♦ Afterword

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In his extended philosophical consideration of the relationship between plants and humans, Emanuele Coccia speaks of a "metaphysics of mixture": a radical refashioning of our understanding of life, which affirms that "the living being is an environment for the world in the same way in which the remaining things of the world are the environment of the living individual. Influence always goes in both directions" (Coccia 72).

The fluidity of identities and ontologies advanced by Coccia has parallels with the approach taken by environmental cultural studies, which brings together previously separate areas in an attempt to understand and engage with some of the pressing issues of our age: environmental crisis; poverty; human rights abuses. In addition to exploring the entanglements between culture and nature, the present volume of Hispanic Issues On Line insists on reconfiguring traditional global divisions between Latin America and the so-called developed world, or Western and non-Western peoples. The broad focus on Luso-Hispanic cultures brings into dialogue regions that have a shared experience of Iberian colonialism—albeit experienced very differently from one place to the next—and whose societies, cultures, and patterns of economic growth have much in common, but have rarely been considered together. The essays included in this volume not only firmly dispense with traditional disciplinary and spatial boundaries, but also the kinds of ontological categories called into question by Coccia, as well as Donna Haraway, Eduardo Kohn, and Michael Marder, among others: that is, the division between humans and nonhumans, whether they are plants, animals, or objects.

Many of us are mindful of the catastrophic consequences and prognosis of anthropogenic climate change. CO2 levels are at an 800,000-year high (Lewis and Maslin 172); 40 percent of insects are threatened with extinction (Sánchez-Bayo and Wyckhuys 8); Arctic sea ice continues to melt at an unprecedented rate: "Human activity has clearly altered the land surface, oceans and atmosphere, and re-ordered life on Earth" (Lewis and Maslin 172). The essays included in this volume engage with many of the severe environmental threats facing the Luso-Hispanic world today, including the rapid expansion of industrial farming in Argentina and Brazil. In his thought-provoking essay

in this volume, Eduardo Molinari establishes the extent of the "soyazation" of Argentina through a catalogue of chilling statistics, including the fact that, in 2017, the amount of soy planted in the country equalled the total number of crops planted in 1970. As Claiton Marcio da Silva explains in his essay, these soy plantations necessitate widespread land clearance, which, in the case of the Brazilian *Cerrados*, leads to soil erosion and deforestation. Alongside other environmental threats, such as cattle ranching, biofuel production, and cotton and maize plantations, soy has caused a steep decline in biodiversity in the *Cerrados*, leaving at least 345 species of plants endangered.

One of the central threats of spiralling soy production in Argentina is the concomitant increase of agrochemical use, particularly glyphosate, commonly sold as "Roundup." Molinari cites a report that estimates the rate of glyphosate usage per capita in Argentina as the highest in the world. Such high levels lead to an omnipresence of the chemical in daily life: "in the air we breathe, the water we drink, the dust carried by the wind that we inhale, and a large portion of the food that we put on our families' tables every day" (gtd. in Molinari). Roundup has a nefarious history in Latin America. It was used in the first years of the twenty-first century when the Colombian army took to the skies to eliminate coca in the country's southern hinterlands as part of the controversial U.S.-sponsored drug eradication program "Plan Colombia," leading to an upsurge in respiratory, gastro-intestinal, and dermatological diseases in the immediate aftermath of the aerial spraying (O'Shaughnessy and Branford 71). In 2015, the International Agency for Research on Cancer (IARC) announced that glyphosate was "probably carcinogenic to humans," prompting the Colombian Government to withdraw the spraying campaign (IARC 1). In the case of Argentina, a number of haunting visual images of children involved in soy production have strengthened public antipathy to the use of pesticides. Molinari recalls the shock elicited by one photograph in particular, that of a child who had worked in the soy fields as a human signpost guiding pilots flying overhead on where to spray the chemicals and who "resembled one of the victims from Hiroshima" (Molinari). A photograph published in National Geographic Magazine in 2015 showing Aixa Ponce Cano, a young girl from the rural Argentine town of Avia Terai—an area surrounded by soy plantations—whose face and body were covered in moles, drew worldwide attention to the threat posed by pesticides to public health in the country (Grossman). Samanta Schweblin's recent eco-horror Distancia de rescate (2014) describes the Argentine countryside as a space of toxicity and death, replete with dying horses, "abortos espontáneos" (23) (spontaneous abortions), and the poisoning of unborn children "por algo que sus madres aspiraron en el aire, por algo que comieron o tocaron" (104) (because of something that their mothers breathed in the air, because of something that they

