Decolonizing Nature presents a timely critical analysis of the parameters and limitations of philosophical, artistic, and curatorial models that respond to climate change. Immensely rich and informative, this book makes an impassioned argument for a post-anthropocentric political ecology in which the aesthetic realm joins with Indigenous philosophies and environmental activism to challenge the neoliberal corporate-state complex. It invites us to confront tough questions on how we might collectively reimagine and realize environmental justice for humans and nonhumans alike.

—Jean Fisher, Emeritus Professor in Fine Art and Transcultural Studies, Middlesex University

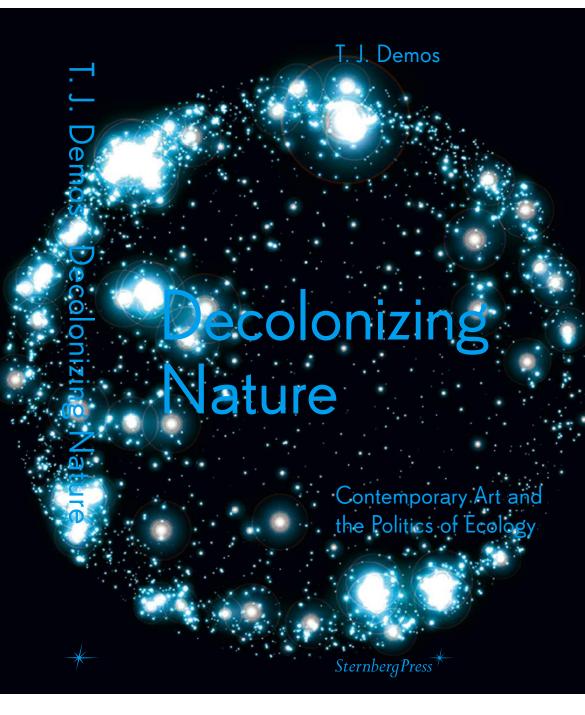
Astute and ambitious. Essential reading for anyone interested in the arts, activism, and environmental change. T. J. Demos moves with impressive ease across national boundaries, cultural forms, social movements, and ecological theories.

- —Rob Nixon, Currie C. and Thomas A. Barron Family Professor in Humanities and the Environment, Princeton University
- T. J. Demos breaks new ground in art criticism. In an expansive analysis of polyvocal artist-activist practices in both the Global South and the North, Demos eschews environmental catastrophism and techno-fixes to highlight collaborative resistance to neocolonial violence and neoliberal collusion-to-plunder. *Decolonizing Nature*, rigorous, accessible, and rebellious, is an indispensible contemporary art manifesto.
- —Subhankar Banerjee, Lannan Chair of Land Arts of the American West and Professor of Art and Ecology, University of New Mexico

The first systematic study of its kind, *Decolonizing Nature* is an exemplary combination of militant research and contemporary art history that will resonate with activists on the front lines as much as those working in the art field, reframing the latter as a site of struggle in its own right as we come to terms with the so-called Anthropocene.

- —Yates McKee, author of Strike Art: Contemporary Art and the Post-Occupy Condition
- T. J. Demos's ability to distill and interrelate heterogeneous discourses and ecopolitical contexts, without flattening them in the process, is breathtaking. The heart of this book lies in its detailed discussion of specific artworks and the environmental struggles from which they emerge and to which they ambitiously, and often brilliantly, respond. *Decolonizing Nature* makes a forceful case for why and how art matters, now more than ever.
- —Emily Eliza Scott, coeditor of Critical Landscapes: Art, Space, Politics





Decolonizing Nature

Contemporary Art and the Politics of Ecology



Sternberg Press *

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This book investigates the intersection of contemporary art, environmental activism, and political ecology. While ecology—in particular, its political dimensions—has received limited attention within academic studies of the visual (and particularly the art historical), in recent years the looming threat of manifold environmental crises, exacerbating sociopolitical and economic ones, has grown ever more evident world-wide. Indeed, there is an increasing sense of urgency within multiple realms of visual culture, including art exhibitions, social movements, and mainstream and independent media, as ecological concerns have been taken up in video, documentary pho-

tography, creative activism, architecture, and socially engaged art. The term "political ecology," as used herein, acknowledges approaches to the environment that, although potentially divergent, nevertheless insist on environmental matters of concern as inextricable from social, political, and economic forces. Since environmental stresses can be both a driver and consequence of injustice and inequality—including

1 A selection of recent publications in art history, visual culture, and architectural and curatorial studies that addresses art and ecology includes: James Brady, ed., Elemental: An Arts and Ecology Reader (Manchester: Cornerhouse Publications, 2016); Emily Eliza Scott and Kirsten Swenson, eds., Critical Landscapes: Art, Space, Politics (Oakland: University of California Press, 2015); Maja Fowkes, The Green Bloc: Neo-avant-garde Art and Ecology under Socialism (Budapest: Central European Press, 2015); Lucy R. Lippard, Undermining: A Wild Ride through Land Use, Politics, and Art in the Changing West (New York: The New Press, 2014); Forensic Architecture, eds., Forensis: The Architecture of Public Truth (Berlin: Sternberg Press, 2014) Also see "Contemporary Art and the Politics of Ecology," ed. T. J. Demos. special issue, Third Text, no. 120 (January 2013); and the "Anthropocene Project" (2013-14) at the Haus der Kulturen der Welt, Berlin. I examine the longer history of environmental art in chapter 1.

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poverty, racism, and neocolonial violence—political ecology recognizes that the ways we regard nature carry deep implications and often unacknowledged ramifications for how we organize society, assign responsibility for environmental change, and assess social impact. At the same time, as I work out of my own intellectual formation in art history, analyses in this book draw on interdisciplinary science and cultural studies as well as critical philosophy that artists have also engaged with—speculative realism and new materialism as much as Indigenous cosmologies and climate justice activism. My conviction is that environmentally engaged art bears the potential to both rethink politics and politicize art's relation to ecology, and its thoughtful consideration proves nature's inextricable binds to economics, technology, culture, and law at every turn. Addressing that convergence, and its political effects, cultural translations, and artistic mobilizations, is this book's central concern.

As we know, the ongoing destruction of our environment by anthropogenic pollution is pushing us toward catastrophic circumstances. This situation promises only to worsen as we advance toward a series of climate-change tipping points.4 Amounting to the most momentous experimentation with the earth's living systems in human history, this environmental alteration, put into place by industrial modernity (with roots in the formation of capitalism centuries before), threatens increased temperatures, plummeting agricultural yields, wide-ranging droughts and consequent raging wildfires, massive flooding, extreme weather events, the collapse of fisheries, and public health breakdowns

- 2 By capitalizing Indigenous throughout this book, I'm following recent critical scholarship—for instance, Glen Coulthard, Red Skin, White Masks: Rejecting the Colonial Politics of Recognition (Minneapolis: University of Minnesota Press, 2014)—that employs this style as a mode of cultural respect for, and political affirmation of, native peoples and their manifold rights struggles.
- 3 Political ecology has a varied and complex genealogy, articulated at the intersections of cultural geography, human ecology, anthropology, environmental studies, and political economy over the course of the twentieth century. In general, it examines the unequal distribution of costs and benefits of environmental changes according to social, cultural, and economic differences, in relation to their political implications. For overviews, see Raymond L. Bryant and Sinead Bailey, Third World Political Ecology (London: Routledge, 1997); and Paul Robbins, Political Ecology: A Critical Introduction (Oxford: Blackwell, 2004).
- 4 For overviews of climate-change science, see James Hansen, Storms of My Grandchildren: The Truth about the Coming Climate Catastrophe and Our Last Chance to Save Humanity (New York: Bloomsbury Press, 2009); Naomi Klein, This Changes Everything: Capitalism vs. the Climate (New York: Allen Lane, 2014); Elizabeth Kolbert, The Sixth Extinction: An Unnatural History (New York: Henry Holt and Company, 2014); Bill McKibbon, Eaarth: Making a Life on a Tough New Planet (New York: Henry Holt and Company, 2010); and Rajendra K. Pachauri, Leo Meyer, and the Core Writing Team, eds., Climate Change 2014: Synthesis Report; Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Geneva: IPCC, 2014), http://www.ipcc.ch/pdf/assessment-report /ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

with spreading epidemics.⁵ While the predictions seem to worsen each year, none should be new. A long-standing subject of peer-reviewed journals and expert research, anthropogenic climate disruption has reached global scientific consensus in the form of the Intergovernmental Panel on Climate Change (IPCC), which issued its fifth synthesis report in 2014, reaffirming—in quite conservative terms, according to some critics—what we have known, at least in part, for decades. Kevin Anderson, deputy director of the Tyndall Centre for Climate Change Research a notable scientist-activist of our day, observes that with the current production of greenhouse gases, we're heading toward global warming of some four degrees Celsius (7.2°F) by the end of this century, which is of a magnitude "incompatible with any reasonable characterization of an organized, equitable and civilized global community."

