the filter of medical discourses that pathologize non-normative bodies and sexualities as aberrant "species" that must be exterminated or as "disorders" to be "treated" before the subject can fully integrate into society. This double gesture of animalizing queer sexualities while at the same time pathologizing them as unnatural reflects the paradoxical sides of what Greta Gaard calls "erotophobia," in which the abject alterity of the (queer, nonhuman) other threatens dominant narratives and oppressive power structures that seek to control sexuality and nature.[306]

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which itself likely did much to raise awareness among South Americans about the precarious situation of their coastal sea turtle populations.

[306] Gaard, "Toward a Queer," 118-19.

In addition to exposing erotophobia's ugliness, *XXY* draws connections between dimorphic constructions of sexuality and the taxonomic categorization of species, revealing the detrimental conjunction between classification and oppression. When Alex finds Álvaro sketching "un bicho raro" (a weird bug) that he captured on the beach, he asks Alex white kind of insect it is. Alex furiously smashes the beetle while yelling, "¿Qué sabés vos de las especies de mi casa?" (What do you know about the species of my home?), expressing indignation at the brutal affinities between identification and instrumentalization while also alluding to the region's violent colonial histories. From the sixteenth to the eighteenth centuries the indigenous Guaraní—who still live and speak their language throughout their traditional territories in present-day Uruguay, Paraguay, Brazil, and Argentina—were forced by Spanish *encomenderos* into hard labor extracting agricultural and mineral resources and were captured in massive numbers by Portuguese *bandeirantes* for sale in the global slave trade.[307] As Birke and Parisi contend, early explorers and naturalists often classified new species using names that reinforced European racism and imperialism,[308] while simultaneously erasing sophisticated knowledge systems developed by indigenous peoples about local ecosystems, biodiversity, and climate cycles. For example, Guillermo Wilde observes the "obsesión clasificatoria" (classificatory obsession) of eighteenth-century Spanish engineer and

[307] Almeida and Mura, "Historia y territorio," 55-56.

[308] Birke and Parisi, "Animals, Becoming," 57.

naturalist Félix Manuel de Azara who classified Paraguay's "species" without differentiating between plants, animals, and indigenous peoples.[309]

XXY and *El niño pez* present the intersections of natural diversity and sexual diversity within an exuberant multispecies frame. The opening credits of both films (Figs. 3.1 and 3.2) feature vivid images of aquatic ecosystems pulsing with leafy plants, undulating sea anemones, throbbing sponges, and other hermaphroditic plants and invertebrates visible through the dark, nutrient-rich waters, while the liquid soundtrack submerges viewers as if they were scuba-diving off the Uruguayan coast or in Lake Ypoá. The films' aquatic landscapes and soundscapes evoke the "countless gender variations and shimmering sexual possibilities"[310] of the more-than-human world while recalling, as in Porzecanski's and Tarazona's novels, the primordial waters from which sprang all biological life. As frames for unfolding human and nonhuman dramas, these landscapes portray the characters' varied gender identities and performativities as legitimate and "natural" facets of biological and sexual exuberance while suggesting, as Myra J. Hird puts it, that "[w]e may no longer be certain that it is nature that remains static and culture that evinces limitless malleability."[311]

Frohlich observes that *XXY* continually depicts Alex as a part of nature through cinematographic techniques such as the film's marine tones reflected in the color of Alex's eyes.[312] To this I would add that the *XXY*'s cinematography draws repeated

[309] Wilde, "Imaginarios contrapuestos," 202.

[310] Bagemihl, *Biological Exuberance*, 260.

[311] Hird, "Naturally Queer," 88.

[312] Frohlich, "What of Unnatural Bodies," 162.



Figure 3.1. Still from opening credits of *XXY*. Courtesy of Lucía Puenzo



Figure 3.2. Still from opening credits of *El niño pez.* Courtesy of Lucía Puenzo

connections between Alex's sexual liminality and that of the diverse aquatic species prevalent in the film. Multiple scenes reveal Alex floating peacefully in a tide pool, walking along the beach, or interacting with sea turtles, iguanas, crabs, salamanders, and other organisms of the region. Kraken recalls how Alex was conceived on the rocky Atlantic shore and was born blue, unable to breathe during the first forty seconds of her/his life, forming an interesting parallel with Ailín's child respiratory peculiarities in *El niño pez*. Alex's littoral conception also draws her/him closer to the four or more endangered species of sea turtle that come from nesting beaches all over the Atlantic to

forage along the Uruguayan coast.[313] The sea turtle identification tag that hangs on a chain around Alex's neck further reinforces this multispecies association. Arguably the most emblematic animal of the film, sea turtles habitually exhibit a range of nonreproductive sexual behaviors, such as homoerotic mountings and the use of inanimate objects (or unsuspecting human researchers) for sexual stimulation.[314] While these behaviors obviously are not manifested in the film, the figure of the sea turtle with its multiplicity of sexual practices complements the deconstructivist project proposed in *XXY*. After Alex stops taking the hormonal treatments, the scene of her/him flicking the pills out the window one by one cuts to an image of her/his father's desk, where the camera frame is divided equally between a photo of Alex as a child and an aquarium containing a salamander in a transitional developmental stage with four legs, ventral and dorsal fins, and external gills (Fig. 3.3). Like frogs, most salamanders develop from a fully-aquatic larval stage, shedding their gills and fins and growing legs to become terrestrial adults, but in various species the transitional traits persist into adulthood.[315] Similarly, Alex's liminal body simultaneously contains a multitude of material possibilities, and through her/his visual association with the larval salamander, Alex emerges as a hybrid figure that escapes deterministic classification, traversing tenuous categories while challenging notions of sexuality as a fixed identity or a closed set of "options" from which one must choose. Indeed, toward the end of the film Alex declares,

[313] Laporta and Miller, "Sea Turtles in Uruguay," 63.

[314] Nichols, "Sea Turtles Get it On," n.p.

[315] Milner, "Caudata (Salamanders)," n.p.



Figure 3.3. Still from *XXY*, showing a childhood photo of Alex beside a larval salamander. Courtesy of Lucía Puenzo

"No quiero más. No quiero más pastillas, operaciones ni cambios de colegio. Quiero que todo siga igual" (I don't want any more. I don't want any more pills, operations, or different schools. I want everything to stay the same). As Estrada-López contends, the constant visual elision of Alex's genitals truncates the audience's voyeuristic gaze while reinforcing Alex's volitional agency to choose her/his path.[316] However, what is most provocative about Alex's agency is her/his choice not to "choose" at all: rather than submit to a classificatory system that only offers false "options," Alex poses the provocative question, "¿Y si no hay nada para elegir?" (And if there is nothing to choose?), preferring instead to remain in the indeterminacy of the possible.

Multispecies encounters further deconstruct classificatory regimes and their codification within language in *XXY*. Kraken speaks the first word in the film, "hembra" (female), in reference to a rescued sea turtle he is examining at his research station. His utterance immediately calls up gender dimorphic systems of classification, which the film then systematically dismantles in subsequent scenes. Later, when Kraken asks the

[316] Estrada-López, "Deconstrucción sexual," 425-26.

intersex gas station owner Scherer about his own experience of "normalization" through aggressive treatment, Kraken stumbles over his words in search of an adequate noun with which to refer to Alex: "tengo una hija, un hijo..." (I have a daughter, a son...). Toward the end of the film, Kraken confronts the young men who assaulted Alex and yells at them, "que no vuelva[n] a tocar a mi hijo" (don't you dare touch my son again). These semantic gender vacillations underscore the descriptive insufficiency of Western languages and classificatory systems too deeply rooted in binary logic to adequately represent the enormous range of sexual configurations and experiences. Hird argues that the assignation of "male" and "female" to individual bodies relies on extremely limited criteria, since the vast majority of the cells in human and nonhuman bodies are in fact intersex in their genetic makeup.[317] What is more, dimorphic classifications of sex are deeply problematic in their presumption of the ontological existence of an inherent, *a priori* difference between sexes.[318]

The cover design and opening sequence of *XXY* explicitly deconstruct what Haraway has called "gene fetishism," or genetic determinism that reduces organisms to their DNA[319] while underpinning rigid binary classifications of sex based on genetic codes. In the single pair of allosomal (sex-determining) chromosomes found in most human cells, females tend to have a like pair of XX and males XY, with other possible combinations such as XXX and XXY. Feminist science scholar Sarah S. Richardson

[317] Hird, "Naturally Queer," 85.

[318] Hird, "Naturally Queer,"

[319] Haraway, *Modest_Witness*, 142-48.

clarifies that, contrary to mainstream discourses about genomics that exaggerate sexual difference as tantamount to "law-like" genomic differences between "species," in reality males and females share 99.9% sequence identity on all but the Y chromosome, which contains only a small handful of genes.[320] Genetic similarity notwithstanding, Richardson and others propose resisting the genomic construction of biological sex altogether in favor of a more sophisticated framework "that recognizes the non-binary and diverse nature of biological expressions of sex, both genotypic and phenotypic."[321] *XXY* opens with shots—crosscut with pulsating aquatic imagery—of Alex waving a machete while running through the woods with her/his friend Roberta. The image of Alex's machete slicing against the ground cuts to a graphic image of the XXY chromosomes, the Y's jagged corner implying that it was made by severing one leg of an X (Fig. 3.4). As Frohlich contends, this sequence "alludes to Alex's simultaneous connection and discomfort with the male component of her intersexuality and prefigures her struggle to accept it and defend it against the suggestion that (s)he is unnatural."[322] In addition, the "severed" third chromosome makes a profound statement against the problematic privileging of genetic determinism as a basis for the classification of sexual difference.

A similar deconstructive graphic strategy appears in the cover art of *El niño pez*, in which the bottom third of the letters "el niño" and the top third of "pez" are cut off (Fig. 3.5). The first two words stack vertically over the third word, conjoining where the

[320] Richardson, "Sex, Species, and Genomes," 828.

[321] Richardson, "Sex, Species, and Genomes," 837.

[322] Frohlich, "What of Unnatural Bodies," 161.



Figure 3.4. Still from opening credits of *XXY*. Courtesy Lucía Puenzo



Figure 3.5. Cover image of *El niño pez*. Courtesy of Lucía Puenzo

surface of Lake Ypoá meets the sky. The letters' spatial orientation and incompleteness represent the radical hybridity of the eponymous fish child, a transspecies being who traverses the bounds between land and lake, air and water, and whose corporeality is not quite human yet not fully other-than-human. Unable to care for her unusual child, young

Ailín releases the baby in Lake Ypoá "para que viviera tranquilo, para que respirara. Nadamos juntos hasta que se hizo de noche. Cuando salí del agua ya no estaba conmigo" (so that he would live happily, so that he would breathe. We swam together until nightfall. When I got to shore he wasn't with me anymore). When Lala later dives into the lake near Ailín's home, she sees scattered across the bottom hundreds of items left as offerings by local people to the cherubic *mitay pyra* and decides to leave a ring gifted to her by her mother. Suddenly, a humanoid figure appears between the weeds, quickly darting away with the agility of a fish (Fig. 3.6). In one of the final sequences of the film, Lala tells Ailín, "Vi a tu hijo, ...el *mitay pyra*. Nadamos juntos en el agua" (I saw your child, …*mitay pyra*. We swam together in the water).[323] The fish-child figure evokes stories told by Mbyá Guaraní communities of Paraguay, Brazil, and parts of Argentina about Piragui, an anthropomorphic aquatic being believed to protect bodies of water and the fish that inhabit them from human exploitation and degradation.[324] The Mbyá

[323] It is worth noting that critics have interpreted the fish child's ambiguous character in the film with differing results. Carbonari (83), Clark (8) and Vitelia Cisneros (53) view Ailín's depositing of her baby in the lake strictly as an act of infanticide by drowning and the *mitay pyra* story as a fabrication, as mere "myth." On the other hand, Frohlich's interpretation of the events surrounding Ailín's child allows for the possibility that the *mitay pyra* lives on in Lake Ypoá (171-72). More in line with Frohlich's interpretation, I read Puenzo's transspecies fish child in a similar way as I read Tarazona's and Porzecanski's characters in the previous chapter—as aesthetic, non-realist representations of human-nonhuman hybridity informed by indigenous and other-than-dominant knowledge systems that underscore the continuity of the human with other species while challenging imperialist discourses that continue to delegitimize as "myth" non-hegemonic ways of understanding the world. While its deviation from Western realist conventions may be problematic for some, like the broken egg shell in *El animal sobre la piedra* Lala's sighting of the fish child in Puenzo's film can be considered material "proof" of this hybrid being's existence beyond the realm of mere "myth."

[324] Ladeira, *O caminhar,* 156. In her book *O caminhar sob a luz: território mbya à beira do oceano* (Walking under the light: Mbyá territory on the ocean's shore, 2007), Ladeira transcribes contemporary oral accounts about how Piragui "tomava conta dos rios pequenos e da grande água, de tudo, e ela tinha ciúmes das águas que eram limpas e bonitas. E tomava conta dos peixes e não queria que os homens estragassem, sujassem e não queria que os homens judiassem dos peixes" (took care of the little rivers and the large waters, everything, and she jealously guarded the waters to keep them clean and beautiful. And she took care of the fish and didn't let people harm, disrespect, or mistreat them) (156).



Figure 3.6. Still from *El niño pez*, showing Lala's encounter with the Fish Child in Lake Ypoá. Courtesy of Lucía Puenzo

describe Piragui as a masculine or feminine "siren," an amphibious being who draws fishermen into the depths.[325] Similar to Puenzo's transspecies fish child, Piragui begins as a human being unable to thrive in the open air. In one of the contemporary Mbyá oral accounts recorded by Maria Inês Ladeira, when a woman became too physically weak to cross the water to meet the god Nhanderu, her body transformed into "outra coisa" (something else) and the fish adopted her as their protector.[326] Ladeira's storytellers emphasize that for many Mbyá, beings such as Piragui and the ecological knowledges codified in the stories which surround them constitute sophisticated, longstanding ways of knowing and understanding the world: "quando o branco descobriu esses lugares, esses lugares já tinham seus nomes. Então, naquele lugar, que hoje os brancos chamam Superagui, o corpo de uma pessoa feminina se transformou em Piragui, ...que até hoje

[325] There seems to be some flexibility as to *Piragui*'s gender. Deborah Goldemberg and Rubelise da Cunha's São Paulo informant Olívio Jekupé describes Piragui as masculine (130); Bartomeu Melià describes it simply as "anfibio" (amphibian) (195); and Marilyn Cebolla Baide describes it as definitively feminine (25).

[326] Ladeira, *O caminhar*, 156.

existe pelos grandes rios dos oceanos" (when Europeans discovered these places, they already had their own names. Where white people now call Superagui, the body of a woman transformed into Piragui, ...who exists today in great rivers and oceans).[327] In his work on contemporary Mbyá Guaraní cosmologies, Wilde explains that the Mbyá concept of the more-than-human world is far broader and ambiguous than in Western cultures, since it establishes "una continuidad entre entidades animales, vegetales y humanas...[e] integra un conjunto de sujetos invisibles como las divinidades, que poseen influencia en el mundo terreno" (a continuity between animal, vegetal, and human entities...[and] incorporates invisible subjects and deities that have influence in the terrestrial world).[328]

In addition to uncovering Mbyá Guaraní understandings of human-nonhuman continuity, the fish child's transspecies hybridity and the conjoined letters in the film's cover design deconstruct determinist concepts of "species" as pure information reducible to their genetic "instructions" with impervious genomic boundaries. Recent discoveries in genetics and evolutionary biology render it increasingly difficult to classify "species" based on their genomes. For example, our 20,000 human genes are vastly outnumbered by the millions of nonhuman genes within the cells of microbial symbionts that inhabit our bodies and keep us alive.[329] In addition, we may no longer be able to speak of "the human genome" as such, since at least 145 of our active genes come not from human

[327] Ladeira, *O caminhar*, 158.

[328] Wilde, "Imaginarios contrapuestos," 211.

[329] Mullard, "The Inside Story," 578.

ancestors, but from nonhuman microbes living within our ancestors' bodies through horizontal gene transfer, or the exchange of genetic information across species lines,[330] a mechanism which biologists are discovering has played and continues to play a central role in the development of species. As Lynn Margulis and Dorion Sagan argue in *Acquiring Genomes* (2002), increasingly complex organisms emerge from single-celled microbes through symbiogenesis, processes of cross-species "attraction, merger, fusion, incorporation, co-habitation, recombination—both permanent and cyclical—and other forms of forbidden couplings."[331] Symbiogenesis makes a mess out of species "lineage" as a neatly-branching tree and instead reveals that "forbidden couplings"—queer couplings, multispecies couplings—tell the real story of our genetic becomings. In this light, the graphic representations of *XXY* and *El niño pez* reflect a growing sense of the inadequacy of the gene-fetishistic categorizational systems that have been constructed to differentiate among members of "species" and "sexes" and deployed to regulate both nature and sexuality.

The messy, promiscuous, cross-species entanglements described by Margulis, Sagan, Haraway, and others radically challenge what it means to belong to a "species" or a genetically-similar "family." In *XXY* and *El niño pez*, nature itself becomes a site for the construction of new multispecies relationships that are incompatible with the heteronormative, gene-fetishistic notions of "family" implicated in the power dynamics structuring Western societies. As Kath Weston argues in *The Families We Choose*,

[330] Crisp et al., "Expression of Multiple," 1-4.

[331] Margulis and Sagan, *Acquiring Genomes*, 205.

heteronormative societies define "family" exclusively in terms of bloodlines and matrimony and consider procreation as the maximum expression of familial purpose, a scheme that would condemn LGBTQIA individuals to a solitary life.[332] In stark contrast, queer or "chosen" families are constructed intentionally and creatively independent of procreative imperatives, affirming "the kinship potential of other sorts of social ties: the connecting tissue of friendship, say, or nonbiological parenthood, or a committed gay relationship."[333] By displacing the reproductive unit as the only legitimate form of kinship, queer families generate utopic visions of self-determination beyond oppressive societal limits.[334] The human and nonhuman characters of *XXY* and *El niño pez* further rethink traditional concepts of family within a queer *and* multispecies frame, questioning the privileged status of reproductive sexuality and generating familial possibilities beyond the limits of the human.

In *El niño pez*, the "chosen" family revolves around the lesbian relationship between Ailín and Lala whose mutual devotion endures countless obstacles, from the violent treatment of both of their fathers to Ailín's incarceration as the (wrongly) accused murderer of Lala's father Fernando Brontë (Pep Munné), a prominent judge. As Weston observes, many "chosen" families emerge as preferred alternatives to biogenetic family relationships which may offer little to no emotional, moral, or economic support, or worse, may react with homophobic rejection and abuse when a family member comes

[332] Weston, *Families We Choose*, xv.

[333] Weston, *Families We Choose*, xv.

[334] Weston, *Families We Choose*, 40.

out.[335] Ailín's biogenetic family is deeply dysfunctional, with an absent mother and a father who abandons his daughter after impregnating her. While Lala's family may superficially resemble a typical, happy "nuclear" family with two successful parents, one son and one daughter, closer examination reveals pervasive instability and violence: Lala's mother spends weeks and months away from home pursuing her athletic career, and the despotic father physically and verbally abuses Lala's brother Nacho (Julián Doregger) while repeatedly raping Ailín. Lala rejects her parents while questioning the very notion of a nuclear family: after returning home upon the father's death, Lala's mother tries to hug Lala while lamenting that their family has already suffered too much to endure another scandal, to which Lala replies, "¿Qué familia?" (What family?).

As alternatives to their destructive biogenetic families, Ailín and Lala build together an entirely different kind of family based on queer, multispecies notions of kinship. Given Ailín's history of subjugation to sexual violence by her father, Lala's father, and others, heterosexual procreation has become a problematic signifier of trauma and can no longer function as a condition for kinship. Thus, Ailín—whose nickname *la Guayi* means "seed" in Guaraní[336]—looks elsewhere beyond the scope of the human to form meaningful relationships. Dreaming together of building a house on the shore of Lake Ypoá, the dwelling place of Ailín's fish child, the young women steal and sell paintings, jewelry, and other items from Lala's family to accumulate enough money to escape north with their dog Serafín. We learn through a flashback that Ailín gave Serafín

[335] Weston, *Families We Choose*, 34.