ate or touched). The central protagonist of the novel dies in its closing pages under mysterious circumstances after visiting a soy plantation with her young daughter.

Angel G. Polanco Rodríguez and Kata Beilin's essay on water pollution in Yucatán reveals a similar, unsettling picture. A clear pattern has emerged between the dangerously toxic ground water of Yucatán's agricultural zones and the high levels of toxins in the blood and breast milk of Mayan women living and working in these areas. Drawing on the idea of chemo-ethnographies, Polanco and Beilin trace the emerging "toxic relations between economy and health," showing that toxicity is often seen as a necessary evil: "There is a conviction that the economy would not work without the poisonous substances. . . . The culture in which the belief that *health has to be damaged so that life can go on* constitutes a new normal" (Polanco and Beilin). The Mayan women at the centre of this essay are a good example of individuals who end up bearing the brunt of what Rob Nixon has called the "slow violence" of environmental degradation: "those people lacking resources . . . Their unseen poverty is compounded by the invisibility of the slow violence that permeates so many of their lives" (Nixon 4).

Throughout this volume, many of the victims of "slow violence" are remembered: an indigenous activist in Honduras opposing the hydroelectric dam company, Desarrollos Energéticos S.A. (DESA) (see Christopher Kelly's essay); the Republican corpses of Franco's fosas comunes to be flooded by a tide of hydrocapital in the Spanish state of Navarre (see Tim Frye's essay); and those who make a living from what others have discarded, such as the *cat*adores of the Itaoca rubbish dump not far from Rio de Janeiro (the subject of Eduardo Coutinho's documentary film *Boca de Lixo* (Brazil, 1993) and Micah McKay's essay in this volume) or *cartoneros* in Buenos Aires (see Oscar A. Pérez's essay). In Law in a Lawless Land: Diary of a Limpieza in Colombia, Michael Taussig records his impressions of an enormous rubbish dump in Navarro, Colombia, built on the ruins of a once fertile valley, overrun with people, including young children, trawling for treasure amid the fetid mountain of trash. For Taussig, as for the authors of many of the essays in this volume, this extreme encounter with the underside of modernity crystallizes the magnitude of human destruction as we enter the twenty-first century: "Like the plants that went under, like the forest that disappeared, human nature as much as nature is now facing a brave new world for which there is no history or prehistory, other than this mountain shaped like a shell" (Taussig 179).

Despite our increasing reliance on technological and chemical means to control and even assist nature (Taussig's mountain of waste is, notably, "an ecologically attuned garbage dump designed by a Spanish company so that the garbage slowly sinks with its layers of dirt to compost and eventually be-