In the meantime, we have seen more than twenty years of international meetings sponsored by the United Nations (beginning with the Rio Earth Summit in 1992)—our closest approximation of global climate governance—charged with proposing ways to stabilize atmospheric greenhouse gas concentration at safe levels that would not alter the earth's climate. The meetings began a few years after NASA climatologist James Hansen, in 1988, gave his historic presentation in the US Senate explaining that the record temperatures of the year so far were owed *not* to natural variation, but to the increase of human-produced atmospheric pollutants. Since then, emissions have gone up by more than half.⁷ The Rio summit agreed with the now-

accepted, crucial principle of "common but differing responsibilities" of developing and industrialized countries in addressing climate change, giving rise to a key strand of climate justice that both counters the idea that all humans are equally culpable for environmental change and legitimates the concept of climate debt (the notion that countries burning fossil fuels since the Industrial Revolution have used up their pollution allowance and owe a liability to the others).8 Yet

- 5 As the scientific journal *Nature* explains in a recent issue on conservation and extinction, "Thousands of species are disappearing each year. If that trend continues, it could lead to a mass species extinction—defined as a loss of 75% of species—over the next few centuries." Richard Monastersky, "Biodiversity: Life—A Status Report," *Nature* 516 (December 2014): 159. Also see Dahr Jamail, "Climate Disruption's New Record: Carbon Dioxide Levels Reach Highest Point in 15 Million Years," *Truthout*, February 29, 2016, http://www.truthout.org/news/item/22521-climate-disruption-dispatches-with-dahr-jamail.
- 6 "It indeed becomes difficult to imagine that a peaceful, ordered society could be sustained (that is, where such a thing exists in the first place)." Kevin Anderson, "Climate Change Going Beyond Dangerous: Brutal Numbers and Tenuous Hope," Development Dialogue, no. 61 (September 2012): 29.
- 7 See the data of the Carbon Dioxide Information Analysis Center, which puts the current global CO₂ atmospheric levels at an alarming 403.94 ppm; accessed March 29, 2016, http://cdiac.ornl.gov.

UN climate meetings to date have not yielded any binding agreements or governmental leadership regarding environmental policy, particularly the annual Conference of the Parties, or COP, including the most recent in 2015.9 Though agreements at such events are regularly signed to keep temperatures from increasing more than two degrees Celsius (3.6°F) above preindustrial levels (or 1.5°C, agreed at COP21), they are effectively meaningless when voluntary and unenforceable. To low-lying states threatened with sea-level rise and sub-Saharan African countries already suffering drought-stressed heat waves, these non-measures amount to what Nigerian environmental activist Nnimmo Bassey calls a "death sentence." With G8 government representatives continually lobbied by the fossil fuel industry, it has become clear that we are being held hostage to corporate powers that place short-term profits over long-term sustainability, as free-market economics is worshipped at the cost of our planet's very life-supporting capacity. The system of global governance is clearly failing.

At the same time, we are seeing a flourishing of contemporary artistic and activist practices that address and negotiate environmental conflict in other ways. These include cogent analyses of ecological destruction (as carried out by extractivism, oil drilling, and marine industrialization) as well as creative alternatives that model forms of environmental sustainability and egalitarian structures of living. Fields of visual culture wider than institutional art practice are involved here—namely, broadcast media, experimental video and film. Internet-based and independent news, creative activism, NGOs, and collective social movements. The productions of this

- 8 See Andrew Ross, "Climate Debt Denial," Dissent (Summer 2013), http://www.dissentmagazine.org/article/climate-debt-denial.
- 9 See Subhabrata Bobby Banerjee, "A Climate for Change? Critical Reflections on the Durban United Nations Climate Change Conference," Organization Studies 33, no. 12 (2012): 1761-86. For a summary of much of the critical commentary around COP21, see George Monbiot, "Grand Promises of Paris Climate Deal Undermined by Squalid Retrenchments," Guardian, December 12, 2015, http://www.theguardian.com/environment/georgemonbiot/2015/dec/12/paris-climate-deal-governments-fossil-fuels.
- 10 After COP17, Bassey, chair of Friends of the Earth International, claimed, "If countries agree to the text as it stands, they will be passing a death sentence on Africa." Reported in Stephen Leahy, "Draft Climate Deal Dubbed a 'Death Sentence for Africa," Inter Press Service, December 9, 2011, http://www.ipsnews.net/2011/12/draft-climate-deal-dubbed-a-death-sen tence-for-africa. More recently, see Marion Deschamps and Cyril Mychalejko, "Did World Leaders Sign a 'Death Warrant for the Planet' at COP21?," Truthout, December 14, 2015, http://www.truth-out.org/opinion/item/34016-world-leaders-signed-a-death-warrant-for-the-planet-at-cop21.
- 11 See Naomi Klein, "Hot Money: How Free Market Fundamentalism Helped Overheat the Planet," in This Changes Everything, 64–95; and John Cavanagh and Jerry Mander, eds., Alternatives to Economic Globalization: A Better World Is Possible; A Report of the International Forum on Globalization (San Francisco, CA: Berrett-Koehler, 2002). See also "The COP 21 Guide to Corporate Climate Lobbying," InfluenceMap, November 26, 2015, http://influencemap.org/report/The-COP-21-Guide-to-Corporate-Climate-Lobbying.

assemblage form a complex aesthetic field that is also politically organized, contesting the dominant "distribution of the sensible," where, according to Jacques Rancière's useful conceptualization, some voices clearly count and others are relegated to the sensory background, an economically determined, antidemocratic arrangement that activist-artists are continually challenging.¹² This book hopes to further enliven this intersection of art and activism by offering critical analysis of their diverse strategic rhetorics, visual constructions, affective impacts, conceptual maneuvers, political goals, and actual effects, by which people form alliances, create social movements, and make visible publics that counter corporate and governmental positions via creative engagements with media.¹³ In this regard, my approach remains attentive to what Meg McLagan and Yates McKee term the "image complex," or "the whole network of financial, institutional, discursive, and technological infrastructures and practices involved in the production, circulation, and reception of [...] visual-cultural materials." That formation calls for a diagnostics not centered solely on the "politics of aesthetics" of the image, but also on the wider channels of image circulation, the institutions of containment, and the legal-political-economic assemblages that frame and in part determine the visual culture of environmentalism.¹⁴

An additional commitment of this project is to consider ecological formations and conflicts in their global dimension—the convergence of politics and aesthetics in the Global South as well as the North, regions filled with continuities and differences that are economic and geopolitical as much as sociocultural and environmental. In this regard, contemporary positions of environmental artistic practice substantially differ from past varieties in that they tend to avoid the now-inadequate elements of earlier eco-artistic languages, such as those of the 1970s, particularly "the constant elegy for a lost unalienated state, the resort to the aesthetic dimension (experimental/perceptual) and the other others at him healthing.

tual) rather than ethical-political praxis, [and] the appeal to 'solutions,' often anti-intellectual," as ecology and literature theorist Timothy Morton has put it.¹⁵ Many contemporary practices also go beyond eco-aesthetic forms of parochial environmentalism (such as those exclusively attached to the wilderness

- praxis, [and] the appeal to 'solu- 12 Jacques Rancière, Dissensus: On Politics and Aesthetics, tions ' often anti-intellectual " trans. Steven Corcoran (London: Bloomsbury, 2015).
 - 13 George Marcus, Connected: Engagements with Media (Chicago: University of Chicago Press, 1996), 6; and Bruno Latour and Peter Weibel, eds., Making Things Public: Atmospheres of Democracy, trans. Robert Bryce (Cambridge, MA: MIT Press, 2005).
 - 14 Meg McLagan and Yates McKee, eds., introduction to Sensible Politics: The Visual Culture of Nongovernmental Activism (New York: Zone Books, 2012), 12, 9.
 - 15 Timothy Morton, Ecology without Nature: Rethinking Environmental Aesthetics (Cambridge, MA: Harvard University Press, 2007), 23.