[336] Cisneros, "Guaraní y quechua," 53.

to Lala after finding him in a gutter, whimpering from inside a trash bag, and Serafín's development from puppy to mature dog helps establish a temporal order for the film's fragmented narrative structure.[337] Furthermore, multiple scenes show Lala and Ailín kissing and hugging Serafín and feeding him together, and after freeing Ailín from a prostitution ring run by juvenile detention center guards, shots show Lala and Serafín on parallel operating tables, being treated for bullet wounds in the same veterinary clinic (Fig. 3.7). Roughgarden describes physical intimacy in nature as establishing "joy in the welfare of someone else" through which companions can "experience pleasure in the pursuit of a common goal."[338] As Haraway puts it, multispecies relationships, which include but are not limited to those generated in the context of domestication, are intrinsically queer: "To know companion and species together in encounter, in regard and respect, is to enter the world of becoming with, where *who and what are* is precisely what is at stake.... [C]ompanion species...make a mess out of categories in the making of kin



Figure 3.7. Still from *El niño pez*, showing Serafín and Lala being treated for bullet wounds. Courtesy of Lucía Puenzo

[337] Frohlich, "What of Unnatural Bodies," 170.

[338] Roughgarden, "Sexual Diversity," n.p.

and kind. Queer messmates in mortal play, indeed."[339] Traversing the contact zones between species through touch, communication, respect, and regard, *El niño pez*'s companion species reveal the mutual contingencies among organisms that engage together in "mortal play" while generating other formulations of kinship, other forms of relating, and other possible worlds of multispecies flourishing.

The final scene of the film shows Ailín and Lala boarding a bus for Paraguay with Serafín in their arms, and the concluding dialogue emphasizes the intersections among family, home, and nature: "AILÍN. Tenemos la casa. / LALA. Y el lago… Vas a nadar conmigo. / AILÍN. Hasta el fondo" (AILÍN. We have the house. / LALA. And the lake.... You'll swim with me. / AILÍN. To the bottom). Sandilands observes that for many lesbian families and communities, nature represents a space outside of various interconnected forms of violence.[340] As an indigenous, working class, immigrant woman, Ailín becomes subjected to multiple layers of abuse and oppression which are legitimized by a patriarchal, homophobic, racist, and classist society. Building a queer family on the shore of Lake Ypoá represents for Ailín and Lala the utopic vision of a safe and equitable future free from heterosexist and capitalist power structures that reproduce colonial histories of instrumentalization (Fig. 3.8). In the version of the film distributed in Spanish-speaking countries, an image of the queer family appears on the film's cover with Lala and Ailín kissing in the foreground and Lake Ypoá's landscape beyond, the fish child barely visible between the submerged roots of a tree (see Fig. 3.5 above).

[339] Haraway, *When Species Meet*, 19 (ephasis in original).

[340] Sandilands, "Lesbian Separatist Communities," 145.



Figure 3.8. Still from *El niño pez,* showing Lala, Ailín, and Serafín boarding a bus for Paraguay. Courtesy of Lucía Puenzo

XXY's protagonists also form a new kind of family based on queer, multispecies, open-ended dynamics of kinship that point toward more livable futures in which people and turtles, humans and nonhumans, flourish together. As their romantic relationship grows, Alex gives Álvaro one of her/his turtle identification tags used to track the organisms' places of birth, feeding grounds, and migratory routes, explaining that their two tags belonged to turtles of the same family group. Tossing aside the heart-shaped silver locket of a necklace she/he bought earlier, Alex strings the tag on the chain and hands it to Álvaro (Fig. 3.9). Popularized in the Victorian era, lockets were used to store a painted portrait, photograph, or lock of hair of a family member or sweetheart.[341] By replacing this archetypically feminine adornment with a turtle identification tag, Alex reconfigures notions of kinship beyond the limits of the human while also challenging historically-situated heterosexist constructions of family and courtship. While initially Álvaro hesitates to wear Alex's gift, in the final scenes of the film he proudly shows Alex

[341] Bell, *Collecting Victorian Jewelry*, 55.



Figure 3.9. Still from *XXY*, showing Alex giving Álvaro a turtle identification tag. Courtesy of Lucía Puenzo

the identification tag hanging from the chain around his neck before boarding the ferry with his disgruntled parents. Evoking the enormous distances traveled by sea turtles on their migratory routes, the identification tags' similar serial numbers point toward the possibility that Álvaro and Alex will find each other again in a more equitable and sustainable future that promotes both biological diversity and sexual diversity.

Genitalic Extravagance on Display: María Fernanda Cardoso

Cardoso's impressive body of work constantly traverses the lines between nonhuman and human species, nature and culture, and the natural sciences and the arts. Tanya Barson, curator at the Tate Modern in London, observes that Cardoso explores the often problematic cultural history of the biological sciences while "emphasizing the richness and extravagance of morphologies, or forms, available through the natural world, both in their existing and evolving forms and in the possibilities that they present for new forms and structures in art."[342] With undergraduate and graduate degrees from

[342] Barson, "Mark but this flea," n.p.

the University of the Andes in Bogotá, Colombia, Yale University, and Sydney College of the Arts in Australia, Cardoso has received numerous international grants and awards for pieces exhibited at leading museums and galleries throughout Latin America, North America, Europe, and Australia. In Jorge Alejandro Medellín and Diana Fajardo Rivera's evaluation, Cardoso's work "nos invita a hacer una reflexión sobre nuestro pasado precolombino, sobre nuestras relaciones con la naturaleza, sobre la simbología propia de cada animal, [y] sobre el cambio de significado que sufren los objetos con su descontextualización" (invites us to reflect on our pre-Columbian past, our relationship with nature, the symbolism of each animal, [and] the transformation in meaning that the objects undergo through their decontextualization).[343] Like Zermeño, Cardoso draws on a wide range of sculptural techniques and materials ranging from Styrofoam and resin to natural fibers and live organisms, and her body of work encompasses other genres such as performance, video, photography, and illustration. Her early work featured preserved specimens such as lizards, starfish, seahorses, butterflies, and flowers arranged in abstract patterns and symbolic shapes that reference indigenous cosmologies, particularly those of the Chibcha-speaking Muisca people of the Colombian Andes. More recently, her projects combine traditional hands-on art techniques and cutting-edge technologies such as rapid 3D prototyping, as well as historical and emerging research methodologies from the biological sciences, in an exploration of sexual diversity and biological diversity in the more-than-human world.

[343] Medellín and Fajardo Rivera, *Diccionario de Colombia*, 177.

In an interview with Roberta Buiani and Gary Genosko, Cardoso recalls how during the nature walks she took with her father as a child in Colombia, she would bring along a loupe scope to examine the plants, insects, and fungi they encountered.[344] Cardoso's keen attention to the microscopic and utilization of biological research methods pervade her sculptural and multimedia installations, including one of her most recognized works, the performance-installation *Cardoso Flea Circus* (1994-2000) which followed a wide international circuit before becoming part of the Tate Modern's permanent collection (Fig. 3.10). Reviving the controversial circus curiosity popularized in seventeenth- and eighteenth-century Europe and North America which displayed live fleas performing seemingly impossible tasks, Cardoso painstakingly trained fleas to walk tightropes, lift cotton ball weights, and pull tiny locomotives while a live video projection allowed spectators to view the nearly-microscopic insects' feats of strength and agility.[345] For her most recent projects, Cardoso utilizes compound and electron microscopes housed in biology laboratories as well as advanced digital imaging tools to study the

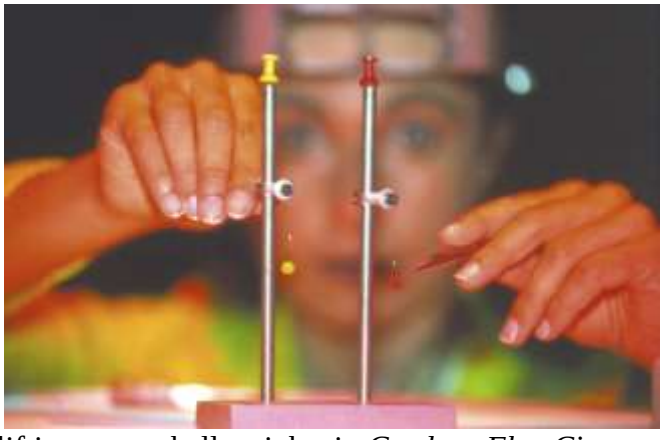


Figure 3.10. Fleas lifting cotton ball weights in *Cardoso Flea Circus* at the Sydney Opera House in 2000. Courtesy of María Fernanda Cardoso

[344] Cardoso, "For a Museum," n.p.

[345] Godbey, "The Cinema of (Un)Attractions," 285-89.

intricate genitalia of invertebrates, observations which form the basis of the ongoing, large-scale research project *Museum of Copulatory Organs* (2008-).

As Barson contends, art in Latin America, and Colombia in particular, draws on a long history linking scientific methodologies with artistic practice.[346] Many European naturalists and explorers such as Alexander von Humboldt, Charles Darwin, and the Spanish botanist José Celestino Mutis (who introduced Humboldt to the region that is now Colombia) combined scientific analysis, empiricism, and artistic production as they documented the organisms, geological formations, and local knowledges they encountered throughout the Americas through detailed drawings and illustrations.[347] These intersecting scientific and artistic methodologies continue to express themselves in contemporary aesthetic movements such as bioart, which first coalesced in Brazil at the end of the twentieth century with the work Eduardo Kac and Sérgio Duarte and is now practiced by artists around the world who utilize laboratory research processes and biotechnology to create works of art that, while often playful, also convey serious critiques of the problematic relationships between animals and humans in technoscientific research.[348]

Similarly, the Enlightenment-era artist-naturalist-explorer tradition from which bioart emerges poses complex ethical challenges, as the classification of new species and the collection of specimens to fill the museums of colonizing nations has been implicated

[346] Barson, "Mark but this flea," n.p.

[347] Barson, "Mark but this flea," n.p.

[348] For more on the ethics of bioart, see Stracey, "Bio-Art: The Ethics behind the Aesthetics" (2009). For an in-depth discussion of technoscience, see Haraway, *Modest_Witness@Second_Millennium.FemaleMan©_ Meets_OncoMouseTM: Feminism and Technoscience* (1997).

in processes of imperial expansion and species extinction. This impetus to further scientific knowledge at all cost is exemplified by cases of now-extinct species such as the Narborough Island tortoise, of which the last living individual was captured and killed by members of the California Academy of Sciences expedition to the Galápagos Islands in 1906.[349] As Haraway comments in *Primate Visions* (1989), "[s]cientific knowledge canceled death; only death before knowledge was final, an abortive act in the natural history of progress."[350] In addition, the early documentation of Latin America's rich biodiversity and geological resources became tied up—if unwittingly—in the extractive colonial practices that led to the displacement and subjugation of indigenous peoples and the destruction of species and ecosystems. For example, after repeated European expeditions into the northern Andes—impelled by widely-circulated accounts of *El Dorado* (the golden one)—and the subsequent Spanish conquest of present-day Colombia, the indigenous Muisca people found themselves subjugated through the *encomienda* system, forced to work in gold mines and perform hard agricultural labor to support the expanding colonies. Abel Fernando Martínez Martín and Edwar Javier Manrique Corredor document the deleterious impact such exploitive practices had on Muisca society and culture, as well as the resulting ecological destruction and species extinctions that swept the Altiplano Cundiboyacense.[351] In addition, European colonists

[349] Van Denburgh, "Preliminary Descriptions," 1-6. In a particularly horrifying variant of the collectionist fanaticism described above, even indigenous people were brought as human "specimens" to the Old World and put on public display, a troubled history which is parodied in Coco Fusco and Guillermo Gómez Peña's performance *Two Undiscovered Americans Visit the West* (1992-1994).

[350] Haraway, *Primate Visions*, 34.

[351] Martínez Martín and Manrique Corredor, "Alimentación prehispánica," 103.

deliberately utilized the introduction of invasive species such as sheep and cattle in order to destroy the agricultural lands and native organisms which the Muisca and other indigenous peoples relied on for their survival.[352]

Similar to the conflict over the "weird bug" in *XXY*, critiques of the problematic linkages among classification, colonization, patriarchy, and extinction pervade Cardoso's entire body of work, particularly in projects produced in the 1990s and early 2000s. On the occasion of the II Biennale of Bogotá in 1990, Cardoso exhibited a collection at the Museo de Arte Moderno with sculptural pieces composed of taxidermied amphibians, reptiles, fish, and insects arranged with wire into varying geometric shapes hung on walls or suspended in the air. The pieces in this collection explicitly uncover Muisca ritual symbolism and knowledge about sexuality and the nonhuman world while materializing overlapping histories of social and environmental exploitation in Colombia. In *Corona para una princesa chibcha* (Crown for a Chibcha princess, Fig. 3.11), a ring of lizards with limbs bent out at right angles hangs head-high from a thin metal arch, the vast empty space below the crown highlighting the absence of the crown's intended wearer. While I hesitate to follow María Clara Bernal's and Ana Sokoloff Gutiérrez's interpretations of the piece as a biblical "crown of thorns," I agree with their suggestions that the empty space symbolizes the destruction of indigenous cultures under Spanish occupation[353] and contemporary industrialization.[354] When read through Jacques Derrida's notion of trace,

[352] Martínez Martín and Manrique Corredor, "Alimentación prehispánica," 106.

[353] Bernal, "María Fernanda Cardoso," n.p.

[354] Sokoloff Gutiérrez, "María Fernanda Cardoso," 71.



Figure 3.11. *Corona para una princesa chibcha*. Detail (*right*). Courtesy of María Fernanda Cardoso

the space below the crown becomes a "mark of the absence of a presence, an always already absent present."[355] Through her physical, corporeal absence, the titular Chibcha princess and the histories of violence that led to the near-erasure of her culture could not be more strikingly present in Cardoso's piece. In addition, the lizards' preserved bodies which simultaneously invoke life and death, provocatively foreground the ways in which the colonization, displacement, and exploitation of indigenous peoples are intimately linked to ecological destruction, resource extraction, and species extinction. In an interview with Elizabeth Ann Macgregor, the artist states that "it is essential to acknowledge that we share this world with so many other life forms and it's a great loss that these are diminishing."[356] The complex linkages between conservation and social justice, which have been thoroughly documented by Martínez Martín, Manrique

[355] Spivak, "Translator's Preface," xvii.

[356] Cardoso, "Looking, Observing, Making," 208.

Corredor, and other scholars of the colonial period, continue today as contemporary Muisca communities struggle to preserve the ecosystems and sacred landscapes pivotal to their survival.

In contrast with Carolina Ponce de León's denunciation of Cardoso's 1990 series as a "provocación superficial [que] pertenece más a lo morboso que a lo simbólico" (superficial provocation [that] corresponds more to the morbid than the symbolic),[357] I would contend that, far from gratuitous, Cardoso's sculptural utilization of taxidermy enacts a deliberate and sophisticated cultural critique of the natural sciences' historical obsession with collecting and preserving "specimens" while deconstructing through a queer frame the heteronormative semiotics of the natural history museums whose displays those specimens filled. As much an art as a science, taxidermy began to flourish in Europe and the United States around 1890 when the demand for dioramas featuring whole, lifelike organisms and "habitat groups" rapidly increased in institutions such as the American Museum of Natural History and the British Museum.[358] As Haraway explains, displayed specimens were often arranged in species-specific family groups consisting of one female and one or two offspring centered around a large, virile, vigilant male, the lead actor in a carefully staged "morality play" reinforcing hierarchical, heteronormative, repro-centric conceptions of nature and society as well as specific patriarchal constructions of masculinity, in an effort to educate increasingly diverse and

[357] Ponce de León, "La Bienal," 95.

[358] Haraway, *Primate Visions*, 36-37. Haraway notes that many naturalists, museum curators, and taxidermists of this period were driven by the conviction that killing and stuffing organisms as specimens for scientific study and public viewing actually served the preservation of the world's vanishing wildlife (37).

"degenerate" urban publics.[359] Against this grain, Cardoso's use of taxidermied organisms arranged in beautiful shapes reflects her preference for "strong images that make an impact on the viewer, make them participate in an aesthetic experience of pleasure. This then makes the viewer an accomplice in the more disturbing aspects of the work."[360]

While Cardoso's sculptural groupings at the 1990 Biennale of Bogotá are also species-specific, her arrangement of the taxidermied animals in numbers far exceeding what can be considered "nuclear families" and in geometric configurations such as rings, webs, and spheres, provocatively queers the heteronormative visual semiotics of traditional natural history museum dioramas while disrupting repro-centric imperatives regimenting how animals should be displayed in public spaces. Like Puenzo's films, Cardoso's installations also queer heteronormative constructions of family and kinship. Cardoso's displays reflect the differing understandings of gender and sexuality among Chibcha-speaking people, for whom traditions of *cusmos* (men gendered as women) and homoerotic behavior predate the time of first European contact.[361] In addition, Cardoso's choice of organisms—diverse species of amphibians, reptiles, insects, and fish—emphasizes Bagemihl's notion of biological exuberance by highlighting the pervasiveness of hermaphroditic and asexual behaviors in the animal world. An example is *Ranas bailando* (Dancing frogs, Fig. 3.12), displayed alongside *Corona para una*

[359] Haraway, *Primate Visions*, 29-30.

[360] Cardoso, "Looking, Observing, Making," 211.

[361] Trexler, *Sex and Conquest*, 86.



Figure 3.12. Detail of *Ranas bailando*. Courtesy of María Fernanda Cardoso

princesa chibcha at the 1990 Biennale of Bogotá. As Bernal and other critics have pointed out, frogs are an important symbol of water, abundance, and sexuality in Muisca culture,[362] and Colombian anthropologists have documented how ancient Muisca design variations in pictographs and gold artifacts accurately depict morphological differences among dozens of amphibian genera and species.[363] Both frogs and lizards are considered sacred messengers aiding in shamanic communication with the more-than-human and spirit worlds, and many present-day Chibcha-speaking communities continue to use the distinctive calls of species such as the green Bogotá savanna frog to accurately forecast the beginning of the rainy season.[364] In this context, Cardoso's displays ironically appropriate museum aesthetic conventions and taxidermic technologies developed

[362] Bernal, "María Fernanda Cardoso," n.p.

[363] Marriner, "Colombian Rock Art," n.p.

[364] Marriner, "Colombian Rock Art," n.p.

relatively recently by Western naturalists, turning them on their head in order to foreground the complex and sophisticated ecological knowledge systems the Muisca have developed over millennia.

Cardoso's most recent projects continue in this vein of utilizing biological research techniques for unexpected and often ironic and irreverent ends in order to queer the natural history museum and challenge heteronormative, repro-centric constructions of nature. One of the most popular and widely publicized exhibitions at the XVIII Biennale of Sydney (2012), Cardoso's *Museum of Copulatory Organs* (*MoCO*) synthesizes years of research uncovering the exuberant and promiscuous sexualities of plants, arachnids, mollusks, and other invertebrates. In response to questions about why she prefers invertebrates, Cardoso emphasizes her passion for uncovering "things people have never seen, and that are 'weird and wonderful.'"[365] Utilizing cutting-edge laboratory technologies in collaboration with taxonomists, evolutionary biologists, electron microscopists, graphic designers, and 3D printer specialists, Cardoso produces highly magnified two-dimensional images and three-dimensional resin and glass replicas of the elaborate microscopic genitalia of nonhuman organisms. Mounted on wooden or metal bases, protected by inverted glass tubes, labeled using handwritten Linnaean binomial nomenclature (genus, species), and with an off-white finish giving them an aged look, the "specimens" are arranged in museum showcases resembling classic natural history museum exhibits while echoing the European naturalist tradition of the "cabinet of curiosities" (Figs. 3.13 and 3.14). While Cardoso's *Museum* clearly situates itself in

[365] Cardoso, "For a Museum," n.p. Cardoso's *MoCO* includes pieces from the collection *It's Not Size that Matters, It's Shape* shown at the ARC One Gallery in Melbourne in 2011.



Figure 3.13. *Museum of Copulatory Organs.* Courtesy of María Fernanda Cardoso



Figure 3.14. Fruit fly sperm in *Museum of Copulatory Organs*. Courtesy of María Fernanda Cardoso

relation to these historical traditions, I would problematize Buiani and Genosko's contention that *MoCO* demonstrates "her loyalty towards the natural museum display."[366] On the contrary, Cardoso's *Museum* is anything but loyal to these traditions, as it renders radically visible and protagonic certain aspects of nonhuman nature that would be erased or vilified as "taboo" in relation to the heteronormative, repro-centric imperatives

[366] Buiani and Genosko, "Putting Penises," n.p.

historically reinforced through the discourses and aesthetic conventions of natural history, taxidermy, and museum curation.