come earth"; 178), many of the essays in this volume draw out the long-established and vital interactions between humans and nonhumans. Marisol de la Cadena's influential book Earth Beings: Ecologies of Practice across Andean Worlds explores alternatives to Western modes of understanding nature, often posited around binaries of self-other, nature-culture. The eponymous "beings" of de la Cadena's study, as Giovanna Micarelli explains, are "sentient entities that do not inhabit, but that are mountains, rivers, lagoons, and other visible marks of the landscape, and that are in mutual relationships of care with the Runakuna" (123). Many of the essays in this collection draw out the importance of indigenous American territorial practices, whereby land, animals, and even plants are seen as animate beings on a continuum with humans. As Philippe Descola explains in relation to animist ontologies more generally, "A human can be embodied in an animal or plant; an animal can adopt the form of another animal; a plant or an animal can shed its outward clothing and reveal its objectivized soul in the body of a human being" (135). In their essay on conservation politics in the Colombian National Parks, Paula Ungar and Julia Premauer draw on de la Cadena's ideas to show how indigenous park rangers mediate their different responsibilities and affiliations as members of tightknit communities and protectors of the natural world by paying attention to what they call the "pulses of the territory": working with nature, which is really an extension of themselves. In this way, the rangers can be seen to embrace what John H. Trevathan and William Viestenz characterize in their essay as an "open bodied ecology" that "rejects any kind of assertion that human communities should be considered the sole stewards, protectors, or shepherds of the natural world." Drawing on the work of the Galician novelist, journalist, and environmental commentator, Manuel Rivas, Trevathan and Viestenz note how ecological thinking a cuerpo abierto reconfigures "ecological collectives as networks of alliances forged across species."

Throughout this collection, there are suggestions as to what form these cross-species alliances and hybrids might take. John Beusterien's suggestive essay relates the concept of a "biotic community" to Cervantes's classic novel *Don Quijote* and considers, in particular, the expression (angry, indignant) on the face of Sancho Panza's donkey as he falls with his master into a pit in an illustration from a French translation of the novel. Sarli E. Mercado, alternatively, notes how human/nonhuman amalgams in the work of Uruguayan poet Marosa di Giorgio as well as the Mexican graffiti artist Sego y Ovbal (a pseudonym for Carlos Segovia Alanis) often take the shape of a mushroom. Fungi notably form the bedrock of Anna Lowenhaupt Tsing's book *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, in which a history of the Matsutake mushroom facilitates the discussion of multiple "interspecies entanglements" (7). In the text accompanying the fifth

of Sego's *Proteus* murals, the artist reflects on how mushrooms carry within them a trace of the dead person from which they have grown: "Yo no me atrevo a devorarlos; esa carne levísima es pariente nuestra" (I do not dare to eat them; that most tender meat is our relative). This reminds me of Chilean poet Pablo Neruda's haunting account of how, at his stepmother's funeral, he glimpsed his father's recently buried coffin, itself already covered in mushrooms (418). The image of mushrooms proliferating in the wake of death in turn brings to mind Donna Haraway's characteristically amusing reflection on the presence of bacteria in her human body: "I am vastly outnumbered by my tiny companions. . . . I love that when 'I' die, all these benign and dangerous symbionts will take over and use whatever is left of 'my' body" (4). As the co-editors of this volume argue in their excellent introduction, "Immersed in and constituted by air, water, organic matter, and microbial communities, all human activities (including breathing and eating) are conditioned by their nonhuman environments, which flow through them like water through soil."

One of the important entanglements that stands out in this volume is the close relationship between humans and plants. In line with the spatial turn in the humanities, scholars recently have begun to attend to the significant role of plants in culture, giving rise to the new discipline of critical plant studies. Michael Marder, for one, has done much to reverse the traditional side-lining of plants in the Western philosophical tradition, which he regards as being in collusion with capitalist economies: "economic rationality, which currently treats plants as sources of bio-energy or biofuel, converts, concretely and on a global scale, the metaphysical principles of sameness and identity into the modes of production and reproduction of material existence in toto" (Marder, "Vegetal Anti-Metaphysics," 470). Far from passive, immobile, and noncommunicative entities, or simply as sources of food or fuel, recent studies by Marder, Matthew Hall, Luce Irigaray, and Coccia all stress that plants are complex beings whose needs and abilities should be recognised and respected. These revisions to philosophical understandings of vegetal life have been assisted by scientific advances, which reveal that the view of plants as unresponsive and unfeeling is incorrect. Studies have shown that, for instance, in addition to being able to sense a wide range of stimuli, including light and touch, plants can communicate not only with other plants, but also with animals and microbes (Karban). In The Hidden Life of Trees, Peter Wohlleben stresses the social propensities of plants, which share nutrients, care for the sick and old, and send messages to one another about predators or diseases.