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landscapes of North America), and take up relational geographies, comparative analyses, and transnational alliances directed against, for instance, the ecocide of corporate globalization or the socioeconomic ramifications of environmental destruction. The most compelling current artistic models, in my view, join the aesthetic dimension of experimental and perceptual engagement with the commitment to postcolonial ethicopolitical praxis, and do so with sustained attention to how local activities interact with global formations.16

War on Nature

My analysis of art and environment extends from the view that climate change is first and

foremost a political crisis, not one that poses insurmountable technological problems or natural barriers: what is needed most is the will to address ecological concerns systematically and comprehensively. There are, in fact, plenty of solutions for sustainable living today, which, if implemented globally, could protect biodiversity and define a more equitable and inclusive socioeconomic order than today's environmentally destructive corporate-state oligarchy.¹⁷ I agree with a range of environmental and political activists who contend that the threat of climate change is the best motivation for a "Great Transition," which will require a systemic shift in reorganizing social, political, and eco-

nomic life, in order to bring us into around us, including its human and nonhuman life-forms. In versity riess, 2000).

17 Klein points to the work of Mark Z. Jacobson, professor of other words, we cannot address climate justice adequately without also targeting the corruption of democratic practice by corporate lobbying, or the underfunding and failure of public transportation systems, or Indigenous rights vio- 18 lations by industrial extractivism, or police violence and the militarization of borders. For these areas all link up in one way or another as interconnected strands of political ecology.

- greater harmony with the world 16 For a critical discussion of local and global ecologies, see Ursula K. Heise, Sense of Place and Sense of Planet: The Environmental Imagination of the Global (Oxford: Oxford Uni
 - civil and environmental engineering at Stanford University, and Mark A. Delucchi, research scientist at the Institute of Transportation Studies at University of California, Davis, which details "how 100 percent of the world's energy, for all purposes, could be supplied by wind, water and solar resources, by as early as 2030"; Mark Z. Jacobson and Mark A. Delucchi, "A Plan to Power 100 Percent of the Planet with Renewables," Scientific American, November 2009; cited in Klein, This Changes Everything, 101.
 - Paul Raskin, Tariq Banuri, Gilberto Gallopín, Pablo Gutman, Al Hammond, Robert Kates, and Rob Swart, Great Transition: The Promise and Lure of the Times Ahead (Boston: Stockholm Environment Institute, 2002), http://www.worldgovernance.org/IMG/pdf_0090_Great_Transition_-_ENG.pdf; see also Stephen Spratt, Andrew Simms, Eva Neitzert, and Josh Rvan-Collins, The Great Transition: A Tale of How It Turned Out Right (London: New Economics Foundation, 2010), http://www.neweconomics.org/publications/entry /the-great-transition.

It is often in civil spheres where we find the most critical and creative energies, the most ambitious and unconventional proposals, in addressing these interlinked crises. While corporate media and the entertainment industry generally rest content (and benefit financially) in presenting an endless stream of apocalyptic scenarios that make it seem as though environmental catastrophe is our ineluctable fate (or they ignore climate change entirely), there are growing numbers of social-movement campaigners, artists, political theorists, and activists intent on thinking outside the enforced narratives of disaster capitalism. They are doing so increasingly both within the institutionalized exhibition areas of the contemporary art system—I examine numerous models of such practices in the chapters that follow—and beyond those walls, in conflicted public spaces, independent media outlets, and in reclaimed zones of autonomy and the commons. Working within and against the thick, heterogeneous histories of conceptualist art, the complex intertwining of aesthetics and politics within documentary moving-image practices, and the socio-spatial politics of environmental sculpture of decades past, contemporary artists are connecting to and building upon past approaches of institutional critique, documentary fictions, and multispecies assemblages. 19 In this respect, the most adventurous practitioners are also pushing beyond those earlier precedents—for instance, analyzing the political ecologies and economies of art institutions (as well as liberating existing institutions or even inventing whole new models, as in the cases of Liberate Tate and the Laboratory of Insurrectionary Imagination); joining the speculative fictions of video-essay making to politico-environmental imaginaries; and growing linkages between permaculture farming, experimental social relationships, and post-anthropocentric modalities of belonging. As these observations indicate, some of the most ambitious artistic engagements, for me, are those that enact an intersectionalist politics of aesthetics, where art no longer prioritizes the gallery-enclosed

tion alone, but rather emerges in close proximity to field research, creative pedagogies, political mobiships and solidarities, whereby interdisciplinary collaboration mirrors the very complex relations of political ecology.20 A selection of these practices finds extended consideration in these pages.

experience of aesthetic contempla- 19 Here I'm building on my own recent work that has explored the aesthetics and politics of documentary art and neo-conceptualist mixed-media practices, as in The Migrant Image: The Art and Politics of Documentary (Durham, NC: Duke University Press, 2013); and Return to the Postcolony: Specters of Colonialism in Contemporary Art (Berlin: Sternberg Press, 2013). lization, and civil society partner- 20 In this regard, this book resonates with recent publications that investigate the vibrant contemporary efflorescence of activist-arts participating in social-movement cultures, including Yates McKee, Strike Art: Contemporary Art and the Post-Occupy Condition (London: Verso Books, 2016); Nato Thompson, Seeing Power: Art and Activism in the 21st Century (Brooklyn: Melville House, 2015); Catherine Flood and Gavin Grindon, eds., Disobedient Objects (London: V&A Publishing, 2014); and Nicolas Lampert, A People's Art History of the United States (New York: The New Press, 2013).

Of course, ecology has not always been so defined. In 1866, German biologist Ernst Haeckel coined the term, which designated "the body of knowledge concerning the economy of nature—the investigation of the total relations of the animal both to its organic and inorganic environment."21 Ecology's disciplinary formation coincided with the height of European colonialism, a regime not limited to the governing of peoples but also the structuring of nature. The colonization of nature, emerging from the Enlightenment principles of Cartesian dualism between human and nonhuman worlds, situated the nonhuman world as objectified, passive, and separate, and "elaborated a rationalizing, extractive, dissociative understanding which overlaid functional experiential relations among people, plants and animals."22 Destructive and utilitarian, idealized and exoticized nature has been colonized in concept as well as in practice. It entailed a multifarious, complex, and at times contradictory pattern of bureaucratic rationalization, scientific and technological mastery, military domination, integration within the expanding capitalist economy, and legal systematization in order to manage and maximize the possibilities of resource exploitation. In this vein, ecology was far from the innocent discipline Haeckel named; rather, it comprised "the science of empire." 23

This colonization only continues today. Michel Serres once characterized Western modernity's relation to nature as constituting a "war" based on the "mastery and appropriation" of the earth, against which the French philosopher called for a "natural contract" to inaugurate a new

colonial equality between human are still far from realizing such a contract, even though growing social movements, emerging out of Indigenous philosophy and environmental activism alike, insist on recognizing the "rights of nature," and some nations in Latin 23 America (Ecuador and Bolivia) have recently enshrined those rights in their constitutions and legal systems, albeit with uneven 25 For more on this subject see my catalogue essay for the implementation.25 That said, we