Cardoso's *MoCO* confronts spectators with the realization that nonreproductive sexual pleasure, desire, and agency is not limited strictly to the sphere of rational, human "subjects" but instead pervades the entire nonhuman world. In an interview with the Australian Broadcasting Corporation, Cardoso comments that "these beautiful shapes changed my perception of the world, it makes you realise there's a lot of sex going around you and you're not aware of it.... A lot of animal species are promiscuous, especially insects."[367] For example, one group of sculptures depicts the extravagance and incredible morphological diversity of the intromittent organs (external male genitalia) of harvestmen (*Opiliones*), a spider-like genus of arachnid (Figs. 3.15 and 3.16). While Cardoso's collection centers on a range of harvestmen species found in Tasmania, other members of the genus are listed as endangered in Brazil, Argentina, Spain, and the United States. Harvestmen "penises" have evolved partially in response to what behavioral ecologist William G. Eberhard has called "cryptic female choice," or a female's ability to control by chemical or physical means whether a copulatory encounter will result in insemination and offspring: "Such discrimination is 'cryptic' in the sense that it is a hidden, or internal, decision made by a female after the more obvious decision to copulate. Even though a male was accepted as a partner in copulation, he may be rejected as a father of the female's offspring."[368] In other words, female harvestmen

[367] Quoted in "Professor María Fernanda Cardoso," n.p.

[368] Eberhard, *Female Control*, 5-6.



Figure 3.15. Harvestmen intromittent organs in *Museum of Copulatory Organs.* Courtesy of María Fernanda Cardoso



Figure 3.16. Electron microscope scan (*left*), digital model (*center*), and resin sculpture (*right*) of harvestmen intromittent organ in *Museum of Copulatory Organs*. Courtesy of María Fernanda Cardoso

regularly choose to engage in frequent sexual activity independent of any urge to reproduce. Australian and Argentine biologists Glenn S. Hunt and Emilio A. Maury provocatively argue that the complex structures and large relative size of harvestmen intromittent organs have evolved to provide sophisticated forms of sensory stimulation to

females before and during sex.[369] By illustrating in striking visual clarity evidence supporting the theory of cryptic female choice, Cardoso's harvestmen sculptures complicate longstanding assumptions that copulation invariably leads to fertilization while simultaneously revealing the prevalence of nonprocreative sexual behavior and desire in the more-than-human world.

As Lara Stevens notes, the sculptures' suggestion of "sexual foreplay" in arachnids challenges anthropocentric perspectives that have "historically characterised animal sex as purely procreative and still often insist...on only granting humans (and sometimes other mammals such as dolphins) the rational capacity to engage in sex for pleasure."[370] Indeed, the anthropomorphic evocation of "foreplay," as well as the human-scale magnification and monochromatic tones of the sculptures, invites viewers to question the tenuous boundaries separating humans from other species and instead contemplate what makes us more similar than different. While I follow Stevens's initial contention that Cardoso's sculptures reveal the existence of sexual desire in nonhuman animals, later Stevens confusingly reverses this claim by reducing the harvestmen's elaborate genitalia to "the function of species survival" and "biological determinism," reinforcing repro-centric and anthropocentric discourses by suggesting that it is only human cultural constructions of sexuality that are agential and variable.[371] In contrast, Cardoso's sculptures reveal evidence not only of female agency, but also of the

[369] Hunt and Maury, "Hypertrophy of Male Genitalia," 555.

[370] Stevens, "Dismembering the Member," n.p.

[371] Stevens, "Dismembering the Member," n.p.

astonishing variability in genitalic forms within one single genus. Beginning as electron microscope scans of laboratory specimens converted into large-scale 3D computer models, and finally transformed into solid resin using a 3D printer, Cardoso's sculptures expose in striking detail harvestmen genitalic morphology resembling the elegant blossoms of orchids and lilies or the whimsical shapes of sea slugs, squid, jellyfish, and other deep-sea organisms.

While the harvestmen collection focuses primarily on deconstructing repro-centric notions of sexuality, other pieces in Cardoso's *MoCO* exemplify the vast range of sexual configurations and behaviors that betray the ludicrousness of heteronormativity, from salamander and pseudoscorpion spermataphores to damselfly genitals and plant pollen. Electron microscope scans enlarged and printed with black ink on thick cotton rag paper display in astonishing detail the genitalia of *Phallomedusa solida* (Fig. 3.17), a hermaphroditic species of mangrove snail no larger than 20 millimeters commonly found in salt marshes around Sydney. *P. solida*'s name derives from its Medusa-like penis, "a complex, elaborate structure with a spiral appearance" terminating in "a dense cluster of tentacle-like appendages of varying length" with which two individuals penetrate each other simultaneously during copulation.[372] Like many species of snail, *P. solida* launch "love darts" before copulation, releasing complex chemical compounds that effectively alter the sex organs of their mates.[373] As Jane Goodall notes, "[t]he tiny organisms in Cardoso's work do not carry the social connotations of human gender identities, and the

[372] Golding, Byrne, and Ponder, "Novel Copulatory Structures," 171-72.

[373] Rogers and Chase, "Dart Recepit," 122.



Figure 3.17. Electron microscope scan of *Phallomedusa solida* genitalia. Courtesy of María Fernanda Cardoso

formal extravagance of their sexual apparatus confounds any ready-made interpretations we might be tempted to apply to them."[374] The highly polymorphous and shifting sexual terrain of *P. solida* and countless other organisms render impossible the sustained maintenance of discourses that normalize heterosexuality as the only "natural" expression of sexual behavior and desire, both within and beyond the scope of the human.

Conclusion: Multispecies Companionships beyond the Anthropocene

Like the multispecies kinships forged in Puenzo's films, Cardoso's nonhuman "specimens" on display and their human counterparts engage in encounters across "contact zones" in which processes of "becoming-with" make "a mess out of categories in the making of kin and kind."[375] Cardoso's and Puenzo's bioregional focus in *Corona*

[374] Goodall, "Natural Aesthetics," 55.

[375] Haraway, *When Species Meet*, 19.

para una princesa chibcha (the northern Andes), *Museum of Copulatory Organs* (Australasia), *XXY* (the Uruguayan coast), and *El niño pez* (Paraguay/Argentina) underscores the extent to which human and nonhuman species are mutually implicated in both local and global dynamics of multispecies survival in the age of the Anthropocene. While in the Southern Cone sea turtles and human coastal communities struggle to negotiate the dangerous effects of rising ocean temperatures, a growing and indiscriminate fishing industry, and increasing levels of toxic contamination,[376] in Colombia's cloud forests and high mountain ecosystems—which are home to an astonishing one-sixth of the world's entire biodiversity—species are going extinct faster than scientists can study them due to warming temperatures, deforestation, large-scale mining, and other devastating human impacts[377] that also threaten the sustainable way of life of indigenous and rural communities who rely on the forests' biodiversity for their survival.

Half a world away, the ozone layer protecting the earth from the sun's biologically harmful ultraviolet radiation is at its thinnest over Australia as a result of high concentrations of anthropogenic chloroflurocarbons (CFCs) and other ozone-depleting compounds.[378] The fact that Australia has one of the highest extinction rates of any continent[379] as well as the highest rates of skin cancer in the world[380] crystallizes

[376] Laporta and Miller, "Sea Turtles in Uruguay," 65.

[377] Spanne, "Colombia's Unexplored Cloud Forests," n.p.

[378] O'Reilly, "Skin Cancer and Climate Change," n.p.

[379] McConnon, "Australia's Extinction Rate," n.p.

[380] O'Reilly, "Skin Cancer and Climate Change," n.p.

climate change's deleterious effects on both public health and species survival. While they may not explicitly reference climate change itself, Cardoso's sculptural installations and Puenzo's films meditate on the ways in which multispecies companions are mutually implicated in local and global processes that have real yet unpredictable life-and-death consequences for individuals and entire populations. Puenzo's and Cardoso's works also forge more sustainable, equitable, and livable coalitions beyond the Anthropocene by mapping the intersections of biological diversity and sexual diversity while uncovering the queer, knotted, messy becomings of human and nonhuman species.

CHAPTER 4

JUAN CARLOS GALEANO, SOLMI ANGARITA, AND ASTRID CABRAL: COSMOPOLITICS, SEMIOSIS, AND RESISTANCE IN THE AMAZON

> [C]ommunity can be imagined as belonging to, and being a pluralist, diverse manifestation of a vast ecological interweaving of different life forms and environments interacting locally and globally. Such a view of the world challenges us to listen to a diversity of stories, and to try to understand other ways of knowing and being.
>
> —Daniel Fischlin and Martha Nandorfy, *The Rights of Community, The Community of Rights*

While chapter 2 explores multispecies interactions on the corporeal level to dismantle anthropocentric discourses by revealing the fundamental evolutionary continuity of the human with all other species on the planet, chapter 3 centers on multispecies queer companionships that simultaneously deconstruct heteronormative and "repro-centric"[381] constructions of gender and of nature itself. This frame of inquiry expands to the level of community in the present chapter, which examines the complex web of multispecies relationships on a broader, bioregional scale, focusing on the ways in which biosocial communities, constructed through semiotically-rich communication among individual members of species constituted as sentient beings, reconfigure our

[381] Mortimer-Sandilands and Erickson, "Introduction," 11.

understandings of rights, politics, and ethics beyond the scope of the human. As points of convergence in the circulation of signs and thoughts, humans and nonhumans alike occupy the position of intentional subjects that interpret, represent, and transform the world around them.

The poetic, narrative, and visual works discussed in this chapter stand largely in opposition to traditional representations of Amazonia in the Latin American cultural imaginary. A vast bioregion (approximately the size of the continental United States) centered on the Amazon River and its numerous tributaries and home to over 10% of the planet's known species, the Amazon is a transnational space encompassing portions of Bolivia, Brazil, Colombia, Ecuador, Peru, Venezuela, Guyana, Suriname, and French Guiana.[382] Bolivian literary theorist Nicomedes Suárez-Araúz notes how, for over a century, writers such as Euclides da Cunha have described the Amazon and its constantly shifting river landscapes as zones where history erases itself, as "green planes of amnesia."[383] Candace Slater, Jeremy Larochelle, and others have observed that literary and cultural envisionings of the Amazon have tended to align themselves with the diametrically opposed metaphors of a sublime "Green Cathedral" or a violent "Green Hell," with a decided proclivity for the latter.[384] This tendency, which Mark D. Anderson calls "ecologies of abjection,"[385] is exemplified in José Eustasio Rivera's novel *La*

[382] World Wide Fund for Nature (WWF), "About the Amazon," n.p.

[383] Suárez-Araúz, "Introduction," 6-7.

[384] Larochelle, "Writing Under the Shadow," 201n9; Slater, *Entangled Edens*, 8, 95-99. Slater borrows the term "Green Cathedral" from Juan de Onís's book of the same name (1992) and explains that the image of a "Green Hell" was first popularized by Alberto Rangel in 1908 (Slater 226n13).

[385] Anderson, "National Natures," 213. With particular reference to *fin de siècle* Brazilian literature about the Amazon, Anderson defines ecologies of abjection as "environmental theories depicting uninhabitable

vorágine (1924), which vividly concludes with the protagonists being "devoured" by the oppressive, unrelenting wildness of the jungle, itself becoming consumed by the pervasive violence and destruction of the Rubber Boom.[386] Such alienating representations of the Amazon, which portray it as either the "victim of exploitation or the victimizer of those who ventured to explore it or live in it,"[387] erect an indissoluble divide between human and nonhuman, foreclosing the possibility of imagining any kind of shared community that brings different orders of life together. Rivera's novel further exemplifies how the Amazonian literary canon has, curiously, been constituted almost exclusively by outsiders who cannot claim to be from the Amazonian basin itself, often labeling as "barbaric" and "unlettered" authors and artists who call the Amazon home, especially if they identify as indigenous.[388]

Given Amazonian cultural production's fraught relationship with these questions of representation, it may seem an unexpected place to ground a discussion about multispecies communities and shared publics. However, the work of Colombian poet Juan Carlos Galeano (1958-), Colombian visual artist Solmi Angarita (1989-), and

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geographies characterized by an unbearable climate and hostile nature, including monstrous and/or parasitical flora and fauna, and physical topographies that defy the 'natural' order and Western aesthetics, which contribute to the evolution of lazy, immoral, irrational, deformed, and dark-skinned humans who have undergone pernicious adaptations to the adverse environment" (213).

[386] Rivera, *La vorágine*, 325.

[387] Suárez-Araúz, "Introduction," 6.

[388] Suárez-Araúz, "Introduction," 1-2. This dichotomous view that grants metropolitan writers a heightened status while delegitimizing those from the "barbaric social milieu" (Suárez-Araúz 2) of the Amazon rainforest reflects a recurring theme in Latin American intellectual history revolving around the opposition between civilization and barbarism, embodied in the subtitle of Domingo Faustino Sarmiento's *Facundo* (1845), as well as the dichotomy of city and country expressed in Ángel Rama's *La ciudad letrada* (*The Lettered City,* 1984).

Brazilian poet Astrid Cabral (1936-) exemplifies recent trends in Amazonian literature and art that are turning this exclusionary, anthropocentric, and ecologically problematic aesthetic tradition on its head. In light of the points of intersection among biosemiotics, cosmopolitics, multispecies ethnography, and what Daniel Fischlin and Martha Nandorfy call "relational contingencies" and an "ethics of encounter" (theoretical perspectives which I will discuss at length below), I contend that these poetic and artistic works conceive of "community" as an intricate fabric of mutually contingent and communicative relationships among humans, animals, plants, and mythical beings that flourish on the banks of the Amazon River and in the depths of the rain forest. With special attention to Galeano's poetry collections *Amazonía* (2012) and *Yakumama* (2014) and Angarita's accompanying illustrations, as well as the book of poems *Jaula* (*Cage*, 2006) by Cabral, I argue that poetry and art can reimagine the Amazon as a crucial context for thinking through politics, ethics, and rights beyond the human/nature divide and for imagining how multispecies shared communities are constructed as a form of resistance to historical and contemporary processes of colonization, ecological destruction, and amnesia. Furthermore, as writers and artists from the Amazon itself who transformatively combine ethnographic perspectives with artistic and literary creative practice, Galeano, Angarita, and Cabral resist the historical exclusion of indigenous and other-than-dominant voices and perspectives from the Amazonian literary canon, highlighting the sophisticated knowledge systems and scientific literacies that indigenous peoples have developed over millennia and that continue to bear explanatory influence in the present, helping us envision the varied forms that multispecies flourishing may take beyond the global ecological crisis of the Anthropocene.

In what follows, I complement and extend previous ecocritical studies of the work of Galeano, Angarita, and Cabral—such as those carried out by Joni Adamson, Jeremy Larochelle, and Malcolm K. McNee discussed below—by revealing, through an in-depth consideration of the biosemiotic theories of Jesper Hoffmeyer, Timo Maran, and Eduardo Kohn, new insights on the astonishing diversity of communicative processes occurring across rich zones of semiotic contact among the multiple species depicted in the poems and illustrations. As discussed in the introductory chapter, while theoretical approaches such as biosemiotics that draw on research in the biological and physical sciences are gaining ground in European, Australian, and North American ecocriticism, their application in Latin American cultural studies remains somewhat limited. Thus, my discussion of Galeano's and Cabral's poetry and Angarita's illustrations in light of biosemiotics and its points of convergence with multispecies ethnography and other approaches brings new theoretical tools to Latin American ecocriticism. I also contribute to the expanded scope of Latin American ecocriticism by putting non-canonical, twenty-first-century works of literature in dialogue with visual representations of Amazonian cosmologies. Finally, I explore how Galeano's and Cabral's poetry emerges out of a long tradition of ethnographic literature in Latin America while working against the alienation and amnesia which have been conventionally perpetuated in Amazonian aesthetic traditions.

Cosmopolitics and Relational Contingencies in Multinatural Communities

As I discussed in the introductory chapter, a growing number of political movements on local, national, and global scales are redefining politics beyond the limits

of the human by recognizing the rights of the earth and its myriad biotic systems and species. This trend, rooted in indigenous and other-than-dominant cosmovisions thousands of years in the making, is exemplified by Ecuador's and Bolivia's 2008 and 2009 constitutional amendments to protect the rights of nature or Pachamama, as well as the April 2010 landmark World People's Conference on Climate Change and the Rights of Mother Earth in Cochabamba, Bolivia. At this conference, delegates drafted a "Universal Declaration" that recognizes the rights of the earth to be respected, to be free of contamination, and to maintain its biodiversity, further citing human beings' obligations toward the biotic systems we inhabit.[389] These movements, which have largely coalesced in Latin America and other regions of the Global South, embody what Peruvian anthropologist Marisol de la Cadena, Joni Adamson, and other scholars call cosmopolitics. Drawing on Belgian philosopher Isabelle Stengers's 2005 essay "The Cosmopolitical Proposal" as well as Cadena's fieldwork with indigenous organizers in Peru, Bolivia, and Ecuador described in her essay "Indigenous Cosmopolitics in the Andes: Conceptual Reflections Beyond 'Politics'" (2010), Cadena defines cosmopolitics as "a new pluriversal political configuration" that connects "different worlds with its socionatural formations" by taking seriously the participation of nonhuman organisms and landscapes—known as "earth-beings"—as willful, sentient entities contending with heterogeneous political proposals and issues of justice and equality.[390] Subsequently, Adamson's essay "Indigenous Literatures, Multinaturalism, and *Avatar*: The Emergence

[389] "Declaración universal," n.p.

[390] Cadena, "Indigenous Cosmopolitics," 361-62.

of Indigenous Cosmopolitics" (2012) pushed Cadena's understanding of cosmopolitics to the forefront of conversations in ecocriticism and environmental humanities.[391] By bringing nonhuman forms of subjectivity and agency into political debates and public demonstrations, cosmopolitical movements challenge the ontological divide between culture and nature that forms the basis of dominant notions of politics predicated on strictly human forms of antagonism and alliance.

Furthermore, cosmopolitics resists the continued colonial reification of indigenous knowledge systems and movements as amounting to no more than "superstition" or "infantile invention" and instead contests the ways in which both nature and indigenous peoples have been excluded from the ontological construction and practice of conventional politics.[392] Far from "politics as usual," cosmopolitical movements often mobilize around heterogeneous coalitions among indigenous, mestizo, and other grassroots actors, local political and spiritual leaders, local merchants, foreign activists, public health officials, ecologists, climate scientists, and others who bring their different yet overlapping points of view to bear against ecologically destructive transnational economic interests. For example, Cadena documents how a proposed mountaintop removal mining operation in the Andes is opposed by those concerned with the mine's detrimental effect on local tourism and agricultural economies, toxic contamination of soils and water sources, and species habitat loss, alongside those wary

[391] In this essay Adamson deploys the concept of cosmopolitics in her reading of works by indigenous and nonindigenous authors, including Leslie Marmon Silko's novel *Almanac of the Dead* (1991), Linda Hogan's novel *People of the Whale* (2008), and James Cameron's film *Avatar* (2009).

[392] Cadena, "Indigenous Cosmopolitics," 350.

that the affected mountain Ausangate, as a sacred and powerful earth-being, would become angry about the mine and cause droughts, landslides, and epidemics in the area.[393] In this sense, cosmopolitics entails the coexistence of differing understandings of the world—or rather, the coexistence of what Stengers calls "multiple, divergent worlds,"[394] diverse perspectives and alliances that partially connect without generating a universalizing system of politics or a singular understanding of "nature."[395] In a similar vein, in "'¡Todos Somos Indios!' Revolutionary Imagination, Alternative Modernity, and Transnational Organizing in the Work of Silko, Tamez, and Anzaldúa" (2012) Adamson draws on María Josefina Saldaña-Portillo's analysis of indigenous Zapatista organizing in Chiapas, Mexico, to explore how transnational indigenous and non-indigenous groups increasingly build coalitions around overlapping commitments to social justice and environmental protection, constructing "alternative modernities" that deconstruct the empty signifier of "authentic" indigenous identity and that pave the way for diverse multiethnic and multinatural voices to participate in politics.[396] Adamson later links the Zapatista uprising and other transnational, coalitional movements of the Global South to the cosmopolitical movements that Cadena describes in the Andes.[397]

Fundamental to cosmopolitics is the reconfiguration of the concepts of "community" and "rights" beyond the strictly human sphere. In *The Community of*

[393] Cadena, "Indigenous Cosmopolitics," 338-39.

[394] Stengers, "Cosmopolitical Proposal," 995.

[395] Cadena, "Indigenous Cosmopolitics," 351.

[396] Adamson, "'¡Todos Somos Indios!,'" 2; Saldaña-Portillo, *Revolutionary Imagination*, 256.

[397] Adamson, "Indigenous Literatures," 151.