The idea that plants can think is central to Beilin's essay in this volume on amaranth. As Beilin explains, in pre-Hispanic times, this little-known grain was as important as maize. It was easy to grow, resilient to drought, and was an important source of protein. It was also considered a magical "grain of the

gods." Although amaranth declined and finally all but disappeared under the Spanish Empire, probably because of the grain's symbolic importance for the Meso-American elite, Beilin's essay traces its recent resurgence in the Valley of Tehuacán, Mexico. Underpinning Beilin's history of this comeback is Kohn's conception of an "anthropology beyond the human" (Kohn 6) as well as Marder's idea of "plant-thinking." Although the rural development program Proyecto Alternativas was responsible for first reintroducing amaranth seed in the valley, according to Beilin's argument, a long-dormant interspecies alliance between locals and the plant, as well as amaranth's own agendas and self-determination, secured the reestablishment of the grain as central to the diet of the region. Indeed, Kohn's argument that "seeing, representing, and perhaps knowing, even thinking, are not exclusively human affairs" (1) expresses a conviction long-established among many indigenous communities in South America. The title of Ricardo Serruya's 2013 La venganza del amaranto (The Revenge of Amaranth), a book detailing how weed varieties of amaranth are now able to withstand glyphosate and hence are being used by environmental activists to overrun soy plantations, draws on the same imaginary as, say, many Amazonian beliefs about the tutelary spirits of trees bringing misfortune to those who disrespect nature (Smith 57). (After the Plan Colombia spraying campaign, local coca farmers also reported the emergence of a new strain of coca that could, purportedly, resist Roundup: a kind of wonder plant they called *supercoca* or *boliviana negra*. See O'Shaughnessy and Branford 93.)

The intriguing idea of amaranth (or coca) as a subversive plant is one instance among many in this collection of the ways in which people—and nature—can engage in environmental activism. As the introduction to this volume makes clear, activism is a dangerous business, particularly in Latin America, with some two hundred environmental protesters murdered there in 2017 alone. A report by Global Witness noted the culture of impunity surrounding the murders of activists, fueled by the collusion between corporate and state interests, and often the complicity of the police and army (10). This volume examines the stories of a number of protesters, both living and dead, across the Luso-Hispanic world. Molinari refers to the polemical case of Santiago Maldonado, who disappeared on August 1, 2017, after he took part in a demonstration in support of the Mapuche community in the department of Cushamen in Argentina. Maldonado's dead body was recovered from a nearby river several weeks later. His family and human rights organizations such as Amnesty International continue to call for a full, impartial investigation into the young man's death. On November 25, 2017, the day before Santiago Maldonado's funeral, another young Argentine, Rafael Nahuel, this time from the indigenous Mapuche community itself, was shot dead by security

forces during a related dispute over territory. Throughout the essays included in this collection, stories like Maldonado's and Nahuel's unfold again and again. Kelly's essay considers the death of the Honduran activist Berta Cáceres on March 2, 2016, following her prolonged protests against the hydroelectric dam company, DESA. Kelly takes Cáceres's death as both singular and part of a systemic and cyclical process: "Berta Cáceres is at once also Metacomet, Spotted Elk, Geronimo, and other indigenous people across time, living and dead, who stand and fall and stand again."