- political ecology based on a post- 21 Ernst Haeckel, cited in J. Donald Hughes, An Environmental History of the World: Humankind's Changing Role in the Community of Life (New York: Routledge, 2009), 7.
- and nonhuman life.²⁴ Clearly we 22 William M. Adams and Martin Mulligan, Decolonizing Nature: Strategies for Conservation in a Post-colonial Era (London: Earthscan, 2003), 24. However, by the 1850s British and French colonial rule amounted "to a highly heterogeneous mixture of Indigenous, romantic, Orientalist and other elements," which defies any single consistent ideology of nature (ibid., 19). See also Richard H. Grove, Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1800 (Cambridge: Cambridge University Press, 1995), 12.
 - See Libby Robin, "Ecology: A Science of Empire?," in Ecology and Empire: Environmental History of Settler Societies, ed. Tom Griffiths and Libby Robin (Keele: Keele University Press, 1997), 63-75.
 - 24 See Michel Serres, The Natural Contract, trans. Elizabeth MacArthur and William Paulson (Ann Arbor: University of
 - exhibition I cocurated, "Rights of Nature: Art and Ecology

continue to confront what Indian activist Vandana Shiva calls "the corporate control of life," owing to neoliberal globalization, international trade policies, deregulated environmental protections, and the patenting of biological matter (in the form of genetically modified seeds, for instance), all of which have brought ruin and devastation to many tribal and subsistence farming communities worldwide. 26 For sociologist Melinda Cooper, that context is the culmination of biogenetic capitalism's expansion, first surfacing in the 1980s and deployed to overcome an earlier environmentalism gathered around the commitment of "limits to growth." Formulated in the eponymous 1972 report commissioned by the Club of Rome (a group of European industrialists, academics, and scientists founded in 1968), the study used computer modeling to calculate the negative environmental effects of growing population, industrialization, pollution, food production, and resource depletion. Unlike nonrenewable energy and its ecosystem despoilment, biogenetic capitalism transforms life itself into a prospective infinite source of growth via biotechnology and financial speculation, representing further incursions of neoliberalism, now directed at colonizing the primordial genetic elements and temporalities (including financializing the futures) of our material existence.²⁷

This corporate-industrial and politico-economic onslaught has not gone unchallenged, however. A growing international formation mobilizing against the continuing plunder is comprised of environmentalists such as Naomi Klein, Bill McKibben, and David Solnit; anti-austerity social movements that emerged from Occupy, and their related recent uneven transformations into anti-neoliberal political parties in Europe, such as Podemos in Spain and Syriza in Greece; NGOs like the African Bio-

diversity Network and the Gaia Foundation; politically engaged scientists like Kevin Anderson and James Hansen; Indigenous activists, from the Sarayaku region in Ecuador to the Gwich'ins in Alaska: and solidarity networks like Idle No More. As stated in the declaration of the multiple Indigenous groups who participated in 26 the Kari-Oca II Earth Summit in 2012: "We reaffirm our responsi- 27 Melinda Cooper, Life as Surplus: Biotechnology and Capitalbility to speak for the protection

in the Americas," at Nottingham Contemporary, "Rights of Nature: The Art and Politics of Earth Jurisprudence," April 2015, https://creativeecologies.ucsc.edu/wp-content /uploads/sites/196/2015/10/Demos-Rights-of-Nature-2015. compressed.pdf. On the rights of nature, see Cormac Cullinan, Wild Law: A Manifesto for Earth Justice (Claremont, South Africa: Siber Ink, 2002); Peter Burdon, ed., Exploring Wild Law: The Philosophy of Earth Jurisprudence (Kent Town: Wakefield Press, 2011); and Evo Morales Ayma et al., The Rights of Nature: The Case for a Universal Declaration of the Rights of Mother Earth (Ottawa: Council of Canadians. 2011).

- Vandana Shiva, The Corporate Control of Life, dOCUMENTA (13): 100 Notes-100 Thoughts, no. 12 (Ostfildern: Hatie
- ism in the Neoliberal Era (Seattle: University of Washington Press, 2008).

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and enhancement of the well-being of Mother Earth, nature and future generations of our Indigenous Peoples and all humanity and life. [...] We, Indigenous Peoples from all regions of the world have defended our Mother Earth from the aggression of unsustainable development and the overexploitation of our natural resources by mining, logging, mega-dams, exploration and extraction of petroleum. Our forests suffer from the production of agro-fuels, bio-mass, plantations and other impositions of false solutions to climate change and unsustainable, damaging development."28 So how can we reverse this untenable, unjust situation? And what role exists for artists and activists, increasingly brought together under these emergency conditions?

Decolonizing Nature

To decolonize nature represents a doubtlessly ambitious and manifold project, with artists,

activists, and creative practitioners (in addition to scientists, policy makers, and politicians) involved at every stage. As Naomi Klein asks, "Can we imagine another way of responding to crisis other than one of deepening inequality, brutal disaster capitalism and mangled techno-fixes"?29 If so, it will require an immense project of imaginative thinking and practice to rescue nature from corporate control, financialization, and the proprietary exploitations of biogenetic capitalism. For David Harvey, these forces represent the "accumulation by dispossession" that constitutes a new imperialism, the grossly uneven development of the present day. For Jason Moore, such is the result of centuries of interpenetration between capitalism and nature, including "capitalism's internalization of planetary life and processes, through which new life activity is continually brought into the orbit of capital and capitalist power" and "the biosphere's internalization of capitalism, through which human-initiated projects and processes influence and shape the web of life."30 The resulting inequality it staggering. According to a recent Oxfam report, the world's richest eighty people own as much as the

bottom half of the earth's populapeople), just as around ninety corporations are responsible for running the fossil fuel economy, and a much smaller number of governments is accountable for the geopolitical and humanitarian wars that camouflage control of the

- tion combined (about 3.5 billion 28 "Kari-Oca II Declaration," Rio de Janeiro, June 17, 2012, Climate & Capitalism, http://climateandcapitalism.com/2012 /06/19/kari-oca-2-declaration. The declaration was signed by over five hundred Indigenous representatives from around the world at an alternative meeting that took place alongside the UN's Rio+20 summit on sustainability (Kari-Oca means "White man's house" in the Tupi-Guarani languages).
 - 29 In John Tarleton, "Interview: Naomi Klein Breaks a Taboo," Indypendent, September 12, 2014, https://indypendent .org/2014/09/12/interview-naomi-klein-breaks-taboo.
 - 30 Jason W. Moore, Capitalism in the Web of Life: Ecology and the Accumulation of Capital (London: Verso Books, 2015), 13.

world's natural resources and energy supplies.³¹ Political ecology necessitates engaging with these inequalities of our neocolonial present, just as centuries of colonialism initiated climate change.³² Accumulation by dispossession occurs when the fossil fuel economy in so-called developed nations creates the atmospheric pollution that, in causing global warming, now threatens the existence of small island nations, such as Kiribati and the Maldives, creates havoc in the Bangladesh's delta, and melts permafrost in Alaska. Or when agents of "green capitalism"—which grants post-1970s corporate practice a cosmetic environmental guise—buy tracts of rainforest in the Brazilian Amazon in order to plant eucalyptus monocultures (green deserts that contain no life) for biofuel that forces Indigenous and Quilombola (Afro-Brazilian former slave) communities from their once-biodiverse, natively managed land. What are these cases if not contemporary corporate colonialism?³³

As we know from the 2014 IPCC report, 80 percent of fossil fuel reserves must stay in the ground if we are to remain under the critical warming threshold of two

degrees Celsius (or more, if we keep it to 1.5 degrees, as recommended at the recent COP21), equivalent, as eco-socialist Chris Williams notes, to writing off some US\$20 trillion in assets from the largest corporations on the planet, including Exxon-Mobil, Chevron, BP, and Shell.34 Responding to this eventuality, ExxonMobil reassured its share- 32 In this regard, Eyal Weizman is right in arguing that climate holders: "The scenario where governments restrict hydrocarbon production in a way to reduce [greenhouse gas] emissions 80 percent during the outlook period [to 2040] is highly unlikely." Instead, as one company executive explained, "All of Exxon- 34 Mobil's current hydrocarbon reserves will be needed, along