Rights, The Rights of Community (2012), Canadian scholars Daniel Fischlin and Martha Nandorfy expand notions of community to include human as well as nonhuman beings, inorganic entities, and the very land that makes community possible: "community can be imagined as belonging to, and being a pluralist, diverse manifestation of a vast ecological interweaving of different life forms and environments interacting locally and globally."[398] In Fischlin and Nandorfy's revisioning of rights and community, individuals cannot be conceived of outside the context of the multispecies communities through which they emerge as beings, and prevailing notions of "human rights" must be reconfigured to recognize that communities themselves have rights that are imbricated with the rights of the (non)human individual. Moreover, as a matrix of what Fischlin and Nandorfy call "relational contingencies"—the mutual irreducibility and inseparability of the individual from community and vice-versa—multispecies communities must actively and continually negotiate the terms of engagement and the values encoded within rights through an "ethics of encounter," an indeterminate set of embodied practices that respond to the dignity of the other and that make the emergence of rights possible.[399] Injustices occur when the relational contingencies within communities are ignored and when the terms of ethical encounter become incoherent: "to be 'in' community is to be constantly calibrating both intra and inter-communitarian relations. The success of these relations is

[398] Fischlin and Nandorfy, *Community of Rights*, 25. While Fischlin and Nandorfy themselves do not employ the term cosmopolitics, Adamson brings their work into fruitful dialogue with Cadena's research and explores the points of convergence between their ideas and how these can contribute to conversations in ecocriticism (Adamson, "Environmental Justice," 181).

[399] Fischlin and Nandorfy, *Community of Rights*, 7.

crucial to long-term community outcomes associated with renewability, sustainability, adaptation, and survival."[400]

Similarly, Uruguayan writer and political theorist Eduardo Galeano (1940-2015) articulates how the self's emergence within a network of relational contingencies inevitably impacts how communities define the ethical terms of encounter among diverse beings. In his address to the 2010 World People's Conference on Climate Change and the Rights of Mother Earth in Cochabamba, he observes that "[l]as culturas indígenas la ven [la naturaleza] desde adentro. Viéndola, me veo. Lo que contra ella hago, está hecho contra mí. En ella me encuentro, mis piernas son también el camino que las anda" ([i]ndigenous cultures see her [nature] from inside. Seeing her, I see myself. What is done against her is done against me. In her I find myself, my legs are also the road on which they walk).[401] The self, represented synecdochically through "my legs," finds itself inextricably bound up with the very earth ("road") on which it walks and with the more-than-human community through which it emerges as a self-in-becoming. Therefore, the negotiation of encounter between self and other is an embodied ethical practice that also affirms the rights of community within and outside those of the individual ("What is done against her is done against me").[402]

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[400] Fischlin and Nandorfy, *Community of Rights*, 8-9.

[401] Eduardo Galeano, "Mensaje a la cumbre," n.p. (English translation by Yoshi Furuhashi). All subsequent bibliographic references using the last name Galeano are to Juan Carlos Galeano unless otherwise specified.

[402] Eduardo Galeano's long essays, such as *Úselo y tírelo* (Use it, then throw it away, 1994), and *Patas arriba* (*Upside Down*, 1998), have been widely discussed by ecocritics within and beyond Latin America, especially in relation to his critiques of ecological contamination, global capitalism, and economic exploitation. See, for example, Luis I. Prádanos's essay "Ecocrítica y epistemología subalterna en Eduardo Galeano" (Ecocriticism and subaltern epistemology in Eduardo Galeano, 2012) and DeVries's *A History of Ecology and Environmentalism in Spanish American Literature* (18, 26n11). To this point Galeano's

How can "rights" be understood, then, when humans and nonhumans find themselves at opposite ends of the struggle for survival, when the life of one depends on the death of another? The ethical terms by which individuals negotiate encounters with human and nonhuman "others" are encoded in stories and, as Fischlin and Nandorfy propose, communities construct themselves through the self-reflexive act of shared storytelling.[403] Adamson and Monani explain in their introduction to *Ecocriticism and Indigenous Studies: Conversations From Earth to Cosmos* (2017) that indigenous and other-than-dominant story cycles and cosmovisions—a keyword they borrow from the English translation of the Universal Declaration of the Rights of Mother Earth—provide an explanatory framework through which communities can interpret globalization, climate change, and other complex historical and contemporary processes, while also encoding guidelines for sustainable behavior:

> Cosmovisions are articulated within specific histories, geographies, and contemporary contexts, they are an active means to negotiate the practice of daily survival. They serve as philosophical engagements to navigate the everyday ethics of living in wider worlds with humans and nonhumans alike.[404]

Far from "superstition" inferior to "objective" Western sciences, indigenous storytelling conveys theoretically robust and scientifically valid knowledges about the ecological

address to the 2010 Mother Earth Summit has received little to no ecocritical attention, especially not in conversation with multispecies ethnography and cosmopolitics.

[403] Fischlin and Nandorfy, *Community of Rights*, 7-8.

[404] Adamson and Monani, "Introduction," 8; "Declaración universal," n.p. Adamson and Monani's discussion of cosmovisions builds on Adamson's earlier work, such as the 2014 essay "Cosmovisions: Environmental Justice, Transnational American Studies and Indigenous Literature" (182). The English term "cosmovision" is in fact a borrowing of the Spanish word *cosmovisión*, which the Real Academia Española defines as a particular vision of the universe and which is used much more widely than its English calque (*Oxford English Dictionary*, 3rd ed., s.v. "cosmovision;" *Diccionario de la lengua española*, 23rd ed., s.v. "cosmovisión).

interactions that sustain more-than-human communities and the ways in which humans should approach the life-and-death relationships that make individual and community survival possible. For example, countless stories emerging from the Amazon basin describe powerful earth-beings—such as Mãe de Peixe, the Brazilian mother of fish, Yakumama, the Peruvian mother of all rivers, and Mapinguari, the Bolivian guardian of forest beings—who advise community members on sustainable fishing, hunting, and harvesting practices and often punish those who break the rules through wastefulness and greed.[405]

Such stories are increasingly foregrounded in the work of indigenous studies scholars, ecocritics, and ethnographers who, in collaboration with indigenous and grassroots communities, are collecting "the oral astronomical, ceremonial, cultural, agroecological, and ethnobotanical knowledges of diverse ethnic groups around the world and consider them legitimate and scientifically sound."[406] Recuperating the Greek root of the word *ethnos,* which denotes a heterogeneous multitude living together as part of a common nature, many of those who call themselves "multispecies ethnographers" are exploring how "'the human' has been formed and transformed amid encounters with multiple species of plants, animals, fungi, and microbes."[407] While some identify this expanded, posthumanist understanding of ethnography as symptomatic of anthropology's recent "ontological turn,"[408] Adamson traces (based on the findings of Laura Dassow

[405] Galeano, "On Rivers," 334; Galeano, Introduction, xvi.

[406] Adamson and Monani, "Introduction," 9.

[407] Kirksey, Schuetze, and Helmreich, "Introduction," 1.

[408] Kirksey, Schuetze, and Helmreich, "Introduction," 4.

Walls) the ways in which multispecies ethnography in fact emerges out of a long intellectual genealogy running through Alexander von Humboldt, Charles Darwin, Franz Boas, Claude Lévi-Strauss, Eduardo Viveiros de Castro, and even the likes of Ralph Waldo Emerson and Henry David Thoreau (often credited as pioneers in the American environmental movement).[409]

Adamson, Monani, and Walls clarify that it is what Humboldt learned through extensive interactions with indigenous groups in the Amazon between 1799 and 1804 that most influenced the generations of thinkers that came after him and that shaped his understanding of nature as "a planetary interactive causal network operating across multiple-scale levels, temporal and spatial,"[410] a concept which is also reflected in contemporary cosmopolitical movements.[411] As ethnographic storytellers themselves, Juan Carlos Galeano, Astrid Cabral, and Solmi Angarita uncover these currents in multispecies ethnography through poetry and art that embody the power of stories, as material-discursive enactments of multispecies encounters, to inscribe rights as they are negotiated within and beyond more-than-human communities.

Multispecies Communication in an Ecology of Selves

How do humans negotiate the ethical terms of encounter with other species who cannot "speak" as we do? How can we conceive of "speech" from outside the confines of

[409] Adamson, "Environmental Justice," 174; Walls, *Passage to Cosmos*, 268.

[410] Walls, *Passage to Cosmos*, 11.

[411] Adamson, "Environmental Justice," 174-75.

the human? A multispecies shared public may seem impossible from a Western, anthropocentric standpoint, since conventional notions of politics and rights are predicated on the ability to *respond* agentially through semiotic communication, an ability often attributed only to *Homo sapiens*. However, as European ecocritics Serenella Iovino and Serpil Oppermann contend, all matter is in fact "storied mater," not in the sense of discourses projected onto material bodies, but in that matter itself is a material-discursive matrix of "meanings, properties, and processes, in which human and nonhuman players are interlocked in networks that produce undeniable signifying forces."[412] Many biologists and humanists working in the emerging field of biosemiotics sustain that "semiosis is fundamental to life, that all living systems are semiotic systems," and that the production of signs is in fact the principal determining factor distinguishing *all* organic life forms—from macroscopic animals and plants to microscopic bacteria—from inanimate matter.[413] In the chapters of *Biosemiotics* (2008), Danish biologist Jesper Hoffmeyer explains the myriad ways in which sign processes are pivotal to life, from the receptor molecules that transmit and interpret chemical signals across the cell membranes of every living organism on earth and the infinite possibilities encoded in DNA, to the macroscopic behaviors and practices that enable organisms to thrive and interact in their environments. Hoffmeyer has argued that "biological communication is more than just machine-like exchange of information.... Living creatures are not just senseless units in

[412] Iovino and Oppermann, "Introduction," 1.

[413] Barbieri, "What is Biosemiotics?" 2.

the survival game; they also *experience* life" by interpreting and even transforming it as intentional, communicative beings.[414]

While biosemiotic theory has gained widespread recognition over the last decade, Estonian semiotician Timo Maran traces its development to the earlier writings of Hungarian-American semiotician Thomas A. Sebeok, American philosopher Charles S. Peirce, and German biologist Jakob von Uexküll. Uexküll's *Umwelten* theory places each organism in a subject position, studying its "relations with its environment as shaped by its species-specific perceptual and cognitive capacities and organized by meanings that bind the animal to living and nonliving entities in its environment."[415] As Maran observes, biosemiotics considers the ways in which individual organisms perceive, interpret, and generate semiotic processes in their environment, and treats multispecies "communities as the sum of interconnecting *Umwelten*,"[416] rich webs of overlapping and intersecting semiotic worlds. Thus, biosemiotics not only tears down categorical divides constructed by Western philosophy to set humans apart, but it also reveals the extent to which human existence and communication is deeply imbricated in larger sign processes occurring between and through human and nonhuman bodies in biocultural communities.

[414] Hoffmeyer, *Biosemiotics*, xiii-xiv (emphasis in original).

[415] Maran, "Biosemiotics," 29.

[416] Maran, "Biosemiotics," 29. Maran explains how biosemiotic understandings of signs differ in significant ways from Saussurean semiotic tradition. For example, while Ferdinand de Saussure holds that the sign has two parts, the signifier and the signified (excluding the referent, which Saussure considered of little linguistic relevance), Peirce's model of the sign is tripartite so as to include the material object/being, positioning Peircian semiotics as better equipped for understanding sign processes beyond the limited scope of human language (Maran 29).

Drawing on biosemiotic theories but also on the epistemologies and scientific literacies of indigenous Runa communities in the Ecuadorian Amazon, Eduardo Kohn contends in *How Forests Think: Toward an Anthropology Beyond the Human* (2013), that Western social theory tends to conflate all representation with strictly *human* forms of language and symbolic communication.[417] Inspired in part by Peircean semiotics, Kohn argues that language and symbolic "speech"—albeit unique to human communication—are in fact nested semiotic modalities that emerge co-constitutively from a broader realm of representational, nonsymbolic practices that extend far into the nonhuman world.[418] In addition to symbols (considered to be distinctively human forms of representation and the most complex), Peirce identifies two more kinds of signs: the "iconic" and the "indexical."[419] As the least complex representational modality, icons bear a direct likeness to the things they represent; indices relate indirectly to the things they represent, not through likeness, but by forming a connection with something else not immediately present or an event which has not yet occurred; finally, symbols derive their meaning not from any relationship to the represented object, but rather through their systematic relationship to other circulating symbols.[420]

While symbols are arguably what make human communication unique, they emerge out of a contingent relationship with icons and indices—the kinds of sign processes that permeate the nonhuman world and that often appear in human speech. For

[417] Kohn, *How Forests Think*, 8.

[418] Kohn, *How Forests Think*, 50-53.

[419] Peirce, "Sketch," 461.

[420] Kohn, *How Forests Think*, 30-37.

example, in lowland Quichua, the language spoken by the Runa, the word *tsupu* denotes when a large object (or animal) plunges into a body of water; *tsupu*'s direct, onomatopoeic resemblance to the splashing commotion it represents makes it an icon.[421] On the other hand, when a hunter tugs on a liana to startle a monkey from its treetop perch, the shaking perch becomes an indexical sign to the monkey, who interprets it as a sign not of something identical to itself, but as a sign of something beyond itself or of something yet to happen—a jaguar stalking up the tree, a branch about to break—which requires non-mechanical interpretation and preventive action in the present. As Kohn explains:

> Understanding the relationship between distinctively human forms of representation and these other forms is key to finding a way to practice an anthropology that does not radically separate humans from nonhumans. Semiosis (the creation and interpretation of signs) permeates and constitutes the living world, and it is through our partially shared semiotic propensities that multispecies relations are possible, and also analytically comprehensible.[422]

Expanding our concept of signs beyond strictly symbolic, human modalities paves the way for a non-anthropocentric understanding of the myriad ways in which nonhuman organisms represent and interpret the world around them and—perhaps most provocatively—the ways in which members of different species communicatively negotiate encounters with one another.

As "waypoints in the lives of signs" and "loci of enchantment," both human and nonhuman individuals participate in what Kohn terms an "ecology of selves, ...an

[421] Kohn, *How Forests Think*, 27-31.

[422] Kohn, *How Forests Think*, 9.

emergent and expanding multilayered cacophonous web of mutually constitutive, living, and growing thoughts."[423] The multispecies interactions that intersect throughout more-than-human communities in the Amazon rainforest rely on understanding not only how other organisms represent themselves, but also how one is represented from the perspective of other beings as intentional, communicative "selves." Unavoidably, killing and death play an intrinsic role in the flourishing of multiple species within this "ecology of selves," since the Runa and other indigenous and nonindigenous communities that call the Amazon basin home practice hunting, fishing, and harvesting as vital components of their way of life and their physical, economic, and cultural survival. Asking some of the same questions that Donna Haraway does in *When Species Meet* (2008), Kohn describes "a more capacious ethical practice, one that mindfully attends to finding ways of living in a world peopled by other selves" and that remains deeply attentive to the ethical challenges involved in deciding "what kind of flourishing to encourage" through the "many deaths on which all flourishing depends."[424] This is why, Kohn argues, ethics and semiotic processes must be examined side by side because one cannot exist without the other; the ethical terms of encounter must be negotiated through communicative sign processes traversing the bounds of human and nonhuman.

In many indigenous cultures of the Amazon, shamans and other "trans-specific beings"[425] play a pivotal role in interpreting the sign processes of nonhuman organisms

[423] Kohn, *How Forests Think*, 90, 79.

[424] Kohn, *How Forests Think*, 134-35. See, for example, Haraway, *When Species Meet*, 157, 288.

[425] Castro, "Cosmological Deixis," 471-72.

and ecosystems, often with the aid of psychotropic plants such as *ayahuasca* (*Banisteriopsis caapi*) to facilitate encounters with other life forms as well as the earth-beings (what Kohn calls "spirit masters")[426] that protect them. Through these multinatural and supernatural encounters, shamans gain vital knowledge about the past, present, and future which they convey to their communities and which inform sophisticated understandings of ecosystems and the sustainable practices necessary to maintain them. As I discussed in the analysis of Alejandra Zermeño's textile sculptures in chapter 2, Amazonian shamans can assume the point of view of other species, temporarily donning nonhuman bodily "clothing" with its attendant sensory apparatus in order to enter the material-semiotic world (*Umwelt*) of the other, gaining insight into the otherwise invisible, multilayered, multinatural worlds that make up the forest and its more-than-human communities.[427] As Catriona Sandilands argues in her essay "Pro/Polis: Three Forays into the Political Life of Bees" (2014) it is through material-semiotic points of contact between nonhuman and human *Umwelten* that shared publics are constructed: "our political lives are part of, and shaped by, different perceptual universes as our bodies commingle across species lines."[428] Furthermore, writing about nature—or better said, allowing nature to write itself into poetry and other artistic forms—is an intrinsic invitation to a cosmopolitics that opens up the notion of "community" to include

[426] Kohn, *How Forests Think,* 24.

[427] See Castro, "Cosmological Deixis," 472-72.

[428] Sandilands, "Pro/Polis," 169.

nonhuman organisms in multispecies engagements, a dynamic which poignantly plays itself out in the work of Galeano, Angarita, and Cabral.

Ethics of Encounter: Juan Carlos Galeano and Solmi Angarita

Teeming with human and nonhuman life forms that communicate with each other and actively interpret the world around them, the multivocalic world of Juan Carlos Galeano's Amazonian short stories, documentary films, and poetry, accompanied by Solmi Angarita's illustrations, challenges Western culture's fundamental anthropocentric notions of politics, publics, and personhood. While growing up on his grandparents' small farm in the Amazonian region of Caquetá, Colombia, Galeano witnessed the indiscriminate displacement of indigenous communities and the destruction of crucial species habitats as huge swaths of rainforest were cleared for agricultural development and cattle ranching, the winter sunsets tinted purple as the sky filled with the smoke of burning trees.[429] Against this backdrop of destruction, Galeano also remembers as a child being immersed in a vibrant landscape brimming with the diverse species, spirits, and multinatural worlds described in the countless stories and symbolic narratives he would hear from indigenous and nonindigenous neighbors and friends and which would later shape the images, rhythm, tone, and playful irony that characterizes his writing.[430]

After leaving Caquetá to pursue his studies in Bogotá and Kentucky and to join the faculty of Florida State University, Galeano has since returned to the Amazon

[429] Galeano, Introduction, xviii; Galeano, "Juan Carlos Galeano," n.p.

[430] Galeano, "Tierra y poesía," 111.

regularly over the past decade, often with his students, to conduct ethnographic fieldwork collecting stories from rural and urban areas throughout the Amazon River Basin.[431] These oral narratives and the sophisticated knowledge systems they embody form the basis for Galeano's collection of short stories *Cuentos amazónicos* (2007, published in English translation two years later as *Folktales of the Amazon*), as well as the partially overlapping bilingual poetry collections *Amazonía* (2012) and *Yakumama and Other Mythical Beings* (2014) which have inspired a series of paintings by Angarita.[432] These stories are also woven into the narrative fabric of Galeano's documentary films *The Trees Have a Mother: Amazonian Cosmologies, Folktales, and Mystery* (2008, co-directed with Valliere Richard Auzenne) and *The River*, which will premiere at the Twelfth Biennial Conference of the Association for the Study of Literature and Environment (ASLE) in Detroit, Michigan in June 2017. Galeano's work represents a departure both from previous literary renderings of Amazonian folklore—produced mainly by Latin American Modernists heavily influenced by the "excessive flowery and ornate language" of French Parnasianism and Symbolism[433]—as well as from the existing corpus of Amazonian folklore recorded by linguists and anthropologists in which critical discourse often obscures the art of the oral narrative as an embodied experience.[434] As anthropologist Michael Uzendoski comments, "Galeano has offered us another option that derives from

[431] Galeano, "On Rivers," 332.

[432] The edition of *Yakumama* published in 2014 contains only one of Angarita's paintings, "Renacos." Galeano is currently preparing an expanded edition of *Yakumama* which will feature more of Angarita's illustrations, including the ones I discuss in this chapter.

[433] Galeano, Introduction, xviii.

[434] Uzendoski, Foreword, ix.

how storytellers and poets, rather than social scientists, do things.... He has found a way to write down oral literature to convey something of the experience of listening to a tale *en vivo* (live)" through lyrical, uncomplicated language that captures the multivocalic, synesthetic, and multinatural experience of storytelling in the Amazon.[435] In this way, Galeano's work situates itself in relation to other literary-ethnographic renderings of popular oral traditions in Latin America, such as Nobel Prize-winning author Miguel Ángel Asturias's *Leyendas de Guatemala* (*Legends of Guatemala*, 1930), which gathers up Maya-Quiché oral narratives, and Lydia Cabrera's *Cuentos negros de Cuba* (*Afro-Cuban Tales*, 1940), which foregrounds stories from Santería and other syncretic Afro-diasporic religions. These collections represent indispensable texts for literary critics and anthropologists alike.

The stories emerging from indigenous and other-than-dominant communities, as Adamson has argued in *American Indian Literature, Environmental Justice, and Ecocriticism: The Middle Place* (2001), function as a "complex navigational system" for "seeing" long spans of geological, atmospheric, and biological time that are otherwise unavailable in a single lifetime, allowing humans to make comparative observations about past, present, and future environmental conditions.[436] In the essay "Environmental Justice, Cosmopolitics, and Climate Change" (2013), Adamson argues that these narrative and symbolic "seeing instruments," such as the ones she analyzes in Galeano's documentary *The Trees Have a Mother* and Richard Powers's novel *The Echo Maker*

[435] Uzendoski, Foreword, ix.