Although environmental activism is less entrenched—and somewhat less dangerous—in Spain, Frye's essay on the Itoiz dam in the Basque country, which planned to flood three villages as well as two national nature reserves, reminds us of the potential impact and consequences of environmental protest outside Latin America. In 1996, Spanish antidam protesters took direct action by cutting cables to disable work on the proposed dam site. While protesters lived to tell the tale, they received a severe beating from the Guardia Civil and hefty jail sentences (Weyndling); the dam was completed in 2009. Michael Ugarte's affectionate biographical essay on his uncle, Artemio Precioso Ugarte, one of the founders of Greenpeace in Spain, traces the seeds of such movements back to the days of the Spanish Civil War and the communist commitments of the 1930s and 1940s. Ugarte's account of his uncle's trajectory from communism to ecologism as "a logical intellectual process of reconciling economic realities with the creation of a life in which human beings are one with their natural world, and that includes instincts, desires, and appetites that make the species homo sapiens akin to all animals" resonates with many of the multicultural understandings of nature outlined above, more commonly associated with indigenous cultures. Trevathan and Viestenz's essay on Rivas also takes Francoist Spain as a point of departure for understanding the persistence of the concept of sovereignty in political and ecological practices in contemporary Spain. Trevathan and Viestenz's and Ugarte's essays are instances of how this collection refuses to essentialize indigenous peoples' engagement with nature. As Ungar and Premauer make clear, individuals from indigenous communities are capable of engaging in activities deleterious to the environment, just as non-indigenous people—like Artemio Precioso Ugarte—can act in ways consonant with indigenous thinking about the nonhuman world. The fact that many people in the Iberian Peninsula are engaging with modes of food production or community activism normally associated with non-Western cultures accords with the imperative of the Portuguese thinker Boaventura de Sousa Santos for greater dialogue between Western and Southern epistemologies. As the editors of this volume stress, environmental cultural studies itself is premised on the need for a "pluriversal" dialogue between different modes

of understanding nature, including between indigenous knowledge, on the one hand, and scientific knowledge, on the other.

Activism, while perilous, is fundamental to the future of human and nonhuman life on our planet. Beilin and Polanco argue that, while many indigenous communities suffer disproportionately from continuing destructive environmental practices, they do not accept this situation passively. In this volume, we read of collectives of people—small and large; local, national, and international—who come together to resist toxicity, predation, and deterritorialization: the association of beekeepers from Hopelchén, Solid@rios con Itoiz, the municipal authorities in Gualeguaychú, *Via Campesina*, Towns in Transition, Movimiento 15-M, Vivero de Iniciativas Ciudadanas (VIC) (see Luis I. Prádanos's essay), and, as McKay highlights, the everyday activities that continue to bind people together even in extreme environments like the Itaoca rubbish dump, such as preparing and eating food, talking, and playing football.

Activism is the opposite of the inertia experienced by many of us when faced with yet another apocalyptic news report about climate change. Bécquer Seguín argues in this volume that "[e]schatological argumentation, because of the magnitude and imperceptibility of end times, frequently orients such fear toward paralysis and away from action"—a fundamental point missed, he adds, by the authors of the 2012 report Consumo y estilos de vida. Cambio Global España 2020/2050. Seguín draws upon Alison McQueen's discussion of the political choices available in the face of the "apocalyptic imaginary," ranging from unequivocal adoption of the logic of apocalypse through to withdrawal and resignation, in his examination of two Spanish Crisis novels, Rafael Chirbes's En la orilla (2013) and Cristina Sánchez-Andrade's Las Inviernas (2014). Whilst the protagonist of Chirbes's work, who in the novel's own apocalyptic conclusion, drowns his father and commits suicide, enacts a withdrawal from politics, and, indeed, life itself, Las Inviernas presents us with an alternative model of engagement predicated on collective action. Like so many of the ecological campaigners discussed in this volume, the fictional protagonists of Sánchez-Andrade's novel promote (in this case a specifically feminist) community-centered, collective living which works with rather than against the natural world. Such inclusive practices are also inbuilt into environmental cultural studies, a discipline that not only examines our contemporary ecological crisis but, as this volume exemplifies, provides us with multiple strategies for understanding and overcoming it through new and collective thinking and endeavour.

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