- 31 See David Harvey, Spaces of Global Capitalism: Toward a Theory of Uneven Geographical Development (London: Verso Books, 2006); Neil Smith, Uneven Development: Nature, Capital, and the Production of Space (Oxford: Blackwell, 1990): "Oxfam: World's Richest 80 People Own as Much as the Bottom Half," Democracy Now!, January 20, 2015, http://www .democracynow.org/2015/1/20/headlines/oxfam worlds rich est_80_people_own_as_much_as_the_bottom_half; Suzanne Goldenberg, "Just 90 Companies Caused Two-thirds of Manmade Global Warming Emissions," Guardian, November 20. 2013, http://www.theguardian.com/environment/2013 /nov/20/90-companies-man-made-global-warming-emis sions-climate-change; and Michael Klare, Resource Wars: The New Landscape of Global Conflict (New York: Holt, 2002).
- change is the telos of colonial modernity. See Eyal Weizman and Fazal Sheikh. The Conflict Shoreline: Colonialism as Climate Change in the Negev Desert (Göttingen: Steidl, 2015). 33 For more on this argument see Ashley Dawson, "Putting a Human Face on Climate Change," in Climate Change and Museum Futures, ed. Fiona Cameron and Brett Neilson (London: Routledge, 2014), 207-18; and Santiago Navarro F, and Renata Bessi, "Green Neocolonialism, Afro-Brazilian Rebellion in Brazil," trans. Miriam Taylor, Truthout, December 28, 2014, http://www.truth-out.org/news/item/28232-greenneocolonialism-afro-brazilian-rebellion-in-brazil.
- Chris Williams, "Why U.N. Climate Talks Continue to Fail," Indypendent, September-October 2014, 4. See also Chris Williams, Ecology and Socialism: Solutions to Capitalist Ecological Crisis (London: Haymarket Books, 2010).

with substantial future industry investments, to address global energy needs."35 It's thus not surprising that, as Klein reports, in 2013 in the United States alone the oil and gas industry spent approximately \$400,000 a day lobbying Congress and government representatives, and expended a record \$73 million in federal campaigns and political donations during the 2012 election season, all to support their agenda—economically disastrous for its inequality, environmentally ruinous for its pollution.³⁶ In this sense, any decolonizing of nature must address our current financial ecologies of democracy, with an eye on challenging the corrupting influx of corporate money in politics today. If reductions are to respect any kind of equity principle between rich and poor nations, then wealthy countries need to cut emissions by something like 8 to 10 percent a year, starting immediately, amounting to what Kevin Anderson and Alice Bows-Larkin call "radical and immediate degrowth strategies in the US, EU and other wealthy nations."37 Klein writes: "There is still time to avoid catastrophic warming, but not within the rules of capitalism as they are currently constructed. Which is surely the best argument there has been for changing those rules."38

Beyond the critical analysis of corporate practice and the international framework of trade policies that privilege economy over environment (including the trade agreements currently operating under the WTO and World Bank), we also need to decolonize our conceptualization of nature in properly political ways. This can be done by moving away from the naturalization of finance (as if it's a universal given); by overturning the philosophy of corporate "personhood" through which economic entities control life; by transforming our laws to introduce a biocentric integration of humans with their environment so that nature's rights to exist will be acknowledged and enforced, as many Indigenous groups demand; and by reinventing economies of selective degrowth and just distribution so that our social systems accord with ecological sustainability and equality. "If a Green Revolution is to happen," explains activist and literature professor

to utopian prophecy, to create a cultural 'wilding' that opens hori- 37 zontal spaces into which people can enter and join the carnival."39 I'm convinced that art, given its long histories of experimentation,

- Nicholas Powers, "we have to 35 Cited and discussed in Williams, "Why U.N. Climate Talks Continue to Fail."
- switch from apocalyptic imagery 36 Klein, This Changes Everything, 149. The 2016 presidential race appears no different, excepting the campaign of Bernie
 - Ibid., 87-88; Anderson, "Climate Change Going Beyond Dangerous," 18-21; Kevin Anderson and Alice Bows, "A 2°C Target? Get Real, Because 4°C Is On Its Way," Parliamentary Brief 13 (2010): 19.
 - 38 Klein, This Changes Everything, 88.
 - 39 Nicholas Powers, "Greening Our Desires," Indypendent, September-October 2014, 23.

imaginative invention, and radical thinking, can play a central transformative role here. In its most ambitious and far-ranging sense, art holds the promise of initiating exactly these kinds of creative perceptional and philosophical shifts, offering new ways of comprehending ourselves and our relation to the world differently than the destructive traditions of colonizing nature.

Beyond Anthropocentrism

As indicated above, decolonizing nature entails transcending human-centered exceptionalism,

no longer placing ourselves at the center of the universe and viewing nature as a source of endless bounty. Fields of inquiry that have recently investigated the terms of such a move include speculative realism, new materialism, ecosophical activism, objectoriented ontology, elementary politics, and post-humanism, each variously proposing innovative methodologies of post-anthropocentric analysis. 40 This diverse and at times conflictual movement represents nothing less than a paradigm shift in the humanities, constitutionally preoccupied in the past with the human, its histories, epistemologies, ethics, and aesthetics.41 As Levi Bryant, Graham Harman, and Nick Srnicek write, "By contrast with the repetitive continental focus on texts, discourse, social practices, and human finitude, the new breed of thinker is turning once more toward reality itself [...] speculating once more about the nature of reality independently of thought and of humanity more generally."42 A leading practitioner of this mode of thought and its political ramifications, sociologist Bruno Latour has noted that global environmental governance has largely failed,

the progressive composition of a common world, where nonhuman entities are integrated into a new commonality and form the basis of a post-anthropocentric social, political, and economic organization.43 Such a community, grouped around climate as also maintains difference-would ostensibly recognize the vitality of

- and he articulates the need for 40 See, for instance, Jane Bennett, Vibrant Matter: A Political Ecology of Things (Durham, NC: Duke University Press, 2010); Levi Bryant, Graham Harman, and Nick Srnicek, eds., The Speculative Turn: Continental Materialism and Realism (Melbourne: re.press, 2011); Diana Coole and Samantha Frost, eds., New Materialisms: Ontology, Agency, and Politics (Durham, NC: Duke University Press, 2010); Anselm Franke, ed., Animism (Berlin: Sternberg Press, 2010); and Bruno Latour, We Have Never Been Modern, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993).
 - 41 On the humanistic implications of this shift, see Dipesh Chakrabarty, "The Climate of History: Four Theses," Critical Inquiry 35, no. 2 (Winter 2009): 197-222.
- a "non-unified cosmopolitical 42 Levi Bryant, Graham Harman, and Nick Srnicek, "Towards a Speculative Philosophy," in Bryant et al., The Speculative Turn, 3.
- concern"—a commonality that 43 Bruno Latour, "The Year in Climate Controversy," Artforum, December 2010, 228-29. Also see Bruno Latour, Politics of Nature: How to Bring the Sciences into Democracy, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 2004).

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materiality and nonhuman agents, and take account of circuits of causality that extend beyond human origins (as in the new materialist philosophy of Jane Bennett). It would also correlate with science-studies approaches to nature as a site of "radical openness, an edgy protean differentiating multiplicity, an agential dis/concontinuity" (as in the theorization of Karen Barad), and invoke the "becoming-with" ontologies that view the human body as a multiplicity of beings (including the bacteriological) all enmeshed within complex multispecies ecologies (as in the work of Donna Haraway).⁴⁴ There are indeed many critical resources newly available for political-ecology analysis.