[436] Adamson, *American Indian Literature*, 141

(2006), also make visible global and local patterns of climate change which are otherwise too abstract or intangible because of their large scale.[437] In "Source of Life: *Avatar*, Amazonia, and an Ecology of Selves" (2014), Adamson discusses Galeano's poem "Table" and *The Trees Have a Mother* alongside James Cameron's blockbuster film *Avatar* (2009) in light of Kohn's "ecology of selves," arguing that when Amazonian indigenous peoples recognize trees as "selves" they reject "the idea that their oral traditions speak only of a 'mythic' past and therefore provide no explanatory or theoretical power in the present."[438] Adamson's notion of "seeing instruments" can also be used to illuminate a widely-told Amazonian story, described by Galeano in his 2017 essay "On Rivers," about a romance between the trees and invisible "flying rivers" (water-filled clouds in the sky), a relationship which is necessary for the health of the planet.[439] Biologists have widely documented how through the dual processes of interception and evapotranspiration, trees replenish soil moisture and groundwater supply, reduce runoff and flooding, and cool and remoisten the air, making it possible for rain to fall far away from ocean coasts; thus the loss of trees is contributing to drought, desertification, and accelerating temperature increases around the globe.[440] The Amazonian love story between trees and "flying rivers" conveys a scientifically sound

[437] Adamson, "Environmental Justice," 172.

[438] Adamson, "Source of Life," 258. In this essay Adamson also explores similarities between boundary-crossing practices in Galeano's documentary and the "dream state" in *Avatar* to illuminate, in light of Kohn's "ecology of selves," the importance of maintaining ontological difference even when boundaries become blurred (258).

[439] Galeano, "On Rivers," 336.

[440] Cotrone, "Role of Trees," n.p.

understanding of the vital role that forests play in the hydrologic cycle and the detrimental climactic and biospheric consequences of its disruption. Thus, this story helps communities in the Amazon envision and analyze the ways in which the complex dynamics of climate change are unfolding on both local and global scales.

Building on Adamson's arguments about how the oral traditions portrayed in Galeano's documentary offer sophisticated "seeing instruments" for understanding climate change and for seeing other organisms as "selves," I argue that the stories channeled in Galeano's poems also encode within their symbolic narratives the ethical terms of multispecies encounter, equipping humans with the analytical tools and ethical framework necessary for negotiating the precarious interactions and differential relations of life-and-death that are necessary for individual and community survival. Through an analysis enlivened by biosemiotic theory's intersections with multispecies ethnography and Amazonian philosophy as well as new insight into Angarita's methods and materials, I contend that the material-semiotic encounters among humans, nonhuman organisms, and mythical beings dramatized in Galeano's poetry and Angarita's paintings reveal what Fischlin and Nandorfy call the "relational contingencies"[441] that make up more-than-human interactions, while conveying the real-world codes of behavior that humans must follow in order to participate as communicative "selves" within a multispecies community.

Galeano's poem "Curupira" dramatizes how the nonhuman creatures that inhabit the mythical and material dimensions of the Amazon rainforest are recognized for their

[441] Fischlin and Nandorfy, *Community of Rights*, 7

capacity to respond meaningfully as political, communicative subjects rather than as mere objects of representation. Larochelle describes this transspecies and gender-bending earth-being, known in the Peruvian Amazon as Chullachaki and in the Brazilian and Colombian Amazon as the Curupira, as "el espíritu guardián del bosque...[que] se puede convertir en muchacha bonita para secuestrar al que está poco preparado al entrar en el bosque, y al que caza o pesca en exceso" (the guardian spirit of the forest...[who] can turn into a lovely young woman and kidnap an inexperienced passerby who enters the woods or someone who hunts or fishes excessively).[442] As a text that conveys, to borrow Sandilands's terms, an "understanding [of] the politicity of multiple agents,"[443] Galeano's poem reveals a multispecies cosmopolitics at work that includes humans, animals, trees, fruits, and the powerful spirit beings that serve as their protectors and that have the power to punish humans for unethical behavior. The poem begins with a description of the Curupira with "un pie mirando adelante y el otro para atrás" (one foot pointing ahead and the other pointing behind), occupying a liminal space between spirit and matter, human and nonhuman, and serving as a mediating force in complex dynamics of labor, reciprocity, survival, killing, and death.[444] He gladly accepts hunters' cigars in return for "sus secretos" (his secrets) about how to track and kill game, generously calling forth animals and fruits in generative plumes of smoke.[445] However, he also punishes humans

[442] Galeano, Introduction, xxiii; Larochelle, "Introducción," 15.

[443] Sandilands, "Pro/Polis," 157.

[444] Galeano, *Yakumama*, 10-11. The English translations in this bilingual collection and which I am borrowing in this chapter are by James Kimbrell and Rebecca Morgan.

[445] Galeano, *Yakumama*, 10-11.

for taking more than they need from the forest, blowing the smoke "para que desaparezcan / los animales, árboles y frutas" (so the animals, trees, and fruits disappear) and "para que desaparezcan los caminos" (making the paths vanish), causing greedy hunters to lose their way.[446] The poem concludes with an ominous warning: "También podría decirles a los animales sus secretos / para cazar a los hombres" (He could also tell the animals his secrets for hunting men).[447]

While human and nonhuman organisms are intertwined in a shared struggle for survival, conflict arises when these intermeshed publics are seen as separate and when nonhuman organisms are denied the status of political subjects, as intentional participants in an "ecology of selves."[448] The kind of multispecies cosmopolitics that Galeano proposes in his poem suggests that nonhuman organisms, as Sandilands elaborates, "are quite capable of experiencing their own equality and inequality *as such*," precisely because "the ontological condition of cross-species equality is experienced *in*, and not *prior to*, struggles *for* equality."[449] In other words, the ethical terms of engagement across species lines and in life-or-death situations are not negotiated hierarchically prior to such encounters, but rather emerge from within these encounters as they make and remake the participants in a shared process of becoming.

In Angarita's painting that illustrates the poem (Fig. 4.1), an androgynous Curupira is depicted seated on a boulder with his right foot pointing backwards,

[446] Galeano, *Yakumama*, 10-11.

[447] Galeano, *Yakumama*, 10-11.

[448] Kohn, *How Forests Think*, 79.

[449] Sandilands, "Pro/Polis," 159 (emphasis in original).



Figure 4.1. Illustration for the poem "Curupira." Courtesy of Solmi Angarita

suggesting the "multiplicity of roles"[450] described in Galeano's poem. The lush foliage surrounding the Curupira contains a whimsical human-plant being with palm fronds for arms, suggesting, along with the Curupira himself, the permeability of multinatural worlds and orders of life. An intricate cloud of smoke rises from the cigar in the Curupira's mouth as wisps and plumes form the silhouettes of tapirs, macaws, anteaters, toucans, and other animals frequently hunted by local communities in the Amazon basin. This smoky collage suggests at once the lush abundance of life in the Amazon rainforest, as well as the precariousness of life in a region increasingly threatened by climate change and global economic forces. While the Curupira's cigar smoke brings the forest and its diverse life forms into being and mediates their interactions with humans, the image also echoes Galeano's childhood memories of the sky filling with smoke as entire forests were burned for cattle pasture and agricultural development. Like the other paintings in this series, Angarita's illustration of Curupira is painted with acrylic on Triplex, a material

[450] Adamson and Galeano, "Why Bears," 231.

derived from the wood of the enormous ceiba trees (*Ceiba pentandra*) that grow in the Amazon.[451] As Angarita explained in an email communication, she chose these materials for their affordability and ability to withstand the humidity of Loreto in the Peruvian Amazon where she was living at the time.[452] In addition, the unpainted areas of her paintings reveal a natural wood grain that brings viewers into a relationship of material intimacy and immediacy with processes of deforestation occurring in the Amazon. As botanist Catherine L. Woodward explains, ceiba trees have a long history of commercial exploitation: the fluffy kapok that surrounds their seeds was vigorously harvested in the 1940s and 1950s to fill life preservers, mattresses, and automobile seats, and more recently, the trees are being rapidly cut down to produce pallets.[453] In addition to drawing heightened attention to deforestation, the use of Triplex also materially links Angarita's paintings to the "complex biological interactions and human connections with the environment" that permeate the Amazon.[454] As Woodward elaborates, the ceiba's giant, umbrella-shaped crown supports countless epiphytes (aerial plants) while providing food sources for birds, treetop highways for monkeys and other mammals, tiny pools of water for tadpoles to grow, and habitat for unparalleled insect diversity, and is considered a sacred tree by many human communities in the region.[455] Like the generative plume of

[451] Angarita, email message to author, March 1, 2017.

[452] Angarita, email message to author, March 1, 2017.

[453] Woodward, "Ceiba Tree," n.p.

[454] Woodward, "Ceiba Tree," n.p.

[455] Woodward, "Ceiba Tree," n.p.

smoke billowing from the Curupira's cigar, ceiba trees embody the kinds of interactions that sustain multispecies communities.

The smoke in Angarita's painting of the Curupira also suggests the material-semiotic exchange of knowledge that occurs through the sharing of cigars as vectors through which hunters learn the Curupira's "secrets,"[456] often conveyed through dreams or through visions aided by ayahuasca and other species of psychotropic plant. As Kohn explains based on his experiences with the Runa, while spirit masters such as the Curupira can understand human speech, humans must inhale or ingest ayahuasca, often mixed with other ingredients, in order to communicate with these earth-beings and gain insight into the otherwise invisible layers of reality that make up multinatural worlds.[457] Many Amazonian communities "use this opportunity to cement bonds of obligation with the spirit masters so that these, in turn, will allow them to hunt their animals."[458] Similarly, through what Sandilands terms "translation mediums," individuals of different species can gain insight into each other's life-worlds through material-semiotic exchanges based on the intense corporeality of human-animal relationality and political engagement.[459] The more-than-human, material-semiotic contact zones like those made possible through the ayahuasca smoke depicted in Angarita's painting promote the flourishing of multispecies publics that intertwine in their shared struggle for survival.

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[456] Galeano, *Yakumama*, 10-11.

[457] Kohn, *How Forests*, 143-44.

[458] Kohn, *How Forests*, 143-44.

[459] Sandilands, "Pro/Polis," 168.

The collaboration between Angarita and Galeano began in Iquitos, Peru in 2013 when they were introduced by mutual friend and acclaimed Peruvian artist Rember Yahuarcani (1985-) who is of indigenous Huitoto origin.[460] Angarita was invited to create thirty illustrations for a series of short, limited-distribution volumes of Galeano's poetry published in 2014 by Editorial ARSAM in Lima.[461] Spending between three days and two weeks on each painting, Angarita lived for nearly a year with an indigenous Huitoto family in Loreto, Peru along the banks of the Amazon River, an area that she describes as full of "descubrimientos constantes, de olores, sabores, sonidos, paisajes, animales, plantas y sus personas" (constant discoveries, of aromas, flavors, sounds, landscapes, animals, plants, and its people).[462] While Galeano's poems themselves serve as the principal references for Angarita's paintings, she also prepared for each illustration by conducting research with local community members who shared with her their oral traditions and in-depth knowledge of the ecosystems and species of the region. For example, in preparation for illustrating Galeano's poem "Yakuruna" about the shape-shifting fish-guardians believed to dwell in the Amazon River, Angarita learned from a Huitota woman that the Yakuruna's striped tail resembles that of a species of gilded catfish (*Zungaro zungaro*), and local fishermen caught one so that Angarita could sketch

[460] Angarita, email message to author, March 1, 2017. For more on Yahuarcani's work, see his interview with Paco Bardales, "Rember Yahuarcani: arte indígena, amazónico, cosmopolita" (Rember Yahuarcani: Indigenous, Amazonian, cosmopolitan art, 2009).

[461] The three titles in the series are *Seres míticos del Amazonas*, *Una canoa vuela por encima del puerto*, and *Más aplausos para la lluvia*. Digital excerpts from the first two can be found at http://myweb.fsu.edu/jgaleano/poetry.html.

[462] Angarita, email message to author, March 1, 2017.

it in detail, after which point they all enjoyed it for lunch.[463] Angarita's materials and research methods, like Galeano's fieldwork, remain keenly attentive to the sophisticated knowledge of indigenous peoples about the complex relationships among diverse species that thrive in the Amazon.

Galeano's poem "Chicua" also exemplifies the complex multispecies interactions that unfold in the Amazonian rainforest and the possibilities of interspecies communication that emerge from such encounters. This poem brings to life the complex material-semiotic web of humans, nonhumans, and spirit beings that people the Amazonian rainforest and permeate the thoughts and dreams of its inhabitants. In light of Kohn's "ecology of selves," "Chicua" challenges conventional Western notions of personhood and semiosis, urging readers to reconsider who/what represents and what counts as representation. The sound-images in the poem that imitate the vocalizations of the *chicua* or squirrel cuckoo (*Piaya cayana*) with the onomatopoeic phrases "*Chic-chic-chicua*" and "*Chic-chic-chic*," reveal that humans cannot claim to be the only organisms that represent and interpret the world around them.[464] As Kohn argues, semiotic processes are fundamental to and synonymous with life itself, and the inverse is also true: signs are alive in that that they manifest the absence of a future which they are attempting to

[463] Galeano, *Yakumama*, 18-19; Angarita, email message to author, March 1, 2017. Angarita's familiarity with the Amazon stretches back to at least 2010 when she lived for two years in Leticia in the Colombian Amazon completing her master's project *Intuiciones* (2012) in collaboration with indigenous scholars of Huitoto, Macuna, and Bora descent who shared with her insights about their comovisions. In addition to her master's degree in fine arts with an emphasis in new media (video and photography) from the Universidad Nacional de Colombia in Bogotá, Angarita is soon to finish a degree in editorial design from the Instituto Toulouse Lautrec in Lima, Peru. She plans to return to rural areas of the Peruvian and Colombian Amazon to provide youth education in English and the arts.

[464] Galeano, *Amazonía*, 20-21 (emphasis in original). The English translations in this bilingual collection and which I am borrowing in this chapter are by James Kimbrell and Rebecca Morgan.

concretize in the present, and the consequences of a sign's interpretation extends into the future.[465] In this sense, the chicua bird has the ability to "anunciar el futuro / con su canto" (announce / the future in song) and, like the Curupira's smoke, to summon "bestias deliciosas" (delicious beasts) to appear "a la boca de los rifles" (in the / hunter's scope).[466] In many indigenous cultures of the Amazon, certain vocalizations of the chicua are interpreted contextually as sign-omens bearing upon the future outcome of thoughts, actions, and events.[467] In order to be successful in their search for food, the hunters must attend to the advice and warnings encoded in the squirrel cuckoo's song. Thus, rather than a simple mimetic icon bearing a direct resemblance to the thing it represents, the chicua's song is a complex indexical sign that points to what is not immediately present, an event which has not yet happened.

The bird's prophetic call serves as a manifestation of its unique interpretation of the world around it and reveals the chicua's—and all living organisms'—status as an intentional, communicative "self" that thinks, represents, and is represented by other living beings. As a member of this "ecology of selves,"[468] the hunter in Galeano's poem dares not enter the forest "sin su perro / y los consejos de la Chicua" (without his dog / and the advice of the Chicua).[469] Similarly, in Angarita's painting that illustrates the poem, the hunter positions himself behind the chicua, holding his rifle at an angle in his

[465] Kohn, *How Forests Think*, 35-36.

[466] Galeano, *Amazonía*, 20-21.

[467] Kohn, *How Forests Think*, 171-72.

[468] Kohn, *How Forests Think*, 79.

[469] Galeano, *Amazonía*, 20-21.

left hand and resting his right hand on the bird's tail feathers as if tentatively awaiting his cue, waiting for the bird to "sing" the animals he seeks into existence (Fig. 4.2). Angarita plays with scale, making the squirrel cuckoo (which measures 16-20-inches in the wild) appear at least three times the size of the hunter who is dwarfed by the bird's long, white-tipped tail feathers. Bisected by the sturdy branch upon which the chicua perches, one side of the painting is full of lush foliage while the other, at the bird's front, remains unpainted as if to represent the future yet to come through the chicua's song. The emptiness of the left side of the painting also metaphorically suggests the ways in which inattention to the signs generated by the other beings of the forest would render the hunter "soul-blind," empty and incapable of recognizing the selfhood of other beings, severing him from the web of relations that sustains his way of life and putting himself at risk of illness, injury, or worse, death.[470] As soul-possessing selves, the hunter, his dog, and the euphonic chicua are all nodes in a multi-species web that reverberates with



Figure 4.2. Illustration for the poem "Chicua." Courtesy of Solmi Angarita

[470] Kohn, *How Forests Think*, 116-17.

meaning and life. The chicua's call represents the world through semiotic modalities that transcend the confines of human language yet carry deep meaning for its human listeners, and in recognizing other organisms as communicative selves we can begin to imagine what flourishing means for the other living beings in our midst.

In addition to exploring the ways in which humans and nonhumans negotiate the ethical terms of encounter when faced with unequally distributed consequences of life and death, Galeano's poems also explore the unexpected possibilities that emerge from multispecies encounters predicated on mutual recognition, playfulness, and humor. Far from depicting individual beings and orders of life as autonomous wholes, the poem "Garzas" (Herons) evokes a relational ontology in which species constantly disassemble and reassemble each other through the dynamics of embodiment and play, traversing the muddled contact zones that constitute multispecies communities. Like the playful scale in Angarita's illustration of "Chicua," "Garzas" playfully presents a seemingly paradoxical spatial arrangement in which a group of fishermen, gutting and removing scales from their recent catch along the river's shore, discover within the fish's bellies the river itself and the very sandbar upon which the fishermen are working.[471]

This Cortázarian *mise-en-abîme,*[472] where the outside doubles back upon the inside in a relentless refractive chain, reflects the intra-active process described by Donna Haraway as a "becoming with" in which the partners of multispecies relationships do not

[471] Galeano, *Amazonía,* 60-61.

[472] I am thinking particularly about Julio Cortázar's short story "Continuidad de los parques" (1964) (Continuity of the Parks), in which a businessman sits in a green armchair reading a novel about two adulterers that enter a house to kill a man sitting in a green armchair, suggesting paradoxically that the businessman's own murder is already written in the text he is reading.

preexist their relating but rather emerge co-constitutively, blurring the lines between inside and outside, self and other. As interstitial spaces, the fish's flesh and the sandbar that both surrounds and inhabits the fish's bodies become literal contact zones, "material-semiotic nodes or knots in which diverse bodies and meanings coshape one another."[473] The glistening sandbar contained "[en] las barrigas / de sus peces" (in the bellies of the fish) plays host not only to the fishermen but also to boys playing soccer and a flock of herons that has come to forage in the river.[474] These human and nonhuman "others" embedded in the fish's flesh reveal the corporeal reconfigurings that occur when beings intra-act across contact zones and "make each other up, in the flesh."[475] As Haraway contends, intra-acting beings relentlessly reconfigure the tenuous boundaries between species and question the very existence of "kinds" as ontological categories: "Individuals and kinds at whatever scale of time and space are not autopoietic wholes; they are sticky dynamic openings and closures in finite, mortal, world-making, ontological play."[476] The herons, fish, and humans—which mark distinct points of divergence in the evolution of vertebrates—represent lines of descent that in Galeano's poem become muddled within the flesh of the fish, unmaking and remaking each other in a play of differences and likenesses.

In addition to the dynamics of ontological play and worlding occurring within the fish's bellies and upon the shining beach, "Garzas" dramatizes the opening-up of

[473] Haraway, *When Species Meet*, 4.

[474] Galeano, *Amazonía*, 60-61.

[475] Haraway, *When Species Meet*, 16.

[476] Haraway, *When Species Meet*, 88.

possibilities when multiple species engage in material, semiotic, joyful play. Haraway defines interspecies play as "the practice that makes us new, that makes us into something that is neither one nor two, that brings us into the open where purposes and functions are given a rest."[477] By allowing for inventiveness and spontaneity, play makes possible the "shared building of other worlds" through nonliteral, non-mimetic communication that always points toward the unexpected.[478] Functioning as the primary narrative drive of Galeano's poem, play erupts in the soccer game on the beach, as the boys hide the herons' feather "ropas" (clothes), and the fishermen wink and laugh at the rollicking spectacle that they have discovered in the fish's bellies.[479] But it is the herons who have the last laugh as they "se ponen las escamas de los peces y se tiran al río" (dress themselves in fish scales and dive into / the river) in an act that not only queers species boundaries, but also generates humor through the proliferation of signs unleashed through playful interspecies communication.[480] By opening up a "world of meanings that do not mean what they seem to mean,"[481] play allows different kinds of beings to negotiate their relationships on multiple material-semiotic levels. Through humor and play, the multispecies characters in Galeano's poem inhabit a contact zone in which communication and recognition across species lines is the name of the game. As members of a biosocial community, the herons, fishermen, boys, and fish unmake and

[477] Haraway, *When Species Meet*, 237.