At the forefront of this convergence, art figures as a central platform for the creative practice of speculative realisms, linking with further philosophical inquiry and conceptual experimentation, as well as exploring, for instance, what a "world-withoutus" would be like, or what "zoe-egalitarianism" would mean and "becoming-Earth" entail.45 But there are many potential rifts and discontinuities in this theoretical confluence. Along with Latour, theorists like Morton have gone to great lengths to criticize the traditional Western concept of nature by mobilizing post-anthropocentric terms that are also post-natural. Long positioned as an ahistoric monolith in a separate realm apart from the human, nature's conventional definition appears to critics faulty for its basis in ontological objectification and dualistic thinking, the conceptual platform for extractivist practice. It is also opposed for its ideological manipulations, particularly where it acts as a force of naturalization, fixation, and domination. "Ecology without

nature," then, promises to dissolve representational forms that allow for exploitation of a vast realm by agents who exist in the unnatural zone of culture.46 Yet, in my view, rejecting the term nature is not an option, even while I agree with efforts geared toward its of Minnesota Fiess, 2010).
45 On the world-without-us, see Eugene Thacker, In the Dust of conceptual reorientation in order to undo nature's objectification more, it's crucial to acknowledge nature's significance as a rallying cry within the contemporary resurgence of Indigenous and

- 44 Bruno Latour, "Waiting for Gaia: Composing the Common World through Arts and Politics" (lecture, French Institute, London, November 2011), http://www.bruno-latour.fr/node/446; also in What Is Cosmopolitical Design? Nature, Design and the Built Environment, ed. Albena Yaneva and Alejandro Zaera-Polo (Farnham: Ashgate, 2016); Karen Barad, "Nature's Queer Performativity (the authorized version)," Kvinder, Køn og forskning/Women, Gender and Research, nos. 1-2 (2012), 29; and Donna J. Haraway, Manifestly Haraway (Minneapolis: University
- This Planet (London: Zero Books, 2011); on zoe-egalitarianism and becoming-Earth, see Rosi Braidotti, The Posthuman (Cambridge: Polity, 2013), 81.
- and ontological isolation. Even 46 "'Ecology without nature' could mean 'ecology without a concept of the natural.' Thinking, when it becomes ideological, tends to fixate on concepts rather than doing what is 'natural' to thought, namely, dissolving whatever has taken form. Ecological thinking that was not fixated, that did not stop at a particular concretization of its object, would thus be 'without nature." Morton, Ecology without Nature, 24.

environmentalist activism, which also insists that humans are fully integrated in and part of the natural realm. An additional obstacle with some of these approaches is that proposals for new sociopolitical compositions, modeled on a cosmopolitical scenography of global governance, as in Latour's work, often lack a structural critique of neoliberalism (indeed, this absence helps explain Latour's problematic support for techno-fixes and geo-engineering projects, a position directly challenged in Klein's recent work).⁴⁷ For there's little in Latour's 2004 book *Politics of Nature*, or in his recent writings about the Anthropocene, that attends to the WTO, free trade arrangements, the World Economic Forum in Davos, or the political economy of petro-capitalism a complex actor-institutional network that motors the global fossil-fuel ecologies of unsustainability. As a result, we are invited to overlook the manifold violence that is climate change. 48 In this regard, Latour's silence, or lack of direct engagement with corporate globalization, parallels speculative realism's characteristic political diffidence, its general withdrawal from the political sphere of human activities, swept aside in its eagerness to theorize object-oriented ontologies.49

Given these tendencies, it's necessary to bring these formations into relation with key accounts of political and social ecology; that is, if they are to gain critical use value. For me, these include,

of postcolonial and Marxist theorists and activists (for instance, Vandana Shiva, David Harvey, Neil Smith, and Jason Moore), 48 Rebecca Solnit writes: "Climate change is global-scale vioalong with the direct political analysis of groups like the International Forum on Globalization, the International Rights of Nature Tribunal, and the Indigenous movement Idle No More. in addition to a more socially 49 See Bryant, Harman, and Srnicek, "Towards a Speculative engaged eco-criticism (such as that of Rob Nixon, Ashley Dawson, and Ursula Heise), all of which focus on the crises and conflicts of actual environmental

- but are not limited to, the work 47 Bruno Latour, "Love Your Monsters," in Love Your Monsters: Postenvironmentalism and the Anthropocene, ed. Ted Nordhaus and Michael Shellenberger (Oakland, CA: Breakthrough Institute, 2011), 17-25, http://thebreakthrough.org /index.php/journal/past-issues/issue-2/love-your-monsters; and Klein, This Changes Everything, 279.
 - lence against places and species, as well as against human beings. Once we call it by name, we can start having a real conversation about our priorities and values. Because the revolt against brutality begins with a revolt against the language that hides that brutality." Rebecca Solnit, "Climate Change Is Violence," in The Encyclopedia of Trouble and Spaciousness (San Antonio, TX: Trinity University Press, 2014), http://truth-out.org/progressivepicks/item/28933climate-change-is-violence.
 - Philosophy," where the authors address Slavoj Žižek's critique of speculative realism as having an inadequate account of political subjectivity, claiming in their defense that "there needs to be an aspect of ontology that is independent of its enmeshment in human concerns. Our knowledge may be irreducibly tied to politics, yet to suggest that reality is also thus tied is to project an epistemological problem into the ontological realm" (16).

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struggles. As well, environmental concerns in the Global South need to be addressed, and here I've considered what Madhav Gadgil and Ramachandra Guha call the "environmentalism of the poor." Doing so helps to avoid continuing the Global North's legacy of provincialism, prejudice, and privilege regarding ecology, which has led to the multifaceted violence toward the West's colonized peoples, as well as toward its own poor, disenfranchised, and Indigenous populations—part and parcel of what Gadgil and Guha term an "environmentalism of affluence," which also might be said to characterize some of the recent theorizations of the speculative turn.⁵⁰

Decolonizing Methodologies

One step to escape the environmentalism of affluence is to decolonize our research methodologies, in part by acknowledging the con-

ceptual lineages of theories elaborated in the Western academy and tracing their connection to the histories of struggles and perspectives of the colonized, including Indigenous cosmologies, subaltern legal codes, and social movements where appropriate.⁵¹ In doing so, we take seriously the critiques of native thinkers themselves, as when

ary 2013): 17-28.

anthropologist Kimberly TallBear takes Jane Bennett to task for her 50 Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies of Environment" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies" (1998) Madhav Gadgil and Ramachandra Guha, "Ideologies" (1998) Madhav Gadgil and Ramachandra Guha) Madhav Gadgil and Madhav Ga "vital materialism" that invokes a "pluriverse traversed by heterogeneities that are continually doing things," and the "lively matter" of "nonhuman bodies," because she neglects to mention that similar views can be found in the cultural traditions of many Indigenous peoples.⁵² Or when anthropologist Zoe Todd criticizes Bruno 52 Latour's discussion of the climate as a "common cosmopolitical concern," pointing out his failure to cite the work of any thinkers 53 from First Nations cultures that have long held such beliefs.53 One wonders similarly, when

- ronmentalism," in Ecology and Equity: The Use and Abuse of Nature in Contemporary India (London: Routledge, 1995), 98. In some ways, my project parallels related attempts to trace post-anthropocentric theoretical discourse to Indigenous and pre- and postcolonial thinking and practice, as with the "Forensis" project at the Centre for Research Architecture at Goldsmiths, and Anselm Franke's "Animism" research exhibition: see Forensic Architecture. Forensis: and Franke. Animism. In other ways, it attempts to move beyond these often Latour-inspired conceptualizations that remain-problematically in my view-within Western discourse paradigms, as critically addressed by Jessica L. Horton and Janet Catherine Berlo, "Beyond the Mirror: Indigenous Ecologies and 'New Materialisms' in Contemporary Art," Third Text, no. 120 (Janu-
- See Kim TallBear, "Beyond Life/Not Life: A Feminist-Indigenous Reading of Cryopreservation, Interspecies Thinking and the New Materialisms" (lecture, UCLA, November 5, 2013), https://www.youtube.com/watch?v=TkUeHCUrQ6E; citing Bennett, Vibrant Matter, 122.
- Zoe Todd, "An Indigenous Feminist's Take on the Ontological Turn: 'Ontology' Is Just Another Word for Colonialism." Urbane Adventurer: Amiskwacî (blog), October 24, 2014, https://zoeandthecity.wordpress.com/2014/10/24/an-indige nous-feminists-take-on-the-ontological-turn-ontology-is-justanother-word-for-colonialism.

Rosi Braidotti argues for a "postanthropocentric creation of a new pan-humanity," 54 whether her futurism overlooks present resources located in, for instance, Indigenous heritage and current political engagements that were never anthropocentric in the first place. The point, however, isn't to focus on specific intellectuals who importantly contribute to comprehending political ecology today, but to become sensitive to the general academic tendencies of non-acknowledgment that continue the exclusion of traditions and populations that have historically suffered centuries of colonial violence.