[478] Haraway, *When Species Meet*, 237.

[479] Galeano, *Amazonía*, 60-61.

[480] Galeano, *Amazonía*, 60-61.

[481] Haraway, *When Species Meet*, 240.

remake each other in a constant and playful process of "becoming with" that unfolds diachronically over the course of evolutionary time and synchronically in the open moment of multispecies encounter. By revealing that selves always contain and are contained by their "others," "Garzas" evokes a relational ethic that demands recognition of the co-emergence and shared future of the more-than-human world.

Many of Galeano's poems and Angarita's paintings foreground the diverse beings that traverse the precarious boundaries among humans, plants, animals, and the spirits that inhabit the heart of the forest and the rivers in the Amazon Basin. Like the transspecies beings discussed in chapter 2, these border-crossing creatures not only reflect the "highly transformational world" represented in Amazonian cosmologies,[482] but also indicate a fundamental aspect of Amerindian ontology—what Viveiros de Castro terms "perspectival multinaturalism"—which posits the shared spirit and common subjectivity among living beings, human, animal, or otherwise.[483] In other words, the natural world is filled with extra-human intentional subjects that perceive, represent, and transform reality from different points of view grounded in differently embodied life-worlds. For example, in Galeano's poem "Matinta Perera," the eponymous being's positionality as a subject with a uniquely embodied point of view is captured through the notion of clothing, in similar ways as in Zermeño's textile sculptures. Commonly represented in folktales of the Brazilian Amazon, this transformable trickster "allows a

[482] Rivière, "WYSINWYG in Amazonia," 256.

[483] Castro, "Cosmological Deixis," 471-72.

person or shaman to take its body to harass the villagers in the forest,"[484] often taking the form of a bird but also on occasion appearing as a jaguar or wild boar.[485] In Galeano's poem, the *Matinta Perera* "se pone las ropas de un pájaro para volar / por las noches" (wears the clothes of a bird / for a little night flying) and wakes up the entire village with his "silbidos como chillidos" (shrill songs), later appearing "vestido de viejecita" (dressed like a modest old lady).[486] As Viveiros de Castro observes, in Amazonian philosophy "the 'clothing' which, amongst animals, covers an internal 'essence' of a human type, is not a mere disguise but their distinctive equipment, endowed with the affects and capacities which define each animal."[487]

The Matinta Perera's internal "human essence," differentially expressed through multiple bodily forms, is vividly represented in Solmi Angarita's illustration, which depicts a tranquil human face emerging from beneath the iridescent feathers and moonlit beak of a South American corvid (Fig. 4.3). As a creature that queers species and gender lines like the Curupira, the avian talons of Angarita's Matinta Perera mingle with human legs adorned with pink high-heeled shoes, as if this adjectivally and pronominally "masculine" being with a bit of "carmín en su pico" (lipstick on his beak) were "listo / para danzar" (ready [to go dancing]).[488] As in the case of "Garzas," "Matinta Perera" also

[484] Galeano, *Folktales*, 73.

[485] Monteiro, "A Tia Podó," 6.

[486] Galeano, *Yakumama*, 18-19.

[487] Castro, "Cosmological Deixis," 482.

[488] Galeano, *Yakumama*, 18-19. In the bilingual edition James Kimbrell and Rebecca Morgan translate this last phrase as "ready for the party" rather than "ready to go dancing."

employs playfulness and humor, offering "feelings of relief, optimism, and hope for resilience even in the face of potential crisis."[489] According to some versions of the folktale, the Matinta Perera's nightly transspecies and transsexual permutations and annoying cries can be halted only through the invitation to "come by for coffee early tomorrow," a request which the Matinta Perera, changed back into human form, is obligated to follow.[490] This multispecies communicative encounter, "designed to reveal the person inside the bird in the sight of those bothered by its cries,"[491] dramatizes the ways in which different forms of life can negotiate the complicated task of living together in biosocial communities that make room for the intentionalities and subjectivities of nonhuman actors capable of perceiving, representing, and transforming the world.

Galeano's poem "Cobra Grande" imagines community as a vast matrix of multispecies interactions and relationally-contingent beings that flourish throughout the



Figure 4.3. Illustration for the poem "Matinta Perera." Courtesy of Solmi Angarita

[489] Adamson and Galeano, "Why Bears," 236.

[490] Galeano, *Folktales*, 73.

[491] Galeano, *Folktales*, 73.

Amazon River Basin. The eponymous snake appears in the poem as "[u]na serpiente inmensa que viaja por las orillas" (a humongous serpent who cruises the riverbanks), changing the shape of the forests so they can "beber / en los igarapés" (drink / in the streams), and "milking" the clouds to replenish the forests with rain.[492] The symbolic narratives surrounding the Cobra Grande (Great Cobra) as it is known in the Brazilian Amazon or Yakumama in Peru, describe it as a powerful earth-being often appearing as an enormous green anaconda (*Eunectes murinus*) considered to be "the mother of the river and all living things in it."[493] In the introduction to *Folktales of the Amazon*, Galeano describes how during a five-day trip he took upriver to Iquitos, Peru, the crewmembers of the cargo boat told him about "a supernatural snake able to produce big waves and hold the boat on her body for a few minutes. Other members of the crew swore to the veracity of the tale."[494] Two years later, Galeano heard a similar story from the Brazilian captain and crewmembers of another boat on his way from Tefé to Manaus.[495] Local communities use the figure of the Cobra Grande/Yakumama to explain—in terms that, like Ausangate's rage, cannot always be read as strictly metaphorical—a wide range of phenomena from whirlpools and waves that rock canoes and boats, to the hydrologic forces that cause erosion and floods, the formation and disappearance of riverine islands, and the changing river channels that shape the forest landscape.

[492] Galeano, *Yakumama*, 28-29.

[493] Galeano, *Folktales*, 13.

[494] Galeano, Introduction, xix.

[495] Galeano, Introduction, xix.

In addition to shaping the geological contours of the Amazon River Basin and making visible the effects of economic development and climate change, the presence of the Yakumama/Cobra Grande is also associated with an abundance of fish in any given area, and fishermen often look for anacondas when selecting the best fishing spots.[496] The giant serpent in Galeano's poem spends her time "sacándose peces / de la boca para dárselos a la gente" (delivering fish from her mouth to the people) who return after a day of fishing "en canoas rebosantes / con regalos de la Cobra" (in canoes brimming / with gifts from the Cobra).[497] The relational contingencies underlying the multispecies flourishing described in Galeano's poem are depicted vividly in Angarita's illustration (Fig. 4.4). The serpent's body, covered in glistening riverine scales, forms a spinning vortex—like the deep whirlpools that the Cobra Grande/Yakumama is believed to inhabit—interweaving humans with the fish, plants, pink river dolphins, and stingrays



Figure 4.4. Illustration for the poem "Cobra Grande." Courtesy of Solmi Angarita

[496] Galeano, "On Rivers," 332.

[497] Galeano, *Yakumama*, 28-29.

swimming from the cobra's mouth. Reflecting the Amazonian imaginary in which "anacondas and rivers are inseparable,"[498] in Angarita's painting the snake quite literally *is* the river. The spinning whirlpool formed by the snake's tail also represents how different orders of life benefit mutually from the natural abundance that sustains multispecies communities in the Amazon, but that is also becoming increasingly threatened.

In Galeano's poem, ethical encounters with the Cobra Grande—who mediates contact zones between humans and other organisms—are negotiated by throwing "flores y cachaça[499] / en los remolinos donde vive la Cobra" (flowers and [cachaça] in the / whirlpools where the Cobra dwells) lest she become enraged and "swallow" all the rivers and fish as punishment to those who overfish, pollute the water, and engage in other environmentally harmful practices.[500] Similarly, in Angarita's painting one woman, waist-deep in the river formed by the cobra's coiled body, carries a bottle of cachaça (a Brazilian liquor made from distilled sugarcane juice) while another woman sitting in a canoe tosses beautiful flowers into the cobra's wavelike scales. The baskets full of fruit and the nets brimming with fish depicted in the painting suggest the ways in which sustainable access to the natural food sources required for flourishing must be predicated on ethical encounters with other species who share such food sources or who, like the

[498] Galeano, "On Rivers," 332.

[499] Cachaça is a very popular Brazilian liquor made from distilled sugarcane juice. In the bilingual edition of *Yakumama*, James Kimbrell and Rebecca Morgan choose to translate this term to the more generic "firewater," or strong liquor.

[500] Galeano, *Yakumama*, 28-29; Galeano, "On Rivers," 332.

fish, relinquish their existence for the survival of others and the community. As Fischlin and Nandorfy contend:

> All rights discourses are predicated on encounter and contingent relationship. Unavoidable, chance encounters with the other of family, of territory and land, of species otherness, of differences both within and without how one defines belonging to community—these encounters with the flesh, with the soil, with the intimacy of being in another's presence, and being called upon to respond to that presence, mark whatever community may mean as a ceaseless state of relational becoming.[501]

Rather than privileging individual "human rights" over the rights of community, Galeano's and Angarita's depictions of Cobra Grande/Yakumama and of the humans who "respond to that presence" imagine the individual as a relational process of becoming, and the community as emerging through a constant negotiation of the ethical terms of encounter and of what flourishing means beyond the scope of the human.

Angarita's painting also hints at what would happen to Amazonian ecosystems if humans fail to "respond to that presence" of the Cobra Grande/Yakumama and the multispecies communities this earth-being represents. In her analysis of Galeano's documentary *The Trees Have a Mother* in the essay "Source of Life: *Avatar,* Amazonia, and an Ecology of Selves," Adamson highlights how the indigenous and mestizo individuals interviewed in the film use the Yakumama as a "seeing instrument" to explain interconnecting processes of deforestation, erosion, resource extraction, and climate change using terminologies derived from their own scientific literacies that both differ from and complement mainstream Western science: "They worry that Yakumama, ...(a being representing the complexity of riverine ecosystems), will succumb to the rising

[501] Fischlin and Nandorphy, *Community of Rights*, 279.

temperatures and the mighty Amazon itself will be turned into 'a ditch.'"[502] As if to echo this looming possibility, Galeano's recent essay "On Rivers" describes the Peruvian government's plans, in collaboration with other nations, for privatizing port and river access and turning the rivers into industrial shipping channels for the efficient transportation of soybeans, ore, and other products to international markets.[503] In addition to increased development and river traffic, the frequent dredging of the Amazon River and its major tributaries that would be necessary for keeping the rivers navigable for large ships[504] would drastically alter the rivers' chemical makeup, sedimentation patterns, hydraulic conditions, and riverbank stability, all of which directly impact the entire ecosystem's ability to support fish and other species both in the water and on land.[505] In "On Rivers," Galeano describes conversations with indigenous and mestizo residents of Iquitos who use the sandbars to catch fish to feed their families. They are fully aware of the complex economic, cultural, and ecological impacts of these shipping channels and use the figure of the Yakumama to theorize about what may happen if they are implemented: "the mighty *Yakumama*, the mother of the river...has gotten very upset...for all the latest overfishing of her children and especially now with the news about the dredging on the river."[506] The fishermen and their families fear that, like the vengeful earth-being Ausangate, the Yakumama will "come back with the force of the water

[502] Adamson, "Source of Life," 261.

[503] Galeano, "On Rivers," 337.

[504] Galeano, "On Rivers," 337.

[505] Mulhollem, "Research Shows," n.p.

[506] Galeano, "On Rivers," 338.

against the people of Iquitos."[507] The spatial composition of Angarita's painting—with the giant spiraling snake-river occupying slightly more than half of the board, leaving a large expanse of unpainted space—reflects this Amazonian belief that without the Yakumama/Cobra Grande providing fish and other sources of nutritional and economic stability to communities in the Amazon, the river will indeed turn into a "ditch" along with all of the life forms and ecosystems that depend on it. The stark emptiness that looms at the edges of the Yakumama's body in Angarita's painting serves as a reminder and a warning of what would happen if humans fail to recognize and respond ethically to the other "selves" with whom they participate in multispecies communities.

Contested Histories, Uncertain Futures: Astrid Cabral

In poetry brimming with the diverse "selves"—animals, plants, rivers, forests, and mythical earth-beings—that make up the Amazon River Basin, Astrid Cabral dramatizes material-semiotic encounters between humans and nonhumans while uncovering the deep social and ecological histories that have shaped the Brazilian Amazon. Particularly in her collection *Jaula* (2006, published as the bilingual edition *Cage* in 2008), the rivers and forests and their interconnected multispecies communities emerge not only as "storied matter,"[508] but also as *historied* matter, a living archive inscribed with the memories and events of a violent colonial past that intertwines with a modernized present in which indigenous and other-than-dominant people's sophisticated knowledge systems continue

[507] Galeano, "On Rivers," 338.

[508] Iovino and Oppermann, "Introduction," 1.

to bear explanatory power, helping humans navigate their often contentious relationships with ecosystems and other forms of life. Working against the conventional imaginary of the Amazon as what Suárez-Araúz calls "a land whose history was unstable and self-erasing,"[509] Cabral reveals the pervasive historicity of the region stretching as far back as prehistoric time when a fish became fossilized "[e]ntre fatias de pedra" (between slices of stone) or thousands of years ago when the ancient Nazca culture created a colossal hummingbird-shaped geoglyph that "não conhece a pressa / das efêmeras pétalas" (knows nothing of the haste / of fleeting petals).[510] This broad, multigenerational, community history also includes the deeply personal history of Cabral herself, whose poems look back into her childhood in the Amazon, focalized through the eyes of a young girl exchanging gazes and signs with the organisms she encounters in her backyard, in the forest, and in the river itself. Antônio Paulo Graça notes that this retrospective angle generates a complex double-voice that maintains the impressions, fears, and sense of wonder of a child, tempered by the skepticism and maturity (and sometimes, the irony) of adulthood.[511]

Born in Manaus, the capital city of the Brazilian state of Amazonas and the most populous city in the Amazon rainforest, Cabral, like Galeano, grew up with grandparents in a vibrant landscape teeming with the diverse organisms and stories that would later permeate her verses. As *Cage*'s translator Alexis Levitin describes:

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[509] Suárez-Araúz, "Introduction," 6.

[510] Cabral, *Cage*, 76-79. The translations in this bilingual volume and which I am borrowing in this chapter are by Alexis Levitin.

[511] Graça, "A poesia," xxii.

> Surrounded by plant life, this abundance of insects, amphibians, reptiles and birds, crowned by the startling appearance of the pink river dolphin arching silently through the muddy waters, was an integral part of her environment and became firmly rooted in her memories, her blood, and her imagination.[512]

With a precocious literary career, Cabral soon became recognized as one of the leading figures in the Clube da Madrugada (Club of Dawn), an avant-garde literary movement that, beginning in the 1950s, spurred an aesthetic renewal of Amazonian literature of Brazil and revitalized national interest in the region's writers and artists.[513] Two years after the military coup of 1964, Cabral left her position at the University of Brasília to work for the Brazilian Foreign Service in Beirut and Chicago, rejoining the faculty in Brasília in 1988 after the military dictatorship ended.[514] The author of short stories, essays, critical articles, and nine volumes of poetry, Cabral has also translated American proto-environmentalist Henry David Thoreau's major works into Portuguese, an endeavor which resonates with Cabral's understanding of the integral relationship between humans and the more-than-human world.[515] Indeed, Maria Esther Maciel links Cabral with other contemporary Lusophone writers who position themselves either implicitly or explicitly as "avessos à abordagem antropocêntrica dos viventes não-humanos" (against the anthropocentric treatment of nonhuman beings).[516]

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[512] Levitin, Introduction, i.

[513] Pinto-Bailey, review of *Cage*, 69.

[514] Levitin, Introduction, ii.

[515] Levitin, Introduction, ii-iii.

[516] Maciel, "Animais poéticos," 17.

While Galeano's poems reflect the multiplicity of voices he encounters while conducting ethnographic fieldwork and gathering stories from throughout the Amazon basin, Cabral's poetic voice is considerably more personal, often recalling with detailed intimacy her own experiences of encounter with nonhuman "others." As Angélica Soares explains, one of the constants in the work of Cabral and other Brazilian women poets is the "individualização da memoria comunitária" (individualization of community memory) as a strategy of opposition against patriarchal tradition.[517] I would add to this by arguing that the individualization of memory in Cabral's poems also reinforces the extent to which individuals of different species remake each other during intimate moments of encounter, from which emerge new kinds of ethics and politics beyond the limits of the human. In this way, Cabral's poetry aligns itself with many indigenous philosophies of the Amazon that recognize the fundamental continuity and shared intersubjectivity of human and nonhuman individuals. Peruvian anthropologist Fernando Santos Granero details that

> En vez de establecer rígidas fronteras entre naturaleza y sociedad, lo humano y lo animal, lo sagrado y lo profano, …las cosmovisiones indígenas se fundamentan en la multiplicidad de esferas de la realidad, la permeabilidad de sus fronteras, y la activa interacción entre todos los seres que las habitan.
>
> (Instead of establishing rigid boundaries between nature and society, human and animal, the sacred and the profane, ...indigenous cosmovisions are based on a multiplicity of spheres of reality, the permeability of their boundaries, and the active interaction of all the beings inhabiting them).[518]

[517] Soares, "A marginalização social," 41.

[518] Santos Granero, "Una manera religiosa," 29.

Illustrating the Amazonian philosophy known by Viveiros de Castro and others as "perspectival multinaturalism," Cabral's poetry reveals a world "filled with beings whose form, name and behavior inextricably mix human and animal attributes in a common context of intercommunicability."[519]

For example, the poem "Encontro no jardim" ("Encounter in the Garden") dramatizes a moment of intimate "intercommunicability" between a young Cabral and a snake whose green body evokes images of the Cobra Grande/Yakumama (an evocation which comes through more clearly in the original Portuguese than in Levitin's translation of "cobra" as "serpent"). This poem exemplifies Malcolm McNee's characterization of *Cage* as "a personal bestiary and meditation on the notions of animality and human/animal encounter and alterity" with perspectives that "often easily shift registers between territorial referentiality and philosophical abstraction."[520] Drawing on the formal innovations of Brazilian Modernism and Concrete Poetry, the typographical distribution of the poem's first fifteen lines—not longer than one or two words each—form the curved, sideways N shape of a snake's body as it slithers through the grass:

Ondulando
o corpo
réptil
sempre
à frente
rente
ao solo
graças
à oculta
mola
a cobra

[519] Castro, "Cosmological Deixis," 471.

[520] McNee, *Environmental Imaginary*, 55.

ágil
desenhava
seu caminho
no verde.
. . . . . .

(Undulating
the reptile
body
ever
forward
hugging
the ground
driven by
a hidden
spring
the agile
serpent
drew
his path
in green.)[521]

This "concrete-visual"[522] image quickly changes parallel to a pivotal thematic shift in the poem: the moment of encounter between the speaker and the snake. At the instant when the speaker looks at the cobra "frente a frente" (face to face), the short verses that delineate the crisp outline of the snake's slender body give way to longer verses whose jagged edges form a muddled shape, as if to represent the unraveling of species boundaries at the moment of encounter.[523]

At first the young speaker experiences a "[s]ensação de asco" (sense of loathing) at the "estranheza / de cores e contornos" (strangeness / of color and shape) facing her in

[521] Cabral, *Cage*, 56-57.

[522] Fernández Serrato, *¿Cómo se lee?*, 176.

[523] Cabral, *Cage*, 56-57.

the garden.[524] However, another formal change—this time of verb tense from preterite to present—marks a second pivotal shift in the poem, in which the speaker's initial feelings of fear and alienation are promptly replaced by ones of profound recognition and identification:

Súbito
a revelação
em luz se acende:
um segredo a nos unir
dá cabo do medo.
. . . . . .
Eu também ser de veneno.
Eu tambiém ser inepto ao vôo.
Ambas inquilinas do mesmo solo.
Ambas coincidentes no tempo.

(And then
the revelation
suddenly blaze[s][525] forth:
a secret binding us together
doing away with fear.
. . . . . .
I, too, a creature of poison.
I, too, a creature unable to fly.
Both tenants of the self-same soil.
Both here in time together.)[526]

The young speaker understands in a "blazing" revelation that she and the snake resemble each other through what they lack (the ability to fly) and what they possess (poison), and that they mutually inhabit the "self-same soil" that sustains multispecies communities in the Amazon. In meeting the cobra's gaze, the poetic persona suddenly becomes aware of

[524] Cabral, *Cage*, 56-57.

[525] Levitin's English translation ("blazed") does not maintain the original line's shift in verb tense from preterit to present.