Many Indigenous cosmologies do in fact offer ecological wisdom about localized and sustainable forms of life based on synergies with biodiverse, healthy environments. Pointing this out does not amount to an idealization of Indigeneity, and indeed there are thorough criticisms of this idealization tendency as well as historical examples of the destructive relations of natives to nature in the pre- and post-contact periods.⁵⁵ Rather, it remains imperative to register the cultural traditions of peoples living in environmentally sensitive ways, who have rearticulated their forms of life in the context of present geopolitical and ecological conflicts and their ongoing struggles for decolonization and cultural survival—unlike much of Western modernity, which continues to push the world beyond the tipping points of anthropogenic environmental catastrophe. Post-anthropocentric philosophy is not a recent discovery, but rather connects—whether intentionally or not—to long-standing Indigenous views of nature as a pluriverse of agents. These views define a cosmopolitics—

a creative social organization 54 Braidotti, The Posthuman, 101. merged with world makingexisting generally in contradistinction to the nature/human divisions of Western anthropocentric colonial ecologies.56

What we need then are new methodologies to acknowledge the voices of historically oppressed 56 Isabelle Stengers, "The Cosmopolitical Proposal," in Latour peoples, which stand to strengthen the basis of ethico-political solidarity around ecological concerns by joining with current struggles for cultural and environmental survival against corporate

- 55 On the destruction of North America's megafauna some thirteen thousand years ago, see Alan Weisman, The World without Us (London: Virgin, 2008). Also see Shepard Krech III, The Ecological Indian: Myth and History (New York: W. W. Norton & Company, 2000); criticisms of Krech in Vine Deloria, Jr., "The Speculations of Krech," review of The Ecological Indian, by Shepard Krech, Worldviews 4 (2000): 283-93; and criticisms of Deloria in turn in Kimberly TallBear, "Shepard Krech's The Ecological Indian: One Indian's Perspective," IIIRM Publications, September 2000, http://www.iiirm.org/publications /Book%20Reviews/Reviews/Krech001.pdf.
 - and Weibe, Making Things Public, 995. For theoretical innovation that does register Indigenous thinking, see Eduardo Viveiros de Castro, "Perspectivism and Multinaturalism in Indigenous America," in The Land Within: Indigenous Territory and The Perception of Environment, ed. Alexandre Surrallés and Pedro García Hierro (Copenhagen: International Work Group for Indigenous Affairs, 2005); and Eduardo Kohn, How Forests Think: Toward an Anthropology beyond the Human (Berkeley: University of California Press, 2013).

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globalization. With such an effort, non-Indigenous writers and scholars contribute to challenging the situation of academic "research" being associated with colonial domination, and supporting the validity of aboriginal peoples' "right of self-determination, to the survival of our languages and forms of cultural knowledge, to our natural resources and systems for living within our environments," as education scholar Linda Tuhiwai Smith explains.⁵⁷ For me this book is only a beginning step in this direction (as a descendent of settler-colonial culture), but this commitment is increasingly imperative. A number of points of connection in these pages consider how current artistic and activist practices have joined the struggles of native and disenfranchised peoples. These include the work of Amar Kanwar and Sanjay Kak relating to the Dongria Kondh and their fight against mining in the Indian state of Odisha; Subhankar Banerjee's photography and writing regarding the Gwich'in people in Alaska and their opposition to Arctic oil drilling; Ursula Biemann and Paulo Tavares's project *Forest Law*, regarding the efforts of the Indigenous people of Sarayaku for self-determination and environmental protection in the Ecuadorian Amazon; and Maria Thereza Alves's work with Indigenous communities in the environmentally degraded Chalco area of Mexico City, work that also connects to the decadeslong Zapatista struggle for autonomy and sustainability among the Mayan communities of Chiapas. These projects are exemplary for their refusal to co-opt or idealize Indigenous knowledge systems, and for "standing with" their subjects. 58 As such, they demonstrate a new imperative for artists, as much as writers, to intersect with movements in the global struggle for climate justice, human rights, and ecological sustainability.

One significant example is Biemann and Tavares's Forest Law (2014), a multimedia video-based investigation built on research into the formation of the philosophy in Latin America known as buen vivir (good living), particularly in relation to Andean-Amazonian 59 cultures. It's a translation of the Quechua term sumak kawsay, meaning "living in plenitude, knowing how to live in harmony with the cycles of Mother Earth, of the cosmos, of life and of history,

- 57 Linda Tuhiwai Smith, Decolonizing Methodologies: Research and Indigenous Peoples (London: Zed Books, 2008), 1.
- 58 On the transformative and politically committed practice of "standing with" one's subject and rejecting false objectivity and liberal academicism in favor of the knowledge production of feminist and Indigenous practices and pedagogy, see Kim TallBear, "Standing With and Speaking as Faith: A Feminist-Indigenous Approach to Inquiry," Journal of Research Practice 10, no. 2 (2014), http://jrp.icaap.org/index .php/jrp/article/view/405/371.
 - See Fernando Huanacuni Mamani, Vivir bien/buen vivir: Filosofía, políticas, estrategias y experiencias regionales (La Paz: Convenio Andrés Bello y Instituto Internacional Integración, 2010), 32; cited in Julien Vanhulst and Adrian Beling, "Buen vivir: Emergent Discourse within or beyond Sustainable Development?" Ecological Economics 101 (May 2014): 56. See also Ricardo Jiménez, "Retrieving and Valuing Other Ethical Pillars: The Concept of Buen Vivir," Forum for a New World Governance, July 17, 2011, http://www.worldgovernance.org/article690.html?lang=en.

and in balance with every form of existence in a state of permanent respect."59 As the artists make clear, this philosophy has Indigenous origins and joins with academic elaborations and political activism, manifesting, for instance, in recent constitutional amendments and legal codes, including the Law of the Rights of Mother Earth, instituted in Ecuador in 2008. Buen vivir politics both challenges the Washington-consensus doctrine of development that has ruled Latin America since the mid-twentieth century (comprised of corporate neoliberalism and antienvironmental neocolonialism enforced by authoritarian military governance) and provides a crucial biocentric model of political economy based on environmental consonance and social equality. "The greatest potential of Buen vivir," Julien Vanhulst and Adrian Beling argue, "lies in the opportunities it generates for dialog with other modern discourses and the current forms of development, by enlarging the frame of current debates and allowing for the potential emergence of novel conceptions, institutions and practices through collective learning."60 In this regard, ecology defines a method of intersectionality, which insists on thinking being and becoming at the cross section of multiple fields of social, political, economic, and material determinations. 61 Such a convergence is forcefully addressed in Biemann and Tavares's work, which maps a network of Global South environmentalism, Indigenous activism, and practices of Earth jurisprudence, all working to extend the rights of nature and contest the corporate and state destruction of Amerindian forest culture. The intersectionalist politics at stake here resonates within and beyond Latin America, touching on the rural US anti-fracking movement and the International Criminal Court's environmental cases in The Hague, sub-Saharan Africa's struggles to protect biodiversity and Indian subsistence farmers' rights to livelihood. This revolutionary Earth-centered legal shift, including its cultural manifestations, represents one forefront of the decolonization of nature.62

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sider contemporary art and activism in relation to subjects such as 60 Vanhulst and Beling, "Buen vivir," 61. sustainability, the financialization of nature, and contemporary catastrophism. Others focus on the intersection of art and environment in Mexico, India, the Arctic, 62 For more on this see my essay "Rights of Nature."

This book is organized both thematically and geographically. There are chapters that con-

- climate refugees, the politics of 61 Emerging from black feminist legal theory, intersectionality examines overlapping systems of oppression-including those of race, class, gender, and sexuality-in the figuration of social identity. The methodology was first articulated in Kimberlé Crenshaw, "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics," University of Chicago Legal Forum 140 (January 1, 1989): 139-67.