[526] Cabral, *Cage*, 58-59.

her situatedness within the material-semiotic connections that link her to other forms of life, linkages which are as close as "nosa epiderme / nos enredando em suas redes" (our skin / weaving a web around us). Closing the muddled contact zone between herself and the cobra, the girl extends her hand to touch "o corpo da exótica irmã" (the body of my exotic sister), conceptualizing her relationship with this reptilian "other" in kinship terms. While McNee reads this poem as demonstrating a generic or "abstractly spacious" setting in a garden that could be located anywhere (not necessarily the Amazon),[527] I would suggest the possibility that the poem enacts a subtle place-based situatedness through its relationship to Amazonian concepts of human-snake kinship embodied in the transformable earth-being Cobra Grande/Yakumama and in commonly-told stories about humans giving birth to snakes and vice-versa.[528] Through the poetic voice's recognition of the cobra as "sister," Cabral's poem positions itself in relation to the "highly transformational world" [529] captured in Amazonian storytelling while positing transspecies kinship as a space in which to reexamine the ethical terms of encounter.

Other poems in Cabral's collection conjure a sense of kinship between the human speaker and the nonhuman beings she encounters. For instance, in "Lagartixa" ("Gecko"), the speaker recalls one morning of her childhood when "me descobri / irmã da lagartixa / equilibrista" (I found myself / sister to the gecko / acrobat), imagining the two of them doing cartwheels and other gymnastic feats "na costa do planeta" (on the

[527] McNee, *Environmental Imaginary*, 68-69.

[528] Galeano, *Folktales*, 21-22.

[529] Rivière, "WYSINWYG in Amazonia," 256.

edge of the planet).[530] In "Parentesco" ("Kin"), the poetic persona recalls glimpsing through a television screen the startling underwater "universo" (universe) of the Amazonian *tucunaré* (peacock bass), a species which previously she had known only as a source of food.[531] While watching the tucunaré protect juvenile fish from predators, the speaker describes how "Passei a sentir-me sua parenta / vendo o tucunaré super-humano" (I came to feel myself a relative / seeing the *tucunaré* [as] super-human).[532] In a moment of respect and regard, the human speaker sees the tucunaré not strictly as a cooked fish on her plate, but as another intentional "self" that inhabits and acts upon the world. This multispecies encounter, mediated through a television program, demonstrates the power of stories (whether oral, written, or audiovisual) as sophisticated analytical tools that make visible the often undetected connections between human and nonhuman beings and that help people negotiate the differential relations of life-and-death within an "ecology of selves."[533]

The poem "Papagaios[534] da infância" ("Parrots of Childhood") describes the frequent encounters between a group of children (including the first-person poetic voice) and a family of green Amazon parrots.[535] Taking full advantage of the double entendre

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[530] Cabral, *Cage*, 60-61.

[531] Cabral, *Cage*, 28-29.

[532] Cabral, *Cage*, 28-29.

[533] Kohn, *How Forests Think*, 79.

[534] *Papagaio* means both kite and parrot in Portuguese, a double meaning which unfortunately is not present in English. In his translation Levitin settles on "parrot," since the connection with kites it established in the first lines of the poem.

[535] Cabral, *Cage*, 30-31.

papagaio (which means both kite and parrot in Portuguese), this semantic play reflects the multiple layers of playfulness and humor in the poem, from the memory of children playing with silk kites, now stuck in trees, to the mischievous parrots "quebrando caroços / chovendo excremento em cima de nós" (dropping bits of rotting fruit / and raining down on us their excrement) from the heights of mango and star-apple trees.[536] As Haraway contends, "the experience of sensual joy in the nonliteral open of play might underlie the possibility of morality and responsibility for and to one another in all of our undertakings at whatever webbed scales of time and space."[537] Similar to Galeano's poem "Garzas," "Papagaios da infância" depicts the ways in which multispecies play destabilizes the boundaries between different orders of life and opens up a space for negotiating the ethical terms of encounter between individuals of different species.

"Papagaios da infância" further destabilizes anthropocentric species divides by revealing the interpenetrating realms of human and nonhuman semiosis. In keeping with the poem's playful tone, the poetic persona remembers how the Amazon parrots "hidden in the tree tops, camouflaged in green" would wake everyone up with their voices:

> Um cantava sambas de carnaval
> outro chamava a família: "Vem cá,
> Geraldo" "Dorotéia, num esquece a chave"
> "Hora do almoço, Aracy." "Dá cá um beijo."
>
> (One of them sang carnival sambas
> another called out to the family: "Come here,
> Geraldo," "Dorothea, don't forget your keys,"

[536] Cabral, *Cage*, 30-31.

[537] Haraway, *When Species Meet*, 242.

"It's time for breakfast, Aracy." "Gimme a kiss.")[538]

With screeching voices, the Amazon parrots heckle, remind, and tease "the family," an ambiguous noun whose referent may include only the human family living nearby, only the parrot family hidden in the trees, or both of these together in a diverse, queer, multispecies "family" like the ones depicted in Lucía Puenzo's films discussed in the previous chapter. The playful and humorous anthropomorphization of the parrots' songs and utterances suggests in a very serious way the "common context" of transspecies "intercommunicability" that characterizes the indigenous Amazonian philosophy of perspectival multinaturalism,[539] a concept that anticipates more recent forays by Western scientists into the complex biosemiotics of nonhuman vocalizations. Building on the ideas of von Uexküll, Peirce, and Hoffmeyer, German semiotician Winfried Nöth (who, incidentally, has served on the faculty of the Pontifícia Universidade Católica de São Paulo in Brazil) goes so far as to suggest that bird calls and songs more closely resemble *symbolic* human speech than the indexical and iconic signs more commonly generated in the nonhuman world. Like symbols, bird calls are in fact *arbitrary* signs whose meaning and use are governed by habit and convention—by their relation to other signs—and are in no way motivated by the objects to which they refer.[540] Furthermore, bird songs possess a sophisticated internal organization, a "syntax" that can be divided into syllables, phrases, verses, and stanzas that must be learned from other birds and that, like

[538] Cabral, *Cage*, 30-31.

[539] Castro, "Cosmological Deixis," 471

[540] Nöth, "Biosemiotics for Biologists," 145.

dialects, demonstrate regional variations among geographically isolated populations of the same species.[541] Thus, the parrots' humorous utterances in Cabral's poem in fact prompt a serious reassessment of who/what communicates, what it means to communicate, and why this matters in the context of multispecies communities attempting to live and flourish together.

Cabral's poem "Passarês" ("Birdish"), like "Papagaios da infância" and Galeano's "Chicua," further delves into the complex semiotics of avian communication and its potential for crossing species lines. When a "pássaro estrangeiro" (foreign bird) lands on the speaker's windowsill, she watches the singing bird and tries to understand its call: "conheço-lhe o passarês / sem jamais decifrar-lhe a voz" (I know his Birdish / yet cannot quite decipher it).[542] While Maciel's interpretation of this poem seems to emphasize what the bird *lacks,* describing its call as a "dizer desprovido de palavras" (speech deprived of words),[543] a different reading of Cabral's poem reveals that it is, in fact, a deficiency on the part of the human poetic persona—her "terrível surdez" (dreadful deafness)—that obscures understanding and leaves her "cega ao que pássaros sabem" (blind to what all birds must know).[544] This synesthetic characterization of the human speaker as blind/deaf to the bird's song destabilizes the anthropocentrism underpinning prevailing concepts of semiosis, language, and cognition in ways that resonate with both Amazonian indigenous philosophy and biosemiotic theory. While the poem's human speaker's metaphoric

[541] Nöth, "Biosemiotics for Biologists," 145-46.

[542] Cabral, *Cage*, 88-89.

[543] Maciel, "Animais poéticos," 17.

[544] Cabral, *Cage*, 88-89.

deafness and blindness make it difficult for her to decipher the bird's "mensagem" (message),[545] this barrier does not preclude altogether the possibility of intercommunicability and empathy across species lines. As Hoffmeyer explains in *Signs of Meaning in the Universe* (1996), human beings tend to "relish the semiotic artfulness" of birdsong because it "reminds us of something about ourselves. We are not birds, but we can hear that the birdsong means something and thus we can empathize with them."[546] The recognition in Cabral's poem that the bird's song "means something" on different levels to her and to the bird itself, also suggests the ways in which different orders of life, inhabiting intersecting *Umwelten*, can negotiate the ethical terms of encounter through communicative channels of empathy. For her part, Sarah E. McFarland proposes that the aesthetic imagination can be employed in the activation of what she terms "emphatic empathy," an empathic response that resists the objectification of nonhuman others and avoids the anthropocentric trap of portraying other organisms as "fur-covered humans" or mere metaphors in the quest for human understanding and mastery.[547] Through the relentless effort to reach across species divides, emphatic empathy recognizes the inevitable *untranslatability* of the nonhuman other's experience, as well as the nonhuman's positioning as a subject in multinatural worlds that overlap with our own. Far from "misrepresenting nonhuman creatures...as proxies or as objects for human emotional or cognitive projection,"[548] Cabral's "Passarês" portrays the bird as a subject in

[545] Cabral, *Cage*, 88-89.

[546] Hoffmeyer, *Signs of Meaning*, 140.

[547] McFarland, "Animal Studies," 154.

[548] McFarland, "Animal Studies," 153.

its own right possessing of agency, perspective, and knowledge whose validity stands even if not directly translatable into human terms.

While "Papagaios da infância" and "Passarês" celebrate transspecies communication and empathy in spite of the frequent untranslatability of nonhuman life-worlds, the need to find the right words to describe complex historical and ecological processes gains potent urgency in "Nome aos bois" ("Let us Call the Oxen"). The poem opens with the poetic persona's appeal to finally "dar nome aos bois / antes de nos perdermos / pelos currais e pastos, / cerrados, ermos, gerais" (call the oxen by their rightful name / before we lose ourselves / among corrals and pastures, / stunted trees and endless plains), and three times during the poem she paradoxically describes the creatures as "os bois que não são bois" (oxen that are not oxen).[549] Associated in the poem with an unforgiving landscape of "pastos, / cerrados, ermos, gerais" (which Levitin translates as "stunted trees and endless plains"), the oxen are also described as "fantásticas / bestas que infectam-infestam / nossos prados sem cerca" (fantastic / beasts that infect-infest / our unfenced meadows).[550] Cabral seems to suggest that these "oxen who are not oxen" represent simultaneously the domesticated beasts of burden that were introduced by Europeans during colonial expansion, as well as something much bigger than the oxen themselves: the entire colonial project with its catastrophic social and ecological ramifications. In his analysis of another poem in *Cage*, "Os búfalos" ("Buffalo"), McNee interprets the figure of the Marajó water buffalo (a South Asian species brought to the

[549] Cabral, *Cage*, 2-3.

[550] Cabral, *Cage*, 2-3.

New World by Europeans) as "a reminder of the history of colonial expansion and the transoceanic exchange of flora and fauna that continues to alter Amazonian ecologies" as well as a symbol of conflicting "contemporary debates on the expansion of ranching in the Amazon."[551] Similarly, in "Nome aos bois" these "oxen that are not oxen" serve as a sophisticated metaphor pointing to processes beyond themselves, a "seeing instrument"[552] for condensing vast expanses of time and making "nameable" long overlapping histories of colonial oppression, agricultural development, deforestation, and toxic contamination by pesticides, mining chemicals, and other substances that "infect-infest" soils, rivers, and human and nonhuman bodies—processes which in the present continue to impact multispecies communities in the Amazon.

Cabral's poem "Ex-Rio" (Ex-River), published in a special issue of *Review: Literature and Arts of the Americas* (2012), also takes a long historical view of the anthropogenic processes shaping the Amazon basin over time. The poetic voice describes "um rego" (a ditch) where thirty years ago "passava um rio" (a river passed through), and all that remains of the incredible exuberance of the fluvial ecosystem are mere "resíduos de vida" (vestiges of life) hidden between the stones of the riverbed.[553] This description of the vibrant river turned into a dry and virtually lifeless "ditch"—the same image conjured by the fishermen in Galeano's documentary—reflects growing concern about climate change and other anthropogenic threats to the river ecosystems that sustain life in

[551] McNee, *Environmental Imaginary*, 61.

[552] Adamson, "Environmental Justice," 172.

[553] Cabral, "Ex-River," 212-13.

the Amazon. The descriptions of the rivers as "ditches" in Galeano's and Cabral's works—a bleak image which Angarita also subtly illustrates in her paintings—are especially poignant given the Peruvian and neighboring governments' plans to dredge the major rivers in the Amazon basin, turning them into efficient industrial shipping channels. Examining the "ditch," the speaker in Cabral's poem ambiguously asks "Quem bebeu o rio? / De quem tamanha sede?" (Who drank the river? / Who suffered such a thirst?).[554] Her questions become more specific in the concluding verses, which point to the culprits as human "assassinos" (assassins), and the speaker finds herself searching for their "digitais" (fingerprints) along the "margens pardas" (darkened banks) of the dried-up river.[555] "Ex-Rio" starkly illustrates what can happen when humans, refusing to recognize other living organisms and ecosystems as "selves" emerging relationally from within more-than-human communities, fail to participate in the ethical encounters that make the flourishing of multiple species possible.

Conclusion: Against Amnesia

Far from being a territory where history is, as Suárez-Araúz describes, "unstable and self-erasing,"[556] the Amazon that emerges from Galeano's, Angarita's, and Cabral's works constitutes a place where history is very much alive in the ecosystems and organisms that thrive there, as well as in the sophisticated story cycles, cosmovisions, and

[554] Cabral, "Ex-River," 212-13.

[555] Cabral, "Ex-River," 212-13.

[556] Suárez-Araúz, "Introduction," 6.

ecological knowledge systems developed by indigenous peoples over generations. These stories continue to function as analytical tools for facing the challenges of the present and as ethical frameworks for negotiating the precarious interactions and differential relations of life-and-death implicated in individual and community survival. Informed by these story cycles, Galeano's and Cabral's poems and Angarita's paintings uncover a complex community of sentient, intentional, agential "selves" that interpret, represent, and transform the world around them through the material-semiotic contact zones connecting human and nonhuman life-worlds. By delving into the ways in which individuals of different species make, unmake, and remake each other in the ethical space of encounter, these visual and poetic works show a world, beyond the "ditches" and "infected-infested" landscapes of the Anthropocene, in which multiple species communicate and flourish together.

CHAPTER 5

CONCLUSION: DITCHES AND DOLPHINS: THE PROMISE OF MULTISPECIES FLOURISHING BEYOND THE ANTHROPOCENE

> 'If he dies,' the dolphins told him, 'you will have to stay here in jail and then in our city. We dolphins are also people, even though all of you who live up there don't believe it.'
>
> —Juan Carlos Galeano, *Folktales of the Amazon*

Up and down the Amazon River between the Brazilian towns of Tefé and Benjamin Constant, people tell stories about the punishments incurred by those who injure or kill pink river dolphins that often frustrate fishermen by damaging their nets and stealing their catch.[557] One story in particular, collected in Juan Carlos Galeano's *Folktales of the Amazon*, describes a fisherman who becomes angry and nearly kills a dolphin with his spear.[558] Soon the fisherman is arrested by two policemen (who, seemingly human at first, are later seen "breathing through holes on the top of their heads" like dolphins) and is taken down into the underwater world at the river's bottom where dolphins, fish, and other organisms live in opulent cities, drive cars, eat at restaurants, and are treated in hospitals.[559] When the policemen question the accused

[557] Galeano, *Folktales*, 28-29.

[558] Galeano, *Folktales*, 28-29.

[559] Galeano, *Folktales*, 28-29.

about his crime, they explain that if the doctors cannot save the speared dolphin, the fisherman will be imprisoned in their underwater city, because "[w]e dolphins are also people, even though all of you who live up there don't believe it." This story, one of many symbolic narratives that proliferate in indigenous and mestizo communities throughout Latin America, illustrates what exactly is at stake when individuals of different species interact in the spaces and moments of encounter. This story provides a framework for ethically engaging with nonhuman beings while also reconfiguring notions of "personhood" beyond strictly human terms by casting pink river dolphins and other organisms as intentional, communicative subjects whose life-worlds intersect with ours and whose survival is inextricably bound up with our own. If a fisherman can be imprisoned in an underwater city for injuring a single dolphin, what are the consequences for dredging the Amazon River and its tributaries or allowing global climate change to turn the entire river basin—and the multispecies communities that depend on it—into a "ditch"?[560]

Stories like this illustrate how, in the age of the Anthropocene, the arts and the humanities play a crucial role in understanding, representing, and responding to environmental and social challenges while engaging in varied conversations about gender, politics, and ethics within and beyond the scope of the human. Cultural theorists must participate alongside scientists, policy makers, community members, and other key voices in ongoing debates about conservation, environmental justice, and (non)human rights while collaboratively forging solutions to ecological challenges and generating

[560] Cabral, "Ex-River," 212-13.

livable futures beyond the Anthropocene. These kinds of transnational, multicultural, interdisciplinary, and intertextual collaborations make possible the transformation of society and the shaping of more sustainable and equitable futures. Enlivened by these convictions, this study has explored the convergences of gender, class, ethnicity, and the environment in Latin America through interdisciplinary approaches that bridge divides between literature and other forms of cultural expression and between the sciences and the humanities, while foregrounding the work of women and other marginalized groups whose aesthetic contributions remain underrepresented in mainstream cultural studies debates and college curricula.

In the context of this new era in which human activity is reshaping geological, atmospheric, and ecological futures on a massive planetary scale, this study is particularly animated by the ways in which diverse forms of Latin American cultural production, emerging from overlapping histories of social and environmental exploitation and resistance, bring to the forefront alternative epistemologies and political configurations that point toward more sustainable ways of living and being in a rapidly changing world. Positioning itself at the intersections of material ecocriticism, multispecies ethnography, queer ecologies, and Latin American environmental philosophy, this study examined multispecies relationships in contemporary Latin American cultural production while foregrounding indigenous epistemologies about human-nonhuman entanglements in an age of planetary ecological crisis. As the previous chapters have demonstrated, a wide range of writers, filmmakers, and artists from across present-day Latin America depart from the dystopian ecological narratives of recent decades by casting encounters between

species as hopeful figurations of human-nonhuman flourishing, forging a better future for our shared planet.

After an introductory chapter which laid the theoretical groundwork for this study and identified key political movements in Latin American that are changing our understanding of the "nonhuman," the subsequent chapters examined aesthetic representations of multispecies relationships in three telescoping dimensions—corporealities, companions, and communities—that reflect the multiple, intersecting layers of human-nonhuman entanglement from the individual to the collective, from genetic threads to river networks, from the microscopic to the cosmic. Chapter 2—centered on corporealities—proposed the figure of transspecies beings as a way to reimagine the human body not as a bounded Cartesian subject separate from and superior to the rest of biological life, but as itself the result of multispecies interactions across the vast expanses of evolutionary time and space. To this end, I illustrated how the novels of Teresa Porzecanski and Daniela Tarazona, in tandem with Alejandra Zermeño's textile sculptures, evoke biological theories of evolution while materializing traditions surrounding border-crossing creatures and shamanic practices in indigenous and Afro-diasporic cultures of Latin America. I argued that Porzecanski's and Tarazona's novels and Zermeño's sculptural installations set forth a new concept of humanity as a species already changing into something other than itself, an "other" that it has always been since its beginnings.

Drawing on connections between the biological sciences and indigenous theories about gender, sexuality, and species that challenge Western categorizations, chapter 3—focused on companions—explored the ways in which multispecies relationships blur the

boundaries between genders, sexualities, and orders of life while dismantling heterosexist, anthropocentric discourses about what constitutes the "natural." With particular attention to Lucía Puenzo's films and María Fernanda Cardoso's sculptural installations, I argued that queer performativities both within and beyond the scope of the human simultaneously deconstruct taxonomic notions of "species" and socially constructed categories of gender, sexuality, reproduction, and identity while imagining differing futurities of multispecies flourishing beyond the current age of planetary ecological crisis. These works draw on the modern biological sciences' problematic engagement with sexual diversity in the natural world, as well as indigenous peoples' sophisticated understandings of gender and sexuality that resist Western categorizational regimes. Puenzo's films and Cardoso's installations emphasize the rich biological diversity and multiple sexual configurations and behaviors throughout the nonhuman world while denaturalizing biological categories and monolithic heteronormative constructions of kinship.

Chapter 4—centered on communities—uncovered the complex web of interactions that make up multispecies communities in contemporary ethnographic poetry and paintings from the Brazilian, Colombian, and Peruvian Amazon. Juan Carlos Galeano's and Astrid Cabral's poetry and Solmi Angarita's illustrations conceive of "community" as a vast fabric of mutually contingent and communicative relationships among humans, plants, animals, and mythical beings. I argued that, by drawing on images, motifs, and narratives from the oral traditions of the diverse indigenous and mestizo communities of the Amazon basin, these pieces reveal how multispecies communities are reinforced through stories that codify the ethical terms of encounter.