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and small island nations like the Maldives and Tuvalu, in addition to the United States and Europe. Chapter 1, "The Art and Politics of Sustainability," traces the conflicted notion of sustainability via scientific, political, and cultural discourses since the 1960s, examining how the term often functions as a privileged instrument of greenwashing and how it might be mobilized otherwise. It examines the restorationist eco-aesthetics of the '60s and '70s that tasked art with the repair of ecosystems (in work by Alan Sonfist, Agnes Denes, Helen Mayer and Newton Harrison, and Robert Smithson); the systems aesthetics of the '70s, where the cybernetic theories of Gregory Bateson and György Kepes offered new ways to consider nature as intertwined with technological systems (addressed in art by Dan Graham, Hans Haacke, and Pulsa); and the formation of political ecology of the '90s and 2000s, whereby artists have investigated nature-culture assemblages, insisting on the political dimensions of ecology and sustainability in relation to social justice and economic equality (in work by Marjetica Potrč, Tue Greenfort, Superflex, and Nils Norman).

Chapter 2, "Climates of Displacement: From the Maldives to the Arctic," considers how distinct (but not unrelated) environmental crises are increasingly bringing about forced displacements of life from the frontline territories of climate change, foremost among them small island states, Far North regions, and low-lying deltas. It examines the contrasting documentary photography of the Argos Collective and of Subhankar Banerjee as models of aesthetic and political engagement, and considers the intricacies of climate-refugee discourse and its assorted problems. These contexts offer ways to approach the intertwinement of political ecology, environmental crisis, forced migration, and artistic-activist aesthetics, a nexus posed to become only more pressing with forecasts of increased climate-driven mass displacement in the near future. In chapter 3, "The Post-natural Condition: Art after Nature?," I investigate political ecology further by focusing on how artists—Lise Autogena and Joshua Portway, Amy Balkin, Nils Norman, and the Laboratory for Insurrectionary Imagination—have challenged what the late geographer Neil Smith termed the "financialization of nature," according to which natural forms, such as atmospheric carbon, are regulated by market dynamics within neoliberal capitalism. This chapter considers how artists have analyzed and challenged this neocolonial logic by visualizing its workings as well as inventing ecologically sustainable alternatives along with permaculture and biodynamic farming (Norman's sculptural and process-based designs synergize experimental architecture, public space, activism, and organic gardening), which also importantly entail experimentation with noncapitalist living, social justice, and environmental activism.

Chapter 4, "¡Ya basta! Ecologies of Art and Revolution in Mexico," begins by examining the works of Minerva Cuevas and Marcela Armas that contest the externalities—the environmental and social costs commonly disavowed by corporate industry—of Mexico's post-NAFTA neoliberal economy. Other artists, including Gilberto Esparza, Superflex, and Pedro Reyes, integrate industrial pollution, organic agricultural waste, or social violence in their works, redirecting them toward positive ends. The chapter also considers the revolution in everyday life as practiced by the Zapatistas over the last twenty years, which defines an ecological sustainability merged with revolutionary Indigenous autonomy. Lastly, the chapter looks at the work of Maria Thereza Alves, and particularly her mixed-media research project in Chalco, on the eastern edge of Mexico City, which addresses the colonial history that informs present conflicts over land and water use, turning Mexico's growing capital into an environmental crisis point.

The book transitions to the South Asian subcontinent in chapter 5, "Nature's Sovereignty: Conflicting Environments of Development in India," which investigates the country's worsening environmental predicaments decades into the Green Revolution—the adoption of Western industrial, chemical-based farming to bring greater yields, which has in turn gradually destroyed soil health as much as farmers' livelihoods—paralleling the expansion of neoliberal agricultural governance worldwide. The conflicts accompanying these histories have initiated an urgent debate over the meaning of development and the value of nature, which has occupied many Indian activist-artists as well. The chapter also considers New Delhi's crisis urbanism and the Yamuna River's failed environmental management through the photography of Ravi Agarwal, and explores eastern India's zone of social and military conflict (Chhattisgarh and Odisha in particular), which forms a critical test case for the intersection of ecological commitments and activist-artistic intervention. There, one finds the sustainability of tribal life pitted against multinational corporate interests intent on carrying out resource extraction, throwing land use, Adivasi (Indigenous) rights, and economic development into violent disarray. This geopolitical tension has become the subject of investigation by artists, such as Amar Kanwar, and filmmakers, such as Sanjay Kak, whose recent works offer remarkable and innovative aesthetic approaches to disputes around the biopolitics of sustainability, postcolonial environmental justice, and the financialization of nature.

Chapter 6, "Decolonizing Nature: Making the World Matter," investigates the work of the collective World of Matter. Taking up Michel Serres's proposal for a

"natural contract" that would bring human culture into a relation of post-anthropocentric equality with the environment, overcoming humanity's attempted mastery and domination of the earth, the collective critically examines capitalism's subjection of nature to an economic calculus. That situation has led to environmental and social devastation in places as diverse as Brazil, the Netherlands, Ecuador, Bangladesh, India, and Nigeria—the various research areas of World of Matter members, including Mabe Bethônico, Ursula Biemann, Lonnie van Brummelen and Siebren de Haan, Uwe H. Martin, Helge Mooshammer and Peter Mörtenböck, Emily E. Scott, and Paulo Tavares. In their far-ranging work, the group redefines nature as a site of aestheticconceptual speculation, taking social struggles against corporate control seriously and considering developments in the rights-of-nature discourse, which resonates with Serres's prescient politico-juridical proposition. The chapter also examines the formation of object-oriented ontologies that decenter human sovereignty, and the group's connection of aesthetics to environmental, social, and political systems. World of Matter's collective artistic and interdisciplinary research is pathbreaking. Through constellations of texts, images, and videos, it advances the imperative to explore how the world matters in material terms and via conflicting forms of valuation, including those beyond the economic.

The final chapter, "Gardening against the Apocalypse: The Case of dOCUMENTA (13)," considers the 2012 mega-exhibition's dedication to environmental concerns and nonhuman agencies. It examines how contributing artists, such as Christian Philipp Müller, Song Dong, and Claire Pentecost, turned to experimental gardening in order to propose sustainable ways of organizing the natural world, in the process opening up new paths of creative expression. The chapter also critically investigates the exhibition's conceptualization, examining conflicts in theories of botanical nature and political ecology by comparing Donna Haraway's post-structuralist approach that celebrates nature-technology hybrids with Vandana Shiva's social-justice activism against corporate biotechnology and its GMO patenting—both were included as guiding lights in the exhibition's programming. As well, the chapter reflects on futurist visions of postapocalyptic landscapes presented at the exhibition in the video works of Moon Kyungwon and Jeon Joonho as well as the Otolith Group. I address the ideological mechanisms of contemporary catastrophism, rife in popular culture, according to which spectacles of disaster repeatedly narrate our potential future. Against this form of destructive nihilism, the chapter poses the urgency of regaining political

momentum around ecology in the present, answered in part by the Otolith Group's construction of a politically insistent speculative realism.

With this overview, and during the process of working on the present book, I've immersed myself in material that is as challenging in its complexity as it is expansive in its geographies (certain areas, including East Asia, the Middle East, and sub-Saharan Africa, have received too little analysis owing to limited time and resources, and must await future consideration). My research is a first effort at making sense of the provocative and moving projects of artists, and the multifaceted methodological and theoretical approaches to ecology, that have emerged historically, been mobilized politically, and grown significantly in recent years. I'm convinced that there is nothing more important, timely, and urgent to consider as our present ecological crisis, and in this regard, we can only do so by starting from our bases in our respective fields. Under current forms of governance, our relation to the environment threatens our coming existence, where not only nature is colonized but also our very future, a colonization that we must all struggle to resist. In a way that I find particularly inspirational, Miya Yoshitani, the executive director of the Oakland-based Asian Pacific Environmental Network, has explained:

The climate justice fight here in the U.S. and around the world is not just a fight against the [biggest] ecological crisis of all time. It is the fight for a new economy, a new energy system, a new democracy, a new relationship to the planet and to each other, for land, water, and food sovereignty, for Indigenous rights, for human rights and dignity for all. When climate justice wins, we win the world we want. We can't sit this one out, not because we have too much to lose, but because we have too much to gain. ⁶³

Indeed, we must all join the struggle for climate justice, doing so from our respective disciplinary, cultural, economic, or otherwise-situated points, and that also means challenging the very divisions of specialization in the first place.

⁶³ Miya Yoshitanti in a speech during People's Climate March, New York, September 2014; cited in Klein, This Changes Everything, 155–56.