Instead of privileging the individual above the community, the works of Galeano, Cabral and Angarita imagine the individual as an emergent and relational process and community as the unfinished result of the constant negotiation of ethical encounters among individuals. As points of convergence in an ecology of signs, thoughts, and meanings, nonhuman organisms are envisioned as intentional subjects that interpret, represent, and transform the world in its multiple natures and subjectivities.

The question of what counts as "theory" is one of the undercurrents that cuts through the various chapters of this study. Which "theorizations" of human-nonhuman encounters are granted authority, and which ones are reduced to the realm of "folklore" or "myth"? What shapes is "theory" allowed to take—those legitimized through publication in university presses, those encoded in oral narratives developed over millennia, or those given to people in their dreams by "spirit masters" of the forest? What voices, grounded in specific ethnic, cultural, political, and historical perspectives, are considered capable of generating "theory" as such, and who decides? This study is animated by a fundamental commitment to the inclusion of philosophies emerging from indigenous and other-than-dominant communities not merely as objects of study, but as legitimate "theory" that is brought to bear on complex questions regarding species, corporeality, gender, sexuality, semiosis, politics, and ethics beyond the scope of the human. These theories, rooted in the historical, lived experiences of indigenous people, constitute sophisticated frameworks for analyzing human-nonhuman relationships that in many ways complement and anticipate recent discoveries in Western science and social theory. For example, I contended in chapter 2 that transspecies beings like the ones portrayed by Porzecanski, Tarazona, and Zermeño evoke Darwinian evolutionary

theories while materializing long traditions of border-crossing creatures in Latin American indigenous story cycles and Afro-diasporic cosmologies. My inquiry into the ways in which multispecies encounters unmake binary categorizations of gender, sexuality, and species in the works of Puenzo and Cardoso in chapter 3 insisted on bringing indigenous perspectives on sexual diversity into conversation with efforts by biologists and queer theorists to dismantle binary constructions of sex and "repro-centric" notions of what constitutes "healthy" populations and partnerships.[561] I also contended in chapter 4 that we cannot fully understand the radical remaking of semiosis, politics, and ethics that occurs in the spaces and moments of encounter between members of multispecies communities without attending to indigenous philosophies such as perspectival multinaturalism, in tandem with key concepts in biosemiotics, material ecocriticism, and cosmopolitical theory. The theoretical and methodological choices I have made in this study are absolutely deliberate and reflect a growing need to bring multiethnic, multicultural, and historically underrepresented voices to the table if we are to take on the immensity of the environmental challenges that we face alongside the other species with which we share the same planet in peril.

In relation to the growing field of environmental humanities, this study demonstrates why interdisciplinary perspectives from the arts and humanities are absolutely crucial for developing real-world solutions to environmental and social justice problems. This study joins a rapidly growing body of environmental humanities scholarship that highlights the need for more multiethnic voices in debates about culture

[561] Mortimer-Sandilands and Erickson, "Introduction," 11.

and the environment and that recognizes the deep historical connections between social justice and environmental protection. With this in mind, this study expands the horizons of Latin American environmental criticism by incorporating cutting-edge theories on materiality informed by the biological and physical sciences, whose application remains somewhat limited in Latin American cultural studies debates. In contrast to much of Latin American ecocritical scholarship that has focused on rereading canonical literary texts and traditions, this study centers on works produced after the year 2000 and considers parallel forms of cultural production such as film and visual art. These different but converging forms of signification reflect the expanding media focus of twenty-first century environmental movements while forging the kinds of interdisciplinary and intertextual connections necessary to confront the global scope of ecological crisis.

This study complements and extends the work of Laura Barbas-Rhoden, Mark D. Anderson, Gisela Heffes, and other Latin Americanists working in environmental criticism by remaining keenly attentive to the ways in which dark, interlinked histories of colonization, slavery, displacement, industrialization, resource extraction, ecological destruction, and species extinction inform present-day literary and visual representations of human-nonhuman relationships. For example, my discussion of Cardoso's *Corona para una princesa chibcha* necessarily drew attention to the significance of the titular princess's (non)presence in relation to the destruction of indigenous cultures and entire ecosystems under Spanish occupation and contemporary industrialization in the region. However, I also contended that *Corona*'s irreverent queering of the heterosexist design conventions of natural history dioramas suggests the range of nonreproductive sexual interactions that contribute to the "health" of organisms, populations, and ecosystems,

opening up a space for imagining different kinds of multispecies flourishing beyond crisis. Thus, in my discussion of Cardoso's installations and of the other literary, artistic, and filmic pieces examined in the preceding chapters, this study complicates current trends in Latin American ecocriticism by showing how Latin American cultural production, in addition to exploring important themes of ecological destruction and historical violence, also uses images of multispecies encounters to open up unexpected possibilities for more-than-human flourishing beyond the dire geographies of the Anthropocene.

As with any study that draws general conclusions based on analysis of a few representative texts, this one has limitations that also suggest fruitful new directions for future research. Great attention was paid to choosing a range of contemporary cultural artifacts that explore multispecies relationships and other-than-dominant knowledge systems through various literary genres (novel, poetry, short story), multiple forms of visual expression (paintings, textile sculptures, taxidermy installations, electron microscope scans, drama and documentary films), and diverse cultural perspectives from both Lusophone and Spanish-speaking countries of Latin America (Brazil, Argentina, Colombia, Peru, Mexico, Uruguay). Obviously, a study that incorporated more examples of contemporary cultural production—perhaps from the Caribbean, Central America, and U.S. Latinx communities—would further illuminate the perspectives explored in this study and either bolster or revise my conclusions based on the pieces examined here. For example, the paintings and drawings of Dominican artists Raúl Recio and Amaya Salazar explore connections between human corporeality and Antillean flora and fauna, and a very recent series by Florida-born collage artist Javier Piñón parodies the glamorization

and sexualization of human encounters with deep-sea creatures.[562] Regardless of the limitations inherent in analyzing a relatively small selection of literary, filmic, and artistic artifacts, the pieces discussed in the preceding chapters illustrate the ways in which contemporary Latin American cultural production, drawing on epistemologies and perspectives across disciplines and cultures, portrays multispecies encounters in three interconnecting dimensions—corporealities, companions, and communities—as figurations of more livable futures for humans and nonhumans alike.

A second limitation of this study is its concentration on works produced after the year 2000. I primarily sought in to illustrate how cutting-edge contemporary writers, artists, and filmmakers are choosing to grapple with the social, environmental, aesthetic, and ethical challenges posed by this new era of the Anthropocene at the same moment when this concept is gaining increasing traction in international debates about culture and the environment. I also sought to explore how current trends in Latin American cultural production are resonating with very recent grassroots cosmopolitical movements in Bolivia, Ecuador, and elsewhere, whose declarations and constitutional amendments are marking a sea change in our understanding of politics and rights beyond the scope of the human. While a consciousness of literary traditions certainly plays a role in my contextualization of the pieces analyzed—as in the case of Galeano's, Angarita's, and Cabral's problematization of the conventional literary imaginary of the Amazon as a "Green Cathedral" or "Green Hell"—it was not my main objective to demonstrate how Latin American cultural representations of multispecies engagements have changed over

[562] See, for example, Raúl Recio's series *Las chapeadoras* (Weed pullers) (2015), Amaya Salazar's *En el jardín* (In the garden) (2009), and Javier Piñón's series *Octopussy* (2013-2014).

time. However, such a comparative investigation, particularly one that identified similarities and differences among different historical periods from the pre-Columbian era to the present, would be a logical and complementary corollary to this present study.

A third limitation of this study is the preference that has been given to texts that represent encounters with *animal* others. While they range broadly—from invertebrate mangrove snails, harvestmen insects, and jellyfish, to vertebrates like Amazon parrots and herons, fish and anacondas, larval salamanders, and large mammals such as jaguars and pink river dolphins—most of the multispecies encounters portrayed in the works discussed here entail organisms belonging to the kingdom *Animalia*, with some exceptions, such as the role that forests psychotropic plants play in Galeano's poems and Angarita's paintings, as well as descriptions of Violeta's "tentacular algae hair" in Porzecanski's novel.[563] While vertebrate animals represent an astonishingly small 0.1% of the total estimated biodiversity on the planet,[564] they are by far the most prolifically represented in literary and cultural production, thus affording a greater variety of literary, filmic, and artistic texts to choose from. Thus the prevalence of animal "others" and the limited presence of other organismic kingdoms in this study was unintentional and in no way suggests that animals are the only organisms with which humans can have meaningful interactions.

In this vein, a fruitful complement to this present study would be further investigation into encounters with our vegetal and fungal "others" and how these

[563] Porzecanski, *Felicidades fugaces*, 172.

[564] Mora et al., "How Many Species," 1.

interactions are explored in contemporary Latin American cultural expression. For example, an examination of the ethnobotanical poetry of Nicaraguan writer Esthela Calderón and of Brazilian poet Sérgio Medeiros could illuminate important questions about how multispecies encounters unfold with plants or fungi, organisms that do not appear to "vocalize," "respond," or "act" in the same ways that vertebrates do.[565] How can we rethink our concepts of agency, intentionality, and communication to better account for organisms whose behavior is registered on much longer time-scales, often occurring underground or as invisible compounds in the air?[566] How does the radically queer world of plant reproduction and physiology help us continue to dismantle rigid categorizations of gender, sexuality, species, and identity?[567] How do symbolic narratives about plants, developed by indigenous communities over millennia, convey sophisticated and scientifically sound understandings of vegetal ecologies and the long-term effects of climate change? These questions and more are being fervently debated in biosemiotics, plant biology, and the emerging field of vegetal ecocriticism in which scholars like Catriona Sandilands, Donna Haraway, and Anna Tsing are uncovering the sophisticated

[565] See, for example, Sergio Medeiros's *O sexo vegetal* (*Vegetal Sex*, 2009), and Esthela Calderón's *Soplo de corriente vital* (Breeze of a vital current, 2008).

[566] Many species of plant are known to release different kinds of airborne chemicals to signal that they are being attacked by herbivorous insects and to attract the predators of those herbivores. This defense mechanism also constitutes a sophisticated form of communication between organisms of widely different species. See, for example, Paré and Tumlinson, "Plant Volatiles."

[567] The sexual world of fungi is also exceedingly queer. Consider, for example, that the genus *Schizophyllum* has more than 28,000 sexes, making it, as Myra J. Hird puts it, a decidedly "promiscuous mushroom" (86).

sign processes and queer sexual behaviors of plants and fungi.[568] Much detail and insight remains to be revealed regarding the depth, pervasiveness, and character of multispecies encounters in other literary and cultural genres, with other orders of being, in other places, and at other times.

In closing, various forms of contemporary cultural production from across Latin America explore the unexpected ways in which human and nonhuman beings make and remake each other in the spaces and moments of encounter. Multispecies encounters have much to tell us about how our past, present, and future existence is irrevocably entangled with the other beings on this planet: they illustrate that our conceptions of human corporeality must account for the myriad "others" that contain and are contained by us through the depths of evolutionary time and space; they deconstruct heterosexist and repro-centric categorizations of gender, sexuality, and species through the queer dynamics of multispecies companionship; and they demonstrate how multispecies communities, constituted by intentional "selves" that interpret, represent, and transform the world, demand the reconfiguration of politics, ethics, and rights beyond the limits of the human. Against the backdrop of the Anthropocene's dire geographies, violent histories, and rivers reduced to ditches, contemporary voices emerging from Latin America foreground indigenous and other-than-dominant epistemologies and political configurations that point toward equitable and sustainable ways of living and being with

[568] See, for example, Haraway's "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin" (2015), Sandilands's lecture titled "Botanically Queer" (2014), and Tsing's "Unruly Edges: Mushrooms as Companion Species" (2012).

pink river dolphins and the countless other life forms with whom we share this rapidly changing planet.

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APPENDIX A

COPYRIGHT PERMISSIONS

Alejandra Zermeño granted permission via email on February 13, 2017 to print images of her work:

El 13/02/2017, a las 10:59, Vera Coleman <vrjones2@asu.edu> escribió:
Estimada Alejandra,

Espero que Ud. se encuentre bien. Me llamo Vera Coleman y soy candidata de doctorado en Arizona State University con una concentración en literatura y cultura hispánicas. Tengo el gran placer de analizar algunas obras suyas en un capítulo de mi disertación, la cual se trata de las relaciones multiespecies en la producción cultural contemporánea.

A mi comité y a mí nos fascinan sus instalaciones y esculturas, especialmente *Célula madre*, *Sinfonía celular*, y *Biología interna de los animales.* Nos encantaría incluir algunas imágenes en la versión publicada de la disertación. ¿Consideraría Ud. darnos permiso para hacer esto?

Le agradezco profundamente su tiempo y consideración. Espero con entusiasmo su respuesta.

Un saludo cordial,
Vera

2017-02-13 11:14 GMT-07:00 Alejandra Zermeño <info@alejandrazermeno.net>:
Estimada Vera, un placer conocerla aunque sea vía virtual. Por supuesto, me siento honrada que usen mi trabajo para lo que necesiten.
También me gustaría mucho leer la tesis.

Muchas gracias y felicidades.

Alejandra Zermeño

(On 02/13/2015, at 10:59 am, Vera Coleman <vrjones2@asu.edu> wrote:
Dear Alejandra,

I hope this message finds you well. My name is Vera Coleman and I am a doctoral candidate at Arizona State University with a concentration in Hispanic literature and culture. I have the great pleasure of analyzing some of your works in a chapter in my dissertation, which centers on multispecies relationships in contemporary cultural production.

My committee and I are fascinated by your installations and sculptures, especially *Stem cell*, *Cellular symphony*, and *Internal biology of animals.* We would love to include some images in the published version of the dissertation. Would you consider giving us permission to do this?

I am deeply grateful for your time and consideration. I look forward to your reply.

Cordially,

Vera

2017-13-02 11:14 GMT-07:00 Alejandra Zermeño <info@alejandrazermeno.net>:
Dear Vera, it's a pleasure to meet you even it is by virtual means. Of course, I would be honored if you use my work for what you need.
I would also like to read your dissertation.

Thank you and congratulations,

Alejandra Zermeño)

Lucía Puenzo granted permission via email on February 17, 2017 to print images and stills from her films *XXY* and *El niño pez*:

El feb 17, 2017, a las 12:04 PM, Vera Coleman <vrjones2@asu.edu> escribió:
Estimada Lucía,

Espero que Ud. se encuentre bien. Me llamo Vera Coleman y soy candidata de doctorado en Arizona State University con una concentración en literatura y cultura hispánicas. Tengo el gran placer de analizar algunas películas suyas en un capítulo de mi disertación, la cual se trata de las relaciones multiespecies en la producción cultural contemporánea.

A mi comité y a mí nos fascinan sus películas, especialmente *XXY* y *El niño pez*. Nos encantaría incluir algunas imágenes/fotogramas en la versión publicada de la disertación. ¿Consideraría Ud. darnos permiso para hacer esto?

Le agradezco profundamente su tiempo y consideración. Espero con entusiasmo su respuesta.

Un saludo cordial,
Vera

2017-02-17 12:07 GMT-07:00 lucia puenzo <lucia.puenzo@gmail.com>:
Hola Vera
Un gusto conocerte.
Sí, no hay problema, pueden usar las imágenes que quieran. Copio a Marcos para que prepare una autorización si la necesitan.
Besos
Lucía

Enviado desde mi iPhone

(On Feb. 17, 2017, at 12:04 PM, Vera Coleman <vrjones2@asu.edu> wrote:
Dear Lucía,

I hope this message finds you well. My name is Vera Coleman and I am a doctoral candidate at Arizona State University with a concentration in Hispanic literature and culture. I have the great pleasure of analyzing some of your films in a chapter of my dissertation, which centers on multispecies relationships in contemporary cultural production.

My committee and I are fascinated by your films, especially *XXY* and *The Fish Child*. We would love to include some images/stills in the published version of the dissertation. Would you consider giving us permission to do this?

I am deeply grateful for your time and consideration. I look forward to your reply.

Cordially,
Vera

2017-02-17 12:07 GMT-07:00 lucia puenzo <lucia.puenzo@gmail.com>:
Hello Vera
It's a pleasure to meet you.
Yes, no problem, you can use whatever images you would like. I am CCing Marcos so he can prepare an authorization if you need it.
Kisses
Lucía

Sent from my iPhone)

María Fernanda Cardoso granted permission via email on February 27, 2017 to print images of her work:

2017-02-13 9:54 GMT-07:00 Vera Coleman <vrjones2@asu.edu>:
Estimada María Fernanda,

Espero que Ud. se encuentre bien. Me llamo Vera Coleman y soy candidata de doctorado en Arizona State University con una concentración en literatura y cultura hispánicas. Tengo el gran placer de analizar algunas obras suyas en un capítulo de mi disertación, la cual se trata de las relaciones multiespecies en la producción cultural contemporánea.

A mi comité y a mí nos fascinan sus instalaciones y esculturas, especialmente *Corona para una princesa chibcha*, y *Museum of Copulatory Organs.* Nos encantaría incluir algunas imágenes en la versión publicada de la disertación. ¿Consideraría Ud. darnos permiso para hacer esto?

Le agradezco profundamente su tiempo y consideración. Espero con entusiasmo su respuesta.

Un saludo cordial,
Vera

2017-02-27 14:08 GMT-07:00 Maria Fernanda Cardoso <studio@mariafernandacardoso.com>:

Claro! Simplemente bajen las imágenes.

Necesitamos más vida!

Mf

(2017-02-13 9:54 GMT-07:00 Vera Coleman <vrjones2@asu.edu>:

Dear María Fernanda,

I hope this message finds you well. My name is Vera Coleman and I am a doctoral candidate at Arizona State University with a concentration in Hispanic literature and culture. I have the great pleasure of analyzing some of your works in a chapter of my dissertation, which centers on multispecies relationships in contemporary cultural production.

My committee and I are fascinated by your installations and sculptures, especially *Crown for a Chibcha princess* and *Museum of Copulatory Organs*. We would love to include some images/stills in the published version of the dissertation. Would you consider giving us permission to do this?

I am deeply grateful for your time and consideration. I look forward to your reply.

Cordially,
Vera

2017-02-27 14:08 GMT-07:00 Maria Fernanda Cardoso <studio@mariafernandacardoso.com>:
Of course! Simply download the images.

We need more life!

Mf)

Solmi Angarita granted permission via email on March 1, 2017 to print images of her work:

El 1 de marzo de 2017, 16:43, Vera Coleman<vrjones2@asu.edu> escribió:
Estimada Solmi,

Le agradezco profundamente todo el tiempo que Ud. ha tomado para contestar mis preguntas y de forma tan detallada. La información en su mensaje y en los enlaces me

va a ayudar enormemente con mi estudio, y los citaré en mis referencias. Es un absoluto placer aprender más sobre la vida de Ud. y las experiencias que ha tenido con el Profesor Galeano, Rember Yahuarcani, y las comunidades del Amazonas.

Hay cuatro ilustraciones que me encantaría incluir en mi disertación. Estas son *Matinta Perera, Curupira, Cobra Grande*, y una cuyo título desconozco pero creo que ilustra el poema "Chicua." Es la segunda imagen que aparece en su página de Behance. Muchas gracias por considerar darme permiso para publicar estas imágenes.

Le mando todos mis mejores deseos y mi profundo agradecimiento.

Cordialmente,
Vera

2017-03-01 14:59 GMT-07:00 solmiart . <solmi.arte@gmail.com>:
Estimada Vera,

No habría problema, solo le pediría que si es publicado en alguna parte me lo haga saber enviándome el link o la publicación escaneada.
Por otro lado, efectivamente la segunda ilustración es de la Chicua.

Gracias por todo,
Solmi Angarita

(On March 1, 2017, 4:43 pm, Vera Coleman<vrjones2@asu.edu> wrote:
Dear Solmi,

I deeply appreciate all of the time that you have dedicated to answering my questions and with such detail. The information in your message and in the links you sent me will help me enormously with my study, and I will cite them in my references. It is an absolute pleasure learning more about your life and the experiences you have had with Professor Galeano, Rember Yahuarcani, and the communities of the Amazon.

There are four illustrations that I would love to include in my dissertation. They are *Matinta Perera, Curupira, Cobra Grande*, and one whose title I am unsure of but I believe it illustrates the poem "Chicua." It is the second image appearing on your Behance page. Thank you very much for considering giving me permission to publish these images.

Sending my best wishes and deep gratitude.

Cordially,
Vera

2017-03-01 14:59 GMT-07:00 solmiart . <solmi.arte@gmail.com>:
Dear Vera,

No problem, I only ask that if your study is published somewhere that you let me know, either sending me the link or a scanned version of the publication.
On another note, yes, the second illustration is of the Chicua.

Thank you for everything,
Solmi Angarita)